Arcserve[®] Unified Data Protection Appliance

User Guide

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.

https://www.arcserve.com/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. Please refer to <u>arcserve.com/support</u> for contact information to customer care. Information will be provided by support 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 will be the responsibility of customer.

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Chapter 1: Introducing the Arcserve UDP Appliance

This section contains the following topics:

Introduction (see page 8) Safety Precautions (see page 10) What is Included in the Box (see page 11) What is Not Included in the Box (see page 11) Available Models (see page 11) Controls and Indicators (see page 14) Ports Used by the Appliance (see page 17) Product Documentation (see page 22)

Introduction

Each Arcserve UDP 7000 series appliance is a self-contained, "set and forget" backup and recovery solution. The Arcserve UDP 7000 series is the first complete and most cost-effective data protection appliance, featuring Assured Recovery[™]. 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 7000 series delivers unmatched operational agility and efficiency, and truly simplifies disaster recovery activities.

The Arcserve UDP 7000 series 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 7000 series appliance:

- Arcserve UDP
- Arcserve UDP Agent (Linux)
- Arcserve Backup

Each Arcserve UDP 7000 series 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
- 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-to-date 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 the data in the 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: It is recommended to change the default password.

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 by letting you customize your data protection strategies based on your particular 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 a lite-integration with Arcserve Backup. Arcserve Backup is installed at "C:\Program Files (x86)\Arcserve" on your computer. The components installed in the UDP Appliance lets you back up the destination of Arcserve UDP to a tape.

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> (see page 61).

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
- Quick Start Guide
- 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: https://www.arcserve.com/support.

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 appliances are available in a variety of different models designed to meet your specific needs.

Arcserve UDP 7000 Series Appliance Specifications

Initial February 2015 launch in North America. Additional capacities and geographies planned Q3 2015.						
Appliance Model	7100	7200	7200V	7300	7300V	
Backup Storage Capacity		_		-	_	
Raw backup storage capacity*	3 ТВ	6 ТВ	6 TB	9 TB	9 TB	
Usable backup storage capacity**	2.8 TB	5.8 TB	5.8 TB	8.8 TB	8.8 TB	
Protected (source data) capacity***	Up to 8 TB	Up to 17 TB	Up to 17 TB	Up to 26 TB	Up to 26 TB	
Standard Features						
The unified managem encryption, WAN opt standby, tape suppor	nent console, globa imized replication, t, application cons	al deduplication, bl advanced virtualiz istent backups, gra	ock level infinite in ration support, age nular restore, unifi	cremental backups ntless backup, rem ed reporting and d	, compression, ote virtual ashboard.	
On-Appliance Virtual Standby	N/A	N/A	Up to 3 VMs	N/A	Up to 3 VMs	
Warranty and Technical Specifications						
Full system depot warranty	3 Years					
Physical dimensions	1.7" x 17.2" x 25.6" (1U - 19" Rack Mount rails provided)					
(H x W x D in inches)		(4.3cm x 43.7cm x 65cm)				
Remote management & network interface ports	1 x IPMI & 2 x 1 GbE (RJ45)					
Hard disk type & RAID configuration	4 x 1 TB SAS (RAID 5)	4 x 2 TB SAS (RAID 5)	4 x 2 TB SAS (RAID 5)	4 x 3 TB SAS (RAID 5)	4 x 3 TB SAS (RAID 5)	
External SAS port (for Tape Backup)	None	1 x IPASS	1 x IPASS	1 x IPASS	1 x IPASS	
Total system RAM	16 GB	16 GB	32 GB	32 GB	48 GB	
SSD drive (For deduplication hash tables)	120 GB SSD 240 GB SSD					
Maximum weight	41 lbs (18.6 kg)					
Power Supply			1 x 600W			

	Arcserve UDP 7000 Series Appliance Specifications				
Initial February 2015	launch in North Am	nerica. Additional c	apacities and geog	raphies planned Q	3 2015.
Appliance Model	7100	7200	7200V	7300	7300V
Power consumption (Watts)					
■ Idle	■ 93.4 W	■ 122.6 W	■ 124.6 W	■ 124.6 W	■ 129.4 W
■ Load	■ 116.5 W	∎ 164.5 W	■ 166.5 W	■ 166.5 W	■ 187.6 W
■ Startup	■ 143.3 W	■ 143.4 W	■ 145.4 W	■ 145.4 W	■ 152.4 W
AC voltage & frequency range (50-60 Hz)			100v - 240v		
Ampere ratings (A)			7.5A Max		
Environmental Specifications					
Operating temperature	50°F ~ 95°F (10°C ~ 35°C)				
Storage temperature	-40°F ~ 140°F (-40°C ~ 60°C)				
Operating humidity (RH)	8% ~ 90% (noncondensing)				
Operating altitude (Feet)	N/A				
Maximum noise (dBA)	N/A				
Typical cooling (BTU/Hour)					
■ Idle	■ 317		■ 425		■ 442
■ Load	■ 398		■ 568		■ 640
 Startup 	■ 489		■ 496		■ 520
Maximum cooling (BT/Hour)	1356	1356 1356			

*1 TB = 1,000,000,000 bytes.

