Arcserve® 9000 Appliance Series Secured by Sophos

Frequently Asked Questions

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General

Q What is the Arcserve 9000 Appliance Series Secured by Sophos?

The Arcserve® 9000 Appliance Series Secured by Sophos is the first and only means to neutralize ransomware attacks, deliver effective disaster recovery (DR), and restore data - an all-in-one data protection strategy that can be deployed in just 15 minutes flat.

Powered by award-winning Arcserve Unified Data Protection (UDP) and Sophos Intercept X Advanced cybersecurity, Arcserve Appliances uniquely combine deep learning endpoint protection with onsite and offsite business continuity capabilities for a multilayered approach that delivers complete IT resiliency.

Q What are key benefits of choosing the 9000 Series?

1. The 9000 Series help you to entirely mitigate ransomware with all-in-one security and data protection solution delivering prevention and recovery of backed up data, so you can avoid having to have the "how do we pay ransom" conversation.
2. With the 9000 Series you can rely on proven solution designed by experienced vendors combining over 70 years of experience protecting critical business systems and data from disruptions and gain peace of mind with single point of contact for backup, security, hardware, and cloud services.
3. The 9000 Series delivers reliable, scalable, affordable, all-in-one DR, backup, and application availability with up to 20 CPU cores, 1,536 GB RAM and optional SSD Flash Expansion Kit to spin up dozens of VMs on the appliance itself; optional Arcserve Continuous Availability add-on to deliver high availability for mission-critical systems; as well as integration with Arcserve UDP Cloud Hybrid Secured by Sophos for an off-site disaster recovery.
4. The 9000 Series scales together with business and IT infrastructures, delivering up to 504TB effective capacity per appliance, ultra-efficient source-based deduplication with up to a 20:1 ratio to protect more data, and an optional ability to expand the capacity in-place when needed.
5. The 9000 Series simplifies business continuity and DR management by providing software, hardware and cloud services from a single vendor and single point of contact. With 15 minutes to install and configure, an entire IT infrastructure can be protected in no time. And in case of any issues, Arcserve provides onsite hardware support in as little as 4 hours to assure peace of mind for every IT professional.

Q **How are the 9000 Series best used?**

Businesses of all sizes leverage Arcserve Appliances to streamline a wide variety of deployment scenarios:

- Single-site protection for physical or virtual systems, including x86 and non-x86
- Primary site protection combined with copy to the Arcserve Cloud
- Cross-site protection between two sites
- Central appliance site with multiple branch offices
- Hybrid deployment with a combination of on-premises local, remote and cloud systems

Q **What are key features of the 9000 Appliance Series Secured by Sophos?**

The 9000 Appliance Series Secured by Sophos allows you:

- **Prevent Ransomware Attacks on Critical Data Backups**
    - o Implement secure disaster recovery and backup for physical servers and cloud Windows / Linux instances.
    - o Protect VMware, Hyper-V, RHEV, KVM, Nutanix AHV, Citrix and Xen VMs with agentless and agent-based backup.
    - o Back up and recover Microsoft Office 365, UNIX, FreeBSD, AIX, HP-UX, Solaris, Oracle Database, SAP HANA and more, protecting entire IT infrastructures from ransomware.
    - o Spin up dozens of VMs on the appliance with up to 20 cores on Intel Xeon CPUs and up to 1,536GB DDR4-2400Mhz RAM.
- **Secure Backups from Any Threat**
    - o Keep data and system backups safe with Sophos Intercept X Advanced for Server, preloaded and shipped on Arcserve Appliances.
    - o Stay protected against any threat, including unknown malware, with a deep learning neural network combined with signature-based protection from common threats.
    - o Prevent major hacking techniques, including credential harvesting, lateral movement, and privilege escalation with exploit prevention.
    - o Stop ransomware attacks on backup data with CryptoGuard and master boot record attacks with WipeGuard.
- **Scale Without Limitations**
    - o Enable safe business and IT growth with 11 configuration options that range from 12TB to 504TB of effective capacity per appliance.
    - o Keep up with data growth by expanding original capacity by up to four times with in-field, in-appliance Expansion Kits.
    - o Seamlessly scale up and out to the cloud with fully integrated hybrid cloud services.
    - o Reduce backup storage requirements up to 95% with built-in SSD drives and hyper-efficient global deduplication.
- **Eliminate Ransomware-induced IT Disruptions**
    - o Quickly install the only "set it and forget it," multi-layered anti-ransomware solution, proven to be deployable in under 15 minutes.
    - o Protect hundreds of systems with scalable, policy-based disaster recovery and backup management.
    - o Reclaim up to 50% more time to spend on strategic IT initiatives.
    - o Keep business and IT stakeholders informed with SLA reporting that includes recovery time objective (RTO) and recovery time actual (RTA) comparisons.

Q   What models are available in the 9000 Appliance Series?

There are 11 models in the 9000 Series:

Model	Effective Capacity	Usable Capacity	Form Factor	CPU	RAM	SSD
9012	12	4				
9024	24	8	1U	Single	48 GB	480 GB
9048	48	16				
9072DR	72	24				
9096DR	96	32				
9144DR	144	48				
9192DR	192	64	2U	Dual	192 GB	2x 1.9 TB
9240DR	240	80				
9288DR	288	96				
9360DR	360	120				
9504DR	504	168	2U	Dual	384 GB	2x 1.9 TB

Q   Where can I find additional technical specifications of the 9000 Appliance Series?

