# Arcserve<sup>®</sup> Unified Data Protection Appliance User Guide

Version 6.0

arcserve

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### **Contact Arcserve Support**

The Arcserve Support team offers a rich set of resources for resolving your technical issues and provides easy access to important product information.

#### Contact Support

With Arcserve Support:

- You can get in direct touch with the same library of information that is shared internally by our Arcserve Support experts. This site provides you with access to our knowledge-base (KB) documents. From here you easily search for and find the product-related KB articles which contain field-tested solutions for many top issues and common problems.
- You can use our Live Chat link to instantly launch a real-time conversation between you and the Arcserve Support team. With Live Chat, you can get immediate answers to your concerns and questions, while still maintaining access to the product.
- You can participate in the Arcserve Global User Community to ask and answer questions, share tips and tricks, discuss best practices and participate in conversations with your peers.
- You can open a support ticket. By opening a support ticket online, you can expect a callback from one of our experts in the product area you are inquiring about.
- You can access other helpful resources appropriate for your Arcserve product.

### **Arcserve UDP Appliance Return Policy**

A valid RMA (Return Material Authorization) number is required to return a product to Arcserve. Contact the Arcserve Technical Support department to obtain an RMA number. Refer to <u>arcserve.com/support</u> to contact customer care. Support team can inform where to send the RMA data.

Returns are subject to a re-stocking fee of 10%. Exceptions are: 1) If an order was fulfilled incorrectly, Arcserve will accept RMA and provide full credit; 2) If a defective item is returned within 30 days, Arcserve will accept RMA and provide full credit; and 3) If there are hardware technical issues that are unresolved by support after a reasonable period of time to resolve, Arcserve will accept RMA and provide a hardware swap for a unit of equivalent value.

Information needed for the RMA request:

- Product serial number (located on the back of the appliance)
- Arcserve Order Number
- Partner contact name
- Partner phone number
- Partner Email address
- Customer contact name (if available)
- Phone number (if available)
- Email address (if available)
- Description of problem and any troubleshooting already performed.
- Shipping service requested and shipping address.

The RMA number must be clearly marked on the outside of the packaging. All RMAs must be shipped using adequate packaging. All RMAs should be shipped using a reputable carrier that offers package tracking and insurance. Any shipping damage or lost RMAs is the responsibility of customer.

## Contents

| Chapter 1: About Appliance Documentation                  | 9  |
|-----------------------------------------------------------|----|
| Language Support                                          | 10 |
| Product Documentation                                     | 11 |
| Chapter 2: Introducing the Arcserve UDP Appliance         | 12 |
| Introduction                                              | 13 |
| Arcserve Unified Data Protection                          | 14 |
| Arcserve UDP Agent (Linux)                                | 15 |
| Arcserve Replication and High Availability (Arcserve RHA) | 16 |
| Arcserve Backup                                           | 17 |
| Safety Precautions                                        |    |
| What is Included in the Box                               | 19 |
| What is Not Included in the Box                           | 20 |
| Available Models                                          |    |
| Models 7100-7300v                                         | 22 |
| Models 7400-7600v                                         | 24 |
| Models 8100-8400                                          | 26 |
| Controls and Indicators                                   | 28 |
| Front Panel 7100-7300v                                    | 29 |
| Front Panel 7400-7600v                                    | 31 |
| Front Panel 8100-8200                                     | 33 |
| Front Panel 8300-8400                                     | 35 |
| Rear Panel 7100-7300v                                     |    |
| Rear Panel 7400-7600v                                     |    |
| Rear Panel 8100-8200                                      | 41 |
| Rear Panel 8300-8400                                      | 43 |
| Ports Used by the Appliance                               | 45 |
| Arcserve UDP                                              | 46 |
| Components installed on Microsoft Windows                 | 47 |
| Components installed on Linux                             |    |
| Production node protected by UDP Linux remotely           | 50 |
| Arcserve Backup                                           | 51 |
| Appliance for Linux Support                               |    |
| Chapter 3: Installing the Arcserve UDP Appliance          |    |

| How to Install Arcserve Backup r17 5                                                    | 5/        |
|-----------------------------------------------------------------------------------------|-----------|
| How to Install 8100-8200 Series Appliance                                               | بر<br>جد  |
| How to Install 8200-8400 Series Appliance                                               |           |
| Chapter 4: Understanding Network Configuration                                          | <b>58</b> |
| How to Configure the NIC Teaming Process                                                | 59        |
| How to Disable DHCP Server                                                              | 55        |
| How to Understand the Network Configuration on the UDP Appliance                        | 62        |
| How to Configure IP Address for the preinstalled Linux Backup Server                    | 66        |
| How to Enable Round Robin on the DNS Server to Balance Load                             | 68        |
| Chapter 5: Upgrading Arcserve UDP on the Appliance                                      | 69        |
| How to Apply a License After Upgrading Arcserve Software                                | 70        |
| Upgrade Sequence on the Arcserve UDP Appliance                                          |           |
| Upgrade the Arcserve UDP Appliance that performs as Arcserve UDP Console and RPS        | 72        |
| Upgrade the Arcserve UDP Appliance that performs as Arcserve UDP RPS only               | 73        |
| Upgrade Steps When Two or More Arcserve UDP Appliances Are Used in the Envir-<br>onment | 74        |
| Upgrade the Arcserve UDP Linux Agent on the Arcserve UDP Appliance                      |           |
| Upgrade the Arcserve Backup on the Arcserve UDP Appliance                               |           |
| Upgrade Sequence for UDP Console, RPS, and Agent                                        |           |
| Chapter 6: Configuring the Arcserve UDP Appliance                                       | 78        |
| How to Configure Network Settings for a UDP Appliance                                   | 79        |
| Overview of Creating a Plan Using the UDP Appliance Wizard                              | 83        |
| How to Set up the Arcserve UDP Appliance and Create Plans                               | 84        |
| Additional Information on Adding Nodes to a Plan                                        | 93        |
| Add Nodes by Hostname/IP Address                                                        | 94        |
| Add Nodes by Active Directory                                                           | 96        |
| Add vCenter/ESX Nodes                                                                   | 98        |
| Add Hyper-V Nodes                                                                       | 100       |
| Configure UDP Appliance as Gateway                                                      | . 102     |
| Clear Configuration and Apply Appliance Factory Reset                                   | . 103     |
| Apply Arcserve UDP Factory Reset Using Boot Option                                      | . 105     |
| How to Activate Arcserve Product on the Appliance                                       | 108       |
| Chapter 7: Creating Backup Plans                                                        | 109       |
| Create a Backup Plan for Linux Nodes                                                    | . 110     |
| Create a Backup Plan to a Tape Device                                                   | . 111     |
| Create an On-Appliance Virtual Standby Plan                                             | . 112     |

| Chapter 8: Repairing the Arcserve UDP Appliance                                                                           | 113                |
|---------------------------------------------------------------------------------------------------------------------------|--------------------|
| Remove and Replace a Hard Drive                                                                                           | 114                |
| Chapter 9: Safety Precautions                                                                                             | 118                |
| General Safety Precautions                                                                                                | 119                |
| Electrical Safety Precautions                                                                                             | 121                |
| FCC Compliance                                                                                                            | 122                |
| Electrostatic Discharge (ESD) Precautions                                                                                 | 123                |
| Chapter 10: Changing the IPMI Password                                                                                    | 124                |
| How to Change the IPMI Password                                                                                           | 125                |
| Chapter 11: Connecting Appliance Expansion Shelf to the App<br>ance Server                                                | li-<br>129         |
| Appliance Infield Expansion for all the Available Models                                                                  | 130                |
| What is included in the box                                                                                               | 140                |
| How to Connect the Appliance Expansion Shelf to the Appliance Server                                                      | 143                |
| How to Modify Arcserve UDP Data store                                                                                     | 152                |
| Adding a data path on the expansion shelf to the Arcserve UDP data store                                                  | 153                |
| Migrating Hash Destination to the new SSD                                                                                 |                    |
| Checking the overall capacity of the <hostname_data_store> data store from the Ar serve UDP Console</hostname_data_store> | c-<br>155          |
| Resuming all the plans from Arcserve UDP Console                                                                          | 156                |
| Chapter 12: Troubleshooting                                                                                               | 157                |
| Linux Backup Server Fails to Connect from the Console                                                                     |                    |
| Backing Up a UDP Appliance from Another Appliance Reports Duplicated Nodes                                                | s <mark>160</mark> |
| Linux Backup Server Cannot Get the Network DNS Suffix                                                                     | 162                |
| Default Time Zone on the Appliance                                                                                        | 163                |
| Licenses Error even when the licenses are available                                                                       | 164                |
| Chapter 13: Best Practices                                                                                                | 165                |
| Best Practices for Network Configuration                                                                                  | 166                |
| Best Practices for Arcserve UDP Console Migration                                                                         |                    |
| Best Practices for Set Appliance Image Utility Tool                                                                       | 171                |
| Best Practices for pre-installed Linux Backup Server in the Arcserve UDP Appliar                                          | nce .174           |
| Best Practices for Arcserve UDP Appliance to backup the Linux Backup Server it                                            | self 176           |
| Best Practices to Migrate from Arcserve UDP Appliance to Appliance                                                        | 180                |
| Solution 1                                                                                                                | 181                |
| Solution 2                                                                                                                |                    |
| Best Practices for Arcserve UDP Linux instant VM job to Local Appliance Hyper-                                            | V187               |

|   | Best Practices to add Replicate to a remotely managed RPS task to another Appli-<br>ance        | .188       |
|---|-------------------------------------------------------------------------------------------------|------------|
|   | Best Practices to perform Virtual Standby (VSB) task for which the monitor is another Appliance | . 190      |
| C | hapter 14: Acknowledgements                                                                     | <b>192</b> |
|   | putty                                                                                           | .193       |

## **Chapter 1: About Appliance Documentation**

Arcserve UDP Appliance User Guide helps you understand how to use Arcserve UDP Appliance. To understand about UDP Appliance, view Introduction. Rest of the sections help you install and use Arcserve UDP Appliance.

This section contains the following topics:

| Language Support      | 10 |
|-----------------------|----|
| Product Documentation | 11 |

### Language Support

Documentation is available in English as well as multiple local languages.

A translated product (sometimes referred to as a localized product) includes local language support for the user interface of the product, online help and other documentation, as well as local language default settings for date, time, currency, and number formats.

This release is available in the following languages:

- English
- Chinese (Simplified)
- Chinese (Traditional)
- French
- German
- Italian
- Japanese
- Portuguese (Brazil)
- Spanish

## **Product Documentation**

For all Arcserve UDP related documentation, click this link for the <u>Arcserve Docu-</u><u>mentation</u>.

The Arcserve UDP Knowledge Center consists of the following documentation:

### Arcserve UDP Solutions Guide

Provides detailed information on how to use the Arcserve UDP solution in a centrally-managed Console environment. This guide includes such information as how to install and configure the solution, how to protect and restore your data, how to get reports, and how to manage Arcserve High Availability. Procedures are centered around use of the Console and includes how to use the various protection Plans.

### Arcserve UDP Release Notes

Provides high-level description of the major features, system requirements, known issues, documentation issues, and limitations of Arcserve Unified Data Protection.

### Arcserve UDP Agent for Windows User Guide

Provides detailed information on how to use Arcserve UDP Agent in a Windows operating system. This guide includes such information as how to install and configure the agent and how to protect and restore your Windows nodes.

### Arcserve UDP Agent for Linux User Guide

Provides detailed information on how to use Arcserve UDP Agent in a Linux operating system. This guide includes such information as how to install and configure the agent and how to protect and restore your Linux nodes.

## **Chapter 2: Introducing the Arcserve UDP Appliance**

This section contains the following topics:

| Introduction                    | 13 |
|---------------------------------|----|
| Safety Precautions              |    |
| What is Included in the Box     | 19 |
| What is Not Included in the Box | 20 |
| Available Models                | 21 |
| Controls and Indicators         |    |
| Ports Used by the Appliance     | 45 |

### Introduction

The Arcserve UDP appliance is the first complete and most cost-effective data protection appliance, featuring Assured Recovery<sup>™</sup>. Each Arcserve UDP appliance is a self-contained, "set and forget" backup and recovery solution. Architected with cloud-native capabilities, its unmatched ease of deployment and usability combine with a broad set of features such as global source-based deduplication, multi-site replication, tape support, and automated data recovery capabilities. The Arcserve UDP appliance delivers unmatched operational agility and efficiency, and truly simplifies disaster recovery activities.

The Arcserve UDP appliance is fully integrated with the industry-leading Arcserve Unified Data Protection software pre-installed in state-of-the art hardware. The appliance provides a complete and integrated data protection solution for all users to not only meet your current demands, but also the ever-changing backup, archive, and disaster recovery (DR) requirements of the future.

The following software are preinstalled in the Arcserve UDP appliance:

- Arcserve UDP
- Arcserve UDP Agent (Linux)
- Arcserve Backup
- Arcserve Replication and High Availability (RHA)

Each Arcserve UDP appliance comes with a 3-year hardware warranty. Please visit <u>arcserve.com/udp-appliance-warranty</u> for detailed information about this warranty.

### **Arcserve Unified Data Protection**

The Arcserve UDP software is a comprehensive solution to protect complex IT environments. The solution protects your data residing in various types of nodes such as Windows, Linux, and virtual machines on VMware ESX Servers or Microsoft Hyper-V Servers. You can back up data to either a local machine or a recovery point Server. A recovery point Server is a central Server where backups from multiple sources are stored.

Arcserve UDP provides the following capabilities:

- Back up the data to deduplication/non-deduplication data stores on recovery point Servers
- Back up recovery points to tape, using integration with Arcserve Backup (which is also included within the appliance)
- Create virtual standby machines from backup data
- Replicate backup data to recovery point Servers and remote recovery point Servers
- Restore backup data and performs Bare Metal Recovery (BMR)
- Copy selected data backup files to a secondary backup location
- Configure and manage Arcserve Full System High Availability (HA) for critical Servers in your environment

Arcserve UDP replicates backup data that is saved as recovery points from one Server to another recovery point Server. You can also create virtual machines from the backup data that can act as standby machines when the source node fails. The standby virtual machine is created by converting recovery points to VMware ESX or Microsoft Hyper-V virtual machine format.

The Arcserve UDP solution provides integration with Arcserve High Availability. After you create scenarios in Arcserve High Availability, you can then manage and monitor your scenarios and perform operations like adding or deleting destination machines.

### **Arcserve UDP Agent (Linux)**

Arcserve UDP Agent (Linux) is a disk-based backup product that is designed for Linux operating systems. It provides a fast, simple, and reliable way to protect and recover critical business information. Arcserve UDP Agent (Linux) tracks changes on a node at the block level and then backs up only those changed blocks in an incremental process. As a result, it lets you perform frequent backups, reducing the size of each incremental backup (and the backup window) and providing a more up-todate backup. Arcserve UDP Agent (Linux) also provides the capability to restore files or folders and perform a bare metal recovery (BMR) from a single backup. You can store the backup information either on a Network File System (NFS) share or in the Common Internet File System (CIFS) share, in the backup source node.

The latest version of Arcserve UDP Agent (Linux) is preinstalled in a virtual machine within the appliance. This virtual machine becomes the Linux Backup Server. Arcserve UDP Agent (Linux) is installed at the default installation path in the UDP Appliance.

When you open the Console, the Linux Backup Server is already added to the Console. The native host name of the Linux Backup Server is *Linux-BackupSvr*. However, on the Console, the Linux Backup Server adopts the host name of the Appliance with port 8018 configuration. The Linux Backup Server works behind NAT through port direction. The Linux Backup Server uses port 8018 to communicate and transfer data in the Arcserve UDP Appliance.

**Note:** For more information about creating backup plans and restoring Linux machines, see Arcserve UDP Agent for Linux User Guide.

The Linux Backup Server uses the following default login information:

- Username root
- Password Arcserve

Note: We recommend to change the default password.

## Arcserve Replication and High Availability (Arcserve RHA)

Arcserve RHA is a solution based on asynchronous real-time replication and automated application switchover and switchback to provide cost-effective business continuity for virtual environments on Windows Servers.

Arcserve RHA lets you replicate data to a local or remote Server, helping you to recover that data if you face a Server crash or site disaster. You may switch your users to the replica Server manually, or automatically, if you have licensed High Availability.

You can download the full installation package of Arcserve RHA from Arcserve <u>web</u>-<u>site</u> to install all components. For details, refer to Arcserve RHA <u>online documents</u>.

### **Arcserve Backup**

Arcserve Backup is a high-performance data protection solution that addresses the needs of businesses with heterogeneous environments. It provides flexible backup and restore performance, easy administration, broad device compatibility, and reliability. It helps you to maximize your data storage abilities that lets you customize your data protection strategies based on your storage requirements. In addition, the flexible user interface allows advanced configurations and provides a cost-effective way for users at all levels of technical expertise to deploy and maintain an extensive range of agents and options.

Arcserve Backup delivers comprehensive data protection for distributed environments and provides virus-free backup and restore operations. An extensive set of options and agents extends data protection throughout the enterprise and delivers enhanced functionality, including online hot backup and restore of application and data files, advanced device and media management, and disaster recovery.

UDP Appliance includes integration with Arcserve Backup for performing a backup to tape. Arcserve Backup is installed at "C:\Program Files (x86)\Arcserve" on your computer after you run InstallASBU.bat. The components installed in the UDP Appliance lets you back up the destination of Arcserve UDP to a tape.

You can download the full installation package of Arcserve Backup from Arcserve website to install other components. For details, refer to Arcserve Backup online r17.5 online documents.

Arcserve Backup Server uses the following default login information:

- Username -- caroot
- Password -- Arcserve

### **Safety Precautions**

For your safety, please read and follow all instructions before attempting to unpack, connect, install, power on, or operate an Arcserve UDP appliance. Failure to adhere to the safety precautions can result in personal injury, equipment damage, or malfunction.

For more information about the safety precautions, see the <u>Safety Precautions</u> <u>Appendix</u>.

### What is Included in the Box

The following items are contained in the box:

- Arcserve UDP Appliance (serial number label is located on rear of appliance)
- Power cable: 1
- Network Cables: 1 red, 1 blue (3-feet long each)
- IPMI port cable: 1 (7-feet long)
- Rail/Rack Mounting Kit consisting of 2 quick-install outer rails, 2 inner rail extensions, 3 rail adapters (standard rail mounting only), and attaching hardware (as needed)
- Arcserve faceplate
- Microsoft Client Access License

**Note:** Inspect the box that the appliance was shipped in and ensure that no items are missing from the box and that there are no visible signs of damage. If any items are missing or damaged, please retain all packaging materials and contact Arcserve Support immediately at: <u>https://www.arcserve.com/support</u>.

### What is Not Included in the Box

The following items are not included in the box and may be needed for installation and configuration of the appliance:

- Monitor
- Keyboard
- External Storage Device (if needed)

### **Available Models**

The Arcserve UDP 7000 series and 8000 series appliances are available in a variety of different models designed to meet your specific needs:

- Models 7100 7300v
- Models 7400 7600v
- Models 8100 8400

## Models 7100-7300v

| Arcserve | UDP | Appliance | Models | 7100 - | 7300v |
|----------|-----|-----------|--------|--------|-------|
|----------|-----|-----------|--------|--------|-------|

| Arcserve UDP 7000 Series Appliance Specifications                                                                                                                                                                                                                                                                                        |                                                                                                      |         |         |      |             |  |  |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|---------|---------|------|-------------|--|--|--|
| Appliance<br>Model                                                                                                                                                                                                                                                                                                                       | 7100                                                                                                 | 7200    | 7200V   | 7300 | 7300V       |  |  |  |
| Backup Storage Ca                                                                                                                                                                                                                                                                                                                        | Backup Storage Capacity                                                                              |         |         |      |             |  |  |  |
| Raw Storage capa-<br>city*                                                                                                                                                                                                                                                                                                               | 3 TB                                                                                                 | 6 ТВ    | 6 ТВ    | 9 TB | 9 TB        |  |  |  |
| Usable backup<br>capacity**                                                                                                                                                                                                                                                                                                              | <sup>ckup</sup> 2.8 TB 5.8 TB 5.8 TB 8.8 TB 8                                                        |         | 8.8 TB  |      |             |  |  |  |
| Protected (source<br>data) capacity***                                                                                                                                                                                                                                                                                                   | source Up to 8 TB Up to 17 TB Up to 17 TB Up to 26 TB Up to 2 city***                                |         |         |      | Up to 26 TB |  |  |  |
| Standard Features                                                                                                                                                                                                                                                                                                                        | 5                                                                                                    |         |         |      |             |  |  |  |
| Unified management console, global deduplication, block level infinite incremental<br>backups, compression, encryption, WAN optimized replication, advanced vir-<br>tualization support, agentless backup, remote virtual standby, tape support, applic-<br>ation consistent backups, granular restore, unified reporting and dashboard. |                                                                                                      |         |         |      |             |  |  |  |
| On-Appliance Vir-<br>tual Standby                                                                                                                                                                                                                                                                                                        | On-Appliance Vir-<br>tual Standby N/A N/A Up to 3 VMs N/A Up to 3 V                                  |         |         |      |             |  |  |  |
| Warranty and Tec                                                                                                                                                                                                                                                                                                                         | hnical Specific                                                                                      | cations |         |      |             |  |  |  |
| Full System<br>Depot Warranty                                                                                                                                                                                                                                                                                                            |                                                                                                      |         | 3 Years |      |             |  |  |  |
| Physical Dimen-<br>sions<br>(H x W x D in<br>Inches)                                                                                                                                                                                                                                                                                     | 1.7" x 17.2" x 25.6" (1U - 19" Rack Mount rails provided)                                            |         |         |      |             |  |  |  |
| Remote man-<br>agement and net-<br>work interface<br>ports                                                                                                                                                                                                                                                                               | - 1 x IPMI & 2 x 1 GbE (RJ45)                                                                        |         |         |      |             |  |  |  |
| Hard Disk type<br>and RAID con-<br>figuration                                                                                                                                                                                                                                                                                            | 4 x 1 TB SAS 4 x 2 TB SAS 4 x 2 TB SAS 4 x 3 TB SAS 4 x 3 TB SAS (RAID 5) (RAID 5) (RAID 5) (RAID 5) |         |         |      |             |  |  |  |
| External Tape<br>Backup Con-<br>nectivity (SAS,<br>SATA, FC)                                                                                                                                                                                                                                                                             | 1 x PASS                                                                                             |         |         |      |             |  |  |  |

| Total system RAM             | 16 GB                                                                          | 16 GB       | 32 GB       | 32 GB           | 48 GB       |  |  |
|------------------------------|--------------------------------------------------------------------------------|-------------|-------------|-----------------|-------------|--|--|
| SSD drive                    |                                                                                |             |             |                 |             |  |  |
| (For dedu-                   |                                                                                |             | 120 00 000  | 240 CD CCD      | 240 GB SSD  |  |  |
| plication hash               | 120 00 330                                                                     | 120 GB 33D  | 120 06 330  | 240 06 330      |             |  |  |
| tables)                      |                                                                                |             |             |                 |             |  |  |
| Maximum weight               |                                                                                |             | 41 lbc      |                 |             |  |  |
| (lbs)                        |                                                                                |             | 41 105      |                 |             |  |  |
| Power Supplies               |                                                                                |             |             |                 |             |  |  |
| (Single or redund-           | 1 x 600W                                                                       |             |             |                 |             |  |  |
| ant)                         |                                                                                |             |             |                 |             |  |  |
| Power con-                   |                                                                                |             |             |                 |             |  |  |
| sumption                     | 02/110/142                                                                     | 177/164/147 | 125/167/145 | 145 125/167/145 | 129/188/152 |  |  |
| (Watts @ idle/-              | 93/110/143                                                                     | 122/104/143 | 125/16//145 |                 |             |  |  |
| load/startup)                |                                                                                |             |             |                 |             |  |  |
| AC voltage & fre-            |                                                                                |             | 100 2404    |                 |             |  |  |
| quency range                 | 100 - 240V                                                                     |             |             |                 |             |  |  |
| Ampere rating                | 7.5 Amp Max                                                                    |             |             |                 |             |  |  |
| *1 TB = 1,000,000,000 bytes. |                                                                                |             |             |                 |             |  |  |
| ** On "V" models,            | ** On "V" models, space available for backup is reduced by the size of virtual |             |             |                 |             |  |  |

standby VMs.

\*\*\*Estimated capacity assuming a typical 3:1 deduplication and compression ratio. Actual backup capacity may vary significantly, based upon data type, backup type, schedule, and more.

## Models 7400-7600v

### Arcserve UDP Appliance Models 7400 - 7600v

| Arcserve UDP 7000 Series Appliance Specifications                                       |                                                                    |                                                                          |                                                          |                                                        |                                              |                               |
|-----------------------------------------------------------------------------------------|--------------------------------------------------------------------|--------------------------------------------------------------------------|----------------------------------------------------------|--------------------------------------------------------|----------------------------------------------|-------------------------------|
| Appliance Model                                                                         | 7400                                                               | 7400V                                                                    | 7500                                                     | 7500V                                                  | 7600                                         | 7600V                         |
| Backup Storage Capacity                                                                 |                                                                    |                                                                          |                                                          |                                                        |                                              |                               |
| Raw Storage capa-<br>city*                                                              | 16 TB                                                              | 16 TB                                                                    | 20 ТВ                                                    | 20 ТВ                                                  | 30 TB                                        | 30 ТВ                         |
| Usable backup<br>capacity**                                                             | 15.8 TB                                                            | 15.8 TB                                                                  | 19.8 TB                                                  | 19.8 TB                                                | 29.8 ТВ                                      | 29.8 TB                       |
| Protected (source<br>data) capacity***                                                  | Up to 46<br>TB                                                     | Up to 46 TB                                                              | Up to 58<br>TB                                           | Up to 58<br>TB                                         | Up to 90<br>TB                               | Up to 90<br>TB                |
| Standard Features                                                                       |                                                                    |                                                                          |                                                          |                                                        |                                              |                               |
| Unified managemen<br>backups, compressi<br>support, agentless k<br>backups, granular re | it console, g<br>on, encrypt<br>backup, rem<br>estore, unifi       | global deduplic<br>tion, WAN opti<br>note virtual sta<br>ted reporting a | ation, block<br>mized replic<br>ndby, tape<br>nd dashboa | c level infinit<br>cation, adva<br>support, ap<br>ard. | te incremen<br>anced virtua<br>oplication co | tal<br>Ilization<br>onsistent |
| On-Appliance Vir-<br>tual Standby                                                       | N/A                                                                | Up to 6 VMs                                                              | N/A                                                      | Up to 9<br>VMs                                         | N/A                                          | Up to 12<br>VMs               |
| Warranty and Tech                                                                       | nical Specific                                                     | ations                                                                   |                                                          |                                                        |                                              |                               |
| Full System Depot<br>Warranty                                                           |                                                                    |                                                                          | 3 Yea                                                    | ars                                                    |                                              |                               |
| Physical Dimen-<br>sions<br>(H x W x D in<br>Inches)                                    | 3.5                                                                | " x 17.2" x 25.6                                                         | " (2U - 19" F                                            | Rack Mount                                             | rails provid                                 | led)                          |
| Remote man-<br>agement and net-<br>work interface<br>ports                              | 1 x IPMI & 2 x 1 GbE (RJ45) and 4 x 1GbE (RJ45). Optional 2 x 10Gb |                                                                          |                                                          |                                                        |                                              |                               |
| Hard Disk type and<br>RAID configuration                                                | 10 x 2 TB<br>SAS<br>(RAID 6)                                       | 10 x 2 TB SAS<br>(RAID 6)                                                | 12 x 2 TB<br>SAS<br>(RAID 6)                             | 12 x 2 TB<br>SAS<br>(RAID 6)                           | 12 x 3 TB<br>SAS<br>(RAID 6)                 | 12 x 3 TB<br>SAS<br>(RAID 6)  |
| External Tape<br>Backup Con-<br>nectivity (SAS,<br>SATA, FC)                            | 1 x PASS                                                           |                                                                          |                                                          |                                                        |                                              |                               |
| Total system RAM                                                                        | 64 GB                                                              | 96 GB                                                                    | 64 GB                                                    | 96 GB                                                  | 128 GB                                       | 192 GB                        |
| SSD drive                                                                               | 240 GB                                                             | 240 GB SSD                                                               | 480 GB                                                   | 480 GB                                                 | 480 GB                                       | 480 GB                        |

more.

| (For deduplication hash tables)                                                                          | SSD      |          | SSD      | SSD      | SSD      | SSD      |  |  |
|----------------------------------------------------------------------------------------------------------|----------|----------|----------|----------|----------|----------|--|--|
| Maximum weight                                                                                           | 52 lbs   |          |          |          |          |          |  |  |
| (lbs)                                                                                                    |          | 52 103   |          |          |          |          |  |  |
| Power Supplies                                                                                           |          |          |          |          |          |          |  |  |
| (Single or redund-                                                                                       |          |          | 2 x 92   | 20w      |          |          |  |  |
| ant)                                                                                                     |          |          |          |          |          |          |  |  |
| Power con-                                                                                               |          |          |          |          |          |          |  |  |
| sumption                                                                                                 | 208/257/ | 208/257/ | 208/257/ | 208/257/ | 240/296/ | 240/296/ |  |  |
| (Watts @ idle/-                                                                                          | 358      | 358      | 358      | 358      | 369      | 369      |  |  |
| load/startup)                                                                                            |          |          |          |          |          |          |  |  |
| AC voltage & fre-                                                                                        |          |          | 100 - 2  | 404      |          |          |  |  |
| quency range                                                                                             |          |          | 100-2    | .40V     |          |          |  |  |
| Ampere rating                                                                                            |          |          | 11 Amp   | Max      |          |          |  |  |
| *1 TB = 1,000,000,000 bytes.                                                                             |          |          |          |          |          |          |  |  |
| ** On "V" models, space available for backup is reduced by the size of virtual standby VMs.              |          |          |          |          |          |          |  |  |
| ***Estimated capacity assuming a typical 3:1 deduplication and compression ratio. Actual                 |          |          |          |          |          |          |  |  |
| backup capacity may vary significantly, based upon data type, backup type, schedule, and $\left   ight.$ |          |          |          |          |          |          |  |  |

25 Arcserve UDP Appliance User Guide

### Models 8100-8400

| Arcserve UDP 8000 Series Appliance Specifications |                                                                                                                     |                                        |                                                              |                                    |  |  |  |
|---------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|----------------------------------------|--------------------------------------------------------------|------------------------------------|--|--|--|
| Appliance<br>Model                                | UDP 8100                                                                                                            | UDP 8200                               | UDP 8300 UDP 8400                                            |                                    |  |  |  |
| Source<br>Backup*                                 | 12TB-18TB                                                                                                           | 24TB-36TB                              | 48TB-128TB                                                   | 96TB-240TB                         |  |  |  |
| System RAM                                        | 32GB                                                                                                                | 32GB                                   | 64GB                                                         | 128GB                              |  |  |  |
| Max RAM**                                         | 64GB/960                                                                                                            | GB/160GB                               | 96GB/128GB/192GB                                             | 160GB/192GB/256GB                  |  |  |  |
| SSD drive                                         | 120GB SSD                                                                                                           | 200GB SSD                              | 480GB SSD                                                    | 1.2TB SSD                          |  |  |  |
| Processor                                         | E5-2609 V4,<br>8-CORE,<br>1.7GHZ                                                                                    | E5-2620 V4,<br>8-CORE, 2.1<br>GHZ      | , E5-2640 V4, 10- E5-2650 V4, 12<br>CORE, 2.4GHZ CORE, 2.2GH |                                    |  |  |  |
| RAID Card                                         | 936                                                                                                                 | 1-4i                                   | 930                                                          | 51-8i                              |  |  |  |
| RAID Con-<br>figuration                           | RAID-5 v                                                                                                            | vith BBU                               | RAID-6 with BBU                                              |                                    |  |  |  |
| Drive Bays                                        | Z                                                                                                                   | 1                                      |                                                              | 12                                 |  |  |  |
|                                                   |                                                                                                                     |                                        | 6x 4TB SAS 12G<br>7x 4TB SAS 12G                             | 6x 8TB SAS 12G<br>7x 8TB SAS 12G   |  |  |  |
| _ ·                                               | 3x 2TB SAS<br>12G                                                                                                   | 3x 4TB SAS<br>12G<br>4x 4TB SAS<br>12G | 8x 4TB SAS 12G                                               | 8x 8TB SAS 12G                     |  |  |  |
| Drives                                            | 4x 2TB SAS<br>12G                                                                                                   |                                        | 9x 4TB SAS 12G<br>10x 4TB SAS 12G                            | 9x 81B SAS 12G<br>10x 8TB SAS 12G  |  |  |  |
|                                                   |                                                                                                                     |                                        | 11x 4TB SAS 12G<br>12x 4TB SAS 12G                           | 11x 8TB SAS 12G<br>12x 8TB SAS 12G |  |  |  |
| DIMMs /<br>Max DIMMs                              | 4x 8GB DD                                                                                                           | R4-2400/ 8                             | 4x 16GB DDR4-<br>2400/ 8                                     | 4x 32GB DDR4-2400/<br>8            |  |  |  |
| Cards                                             |                                                                                                                     |                                        | LSI SAS9200-8E                                               |                                    |  |  |  |
| Power Sup-<br>plies                               | 2x hot swap redundantTwo x 920W hot swap redundant high-effi-500W AC Platinumciency AC power supply, Platinum Level |                                        |                                                              |                                    |  |  |  |

Arcserve UDP Appliance Models 8100 - 8400

\*Estimated capacity assuming a typical 3:1 deduplication & compression ratio. Actual backup capacity may vary significantly, based upon data type, backup type, backup schedule, etc.