** On "V" models, space available for backup will be 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, etc.

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

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
1	Power button	Used to turn on and off power from the power supply to the appliance components. When turning off the power, the main power is 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.
2	Reset button	Used to reboot the appliance.

3 Power LED Solid Green: 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. 4 Device Activity LED Blinking Amber: Indicates activity on at least one of the hard dives. 5 Network Interface Card (NIC1) LED Blinking Amber: Indicates network activity on Network 1 (ETHO Port). 6 Network Interface Card (NIC2) LED Blinking Amber: Indicates network activity on Network 2 (ETH1 Port). 7 Information LED Continuously on and Red: An overheat condition has occurred. (This can be caused due to cable congestion.) 7 Information LED Continuously on and Red: An overheat condition has occurred. (This can be caused due to cable congestion.) 8 Unit Identifier (UID) button Solid Blue: 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 Unit Identifier (UID) button Used to turn on or off the Universal Information LED (blue) on both the front and rear appliance panels. When the blue LED is on, the appliance can be easily located in a rack (from either the front or the back). 9 Hard Drive (HDD) LED Blinking Green: Indicates activity on the corresponding drive. 10 Hard Drive (HDD) LED Solid Red: Indicates failure of the corresponding hard drive. With the Arcserve UDP appla	Number	Control/Indicator	Description		
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9Hard Drive (HDD) LEDBlinking Green: Indicates activity on the corresponding drive.10Hard Drive (HDD) LED*Solid Red: 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. 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.11Hard Drive (HDD) LatchUsed to unlock and remove the hard drive.12Solid State Drive (SSD) LED*Solid Green: Indicates drive failure.13Solid State Drive (SSD) LEDSolid Green: Indicates the drive is being accessed.14Solid State Drive (SSD) LatchUsed to unlock and remove the SSD drive.			When the blue LED is on, the appliance can be easily located in a rack (from either the front or the back).		
10Hard Drive (HDD) LED*Solid Red: 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. 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.11Hard Drive (HDD) LatchUsed to unlock and remove the hard drive.12Solid State Drive (SSD) LED*Solid Red: Indicates drive failure.13Solid State Drive (SSD) LEDSolid Green: Indicates drive activity. Blinking Green: Indicates the drive is being accessed.14Solid State Drive (SSD) LatchUsed to unlock and remove the SSD drive.	9	Hard Drive (HDD) LED	Blinking Green: Indicates activity on the corresponding drive.		
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12 Solid State Drive (SSD) LED *Solid Red: Indicates drive failure. 13 Solid State Drive (SSD) LED Solid Green: Indicates drive activity. 14 Solid State Drive (SSD) Latch Used to unlock and remove the SSD drive.	11	Hard Drive (HDD) Latch	Used to unlock and remove the hard drive.		
13 Solid State Drive (SSD) LED Solid Green: Indicates drive activity. 14 Solid State Drive (SSD) Latch Used to unlock and remove the SSD drive.	12	Solid State Drive (SSD) LED	*Solid Red: Indicates drive failure.		
Blinking Green: Indicates the drive is being accessed. 14 Solid State Drive (SSD) Latch Used to unlock and remove the SSD drive.	13	Solid State Drive (SSD) LED	Solid Green: Indicates drive activity.		
14Solid State Drive (SSD) LatchUsed to unlock and remove the SSD drive.			Blinking Green: Indicates the drive is being accessed.		
	14	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>.

Rear Panel

The rear panel contains the power supplies, cable connections, and ports for the appliance.



Number	Name of Control/Indicator	Description
1	Power Supply	Provides high-efficiency power supply to the appliance.
		Note: The main power switch is used to apply or remove power from the power supply to the appliance. Turning off the appliance power with this button removes the main power but standby power is still supplied. Therefore, to ensure power is completely removed from the appliance, unplug the power supply cable before performing maintenance.
2	IPMI Port (Remote Management)	The IPMI (Intelligent Platform Management Interface) port is used to monitor the physical health of servers, such as temperature, voltage, fans, power supplies, and the appliance.
		Note : The default user name/password for IPMI access is ADMIN/ARCADMIN (case-sensitive). It is recommended that you change the password as soon as possible. For details about how to change the IPMI password, see <u>How to Change the IPMI Password</u> (see page 66).
3	External Storage Device Port (SAS port for tape drive)	Used to connect an external storage device (hard drive, tape drive, etc.) to the appliance. These portable external storage devices can be used to store backed-up data for easy transporting from one location to another.
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 appliance.