Detailed technical specifications for 9000 Series are provided in the 9000 Series datasheet, available on the Arcserve Website.

Q   What Arcserve software comes with the 9000 Appliance Series?

The 9000 Appliance Series are shipped with preinstalled Arcserve UDP software (UDP).

- Models 9012, 9024 and 9048 include the Advanced Edition of UDP, and the optional upgrades to UDP Premium Edition and Arcserve Continuous Availability are offered.
- Models 9072DR, 9096DR, 9144DR, 9192DR, 9240DR, 9288DR, 9360DR and 9504DR include the Premium Edition of UDP, and the Arcserve Continuous Availability add-on is optional.

More details about UDP editions can be found in the Arcserve UDP Licensing Guide, available on the Arcserve Website.

Q   How does Sophos secure 9000 Appliance Series?

To protect data and system backups from ransomware and other attacks, 9000 Series come preinstalled with Sophos Intercept X Advanced for Server, advanced endpoint protection that combines a signature-based and signatureless malware detection, deep learning neural network, anti-exploit technology, CryptoGuard anti-ransomware and WipeGuard technologies, and more to stop the widest range of endpoint threats.

The result is the first and only complete, multi-layered solution to entirely neutralize cyber-attacks, which allows you to keep operations running smoothly and meet service level agreements (SLAs) with turnkey backup, disaster recovery, high availability, and cyber-security. Now IT organizations can complete end-to-end protection delivered by Sophos Intercept X Advanced for Server integrated with Arcserve Appliances – a plug-and-play solution for disaster recovery and application availability.

Q   Do the 9000 Appliance Series integrate with Arcserve, public or private clouds?

Yes, the 9000 Series integrates with the cloud via an optional add-on, Arcserve UDP Cloud Hybrid Secured by Sophos – a secure, offsite backup-as-a-service (BaaS) and Disaster recovery-as-a-service (DRaaS) for complete protection of IT infrastructures from any disaster.

You can choose from a variety of available Arcserve datacenters and Amazon AWS regions to suite your corporate needs and regulatory requirements. Backups staged to the Arcserve Cloud data centers and virtual machines can be spun up in the cloud.

In addition, UDP software natively integrates with Amazon AWS, Microsoft Azure and other private and public clouds to stage backups and spin up virtual machines/instances.

Q   Where do I find more information about the 9000 Series Appliances?

More information about 9000 Series is available on the [Arcserve Website](#).

Q   I still cannot find an answer to my question. What do I do?

Feel free to reach out to your Arcserve Partner or Arcserve Representative who will be happy to answer any questions you may have 8000/7000 Series

Q   What is new in the 9000 Appliance Series compared to the 8000 Series Appliances?

When compared to the 8000 Series, the new 9000 Series delivers:

- Prevention and mitigation of ransomware – a first and last line of defense with integrated Sophos Intercept X Advanced and Arcserve UDP data protection to accelerate threat prevention and immediately restore backed up data
- All-in-one DR, backup, and application availability with up to 20 CPU cores and 1,536 GB RAM.
- Streamlined in-appliance expansion capabilities by simply adding HDDs and RAM to the appliance itself – no shelves required.
- Additional reliability with full component redundancy – all DR models include dual CPUs, dual redundant power supplies, RAID-6 HDDs, and RAID-1 SSDs.
- Advanced scalability with up to 504TB of effective capacity – 2X from the largest model in the 8000 Series.
- Outstanding compatibility with existing IT infrastructures, as the new 9000 Series hardware is produced by the #1 Server Hardware maker in the world.
- Great peace of mind with as-fast-as 4-hour onsite support for hardware parts replacement.

Q   When will the support for 8000/7000 Series Appliances end?

Support for the 8000 and 7000 Series will continue to be provided according to the [Arcserve Support Policy](#) available on the Arcserve Website.

Q   Can backups from 8000/7000 Series Appliances be migrated to 9000 Appliance Series?

Yes, backups from 8000 or 7000 Series Appliances can be migrated to the new 9000 Appliance Series. The detailed guidelines for the migration can be found in the [Appliance User Guide](#).

Q   What happens to 8000 Series Appliance orders if the purchase order has been already submitted?

The 8000 Series Appliances will be delivered as per the original purchase order.

Purchasing and Availability

Q   When did 9000 Appliance Series become available for purchase?

The new 9000 Appliance Series, optional edition and software upgrades, applicable maintenance and add-on cards are available for purchase since **February 5, 2019**.

Q   In what countries/territories are the 9000 Appliance Series available for purchase?

The new 9000 Appliance Series are available worldwide.

As with any Arcserve product, 9000 Appliance Series are not available in Cuba, Iran, North Korea, Sudan and Syria, and any other countries designated as embargoed countries by the Bureau of Industry and Security of the Department of Commerce of the United States.

Note that the Arcserve Appliances available for purchase in Japan differ from the appliances available elsewhere. Please contact an Arcserve Representative in Japan for more details.