\*\*Arcserve Appliances have additional RAM in order to host Virtual Standby / Instant VM recovery on the appliances. VM memory allocation should be sized based on guest OS workload. Arcserve also provides the option to add additional RAM to the standard appliance configuration based on customer needs.

### **Controls and Indicators**

The Arcserve UDP Appliance contains several controls and indicators (LEDs) on the front and rear panels and on each drive carrier. These controls and indicators provide the capability to control various functions and a quick-view reference of the status of the appliance and components:

- Front Panel 7100-7300v
- Front Panel 7400-7600v
- Front Panel 8100-8200
- Front Panel 8300-8400
- Rear Panel 7100-7300v
- Rear Panel 7400-7600v
- Rear Panel 8100-8200
- Rear Panel 8300-8400

### Front Panel 7100-7300v

The front panel of the Arcserve UDP Appliance contains control panel buttons, control panel LEDs, and drive carrier LEDs. The following table describes these items.



| Number | Control/Indicator   | Description                                               |
|--------|---------------------|-----------------------------------------------------------|
|        |                     | Used to turn on and off power from the power supply to    |
|        |                     | the appliance components. When turning off the power,     |
| 1      | Dowor button        | the main power is turned off but standby power is still   |
|        | Power bullon        | supplied. Therefore, to ensure power is completely        |
|        |                     | removed from the appliance, unplug the power supply       |
|        |                     | cable before performing maintenance.                      |
| 2      | Reset button        | Used to reboot the appliance.                             |
|        | Power LED           | Solid Green: Indicates that the power is being supplied   |
| 2      |                     | to the power supply of the appliance.                     |
| 5      |                     | This LED should normally be on when the appliance is      |
|        |                     | operating.                                                |
| 4      | Device Activity LED | Blinking Amber: Indicates activity on at least one of the |
|        |                     | hard drives.                                              |
| 5      | Network Interface   | Blinking Amber: Indicates network activity on Network 1   |
|        | Card (NIC1) LED     | (ETHO Port).                                              |
| 6      | Network Interface   | Blinking Amber: Indicates network activity on Network 2   |
|        | Card (NIC2) LED     | (ETH1 Port).                                              |

|                      |                                                                                                                          | <b>Continuously on and Red:</b> An overheat condition has occurred. (This can be caused due to cable congestion.)                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|----------------------|--------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 7                    |                                                                                                                          | *Blinking Red - Fast (1 second): Fan Failure. Check for                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|                      |                                                                                                                          | an inoperative fan.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|                      | Information LED                                                                                                          | *Blinking Red - Slow (4 seconds): Power Failure. Check                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|                      |                                                                                                                          | for an inoperative power supply.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|                      |                                                                                                                          | Solid Blue: Local UID has been activated. Use this func-                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|                      |                                                                                                                          | tion to locate the Server in a rack environment.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|                      |                                                                                                                          | Blinking Blue: Remote UID has been activated. Use this                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|                      |                                                                                                                          | function to locate the Server from a remote location.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|                      |                                                                                                                          | Used to turn on or off the Universal Information LED                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 8                    | Unit Identifier (UID)                                                                                                    | (blue) on both the front and rear appliance panels.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|                      | button                                                                                                                   | When the blue LED is on, the appliance can be easily loc-                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|                      |                                                                                                                          | ated in a rack (from either the front or the back).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 9                    | Hard Drive (HDD)                                                                                                         | Blinking Green: Indicates activity on the corresponding                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|                      | LED                                                                                                                      | drive.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|                      | Hard Drive (HDD)                                                                                                         | <b>*Solid Red</b> : Indicates failure of the corresponding hard drive.                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|                      |                                                                                                                          | With the Arcserve UDP appliance, if one hard drive fails,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|                      |                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 10                   | Hard Drive (HDD)                                                                                                         | the rest of the drives will kick in immediately to ensure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| 10                   | Hard Drive (HDD)<br>LED                                                                                                  | the rest of the drives will kick in immediately to ensure<br>no data is lost and the appliance continues to work nor-                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 10                   | Hard Drive (HDD)<br>LED                                                                                                  | the rest of the drives will kick in immediately to ensure<br>no data is lost and the appliance continues to work nor-<br>mally. Therefore, to guard against any problems asso-                                                                                                                                                                                                                                                                                                                                                                     |
| 10                   | Hard Drive (HDD)<br>LED                                                                                                  | the rest of the drives will kick in immediately to ensure<br>no data is lost and the appliance continues to work nor-<br>mally. Therefore, to guard against any problems asso-<br>ciated with multiple hard drive failures, it is important to                                                                                                                                                                                                                                                                                                     |
| 10                   | Hard Drive (HDD)<br>LED                                                                                                  | the rest of the drives will kick in immediately to ensure<br>no data is lost and the appliance continues to work nor-<br>mally. Therefore, to guard against any problems asso-<br>ciated with multiple hard drive failures, it is important to<br>replace a hard drive as soon as possible to minimize<br>potential loss of data.                                                                                                                                                                                                                  |
| 10                   | Hard Drive (HDD)<br>LED<br>Hard Drive (HDD)<br>Latch                                                                     | the rest of the drives will kick in immediately to ensure<br>no data is lost and the appliance continues to work nor-<br>mally. Therefore, to guard against any problems asso-<br>ciated with multiple hard drive failures, it is important to<br>replace a hard drive as soon as possible to minimize<br>potential loss of data.<br>Used to unlock and remove the hard drive.                                                                                                                                                                     |
| 10<br>11<br>12       | Hard Drive (HDD)<br>LED<br>Hard Drive (HDD)<br>Latch<br>Solid State Drive<br>(SSD) LED                                   | the rest of the drives will kick in immediately to ensure<br>no data is lost and the appliance continues to work nor-<br>mally. Therefore, to guard against any problems asso-<br>ciated with multiple hard drive failures, it is important to<br>replace a hard drive as soon as possible to minimize<br>potential loss of data.<br>Used to unlock and remove the hard drive.<br><b>*Solid Red</b> : Indicates drive failure.                                                                                                                     |
| 10<br>11<br>12       | Hard Drive (HDD)<br>LED<br>Hard Drive (HDD)<br>Latch<br>Solid State Drive<br>(SSD) LED<br>Solid State Drive              | the rest of the drives will kick in immediately to ensure<br>no data is lost and the appliance continues to work nor-<br>mally. Therefore, to guard against any problems asso-<br>ciated with multiple hard drive failures, it is important to<br>replace a hard drive as soon as possible to minimize<br>potential loss of data.<br>Used to unlock and remove the hard drive.<br><b>*Solid Red</b> : Indicates drive failure.<br><b>Solid Green</b> : Indicates drive activity.                                                                   |
| 10<br>11<br>12<br>13 | Hard Drive (HDD)<br>LED<br>Hard Drive (HDD)<br>Latch<br>Solid State Drive<br>(SSD) LED<br>Solid State Drive<br>(SSD) LED | the rest of the drives will kick in immediately to ensure<br>no data is lost and the appliance continues to work nor-<br>mally. Therefore, to guard against any problems asso-<br>ciated with multiple hard drive failures, it is important to<br>replace a hard drive as soon as possible to minimize<br>potential loss of data.<br>Used to unlock and remove the hard drive.<br><b>*Solid Red</b> : Indicates drive failure.<br><b>Solid Green</b> : Indicates drive activity.<br><b>Blinking Green</b> : Indicates the drive is being accessed. |

\*Any Solid or Blinking Red light indicates some kind of failure. To quickly resolve this issue, contact our support site at <u>arcserve.com/support</u>.

### Front Panel 7400-7600v

The front panel of the Arcserve UDP Appliance contains control panel buttons, control panel LEDs, and drive carrier LEDs. The following table describes these items.



| Number | Control/Indicator   | Description                                                  |
|--------|---------------------|--------------------------------------------------------------|
|        | Power button        | Used to turn on and off power from the power supply to       |
|        |                     | the appliance components. When turning off the power,        |
| 1      |                     | the main power is turned off but standby power is still sup- |
| 1<br>L |                     | plied. Therefore, to ensure power is completely removed      |
|        |                     | from the appliance, unplug the power supply cable before     |
|        |                     | performing maintenance.                                      |
| 2      | Reset button        | Used to reboot the appliance.                                |
|        | Power LED           | Solid Green: Indicates that the power is being supplied to   |
|        |                     | the power supply of the appliance.                           |
| 5      |                     | This LED should normally be on when the appliance is oper-   |
|        |                     | ating.                                                       |
| 4      | Device Activity LED | Blinking Amber: Indicates activity on at least one of the    |
|        |                     | hard dives.                                                  |
| 5      | Network Interface   | Blinking Amber: Indicates network activity on Network 1      |
|        | Card (NIC1) LED     | (ETH0 Port).                                                 |
| 6      | Network Interface   | Blinking Amber: Indicates network activity on Network 2      |
|        | Card (NIC2) LED     | (ETH1 Port).                                                 |

|    |                           | Continuously on and Red: An overheat condition has                                                             |  |
|----|---------------------------|----------------------------------------------------------------------------------------------------------------|--|
| 7  | Information LED           | occurred. (This can be caused due to cable congestion.)                                                        |  |
|    |                           | *Blinking Red - Fast (1 second): Fan Failure. Check for an                                                     |  |
|    |                           | inoperative fan.                                                                                               |  |
|    |                           | *Blinking Red - Slow (4 seconds): Power Failure. Check for<br>an inoperative power supply.                     |  |
|    |                           | <b>Solid Blue:</b> Local UID has been activated. Use this function to locate the Server in a rack environment. |  |
|    |                           | Blinking Blue: Remote UID has been activated. Use this                                                         |  |
|    |                           | function to locate the Server from a remote location.                                                          |  |
| 8  | Power Fail                | Indicates a power supply module has failed.                                                                    |  |
| 9  | Hard Drive (HDD)          | Blinking Green: Indicates activity on the corresponding                                                        |  |
|    | LED                       | drive.                                                                                                         |  |
| 10 | Hard Drive (HDD)<br>LED   | * <b>Solid Red</b> : Indicates failure of the corresponding hard drive.                                        |  |
|    |                           | With the Arcserve UDP appliance, if one hard drive fails, the                                                  |  |
|    |                           | rest of the drives will kick in immediately to ensure no data                                                  |  |
|    |                           | is lost and the appliance continues to work normally. There-                                                   |  |
|    |                           | fore, to guard against any problems associated with mul-                                                       |  |
|    |                           | tiple hard drive failures, it is important to replace a hard                                                   |  |
|    |                           | drive as soon as possible to minimize potential loss of data.                                                  |  |
| 11 | Hard Drive (HDD)<br>Latch | Used to unlock and remove the hard drive.                                                                      |  |

\*Any Solid or Blinking Red light indicates some kind of failure. To quickly resolve this issue, contact our support site at <u>arcserve.com/support</u>.

### Front Panel 8100-8200

The front panel of the Arcserve UDP 8100-8200 Appliance contains control panel buttons, control panel LEDs, and drive carrier LEDs. The following table describes these items:



| Control/Indicator | Description                                                                                                                                                                                                                                                                    |  |
|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| I/O Power button  | Used to turn on and off power from the power supply to the appli-<br>ance components. When turning off the power, the main power is<br>turned off but standby power is still supplied. Therefore, to ensure<br>that power is completely removed from the appliance, unplug the |  |
| Poset button      | Lised to reheat the appliance                                                                                                                                                                                                                                                  |  |
|                   |                                                                                                                                                                                                                                                                                |  |
| Power LED         | <b>Solid Green:</b> Indicates that the power is being supplied to the power supply of the appliance.                                                                                                                                                                           |  |
|                   | This LED should normally be on when the appliance is operating.                                                                                                                                                                                                                |  |
| HDD LED           | Blinking Amber: Indicates activity on at least one of the hard drives.                                                                                                                                                                                                         |  |
| Network Interface | Blinking Amber: Indicates network activity on Network 1 (ETHO Por                                                                                                                                                                                                              |  |
| Card (NIC1) LED   |                                                                                                                                                                                                                                                                                |  |
| Network Interface | Plinking Ambor: Indicator notwork activity on Notwork 2 (ETH1 Do                                                                                                                                                                                                               |  |
| Card (NIC2) LED   | billiking Amber, multates network activity on Network 2 (ETH1 P                                                                                                                                                                                                                |  |

|                         | Continuously on and Red: An overheat condition has occurred.             |  |
|-------------------------|--------------------------------------------------------------------------|--|
|                         | Note: A cable congestion may cause this situation.                       |  |
|                         | *Blinking Red - Fast (1 second): Fan Failure. Check for an inop-         |  |
|                         | erative fan.                                                             |  |
| Information LED         | *Blinking Red - Slow (4 seconds): Power Failure. Check for an inop-      |  |
|                         | erative power supply.                                                    |  |
|                         | Solid Blue: Local UID is activated. Use this function to locate the      |  |
|                         | Server in a rack environment.                                            |  |
|                         | Blinking Blue: Remote UID is activated. Use this function to locate      |  |
|                         | the Server from a remote location.                                       |  |
|                         | Used to turn on or off the Universal Information LED (blue) on both      |  |
| Unit Identifier (UID)   | the front and rear appliance panels.                                     |  |
| button                  | When the blue LED is on, the appliance can be easily located in a rack   |  |
|                         | (from either the front or the back).                                     |  |
| Hard Drive (HDD)<br>LED | Blinking Green: Indicates activity on the corresponding drive.           |  |
|                         | *Solid Red: Indicates failure of the corresponding hard drive.           |  |
|                         | With the Arcserve UDP appliance, if one hard drive fails, the rest of    |  |
| Hard Drive (HDD)        | the drives will kick in immediately to ensure no data is lost and the    |  |
| LED                     | appliance continues to work normally. Therefore, to guard against        |  |
|                         | any problems associated with multiple hard drive failures, it is import- |  |
|                         | ant to replace a hard drive as soon as possible to minimize potential    |  |
|                         | loss of data.                                                            |  |
| Hard Drive (HDD)        | Used to unlock and remove the hard drive.                                |  |
| Solid State Drive       |                                                                          |  |
| (SSD) LFD               | *Solid Red: Indicates drive failure.                                     |  |
| Solid State Drive       | Solid Green: Indicates drive activity.                                   |  |
| (SSD) LED               | Blinking Green: Indicates the drive is being accessed                    |  |
| Solid State Drive       |                                                                          |  |
| (SSD) Latch             | Used to unlock and remove the SSD drive.                                 |  |

\*Any Solid or Blinking Red light indicates some kind of failure. To quickly resolve this issue, contact our support site at <u>arcserve.com/support</u>.

### Front Panel 8300-8400

The front panel of the Arcserve UDP 8300-8400 Appliance contains control panel buttons, control panel LEDs, and drive carrier LEDs. The following table describes these items:

| See detail illustration and thart below for front panel information |                         |                                                                                                   |
|---------------------------------------------------------------------|-------------------------|---------------------------------------------------------------------------------------------------|
| Power Button                                                        |                         | HDD Latch                                                                                         |
|                                                                     |                         |                                                                                                   |
| RESET                                                               | HDD Activity LED        |                                                                                                   |
| NIC2 Activity LED                                                   | NIC1 Activity LED       |                                                                                                   |
| Power Failure LED                                                   | Informational LED       |                                                                                                   |
|                                                                     | This LED alerts the ope | rator of several states, as noted in the chart below.                                             |
|                                                                     | Status                  | Description                                                                                       |
|                                                                     | Continuously on and red | An overheat condition has occurred.(May be due to<br>cable congestion.)                           |
|                                                                     | Blinking red (1Hz)      | Fan fallure, check for Inoperative fan                                                            |
|                                                                     | Blinking red (0.25 Hz)  | Power failure, check for a non-operational power supply                                           |
|                                                                     | Solid Blue              | Local UID has been activated. Use this function to locate the server in a rack mount environment. |
|                                                                     | Blinking Blue           | Remote UID is on. Use this function to identify the server<br>from a remote location.             |

| Control/Indicator | Description                                                                |
|-------------------|----------------------------------------------------------------------------|
|                   | Used to turn on and off power from the power supply to the appli-          |
|                   | ance components. When turning off the power, the main power is             |
| Power button      | turned off but standby power is still supplied. Therefore, to ensure       |
|                   | power is completely removed from the appliance, unplug the power           |
|                   | supply cable before performing maintenance.                                |
| Reset button      | Used to reboot the appliance.                                              |
|                   | Solid Green: Indicates that the power is being supplied to the power       |
| Power LED         | supply of the appliance.                                                   |
|                   | This LED should normally be on when the appliance is operating.            |
| Network Interface | Blinking Amber: Indicates network activity on Network 1 (ETHO Port).       |
| Card (NIC1) LED   |                                                                            |
| Network Interface | <b>Blinking Amber:</b> Indicates network activity on Network 2 (FTH1 Port) |
| Card (NIC2) LED   | binking Amber. Indicates network activity on Network 2 (ETHEFOIL).         |
| Information LED   | Continuously on and Red: An overheat condition has occurred. (This         |
|                   | can be caused due to cable congestion.)                                    |

|                           | *Blinking Red - Fast (1 second): Fan Failure. Check for an inop-<br>erative fan.                                                                                                                                                                                                                                                                                                                                                                                    |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                           | *Blinking Red - Slow (4 seconds): Power Failure. Check for an inop-<br>erative power supply.                                                                                                                                                                                                                                                                                                                                                                        |
|                           | <b>Solid Blue:</b> Local UID has been activated. Use this function to locate the Server in a rack environment.                                                                                                                                                                                                                                                                                                                                                      |
|                           | <b>Blinking Blue:</b> Remote UID has been activated. Use this function to locate the Server from a remote location.                                                                                                                                                                                                                                                                                                                                                 |
| Power Failure LED         | Indicates a power supply module has failed.                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Hard Drive (HDD)<br>LED   | Blinking Green: Indicates activity on the corresponding drive.                                                                                                                                                                                                                                                                                                                                                                                                      |
| Hard Drive (HDD)<br>LED   | <b>*Solid Red</b> : Indicates failure of the corresponding hard drive.<br>With the Arcserve UDP appliance, if one hard drive fails, the rest of<br>the drives will kick in immediately to ensure no data is lost and the<br>appliance continues to work normally. Therefore, to guard against<br>any problems associated with multiple hard drive failures, it is import-<br>ant to replace a hard drive as soon as possible to minimize potential<br>loss of data. |
| Hard Drive (HDD)<br>Latch | Used to unlock and remove the hard drive.                                                                                                                                                                                                                                                                                                                                                                                                                           |

\*Any Solid or Blinking Red light indicates some kind of failure. To quickly resolve this issue, contact our support site at <u>arcserve.com/support</u>.
#### Rear Panel 7100-7300v



| Number | Name of Con-<br>trol/Indicator   | Description                                                                                                             |  |
|--------|----------------------------------|-------------------------------------------------------------------------------------------------------------------------|--|
| 1      |                                  | Provides high-efficiency power supply to the appliance.                                                                 |  |
|        |                                  | <b>Note:</b> The main power switch is used to apply or remove power from the power supply to the appliance. Turning off |  |
|        | Power Supply                     | the appliance power with this button removes the main                                                                   |  |
|        |                                  | power but standby power is still supplied. Therefore, to                                                                |  |
|        |                                  | unplug the power supply cable before performing main-                                                                   |  |
|        |                                  | The IDMI (Intelligent Distform Management Interface) port                                                               |  |
|        |                                  | is used to monitor the physical health of Servers, such as                                                              |  |
|        | IPMI Port (Remote<br>Management) | temperature, voltage, fans, power supplies, and the appli-                                                              |  |
|        |                                  | ance.                                                                                                                   |  |
| 2      |                                  | <b>Note</b> : The default user name/password for IPMI access is ADMIN/ARCADMIN (case-sensitive). We recommend that      |  |
|        |                                  | you change the password as soon as possible. For details                                                                |  |
|        |                                  | about how to change the IPMI password, see <u>How to</u>                                                                |  |
|        |                                  | Change the IPMI Password.                                                                                               |  |
|        | External Storage                 | Used to connect an external storage device (hard drive,                                                                 |  |
| 3      | Device Port                      | tape drive, etc.) to the appliance. These portable external                                                             |  |
| 5      | (SAS port for tape               | storage devices can be used to store backed-up data for                                                                 |  |
|        | drive)                           | easy transporting from one location to another.                                                                         |  |
| 4      | Serial Number Label              | A unique serial number that is assigned to the appliance.                                                               |  |
| 5      | COM1 Sorial Port                 | Communication port that is used to connect a serial device,                                                             |  |
| 5      |                                  | such as a mouse to the appliance (if needed).                                                                           |  |
| 6      | USB 2.0 (black)                  | Used to connect USB 2.0 type devices to the appliance.                                                                  |  |

| 7 | USB 3.0 (blue)   | Used to connect USB 3.0 type devices to the appliance.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |
|---|------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| 0 | Network Data I/O | Used to transfer network data to and from the appliance.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |
| 0 | Port 1           | ((ETH0 for Network 1)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |
| 0 | Network Data I/O | Used to transfer network data to and from the appliance.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |
|   | -                | The second |  |
| 9 | Port 2           | (ETH1 for Network 2)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |

## Rear Panel 7400-7600v



| Number              | Name of Con-<br>trol/Indicator                        | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |
|---------------------|-------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| 1 Dual Power Supply |                                                       | Provides high-efficiency power supply to the appliance.<br><b>Note:</b> The main power switch is used to apply or remove<br>power from the power supply to the appliance. The benefit<br>of having a dual power supply is if one fails then the other<br>is available for use.<br>Turning off the appliance power with this button removes<br>the main power but standby power is still supplied. There-<br>fore, to ensure power is completely removed from the<br>appliance, unplug the power supply cable before per-<br>forming maintenance. |  |
| 2                   | IPMI Port (Remote<br>Management)                      | The IPMI (Intelligent Platform Management Interface) port<br>is used to monitor the physical health of Servers, such as<br>temperature, voltage, fans, power supplies, and the appli-<br>ance.<br><b>Note</b> : The default user name/password for IPMI access is<br>ADMIN/ARCADMIN (case-sensitive). We recommend that<br>you change the password as soon as possible. For details<br>about how to change the IPMI password, see <u>How to</u><br><u>Change the IPMI Password</u> .                                                             |  |
| 3                   | External Storage<br>Device Port<br>(SAS port for tape | Used to connect an external storage device (hard drive,<br>tape drive, etc.) to the appliance. These portable external<br>storage devices can be used to store backed-up data for<br>easy transporting from one location to another.                                                                                                                                                                                                                                                                                                             |  |

|    | drive)                                                                                  |                                                                                                                                                                                                                                                                                                                                     |
|----|-----------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 4  | Serial Number Label                                                                     | A unique serial number that is assigned to the appliance.                                                                                                                                                                                                                                                                           |
| 5  | COM1 Serial Port                                                                        | Communication port that is used to connect a serial device, such as a mouse to the appliance (if needed).                                                                                                                                                                                                                           |
| 6  | USB 2.0 (black)                                                                         | Used to connect USB 2.0 type devices to the appliance.                                                                                                                                                                                                                                                                              |
| 7  | USB 3.0 (blue) Used to connect USB 3.0 type devices to the applia                       |                                                                                                                                                                                                                                                                                                                                     |
| 8  | Network Data I/O<br>Port 1                                                              | Used to transfer network data to and from the appliance.<br>((ETH0 for Network 1)                                                                                                                                                                                                                                                   |
| 9  | Network Data I/O<br>Port 2                                                              | Used to transfer network data to and from the appliance.<br>(ETH1 for Network 2)                                                                                                                                                                                                                                                    |
| 10 | VGA Connector                                                                           | Used to connect a monitor to the appliance (if needed).                                                                                                                                                                                                                                                                             |
| 11 | External Storage<br>Device Port<br>(Tap Auto-<br>loader/Library)<br>LSI SAS 9212 - 4i4e | Used to connect an external storage device (Tape Auto-<br>loader/Library) to the appliance. These portable external<br>storage devices can be used to store backed-up data for<br>easy transporting from one location to another.<br><b>Note</b> : This port is present in the operating system as LSI<br>Adapter SAS2 2008 Falcon. |

## Rear Panel 8100-8200



| Num-<br>ber | Name of Control/Indicator                    |  |  |
|-------------|----------------------------------------------|--|--|
| 1           | Power Supply Module #1                       |  |  |
| 2           | AC Power Inlet #1                            |  |  |
| 3           | Power Supply #2                              |  |  |
| 4           | AC Power Inlet #2                            |  |  |
| 5           | COM Port                                     |  |  |
| 6           | IPMI Port (Remote Management)                |  |  |
| 7           | Low Profile PCI Expansion Slot               |  |  |
| 8           | PCI Expansion Slot                           |  |  |
| 9           | Power Good LED #1                            |  |  |
| 10          | Power Supply Lock #1                         |  |  |
| 11          | Power Good LED #2                            |  |  |
| 12          | Power Supply Lock #2                         |  |  |
| 13          | USB 2.0 Port 1 (Black)                       |  |  |
| 14          | USB 2.0 Port 2 (Black)                       |  |  |
| 15          | USB 3.0 Port 3 (Blue)                        |  |  |
| 16          | USB 3.0 Port 4 (Blue)                        |  |  |
| 17          | Network Data I/O Port 1 (ETH0 for Network 1) |  |  |
| 18          | Network Data I/O Port 2 (ETH1 for Network 2) |  |  |
|             |                                              |  |  |

| 19 | VGA Port                         |
|----|----------------------------------|
| 20 | External Storage Device Port     |
| 20 | (SAS port for tape drive option) |