Number	Name of Control/Indicator	Description
8	Network Data I/O Port 1	Used to transfer network data to and from the appliance. ((ETH0 for Network 1)
9	Network Data I/O Port 2	Used to transfer network data to and from the appliance. (ETH1 for Network 2)
10	VGA Connector	Used to connect a monitor to the appliance (if needed).

Ports Used by the Appliance

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

Appliance for Linux Support

Port #	Port Type	Initiated by	Listening Process	Description
8018	ТСР			NAT port redirection, redirect 8018 on appliance to the Linux Backup Server Agent port 8014.
8019	ТСР			NAT port redirection, redirect 8019 on appliance to the Linux Backup Server SSH port 22.

Arcserve UDP

Components installed on Microsoft Windows

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

Port #	Port Type	Initiated by	Listening Process	Description
1433	ТСР	Remote Java	sqlsrvr.exe	Specifies the default communication port between the Arcserve UDP console and Microsoft SQL Server databases when they reside on different computers.
				Note : You can modify the default communication port when installing SQL Server.
4090	ТСР	Arcserve UDP Agent	HATransServer.exe	Transfers data for Virtual Standby tasks in the proxy mode.

Port #	Port Type	Initiated by	Listening Process	Description
5000-50 60	ТСР	Arcserve UDP Server	GDDServer.exe	Reserved for Arcserve UDP RPS Global Deduplication Data Store Service (GDD). One Arcserve UDP GDD data store will use 3 free ports that start from 5000. It is needed when the data store with GDD is enabled for backup or the restore task is used.
6052	ТСР	Arcserve Backup GDB	CA.ARCserve.Commu nicationFoundation. WindowsService.exe	CA.ARCserve.CommunicationFoundation.Wi ndowsService.exe Communication that lets the Arcserve UDP Console and the Arcserve Backup Global Dashboard Primary server synchronize data.
6054	ТСР	Arcserve Backup		CA.ARCserve.CommunicationFoundation.Wi ndowsService.exe Communication that lets the Arcserve UDP Console and the Arcserve Backup Primary server synchronize data.
8006				To shut down Tomcat that is used by the Arcserve UDP console.
8014	ТСР	Arcserve UDP Console	Tomcat7.exe	Specifies the default HTTP/HTTPS communication port between remote management consoles and the Arcserve UDP server. Specifies the default HTTP/HTTPS communication port between remote management consoles and the Arcserve UDP Agent. Note : You can modify the default communication port when you install the Arcsenve UDP components
8014	ТСР	Arcserve UDP Server	httpd.exe	Specifies the default HTTP/HTTPS communication port between the Arcserve UDP server and Arcserve UDP consoles. *Specifies the default shared port and the only port you must open when you use the Arcserve UDP server as the replication destination. Do not open ports 5000-5060 which are used by data stores that have global deduplication enabled. Note : You can modify the default communication port when you install the Arcserve UDP components.

Port #	Port Type	Initiated by	Listening Process	Description
8015	ТСР	Arcserve UDP Console	Tomcat7.exe	Specifies the default HTTP/HTTPS communication port between remote management consoles and the Arcserve UDP server.
				Specifies the default HTTP/HTTPS communication port between remote management consoles and the Arcserve UDP Agent.
				Note : You can modify the default communication port when you install the Arcserve UDP components.
8016	ТСР	Arcserve UDP Server	Tomcat7.exe	Reserved for Arcserve UDP Server Web Services to communicate with the Arcserve UDP RPS Port Sharing Service on the same server.
				Note : The port cannot be customized and can be ignored for the firewall setting.
18005			CA.ARCserve.Commu nicationFoundation. WindowsService.exe	To shutdown Tomcat that is used by the Arcserve UDP server or Agent.

Components installed on Linux

Port #	Port Type	Initiated by	Listening Process	Description
22	ТСР	SSH service		Arcserve UDP Linux 3rd party dependency. Specifies the default for SSH service, however, you can change this port. This port is required for both incoming and outgoing communications.
67	UDP	Arcserve UDP Linux	bootpd	Used for the PXE boot server. Only required if the user wants to use the PXE boot feature. This port is required for incoming communications. Note : The port number cannot be

Port #	Port Type	Initiated by	Listening Process	Description
69	UDP	Arcserve UDP Linux	tffpd	Used for the PXE boot server. Only required if the user wants to use the PXE boot feature. This port is required for incoming communications.
				Note : The port number cannot be customized.
8014	ТСР	Arcserve UDP Linux	Java	Specifies the default HTTP/HTTPS communication ports between the remote consoles and the Arcserve UDP agent for Linux. This port is required for both incoming and outgoing communications.
18005	ТСР	Arcserve UDP Linux	Java	Used by Tomcat. Can be ignored for firewall settings.