Q **When did the Expansion Kits become available for purchase?**

Arcserve 9000 Series Expansion Kits are available for purchase from **May 1, 2019**.

Q **When did the SSD Flash Expansion Kits become available for purchase?**

Arcserve 9000 Series SSD Flash Expansion Kits are available for purchase from **November 16, 2020**.

Q **When did 9000 Appliance Series start being shipped with Sophos?**

The Arcserve 9000 Appliance Series started to include preinstalled Sophos Intercept X Advanced for Server in **October 2019**.

Q **My Appliance does not include Sophos. Can I get it?**

Yes! As long as the appliance is under maintenance, you are eligible to get and install Sophos Intercept X Advanced for Server on the appliance – instructions are available in the Arcserve Appliance User Guide. Arcserve Support experts would be glad to guide you through the simple process.

Q **Can I buy an appliance directly from Arcserve?**

Arcserve is a 100%-channel driven organization, delivering 9000 Series Appliances via an extensive network of global partners. Please contact Arcserve to find the nearest Arcserve partner, or to see if your preferred IT solution provider partners with Arcserve. You can also locate Arcserve resellers on the "find a partner" page on the Arcserve website.

Q **Can I try an appliance before buying?**

Yes! The Arcserve 9000 Series Try and Buy program is available to all new and existing Arcserve customers, and to prospects who demonstrate a significant interest in Arcserve Appliances and require validating product functionality before the purchase. Please contact Arcserve Partner or Arcserve Representative for more details.

Licensing

Q **How are the appliances licensed?**

Your Arcserve 9000 Series appliance purchase include the licenses for an operating system, preinstalled Sophos Intercept X Advanced for Server, and preinstalled Arcserve UDP software (UDP) licensed to the target capacity of the appliance. There are no limitations on the number of protected systems, sockets or OS instances, or the capacity of the protected data.

- Models 9012, 9024 and 9048 include the Advanced Edition of UDP, with optional upgrades to the Premium Edition of UDP and Arcserve Continuous Availability.
- Models 9072DR, 9096DR, 9144DR, 9192DR, 9240DR, 9288DR, 9360DR and 9504DR include the Premium Edition of UDP, with an optional Arcserve Continuous Availability add-on.

The only compulsory add-on to any 9000 Series Appliance purchase is the maintenance program, available in Gold and Platinum options in 1-, 3- and 5-year durations.

An optional software upgrade to the Premium Edition of UDP and optional Arcserve Continuous Availability add-on require the purchase of a corresponding maintenance subscription for the same duration as the maintenance for the appliance itself.

Q   How are the Expansion Kits licensed?

Arcserve Appliance 9000 Series Expansion Kit purchase includes the hardware parts for expansion and the software licenses for the expanded capacity.

The only compulsory add-on to any 9000 Series Appliance Expansion Kit purchase is the maintenance program, available in Gold and Platinum options in 1-, 3- and 5-year durations. Note, the maintenance option of the Expansion Kit should match the maintenance option of the appliance. For example, if the appliance is covered by the Platinum maintenance option, the Expansion Kit must be purchased with the Platinum Maintenance option as well.

Q   Can Arcserve Backup be used with or on the appliance?

Yes! Arcserve Backup is included with the Premium edition of Arcserve UDP software. It is:

- Available as an optional add-on for models 9012, 9024 and 9048.
- Included with models 9072DR, 9096DR, 9144DR, 9192DR, 9240DR, 9288DR, 9360DR and 9504DR.

Arcserve Backup, included with add-ons or DR models, is licensed for the target capacity of the appliance.

Arcserve Backup backs up UNIX, FreeBSD, AIX, HP-UX, Solaris, Oracle Database, SAP HANA and other systems and data to the appliance, and copy these backups, appliance data stores and the appliance itself to the tape drives, multi-drive tape libraries, and autoloaders connected to the licensed appliance.

Q   Can Arcserve Continuous Availability be used with or on the appliance?

Yes! An optional Arcserve Continuous Availability add-on enables an ability to make mission-critical server continuously available with a replica on the licensed appliance. There are no technical differences of the optional Arcserve Continuous Availability add-on in 9000 Appliance Series and the standalone Arcserve Continuous Availability software. In fact, version upgrades, updates, patches, and hotfixes can be applied to both the appliances and standalone software.

The major difference is licensing – the optional Arcserve Continuous Availability add-on in the 9000 Series allows to perform its functions only if the target node for high availability and/or replication scenarios are located on the licensed appliance.

Q   Is it a requirement to purchase any software along with the appliance?

No – all the necessary software is preloaded and shipped with the appliance. You can purchase optional software upgrades and add-ons to extend the appliance functionality.

Sophos Intercept X Advanced for Server is also preinstalled, and its license is included with the appliance maintenance. As long as the appliance remains under maintenance, Sophos Intercept X will be active, and you will receive necessary updates.

You can install third-party software on the appliance – including infrastructure monitoring, management tools and other software to integrate appliances into the IT infrastructure. As with any third-party tools, if assistance is required, you may need to contact the relevant vendor's technical support department.

Shipping and Delivery

Q Who pays for shipping and delivery?