#### Rear Panel 8300-8400



| Num- | Name of Control/Indicator             |  |  |  |  |
|------|---------------------------------------|--|--|--|--|
| ber  |                                       |  |  |  |  |
| 1    | Power Supply Module #1 Lock           |  |  |  |  |
| 2    | Power Supply Module #1 Power Good LED |  |  |  |  |
| 3    | Power Supply Module #1 AC Receptacle  |  |  |  |  |
| 4    | Power Supply Module #1 Fan            |  |  |  |  |
| 5    | Rear SSDs (optional)                  |  |  |  |  |
| 6    | IPMI Port (Remote Management)         |  |  |  |  |
| 7    | External SAS HBA Ports                |  |  |  |  |
| 8    | Half-length PCI Expansion Slots       |  |  |  |  |
| 9    | Internal RAID Controller              |  |  |  |  |
| 10   | Full-length PCI Expansion Slots       |  |  |  |  |
| 11   | Power Supply Module #2 Lock           |  |  |  |  |
| 12   | Power Supply Module #2 Power Good LED |  |  |  |  |
| 13   | Power Supply Module #2 AC Receptacle  |  |  |  |  |
| 14   | Power Supply Module #2 Fan            |  |  |  |  |
| 15   | COM Port                              |  |  |  |  |
| 16   | USB Port 1 (generation 2)             |  |  |  |  |
| 17   | USB Port 2 (generation 2)             |  |  |  |  |
| 18   | USB Port 3 (generation 3)             |  |  |  |  |

| 19 | USB Port 4 (generation 3) |
|----|---------------------------|
| 20 | ETH0 (Network 1)          |
| 21 | ETH1 (Network 2)          |
| 22 | VGA Port (Monitor)        |
| 23 | UID LED                   |

## Ports Used by the Appliance

The following list of tables provide information about ports that are used by Arcserve UDP, Arcserve Backup, and the appliance for Linux support:

- Arcserve UDP
- Arcserve Backup
- Appliance for Linux Support

#### **Arcserve UDP**

This section contains the following topics:

- Components installed on Microsoft Windows
- Components installed on Linux
- Production node protected by UDP Linux remotely

# **Components installed on Microsoft Windows**

The following ports are required for backup and other jobs when you have a LAN environment:

| Po-<br>rt<br>#          | Po-<br>rt<br>Ty-<br>pe | lni-<br>tiate-<br>d by               | Listening Process                                               | Description                                                                                                                                                                                                                                                              |
|-------------------------|------------------------|--------------------------------------|-----------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 143-<br>3               | тср                    | Remot<br>e Java                      | sqlsrvr.exe                                                     | Specifies the default communication port<br>between the Arcserve UDP console and<br>Microsoft SQL Server databases when they<br>reside on different computers.<br><b>Note</b> : You can modify the default com-<br>munication port when installing SQL Server.           |
| 409-<br>0               | тср                    | Arc-<br>serve<br>UDP<br>Agent        | HATransServer.exe                                               | Transfers data for Virtual Standby tasks in<br>the proxy mode.                                                                                                                                                                                                           |
| 500-<br>0-<br>506-<br>0 | ТСР                    | Arc-<br>serve<br>UDP<br>Server       | GDDServer.exe                                                   | Reserved for Arcserve UDP RPS Global Dedu-<br>plication Data Store Service (GDD). One Arc-<br>serve UDP GDD data store will use 3 free<br>ports that start from 5000. It is needed<br>when the data store with GDD is enabled for<br>backup or the restore task is used. |
| 605-<br>2               | ТСР                    | Arc-<br>serve<br>Backu-<br>p GDB     | CA.ARCserve.Com-<br>municationFoundation.<br>WindowsService.exe | CA.ARCserve.Com-<br>municationFoundation.WindowsService.exe<br>Communication that lets the Arcserve UDP<br>Console and the Arcserve Backup Global<br>Dashboard Primary Server synchronize data.                                                                          |
| 605-<br>4               | ТСР                    | Arc-<br>serve<br>Backu-<br>p         |                                                                 | CA.ARCserve.Com-<br>municationFoundation.WindowsService.exe<br>Communication that lets the Arcserve UDP<br>Console and the Arcserve Backup Primary<br>Server synchronize data.                                                                                           |
| 800-<br>6               |                        |                                      |                                                                 | To shut down Tomcat that is used by the<br>Arcserve UDP console.                                                                                                                                                                                                         |
| 801-<br>4               | ТСР                    | Arc-<br>serve<br>UDP<br>Con-<br>sole | Tomcat7.exe                                                     | Specifies the default HTTP/HTTPS com-<br>munication port between remote man-<br>agement consoles and the Arcserve UDP<br>Server.<br>Specifies the default HTTP/HTTPS com-                                                                                                |

|            |     |                                      |                                                                 | munication port between remote man-<br>agement consoles and the Arcserve UDP<br>Agent.                                                                                                                                                                                                                                                                                               |
|------------|-----|--------------------------------------|-----------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|            |     |                                      |                                                                 | <b>Note</b> : You can modify the default com-<br>munication port when you install the Arc-<br>serve UDP components.                                                                                                                                                                                                                                                                  |
| 801-<br>4  | тср | Arc-<br>serve<br>UDP<br>Server       | httpd.exe                                                       | Specifies the default HTTP/HTTPS com-<br>munication port between the Arcserve UDP<br>Server and Arcserve UDP consoles.<br>*Specifies the default shared port and the<br>only port you must open when you use the<br>Arcserve UDP Server as the replication des-<br>tination. Do not open ports 5000-5060 which<br>are used by data stores that have global<br>deduplication enabled. |
|            |     |                                      |                                                                 | <b>Note</b> : You can modify the default com-<br>munication port when you install the Arc-<br>serve UDP components.                                                                                                                                                                                                                                                                  |
| 801-<br>5  | тср | Arc-<br>serve<br>UDP<br>Con-<br>sole | Tomcat7.exe                                                     | Specifies the default HTTP/HTTPS com-<br>munication port between remote man-<br>agement consoles and the Arcserve UDP<br>Server.<br>Specifies the default HTTP/HTTPS com-<br>munication port between remote man-<br>agement consoles and the Arcserve UDP<br>Agent.<br><b>Note</b> : You can modify the default com-                                                                 |
|            |     |                                      |                                                                 | munication port when you install the Arc-<br>serve UDP components.                                                                                                                                                                                                                                                                                                                   |
| 801-<br>6  | тср | Arc-<br>serve<br>UDP<br>Server       | Tomcat7.exe                                                     | Reserved for Arcserve UDP Server Web Services to communicate with the Arcserve UDP<br>RPS Port Sharing Service on the same Server.<br><b>Note</b> : The port cannot be customized and<br>can be ignored for the firewall setting                                                                                                                                                     |
| 180-<br>05 |     |                                      | CA.ARCserve.Com-<br>municationFoundation.<br>WindowsService.exe | To shutdown Tomcat that is used by the Arc-<br>serve UDP Server or Agent.                                                                                                                                                                                                                                                                                                            |

# **Components installed on Linux**

The following ports are required for backup and other jobs when you have a LAN environment:

| Port<br># | Port Type | Initiated<br>by       | Listening Process | Description                                                                                                                                                                                                              |
|-----------|-----------|-----------------------|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 22        | тср       | SSH ser-<br>vice      |                   | Arcserve UDP Linux 3rd<br>party dependency. Spe-<br>cifies the default for SSH<br>service, however, you can<br>change this port. This<br>port is required for both<br>incoming and outgoing<br>communications.           |
| 67        | UDP       | Arcserve<br>UDP Linux | bootpd            | Used for the PXE boot<br>Server. Only required if<br>the user wants to use the<br>PXE boot feature. This<br>port is required for incom-<br>ing communications.<br><b>Note</b> : The port number<br>cannot be customized. |
| 69        | UDP       | Arcserve<br>UDP Linux | tffpd             | Used for the PXE boot<br>Server. Only required if<br>the user wants to use the<br>PXE boot feature. This<br>port is required for incom-<br>ing communications.<br><b>Note</b> : The port number<br>cannot be customized. |
| 8014      | ТСР       | Arcserve<br>UDP Linux | Java              | Specifies the default<br>HTTP/HTTPS com-<br>munication ports<br>between the remote con-<br>soles and the Arcserve<br>UDP agent for Linux. This<br>port is required for both<br>incoming and outgoing<br>communications.  |
| 18005     | тср       | Arcserve<br>UDP Linux | Java              | Used by Tomcat. Can be<br>ignored for firewall set-<br>tings.                                                                                                                                                            |

# **Production node protected by UDP Linux remotely**

The following port is required for backup and other jobs when you have a LAN environment:

| Port | Port | Initiated | Listening | Description                                            |  |
|------|------|-----------|-----------|--------------------------------------------------------|--|
| #    | Туре | by        | Process   |                                                        |  |
|      |      |           |           | Arcserve UDP Linux 3rd party dependency. Specifies the |  |
| 22   |      | SSH ser-  |           | default for the SSH service, however, you can change   |  |
|      |      | vice      |           | this port. This port is required for both incoming and |  |
|      |      |           |           | outgoing communications.                               |  |

\*Port sharing is supported for replication jobs. All data on different ports can be forwarded to port 8014 (default port for the Arcserve UDP Server, which can be modified during installation). When a replication job runs between two recovery point Servers across WAN, only port 8014 needs to be opened.

Similarly, for remote replications, the Remote administrator needs to open or forward port 8014 (for data replication) and port 8015 (default port for the Arcserve UDP console, which can be modified during installation) for local recovery point Servers to obtain the assigned replication plan.

# **Arcserve Backup**

The following ports are required for backup and other jobs when you have a LAN environment:

| Port<br>#     | Port<br>Type | Initiated by                              | Listening Process                                               | Description                               |
|---------------|--------------|-------------------------------------------|-----------------------------------------------------------------|-------------------------------------------|
| 135           | тср          |                                           |                                                                 | Microsoft Port<br>Mapper                  |
| 445           | тср          |                                           | MSRPC over the Named Pipes                                      |                                           |
| 6050          | TCP/UD-<br>P | CASUniver-<br>salAgent                    | Univagent.exe                                                   | Arcserve<br>Universal Agent               |
| 6502          | ТСР          | Arcserve Com-<br>munication<br>Foundation | CA.ARCserve.Com-<br>municationFoundation.<br>WindowsService.exe | Arcserve Com-<br>munication<br>Foundation |
| 6502          | тср          | CASTapeEngine                             | Tapeng.exe                                                      | Arcserve Tape<br>Engine                   |
| 6503          | тср          | CASJobEngine                              | Jobengine.exe                                                   | Arcserve Job<br>Engine                    |
| 6504          | тср          | CASDBEngine                               | DBEng.exe                                                       | Arcserve Data-<br>base Engine             |
| 7854          | тср          | CASportmapper                             | Catirpc.exe                                                     | Arcserve<br>PortMapper                    |
| 4152-<br>3    | тср          | CASDiscovery                              | casdscsvc.exe                                                   | Arcserve Dis-<br>covery Service           |
| 4152-<br>4    | UDP          | CASDiscovery                              | casdscsvc.exe                                                   | Arcserve Dis-<br>covery Service           |
| 9000-<br>9500 | тср          |                                           | For other Arcserve MS RPC services that use dynamic ports       |                                           |

# **Appliance for Linux Support**

The following ports are required for backup and other jobs when you have a LAN environment:

| Port  | Port | Initiated | Listening | Description                                                                                                                                                       |  |
|-------|------|-----------|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| #     | Туре | by        | Process   | Description                                                                                                                                                       |  |
| 8017  | тср  |           |           | NAT port redirection, redirects 8017 on appliance<br>to the Linux backup server in order to backup other<br>Linux node to Amazon S3.                              |  |
| 8018  | тср  |           |           | NAT port redirection, redirects 8018 on appliance to the Linux Backup Server Agent port 8014.                                                                     |  |
| 8019  | тср  |           |           | NAT port redirection, redirects 8019 on appliance to the Linux Backup Server SSH port 22.                                                                         |  |
| 8021  | тср  |           |           | NAT port redirection, redirects 8021 on appliance<br>to Linux backup server to backup other Linux node<br>using 8021 port.                                        |  |
| 8036  | тср  |           |           | using 8021 port.<br>NAT port redirection, redirects 8036 on applianc<br>to the Linux Backup Server port 8036.<br>NAT port redirection, redirects 50000 on appliar |  |
| 50000 | тср  |           |           | NAT port redirection, redirects 50000 on appliance<br>to Linux backup server in order to backup other<br>Linux node to cloud using 50000 port.                    |  |
| 50001 | тср  |           |           | NAT port redirection, redirects 50001 on appliance<br>to Linux backup server in order to backup other<br>Linux node to cloud using 50001 port.                    |  |
| 50002 | тср  |           |           | NAT port redirection, redirects 50002 on appliance<br>to Linux backup server in order to backup other<br>Linux node to cloud using 50002 port.                    |  |
| 50003 | тср  |           |           | NAT port redirection, redirects 50003 on appliance<br>to Linux backup server in order to backup other<br>Linux node to cloud using 50003 port.                    |  |
| 50004 | тср  |           |           | NAT port redirection, redirects 50004 on appliance<br>to Linux backup server in order to backup other<br>Linux node to cloud using 50004 port.                    |  |

# **Chapter 3: Installing the Arcserve UDP Appliance**

This section contains the following topics:

| How to Install Arcserve Backup r17.5      | .54  |
|-------------------------------------------|------|
| How to Install 8100-8200 Series Appliance | . 56 |
| How to Install 8300-8400 Series Appliance | . 57 |

#### How to Install Arcserve Backup r17.5

Arcserve Backup r17.5 is not pre-installed on the appliance. You can install Arcserve Backup r17.5 using a script called "InstallASBU.bat" located on your desktop.

#### Follow these steps:

1. From your desktop, locate and launch InstallASBU.bat.

**Note**: If you are launching the .bat file from a non-English Windows system, the following screen appears. Select the language to install Arcserve Backup r17.5, otherwise go to step 2.



2. Enter the Administrator password and the script is generated to help install Arcserve Backup r17.5.



After installation completes, the Arcserve Backup icon is added to your desktop. You can now log into Arcserve Backup with the following credentials:

- User Name = caroot
- Password = Arcserve

### How to Install 8100-8200 Series Appliance

The appliance is intended for installation in restricted areas only. Initial setup and maintenance should be performed by qualified personnel.

For the complete installation process, see <u>Appliance Installation of 8100-8200</u>.

### How to Install 8300-8400 Series Appliance

The appliance is intended for installation in restricted areas only. Initial setup and maintenance should be performed by qualified personnel.

For the complete installation process, see <u>Appliance Installation of 8300-8400</u>.

# **Chapter 4: Understanding Network Configuration**

This section contains the following topics:

| How to Configure the NIC Teaming Process                             | 59 |
|----------------------------------------------------------------------|----|
| How to Disable DHCP Server                                           | 61 |
| How to Understand the Network Configuration on the UDP Appliance     | 62 |
| How to Configure IP Address for the preinstalled Linux Backup Server | 66 |
| How to Enable Round Robin on the DNS Server to Balance Load          | 68 |

#### How to Configure the NIC Teaming Process

The Arcserve UDP Appliance contains built-in Ethernet ports. To use these ports, an Ethernet NIC teaming needs to be configured. NIC Teaming allows multiple network adapters placed into a team for bandwidth aggregation and traffic failover to maintain connectivity in the event of a network component failure.

To configure a working NIC Team, a network switch supporting the link aggregation is required. Consult your network switch vendor and Microsoft Windows Configuration document to configure the NIC Team.

After the network switch is configured, follow these steps:

1. From Windows desktop, launch the Arcserve UDP Appliance Wizard.

**Note**: If a DHCP or static IP address is used, you can configure the IP address for the NIC Team in the Network Connections screen. Ensure that a valid IP address is assigned to the NIC Team and is available on your network.

| Network Connections               |                                   |                                              |      |  |  |
|-----------------------------------|-----------------------------------|----------------------------------------------|------|--|--|
| Connection Name                   | IP Address                        | Description                                  |      |  |  |
| Network Connection 1<br>Connected | 13.1.143.21<br>Automatic via DHCP | Microsoft Network Adapter Multiplexor Driver | Edit |  |  |
|                                   |                                   |                                              |      |  |  |
|                                   |                                   |                                              |      |  |  |
|                                   |                                   |                                              |      |  |  |
|                                   |                                   |                                              |      |  |  |
|                                   |                                   |                                              |      |  |  |

- 2. From the Server Manager, select Tools > Routing and Remote Access. The Routing and Remote Access dialog opens.
- 3. Right-click the node of the Appliance Server and select Disable Routing and Remote Access.

**Note**: If other routing and remote access functions are configured for other purposes, we recommend to reconfigure them again after completing these steps.

4. Click Yes on the confirmation dialog to disable the router and remove the configuration. 5. Right-click the node of the Appliance Server and select Configure and Enable Routing Remote Access.

The Routing and Remote Access Server Setup Wizard opens.

- 6. Click Cancel and open a Windows Command prompt window.
- 7. Run the following command:

C:\\Program Files\Arcserve\Unified Data Protection\Engine\BIN\Appliance\resetnic.bat

The configuration completes and the following message appears.



To verify that the configuration is working, log into the Linux Backup Server in the Hyper-V Manager and ping the IP address for the specific computers on your intranet. If this fails, review and repeat this procedure.

#### How to Disable DHCP Server

DHCP Server is enabled by default on the Appliance. The DHCP Server works only on Hyper-V Virtual Ethernet Adapter – *LinuxBkpSvr* on the Appliance to make sure that the preinstalled Linux Backup Server can get the IP and communicate with the Appliance and does not impact the production network environment.

To disable DHCP Server, follow these steps:

- 1. Open file C:\Program Files\Arcserve\Unified Data Protection\Engine\BIN\Appliance\Configuration\Appliance.properties
- 2. Modify the file to *DHCP\_ENABLE=false*. The *Appliance.properties* appears as below:

DHCP\_ENABLE=false AdapterName=LinuxBkpSvr Appliance\_IPAddress=192.168.10.1 Linux IPAddress=192.168.10.2

- 3. Save the file.
- 4. Delete the file C:\Program Files\Arcserve\Unified Data Protection\Engine\BIN\Appliance\dhcpdone.flag.
- 5. Run C:\Program Files\Arcserve\Unified Data Protection\Engine\BIN\Appliance\resetdhcp.ps1 to disable the DHCP Server service as below from dos command line:

C:\Program Files\Arcserve\Unified Data Protection\Engine\BIN\Appliance>powershell .\resetdhcp.ps1

# How to Understand the Network Configuration on the UDP Appliance

The purpose of network configuration on the Appliance ensures the build-in Linux Backup Server (virtual name in Hyper-V Manager: Linux-BackupSvr) can work behind NAT. So that:

- User does not need to change the hostname of the build-in Linux.
- User saves an IP on the network for the Linux Backup Server.
- The Linux Backup Server can connect to any machine on the public network.
- Any machine on the public network can only connect to the Linux Backup Server through the Appliance Servers special port.

#### **Network Configuration Detail:**

 On the Hyper-V Manager, an internal only virtual switch – *Linux-BkpSvr-Switch* is available that is used only by Linux-BackupSvr.

| Name 📩          | State                                                                  | CPU Usage                | Assigned Memory         | Uptime                                                                                                   | Status                                                                    |              |
|-----------------|------------------------------------------------------------------------|--------------------------|-------------------------|----------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------|--------------|
| Linux-BackupSvr | <b>11</b>                                                              |                          | Virtual Swite           | ch Manager f                                                                                             | for UPDATE1-2                                                             | _ 0 X        |
|                 | Virtual Switches     New virtual network switch     Junu-BipSvr-Switch |                          | Name:                   | al Switch Properti                                                                                       | ies                                                                       |              |
|                 | Elobal Ne                                                              | alonly<br>twork Settings | Linux-Big               | Svr-Switch                                                                                               |                                                                           |              |
| Checkpoints     | MAC Address Range<br>00-15-50-0A-04-00 to 00-15-50-0                   |                          | 15-50-0                 | Connection type  Connection type  What do you want to connect this virtual switch to?  External network: |                                                                           |              |
|                 |                                                                        |                          | R                       | altek PCIe G8E P                                                                                         | amily Controller                                                          | ×            |
|                 |                                                                        |                          |                         | Allow manageme<br>Enable single-ro                                                                       | ent operating system to share this netv<br>ot I/O virtualization (SR-IOV) | vork adapter |
| Linux-BackupSvr |                                                                        |                          | <ul> <li>Int</li> </ul> | ernal network                                                                                            |                                                                           |              |

In the Control Panel\Network and Internet\Network Connections, you can see "Hyper-V Virtual Ethernet Adapter" named as "LinuxBkpSvr". You have configured the IPv4 for this switch as "192.168.10.1" by default as below.

| LinuxBkpS                                                                                                                                                                                                                  | r Properties                                                                                              | K Internet Protocol Version 4 (TCP/IPv4) Properties                                                                                                                                   | x |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|
| Networking Sharing                                                                                                                                                                                                         | -                                                                                                         | General                                                                                                                                                                               | _ |
| Connect using:                                                                                                                                                                                                             | dapter #2                                                                                                 | You can get IP settings assigned automatically if your network supports<br>this capability. Otherwise, you need to ask your network administrator<br>for the appropriate IP settings. |   |
| This connection uses the followi                                                                                                                                                                                           | Configure                                                                                                 | Obtain an IP address automatically  Obtain an IP address automatically                                                                                                                |   |
| Gos Packet Scheduler     Arbyper-V Extensible Virt     Arbyper-V Extensible Virt     Arborsoft Network Ada     A Microsoft Network Ada     A Link-Layer Topology D     A Link-Layer Topology D     A Link-Layer Topology D | al Switch<br>ter Multiplexor Protocol<br>scovery Mapper I/O Driver<br>scovery Responder<br>n 6 (TCP/IPv6) | O doe ore not notwing an address:         192 , 168 , 10 , 1           Subnet mask:         255 , 255 , 255 , 0           Default gateway:         .                                  |   |
| Internet Protocol Versio                                                                                                                                                                                                   | n 4 (ICP/IPV4)                                                                                            | Use the following DNS server addresses:                                                                                                                                               |   |
| Install Ur                                                                                                                                                                                                                 | nstal Properties                                                                                          | Preferred DNS server:                                                                                                                                                                 |   |
| Description                                                                                                                                                                                                                | (Internet Destand The defects                                                                             | Alternate DNS server:                                                                                                                                                                 |   |
| wide area network protocol th<br>across diverse interconnected                                                                                                                                                             | internet Protocol. The default<br>at provides communication<br>networks.                                  | Validate settings upon exit Advanced                                                                                                                                                  |   |
|                                                                                                                                                                                                                            | OK Carcel                                                                                                 | OK Cancel                                                                                                                                                                             |   |

 You have configured DHCP Server on the appliance machine by default, the DHCP Server only works on the Hyper-V virtual adapter.

| <b>9</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | DHCP                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| File Action View Help                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 🗢 🔿 🙍 🐹 💥 🔟 🧟 📄 🖉 💷                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Image: Weight of the second | Name IPv4 IPv6 Server Bindings Properties ? ×                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | IPv4 IPv6 Select the connections that the DHCP server supports for servicing clients. If this list is empty, verify that a static IP address is configured for this computer. Connections and server bindings:  I S2:168:10.1 Ethernet.4  I S2:168:10.1 Ethernet.4 I S2:168:10.1 Ethernet.4 I S2:168:10.1 Ethernet.4 I S2:168:10.1 Ethernet.4 I S2:168:10.1 Ethernet.4 I S2:168:10.1 Ethernet.4 I S2:168:10.1 Ethernet.4 I S2:168:10.1 Ethernet.4 I S2:168:10.1 Ethernet.4 I S2:168:10.1 Ethernet.4 I S2:168:10.1 Ethernet.4 I S2:168:10.1 Ethernet.4 I S2:168:10.1 Ethernet.4 I S2:168:10.1 Ethernet.4 I S2:168:10.1 Ethernet.4 I S2:168:10.1 Ethernet.4 I S2:168:10.1 Ethernet.4 I S2:168:10.1 Ethernet.4 I S2:168:10.1 Ethernet.4 I S2:168:10.1 Ethernet.4 I S2:168:10.1 Ethernet.4 I S2:168:10.1 Ethernet.4 I S2:168:10.1 Ethernet.4 I S2:168:10.1 Ethernet.4 I S2:168:10.1 Ethernet.4 I S2:168:10.1 Ethernet.4 I S2:168:10.1 Ethernet.4 I S2:168:10.1 Ethernet.4 I S2:168:10.1 Ethernet.4 I S2:168:10.1 Ethernet.4 I S2:168:10.1 Ethernet.4 I S2:168:10.1 Ethernet.4 I S2:168:10.1 Ethernet.4 I S2:168:10.1 Ethernet.4 I S2:168:10.1 Ethernet.4 I S2:168:10.1 Ethernet.4 I S2:168:10.1 Ethernet.4 I S2:168:10.1 Ethernet.4 I S2:168:10.1 Ethernet.4 I S2 |

 By default, only one 192.168.10.2 in the Address Pool to ensure the build-in Linux Backup Server can get the IP 192.168.10.2.

| 2                     |                          |                | DHCP                           |
|-----------------------|--------------------------|----------------|--------------------------------|
| File Action View Help |                          |                |                                |
| * 🔿 🛛 🖬 🖉 🕞 *         |                          |                |                                |
| 2 DHCP                | Start IP Address         | End IP Address | Description                    |
|                       | <b>∷</b> II 192.168.10.2 | 192.168.10.2   | Address range for distribution |

• We have configured NAT on the Appliance machine.

| C:\Windows\syste | em32>netsh routing ip n | at dump                          |                    | ^                |
|------------------|-------------------------|----------------------------------|--------------------|------------------|
| <b>6</b>         | Administrato            | or: Command Prompt               |                    | - 🗆 X            |
| LinuxBkpSvr      | Unidentified network    | Hyper-V Virtual Ethernet Adapte  | No Internet access | Public network   |
| Ethernet 5       | ARCSERVE.COM            | Intel(R) 1350 Gigabit Network Co | Internet access    | Public network   |
| Ethernet 6       | Disabled                | Intel(R) Ethernet Converged Net  |                    |                  |
| Ethernet 2       | Disabled                | Intel(R) I350 Gigabit Network Co |                    |                  |
| Ethernet         | Disabled                | Intel(R) Ethernet Converged Net  |                    |                  |
| Name             | Status                  | Device Name                      | Connectivity       | Network Category |

| pushd routing ip nat<br>uninstall                          |               |
|------------------------------------------------------------|---------------|
| install<br>set global tcptimeoutmins=1440 udptimeoutmins=1 | loglevel=ERRO |
| t<br>#NAT Configuration For Interface Ethernet 2           |               |
| *<br>add interface name="Ethernet 2" mode=FULL             |               |
| t<br>NAT Configuration For Interface Ethernet 5            |               |
| add interface name="Ethernet 5" mode=FULL                  |               |
| t<br>NAT Configuration For Interface LinuxBkpSvr           |               |
| add interface name="LinuxBkpSvr" mode=PRIVATE              |               |
| bqoo                                                       |               |

 We have configured port redirection on the appliance for the Linux Backup Server.

| C:\Windows  | \system32>nets]      | h interface port                                             | proxy show all     |
|-------------|----------------------|--------------------------------------------------------------|--------------------|
| Listen on   | ipv4:                | Connect to i                                                 | քս4:               |
| Address     | Port                 | Address                                                      | Port               |
| *<br>*<br>* | 8018<br>8019<br>8035 | 192.168.10.2<br>192.168.10.2<br>192.168.10.2<br>192.168.10.2 | 8014<br>22<br>8035 |

Linux Backup Server gets the IP address 192.168.10.2 from the DHCP Server. After getting the IP, the backend script (C:\Program Files\Arcserve\Unified Data Protection\Engine\BIN\Appliance\resetdhcp.ps1) communicates with Linux to change the system locale of the Linux to make it consistent with the system locale of the Appliance Windows OS.

| [root@Linu                                       | x-BackupSvr network-scripts]# cat ifcfg-eth0              |  |
|--------------------------------------------------|-----------------------------------------------------------|--|
| DEVICE=et}                                       | 0                                                         |  |
| TYPE=Ether                                       | met                                                       |  |
| ONBOOT=yes                                       |                                                           |  |
| NM_CONTROLLED=yes                                |                                                           |  |
| BOOTPROTO=dhcp                                   |                                                           |  |
| DEFROUTE=yes                                     |                                                           |  |
| NAME="eth@                                       | ) <sup>(1</sup>                                           |  |
| [root@Linux-BackupSvr network-scripts]# ifconfig |                                                           |  |
| eth0                                             | Link encap:Ethernet HWaddr 00:15:5D:0A:04:00              |  |
|                                                  | inet6 addr: fe80::215:5dff:fe0a:400/64 Scope:Link         |  |
|                                                  | UP BROADCAST RUNNING MULTICAST MTU:1500 Metric:1          |  |
|                                                  | RX packets:481943 errors:0 dropped:0 overruns:0 frame:0   |  |
|                                                  | TX packets:100859 errors:0 dropped:0 overruns:0 carrier:0 |  |
|                                                  | collisions:0 txqueuelen:1000                              |  |
|                                                  | RX bytes:36784482 (35.0 MiB) TX bytes:21795976 (20.7 MiB) |  |
|                                                  |                                                           |  |
| lo                                               | Link encap:Local Loopback                                 |  |
|                                                  | inet addr:127.0.0.1 Mask:255.0.0.0                        |  |
|                                                  | inet6 addr: ::1/128 Scope:Host                            |  |
|                                                  | UP LOOPBACK RUNNING MTU:65536 Metric:1                    |  |
|                                                  | RX packets:0 errors:0 dropped:0 overruns:0 frame:0        |  |
|                                                  | TX packets:0 errors:0 dropped:0 overruns:0 carrier:0      |  |
|                                                  | collisions:0 txqueuelen:0                                 |  |
|                                                  | RX butes: $0 (0, 0, b)$ TX butes: $0 (0, 0, b)$           |  |
|                                                  |                                                           |  |

# How to Configure IP Address for the preinstalled Linux Backup Server

For the preinstalled Linux Backup Server, by default, the backup server uses IP 192.168.10.2 to communicate with the Appliance Server. Please refer to the network configuration introduction for preinstalled Linux Backup Server as for how preinstalled Linux Backup Server communicate with Appliance Server.