Production node protected by UDP Linux remotely

Port #	Port Type	Initiated by	Listening Process	Description
22		SSH service		Arcserve UDP Linux 3rd party dependency. Specifies the default for the SSH service, however, you can change 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

Port #	Port Type	Initiated by	Listening Process	Description
111	ТСР	CASportmapper	Catirpc.exe	Arcserve PortMapper
135	ТСР			Microsoft Port Mapper
445	ТСР		MSRPC over the Named Pipes	

Port #	Port Type	Initiated by	Listening Process	Description
6050	TCP/UDP	CASUniversalAge nt	Univagent.exe	Arcserve Universal Agent
6502	ТСР	Arcserve Communication Foundation	CA.ARCserve.Commu nicationFoundation. WindowsService.exe	Arcserve Communication Foundation
6502	ТСР	CASTapeEngine	Tapeng.exe	Arcserve Tape Engine
6503	ТСР	CASJobEngine	Jobengine.exe	Arcserve Job Engine
6504	ТСР	CASDBEngine	DBEng.exe	Arcserve Database Engine
41523	ТСР	CASDiscovery	casdscsvc.exe	Arcserve Discovery Service
41524	UDP	CASDiscovery	casdscsvc.exe	Arcserve Discovery Service
9000-95 00	ТСР		For other Arcserve MS RPC services that use dynamic ports	

Product Documentation

For all Arcserve UDP related documentation, click this link for the <u>Arcserve UDP</u> <u>Knowledge Center</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: Installing the Arcserve UDP Appliance

This section contains the following topics:

Install Appliance (see page 23) Connect Cables (see page 26) Power On Appliance (see page 27)

Install Appliance

Delivered with the appliance is a rail/rack mounting kit. This kit provides the quick-install outer rails, inner rail extensions, and mounting hardware which can be used as needed to secure the appliance to any rack configuration. (Rail adapters are also provided, but are for use only with the optional standard mounting rails and not the quick-install rails).

Rack mount cabinets and attachments can vary by different manufacturers. Ensure you have sufficient rack mounting hardware to properly secure the rails in your environment.

Important! This appliance is only for use in a restricted location (authorized access and secured/controlled by locking device).

Follow these steps:

1. Verify the area where the appliance will be located is dry and well-ventilated (free from front and rear obstructions that could inhibit air flow). In addition, ensure the area maintains a constant cool operating temperature, and does not generate heat, electrical noise, or electromagnetic fields.

Note: Each of the outer rails consists of two sections. When assembled, the long section gets attached to the front rack post and the short section gets attached to the rear rack post.

2. Assemble the long section to the short section, aligning the pins with the corresponding slotted openings, and making sure the end brackets are facing in the same direction.



3. Locate the short section against the rear post of the rack so that the two square tabs are aligned with the corresponding square holes in the post. Apply pressure to snap (and lock) the rail to the rear post.



- 4. Adjust the overall length of the assembled outer rails so that the rail will fit snugly (and level) within the rack.
- 5. Locate the long section against the front post of the rack so that the two square tabs are aligned with the corresponding square holes in the post. Apply pressure to snap (and lock) the rail to the front post.
- 6. Repeat steps 2 through 5 for the other outer rail.

Note: The appliance comes with the inner rails pre-attached to the sides of the appliance. (Inner rail extensions are also provided if needed).

7. Carefully raise the appliance so that the rear end of the inner rails are aligned with the front end of the rack-mounted outer rails and using steady pressure on both sides, slide the appliance into the rack until it locks in place (clicking sound)



Connect Cables

To provide power to your appliance, it is important to follow the cable connection steps in the order provided.

Follow these steps:

- Connect the network cables (red and blue) to the corresponding network data I/O serial ports. On the front panel, the corresponding network activity LED comes on. (Network 1 LED = ETHO port. Network 2 LED = ETH1 port).
- 2. Connect one end of the power cable into the rear of the appliance and connect the other end to a power supply.
- 3. Connect cables to your monitor and keyboard (you can use the USB ports or specific ports for your connections).
- 4. If necessary, you could connect a cable from the dedicated IPMI port to a remote management switch (via network) and assign the IP address to the dedicated port in the BIOS setup.