Shipping charges and fees are not included in the cost of appliances or add-ons, and must be paid separately by either a distributor, a partner, or a customer. This allows Arcserve to provide affordable pricing and licensing, instead of artificially inflating the price to account for unpredictable shipping costs.

If a distributor, a partner, or a customer have a contract with a shipping company, Arcserve can utilize their account number to charge the shipping directly to them. Alternatively, Arcserve can pay shipping charges/fees and invoice the party responsible for the shipping directly.

In both cases, Arcserve will handle the entire shipping process and all necessary paperwork.

Q Who pays for customs, import, VAT, etc.?

As with shipping, all customs fees, import, and other taxes are not included in the licenses, and must be paid separately by either a distributor, a partner, or a customer. This allows Arcserve to provide affordable pricing and licensing, instead of artificially inflating the price to account for variable costs and taxes. For most countries, the receiving party – a distributor, a partner, or a customer – must work with local customs and authorities, as well as pay all associated taxes and fees.

An Arcserve Partner or Arcserve Representative will gladly assist in the process and help with paperwork.

Q Are there any changes to order processing procedures for 9000 Appliance Series as compared to 8000 Series?

No, the ordering procedures related to procuring the 9000 Appliance Series are the same with the previous series of appliances.

An Arcserve Partner or Arcserve Representative will gladly answer any questions regarding order processing.

Q How will the appliances be shipped?

Upon the receipt of the purchase order, Arcserve will process the order and initiate all necessary steps culminating with the appliance arriving at your facility. Once the appliance is ready in Arcserve's production facility, it will be given to the designated shipper for delivery to your facility.

Q How fast will the appliance be delivered?

Within the continental United States and Europe, delivery time is generally 1-2 weeks from ordering depending on stock availability. Note, this time does not include customs processing, which may take longer period depending on the country.

An Arcserve Partner or Arcserve Representative will gladly help during the entire process to ensure the paperwork is in order and appliances are delivered as soon as possible.

Q What to do if I received an appliance and it does not work?

If the appliance does not boot up within first 30 days of shipping to your location, upon confirmation by the Arcserve Customer Support, Arcserve will replace the appliance, and will cover the costs of domestic shipping to and from the location of the appliance installation via the original shipping method. You will still be responsible for international shipping charges, customs, and taxes, if any.

More details can be found in the [Arcserve Appliance Support Policy](#) on the Arcserve website.

Q What to do if an Appliance, under warranty, does not work?

The first thing to do is to contact Arcserve Customer Support. If determined necessary, and upon completion of all required diagnostics, the onsite technician may be dispatched to fix the appliance.

More details can be found in the [Arcserve Appliance Support Policy](#) on the Arcserve website.

Maintenance and Support

Q   What maintenance programs are available?

There are two maintenance programs available for 9000 Appliance Series – **Gold** and **Platinum.**

Gold Maintenance includes next business-day, on-site hardware parts replacement, license for Sophos Intercept X Advanced for Server, software upgrades and access to 24x7 phone, online and email technical support. One, three and five-year subscription options are available.

Platinum Maintenance includes a four-hour, on-site hardware parts replacement, license for Sophos Intercept X Advanced for Server, as well as software upgrades and access to 24x7 phone, online and email technical support. One, three and five-year subscription options are available.

Note: Platinum Maintenance is subject to availability, depending on the location of the appliance installation and operation. Your Arcserve Partner or Arcserve Representative can advise on the availability of the Platinum Maintenance at any time, including before the purchase.

Q   What is the main difference between Gold and Platinum maintenance?

Gold Maintenance includes **next-business-day,** on-site hardware parts replacement, while Platinum Maintenance includes a **four-hour,** on-site hardware parts replacement.

Note: Platinum Maintenance is subject to availability, depending on the location of the appliance installation and operation. An Arcserve Partner or Arcserve Representative can advise on the availability of the Platinum Maintenance at any time, including before the purchase.

Q   Why should I check availability of the Platinum maintenance with Arcserve?

The only difference between Platinum and Gold maintenance is four-hour onsite support, which is subject to availability depending on the exact location of the appliance installation and operation. Arcserve can advise on the availability of the four-hour onsite support for any location at any time, including before the purchase.

Arcserve will not be able to sell an initial Platinum Maintenance if the four-hour onsite support is not available for the location of the appliance installation.

Note: if an appliance is relocated from a location with an approved four-hour onsite support availability to a location where four-hour support is not available, the onsite support will be delivered next-business-day, even as the maintenance program remains Platinum.

Q   Is there any other maintenance program for 9000 Appliance Series, i.e., Platinum Plus?

No, only Gold and Platinum maintenance programs are available for the 9000 Series.

Q   What are duration options for maintenance subscriptions?

One, three and five-year subscription options are available for both maintenance programs.

Q   When is the phone/email/online support available?

Per the Arcserve Support Policy, 24x7x365 phone support in English is available for Severity-1 incidents. Arcserve also strives to respond the Severity-1 incident ticket by email within one hour of you submitting it online.

You have 24x7x365 access to https://support.arcserve.com for online technical support, and access to software product and documentation, downloads, fixes, service packs, patch downloads, user groups, user forums, FAQs, webcast recordings, usage tips, and technical updates.