To specify the IP address for the preinstalled Linux Backup Server, follow these steps:

- 1. Open file C:\Program Files\Arcserve\Unified Data Protection\Engine\BIN\Appliance\Configuration\Appliance.properties.
- 2. Change the IP address of *Appliance\_IPAddress* and *Linux\_IPAddress*. For example, set Appliance\_IPAddress as 192.168.100.1 and Linux\_IPAddress as 192.168.100.2.

#### Note:

- The IP address of Appliance\_IPAddress sets to the network interface LinuxBkpSvr (Hyper-V Virtual Ethernet Adapter) used to communicate with this preinstalled Linux Backup Server.
- The IP address of Linux\_IPAddress is set to the preinstalled Linux Backup Server.
- Please ensure "Appliance\_IPAddress" and "Linux\_IPAddress" use the IP address of the same sub network.

Here is the file after modified:

DHCP\_ENABLE=true

AdapterName=LinuxBkpSvr

Appliance\_IPAddress=192.168.100.1

Linux\_IPAddress=192.168.100.2

- 3. Save the file.
- 4. Delete the file C:\Program Files\Arcserve\Unified Data Protection\Engine\BIN\Appliance\dhcpdone.flag.
- 5. Run C:\Program Files\Arcserve\Unified Data Protection\Engine\BIN\Appliance\resetdhcp.ps1 to reset the IP address for network interface LinuxBkpSvr and the preinstalled Linux Backup Server.

Note:

The preinstalled Linux Backup Server will shut down and restart during the process if you change the Linux\_IPAddress.

Run the command prompt and enter the following command:

C:\Program Files\Arcserve\Unified Data Protection\Engine\BIN\Appliance>powershell .\resetdhcp.ps1

# How to Enable Round Robin on the DNS Server to Balance Load

The Microsoft DNS Server supports round robin, which is a technique used for balancing the load between servers. This feature enables DNS to send both IP addresses when a query is received for *myserver.mydomain.com*. The client (or Resolver) always uses the first one. The next time when DNS receives a query for this name, the order of the IP address list is changed using round robin method (the address that was first in the previous list is last in the new list). Round Robin of name records is not supported because only one canonical name is allowed for any one alias.

For more details, refer to Microsoft KB 168321.

In the Appliance, you can add record(s) for all the IPv4 address to the Domain Name Service(DNS) Server to get load balance among the network interfaces.

For more information on load balancing between servers, refer to RFC 1794.

# **Chapter 5: Upgrading Arcserve UDP on the Appliance**

This section contains the following topics:

| How to Apply a License After Upgrading Arcserve Software | .70 |
|----------------------------------------------------------|-----|
| Upgrade Sequence on the Arcserve UDP Appliance           | .71 |
| Upgrade Sequence for UDP Console, RPS, and Agent         | 77  |

# How to Apply a License After Upgrading Arcserve Software

After upgrading Arcserve UDP to v6.5 or upgrading Arcserve Backup to r17.5, the original license key on the Arcserve UDP appliance will not work. To obtain the new license keys for Arcserve Unified Data Protection v6.5 and Arcserve Backup r17.5, contact your account representative.

For more details about adding a license key for Arcserve UDP, see **Arcserve Product Activation** topic from the *Arcserve Unified Data Protection Solutions Guide*.

For more details about adding a license key for Arcserve UDP, see Apply Arcserve Backup Component Licenses from the Arcserve Backup Administration Guide.

#### **Upgrade Sequence on the Arcserve UDP Appliance**

The upgrade from Arcserve UDP Appliance v5.0 to Arcserve UDP v6.5 could involve one of the following sequences:

- Upgrade Arcserve UDP
  - Upgrade the Arcserve UDP Appliance that performs as Arcserve UDP Console and RPS
  - Upgrade the Arcserve UDP Appliance that performs as Arcserve UDP RPS only
  - Upgrade Steps When Two or More Arcserve UDP Appliances Are Used in the Environment
- Upgrade the Arcserve UDP Linux Agent on the Arcserve UDP Appliance
- Upgrade the Arcserve Backup on the Arcserve UDP Appliance
- Upgrade Sequence for UDP Console, RPS, and Agent

# Upgrade the Arcserve UDP Appliance that performs as Arcserve UDP Console and RPS

Upgrade this Arcserve UDP Appliance, then follow up the <u>upgrade sequence</u> described to upgrade the environment.
# Upgrade the Arcserve UDP Appliance that performs as Arcserve UDP RPS only

Upgrade the complete productive environment. For details, refer to the <u>upgrade</u> <u>sequence</u>.

# Upgrade Steps When Two or More Arcserve UDP Appliances Are Used in the Environment

- Upgrade the whole productive environment. For details, refer to the <u>upgrade</u> <u>sequence</u>.
- If you see warning as displayed below when you add an Appliance as RPS from Arcserve UDP Console after upgrade, refer to the <u>Backing Up a UDP Appliance</u> <u>from Another Appliance Reports Duplicated Nodes</u> topic in the Troubleshooting section.



# Upgrade the Arcserve UDP Linux Agent on the Arcserve UDP Appliance

- First, upgrade the Arcserve UDP Console which manages the Linux Backup Server environment;
- Then, upgrade the Linux Backup Server on the Arcserve UDP Appliance. For details, refer to the Arcserve Unified Data Protection Agent for Linux Online Help.

# Upgrade the Arcserve Backup on the Arcserve UDP Appliance

Refer to the **Arcserve Backup Implementation Guide** to complete upgrade on the Arcserve UDP Appliance.

## Upgrade Sequence for UDP Console, RPS, and Agent

Based on the Backward Compatibility Support Policy, plan your upgrade in the following sequence to ensure the upgrade works smoothly:

- 1. Upgrade Arcserve UDP Console.
- 2. Upgrade Arcserve UDP RPS (DR site).
- 3. Upgrade Arcserve UDP RPS (Data Center).
- 4. Upgrade Arcserve UDP Agentless Proxy, some Agents in Data Center.
- 5. Upgrade Arcserve UDP RPS (Remote site).
- 6. Upgrade Arcserve UDP Agentless Proxy and some Agents at the remote site.

Note: Repeat Step 5 and 6 for each remote location.

7. Upgrade Arcserve UDP Virtual Standby Monitor.

**Note:** Per the replication backward support policy, always upgrade the target RPS before the source RPS.

# **Chapter 6: Configuring the Arcserve UDP Appliance**

This section contains the following topics:

| How to Configure Network Settings for a UDP Appliance      |    |
|------------------------------------------------------------|----|
| Overview of Creating a Plan Using the UDP Appliance Wizard |    |
| How to Set up the Arcserve UDP Appliance and Create Plans  |    |
| Additional Information on Adding Nodes to a Plan           | 93 |
| Configure UDP Appliance as Gateway                         |    |
| Clear Configuration and Apply Appliance Factory Reset      |    |
| Apply Arcserve UDP Factory Reset Using Boot Option         |    |
| How to Activate Arcserve Product on the Appliance          |    |

# How to Configure Network Settings for a UDP Appliance

To manage the Arcserve UDP appliance, the first step is to have the appliance in your network. For that, you need to assign a hostname to the appliance and then configure network ports.

#### Follow these steps:

- 1. After you power on the appliance, the Settings screen for the Microsoft License terms opens. Read and accept the terms.
- 2. The UDP End User License Agreement dialog opens. Read and accept the license agreement and click Next.
- 3. Enter a hostname for the appliance. Assigning a name helps identify the appliance on your network.

To make your appliance a member of a domain in your network, click the **Add this Arcserve UDP Appliance to a domain** option and specify the domain, user name, and password.

**Note**: The Domain, Username, and Password fields is displayed when the option is selected.



**Note:** To apply a new hostname, you need to restart the appliance. You can choose to reboot the appliance now or after you configure the network settings.

After you reboot the appliance, you can access the appliance from any other machine using the following URL:

https://<hostname>:8015

- 4. Click Save.
- 5. The following dialog opens.

By default, Arcserve UDP discovers all network connections in a network. If some connections are not assigned, then manually edit and specify the connection details.

|                                           | Arcserve UD                            | P Appliance                                 | >                  |
|-------------------------------------------|----------------------------------------|---------------------------------------------|--------------------|
| arcserve                                  | • UDP Appliance Configu                | ration 🕜 At                                 | pout the Appliance |
| Your Arcserve UDP App<br>Reboot Appliance | pliance must be rebooted for the Hostn | ame and Domain settings to take effect.     |                    |
| Hostname/<br>Domain                       | appliance-test<br>(not assigned)       | Edit                                        |                    |
| UDP Console URL                           | <test url=""></test>                   |                                             |                    |
| Date and Time                             | 8/26/2016 12:32:29 AM                  | Edit                                        |                    |
| Network Connections                       |                                        |                                             |                    |
| Connection Name                           | IP Address                             | Description                                 |                    |
| Ethernet 8                                | Automatic via DHCP                     | Intel(R) I350 Gigabit Network Connection #2 | Edit               |
| Ethernet 7<br>3 Not Connected             | None Assigned<br>Automatic via DHCP    | Intel(R) I350 Gigabit Network Connection    | Edit               |
| Ethernet 6<br>3 Not Connected             | None Assigned<br>Automatic via DHCP    | Intel(R) Ethernet Server Adapter I350-T4 #4 | Edit               |
| Ethernet 5<br>Ont Connected               | None Assigned<br>Automatic via DHCP    | Intel(R) Ethernet Server Adapter I350-T4 #3 | Edit               |
| Ethernet 2<br>ONot Connected              | None Assigned<br>Automatic via DHCP    | Intel(R) Ethernet Server Adapter 1350-T4 #2 | Edit               |
| Copyright (C) 2016 Arcserve (USA          | ), LLC. All rights reserved.           |                                             |                    |

- 6. To edit a network connection, click **Edit** from the **Network Connections** box.
- 7. The Network Connection dialog opens.

| Network Conne | ection 1                                     |
|---------------|----------------------------------------------|
| Status        | Connected                                    |
| Description   | vmxnet3 Ethernet Adapter #2                  |
| Connection    | Use DHCP to obtain IP address automatically. |
|               | IP Address                                   |
|               | Subnet Mask                                  |
|               | Default Gateway                              |
|               | Obtain DNS server address automatically.     |
|               | Preferred DNS Server                         |
|               | Alternate DNS Server                         |
|               |                                              |
|               | Save Cancel                                  |
|               |                                              |

8. Modify the IP address, subnet mask, and default gateway values as required and click **Save**.

**Note:** Optionally, you can also modify the hostname, domain, date, and time.

9. To apply the changes, click **Reboot Appliance** to restart the appliance.

The appliance restarts with a new hostname.

- 10. The Login screen opens again. Enter the user name and password and click **Enter**.
- 11. When the appliance configuration screen reopens, click Launch Wizard.

|                                                                     | Arcserve UDI                                                               | P Appliance                                                                                |                     |
|---------------------------------------------------------------------|----------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|---------------------|
| arcserve                                                            | UDP Appliance Configu                                                      | ration 🛛 🥹                                                                                 | About the Appliance |
| <ul> <li>Click Launch Wizard to c</li> <li>Launch Wizard</li> </ul> | ontinue configuring your appliance wit                                     | h the Arcserve UDP Plan Configuration Wizard                                               | I.                  |
| Hostname/<br>Domain                                                 | appliance-test<br>(not assigned)                                           |                                                                                            |                     |
| UDP Console URL                                                     | <console url=""></console>                                                 |                                                                                            |                     |
| Date and Time                                                       | 8/26/2016 12:39:20 AM                                                      | Edit                                                                                       |                     |
| Network Connections                                                 |                                                                            |                                                                                            |                     |
| Connection Name                                                     | IP Address                                                                 | Description                                                                                |                     |
| Ethernet 8<br>Connected                                             | Automatic via DHCP                                                         | Intel(R) I350 Gigabit Network Connection #2                                                | Edit                |
| Ethernet 7<br>3 Not Connected                                       | None Assigned<br>Automatic via DHCP                                        | Intel(R) I350 Gigabit Network Connection                                                   | Edit                |
| Ethernet 6<br>S Not Connected                                       | None Assigned<br>Automatic via DHCP                                        | Intel(R) Ethernet Server Adapter I350-T4 #4                                                | Edit                |
|                                                                     |                                                                            |                                                                                            |                     |
| Ethernet 5<br>3 Not Connected                                       | None Assigned<br>Automatic via DHCP                                        | Intel(R) Ethernet Server Adapter I350-T4 #3                                                | Edit                |
| Ethernet 5<br>O Not Connected<br>Ethernet 2<br>O Not Connected      | None Assigned<br>Automatic via DHCP<br>None Assigned<br>Automatic via DHCP | Intel(R) Ethernet Server Adapter 1350-T4 #3<br>Intel(R) Ethernet Server Adapter 1350-T4 #2 | Edit<br>Edit        |

# **Overview of Creating a Plan Using the UDP Appliance** Wizard

A plan is a collection of steps that define what nodes to back up and when to back up. The Arcserve UDP appliance lets you create basic plans. Creating a plan using the UDP Appliance wizard is a three-step process:

1. Add the nodes you want to protect.

You can select Windows nodes or virtual machines from vCenter/ESX or Hyper-V Servers.

- 2. Define the backup schedule.
- 3. Review and confirm the plan.



In addition to a basic plan, Arcserve UDP lets you create complex plans and control many parameters from the UDP Console. To create complex plans from the UDP Console, see the *Arcserve UDP Solutions Guide*.

# How to Set up the Arcserve UDP Appliance and Create Plans

After the appliance restarts with the new hostname, the Unified Data Protection wizard opens. The wizard lets you create a basic plan to schedule backups. The plan lets you define the nodes you want to protect and when to create backups. The backup destination is the appliance Server.

**Note:** All the steps on the wizard are optional, you can skip these and directly open the UDP console and create plans.



#### How to Run the Arcserve UDP Appliance Wizard

#### Follow these steps:

- 1. Log into the Arcserve UDP console.
- The Unified Data Protection wizard first opens the Arcserve UDP Appliance Management dialog. You can manage the UDP console either as a standalone instance or you can manage it remotely from another UDP console. The remote console management function is useful when you are managing multiple UDP consoles.



3. Select whether you want to manage the appliance locally (default) or from another UDP console.

If the appliance is managed from another UDP console, then specify the UDP console URL, username, and password.

4. Click Next.

Note: To cancel the wizard and open the Arcserve UDP Console, click Cancel.

5. The Data Stores dialog opens.

A data store is a physical storage area on the appliance and is used as the destination for your backups.

By default, Arcserve UDP creates a data store called <hostname>\_data\_store. This data store is deduplication and encryption enabled. For more information about deduplication and encryption, see *Data Deduplication* topic in Arcserve UDP Solutions Guide.

| Orcser<br>Data Stores<br>Your data store config | <b>UDP Appliance</b>                                   | e Configura<br>e data stores ca | ation<br>an be added from | the Arcserve UDP | Console. |
|-------------------------------------------------|--------------------------------------------------------|---------------------------------|---------------------------|------------------|----------|
| appliance-test_da                               | ta_store                                               |                                 |                           |                  |          |
| Total Capacity<br>17.99 TB                      | Compression<br>Deduplication<br>Encryption<br>Password | Standard<br>Enabled<br>Enabled  |                           |                  |          |
|                                                 | Confirm Password                                       |                                 |                           |                  |          |
|                                                 |                                                        |                                 |                           |                  |          |
|                                                 |                                                        |                                 |                           |                  |          |
|                                                 |                                                        |                                 |                           |                  |          |
|                                                 |                                                        |                                 |                           |                  |          |
|                                                 |                                                        |                                 |                           |                  |          |
| Step 2 of 9                                     |                                                        |                                 | Previous                  | Next             | Cancel   |

**Note:** As this data store is encrypted, you must specify an encryption password.

- 6. Enter and confirm the encryption password for this data store.
- 7. Click Next.
- 8. The Email and Alerts dialog opens.

This dialog lets you define the email Server that is used to send alerts and the recipients who would get the alerts. You can select options specify to get alerts based upon successful jobs, failed jobs, or both.

| arcserve                        | LIDD Appliance Configur                | ration             |          |        |
|---------------------------------|----------------------------------------|--------------------|----------|--------|
| urcserve                        | ODP Appliance Conligui                 | allon              |          |        |
| Email and Alert                 |                                        |                    |          |        |
| Configure email notification se | ttings and the types of alert notifica | ations you want to | receive. |        |
| Enable email notifications      | <b>.</b>                               |                    |          |        |
| Service                         | Other                                  | -                  |          |        |
| Email Server                    |                                        |                    |          |        |
| Port                            | 25                                     |                    |          |        |
| Email service requires          | authentication.                        |                    |          |        |
| Subject                         | Arcserve Unified Data Protection Alert |                    |          |        |
| From                            |                                        |                    |          |        |
| Recipients                      | Separate email addresses with ;        |                    |          |        |
| Options                         | Use SSL                                |                    |          |        |
|                                 | Send STARTTLS                          |                    |          |        |
| Connect using a prov            | Use HTML format                        |                    |          |        |
|                                 | Proxy Settings                         |                    |          |        |
| Sond a Tost Email               |                                        |                    |          |        |
|                                 |                                        |                    |          |        |
| Send Alerts For                 | ✓ Successful Jobs                      |                    |          |        |
|                                 |                                        |                    |          |        |
|                                 |                                        |                    |          |        |
|                                 |                                        |                    |          |        |
|                                 |                                        |                    |          |        |
| Step 3 of 9                     |                                        | Previous           | Next     | Cancel |

9. Specify the following email and alert details.

#### Service

Specifies the email services such as Google Mail, Yahoo Mail, Live Mail, or Other.

#### **Email Server**

Specifies the email Server address. For example, for google Server email, specify smtp.gmail.com.

#### Port

Species the email Server port number.

#### **Requires Authentication**

Specifies whether the email Server requires authentication. If yes, specify the account name and password for authentication.

#### Subject

Specifies the subject of the email that is sent to the recipients.

#### From

Specifies the email ID of the sender. The recipients will receive the mail from this sender.

#### Recipients

Specifies the recipients who will receive the alerts. (You can use semicolons ";" to separate multiple recipients).

#### Options

Specifies the encryption method to use for the communication channel.

#### **Connect using a proxy Server**

Specifies the proxy Server user name and port number if you are connecting to the mail Server through a proxy Server. Also, specify a username and password if the proxy Server requires authentication.

#### Send a Test Email

Sends a test mail to the recipients. You can verify the details by sending a test mail.

#### 10. Click Next.

#### 11. The **Replication to Remote RPS** dialog opens.

|                                                                   | ration           |                     |            |
|-------------------------------------------------------------------|------------------|---------------------|------------|
| Replication to Remote RPS                                         |                  |                     |            |
| Configure the settings below if you want to replicate to a remote | ly-managed Recov | ery Point Server de | stination. |
| • This appliance will replicate to a remotely-managed RPS.        |                  |                     |            |
| Arcserve UDP Console<br>URL                                       |                  |                     |            |
| Username                                                          |                  |                     |            |
| Password                                                          |                  |                     |            |
| Connect using a proxy server.                                     |                  |                     |            |
|                                                                   |                  |                     |            |
| This appliance will not replicate to a remotely-managed RF        | s.               |                     |            |
|                                                                   |                  |                     |            |
|                                                                   |                  |                     |            |
|                                                                   |                  |                     |            |
|                                                                   |                  |                     |            |
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|                                                                   |                  |                     |            |
|                                                                   |                  |                     |            |
|                                                                   |                  |                     |            |
| Step 4 of 9                                                       | Previous         | Next                | Cancel     |

12. Specify the following details if you want the appliance to replicate to a remotely-managed recovery point Server (RPS). For more information on a remotely-managed RPS, see the Arcserve UDP Solutions Guide.

#### Arcserve UDP Console URL

Specifies the URL of the remote Arcserve UDP console.

#### **Username and Password**

Specifies the username and password to connect to the remote console.

#### **Connect using a proxy Server**

Specifies the proxy Server details if the remote console is behind a proxy Server.

- 13. If you do not want the appliance to replicate to a remotely-managed RPS, select the **This appliance will not replicate to a remotely-managed RPS** option.
- 14. Click Next.
- 15. The Create a Plan dialog opens.

Using this dialog, you can create a basic plan where you specify the nodes that you want to protect and the backup schedule.

| arcserve                                                  | UDP Appliance Configur                                                         | ation                |                      |                      |
|-----------------------------------------------------------|--------------------------------------------------------------------------------|----------------------|----------------------|----------------------|
| Create a Plan                                             |                                                                                |                      | ()AI                 | oout Creating a Plan |
| Next you will need to create a backup schedule. More than | a protection plan for your data. In the<br>one protection plan can be created. | e protection plan yo | ou will add nodes ar | d configure a        |
| Skip Plan Creation                                        |                                                                                |                      |                      |                      |
| Plan Name                                                 | Protection Plan 1                                                              |                      |                      |                      |
| Session Password                                          |                                                                                |                      |                      |                      |
| Confirm Password                                          |                                                                                |                      |                      |                      |
| It is important to retain                                 | the Session Password as it will be                                             | required to restore  | the data.            |                      |
| How do you want to add n                                  | odes to the plan?                                                              |                      |                      |                      |
|                                                           | Hostname/IP Address (for Windows maching                                       | ines only)           | -                    |                      |
|                                                           |                                                                                |                      |                      |                      |
|                                                           |                                                                                |                      |                      |                      |
|                                                           |                                                                                |                      |                      |                      |
|                                                           |                                                                                |                      |                      |                      |
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|                                                           |                                                                                |                      |                      |                      |
|                                                           |                                                                                |                      |                      |                      |
|                                                           |                                                                                |                      |                      |                      |
|                                                           |                                                                                |                      |                      |                      |
| Step 5 of 9                                               |                                                                                | Previous             | Next                 | Cancel               |

**Note:** If you do not want to create basic plans using the wizard, click **Skip Plan Creation**. This will open the last dialog, the **Next Steps** dialog. Click **Finish** to open the UDP console and create plans.

16. Specify the following details to create a plan:

#### Plan Name

Specifies the name of the plan. (If you do not specify a Plan Name, the default name "Protection Plan <n>" is assigned).

#### **Session Password**

Specifies a session password. The session password is important as it is required when you restore data. Make sure that you do not lose the password.

#### How do you want to add nodes to the plan?

Specifies the method to add nodes to the plan. Select one of the following methods:

Hostname/IP Address

Use this method to manually add the nodes by specifying the node hostname or IP address. You can add as many nodes as you want.

Discovering Nodes from Active Directory

Use this method to add nodes that are in an active directory, you can first discover the nodes by providing the active directory details and then adding the nodes.

Importing from a vCenter/ESX Server

Use this method to import virtual machine nodes from ESX or vCenter Servers. This option lists all the virtual machines that are discovered on the hostname or IP address you specify here.

Importing from a Hyper-V Server

Use this method to import the virtual machine nodes from Microsoft Hyper-V Servers.

After you select a method, specify the details on each dialog.

17. After the nodes are added to your plan and click **Next**.

The Backup Schedule dialog opens.

| Backup Schedule                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Enter criteria for the plan backup schedule.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Install/upgrade and reboot on 🛛 Friday 🗸 at 9 🗸 : 00 🗸 PM 🗸                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Run Incremental Backup daily at 10 🚽 : 00 🚽 PM 🚽                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| On Friday at 9:00 PM, the latest version of the Arcserve UDP Agent will be installed on any source node that does not have the latest version already installed.<br>These nodes will immediately be rebooted after the installation/upgrade is completed.<br>Agent installation and reboot will not occur on nodes imported from Hyper-V or vCenter/ESX.<br>On Friday at 10:00 PM, the first Full Backup will be performed.<br>On every day after the installation/upgrade is completed, at 10:00 PM an Incremental Backup will be performed. |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Step 7 of 9 Previous Next Cancel                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

18. Enter the following schedule:

- Arcserve UDP agent install or upgrade schedule: The latest version of the Arcserve UDP agent is installed on source nodes that do not have the agent installed. Any previous agent installations is upgraded to the latest version.
- Incremental backup schedule: A full backup is performed for the first time, and then incremental backups is performed after that.

**Note:** If you specify the backup time earlier than the install/upgrade time, then the backup is automatically scheduled for the next day. For example, if you schedule the agent installation for Friday at 9:00 PM and backup schedule for 8:00 PM, then the backup is performed on Saturday at 8:00 PM.

**Cancel Plan Creation:** To cancel the plan that you just created, click **Cancel Plan Creation**.

#### 19. Click Next.

The Plan Confirmation dialog opens.

|                |                                    | Protection Plan 1                              |  |
|----------------|------------------------------------|------------------------------------------------|--|
| O Add a Blan   | Nodes Protected                    | 1                                              |  |
| (+) Add a Plan | Destination                        | appliance-test                                 |  |
|                | Install/Upgrade<br>Backup Schodulo | Friday, 9:00 PM<br>Daily Incromontal, 10:00 PM |  |
|                | Dackup Schedule                    | Daily Incremental, 10.00 FW                    |  |
|                | Edit Nodes Edit S                  | chedule Delete Plan                            |  |
|                |                                    |                                                |  |
|                |                                    |                                                |  |
|                |                                    |                                                |  |
|                |                                    |                                                |  |
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|                |                                    |                                                |  |

20. From here you can review the details of your plan. If necessary, you can edit the nodes or the schedule by clicking Edit Nodes or Edit Schedule, or you can add or delete a plan.

#### **Edit Nodes**

Modifies the source nodes you want to protect.

#### **Edit Schedule**

Modifies the backup schedule.

21. After you are satisfied that the plans are correct, click Next.

The Next Steps dialog opens.

You have successfully completed the configuration and you are now ready to work in the Arcserve UDP Console. You can add more nodes to protect, customize plans with features such as virtual standby, and add more destinations by including Recovery Point Servers and Data Stores.

| <b>GICSETVE</b> * UDP Appliance C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | configuration                   |                  |                 |
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| Next Steps                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                 |                  |                 |
| Configuration is complete and you are ready to open th<br>Data Protection you can:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | ne Arcserve Unified Data Protec | tion. With the A | rcserve Unified |
| Add more nodes to protect                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                 |                  |                 |
| Customize plans with features such as Virtual S                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | tandby                          |                  |                 |
| Add more destinations by including Recovery Performance Control of the second secon | pint Servers and Data Stores    |                  |                 |
| Click Finish to open Arcserve Unified Data Protection                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | n                               |                  |                 |
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| 01 0-10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                 |                  |                 |

22. Click **Finish** to exit the wizard and open the Arcserve UDP Console.

## Additional Information on Adding Nodes to a Plan

You can create a plan to protect various nodes. To protect nodes, you need to add nodes to a plan. You can add nodes from the UDP Appliance wizard. The wizard lets you add nodes using the following methods:

Manually entering the node IP Address or hostname

(Add Nodes by Hostname/IP Address)

Discovering nodes from an active directory

(Add Nodes by Active Directory)

- Importing virtual machine nodes from VMware ESX/vCenter Servers (<u>Add vCenter/ESX Nodes</u>)
- Importing virtual machine nodes from Microsoft Hyper-V Servers (Add Hyper-V Nodes)

## Add Nodes by Hostname/IP Address

You can manually enter the IP address or the hostname of the address to add a node to a plan. Use this method when you have a few nodes to add, however, you can add multiple nodes one at a time. Arcserve UDP Agent (Windows) is installed on these nodes.

#### Follow these steps:

1. On the Add Nodes by Hostname/IP address dialog, enter the following details:

| Add Nodes by Hostname/IP address Enter the hostname/IP address information for the selected Windows no Hostname/IP Address Username Password Description Add to List | About Adding     todes so that they can be added to the plan.     Nodes Protected by Plan     Node Name     Use the fields to the left to add nodes to the plan. | Nodes |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|
| Enter the hostname/IP address information for the selected Windows no<br>Hostname/IP Address<br>Username<br>Password<br>Description                                  | nodes so that they can be added to the plan. Nodes Protected by Plan Node Name Use the fields to the left to add nodes to the plan.                              | 1     |
| Hostname/IP Address Username Password Description Add to List                                                                                                        | Nodes Protected by Plan Node Name Use the fields to the left to add nodes to the plan.                                                                           | 1     |
| Username Password Description Add to List                                                                                                                            | Node Name<br>Use the fields to the left to add nodes to the plan.                                                                                                |       |
| Password Description Add to List                                                                                                                                     | Use the fields to the left to add nodes to the plan.                                                                                                             |       |
| Description                                                                                                                                                          |                                                                                                                                                                  |       |
|                                                                                                                                                                      |                                                                                                                                                                  |       |
| Add to List                                                                                                                                                          |                                                                                                                                                                  |       |
|                                                                                                                                                                      |                                                                                                                                                                  |       |
|                                                                                                                                                                      |                                                                                                                                                                  |       |
|                                                                                                                                                                      |                                                                                                                                                                  |       |
|                                                                                                                                                                      | Remove                                                                                                                                                           |       |
| Cancel Plan Creation                                                                                                                                                 |                                                                                                                                                                  |       |
|                                                                                                                                                                      |                                                                                                                                                                  |       |
|                                                                                                                                                                      |                                                                                                                                                                  |       |
|                                                                                                                                                                      |                                                                                                                                                                  |       |
|                                                                                                                                                                      |                                                                                                                                                                  |       |
|                                                                                                                                                                      |                                                                                                                                                                  |       |
|                                                                                                                                                                      |                                                                                                                                                                  |       |
|                                                                                                                                                                      |                                                                                                                                                                  |       |
| Step 6 of 9                                                                                                                                                          |                                                                                                                                                                  |       |

#### Hostname/IP Address

Specifies the hostname or IP address of the source node.