Note: The default password for IPMI access is ARCADMIN (case-sensitive). Please change it to some other value as soon as possible. Refer to **the Arcserve UDP Appliance User Guide** for instructions on how to change the default password.

5. If necessary, connect the cable from the optional external storage device to the external storage port.



Power On Appliance

The Power LED indicates that power is being supplied to the appliance's power supply unit. This LED should normally be illuminated when the appliance is operating.

Follow these steps:

1. Press the Power button. The Power LED comes on (green) the front panel to indicate power is being supplied to the appliance.

Important! When power is initially applied to the appliance, it may automatically reboot a few times. This is normal behavior for the initial start.



Note: The main power switch is used to apply or remove power from the power supply to the appliance. Turning off the appliance power with this button removes the main power but keeps standby power supplied to the appliance. Therefore, you must unplug the appliance before servicing.

2. Install the faceplate to the front panel. (Snap and lock.)

Chapter 3: Configuring the Arcserve UDP Appliance

This section contains the following topics:

How to Configure Network Settings for a UDP Appliance (see page 30) Overview of Creating a Plan Using the UDP Appliance Wizard (see page 33) How to Set up the Arcserve UDP Appliance and Create Plans (see page 34) Additional Information on Adding Nodes to a Plan (see page 43)

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 have 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 will be displayed when the option is selected.

Welcome to the Arcserve® UDP 7000 Series Appliance Configuration Tool						
This tool will allow you to connect your Arcserve UDP Appliance to the LAN so that further configuration can be performed on the web-based console UI.						
Assign a hostname to the Appliance. This will be used to identify the Appliance on your local network. Optionally, you may add the Appliance to a Domain.						
• A new hostname will require a reboot to take effect. You may configure the other settings on the configuration screen before rebooting the Appliance.						
Hostname						
Add this Arcserve UDP Appliance to a domain						
Save						

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 by 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 you have to manually edit and specify the connection details.

arcserve	UDP 7000 Series	s Appliance Configuration	About the Appliance
Your Arcserve UDP 7000 S Reboot Appliance	Series Appliance must be	rebooted for the Hostname and Domain setti	ngs to take effect.
Hostname/ Domain	<hostname> (not assigned)</hostname>	Edit	
UDP Console URL	https:// <hostnam< th=""><th>ne>:8015</th><th></th></hostnam<>	ne>:8015	
Date and Time	2/19/2015 4:47:	18 PM Edit	
Network Connections			
Connection Name	IP Address	Description	
Network Connection 1	<ip address=""> Automatic via DHCP</ip>	vmxnet3 Ethernet Adapter #2	Edit

6. To edit a network connection, click **Edit**.from the **Network Connections** box.

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 .	Status	Connected		
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 .	Description	vmxnet3 Ethernet Adapter #2		
IP Address Subnet Mask Default Gateway Obtain DNS server address automatically. Preferred DNS Server Alternate DNS Server	Connection	Use DHCP to obtain IP a	address automatically.	
Subnet Mask Default Gateway Obtain DNS server address automatically. Preferred DNS Server Alternate DNS Server		IP Address		
Default Gateway .		Subnet Mask		
Obtain DNS server address automatically. Preferred DNS Server Alternate DNS Server		Default Gateway	· · · · ·	
Preferred DNS Server . . Alternate DNS Server . .		Obtain DNS server addre	ess automatically.	
Alternate DNS Server		Preferred DNS Server	· · · · ·	
		Alternate DNS Server		

7. The **Network Connection** dialog opens.

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.

- 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	ICSETVE [®] UDP 7000 Series Appliance Configuration				
Click Launch Wizard to cor Launch Wizard	ntinue configuring your ap	pliance with the Arcserve UDP	Plan Configuration Wa	zard.	
Hostname/ Domain	<hostname> (not assigned)</hostname>		Edit		
UDP Console URL	https:// <hostnam< th=""><th>e>:8015</th><th></th><th></th></hostnam<>	e>:8015			
Date and Time	2/19/2015 4:47: ⁴	18 PM	Edit		
Network Connections					
Connection Name	IP Address	Description			
Network Connection 1 Connected	<pre><ip 1="" address=""> Automatic via DHCP</ip></pre>	vmxnet3 Ethernet Adapter #2		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 in to 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 stand-alone 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 anytime 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 can be 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*, Arcserve UDP Solutions Guide.