All other phone and email support are provided during normal business hours of your location.

More details can be found in the Arcserve Support Policy.

Q   How do I get support for non-Arcserve components, including Sophos Intercept X?

Arcserve Customer Service supports all software, hardware components, add-ons, and kits provided and shipped by Arcserve, including Sophos Intercept X Advanced for Server. When required, Arcserve team may involve relevant vendors for in-depth expertise and advice – however Arcserve Support will remain the primary support contact throughout the process. Note, that any custom software or components, not provided by Arcserve, must be supported by relevant software vendors.

More details can be found in the Arcserve Support Policy.

Q   Is onsite support available in my country?

Onsite support is available in most locations, countries, and territories worldwide.

In select locations, due to the absence of the relevant facilities and other restrictions, the onsite support cannot be provided.

As of January 2019, this includes: Afghanistan, American Samoa, Antarctica, Cabinda, Canary Islands, Cape Verde, Central African Republic, Chad, Chatham Island, Christmas Island, Cocos Island, Cook Islands, Diego Garcia, Djibouti, Easter Island, Equatorial Guinea, Eritrea, Falkland Islands / Islas Malvinas, Greenland, Guantanamo Bay, Guinea-Bissau, Jan Mayen, Kyrgyzstan, Liberia, Madagascar, Madeira, Mariana Islands, Marshall Islands, Mayotte, Micronesia, Nauru, Niue, North Marianas, Saint Helena, Saipan, San Marino, Sao Tome and Principe, Somalia, Zanzibar, Tahiti, Tajikistan, Tokelau, Tuvalu, Wake Island, Wallis and Futuna Islands.

As for any Arcserve product, support is not available in Cuba, Iran, North Korea, Sudan and Syria, and any other countries designated as embargoed countries by the Bureau of Industry and Security of the Department of Commerce of the United States.

Q   Is 4-hour onsite support available in my country?

Four-hour onsite support is available in most countries and territories worldwide, and its availability depends on the exact location of the appliance installation. To best of our knowledge, nearly every supported country has locations where four-hour support is offered and provided.

An Arcserve Partner or Arcserve Representative can advise on the availability of the Platinum Maintenance for the exact location of appliance installation at any time, including before the purchase.

Q **How does the onsite support work?**

Following the completion of remote troubleshooting, diagnosis, and problem determination, an Arcserve support technician will arrange for the replacement parts to be dispatched to the location of the appliance and will schedule the on-site visit based on the maintenance agreement program and availability.

If the issue requires an on-site service technician visit for parts replacement, the following applies:

Response Time	On-Site Response Time	Terms & Conditions
Next Business Day	Following telephone-based troubleshooting and diagnosis, a technician responsible for parts replacement can be dispatched to arrive on-site the next business day. If you are not available on the next business day, you can choose any future business day at your convenience, with the same service conditions applied.	• Available five (5) days each week, ten (10) hours each day, excluding holidays. • Calls received by Arcserve after 5:00pm local time (Monday-Friday) and/or dispatches submitted after that time may require an additional business day for the service technician to arrive at your location.
4 Hours	A technician responsible for parts replacement should arrive on-site within **four hours** after completion of telephone-based troubleshooting. If you are not available within the next four hours, you can choose to receive service at any other time at your convenience.	• Available seven (7) days each week, twenty-four (24) hours each day – including holidays. • Available within select four (4) hour response locations.

Platinum Maintenance customers are entitled to both next-business-day and four-hour, on-site hardware support services. Platinum Maintenance is subject to availability, depending on the location of the appliance installation and operation. An Arcserve Partner or Arcserve Representative can advise on the availability of the Platinum Maintenance at any time, including before the purchase.

Q **What are the optional spare part kits?**

Optional spare part kits allow you to get a set of appliance spare parts to replace with or without help of an onsite technician in case of part failure.

Spares Kits include spare HDD, SSD, RAM, power supply and a fan. Here are the contents of Spares Kits for specific appliance models:

Appliance Model	HDD	SSD	RAM	Power Supply	Fan
9012	1x2TB				
9024	1x4TB	1x480GB	2x8GB	550W	Included
9048	1x8TB				
9072DR					
9096DR					
9144DR	1x8TB	1x1.92TB	2x16GB	750W	Included
9192DR					
9240DR					
9288DR	1x12TB	1x1.92TB	2x16GB	750W	Included
9360DR					
9504DR	1x12TB	1x1.92TB	2x32GB	750W	Included

Q **Does the appliance maintenance come with free software upgrades?**

Yes, throughout the duration of the Gold or Platinum maintenance program subscription, you are entitled to free upgrades of Arcserve and Sophos Intercept X software.

Q **Does the appliance come with the hardware warranty?**

Yes, Arcserve Appliances are provided with the hardware warranty for the duration of the maintenance program subscription in the initial purchase. More details can be found in the [Arcserve Appliance Support Policy](#) on the Arcserve website.

Q **I have a 7000/8000 Series Appliance with maintenance that includes a Refresh program. How do I refresh the appliance?**

Arcserve UDP 8000 Series Appliances covered by three-year Platinum Plus maintenance agreements and 7000 Series Appliances covered by three-year Platinum maintenance agreements can be refreshed after 36 months from the original purchase.