#### User name

Specifies the user name of the node having administrator privileges.

#### Password

Specifies the user password.

#### Description

Specifies any description to identify the node.

#### **Cancel Plan Creation**

Cancels the plan that you just created.

2. Click Add to List.

The node is added to the right pane. To add more nodes, repeat the steps. All the added nodes are listed on the right pane.

- 3. (Optional) To remove the added nodes from the list on the right pane, select the nodes and click **Remove**.
- 4. Click Next.

The nodes are added to the plan.

### Add Nodes by Active Directory

To add nodes that are in an active directory, provide the active directory details to discover the nodes and then add nodes to the plan.

#### Follow these steps:

1. On the Add Nodes by Active Directory dialog, enter the following details:

| arcserve                        | UDP Appliance Configuration       | <b>n</b>                         |                                     |
|---------------------------------|-----------------------------------|----------------------------------|-------------------------------------|
| Add Nodes by Active             | Directory                         |                                  | About Adding Nodes                  |
| Enter the active directory info | rmation to add nodes to the plan. |                                  |                                     |
| Usemame                         | domain\usemame                    | Nodes Protected by               | Blan                                |
| Password                        |                                   | Nodes Protected by               | Plan                                |
| Computer Name Filter            | *                                 | Use the fields to the left to vo | alidate the node<br>is to the plan. |
| Cancel Plan Creation            |                                   |                                  | Remove                              |
| Step 6 of 9                     | F                                 | Previous Next                    | Cancel                              |

#### Username

Specifies the domain and user name in the domain\username format.

#### Password

Specifies the user password.

#### **Computer Name Filter**

Specifies the filter to discover node names.

#### **Cancel Plan Creation**

Cancels the plan that you just created.

#### 2. Click Browse.

The discovered nodes are displayed.

| er the active directory in                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | e Directory<br>formation to add node                           | es to the plan. |      | (?Abou                                                | t Adding N |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|-----------------|------|-------------------------------------------------------|------------|
| Active Directory Result                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | S Type node filter                                             | text            | × No | odes Protected by Plan                                |            |
| Name  Anne  Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne Anne A | Domain<br>ARCSERVE C<br>ARCSERVE C<br>ARCSERVE C<br>ARCSERVE C | Add to List     |      | Node Name<br>tredentials and add the nodes to the pla | oode<br>n. |

To add nodes, select the nodes and verify.

3. To verify, select the nodes, enter the user name and password, and then click **Apply**.

The credentials are verified. Verified nodes are marked with green check marks. If a node fails verification, re-enter the credentials and click **Apply** again.

Note: You must verify each node before you can add it to the list.

4. Click Add to List.

The selected node is added to the right pane.

- 5. (Optional) To remove the nodes from the right pane, select the nodes and click **Remove**.
- 6. Click Next.

The nodes are added to the plan.

## Add vCenter/ESX Nodes

You can add virtual machine nodes to a VMware vCenter/ESX Server. To add these nodes, you need to discover and import nodes from the vCenter/ESX Server.

#### Follow these steps:

1. On the Add Nodes by vCenter/ESX dialog, specify the following vCenter/ESX Server details, and click Connect.

| arcserve                     | UDP Appliance Configura          | ation    |                               |                    |
|------------------------------|----------------------------------|----------|-------------------------------|--------------------|
| Add Nodes by vCent           | er/ESX                           |          | G                             | About Adding Nodes |
| Enter the vCenter/ESX inform | nation to add nodes to the plan. |          |                               |                    |
| Hostname/IP Address          |                                  | Nod      | es Protected by Pl            | lan                |
| Port                         | 443                              |          | Node Name                     |                    |
| Protocol                     | HTTPS                            | Use      | the fields to the left to add | nodes to the plan. |
| Username                     | root                             |          |                               |                    |
| Password                     |                                  |          |                               |                    |
|                              |                                  |          |                               |                    |
|                              |                                  |          |                               |                    |
|                              |                                  |          |                               | _                  |
|                              |                                  |          |                               | Remove             |
| Cancel Plan Creation         |                                  |          |                               |                    |
|                              |                                  |          |                               |                    |
|                              |                                  |          |                               |                    |
|                              |                                  |          |                               |                    |
|                              |                                  |          |                               |                    |
|                              |                                  |          |                               |                    |
|                              |                                  |          |                               |                    |
|                              |                                  |          |                               |                    |
| Stop 6 of 0                  |                                  | Drawiewe | Maut                          | Canadi             |
| Step o or a                  |                                  | Previous | Next                          | Gancel             |

#### Hostname/IP Address

Specifies the hostname or the IP address of the vCenter/ESX Server.

#### Port

Specifies the port number to be used.

#### Protocol

Specifies the protocol to be used.

#### Username

Specifies a user name of the Server.

#### Password

Specifies the user password.

#### **Cancel Plan Creation**

Cancels the plan that you just created.

2. The discovered hostnames are displayed. Expand a hostname to see the nodes.

| arcserve                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | UDP Appliance Configu                                                                                                                        | ration |                                                        |        |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|--------|--------------------------------------------------------|--------|
| Add Nodes by vCenter/ESX @Abou                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                              |        |                                                        |        |
| Enter the vCenter/ESX information                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | ation to add nodes to the plan.                                                                                                              |        |                                                        |        |
| vCenter/ESX Results                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Type node filter text                                                                                                                        | × Noc  | les Protected by Pl                                    | lan    |
| vCenter/ESX Results Name  Venter/ESX Results  I and the properties of the provide state of the providest of the pr | Type node filter text Object Type Host System Resource Pool Resource Pool Resource Pool Resource Pool Resource Pool Virtual Machine Add to L | × Noc  | les Protected by Pl<br>Node Name<br>VM(new-clonezilla) | Remove |
| Step 6 of 0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                              |        |                                                        |        |

3. Select the nodes that you want to add, and then click Add to List.

The selected nodes are added to the right pane.

- 4. (Optional) To remove the nodes from the right pane, select the nodes and click **Remove**.
- 5. Click Next.

The nodes are added to the plan.

### **Add Hyper-V Nodes**

Use this method to import the virtual machine nodes from a Microsoft Hyper-V Server.

#### Follow these steps:

1. On the Add Hyper-V Nodes dialog, specify the following details.

| arcserve                     | UDP Appliance Configurat | ion      |                                 |                    |
|------------------------------|--------------------------|----------|---------------------------------|--------------------|
| Add Hyper-V Nodes            |                          |          | 0                               | About Adding Nodes |
| Enter Hyper-V information to | add nodes to the plan.   |          |                                 |                    |
| Hostname/IP Address          |                          | Nod      | es Protected by Pla             | an                 |
| Username                     |                          |          | Node Name                       |                    |
| Password                     |                          | Use      | the fields to the left to add n | odes to the plan.  |
|                              |                          |          |                                 | _                  |
|                              |                          |          |                                 | _                  |
|                              |                          |          |                                 | _                  |
|                              |                          |          |                                 | _                  |
|                              |                          |          |                                 |                    |
|                              |                          |          |                                 | Remove             |
| Cancel Plan Creation         |                          |          |                                 |                    |
|                              |                          |          |                                 |                    |
|                              |                          |          |                                 |                    |
|                              |                          |          |                                 |                    |
|                              |                          |          |                                 |                    |
|                              |                          |          |                                 |                    |
|                              |                          |          |                                 |                    |
|                              |                          |          |                                 |                    |
| Step 6 of 9                  |                          | Previous | Next                            | Cancel             |

#### Hostname/IP Address

Specifies the Hyper-V Server name or the IP address. To import virtual machines that are in Hyper-V clusters, specify either the cluster node name or Hyper-V host name.

#### Username

Specifies Hyper-V user name having the administrator rights.

**Note:** For Hyper-V clusters, use a domain account with administrative privilege of the cluster. For standalone Hyper-V hosts, we recommend using a domain account.

#### Password

Specifies the password of user name.

#### **Cancel Plan Creation**

Cancels the plan that you just created.

#### 2. Click **Connect**.

The discovered hostnames are displayed. Expand a hostname to see the nodes.

| arcserve <sup>®</sup> u          | DP Appliance Config   | uration  |              |                    |
|----------------------------------|-----------------------|----------|--------------|--------------------|
| Add Hyper-V Nodes                |                       |          |              | About Adding Nodes |
| Enter Hyper-V information to add | nodes to the plan.    |          |              |                    |
|                                  |                       | _        |              |                    |
| Hyper-V Results                  | Type node filter text | ×        | Nodes Protec | ted by Plan        |
| Name                             | Object Type           |          | Node Name    | t w2b1 01)         |
|                                  | Virtual Machine       | <u>^</u> | - winabt-tes | c-wone-ou/         |
|                                  | Virtual Machine       |          |              |                    |
| 🗹 🚊 abc-test-w3h4-01             | Virtual Machine       |          |              |                    |
|                                  | Virtual Machine       |          |              |                    |
|                                  | Virtual Machine       | ×        |              |                    |
| Return<br>Cancel Plan Creation   | Add to                | List     |              | Remove             |
|                                  |                       |          |              |                    |
| Step 6 of 9                      |                       | Previ    | ous Ne       | xt Cancel          |

- 3. (Optional) You can type the node name in the filter field to locate the node in the tree.
- 4. Select the nodes, and then click Add to List.

The selected nodes are added to the right pane.

- 5. (Optional) To remove the nodes from the right pane, select the nodes and click **Remove**.
- 6. Click Next.

The nodes are added to the plan.

## **Configure UDP Appliance as Gateway**

You can configure the Arcserve UDP Appliance as Gateway.

#### Follow these steps:

- 1. Uninstall Arcserve UDP Console from the Arcserve UDP Appliance.
- 2. From the Arcserve UDP Console, click the resources tab.
- 3. From the left pane of the Arcserve UDP Console, navigate to **Infrastructures**, and click **Sites.**
- 4. Click Add a Site.
- 5. Follow the instructions provided in the **Add a Site** wizard to install Arcserve UDP Remote Management Gateway on the Arcserve UDP Appliance.

**Note:** After installing Arcserve UDP Remote Management Gateway on the Arcserve UDP Appliance, click **Launch Wizard** on the Arcserve UDP Appliance wizard does not launch the Arcserve UDP Console. To access the Arcserve UDP Console, provide the URL of Arcserve UDP Console directly.

# **Clear Configuration and Apply Appliance Factory Reset**

Using Factory Reset, you can return your Arcserve UDP appliance back to clean and non-configured status. You can apply factory reset from the Arcserve UDP Console.

#### Follow these steps:

1. Click Factory Reset on the settings tab from the Arcserve UDP Console.

| arcserve <sup>.</sup>                                                                                                                                                                                                                                                   | unified data protection O Messages (1) · administrator · Help ·                                                                                                                                                                                                                                                                                                                                                                                                                               |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| dashboard resources                                                                                                                                                                                                                                                     | jobs reports log settings   high availability                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Database Configuration     Accenve Backup Data Synchronization Sch     SRM Configuration     Email and Aret Configuration     Update Configuration     Update Configuration     Administrator Account     Remote Daployment Settings     Share Plan     User Management | Factory Reset Performing a Factory Reset on your Arcserve UDP Applance will return all settings to their factory defaults. All resources, job history, reports and log entries will be deleted. The Arcserve UDP software will revert from its current version to the version originally installed on the Applance. Current Arcserve UDP Version: 6.0.3792 update 1 build 272 Original Arcserve UDP Version: 6.0.3792 update 1 build 272 Preserve existing backup data. Perform Factory Reset |

All the backed up data is preserved by default.

#### Notes:

Arcserve UDP provides the **Preserve existing backup data** option to help you preserve the existing data store.

- If you select the Preserve existing backup data option, only C:\ volume is rebuilt. Data at X:\ volume and Y:\ volume remain unchanged.
- If you do not select the Preserve existing backup data option, all the data on the respective volumes of C:\, X:\ and Y:\ is rebuilt.
- 2. Click Perform Factory Reset.

A confirmation dialog is displayed.

| arcserve                                                                                                                                                                                                                                                                                               | unified data protection O Messages (1) · administrator · Ikip ·                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| dashboard resources                                                                                                                                                                                                                                                                                    | obs reports log settings   high availability                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Database Configuration     Arcserve Backap Data Synchronization Sch     SRM Configuration     Email and Alert Configuration     Email and Alert Configuration     Update Configuration     Administration Account     Remote Disployment Settings     Share Plan     User Management     Factory Reset | Factory Reset<br>Performing a Factory Reset on your Accesive UDP Applance will return all settings to their factory defaults. All resources, job history, reports and log entries will be deleted. The Accesive<br>UDP software will revert from its current version "yea version originally installed on the Applance.<br>Confirm Factory Reset<br>Are you sure you want to perform a factory reset on your Arceave UDP Applance?<br>Section Reset will return a factory reset on your Arceave UDP Applance.<br>All of your backup data, will be deleted during the reset and will not be recoverable. If you do not<br>want to delete your backup data, dot. Cancel and select. "Preserve existing backup data".<br>Reset<br>Reset |

3. From the confirmation dialog, click **Reset** to launch the factory reset.

The Appliance machine is rebooted, and the factory reset runs as displayed below:



Completion of factory reset displays a confirmation dialog.

- 4. From the confirmation dialog, perform one of the following options:
  - Click **Restart** to reboot the appliance.
  - Click **Shut Down** to close the appliance.

| CICSETVE Unified Data Protection Appliance                                                                                 |
|----------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                            |
|                                                                                                                            |
| Reverting to Arcserve UDP Version 12.34.56.                                                                                |
| Existing backup data is being pres Factory Reset is Complete                                                               |
| Your Arcsene UCP Appliance has been returned to its factory defaults.                                                      |
| Cick Restart to restart the appliance and launch the Configuration Wizard or cick Shut Down to shut<br>down the appliance. |
| Restart Shut Down                                                                                                          |
|                                                                                                                            |
|                                                                                                                            |
|                                                                                                                            |
|                                                                                                                            |
|                                                                                                                            |
|                                                                                                                            |
| Factory reset is complete.                                                                                                 |
|                                                                                                                            |

## **Apply Arcserve UDP Factory Reset Using Boot Option**

You can also apply UDP factory reset from the Boot Menu of the UDP Appliance. Using UDP factory reset, you can return your Arcserve UDP Appliance to clean and non-configured status.

Note: You can also select the Preserve the backup data option while running UDP factory reset.

Follow these steps:

1. Press F11 to invoke Boot Menu.



2. Select the boot option UDP Factory Reset.



A page about factory reset is displayed.



Notes:

- The Preserve existing backup data option is selected by default. Only
   C:\ volume in the original operating system is rebuilt. Data at X:\
   volume and Y:\ volume remain unchanged.
- If you clear the selection of the Preserve existing backup data option, all the data on the respective volumes of C:\, X:\, and Y:\ in the original operating system is rebuilt.
- 3. Click Reset.

A confirmation dialog appears.

| Confi | rm Factory Reset                                                                                                                                             |                                         |
|-------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|
|       | Are you sure you want to perform a factory reset on your Arcserve UDP App<br>Reset will result in returning all settings to their factory defaults.          | oliance? Selecting                      |
|       | All of your backup data will be deleted during the reset and will not be reco<br>want to delete your backup data, click Cancel and select "Preserve existing | verable. If you do not<br>backup data". |
|       | Reset                                                                                                                                                        | Cancel                                  |

You can click **Cancel** to reboot the Appliance unit.

- 4. After factory reset finishes, you can perform either of the following actions:
  - Click **Restart** to reboot the appliance.
  - Click **Shut Down** to close the appliance.

| GICSETVE' Unified Dat              | a Protection Appliance                                                                                                                                              |
|------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Factory Reset                      |                                                                                                                                                                     |
|                                    | in the Arcaene UCP Appliance to their factory defaults. All insources, job history reports, and log are being defend. The Arcsenie UCP software is<br>the Appliance |
| Reverting to Arcserve UDP Version  | 12.34.56.                                                                                                                                                           |
| Existing backup data is being pres | Factory Reset is Complete                                                                                                                                           |
|                                    | Your Acceane UDP Appliance has been returned to its factory defaults.                                                                                               |
|                                    | Click Restart to restart the appliance and launch the Configuration Wizard or click Shut Dewn to shut<br>down the appliance.                                        |
|                                    | Restart Shut Down                                                                                                                                                   |
| ) <sub>2</sub>                     |                                                                                                                                                                     |
|                                    |                                                                                                                                                                     |
|                                    |                                                                                                                                                                     |
|                                    |                                                                                                                                                                     |
|                                    |                                                                                                                                                                     |
|                                    |                                                                                                                                                                     |
|                                    |                                                                                                                                                                     |
| Factory reset is complete.         |                                                                                                                                                                     |
|                                    |                                                                                                                                                                     |
|                                    |                                                                                                                                                                     |

## How to Activate Arcserve Product on the Appliance

For activating Arcserve product on the Appliance, refer to <u>Activating Arcserve</u> <u>Product License Online</u> topic in Solutions Guide.
# **Chapter 7: Creating Backup Plans**

Using UDP Appliance, you can create backup plans for Windows, Linux, and virtual machines. You can also write data to a tape device and create a virtual standby machine.

| Create a Backup Plan for Linux Nodes        | 110 |
|---------------------------------------------|-----|
| Create a Backup Plan to a Tape Device       | 111 |
| Create an On-Appliance Virtual Standby Plan | 112 |

## **Create a Backup Plan for Linux Nodes**

You can back up Linux nodes from the Appliance Console. The Linux Backup Server is already added to the Console.

#### Follow these steps:

- 1. Open the Appliance Console.
- 2. Click resources, Plans, All Plans.
- 3. Create a Linux Backup plan.
- 4. Specify the Source, Destination, Schedule, and Advanced configurations.

**Note:** For more information about each of the configurations, see How to Create a Linux Backup Plan in the Solutions Guide.

5. Run the backup plan.

### **Create a Backup Plan to a Tape Device**

UDP Appliance has the capability to write data to a tape device. Typically, the source data is the recovery point that you have saved in a data store using the UDP backup plan, and the destination is a tape device. You need to use Arcserve Backup Manager to manage your backup jobs to a tape.

The following process overview gives you an idea on how to write to a tape device using the UDP Appliance:

#### 1. Attach the tape device to the UDP Appliance

UDP Appliance comes with a port at the rear panel to attach your tape device. Once you attach the tape device, UDP Appliance automatically identifies the tape device.

#### 2. Configure the tape device using the Backup Manager

Open the Backup Manager and add the tape device to Backup Manager. Backup Manager is the interface that lets you manage Arcserve Backup. After you add the tape device to Backup Manager, configure the device.

**Note:** For more information on configuring and managing the device, see Managing Devices and Media in Arcserve Backup for Windows Administration Guide.

#### 3. Successfully complete at least one backup job using the UDP Console

You need at least one successful backup that you can write to a tape device. To back up data, create a plan using the UDP Console and back up to a data store.

**Note:** For more information about creating a backup plan for different nodes, see Creating Plans to Protect data in the Solutions Guide.

#### 4. Initiate a backup to tape job from Backup Manager

Open the Backup Manager and create a plan to back up data to the tape device. Here the source data is the destination of UDP backup plan and the destination is the tape device.

**Note:** For more information on creating a backup plan to tape, see Backing Up and Recovering D2D/UDP Data in Arcserve Backup for Windows Administration Guide.

## **Create an On-Appliance Virtual Standby Plan**

Appliance has the capability to serve as a virtual standby machine. This capability is present in the following Appliance series:

- Arcserve UDP Appliance 7200V
- Arcserve UDP Appliance 7300V
- Arcserve UDP Appliance 7400V
- Arcserve UDP Appliance 7500V
- Arcserve UDP Appliance 7600V
- Arcserve UDP Appliance 8100
- Arcserve UDP Appliance 8200
- Arcserve UDP Appliance 8300
- Arcserve UDP Appliance 8400

Prerequisite: You must have a successful backup plan.

#### Follow these steps:

- 1. Open the Appliance Console.
- 2. Navigate to the plans and modify the backup plan.
- 3. Add a Virtual Standby task.
- 4. Update the Source, Destination, Virtual Machine configurations.

**Note:** For more information about the configurations, see *How to Create a Virtual Standby Plan* topic in the Solutions Guide.

5. Save and run the plan.

## **Chapter 8: Repairing the Arcserve UDP Appliance**

|--|

## **Remove and Replace a Hard Drive**

With the Arcserve UDP appliance, if one hard drive fails, the rest of the drives will kick in immediately to ensure no data is lost and the appliance continues to work normally. Therefore, to guard against any problems associated with multiple hard drive failures, it is important to replace a hard drive as soon as possible to minimize potential loss of data.

The Arcserve UDP appliance contains four hard drive carriers which are labeled 0, 1, 2 and 3 from left to right. If you replace more than one hard drive at a time, you should label the replacement hard drives so that you know which drive is placed into each drive carrier. You should also label the hard drives that you remove from the appliance so that you know which drive carrier they occupied.

**Important!** Take proper safety precautions when handling the hard drives because they are static-sensitive devices and can be easily damaged.

- Wear a wrist strap to prevent any static discharge.
- Touch a grounded object before removing the replacement hard disk from the antistatic shipping bag.
- Always handle a hard drive by the edges only and do not touch any of the visible components on the bottom.

#### Follow these steps:

- 1. To gain access to the drive holders, you first need to remove the faceplate:
  - a. Unlock the faceplate lock.
  - b. Press the release knob to retract the faceplate pins.
  - c. Carefully remove the faceplate (using two hands).
- 2. Press the release latch on the drive carrier. This extends the drive carrier handle.



3. Using the handle, pull the drive carrier out from the front of the appliance. The hard drives are mounted in drive carriers to simplify their removal and replacement from the appliance. These carriers also help promote proper airflow for the drive bays.

**Important!** Except for short periods of time (swapping of the hard drives), do not operate the appliance without the drive carriers fully installed.

4. Remove the old hard drive from the drive carrier and install the new hard drive being careful to properly orient the replacement hard drive with the



label on top and the visible components on the bottom.

5. Slide the drive tray into the appliance until it is fully installed and secure by closing the drive carrier handle.



6. Obtain return instructions from Arcserve Support to return a defective drive.

# **Chapter 9: Safety Precautions**

| General Safety Precautions                |  |
|-------------------------------------------|--|
| Electrical Safety Precautions             |  |
| FCC Compliance                            |  |
| Electrostatic Discharge (ESD) Precautions |  |

## **General Safety Precautions**

The following are general safety precautions you should adhere to in order to protect yourself from harm and to protect the appliance from damage or malfunction:

For EMI Class A Equipment (Business equipment), this equipment is registered for Electromagnetic Conformity Registration as business equipment (A) and not home equipment. Sellers or users are required to take caution in this regard.

A급기기(업무용방송통신기자재)

이 기 기 는 업 무 용 (A급 )으 로 전 자 파 적 합 기 기 로 서 판 매 자 또 는 사 용 자 는 이 점 을 주 의 하 시 기 바 라 며 ,가 정 외 의 지 역 에 서 사 용 하 는 것 을 목 적 으 로 합 니 다

**Note**: This safety precaution only applies to South Korea. For more details, contact Arcserve Support at <u>https://www.arcserve.com/support</u> or call 0079885215375 (South Korea).

- Inspect the box that the appliance was shipped in and ensure that there are no visible signs of damage. If there is evidence of damage, please retain all packaging materials and contact Arcserve Support immediately at: <a href="https://www.arcserve.com/support">https://www.arcserve.com/support</a>.
- Decide on a suitable location for the rack unit that will hold the appliance. It should be situated in a clean, dust-free area that is well ventilated and free of clutter. Avoid areas where heat, electrical noise, and electromagnetic fields are generated.
- You will also need it placed near at least one grounded power outlet. Depending on the model, the appliance includes either one power supply or a redundant power supply and will then require two grounded outlets.
- The appliance is only for use in a restricted location.
  - Access can only be gained by service persons or by users who have been instructed about the reasons for the restrictions applied to the location and about any precautions that shall be taken; and
  - Access is through the use of a tool or lock and key, or other means of security, and is controlled by the authority responsible for the location.
- Place the appliance top cover and any components that have been removed away from the appliance or on a table so that they will not be accidentally stepped on.

- While working on the appliance, do not wear loose clothing such as neckties and unbuttoned shirt sleeves, which can come into contact with electrical circuits or be pulled into a cooling fan.
- Remove any jewelry or metal objects from your body, which are excellent metal conductors that can create short circuits and harm you if they come into contact with printed circuit boards (PCBs) or areas where power is present.
- After accessing the inside of the appliance, close the appliance and secure it to the rack unit with the retention screws after ensuring that all connections have been made.

## **Electrical Safety Precautions**

The following are electrical safety precautions you should adhere to in order to protect yourself from harm and to protect the appliance from damage or malfunction:

- Be aware of the locations of the power on/off switch on the appliance as well as the room's emergency power-off switch, disconnection switch, or electrical outlet. If an electrical accident occurs, you can then quickly remove power from the appliance.
- Do not work alone when working with high-voltage components.
- Power should always be disconnected from the appliance when removing or installing main system components, such as the Serverboard, memory modules and the DVD-ROM and floppy drives (not necessary for hot swappable drives). When disconnecting power, you should first power down the appliance with the operating system and then unplug the power cords from all the power supply modules in the appliance.
- When working around exposed electrical circuits, another person who is familiar with the power-off controls should be nearby to switch off the power, if necessary.
- Use only one hand when working with powered-on electrical equipment. This is to avoid making a complete circuit, which will cause electrical shock. Use extreme caution when using metal tools, which can easily damage any electrical components or circuit boards they come into contact with.
- Do not use mats designed to decrease electrostatic discharge as protection from electrical shock. Instead, use rubber mats that have been specifically designed as electrical insulators.
- The power supply power cord must include a grounding plug and must be plugged into grounded electrical outlets.
- Serverboard Battery: CAUTION There is a danger of explosion if the onboard battery is installed upside down, which will reverse its polarities This battery must be replaced only with the same or an equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions.
- DVD-ROM laser: CAUTION this Server may have come equipped with a DVD-ROM drive. To prevent direct exposure to the laser beam and hazardous radiation exposure, do not open the enclosure or use the unit in any unconventional way.

## **FCC Compliance**

This appliance complies with part 15 of the FCC Rules. Operation is subject to the following conditions:

- This appliance may not cause harmful interference, and
- This appliance must accept any interference received, including interference that may cause undesired operation

**Note:** This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user is required to correct the interference at his own expense.

## **Electrostatic Discharge (ESD) Precautions**

Electrostatic Discharge (ESD) is generated by two objects with different electrical charges coming into contact with each other. An electrical discharge is created to neutralize this difference, which can damage electronic components and printed circuit boards. Devices that are sensitive to ESD, such as Serverboards, motherboards, PCIe cards, drives, processors, and memory cards require special handling. Use the following precautions to help neutralize the difference of electrical charges coming into contact with each other, before contact is made, to protect your equipment from ESD:

- Use a rubber mat that has been specifically designed as an electrical insulator.
   Do not use a mat designed to decrease electrostatic discharge as protection from electrical shock.
- Use a grounded wrist strap designed to prevent static discharge.
- Use antistatic or electrostatic discharge (ESD) preventive clothing or gloves.
- Keep all components and printed circuit boards (PCBs) in their antistatic bags until ready for use.
- Touch a grounded metal object before removing the board from the antistatic bag.
- Do not let components or PCBs come into contact with your clothing, which may retain a charge even if you are wearing a wrist strap.
- Handle a board by its edges only. Do not touch its components, peripheral chips, memory modules, or contacts.
- When handling chips or modules, avoid touching their pins.
- Put the Serverboard and peripherals back into their antistatic bags when not in use.
- For grounding purposes, verify your appliance provides excellent conductivity between the power supply, the case, the mounting fasteners, and the Serverboard.

## **Chapter 10: Changing the IPMI Password**

| How to Change the IPMI Password | 125  |
|---------------------------------|------|
| now to change the name assured  | <br> |

## How to Change the IPMI Password

Before changing the IPMI password, you need to access the BIOS setup screen to obtain the IP address.

#### Follow these steps:

1. Boot up your system and a bootup screen appears. From this screen, press the Delete key. The BIOS setup screen is displayed.

**Note**: To navigate, use the arrow keys and press Enter. To go back to the previous screens, press Escape key.

2. Select the IPMI tab at the top of the main BIOS screen.

Note: By default, the configuration address source is set to DHCP.

| Aptio Setup Utility - (<br>IPMI                                                                                                                                                                                          | Copyright (C) 2014 American                                                                                  | Megatrends, Inc.                                    |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|
| BMC Network Configuration<br>IPMI LAN Selection<br>IPMI Network Link Status:<br>Update IPMI LAN Configuration<br>Configuration Address<br>Station IP Address<br>Subnet Mask<br>Station MAC Address<br>Gateway IP Address | [Failover]<br>Shared LAN<br>[No]<br>[DHCP]<br>172.31.8.192<br>255.255.0.0<br>00-25-90-9C-46-eb<br>172.31.0.1 | BIOS will set below setting<br>to IPMI in next BOOT |
| Version 2.17.1245. Co                                                                                                                                                                                                    | oyright (C) 2014 American M                                                                                  | egatrends, Inc.                                     |

- 3. Verify that the IP address is correct. You can connect to the IPMI interface using your web browser only if your Server is on the same network.
- 4. Record the Station IP Address.
- 5. Enter the Station IP address on your web browser.