arcse	rve ° udp 7000 s	Series Appliance Configuration		
Data Stores				
Your data store co	onfiguration is shown below.	More data stores can be added from	the Arcserve UDP	Console.
<hostnam< th=""><th>e>_data_store</th><th></th><th></th><th></th></hostnam<>	e>_data_store			
	Compression	Standard		
	Deduplication	Enabled		
	Encryption	Enabled		
Total Capacity 8.03 TB	Password	•		
	Confirm Password	4		
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 will be 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	UDP 7000 Series Appliance	Configuration		
Email and Alert				
Configure email notification set	tings and the types of alert notifica	tions you want to	receive.	
Enable email notifications	5.			
Service	Other	-		
Email Server	mail.xx.com			
Port	25			
Email service requires	authentication.			
Subject	arcserve Unified Data Protection Alert			
From	abc@xx.com			
Recipients	abc@xx↓com			
Options	Use SSL			
	Send STARTTLS			
	Use HTML format			
Connect using a proxy	' server			
Send a Test Email				
Send Alerts For	Successful Jobs			
	Failed 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 will be 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.

arcserve	UDP 7000 Series Appliance	UDP 7000 Series Appliance Configuration					
Replication to Remote	RPS						
Configure the settings below if	you want to replicate to a remotely	-managed Recov	very Point Server des	tination.			
• This appliance will replic	ate to a remotely-managed RPS.						
Arcserve UDP Console URL							
Username							
Password							
Connect using a proxy	/ server.						
This appliance will not re	eplicate to a remotely-managed RP	5.					
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 7000 Series Appliance Configuration
Create a Plan	() About Creating a Plan
Next you will need to create a backup schedule. More than o	protection plan for your data. In the protection plan you will add nodes and configure a ne protection plan can be created.
Skip Plan Creation	
Plan Name	Protection Plan 1
Session Password	
Confirm Password	
It is important to retain the second seco	ne Session Password as it will be required to restore the data.
How do you want to add no	les to the plan?
	Hostname/IP Address (for Windows machines only)
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>" will be 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:

<u>Hostname/IP Address</u> (see page 43)

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.

<u>Discovering Nodes from Active Directory</u> (see page 45)

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 (see page 47)

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.

<u>Importing from a Hyper-V Server</u> (see page 49)

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 you click **Next**.

18. The **Backup Schedule** dialog opens.

CICSETVE [®] UDP 7000 Series Appliance Configuration	ion				
Backup Schedule					
Enter criteria for the plan backup schedule.					
Install/upgrade and reboot on Friday v at 9 v : 00	▼ PM ▼				
Run Incremental Backup daily at 10 🚽 : 00 🚽 PM 👻					
Schedule Summary (Based upon your selections)					
 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. These nodes will immediately be rebooted after the installation/upgrade is completed. Agent installation and reboot will not occur on nodes imported from Hyper-V or vCenter/ESX. 					
 On Friday at 10:00 PM, the first Full Backup will be performed. On every day after the installation/upgrade is completed, at 10:00 PM a performed. 	an Incremental Backup will	be			
Cancel Plan Creation					
Step 7 of 9 Previo	us Next	Cancel			

- 19. 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 will be upgraded to the latest version.
 - Incremental backup schedule: A full backup will be performed for the first time, and then incremental backups will be 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 will be performed on Saturday at 8:00 PM.

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

20. Click Next.

21. The Plan Confirmation dialog opens.

arcserve	UDP 7000 Serie	es Appliance Con	figuration		
Plan Confirmation					
This is a confirmation of the plan	i you created. You	can edit plans or cre	eate a new plan.		
Protection Plan 1		Plan Name	Protection Plan	n.1	
Add a Plan		Nodes Protected	1		
		Destination	<appliance hos<="" th=""><th>tname></th><th></th></appliance>	tname>	
		Install/Upgrade	Friday, 9:00 PM	1	
		Backup Schedule	Daily Increment	tal, 10:00 PM	
		Edit Nodes	Edit Schedule	Delete	e Plan
Step 8 of 9		P	revious	Next	Cancel

22. 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.

- 23. After you are satisfied that the plans are correct, click Next.
- 24. The Next Steps dialog opens.

You have successfully completed the configuration and you are now ready to work in the Arcserve UDP console. You will be able to 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.

arcserve	UDP 7000 Series Applianc	e Configuratior	1			
Next Steps						
Configuration is complete and you are ready to open the Arcserve Unified Data Protection. With the Arcserve Unified Data Protection you can:						
Add more nodes to prote	ect					
Customize plans with features	atures such as Virtual Standby					
Add more destinations b	y including Recovery Point Serve	ers and Data Stor	es			
Click Finish to open Arcserv	e Unified Data Protection					
0 0						
Step 9 of 9		Previous	Finish	Cancel		

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

Additional Information on Adding Nodes to a Plan

You create a plan to protect various nodes. To protect nodes, you have to first 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 (see page 43))

Discovering nodes from an active directory

(Add Nodes by Active Directory (see page 45))