If you have completed and renewed your three-year Platinum maintenance agreement for 7000 Series Appliance or Platinum Plus maintenance agreement for 8000 Series Appliance, you can request a free-of-charge replacement appliance of a similar configuration.

The exact replacement model is decided by Arcserve based on the stock availability. Upon receiving the replacement appliance, you have thirty days to ship the original Appliance, as well as an expansion shelf, if any, back to Arcserve or be required to pay the full price of the replacement appliance.

In addition to receiving the free replacement appliance, you must extend, reset, and upgrade your old maintenance agreement to the Platinum maintenance agreement for a replaced model, such that the renewed Platinum maintenance agreement for a replaced model covers it for at least three years from the date of the replacement.

To be eligible for the Arcserve Appliance Refresh program, the three-year Platinum Plus Maintenance agreements for 8000 series, or Platinum Maintenance agreement for 7000 series, must be continuous and have never been terminated. If a three-year maintenance agreement has terminated after 36 months of the agreement and no renewal has taken place, replacement appliances must be purchased at a full price.

To request the refresh, please contact your preferred Arcserve partner representative who will assist you through the process.

Q **I have a 7000/8000 Series Appliance with maintenance that includes an Upgrade program. How does I upgrade the appliance?**

If you have a three-year Platinum Plus maintenance agreement for the 8000 series appliance, or a three-year Platinum maintenance agreement for you are the 7000 series appliance, you can purchase a newer Appliance model at a 40% discount from the list price. You can choose a higher model of the replacement appliance, depending on the original appliance model and installed expansion. In addition to the upgrade, you must extend, reset, and upgrade the old maintenance agreement to the Platinum maintenance agreement for an upgraded model at a full price, such that the Platinum Maintenance agreement for an upgraded model covers it for at least three years from the date of the upgrade.

Upon receiving the upgraded appliance, you have thirty days to ship the original appliance, as well as an expansion shelf, if any, back to Arcserve or be required to pay the full price of the new appliance. To be eligible for the Arcserve Appliance Upgrade program, the three-year Platinum Plus Maintenance agreements for 8000 series, or Platinum Maintenance agreement for 7000 series, must be continuous and have never been terminated. If your three-year maintenance agreement terminated after 36 months of the agreement and no renewal has taken place, upgraded appliances must be purchased at a full price.

Here are the models of similar configuration for the Upgrade program:

Original Model	Original Expansion Shelf			
	None	8TB	16TB	40TB
7100 (3TB)	8100 (4TB) or 9012	N/A	N/A	N/A
7200 (6TB)	8100 (6TB) or 9024	N/A	N/A	N/A
7300 (9TB)	8200 (12TB) or 9048	N/A	N/A	N/A
7400 (16TB)	8300 (16TB) or 9048	N/A	N/A	N/A
7500 (20TB)	8300 (20TB) or 9072DR	N/A	N/A	N/A
7600 (30TB)	8300 (32TB) or 9096DR	N/A	N/A	N/A
8100 (4TB)	9012	9048	N/A	N/A
8100 (6TB)	9024	9048	N/A	N/A
8200 (8TB)	9024	9048	9072DR	N/A
8200 (12TB)	9048	9072DR	9096DR	N/A
8300 (16TB)	9048	9072DR	9096DR	9192DR
8300 (20TB)	9072DR	9096DR	9144DR	9192DR
8300 (24TB)	9072DR	9096DR	9144DR	9192DR
8300 (28TB)	9096DR	9144DR	9144DR	9240DR
8300 (32TB)	9096DR	9144DR	9144DR	9240DR
8300 (36TB)	9144DR	9144DR	9192DR	9240DR
8300 (40TB)	9144DR	9144DR	9192DR	9240DR
8400 (32TB)	9096DR	9144DR	9144DR	9240DR
8400 (40TB)	9144DR	9144DR	9192DR	9240DR
8400 (48TB)	9144DR	9192DR	9192DR	9288DR
8400 (56TB)	9192DR	9192DR	9240DR	9288DR
8400 (64TB)	9192DR	9240DR	9240DR	9360DR
8400 (72TB)	9240DR	9240DR	9288DR	9360DR
8400 (80TB)	9240DR	9288DR	9288DR	9360DR

To request an upgrade, please contact your preferred Arcserve partner representative who will assist you through the process.

Note that 40% discount applies only to the upgraded appliance unit, and does not apply to add-ons, upgrades, expansion kits, spares kits or the maintenance agreement.

An Arcserve Partner or Arcserve Representative will be happy to answer any questions you may have about this program.

Q **Can I renew with a different maintenance program after the first year? Will I be eligible for the benefits of this new maintenance level?**

You can choose to renew with a different maintenance program upon renewal, provided that the new maintenance program is provided and offered at the location of the appliance installation. Any additional benefits of the new maintenance level will start 30 days after the beginning of the new maintenance subscription period.

Q   Can I renew the maintenance after it has expired?

Yes, you can renew your maintenance after it has expired. The renewed maintenance will start from the date when the previous maintenance has expired. When you are renewing an expired maintenance, hardware support benefits, including on-site support, will start 30 days after Arcserve receives the renewal order.