After you are connected to the remote Server via the IPMI port, the IPMI login screen is displayed.

|          | Please Login |
|----------|--------------|
| Username |              |
| Password |              |
|          | login        |

- 6. Enter your user name in the Username field. (ADMIN by default)
- 7. Enter your password in the Password field. (ARCADMIN by default)
- 8. The home page is displayed (IPMI main screen).

| stem Server          | Health Configuration I                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Remote Control                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Virtual Media                                                                                      | Maintenance                    | Miscellaneous | Help |  |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|--------------------------------|---------------|------|--|
| System               | Summary                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                    |                                |               |      |  |
| FRU Reading          | Firmware Revision : 01.70                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | IP address : )                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | XXX XXX XXXX                                                                                       |                                |               |      |  |
| Hardware Information | Firmware Build Time : 10/03/2014<br>BIOS Version : 1.0a<br>BIOS Build Time : 08/29/2014                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | BMC MAC ad<br>System LAN1<br>System LAN2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | dress : 00:25:90:9c:47:<br>MAC address : 00:25:9<br>MAC address : 00:25:9<br>MAC address : 00:25:9 | a8<br>0:9c:5f:90<br>0:9c:5f:91 |               |      |  |
|                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | System LAN3<br>System LAN4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | MAC address : 00:25:9<br>MAC address : 00:25:9                                                     | 0.90.51.92                     |               |      |  |
|                      | Remote Console Preview           Refresh Pr           Blue is to state and the st | eview image<br>Stary Institute<br>1 00000<br>1 00000000<br>1 000000<br>1 000000<br>1 000000<br>1 00000<br>1 00000<br>1 0 |                                                                                                    |                                |               |      |  |
|                      | Host is common Host is common Power On Pc                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | wer Down F                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | teset                                                                                              |                                |               |      |  |

9. Click the Configuration option from the top bar. The Configuration screen is displayed.

| system            | Server Health | Configuration                                                          | Remote Control                                                 | Virtual Media                          | Maintenance                                        | Miscellaneous                | Help                         |                                                   | _ |  |  |  |  |
|-------------------|---------------|------------------------------------------------------------------------|----------------------------------------------------------------|----------------------------------------|----------------------------------------------------|------------------------------|------------------------------|---------------------------------------------------|---|--|--|--|--|
| 🔵 Configuration   | •             | Configuration                                                          |                                                                |                                        |                                                    |                              |                              |                                                   |   |  |  |  |  |
| Alerts            | U             | ise these pages to cont                                                | figure various settings, s                                     | uch as alerts, users, o                | or network etc.                                    |                              |                              |                                                   |   |  |  |  |  |
| Date and Time     |               | Alerts : Add, acit or remove allert destinations                       |                                                                |                                        |                                                    |                              |                              |                                                   |   |  |  |  |  |
| DLDAP             |               | Date and Time : Con                                                    | nfigure Date and Time Setting                                  | 5                                      |                                                    | 1010 mm                      | 6. C                         |                                                   |   |  |  |  |  |
| Active Directory  |               | Active Directory :C                                                    | configure s ettings to authenti                                | cate and access the Activ              | required information to act<br>le Directory server | ies the LUAP server. Hess    | r the baive button to save ) | our changes.                                      |   |  |  |  |  |
| 🔁 RADIU S         |               | <ul> <li>RADIUS : Configure</li> <li>Mouse mode : Configure</li> </ul> | as ettings to authenticate and<br>ibure the mous e mode for re | access the RADIUS serv<br>mote console | a.                                                 |                              |                              |                                                   |   |  |  |  |  |
| Mouse Mode        |               | Network : See the l                                                    | MAC address or change net                                      | rork settings, including dy            | mamic and static IP assign                         | rent                         |                              |                                                   |   |  |  |  |  |
| Network           |               | <ul> <li>Dynamic DNS : Con</li> <li>SMTP : Configure th</li> </ul>     | figure dynamic update prope<br>te SMTP email server            | rties for Dynamic DNS                  |                                                    |                              |                              |                                                   |   |  |  |  |  |
| Dynamic DNS       |               | SSL Certificate : Th                                                   | e dates for the default certifi                                | icate and private key are s            | hown below. To upload a                            | new SSL certificate, use the | e Browse button to naviga    | e to the certificate and press the Upload button. |   |  |  |  |  |
| SMTP              |               | <ul> <li>Port : Configure the</li> </ul>                               | port number of the services                                    |                                        |                                                    |                              |                              |                                                   |   |  |  |  |  |
| SSL Certification | 1             | <ul> <li>IP Access Control :</li> <li>SNMP : Configure S</li> </ul>    | Add, edit or remove Placee<br>SM/Psetting                      | us rules                               |                                                    |                              |                              |                                                   |   |  |  |  |  |
| 🕄 Users           |               | Fan Node : Configu                                                     | ire the fan mode                                               |                                        |                                                    |                              |                              |                                                   |   |  |  |  |  |
| Dort              |               | <ul> <li>Web Sersion : Con</li> </ul>                                  | riĝure me weo ses sion valu                                    |                                        |                                                    |                              |                              |                                                   |   |  |  |  |  |
| DIP Access Contr  | ol            |                                                                        |                                                                |                                        |                                                    |                              |                              |                                                   |   |  |  |  |  |
| SN MP             |               |                                                                        |                                                                |                                        |                                                    |                              |                              |                                                   |   |  |  |  |  |
| Fan Mode          |               |                                                                        |                                                                |                                        |                                                    |                              |                              |                                                   |   |  |  |  |  |
| 😌 Web Session     |               |                                                                        |                                                                |                                        |                                                    |                              |                              |                                                   |   |  |  |  |  |

- 10. Click the Users option in the Configuration sidebar.
- 11. Select the User: (ADMN) from the Users List.

| system           | Server Health | Configuration             | Remote Control              | Virtual Media         | Maintenance                    | Misc ella neous | Help |
|------------------|---------------|---------------------------|-----------------------------|-----------------------|--------------------------------|-----------------|------|
| Configuration    | ٢             | Modify User               |                             |                       |                                |                 |      |
| Alerts           |               |                           |                             |                       |                                |                 |      |
| Date and Time    |               | Enter the new information | n for the user below and pr | ess Modily. Ress Cano | el to return to the user list. |                 |      |
| 🗐 LD AP          |               |                           |                             |                       |                                |                 |      |
| Active Directory |               | User Name:                |                             |                       |                                |                 |      |
| 🔵 RADIU S        |               | Password                  |                             |                       |                                |                 |      |
| 🕏 Mouse Mode     |               | Confirm Password:         |                             |                       |                                |                 |      |
| Network          |               | Network Privileges:       | v                           |                       |                                |                 |      |
| Dynamic DNS      |               | Modify Cancel             |                             |                       |                                |                 |      |
| SMTP             |               |                           |                             |                       |                                |                 |      |
| SSL Certificatio | n             |                           |                             |                       |                                |                 |      |
| 😌 Users          |               |                           |                             |                       |                                |                 |      |
| Port             |               |                           |                             |                       |                                |                 |      |
| P Access Cont    | b             |                           |                             |                       |                                |                 |      |
| SN MP            |               |                           |                             |                       |                                |                 |      |
| Fan Mode         |               |                           |                             |                       |                                |                 |      |
| 🕄 Web Session    |               |                           |                             |                       |                                |                 |      |

12. Click Modify User and the Modify User screen is displayed.

- 13. Enter your user name. (ADMIN)
- 14. Select the Change Password check box to change the password. The password fields is enabled.
- 15. Enter the new password and confirm.
- 16. Click Modify to save the changes. Your IPMI password has been changed.

# **Chapter 11: Connecting Appliance Expansion Shelf to the Appliance Server**

| Appliance Infield Expansion for all the Available Models             | 130 |
|----------------------------------------------------------------------|-----|
| What is included in the box                                          | 140 |
| How to Connect the Appliance Expansion Shelf to the Appliance Server | 143 |
| How to Modify Arcserve UDP Data store                                | 152 |

# Appliance Infield Expansion for all the Available Models

| Mod-<br>el | Current Capa-<br>cities \TB | Expan-<br>sion<br>Shelf<br>Capacity | Cur-<br>rent<br>SSD -<br>GB | Ne-<br>w<br>SSD<br>RE-<br>Q -<br>GB | Free<br>Slot | Add-on<br>Cards                                                                                                                                                                                         | DES            | CRIPTION                                                                                                                                                                                                                                                                                                                                                                                       |
|------------|-----------------------------|-------------------------------------|-----------------------------|-------------------------------------|--------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 8100       | 4, 6                        | 8<br>( 6x2 TB<br>Disks)             | 120                         | 8<br>TB -<br>140                    | 2, 3         | LSI SAS<br>9200 -8E<br>HBA<br>Qlogic<br>Dual port<br>HBA<br>Quad-Port<br>1G NIC<br>Dual port<br>10G SPF+<br>Dual Port<br>10G Cop-<br>per<br>Infield<br>Expansion<br>-<br>(MegaRAI-<br>D SAS<br>9380-8e) | 1.<br>2.<br>3. | 8100<br>model sup-<br>ports only 8<br>TB Infield<br>Expansion.<br>8100 - 8 TB<br>Expansion<br>Shelf<br>comes with<br>comes with<br>comes with<br>inbuilt and<br>pre-<br>configured<br>SSD 240<br>GB.<br>8100 has 2<br>and 3 as<br>optional<br>slots . One<br>free slot is<br>mandatory<br>for Appli-<br>ance Infield<br>Expansion /<br>MegaRAID<br>SAS 9380-<br>8e.<br>If both the<br>optional |

| - |   |   |   |    |             |
|---|---|---|---|----|-------------|
|   |   |   |   |    | slots are   |
|   |   |   |   |    | filled with |
|   |   |   |   |    | add-on      |
|   |   |   |   |    | Cards, then |
|   |   |   |   |    | you need to |
|   |   |   |   |    | free at     |
|   |   |   |   |    | least one   |
|   |   |   |   |    | slot , pre- |
|   |   |   |   |    | ferrably    |
|   |   |   |   |    | slot 3 in   |
|   |   |   |   |    | order to    |
|   |   |   |   |    | use Infield |
|   |   |   |   |    | Expansion.  |
|   |   |   |   | 5. | SAS con-    |
|   |   |   |   | _  | nection is  |
|   |   |   |   |    | used        |
|   |   |   |   |    | between     |
|   |   |   |   |    | the Appli-  |
|   |   |   |   |    | ance and    |
|   |   |   |   |    | Expansion   |
|   |   |   |   |    | shelf.      |
|   |   |   |   | c  | 9100        |
|   |   |   |   | 0. | S100 -      |
|   |   |   |   |    | cholf       |
|   |   |   |   |    | shen        |
|   |   |   |   |    |             |
|   |   |   |   |    | KAID-0.     |
|   |   |   |   | 7. | Expansion   |
|   |   |   |   |    | Shelf       |
|   |   |   |   |    | comes with  |
|   |   |   |   |    | Dual PSU.   |
|   |   |   |   | 8. | Follow Add  |
|   |   |   |   |    | data path   |
|   |   |   |   |    | instruc-    |
|   |   |   |   |    | tions given |
|   |   |   |   |    | in Expan-   |
|   |   |   |   |    | sion guide  |
|   |   |   |   |    | after con-  |
|   |   |   |   |    | necting the |
|   |   |   |   |    | expansion   |
|   | 1 | 1 | I |    |             |

|      |       |           |     |      |      |           |    | 1.10         |
|------|-------|-----------|-----|------|------|-----------|----|--------------|
|      |       |           |     |      |      |           |    | shelt.       |
|      |       |           |     |      |      |           | 9. | Wherever     |
|      |       |           |     |      |      |           |    | a new SSD    |
|      |       |           |     |      |      |           |    | is required  |
|      |       |           |     |      |      |           |    | follow the   |
|      |       |           |     |      |      |           |    | Migrate      |
|      |       |           |     |      |      |           |    | HASH des-    |
|      |       |           |     |      |      |           |    | tination to  |
|      |       |           |     |      |      |           |    | new SSD      |
|      |       |           |     |      |      |           |    | instructions |
|      |       |           |     |      |      |           |    | given in the |
|      |       |           |     |      |      |           |    | Expansion    |
|      |       |           |     |      |      |           |    | Guide.       |
|      |       |           |     |      |      |           | 1. | 8200         |
|      |       |           |     |      |      |           |    | model sup-   |
|      |       |           |     |      |      |           |    | ports either |
|      |       |           |     |      |      | I SI SAS  |    | 8 TB or 16   |
|      |       |           |     |      |      | 9200 -8E  |    | TB Infield   |
|      |       |           |     |      |      | НВА       |    | Expansion.   |
|      |       |           |     |      |      |           |    | Client can   |
|      |       |           |     |      |      | Qlogic    |    | connect      |
|      |       |           |     |      |      |           |    | only one     |
|      |       | 0         |     |      |      | ПБА       |    | expansion    |
|      |       | 0         |     | 8    |      | Quad-Port |    | shelf any    |
|      |       | ( 6x2 TB  |     | TB - |      | 1G NIC    |    | time.        |
| 0000 | 0.40  | Disks)    | 220 | NA   |      | Dual nort | 2. | 8200 - 16    |
| 8200 | 8, 12 | OR        | 220 | 16   | 2, 3 | 10G SPF+  |    | TB Expan-    |
|      |       |           |     | ТВ - |      | 1000111   |    | sion Shelf   |
|      |       | 16 ( 6x4  |     | 280  |      | Dual Port |    | comes with   |
|      |       | TB Disks) |     |      |      | 10G Cop-  |    | inbuilt and  |
|      |       |           |     |      |      | per       |    | pre-         |
|      |       |           |     |      |      | Infield   |    | configured   |
|      |       |           |     |      |      | Expansion |    | SSD 480      |
|      |       |           |     |      |      | (MegaRAI  | -  | GB.          |
|      |       |           |     |      |      | D SAS     | 3. | 8200 has 2   |
|      |       |           |     |      |      | 9380-8e)  |    | and 3 as     |
|      |       |           |     |      |      |           |    | optional     |
|      |       |           |     |      |      |           |    | slots. One   |
|      |       |           |     |      |      |           |    | free slot is |
|      |       | 1         | 1   | 1    | 1    |           |    |              |

|  | - | <br> |    |                                                                                                                                                                                                     |
|--|---|------|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  |   |      |    | mandatory<br>for Appli-<br>ance Infield<br>Expansion /<br>MegaRAID<br>SAS 9380-<br>8e.                                                                                                              |
|  |   |      | 4. | If both the<br>optional<br>slots are<br>filled with<br>add-on<br>Cards, then<br>you need to<br>free at<br>least one<br>slot, pre-<br>ferrably<br>slot 3 in<br>order to<br>use Infield<br>Expansion. |
|  |   |      | 5. | SAS con-<br>nection is<br>used<br>between<br>the Appli-<br>ance and<br>Expansion<br>shelf.                                                                                                          |
|  |   |      | 6. | Expansion<br>shelf<br>comes with<br>RAID-6.                                                                                                                                                         |
|  |   |      | 7. | Expansion<br>Shelf<br>comes with<br>Dual PSU                                                                                                                                                        |

|      |                          |                                                                                        |     |                                                           |            |                                                                                                                                                                               | 8. | Follow Add<br>data path<br>instruc-<br>tions given<br>in Expan-<br>sion guide<br>after con-<br>necting the<br>expansion<br>shelf.<br>Wherever<br>a new SSD<br>is required<br>follow the<br>Migrate<br>HASH des-<br>tination to<br>new SSD<br>instructions<br>given in the<br>Expansion<br>Guide. |
|------|--------------------------|----------------------------------------------------------------------------------------|-----|-----------------------------------------------------------|------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 8300 | 16,20,24,28,32,36,<br>40 | 8<br>( 6x2 TB<br>Disks)<br>OR<br>16 ( 6x4<br>TB Disks)<br>OR<br>40 ( 12x4<br>TB Disks) | 480 | 8<br>TB -<br>NA<br>16<br>TB -<br>560<br>40<br>TB -<br>790 | 2, 5,<br>6 | LSI SAS<br>9200 -8E<br>HBA<br>Qlogic<br>Dual port<br>HBA<br>Quad-Port<br>1G NIC<br>Dual port<br>10G SPF+<br>Dual Port<br>10G Cop-<br>per<br>Infield<br>Expansion<br>(MegaRAI- | 1. | 8300<br>model sup-<br>ports either<br>8 TB or 16<br>TB OR 40<br>Infield<br>Expansion.<br>Client can<br>connect<br>only one<br>expansion<br>shelf any<br>time.<br>8300 - 16<br>TB / 40 TB<br>Expansion<br>Shelf                                                                                   |

|  |  |  |                   |    | comes with<br>inbuilt and<br>pre-<br>configured<br>SSD 1.9 TB.                                                                                                                                      |
|--|--|--|-------------------|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  |  |  |                   | 3. | 8300 has 2<br>, 5, and 6<br>as optional<br>slots . One<br>free slot is<br>mandatory<br>for Appli-<br>ance Infield<br>Expansion /<br>MegaRAID<br>SAS 9380-<br>8e.                                    |
|  |  |  | D SAS<br>9380-8e) | 4. | If both the<br>optional<br>slots are<br>filled with<br>add-on<br>Cards, then<br>you need to<br>free at<br>least one<br>slot, pre-<br>ferrably<br>slot 2 in<br>order to<br>use Infield<br>Expansion. |
|  |  |  |                   | 5. | SAS con-<br>nection is<br>used<br>between<br>the Appli-<br>ance and<br>Expansion                                                                                                                    |

| [ |  |  |  |    |                    |
|---|--|--|--|----|--------------------|
|   |  |  |  |    | shelf.             |
|   |  |  |  | 6. | Expansion<br>shelf |
|   |  |  |  |    | comes with         |
|   |  |  |  |    | RAID-6             |
|   |  |  |  |    | (6x4 TB            |
|   |  |  |  |    | Disks).            |
|   |  |  |  | 7. | Expansion<br>Shelf |
|   |  |  |  |    | comes with         |
|   |  |  |  |    | Dual PSU.          |
|   |  |  |  | 8. | Follow Add         |
|   |  |  |  |    | data path          |
|   |  |  |  |    | instruc-           |
|   |  |  |  |    | tions given        |
|   |  |  |  |    | in Expan-          |
|   |  |  |  |    | sion guide         |
|   |  |  |  |    | after con-         |
|   |  |  |  |    | necting the        |
|   |  |  |  |    | expansion          |
|   |  |  |  |    | shelt.             |
|   |  |  |  | 9. | Wherever           |
|   |  |  |  |    | a new SSD          |
|   |  |  |  |    | is required        |
|   |  |  |  |    | follow the         |
|   |  |  |  |    | Migrate            |
|   |  |  |  |    | HASH des-          |
|   |  |  |  |    |                    |
|   |  |  |  |    | instructions       |
|   |  |  |  |    | given in           |
|   |  |  |  |    | Expansion          |
|   |  |  |  |    | Guide.             |
|   |  |  |  |    | (Only for          |
|   |  |  |  |    | Appliance          |
|   |  |  |  |    | 8300 con-          |
|   |  |  |  |    | nect with          |
|   |  |  |  |    | 40 TB Appli-       |
|   |  |  |  |    |                    |

|      |                          |                                                                                        |      |                                                         |            |                                                                                                                                                                                                    | 1. | sion shelf,<br>there is<br>one unat-<br>tached 2<br>TB SSD that<br>you need to<br>place in<br>Base appli-<br>ance and<br>not expan-<br>sion shelf.<br>Check<br>expansion<br>guide from<br>details).<br>8400                                                                         |
|------|--------------------------|----------------------------------------------------------------------------------------|------|---------------------------------------------------------|------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 8400 | 32,40,48,56,64,72,<br>80 | 8<br>( 6x2 TB<br>Disks)<br>OR<br>16 ( 6x4<br>TB Disks)<br>OR<br>40 ( 12x4<br>TB Disks) | 1200 | 8<br>TB -<br>NA<br>16<br>TB -<br>NA<br>40<br>TB -<br>NA | 2, 5,<br>6 | LSI SAS<br>9200 -8E<br>HBA<br>Qlogic<br>Dual port<br>HBA<br>Quad-Port<br>1G NIC<br>Dual port<br>10G SPF+<br>Dual Port<br>10G Cop-<br>per<br>Infield<br>Expansion<br>(MegaRAI-<br>D SAS<br>9380-8e) | 2. | model sup-<br>ports either<br>8 TB or 16<br>TB OR 40<br>TB Infield<br>Expansion .<br>Client can<br>connect<br>only one<br>expansion<br>shelf any<br>time.<br>8400 -<br>Requires<br>no<br>addtional<br>SSD.<br>8400 has 2<br>, 5, and 6<br>as optional<br>slots. One<br>free slot is |

|  | 1 | - | <br> |    |                                                                                                                                                                                                     |
|--|---|---|------|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  |   |   |      |    | mandatory<br>for Appli-<br>ance Infield<br>Expansion /<br>MegaRAID<br>SAS 9380-<br>8e.                                                                                                              |
|  |   |   |      | 4. | If both the<br>optional<br>slots are<br>filled with<br>add-on<br>Cards, then<br>you need to<br>free at<br>least one<br>slot, pre-<br>ferrably<br>slot 2 in<br>order to<br>use Infield<br>Expansion. |
|  |   |   |      | 5. | SAS con-<br>nection is<br>used<br>between<br>the Appli-<br>ance and<br>Expansion<br>shelf.                                                                                                          |
|  |   |   |      | 6. | Expansion<br>shelf<br>comes with<br>RAID-6.                                                                                                                                                         |
|  |   |   |      | 7. | Expansion<br>Shelf<br>comes with<br>Dual PSU.                                                                                                                                                       |

|  |  |  | 8. | Follow the  |
|--|--|--|----|-------------|
|  |  |  |    | Add data    |
|  |  |  |    | path        |
|  |  |  |    | instruc-    |
|  |  |  |    | tions given |
|  |  |  |    | in the      |
|  |  |  |    | Expansion   |
|  |  |  |    | guide after |
|  |  |  |    | connecting  |
|  |  |  |    | the expan-  |
|  |  |  |    | sion shelf. |

## What is included in the box

The following items are contained in the box:

Note: If you notice any damage in the items provided in the box, Contact Arcserve.

Appliance Expansion Shelf

**Note:** The number of available disks in the expansion shelf depends on the capacity of the Appliance Expansion shelf.



CVPM02 Module (CacheVault Power Module02) and Cable



MegaRAID SAS 9380-8e RAID Controller



SAS Cables

Two SAS Cables which are used to connect the MegaRaid Controller in the Appliance Expansion Shelf and Appliance Server.



SSD (optional)

**Note:** For Appliance 8300 only, you need to connect with 40TB Appliance expansion and you have one unattached 2TB SSD.

# How to Connect the Appliance Expansion Shelf to the Appliance Server

#### Follow these steps:

- 1. Prepare the Appliance expansion shelf and place it close to the Appliance Server.
- 2. Connect the CacheVault Power Module02 (CVPM02) to MegaRAID Controller 9380-8e.



- 3. Pause all the Arcserve UDP plans. Verify the Arcserve UDP Console to ensure that there are no running jobs on the Appliance Server and pause all the plans.
- 4. Power off the Appliance Server and disconnect the power cord from the power supply.

**Note:** Disconnect the computer from the power supply to avoid the risk of damaging the system or experiencing electrical shock.

5. Remove the cover of the Appliance Server chassis.

6. Insert the *MegaRAID Controller 9380-8e* into an available PCI-e slot of the Appliance Server.

#### Follow these steps:

- a. Locate an empty PCI-e slot.
- b. Remove the blank bracket panel on the backside of the computer that aligns with the empty PCIe slot.
- c. Save this bracket screw, if applicable.
- d. Align the MegaRAID Controller 9380-8e to a PCIe slot.
- e. Press down gently, but firmly, to seat the raid controller correctly in the slot.



- 7. Secure the *MegaRAID Controller 9380-8e* bracket to the chassis of the system.
- 8. Replace the cover of the Appliance Server chassis.
- 9. Connect the SAS cable between the *MegaRAID Controller 9380-8e* which is in the Appliance Server and the MegaRAID Controller in the Appliance expansion shelf.


10. Insert SSD (Only for Appliance 8300 + 40 TB expansion shelf only).

**Note:** If it is a 40 TB Appliance Expansion Shelf connected to an Appliance 8300, plug the 2 TB SSD (which is shipped together with the Appliance Expansion Shelf) into the empty SATA slot at the rear panel of the Appliance 8300.



- 11. Power on the Appliance Expansion Shelf. Connect the power cords of Appliance Expansion Shelf and power on the Appliance Expansion Shelf.
- 12. Power on the Appliance Server. Reconnect the power cords of the Appliance Server and power on the Appliance Server.
- 13. Log into the MegaRAID Storage Manager. Log into the Appliance Server and open the MegaRAID Storage Manager and login using the administrator credentials.

|                                                                            | MegaRAID                                                       | Storage Manager 15.05.01.00 - Host View                                            | x              |
|----------------------------------------------------------------------------|----------------------------------------------------------------|------------------------------------------------------------------------------------|----------------|
|                                                                            |                                                                |                                                                                    | Avago          |
| Server Details                                                             |                                                                |                                                                                    |                |
| his page displays all the servers t<br>'ou will be prompted for entering l | that were discovered. Choose<br>host credentials while logging | a server and dick on Login to start managing that server.<br>in.                   |                |
| lse Configure Host to configure th                                         | he hosts that you want to vie                                  | и.                                                                                 |                |
| Use LDAP Login 🛛 🔞                                                         | 3                                                              | Enter User Name & Password                                                         | X              |
|                                                                            |                                                                |                                                                                    |                |
| IP Address 10.!                                                            |                                                                | AVag                                                                               | Configure Host |
| Remote servers:                                                            | Server :                                                       | 10.!                                                                               |                |
| Host                                                                       |                                                                | Use your Operating System's login username<br>and password to login the MSM server |                |
| appliance-8400                                                             | User Name:                                                     | administrator                                                                      |                |
|                                                                            | Password:                                                      | •••••                                                                              |                |
|                                                                            | Login Mode:                                                    | Full Access 🗸 🗸                                                                    |                |
|                                                                            |                                                                | Lorin Canrel                                                                       |                |
|                                                                            |                                                                | radu                                                                               |                |

14. Verify the raid controller from MegaRAID Storage Manager.

#### Follow these steps:

- a. Browse the Physical or Logical tab and there are two controllers listed there.
- b. Select the controller 9380-8e, ensure that all the disks connected to the controller 9380-8e are online and available.

**Note:** If there are any disks that are not online, right click and select *Scan Foreign Configuration*.

| Dashboard Physical Logical                                                                                          |                                                                                                              |  |  |
|---------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|--|--|
| udpu2verify                                                                                                         | 0290 9-/Pic 1 Dou 0 Domain 0)                                                                                |  |  |
| SC826P (16), Connector: Pc     Solot: 0, SAS, 1.819 TB,     Solot: 1, SAS, 1, 810 TB,     Solot: 1, SAS, 1, 810 TB, | Disable Alarm<br>Silence Alarm                                                                               |  |  |
|                                                                                                                     | Start Patrol Read<br>Set Patrol Read Properties                                                              |  |  |
| Slot: 5, SAS, 1.819 TB,                                                                                             | Disable SSD Guard                                                                                            |  |  |
| Slot: 11, SSD (SATA), 2                                                                                             | Scan Foreign Configuration                                                                                   |  |  |
| Controller 1: AVAGO MegaRAID                                                                                        | Save Configuration                                                                                           |  |  |
|                                                                                                                     | Set Consistency Check Properties<br>Schedule Consistency Check                                               |  |  |
|                                                                                                                     | Set Adjustable Task Rates                                                                                    |  |  |
|                                                                                                                     | Preserved Cache                                                                                              |  |  |
|                                                                                                                     | Manage Power Save Settings                                                                                   |  |  |
|                                                                                                                     | Update Controller Firmware<br>Manage MegaRAID Advanced Software Options<br>Manage Link Speed<br>Save TTY Log |  |  |

Select Import the foreign drives and click OK.

|   | Foreign Configuration Detected                                                                                                                                        |
|---|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| i | 7 Foreign drives were detected. You must import or clear these drives before they can be used.                                                                        |
|   | Choose an option:      Import: Import logical configuration from all foreign drives.      Clear: Remove logical configuration from all foreign drives.      OK Cancel |

Click Yes to initiate the import process.



#### Click OK.

| Mega | RAID Storage Manager - 15.05.01.00               |
|------|--------------------------------------------------|
| 1    | Foreign Configuration was imported successfully! |

All the disk drives on the expansion shelf are online now.

On the Logical tab, we can see the disks have been configured with RAID-6, and for other modules of the expansion shelf, one SSD is set as RAID-0 and listed under LSI MegaRAID SAS 9380-8e.