- Importing virtual machine nodes from VMware ESX/vCenter servers (Add vCenter/ESX Nodes (see page 47))
- Importing virtual machine nodes from Microsoft Hyper-V servers (Add Hyper-V Nodes (see page 49))

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:

arcserve	UDP 7000 Series Appliance C	onfiguration		
Add Nodes by Hostnar	ne/IP address		About	Adding Nodes
Enter the hostname/IP address	information for the selected Window	/s nodes so that th	iey can be added t	o the plan.
Hostname/IP Address		Nodes Pro	tected by Plan	
Username		Node N	ame	
Password		Use the fiel	lds to the left to add nodes	to the plan.
Description				_
				_
Cancel Plan Creation			R	emove
Step 6 of 9		Previous	Next	Cancel

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, you must first discover the nodes by providing the active directory details and then adding the nodes to the plan.

Follow these steps:

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

arcserve®	UDP 7000 Series Appliance	Configuration		
Add Nodes by Active	Directory		😗 Abo	ut Adding Nodes
Enter the active directory inform	mation to add nodes to the plan.			
Username		Nodes	Protected by Plan	
Password		No.	de Name	
Computer Name Filter	×	Use ti crede	ne fields to the left to validate ntials and add the nodes to the	the node e plan.
				_
Cancel Plan Creation				Remove
		Break	N	a second
Step 6 of 9		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.

ctive Directo	ory Results	Type nod	le filter text		No	odes Protected by Pla	m
Name	C	omain <domain></domain>	Username	Verify	(2) (2)	Node Name	
Inode 1>		<domain></domain>	administrator	0	2	<pre><node 3.domain=""></node></pre>	
✓ <node 3=""></node>		<domain></domain>	administrator	0			
<pre><node 4=""></node></pre>		<domain></domain>	**	•			
I 4 Page Jsername	administrator	N &					
assword			Apply				
assword			Apply				

To add nodes, you have to 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 7000 Series Appliance Configuration				
Add Nodes by vCente	r/ESX		😗 Abo	out Adding Nodes	
Enter the vCenter/ESX information	ation to add nodes to the plan.				
Hostname/IP Address		Nod	les Protected by Plan		
Port	443		Node Name		
Protocol	HTTPS	√ Us	e the fields to the left to add no	des to the plan.	
Username	root				
Password					
			_	_	
Cancel Plan Creation				Remove	
Step 6 of 9		Previous	Next	Cancel	

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 7000 Series Appli	ance Configu	ration		
Add Nodes by vCenter/	/ESX			🕐 Ab	out Adding Nodes
Enter the vCenter/ESX informat	ion to add nodes to the plan				
vCenter/ESX Results	Type node filter text	×	Nodes Pro	tected by Plan	
Name ▲ ■ □ <hostname> □ □ hostname> □ □ hostname></hostname>	Object Type Host System Virtual Machine Virtual Machine Virtual Machine Virtual Machine Virtual Machine	Î	Node N	ame .domain> .domain>	
Return Cancel Plan Creation	Add to Lis	t			Remove
Step 6 of 9		Prev	ious	Next	Cancel

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 7000 Series Appliance (Configuration		
Add Hyper-V Nodes			😗 Ab	out Adding Nodes
Enter Hyper-V information to a	add nodes to the plan.			
Hostname/IP Address		Node	s Protected by Plan	
Username		🗖 N	ode Name	_
Password		Use t	he fields to the left to add no	des to the plan.
Cancel Plan Creation				Remove
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	UDP 7000 Series Appliar	nce Configuratio	n	
Add Hyper-V Nodes			8	About Adding Nodes
Enter Hyper-V information to a	add nodes to the plan.			
Hyper-V Results	Type node filter text	× Noc	les Protected by Plar	1
Name	Object Type		Node Name	
⊿ 🔲 📲 <hostname></hostname>	Hyper-V Host	· ·	<node s.domain=""></node>	
ende 2>	Virtual Machine		<node 6.domain=""></node>	
Image: second	Virtual Machine			
Image: second	Virtual Machine			
Image: second	Virtual Machine			
✓ 3 <node 6=""></node>	Virtual Machine			
Return	Add to List			Remove
Cancel Plan Creation				
Step 6 of 9		Previous	Next	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.

Chapter 4: Create 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

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. You need to manually create a virtual machine within the appliance and configure it for virtual standby. This capability is present in the following Appliance series:

- Appliance Series 1>
- Appliance Series 2>

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 each configurations, see How to Create a Virtual Standby Plan in the Solutions Guide.

5. Save and run the plan.

Chapter 5: Repairing the Arcserve UDP Appliance

This section contains the following topics:

Remove and Replace a Hard Drive (see page 56)

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 will be 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.