You can choose to renew with a different maintenance program, provided that the new maintenance program is provided and offered at the location of the appliance installation. As with hardware support, the additional benefits of the new maintenance level will start 30 days after you place the renewal order.

Q   Can I buy an appliance without maintenance?

No, Arcserve Appliances can only be purchased with the relevant maintenance contract. You can select an available maintenance program and choose the duration that fits your requirements.

Q   What to do if the Appliance just arrived and it does not work?

If the appliance does not boot up within the first 30 days of shipping to your location, upon confirmation by Arcserve Customer Support, Arcserve will replace the appliance, and will cover costs of domestic shipping to and from the location of appliance installation via the original shipping method. You continue to be responsible for international shipping charges, customs, and taxes, if any.

Q   What to do if the Appliance, under warranty, stopped working?

First thing to do is to contact Arcserve Customer Support. If determined necessary and upon completion of all required diagnostics, an onsite technician may be dispatched to fix the appliance.

Q   Will the onsite technician take back the defective parts?

Yes, during the onsite support process the technician will take the defective parts, including HDDs, back for further analysis and possible return to the part supplier.

If you are required to keep the defective HDDs for security purposes, you must purchase an optional "Keep Your Hard Drive Service" that allows them to keep the hard drives upon replacement by a technician.

"Keep Your Hard Drive Service" is available in 3-year and 5-year subscription per-appliance options, covering any appliance models and an unlimited number of HDD replacements for the period of the subscription.

Technical Questions

Q   How does the appliance installation process work?

Arcserve Appliances are based on a standard server-grade hardware, and the installation is nearly identical to provisioning of any other hardware server in the data center. The appliance is simply unpacked, installed in a rack cabinet, connected with all relevant cables, and powered on. A simple wizard guides through the initial configuration, and the appliance becomes ready to start protecting the IT infrastructure. You will also receive simple instructions on activating the Sophos Intercept X Advanced for Server that comes with the appliance.

Detailed Hardware Installation Guides and other documentation are available at the Arcserve Support Website.

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Q Does the UDP software in the 9000 Series differ from the UDP software licensed separately?

There are no technical differences of UDP software inside 9000 Appliance Series and the standalone UDP software. In fact, version upgrades, updates, patches, and hotfixes can be applied to both the appliances and standalone software.

The major difference is licensing – the UDP software in the 9000 Series is licensed per target capacity of the appliance and there are no limitations to the number of protected systems, sockets or OS instances, number of Microsoft Office 365 users, or the capacity of the protected data, as long as the backups are stored on the appliance. These backups can be later copied to the tape devices connected to the licensed appliance.

Standalone UDP software is licensed by either number of sockets in source servers, by number of protected OS instances, number of Microsoft Office 365 users, or by capacity of the protected data – without limitations for backup storage capacity or its type.

Q Does the Arcserve Backup software in the 9000 Series differ from the Arcserve Backup software licensed separately?

There are no technical differences of Arcserve Backup within 9000 Appliance Series and the standalone Arcserve Backup software. In fact, version upgrades, updates, patches, and hotfixes can be applied to both the appliances and standalone software.

The major difference is licensing – the Arcserve Backup software in the 9000 Series is licensed per target capacity of the appliance and there are no limitations to the number of protected systems, sockets or OS instances, or capacity of the protected source data, as long as backups are stored on the appliance. These backups can be later copied to the tape devices connected to the same appliance.

Q Does the Arcserve Continuous Availability software, formerly Arcserve RHA, in the 9000 Series differ from the Arcserve Continuous Availability software licensed separately?

There are no technical differences of the optional Arcserve Continuous Availability add-on in 9000 Appliance Series and the standalone software. In fact, version upgrades, updates, patches, and hotfixes can be applied to both the appliances and standalone software.

The major difference is licensing – the optional Arcserve Continuous Availability add-on in the 9000 Series allows you to perform its functions only if the target node for high availability and/or replication is located on the licensed appliance.

Q Why do 9000 Appliance Series include Sophos Intercept X Advanced for Server?

To protect data and system backups from ransomware and other attacks, 9000 Series are preinstalled with Sophos Intercept X Advanced for Server, advanced endpoint protection that combines a signature-based and signatureless malware detection, deep learning neural network, anti-exploit technology, CryptoGuard anti-ransomware and WipeGuard technologies, and more to stop the widest range of endpoint threats.

The result is the first and only complete, multi-layered solution to entirely neutralize cyber-attacks, which allows businesses to keep operations running smoothly and meet service level agreements (SLAs) with turnkey backup, disaster recovery, high availability, and cyber-security. Now IT organizations can complete end-to-end protection delivered by Sophos Intercept X Advanced for Server integrated with Arcserve Appliances – a plug-and-play solution for disaster recovery and application availability.

Q How does the activation process for Sophos Intercept X preinstalled on the appliance work?

Sophos Intercept X preinstalled on the appliance must be activated according to simple instructions that you receive in your email as part of the delivery process. More details are available on the Arcserve Support Website. Arcserve Customer Support will be happy to assist with any questions.