Appliance server 8100 + 8 TB expansion shelf;

Appliance server 8200 + 16 TB expansion shelf;

Appliance server 8300 + 16 TB expansion shelf;



15. Verify the disks from Disk Management. Open Disk Management, if the Appliance Expansion Shelf assembled disk is not formatted, then format it as NTFS and give it a drive letter such as "V:" and if the SSD is not formatted, then format it as NTFS also and give it a drive letter such as "W:".

| *                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Computer Management                       |                                            |                          |                                    |                   |                               |                                                     |         |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|--------------------------------------------|--------------------------|------------------------------------|-------------------|-------------------------------|-----------------------------------------------------|---------|
| File Action View Help                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                           |                                            |                          |                                    |                   |                               |                                                     |         |
| 🗢 🔿 🙍 🗊 📓                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                           |                                            |                          |                                    |                   |                               |                                                     |         |
| A Computer Management (Local                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Volume                                    | Layout                                     | Туре                     | File System                        | Status            |                               |                                                     | Capa ^  |
| 4 👔 System Tools                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 0                                         | Simple                                     | Basic                    |                                    | Healthy (         | Recovery Partition)           |                                                     | 300 N   |
| D Task Scheduler                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 0                                         | Simple                                     | Basic                    |                                    | Healthy (         | EFI System Partition)         |                                                     | 99 M    |
| Event Viewer                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 0                                         | Simple                                     | Basic                    |                                    | Healthy (         | Recovery Partition)           |                                                     | 76.29   |
| b and Shared Folders                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 🖙 (C:)                                    | Simple                                     | Basic                    | NTFS                               | Healthy (         | Boot, Page File, Crash        | Dump, Primary Partition)                            | 155.7 = |
| Local Users and Groups                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | (V:)                                      | Simple                                     | Basic                    | NTFS                               | Healthy (         | Primary Partition)            |                                                     | 7449.   |
| Performance                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | (X:)                                      | Simple                                     | Basic                    | NTFS                               | Healthy (         | Primary Partition)            |                                                     | 7218.   |
| Device Manager                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | (Y:)                                      | Simple                                     | Basic                    | NTFS                               | Healthy (         | Primary Partition)            |                                                     | 223.5   |
| Image: Services and Applications       Computer Management         Image: Services and Applications       Volume       Layout       Type       File System       Status         Image: Services and Applications       Image: Services and Applications       Volume       Layout       Type       File System       Status         Image: Services and Applications       Image: Services and Applications       Volume       Layout       Type       File System       Status         Image: Services and Applications         Image: Services and Applications       Image: Services and Applications       Image: Services and Applications       Image: Services and Applications         Image: Services and Applications       Image: Services and Applications       Image: Services and Applications       Image: Services and Applications         Image: Services and Applications       Image: Services and Applications       Image: Services and Applications       Image: Services and Applications         Image: Services and Applications       Image: Services and Applications       Image: Services and Applications       Image: Services and Applications         Image: Services and Applications       Image: Services and Applications       Image: Services and Applications       Image: Services and Applicatio |                                           | 237.8 ~                                    |                          |                                    |                   |                               |                                                     |         |
| b Windows Server Backup                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <                                         |                                            |                          | 111                                |                   |                               |                                                     | >       |
| <ul> <li>Task Scheduler</li> <li>Event Viewer</li> <li>Shared Folders</li> <li>Local Users and Groups</li> <li>Performance</li> <li>Divice Manager</li> <li>Storage</li> <li>Windows Server Backup</li> <li>Disk Management</li> <li>Services and Applications</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                           |                                            |                          |                                    |                   |                               |                                                     |         |
| b Bervices and Applications                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Disk 1<br>Basic<br>7449.88 GB 7<br>Online | (V:)<br>449.87 Gi<br>Healthy (F            | B NTFS<br>Primary        | Partition)                         |                   |                               |                                                     |         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Disk 2<br>Basic<br>237.84 GB<br>Online    | <b>Vew Volu</b><br>137.84 GB<br>Healthy (F | me (W<br>NTFS<br>Primary | ':)<br>Partition)                  |                   |                               |                                                     |         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Disk 3<br>Basic<br>7450.88 GB<br>Online   | 00 MB<br>Healthy                           | 99 ME<br>Healti          | (C:)<br>155.73 GB M<br>Healthy (Be | NTFS<br>pot, Page | 76.29 GB<br>Healthy (Recovery | (X:)<br>7218.46 GB NTFS<br>Healthy (Primary Partiti | on)     |

You have connected the Appliance Expansion Shelf to the Appliance Server successfully.

## How to Modify Arcserve UDP Data store

This section contains the following topics:

- Adding a data path on the expansion shelf to the Arcserve UDP data store
- Migrating Hash Destination to the new SSD
- Checking the overall capacity of the <hostname\_data\_store> data store from the Arcserve UDP Console
- Resuming all the plans from Arcserve UDP Console

## Adding a data path on the expansion shelf to the Arcserve UDP data store

#### Follow these steps:

- Create a folder in the volume on the Appliance expansion shelf, such as "V:\data".
- 2. Stop the data store and use the following command to expand the data store to the Appliance expansion shelf:

as\_gddmgr.exe –DataPath Add <hostname\_data\_store> -NewDataPath <new data folder>

as\_gddmgr.exe -DataPath Display <hostname\_data\_store>

## Migrating Hash Destination to the new SSD

**Note:** This step is only required when you use a new SSD for the following expansion shelf:

- Appliance server 8100 + 8 TB expansion shelf;
- Appliance server 8200 + 16 TB expansion shelf;
- Appliance server 8300 + 16 TB expansion shelf;
- Appliance server 8300 + 40 TB expansion shelf;

#### Follow these steps:

- 1. Create a hash folder on the new SSD such as *W*:\*Arcserve*\*data\_store*\*hash*.
- 2. Ensure the data store <hostname\_data\_store> is stopped. If not, stop the data store <hostname\_data\_store> from the Arcserve UDP Console.
- 3. Modify the data store <hostname\_data\_store > from the Arcserve UDP Console and set the Hash Destination to W:\Arcserve\data\_store\hash.
- 4. Save the modification of the data store.
- 5. Start the data store <hostname\_data\_store > from the Arcserve UDP Console.

## Checking the overall capacity of the <hostname\_ data\_store> data store from the Arcserve UDP Console

The overall capacity is the capacity of the Appliance server plus the capacity of the Appliance expansion shelf.

## **Resuming all the plans from Arcserve UDP Console**

Resume all the paused plans from the Arcserve UDP Console.

## **Chapter 12: Troubleshooting**

This section contains the following topics:

| Linux Backup Server Fails to Connect from the Console                      | 158 |
|----------------------------------------------------------------------------|-----|
| Backing Up a UDP Appliance from Another Appliance Reports Duplicated Nodes | 160 |
| Linux Backup Server Cannot Get the Network DNS Suffix                      | 162 |
| Default Time Zone on the Appliance                                         | 163 |
| Licenses Error even when the licenses are available                        | 164 |

## Linux Backup Server Fails to Connect from the Console

#### Symptom

When I try to connect my Linux Backup Server from the Arcserve UDP Console, connection is unsuccessful and I see a red mark.

#### Solution

When a Linux Backup Server fails to connect from the console, you can troubleshoot the connection to determine the problem.

#### To troubleshoot the connectivity issue

- 1. Launch the Hyper-V Manager, connect the Linux Backup Server virtual machine and login.
- 2. Run the following command:

service network restart

3. Verify that the IP address assigned to the Linux Backup Server is 192.168.10.2. To verify, run the following command:

ifconfig

- 4. If the IP address is 192.168.10.2, navigate to the Arcserve UDP Console and update the Linux Backup Server node that you are trying to connect.
- If the IP address is not 192.168.10.2, follow the instructions in the Troubleshoot from DHCP Microsoft Management Console (MMC) section.

#### Troubleshoot from DHCP Microsoft Management Console (MMC)

**Important!** Ensure that the DHCP Server service is running appropriately on the appliance.

- 1. Launch DHCP MMC from the Server Manager, Tools, DHCP.
- 2. Expand the Linux Server node, IPV4, Scope and ensure that the scope with the name 192.168.10.0 exists under it.
- 3. Expand the Address Leases and delete the presence of any other lease record.
- 4. Log into the Linux Backup Server and run the following command:

service network restart

5. Navigate to the Arcserve UDP Console and update the Linux Backup Server node that you are trying to connect.

The Linux Backup Server now connects from the Console.

## Backing Up a UDP Appliance from Another Appliance Reports Duplicated Nodes

#### Symptom

When I back up Appliance B from Appliance A, I see the following warning message in the activity log:

"The following nodes are duplicated: Appliance\_B, Appliance\_A. As a result, they have the same agent identifier and may cause unexpected results. This duplicate node problem can be caused if the node was added using a different node name (such as the DNS name or IP address), or if some machines were set up by cloning from one to another."

#### Case 1: Appliance B is added as an RPS to the Appliance A UDP Console.

For example: From Appliance B, you can configure the appliance using the UDP wizard and select "This appliance will function as an instance of Arcserve UDP Recovery Point Server managed by another Arcserve UDP console."

#### Solution

- 1. Stop the data store in the Appliance B node from the RPS pane of the UDP console.
- 2. Log into Appliance B and delete the registry key of the Node ID that is located under [HKEY\_LOCAL\_MACHINE\SOFTWARE\CA\ARCserve Unified Data Protection\Engine].
- 3. Restart the Arcserve UDP Agent Web Service from the Appliance B node.
- 4. Restart the Arcserve UDP RPS Data Store Service from the Appliance B node.
- 5. From the UDP console, go to the Nodes, All Nodes pane and update the Appliance B node.
- 6. Go to the Recovery Point Server pane and update the Appliance B node.
- 7. Import the existing data store to the Appliance B RPS by setting it with the original backup destination.

## Case 2: Appliance B is added only as an agent node to the Appliance A UDP Console.

For example, a plan protects Appliance B through an agent-based backup task on the Appliance A UDP console.

1. Log into Appliance B and delete the registry key of the Node ID that is located under [HKEY\_LOCAL\_MACHINE\SOFTWARE\Arcserve Unified Data

Protection\Engine].

- 2. Restart the Arcserve UDP Agent service from Appliance B.
- 3. From the UDP console, go to the Nodes, All Nodes pane and update the node from Appliance B.

## Linux Backup Server Cannot Get the Network DNS Suffix

When you set the static IP address to the appliance Server, the Linux Backup Server cannot get the network DNS suffix properly after restarting the network service. This issue leads to communication problems between the Linux backup Server and the UDP console. You then cannot use this Linux backup Server to protect the Linux node due to the communication problems.

#### Symptom

The status of the Linux Backup Server remains in a disconnected state on the UDP console. The **Update Node** cannot update the Linux Backup Server successfully and the yellow warning icon will not change to green. This occurs when you set the static IP address to the appliance Server which will then cause the Linux Backup Server to not get the network DNS suffix properly.

#### Solution

To resolve this issue, you can update the file/etc/resolv.conf directly in the Linux machine to add the correct DNS suffix.

## **Default Time Zone on the Appliance**

#### Symptom

The default time zone is (UTC-08:00) Pacific Time (US & Canada) no matter what region you select when you first power on the appliance.

#### Solution

To resolve this issue, go to the Arcserve Backup Appliance Wizard and click Edit, Date and Time to change the time zone.

## Licenses Error even when the licenses are available

For more information on license related errors in the Appliance even when the licenses are available, refer the link.

## **Chapter 13: Best Practices**

This section contains the following topics:

| Best Practices for Network Configuration                                                        | .166  |
|-------------------------------------------------------------------------------------------------|-------|
| Best Practices for Arcserve UDP Console Migration                                               | 169   |
| Best Practices for Set Appliance Image Utility Tool                                             | 171   |
| Best Practices for pre-installed Linux Backup Server in the Arcserve UDP Appliance              | 174   |
| Best Practices for Arcserve UDP Appliance to backup the Linux Backup Server itself              | .176  |
| Best Practices to Migrate from Arcserve UDP Appliance to Appliance                              | .180  |
| Solution 1                                                                                      | .181  |
| Solution 2                                                                                      | . 185 |
| Best Practices for Arcserve UDP Linux instant VM job to Local Appliance Hyper-V                 | 187   |
| Best Practices to add Replicate to a remotely managed RPS task to another Appli-<br>ance        | . 188 |
| Best Practices to perform Virtual Standby (VSB) task for which the monitor is another Appliance |       |

## **Best Practices for Network Configuration**

- If multiple network interfaces are connected in the production environment, ensure that each network adapter is connected to different sub network.
- If Linux node is not available in the production environment to protect, we recommend to stop the VM Linux-BackupSvr, DHCP Server service and RRAS on the Appliance.

For more information, refer <u>How to Disable DHCP Server</u> in Appliance User Guide.

 If you encounter a connection problem between the Appliance and an Agent node when both the Appliance and the Agent node are online on the network. The problem occurs if there are multiple network interfaces connected to the same sub network in the Appliance.

#### Symptom

If both the Appliance and Agent node are online on the same sub network. The following symptoms may occur:

 On the Arcserve UDP Console, when you deploy the plan to Agent node, the following error message is displayed:



• Backup job of the Agent node fails as below:



 Ping the Agent node from the Appliance and verify whether the Agent node is connected or not as follows:

| C:∖Windows∖system32>ping                                                                                                             | y 10.57.52.13                                                                                              |       |
|--------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|-------|
| Pinging 10.57.52.13 with<br>Reply from 10.57.52.13:<br>Reply from 10.57.52.13:<br>Reply from 10.57.52.13:<br>Reply from 10.57.52.13: | h 32 bytes of data:<br>bytes=32 time<1ms TTL=127<br>bytes=32 time=1ms TTL=127<br>bytes=32 time<1ms TTL=127 | , , , |

 Ping Appliance host name from the Agent node and the Appliance is NOT connected as follows:

```
C:\Users\Administrator>ping appliatest76

Pinging appliatest76 [10.57.52.47] with 32 bytes of data:

Request timed out.

Request timed out.

Request timed out.

Request timed out.

Ping statistics for 10.57.52.47:

Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
```

#### Solution

To resolve the connection problem between the Appliance and Agent node, perform one of the following steps:

 If Linux node is not available in the production environment, stop the DHCP Server service and RRAS service on the Appliance and verify whether the problem is resolved or not.

For more information, refer <u>How to Disable DHCP Server</u> in Appliance User Guide.

On the Appliance and Agent node, follow these steps:

#### Steps to be followed on Appliance:

- 1. Run *ipconfig /all* from DOS Command Prompt to get the available IPv4 address on the Appliance:
- 2. Run *Route Print* from DOS Command Prompt to get the IPv4 Route Table, record the order list for all the available IPv4

address on the Appliance as below:

| IPv4 Route Table                      |               |            |             |        |
|---------------------------------------|---------------|------------|-------------|--------|
| Active Routes:<br>Network Destination | Netmask       | Gateway    | Interface   | Metwic |
| 0.0.0.0                               | 0.0.0.0       | 10.57.52.1 | 10.57.52.46 | 10     |
| 0.0.0.0                               | 0.0.0.0       | 10.57.52.1 | 10.57.52.35 | 10     |
| 0.0.0                                 | 0.0.0.0       | 10.57.52.1 | 10.57.52.45 | 10     |
| 0.0.0                                 | 0.0.0.0       | 10.57.52.1 | 10.57.52.47 | 10     |
| 10.57.52.0                            | 255.255.255.0 | On-link    | 10.57.52.46 | 266    |
| 10.57.52.0                            | 255.255.255.0 | On-link    | 10.57.52.35 | 266    |
| 10.57.52.0                            | 255.255.255.0 | On-link    | 10.57.52.45 | 266    |

#### Steps to be followed on Agent node:

1. From the DOS Command Prompt, try to ping each available IPv4 address of Appliance one by one according to the order above to get the first IPv4 of the Appliance connected on the Agent node as follows:

| C:\Users\A                                                                       | dministrator>                                                                                 | ping 10.57                                                             | 7.52.46                                                    |                                                          |
|----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|------------------------------------------------------------------------|------------------------------------------------------------|----------------------------------------------------------|
| Pinging 10<br>Reply from<br>Reply from<br>Reply from<br>Reply from<br>Reply from | .57.52.46 wit<br>10.57.52.46:<br>10.57.52.46:<br>10.57.52.46:<br>10.57.52.46:<br>10.57.52.46: | h 32 bytes<br>bytes=32<br>bytes=32<br>bytes=32<br>bytes=32<br>bytes=32 | s of datas<br>time<1ms<br>time<1ms<br>time<1ms<br>time<1ms | :<br>TTL=128<br>TTL=128<br>TTL=128<br>TTL=128<br>TTL=128 |

2. Modify the file C:\Windows\System32\drivers\etc\hosts to add a record for the pair the\_IPv4\_got\_above Appliance\_hostname and save the file.

### **Best Practices for Arcserve UDP Console Migration**

On the Arcserve UDP Appliance, you can migrate the Arcserve UDP Console to another Appliance using *ConsoleMigration.exe*. In Arcserve UDP v6.5 Update 2, you can migrate the Arcserve UDP Console between any two Arcserve UDP consoles, no matter whether it is Appliance or not.

Use *ConsoleMigration.exe* for BackupDB and RecoverDB. The following screenshot displays the usage of *ConsoleMigration.exe*:

```
C:\Program Files\Arcserve\Unified Data Protection\Management\BIN\Appliance>Conso
leMigration.exe
Usage: ConsoleMigration.exe <-BackupDB¦-RecoverDB>
-BackupDB: Backup UDP Console database Arcserve_APP
-RecoverDB: Recover UDP Console database Arcserve_APP
```

To complete the migration process, follow these steps:

 On old Arcserve UDP Console, perform backup for the Arcserve UDP database.



The DB\_Migration folder is created successfully.

- 2. On the new Arcserve UDP Console, copy the *DB\_Migration* folder to the following path:
- <UDP\_Home> \Management\BIN\Appliance \
- 3. If the new Arcserve UDP Console is Arcserve UDP Appliance then change hostname and reboot the system and you need to finish the Appliance configuration using Appliance wizard.

Note: If it is not an Arcserve UDP Appliance, skip this step.

4. On the new Arcserve UDP Console, perform the steps mentioned in the screen below to recover the Arcserve UDP Console database.

C:\Program Files\Arcserve\Unified Data Protection\Management\BIN\Appliance>ConsoleMigration.exe -RecoverDB Are you sure you want to recover the backup DB file? <y/n>: y Stopping Arcserve UDP management service, please wait... Recovering backup DB file... Updating nodes, please wait... Please update nodes manually from UDP console, if you still encounter disconnected nodes. The disconnected nodes(if exist) will be saved at "C:\Program Files\Arcserve\Unified Data Protec tion\Management\BIN\Appliance\DB\_Migration\logs". Console migration completed. Console use DB "localhost\ARCSERVE\_APP".

**Note:** In Arcserve UDP Console, if there exists any site other than Local Site, follow the steps mentioned in *NewRegistrationText.txt* file to register the site again.

You have completed migration of Arcserve UDP Console to the new Arcserve UDP Console successfully.

You can use this tool to perform console migration for Arcserve UDP Console connected with remote SQL database. After the migration is complete, the migrated Arcserve UDP Console is configured to connect with the same remote SQL database.

**Note:** When you use Console Migration tool to perform console migration between two Arcserve UDP Consoles then both the Arcserve UDP Console version and SQL database version should be consistent on the two Arcserve UDP Console systems. Otherwise, the console migration fails and an error message is displayed in the command line and log files in the following path:

<UDP\_Home> \Management\BIN\Appliance\logs

### **Best Practices for Set Appliance Image Utility Tool**

Set Appliance Image Utility tool helps you to replace the original Appliance image in current system with desired Appliance image of Arcserve UDP Appliance available versions. You can download the Appliance image of Arcserve UDP v6.5 Update 2 from the URL.

**Note:** The md5 for Appliance image download is *1E9FB62D395EF1812B1DBE9EDB8F2C6E*.

After executing the utility, perform factory reset to revert Appliance to desired released version of Arcserve UDP Appliance using factory default setting available in the Arcserve UDP Console. Set Appliance Image utility is available for Arcserve UDP Appliance v6.5 Update 1 or later releases.

**Note:** The Appliance image used for replacement should have higher version than the *Original Arcserve UDP version* installed on the Arcserve UDP Appliance.

To verify the original Arcserve UDP version, log into Arcserve UDP Console, navigate to **settings** and select **Factory Reset** for the version details.

```
Factory Reset
Performing a Factory Reset
UDP software will revert from its current version to the version originally installed on the Appliance.
Current Arcserve UDP Version: 6.5.4175 update 1 build 358
Original Arcserve UDP Version: 6.0.3792 update 1 build 303
☑ Preserve existing backup data.
```

#### Perform Factory Reset

Example scenario to replace factory reset image for UDP v6 Update 1 with factory reset image for UDP v6.5 Update 1

The example below describes the process to replace factory reset image. You can follow the same process for other versions also.

## How to Use Set Appliance Image Utility to revert from Arcserve UDP Appliance v6 Update 1 to Arcserve UDP Appliance v6.5 Update 1

If the installed Arcserve UDP release version on Appliance is Arcserve UDP v6 Update 1, then you can upgrade the Appliance to Arcserve UDP v6.5 Update 1.

To upgrade, follow these steps:

- Download the Appliance image of Arcserve UDP Appliance v6.5 Update 1, and execute the Set Appliance Image Utility. Perform the following steps to use set Appliance Image Utility:
  - a. Download the Arcserve UDP v6.5 Update 1 Appliance image from the URL or contact support to get the download.

**Note:** The md5 for Appliance image download is *9F568A4BDC6B42972C5177284591B835*.

b. Open the Windows command line and run the following command:

C:\Program files\Arcserve\Unified Data Protection\Management\bin\Appliance\SetImage.exe –applianceimage <Fullpath of the appliance image just downloaded>

After *checking appliance images finished* step is complete, you can view the following query:

Are you sure you want to replace the appliance.wim file? <y/n>

- c. Enter y or yes to replace the image or enter n or no to exit the execution.
- d. When the image replication is complete, the command line displays the following message:

Replace appliance image completed.



2. Perform the following steps to revert to Update 1 version of Appliance:

**Note:** After replacing Appliance image in Arcserve UDP Console, the Original Arcserve UDP version is changed to the desired Appliance release version..

 a. From Arcserve UDP Console, navigate to Settings and select Factory Reset.

| Factory Reset                                                                            |                                                                                                                                                                                                                          |
|------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Performing a Factory Reset on your Arcse<br>UDP software will revert from its current ve | rve UDP Appliance will return all settings to their factory defaults. All resources, job history, reports, and log entries will be deleted. The Arcserve<br>ersion to the version originally installed on the Appliance. |
| Current Arcserve UDP Version:                                                            | 6.5.4175 update 1 build 358                                                                                                                                                                                              |
| Original Arcserve UDP Version:                                                           | 6.5.4175 update 1 build 359                                                                                                                                                                                              |
| Preserve existing backup data.                                                           |                                                                                                                                                                                                                          |
| Perform Factory Reset                                                                    |                                                                                                                                                                                                                          |

The *Original Arcserve UDP Version* changes to Arcserve UDP Appliance v6.5 Update 1.

**Note**: Reload the page if desired Appliance release version is not displayed in *Original Arcserve UDP version* after replacing the Appliance image.

b. Click **Perform Factory Reset** to revert from current version of Appliance to the new Arcserve UDP Appliance v6.5 Update 1 version.

For more information about Factory Reset, refer the link.

# Best Practices for pre-installed Linux Backup Server in the Arcserve UDP Appliance

If you upgrade the Arcserve UDP Appliance pre-installed Linux Backup Server to v6.5 Update 2, then you need to manually add some ports to Linux which is CentOS 6.6 x64 firewall after the upgrade.

#### Follow these steps:

- 1. Navigate to the following path:
- vi /etc/sysconfig/iptables
- 2. The iptables file must contain the following lines that are mentioned in bold, if not you need to add them maually:
  - # Firewall configuration written by system-config-firewall
  - # Manual customization of this file is not recommended.

\*filter

:INPUT ACCEPT [0:0]

:FORWARD ACCEPT [0:0]

:OUTPUT ACCEPT [0:0]

-A INPUT -p tcp -m tcp --dport 22 -j ACCEPT

-A INPUT -p tcp -m tcp --dport 67 -j ACCEPT

-A INPUT -p tcp -m tcp --dport 69 -j ACCEPT

-A INPUT -p tcp -m tcp --dport 8014 -j ACCEPT

-A INPUT -p tcp -m tcp --dport 8016 -j ACCEPT

-A INPUT -p tcp -m tcp --dport 8017 -j ACCEPT

-A INPUT -p tcp -m tcp --dport 8021 -j ACCEPT

-A INPUT -p tcp -m tcp --dport 8035 -j ACCEPT

-A INPUT -p tcp -m tcp --dport 8036 -j ACCEPT

-A INPUT -p tcp -m tcp --dport 50000 -j ACCEPT

-A INPUT -p tcp -m tcp --dport 50001 -j ACCEPT

-A INPUT -p tcp -m tcp --dport 50002 -j ACCEPT

-A INPUT -p tcp -m tcp --dport 50003 -j ACCEPT

-A INPUT -p tcp -m tcp --dport 50004 -j ACCEPT

-A INPUT -m state --state ESTABLISHED,RELATED -j ACCEPT
-A INPUT -p icmp -j ACCEPT
-A INPUT -i lo -j ACCEPT
-A INPUT -m state --state NEW -m tcp -p tcp --dport 22 -j ACCEPT
-A INPUT -j REJECT --reject-with icmp-host-prohibited
-A FORWARD -j REJECT --reject-with icmp-host-prohibited
COMMIT

- 3. Save the iptables file.
- Restart the iptables service using the following command: /etc/init.d/iptables restart

You have added the ports to CentOS 6.6 x64 firewall successfully.

## Best Practices for Arcserve UDP Appliance to backup the Linux Backup Server itself

In the Arcserve UDP Appliance, if you want the Linux Backup Server to backup itself, perform the following steps:

- 1. From Arcserve UDP Console, click the resources tab.
- 2. Click **All Nodes** in the right pane.
- 3. From the center pane, click Add Nodes.

The Add Nodes to Arcserve UDP Console dialog opens.

- 4. From the Add Nodes by drop-down list, select Add Linux Node.
- 5. Provide the node credentials and click Add to List.

| arcser∨e' un                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | nified data protection                                                                                                             | O Messages (1) • administrator • 1                              | kip +     |
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6. Click Save.

The added Linux node is displayed in the **All Nodes** list.

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7. Navigate to All Plans and create an Agent-based Linux plan.

The **Source** tab appears.

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| arcserve <sup>.</sup>               | unified data protection                                        | O Messages (1) + administrator + Help + |
|-------------------------------------|----------------------------------------------------------------|-----------------------------------------|
| dashboard resources                 | jobs reports log settings   high availability                  |                                         |
| Add a Plan                          | Techa line techapor                                            | Save Cancol Hulp                        |
| Task1: Backup: Agent-Based<br>Linux | Tash Type Backup Agent Based Linux +                           | Televe Task                             |
| 🛞 Add a Task                        | Source Destination Schedule Advanced                           |                                         |
|                                     | Linux Backup Server applance v Add                             |                                         |
|                                     | ⊗Adt Banove                                                    |                                         |
|                                     | Kole Kane William Pan Sile                                     |                                         |
|                                     | Filervisions for backup Exclude +  FilesVisions to be excluded |                                         |
|                                     |                                                                |                                         |

8. From the Add drop-down list, select *Select Nodes to Protect in Arcserve UDP*.

UTC-08-00 (Pacific Daylight Time

| arcserve                            | unified data protection                                                   | O Messages (1) + administrator + Help + |
|-------------------------------------|---------------------------------------------------------------------------|-----------------------------------------|
| dashboard resources                 | jobs reports log settings   high availability                             |                                         |
| Add a Plan                          | backup Imu- backupor                                                      | Save Cancel Help                        |
| Task1: Backup: Agent Based<br>Linux | Task Tjøn Backup Agent Based Linux *                                      | O Califor Tank                          |
| Add a Task                          | Source Destination Schedule Advanced                                      |                                         |
|                                     | Unur Backup Server applance - Add                                         |                                         |
|                                     | Oldal Remain<br>Select Nodes to Protect in Accurrue UCP<br>Add Linux Node |                                         |
|                                     | Film volumes for lackup Coducts +                                         |                                         |
|                                     | Plandaders to be excluded                                                 |                                         |

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The Select Nodes to Protect dialog opens.

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9. Protect the added Linux node and click **OK**.

| arcserve <sup>.</sup>                        |              | ified data prote                   |              |              |                    |   |      |                             |         |      | Ø Messages (1)     | administr | Nor 🔹     | Help - 1           |
|----------------------------------------------|--------------|------------------------------------|--------------|--------------|--------------------|---|------|-----------------------------|---------|------|--------------------|-----------|-----------|--------------------|
| dashboard resources                          | jobs         | reports log se                     | ttings       | high availab | lity               |   |      |                             |         |      |                    |           |           |                    |
| Add a Plan                                   | Inori        | Select Nodes to Protec             |              |              |                    |   |      |                             |         |      | II X               | See       | Cancel    | Hep                |
| Task1: Backup: Agent-Based<br>Linux          | Task Ty      | Available Node                     | 5            |              |                    |   | Sele | ted Nodes                   |         |      |                    |           | 0         | 000700             |
|                                              |              | Groups All Nodes (Def              | lauf Groups) | *            |                    | × | _    |                             |         |      |                    |           |           |                    |
|                                              | J            | Kode Name     Inst-backspror       | VM Name      | Plan         | Sile<br>Local Sile |   | 0    | kole Name<br>Inux-backuptvr | VM Kane | Plan | Site<br>Local Site |           |           |                    |
|                                              |              |                                    |              |              |                    |   |      |                             |         |      |                    |           |           |                    |
|                                              |              |                                    |              |              |                    | 2 | •    |                             |         |      |                    |           |           |                    |
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The **Destination** tab appears.