Appendix A: Safety Precautions

This section contains the following topics:

<u>General Safety Precautions</u> (see page 61) <u>Electrical Safety Precautions</u> (see page 62) <u>FCC Compliance</u> (see page 63) <u>Electrostatic Discharge (ESD) Precautions</u> (see page 64)

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:

- 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: https://www.arcserve.com/support.
- 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 back up 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 will be 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.

Appendix B: Changing the IPMI Password

This section contains the following topics:

How to Change the IPMI Password (see page 66)

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.



- 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.

P	lease 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).

System	Server Health	Configuration	Remote Control	Virtual Media	Maintenance	Miscellaneous	Help	
System	😑 Si	ummary						
FRU Reading	Firmwa	re Revision : 01.70	IP address :	XXX XXX XXXX				
	Firmwa	re Build Time : 10/03/201	4 BMC MAC a	ddress : 00:25:90:9c:47	:a8			
Hardware Info	ormation BIOS V	ersion : 1.0a	System LAN	1 MAC address : 00:25:	90:90:5f:90			
	BIOS B	uild Time : 08/29/2014	System LAN	2 MAC address : 00:25:	90:90:5f:91			
			System LAN	3 MAC address : 00:25:	90:9c:5f:92			
			System LAN	4 MAC address : 00:25:	90:9c:5f:93			
	Rem	ote Console Preview						
		Refres	h Preview Image					
		Relate to Separat	Sour's Relay's Indallier					
		1011 1.001 101.001 1		0				
	later a function log			, Br.				
				Terr Clow,				
		1711 C Hain None 17101 C clie 1721 C Toluce 17111 C clie	era nita					
		IF31 ⊂ 3a4Ke1P121 ⊂ IF41 ⊂ 3a8£P301 ⊂						
		IFS1 C Uinhuise IF61 C Couldt						
		[F71 < 38% (#11						
		(F9) C OpendieSE						
		71 Natio 72 Feb E3 38 F4 SedE F5 U		dere 711 deste				
		here L 1						
	Powe	er Control via IPMI						
		Host	t is currently on					
		Power On	Power Down	Reset				

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

iystem	Server Health	Configuration	Remote Control	Virtual Media	Maintenance	Misc ella neous	Help	
Configuration	•	Configuration						
Alerts		ise these pages to conf	igure various settings, s	uch as alerts, users,	or network etc.			
Date and Time		Alerts : Add, edit or	remove alert destinations					
C LDAP		Date and Time :Con	figure Date and Time Setting	s				
Active Directory		 Active Directory :C 	onfigure settings to authentic	ate and access the Act	e Directory server	as the Confiserver, High	the Save Ductor to say	e you charges.
RADIU S		 RADUS :Configure Mouse mode : Configure 	s ettings to authenticate and	access the RADIUS service conside	er.			
Diana Mouse Mode		• Network : See the I	AC address or change net	rork settings , including d	mamic and static IP assignm	ent		
Network		 Dynamic DNS : Configure th 	figure dynamic update prope e SMTP email servier	rties for Dynamic DNS				
Dynamic DNS		SSL Certificate : Th	e dates for the default certifi	cate and private key are	show n below . To upload a r	ew SSL certificate, use the	Browse button to new	rigate to the certificate and press the Upload button.
SMTP		Oslers : Add, edt, or Port : Configure the	port number of the services					
SSL Certificatio	n	PAccess Control : SNLE - Continues S	Add, edit or remove Places	is rules				
Users		Fan Node : Configu	e the fan mode					
Dort		Web Session : Cont	igure the websession value					
IP Access Contr	ol lo							
SNMP								
Fan Mode								
Web Session								

10. Click the Users option in the Configuration sidebar.

- 11. Select the User: (ADMN) from the Users List.
- 12. Click Modify User and the Modify User screen is displayed.

ystem	Server Health	Configuration	Remote Control	Virtual Media	Maintenance	Miscellaneous	Help
Configuration	•	Modify User					
Alerts							
Date and Time		Enter the new informatio	n for the user below and pro	es s Modily. Pres s Cance	to return to the user list.		
LDAP							
Active Directory		User Name:					
S RADIU S		Password					
Mouse Mode		Confirm Password					
Network		Network Privileges:	~				
Dynamic DNS	[Modify Cancel					
SMTP							
SSL Certification							
😌 Users							
Port							
IP Access Contro	k						
SNMP							
Fan Mode							
Web Session							

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

Appendix C: Troubleshooting

This section contains the following topics:

Linux Backup Server Fails to Connect from the Console (see page 70)

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.
- 5. 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 in to 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.