10. The default destination displayed is the data store created using Appliance wizard. Select Local disk or shared folder to backup the node if required.

| arcserve <sup>.</sup>               | unified data pro                                                                                                                               | tection                                                                                                                                                                | O Messages (1) + administrator + Help + |
|-------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|
| dashboard resources                 | jobs reports log                                                                                                                               | settings   high availability                                                                                                                                           |                                         |
| Add a Plan                          | badup Inu: baduptvr                                                                                                                            | Pause this plan                                                                                                                                                        | Save Cancel Help                        |
| Task1: Backup: Agent-Based<br>Linux | Task Type Backup: Agent                                                                                                                        | -                                                                                                                                                                      | O Tolere Taul.                          |
| O Add a Tank                        | Source Destina<br>Desteudor Type<br>Receivery Post Server<br>Data Store<br>Password Post-Source<br>Session Password<br>Contem Session Password | Schedule     Advanced       Otcol dik or sharet holer     Iteratives Port Server       applance_statu_ster     Image: Server       Image: Statu_ster     Image: Server |                                         |

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|                                                                                                  |                                  |

11. After providing the settings related to plan, click **Save**.

| dashboard resources                                                                                                                                                        | jobs  | reports log settings  | hig   | gh avai               | ilabilit  | У |                            |                    |                                            |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|-----------------------|-------|-----------------------|-----------|---|----------------------------|--------------------|--------------------------------------------|
|                                                                                                                                                                            | Plane | s: All Plans          |       |                       |           |   |                            |                    | 3                                          |
| Nodes<br>All Nodes                                                                                                                                                         | Actio | ns - Add a Plan       |       | Configuration Witcard |           |   |                            |                    |                                            |
| Nodes without a Plan Unux Backup Server Groups                                                                                                                             | 8     | Plan Kame             | Total | Nodes                 | Protected | • | Status                     | Active Job-Count   | Select a plan to view the related details. |
| Flan Groups                                                                                                                                                                | в     | backup inso-backuport | 1     | 0                     | 1         | 0 | Opployment: Successful (1) | 0                  |                                            |
| Desiloadora<br>Receivery Parkit Servers<br>Accessen Biologie Servers<br>Dawed Folders<br>Cound Accounts<br>Materianski Angel<br>Biologie Angel<br>Servers<br>Stat Profiles |       |                       |       |                       |           |   |                            |                    |                                            |
|                                                                                                                                                                            | <     | Page (1) + 31 & 2     |       |                       |           |   |                            | No data to display |                                            |

You can perform backup for the added Linux Backup Server successfully.

## Best Practices to Migrate from Arcserve UDP Appliance to Appliance

This topic provides two solutions for user to perform migration from existing Arcserve UDPAppliance to another fresh Arcserve UDP Appliance.

For example, let us migrate the Arcserve UDP Appliance 8200 to Arcserve UDP Appliance 8400. The prerequisites are listed as follows:

- Ensure that you can connect to both Appliance 8200 and Appliance 8400.
- Capacity of the new Appliance should have enough memory to hold all the data on the original Appliance.
- In the Arcserve UDP Appliance 8200, ensure that no job runs.

For more information on Console migration, refer the <u>Best Practices for Arc</u>serve UDP Console Migration topic.

To migrate from any Appliance to a fresh Appliance, you have two solutions as listed below.

- Solution 1
- Solution 2
### **Solution 1**

#### Bare Metal Recovery (BMR) solution

To perform BMR from existing UDP Appliance to another fresh UDP Appliance , follow these steps:

1. Create a data store on the fresh Arcserve UDP 8400 and backup Arcserve UDP Appliance 8200 to this data store.

Note: You can just ignore the following warning:

The Arcserve UDP Recovery Point Server data store is configured on volume *X:,Y:.* This volume will not be backed up.

2. After the backup, perform BMR on the Appliance 8400 using the recovery point you get on the step above and select driver *megasas.inf* manually.

| re Metal Recovery(BMR)<br>Insert Device Driver                                                                                                                                                                                                                                                                                                                              | Provide drivers for following devices:                                                 |                                                                                  |                                                                                                                                    |  |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|--|--|
| An incompatibility problem has been detected and<br>BMR is unable to find subaile driver for some<br>device(s). The operating system of the host being<br>recovered may be different than the operating<br>system that was created on the BMR ISO image.<br>Please select an appropriate driver for the<br>device(s) or add a new driver by cliding "Add<br>Driver" button. | Contraction (Contraction)                                                              | Property<br>Vendor<br>Marufacturer<br>Class<br>Driver Description<br>Hardware ID | Description<br>LSI Logic / Symbios Logic<br>AvagoTech<br>SCSIAdapter<br>NAVAGO MegaRAID SAS Adapter<br>PCTIVEN_10008DEV_005D8GUBSY |  |  |
|                                                                                                                                                                                                                                                                                                                                                                             | Available Driver(s):<br>Driver<br>megasas2.inf<br>megasas2.inf(1)<br>V megasas3.inf(1) | Property<br>Version<br>Manufacturer<br>Class<br>Service<br>INF Path              | Description<br>07/22/2013, 6.600.21.08<br>LSI, DELL<br>SCSIAdapter<br>megasas<br>C: [Windows10ystem32]driverStor                   |  |  |
|                                                                                                                                                                                                                                                                                                                                                                             | Insert Driver                                                                          |                                                                                  |                                                                                                                                    |  |  |

3. After the BMR, restart the Appliance 8400 according to the system prompt.



4. Now, rebuild the network switch on 8400 Appliance.

Follow these steps:

a. Open Routing and Remote Access and click **Disable Routing and Remote Access**.



b. Run the following command with PowerShell:

C:\Program Files\Arcserve\Unified Data Pro-

| 1 I 🖓 🐌 = I              |                                  |                   | Appliance         |                    |        |                  | _ <b>D</b> X |
|--------------------------|----------------------------------|-------------------|-------------------|--------------------|--------|------------------|--------------|
| File Home Share          | View                             |                   |                   |                    |        |                  | × (          |
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| 🚖 Favorites              | Name                             |                   | Date modified     | Туре               | Size   |                  |              |
| Desktop                  | setnat.ps1.log                   |                   | 5/10/2017 5:18 AM | Text Document      | 2 KB   |                  |              |
| 🐌 Downloads              | nat.log                          |                   | 5/10/2017 5:18 AM | Text Document      | 6 KB   |                  |              |
| Secent places            | 🚳 nat2.bat                       |                   | 5/10/2017 5:18 AM | Windows Batch File | 2 KB   |                  |              |
|                          | dhcpdone.flag                    |                   | 5/10/2017 5:17 AM | FLAG File          | 0 KB   |                  |              |
| 🎘 This PC                | resetdhcp.ps1.log                |                   | 5/10/2017 5:17 AM | Text Document      | 2 KB   |                  |              |
| 🚂 Desktop                | inuxdone.flag                    |                   | 5/10/2017 4:52 AM | FLAG File          | 0 KB   |                  |              |
| Documents                | vmstarted.flag                   |                   | 5/10/2017 4:52 AM | FLAG File          | 0 KB   |                  |              |
| 😹 Downloads              | adapterNameChanged.flag          |                   | 5/10/2017 4:52 AM | FLAG File          | 0 KB   |                  |              |
| 🚺 Music                  | anguage.bt                       |                   | 5/10/2017 1:19 AM | Text Document      | 1 KB   |                  |              |
| 📔 Pictures               | initstorage.ps1.log              |                   | 5/9/2017 4:26 AM  | Text Document      | 1 KB   |                  |              |
| Videos                   | setos.flag                       |                   | 5/9/2017 1:42 AM  | FLAG File          | 0 KB   |                  |              |
| 🏭 Local Disk (C:)        | configuration_change.statu       | 15                | 5/9/2017 1:39 AM  | STATUS File        | 1 KB   |                  |              |
| 👝 Local Disk (D:)        | configuration_change.flag        |                   | 5/9/2017 1:39 AM  | FLAG File          | 0 KB   |                  |              |
| BMR (F:)                 | ARCDiskCheck-Finish.tag          |                   | 5/9/2017 1:39 AM  | TAG File           | 0 KB   |                  |              |
| 👝 ZZ (G:)                | Rebuild-VMSwitch.ps1             | 0                 |                   | Windows PowerS     | 3 KB   |                  |              |
| 👝 Local Disk (X:)        | resetdhcp.ps1                    | Open              | <i>6</i> 1. 8     | Windows PowerS     | 23 KB  |                  |              |
| 👝 Local Disk (Y:)        | E ApplianceInformation.ext       | wershell          | Application       | 30 KB              |        |                  |              |
|                          | configuration_change.ps          | Edit              |                   | Windows PowerS     | 19 KB  |                  |              |
| 🗣 Network                | 🚳 arcrun.bat                     | Open with         |                   | Windows Batch File | 1 KB   |                  |              |
|                          | initstorage.ps1                  | Restore previ     | ious versions     | Windows PowerS     | 15 KB  |                  |              |
|                          | ARCDiskCheck.exe                 | Send to           | •                 | Application        | 130 KB |                  |              |
|                          | 📄 setnat.ps1                     | Cut               |                   | Windows PowerS     | 4 KB   |                  |              |
| 34 items 1 item selected | 2.07 KB                          | Сору              |                   |                    |        |                  |              |

tection\Engine\BIN\Appliance\Rebuild-VMSwitch.ps1

- 5. Now, follow these steps to copy the data on 8200 Appliance to 8400 Appliance and import the data on to 8400 Appliance:
  - a. Stop all the UDP services on UDP Appliance 8200 using the following command in the command line:

C:\Program Files\Arcserve\Unified Data Protection\Management\BIN> cmdutil.exe /stopall

b. Copy all the data on disk X and Y from UDP Appliance 8200 to 8400 manually.

| Administrator: C:\Windows\System32\cmd.exe                                                   |
|----------------------------------------------------------------------------------------------|
| Microsoft Windows [Version 6.3.9600]<br>(c) 2013 Microsoft Corporation. All rights reserved. |
| C:\Program Files\Arcserve\Unified Data Protection\Management\BIN>cmdutil.exe /st<br>mall     |
| Start to kill process explorer.exe                                                           |
| Killing process explorer.exe<br>Process killed.                                              |
| Start to kill process D2DUDgc.exe                                                            |
| Stopping service 'Arcserve UDP Agent Service'<br>Service Stopped.                            |
| Stopping service 'Arcserve UDP RPS Data Store Service'<br>Service Stopped.                   |
| Stopping service 'Arcserve UDP RPS Port Sharing Service'<br>Service Stopped.                 |
| Stopping service 'Arcserve UDP Identity Service'<br>Service Stopped.                         |
| Stopping service 'Arcserve UDP Management Service'<br>Service Stopped.                       |
| Stopping service 'Arcserve UDP Management Port Sharing Service'<br>Service Stopped.          |
| Stopping service 'Arcserve UDP Agent Explorer Extension Service'<br>Service Stopped.         |
| Stopping service 'Arcserve UDP Update Service'<br>Service Stopped.                           |
| Stopping Arcserve UDP agent monitor<br>Arcserve UDP agent monitor stopped.                   |
| Start to kill Arcserve UDP processes                                                         |
| Killing process sync_utl_d.exe<br>Process killed.                                            |
| Killing process AFD2DMonitor.exe<br>Process killed.                                          |
| Killing process GDDServer.exe<br>Process killed.                                             |
| Killing process GDDServer.exe<br>Process killed.                                             |
| Killing process GDDServer.exe<br>Process killed.                                             |
| Killing process AStartup.exe<br>Process killed.                                              |
| Killing process explorer.exe<br>Process killed.                                              |
| Stopping mounting driver<br>Mounting driver stopped.                                         |
| Start Windows Explorer.                                                                      |

c. On 8400 Appliance, start all UDP services and then import the data copied from 8200 Appliance.

|   | arcser                           | ve.              | unif         | ied data     | protect                        | tion  |                                    |          |      |        | Ø Messages ( | ŋ • | administrator + | Help +                  |
|---|----------------------------------|------------------|--------------|--------------|--------------------------------|-------|------------------------------------|----------|------|--------|--------------|-----|-----------------|-------------------------|
|   | dashboard re                     | sources          | jobs r       | reports      | log sett                       | ings  | high availability                  |          |      |        |              |     |                 |                         |
|   |                                  |                  |              | Impo         | ort a Data                     | Store |                                    |          |      |        |              |     |                 |                         |
|   |                                  |                  |              | Rece<br>Dela | very Paint Sen<br>Store Falder | d     | ewlation<br>X-Wesewlat, store<br>K | Sentor 1 |      | Busi   |              |     |                 |                         |
|   |                                  |                  |              |              |                                |       |                                    |          | Sere | Cancel | Help         |     |                 |                         |
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### **Solution 2**

#### **Migrate Arcserve UDP Appliance solution**

Important! If the existing Appliance works as both Arcserve UDP Console and Arcserve UDP RPS, we can use this solution.

#### **Prerequisites:**

- On Arcserve UDP Appliance 8200, ensure that no job runs.
- You have migrated the Arcserve UDP Console from UDP Appliance 8200 to 8400.

**Note:** For more information about how to migrate the Arcserve UDP Console from Appliance 8200 to 8400, refer <u>Best Practices for Arcserve UDP Console</u> <u>Migration</u>.

#### Follow these steps:

1. Stop all the Arcserve UDP services on Arcserve UDP Appliance 8200 using the following command in the command line:

C:\Program Files\Arcserve\Unified Data Protection\Management\BIN> cmdutil.exe /stopall

| Administrator: C:\Windows\System32\cmd.exe                                                                                    | 5 |
|-------------------------------------------------------------------------------------------------------------------------------|---|
| ticrosoft Windows [Version 6.3.9600]<br>(c) 2013 Microsoft Corporation. All rights reserved.                                  | ľ |
| :\Program Files\Arcserve\Unified Data Protection\Management\BIN>cmdutil.exe /st<br>pall<br>start to kill process explorer.exe |   |
| (illing process explorer.exe<br>Process killed.                                                                               |   |
| Start to kill process D2DUDgc.exe                                                                                             |   |
| Stopping service 'Arcserve UDP Agent Service'<br>Service Stopped.                                                             |   |
| stopping service 'Arcserve UDP RPS Data Store Service'<br>Service Stopped.                                                    |   |
| Stopping service 'Arcserve UDP RPS Port Sharing Service'<br>Service Stopped.                                                  |   |
| Stopping service 'Arcserve UDP Identity Service'<br>Service Stopped.                                                          |   |
| Stopping service 'Arcserve UDP Management Service'<br>Service Stopped.                                                        |   |
| stopping service 'Arcserve UDP Management Port Sharing Service'<br>Service Stopped.                                           |   |
| stopping service 'Arcserve UDP Agent Explorer Extension Service'<br>Service Stopped.                                          |   |
| Stopping service 'Arcserve UDP Update Service'<br>Service Stopped.                                                            |   |
| Stopping Arcserve UDP agent monitor<br>Arcserve UDP agent monitor stopped.                                                    |   |
| tart to kill Arcserve UDP processes                                                                                           |   |
| (illing process sync_utl_d.exe<br>Process killed.                                                                             |   |
| Killing process AFD2DMonitor.exe<br>Process killed.                                                                           |   |
| Killing process GDDServer.exe<br>Process killed.                                                                              |   |
| Killing process GDDServer.exe<br>Process killed.                                                                              |   |
| Killing process GDDServer.exe<br>Process killed.                                                                              |   |
| Killing process AStartup.exe<br>Process killed.                                                                               |   |
| killing process explorer.exe<br>Process killed.                                                                               |   |
| topping mounting driver<br>founting driver stopped.                                                                           |   |
| Start Windows Explorer.                                                                                                       |   |

- 2. Copy all the data on disk X and Y from Arcserve UDP Appliance 8200 to 8400 manually.
- 3. On 8400 Appliance, start all Arcserve UDP services and then import the data stores copied from 8200 Appliance.

| CITCSETVE' unified data protection Ottomason (1) ·                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | inistrator + Help +     |
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| dashboard resources jobs reports log settings   Nigh availability                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                         |
| Import a Data Store                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                         |
| Recovery Front Server     worksk200       Data Stron Frieder     Kirknonverdeda, storicommon       Storageton Friedered     i                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                         |
| Concil March Strate States of All Strates States and States and States States and States | 100-10-10-10-10-1-1-1-1 |

**Note:** The Arcserve UDP log files are not migrated to the new fresh Appliance.

You have migrated the existing Arcserve UDP Appliance to another fresh Arcserve UDP Appliance successfully.

# Best Practices for Arcserve UDP Linux instant VM job to Local Appliance Hyper-V

Using the Arcserve UDP Appliance, you can set the network to perform Linux instant VM job on local Appliance Hyper-V.

### Follow these steps:

- 1. Open Hyper-V manger.
- 2. Create a new external virtual network switch.
- 3. Open Routing and Remote Access and click **Disable Routing and Remote Access**.



 Run the following command with PowerShell to reconfigure Routing and Remote Access for the newly added virtual network switch in step 1 using DOS command line:

C:\Program Files\Arcserve\Unified Data Protection\Engine\BIN\Appliance>powershell .\Rebuild-VMSwitch.ps1

**Note:** The Linux Backup Server *Linux-BackupSvr* is rebooted during the process.

5. To perform Linux instant VM job to local Hyper-V, select the newly added virtual network switch created.

Now, you can perform Linux instant VM job to local Appliance Hyper-V successfully.

## Best Practices to add Replicate to a remotely managed RPS task to another Appliance

In Arcserve UDP Appliance v6.5 Update1 if you add a *Replicate to a remotely managed RPS* task and enter the hostname/IP of a different appliance machine as Recovery Point Server (RPS) in the *Remote Console* field, then the following error message is displayed in the Arcserve UDP Console:

| arcserve                                       | unified data protec                                     | tion                      |                                 | O Messages (1) • administrator • Help • |  |  |  |  |  |  |
|------------------------------------------------|---------------------------------------------------------|---------------------------|---------------------------------|-----------------------------------------|--|--|--|--|--|--|
| dashboard resources                            | jobs reports log set                                    | tings   high availability |                                 |                                         |  |  |  |  |  |  |
| Modify a Plan                                  | msp                                                     |                           |                                 |                                         |  |  |  |  |  |  |
| Task1: Backup: Agent-Based 📀<br>Windows        | Task Type     Replicate to a remotely-managed RPS     · |                           |                                 |                                         |  |  |  |  |  |  |
| Task2: Replicate to a remotely-<br>managed RPS | Source Destination                                      |                           |                                 |                                         |  |  |  |  |  |  |
|                                                | Remote Console:                                         | 10.10.255.255             |                                 |                                         |  |  |  |  |  |  |
| Add a Task     Add a Task                      | Usemame:                                                | administrator             | Please select a remote console. |                                         |  |  |  |  |  |  |
| Product Installation                           | Password:                                               |                           |                                 |                                         |  |  |  |  |  |  |
|                                                | Port                                                    | 8015                      |                                 |                                         |  |  |  |  |  |  |
|                                                | Protocol:                                               | O HTTP I HTTPS            |                                 |                                         |  |  |  |  |  |  |
|                                                | Enable Proxy:                                           |                           |                                 |                                         |  |  |  |  |  |  |
|                                                |                                                         |                           |                                 |                                         |  |  |  |  |  |  |
|                                                |                                                         |                           |                                 |                                         |  |  |  |  |  |  |
|                                                |                                                         |                           |                                 |                                         |  |  |  |  |  |  |
|                                                |                                                         |                           |                                 |                                         |  |  |  |  |  |  |
|                                                |                                                         |                           |                                 |                                         |  |  |  |  |  |  |
|                                                | Connect                                                 |                           |                                 |                                         |  |  |  |  |  |  |

Please select a remote console

This issue is caused due to the use of same GUID on local console and remote console.

To support remotely managed RPS task to another appliance, follow these steps:

1. Delete the GUID in local Appliance from the following registry path:

HKEY\_LOCAL\_MACHINE\SOFTWARE\Arcserve\Unified Data Protection\Management\Console\GUID

2. Delete the GUID from the database using the following commands in PowerShell:

```
$database = 'arcserveUDP'
$server = 'localhost\arcserve_app'
```

\$sqlconn = New-Object System.Data.SqlClient.SqlConnection
\$sqlconn.ConnectionString = "Data Source=\$server;Initial Catalog=\$database;Integrated Security=SSPI;"
\$sqlconn.Open()
\$sqlcmd = New-Object System.Data.SqlClient.SqlCommand
\$sqlcmd.Connection = \$sqlconn
\$sqlcmd.CommandText = "delete from as\_edge\_configuration where ParamKey='ConsoleUuid'''
\$sqlcmd.ExecuteNonQuery()
\$sqlconn.Close()

- 3. Restart UDP management service on the local appliance machine.
- 4. From the UDP Console of local machine, follow these steps:
  - a. Select All nodes in Nodes view.
  - b. Right click and select Update.
  - c. Click **OK** to update all the nodes.
- 5. Select all RPS nodes in Recovery Point Servers view, right click and select *Update* to update all RPS nodes.

The *Replicate to a remotely managed RPS* task is supported successfully between two Appliance machines.

## Best Practices to perform Virtual Standby (VSB) task for which the monitor is another Appliance

On the Arcserve UDP Appliance v6.5 Update1 if you perform VSB task and use another Appliance as monitor, the VSB task fails and the following error message is displayed in the activity log:

| (        | arcser              | /e°        | un      | ified data j  | protection        |             |                    | O Messages (1) + administrator + Help +                                                                                                                                                                                                           |
|----------|---------------------|------------|---------|---------------|-------------------|-------------|--------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 0        | lashboard reso      | ources j   | jobs    | reports lo    | g settings        | high availa | bility             |                                                                                                                                                                                                                                                   |
| Severit  | Al                  | 🔻 Node Na  | ame     | 10.10.255.255 | 5 × Job ID        | 3           | × Job Type Virtual | Standby • Refersth Reset Front Delete                                                                                                                                                                                                             |
| Time     | AI                  | ▼ Generate | ed From | vsb2          | × Message         |             | x                  |                                                                                                                                                                                                                                                   |
| Severity | Time                | SiteN      | lame    | Node Name     | Generate          | ed From Job | ID Job Type        | Message                                                                                                                                                                                                                                           |
| 0        | 7/18/2017 3:04:20 / | AM Local   | ıl Site | 10.10.255.25  | 5 vsb2            | 3           | Virtual Sta        | The Virtual Standby job failed.                                                                                                                                                                                                                   |
| 0        | 7/18/2017 3:04:20 / | M Local    | ıl Site | 10.10.255.255 | 5 vsb2            | 3           | Virtual Sta        | Synchronize source machine adapter information to Virtual Standby successfully.                                                                                                                                                                   |
| 0        | 7/18/2017 3:04:20 / | W Local    | ıl Site | 10.10.255.255 | 5 vsb2            | 3           | Virtual Sta        | The Virtual Standby job copied data totaling 0 Bytes, the elapsed time was 0 Sec, and the average throughput was 0.00 MB/Min.                                                                                                                     |
| 0        | 7/18/2017 3:04:20 / | W Local    | il Site | 10.10.255.25  | 5 vsb2            | 3           | Virtual Sta        | Failed to convert session \$000000001 to the host for VM [UDPVM_WIN-92KBNU8439].                                                                                                                                                                  |
| 0        | 7/18/2017 3:04:20 / | W Local    | ıl Site | 10.10.255.255 | 5 <sub>vsb2</sub> | 3           | Virtual Sta        | An unexpected error has occurred when attempting to convert sessions for VM (UDEPVM_VMH-2XXBNU6.4439). To remedy this problem, please submit a<br>new backup to start the Virtual Standby job. If the problem persists, contact arcserve support. |
| 0        | 7/18/2017 3:04:20 / | AM Local   | ıl Site | 10.10.255.25  | 5 vsb2            | 3           | Virtual Sta        | Failed to connect to remote server (10.57 l, port = 4090.                                                                                                                                                                                         |
| 0        | 7/18/2017 3:02:40 / | W Local    | ıl Site | 10.10.255.25  | 5 vsb2            | 3           | Virtual Sta        | Failed to connect to remote server [10.57 ], port = 4090.                                                                                                                                                                                         |
| 0        | 7/18/2017 3:01:28 A | AM Local   | ıl Site | 10.10.255.25  | 5 vsb2            | 3           | Virtual Sta        | Try VDDK advanced transport mode (SAN or HotAdd).                                                                                                                                                                                                 |
| 0        | 7/18/2017 3:01:12 / | W Local    | ıl Site | 10.10.255.25  | 5 vsb2            | 3           | Virtual Sta        | Upload meta data to VM (UDPVM_WIN-92KBNU8,1439).                                                                                                                                                                                                  |
| 0        | 7/18/2017 3:01:12 / | AM Local   | ıl Site | 10.10.255.25  | 5 vsb2            | 3           | Virtual Sta        | Begin to convert session \$1000000001.                                                                                                                                                                                                            |
| 0        | 7/18/2017 3:01:12 / | AM Local   | ıl Site | 10.10.255.25  | 5 vsb2            | 3           | Virtual Sta        | Virtual Standby Job will convert session \$000000001.                                                                                                                                                                                             |
| 0        | 7/18/2017 3:01:04 / | AM Local   | ıl Site | 10.10.255.25  | 5 vsb2            | 3           | Virtual Sta        | VM was created. VM name is [UDPVM_WIN-92KBNU8J439].                                                                                                                                                                                               |
| 0        | 7/18/2017 3:00:49 / | W Local    | ıl Site | 10.10.255.25  | 5 vsb2            | 3           | Virtual Sta        | The source machine is [10.57 ], the backup destination is [X: Wreserveldata_store/common/W1442KBUU84389/125786-1310-4b17-8ca7-<br>971de7426347] on Recovery Point Server [vsb2], and the data store name is [vsb2_data_store].                    |
| 0        | 7/18/2017 3:00:48 / | M Local    | ll Site | 10.10.255.255 | 5 vsb2            | 3           | Virtual Sta        | The monitor server is [10.57 ] and is used as a proxy for data transfer.                                                                                                                                                                          |
| 0        | 7/18/2017 3:00:48 / | W Local    | ıl Site | 10.10.255.255 | 5 vsb2            | 3           | Virtual Sta        | Start a Virbual Standby job with destination type VMware ESX Server, and the hypervisor host name is [10.57 ].                                                                                                                                    |
| 0        | 7/18/2017 3:00:48 / | W Local    | il Site | 10.10.255.255 | 5 vsb2            | 3           | Virtual Sta        | Virtual Standby job started.                                                                                                                                                                                                                      |

Failed to connect to remote server [IP], port = 4090.

This issue is caused due to the same GUID present in both monitor Appliance and Arcserve UDP RPS Appliance machine.

To support VSB task, follow these steps:

1. Stop all the UDP services on Arcserve UDP RPS Appliance using the following command in the command line:

C:\Program Files\Arcserve\Unified Data Protection\Management\BIN> cmdutil.exe /stopall

2. Delete the GUID from local Appliance using the following registry path:

HKEY\_LOCAL\_MACHINE\SOFTWARE\Arcserve\Unified Data Protection\Engine\GUID 3. Start all the UDP services on Arcserve UDP RPS Appliance using the following command in the command line:

C:\Program Files\Arcserve\Unified Data Protection\Management\BIN> cmdutil.exe /startall

- 4. From the UDP Console of local machine, follow these steps:
  - a. select All plans in Plans view.
  - b. Right click and select Deploy Now.
  - c. Click **OK** to deploy all plans.

The VSB task is supported successfully.

### **Chapter 14: Acknowledgements**

Portions of this product include software developed by third-party software providers. The following section provides information regarding this third-party software.

This section contains the following topics:

### putty

This product includes the "putty" component which entails the following details:

| Component<br>Name        | putty                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Component<br>Vendor      | Developed originally by Simon Tatham                                                                                                                                                                                                                                                                                                                                                                                                             |
| Component<br>Version     | 0.64                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Legal Remark             | http://www.chiark.greenend.org.uk/~sgtatham/putty/licence.html                                                                                                                                                                                                                                                                                                                                                                                   |
| Project Name             | Appliance Rhodium                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Component<br>Type        | Open Source                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Source Code<br>URL       | http://the.earth.li/~sgtatham/putty/0.64/                                                                                                                                                                                                                                                                                                                                                                                                        |
| Localization<br>Required |                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Platform(s)<br>Required  | Windows 2012 R2                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Component<br>URL         | http://the.earth.li/~sgtatham/putty/0.64/x86/                                                                                                                                                                                                                                                                                                                                                                                                    |
| Component<br>Version URL | http://the.earth.li/~sgtatham/putty/0.64/x86/                                                                                                                                                                                                                                                                                                                                                                                                    |
| Description              | On the appliance machine, we use putty.exe to communicate with the Linux<br>Backup Server to change the system locale and UDP Linux locale.                                                                                                                                                                                                                                                                                                      |
| Features                 | Appliance                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|                          | http://www.chiark.greenend.org.uk/~sgtatham/putty/licence.html                                                                                                                                                                                                                                                                                                                                                                                   |
|                          | PuTTY is copyright 1997-2015 Simon Tatham.                                                                                                                                                                                                                                                                                                                                                                                                       |
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| License URL               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Intended                  | On the appliance machine, we use putty.exe to communicate with the Linux                                                                                                                                                                                                                                                                                                                                                                                                      |
| Usage                     | Backup Server to change the system locale and UDP Linux locale.                                                                                                                                                                                                                                                                                                                                                                                                               |
| Modifications<br>Required | No                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Type of Dis-              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
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| Customer Bin-             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
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