Q My 9000 Series Appliance does not have preinstalled Sophos Intercept X. Am I eligible to install it?

Yes! Customers with Arcserve 9000 Appliance Series shipped before October 15, 2019, are eligible to manually install Sophos Intercept X, included with the appliance. Detailed instructions on how to install Sophos Intercept X on the appliance are available on the Arcserve Support Website. Arcserve Customer Support will be happy to assist with any questions.

Q   Would Sophos Intercept X on 9000 appliances be kept up to date?

Yes. Sophos Intercept X on the Arcserve 9000 Appliance Series will be automatically updated with the latest malware definitions and other software improvements. Note, you must have valid and active maintenance for the Appliance in order to continue receiving Sophos updates.

Q   I have multiple Arcserve Appliances. Can Sophos Intercept X on all appliances be managed under one account?

Yes! Sophos Intercept X installed on all Arcserve Appliances can be managed from the same interface and the same account in Sophos Central.

Q   I already have Sophos Intercept X in my environment. Can Sophos Intercept X on the Arcserve Appliance be managed from my existing Sophos Central account?

In order to manage the Sophos Intercept X provided with the Arcserve Appliance, you must provide a separate email address for a dedicated account on Sophos Central to be able to receive free Sophos Intercept X Advanced Server included with Arcserve Appliances. You can also choose to uninstall the bundled version and install a separately licensed copy of Sophos Intercept X.

Q   Can I uninstall Sophos Intercept X and install another security solution?

Arcserve strongly recommends protecting the appliance with the proven and reliable solution from the IT security industry leader – Sophos. With Sophos Intercept X, you receive Sophos Intercept X updates and upgrades at no cost, as long as the appliances are under maintenance. In addition, Arcserve Customer Service is the single point of contact for any support inquiries, including Sophos Intercept X.

If you choose to do so, you can uninstall Sophos Intercept X Advanced for Server included with Arcserve Appliances and install another security solution of your choice. Note, that Arcserve does not certify any other solutions to be compatible with Arcserve Appliances and does not provide support for any issues related to 3rd-party products, including compatibility with the appliance software and hardware components.

Also note, it is strongly not recommended to operate appliances without a security solution installed.

Q   Does the 9000 Series include deduplication? What ratios does it achieve?

Yes, 9000 Appliance Series are designed for the built-in 4KB-block, source-side, global deduplication. The deduplication allows to store significantly more backups, protect more data and systems without needing extra storage capacity. The 9000 Series can deliver deduplication ratios of 20:1 and more.

Most Arcserve Appliance customers report real-life deduplication ratios of 7:1 to 10:1. To avoid setting unachievable expectations, Arcserve calculates effective capacity of the appliance as three times the usable capacity, which represents conservative deduplication ratios of 3:1 to 4:1, depending on the appliance model.

Your actual ratio may vary, depending on your data types, backup type, backup schedule, retention policy, as well as other factors.

Q   Why do appliances include SSDs?

Arcserve Appliances are powered by the built-in block-based, source-side, global deduplication. To identify a duplicate data block, the deduplication process calculates its checksum, named *hash*, and compares the hash to the database of all hashes backed up previously. If the hash (and hence the identical duplicate block) is already stored on the appliance, the deduplication will not store a duplicate copy of the same data block again and will not even transfer the block over network.

The process of hash comparison during the backup creates a high number of input-output (IO) operations and, to be efficient, requires a storage device with very high IOPS (IO operations per second).

Enterprise-grade SSDs installed on the Arcserve Appliances are perfect for deduplication, as they can process hundreds of thousands IO operations per seconds (IOPS), compared to maximum thousands by the spinning HDDs.

Q   What is the maximum backup throughput that 9000 Appliance Series deliver?

Based on Arcserve Performance Lab tests, the Arcserve Appliance models 9012, 9024 and 9048 deliver up to 20 TB/hour throughput based on global source-side deduplication with a 98% deduplication ratio.

The Arcserve Appliance models 9072DR, 9096DR, 9144DR, 9192DR, 9240DR, 9288DR, 9360DR and 9504DR deliver up to 76 TB/hour throughput based on global source-side deduplication with a 98% deduplication ratio.

Actual performance of the appliance in a specific IT environment may differ, depending on configuration of source systems, network throughput, deduplication ratio and a multitude of other factors.

Q   What is the difference between Raw, Usable, Effective and Available Capacity?

Raw Capacity is the sum of capacities of hard drives in the appliance, not counting SSDs. For example, the 9360DR model has the raw capacity of 144TB, as it comes with 12 HDDs, 12TB each.

Usable Capacity is a sum of total capacities of all HDD volumes available to the operating system, not counting the SSDs. In general, it would be the raw capacity minus RAID-6 overheads. For example, the 9360DR model has a usable capacity of 120TB.

Effective Capacity is an estimated volume of backups that can be stored on the appliance, taking deduplication into account. Arcserve calculates effective capacity of the appliance as three times the usable capacity. For example, the 9360DR model has a usable capacity of 360TB.

For your convenience, effective capacities of 9000 Series models are indicated in the model number. Note, your actual volume of backups may be different, depending on data types, backup type and schedule, deduplication ratios, as well as other factors. For many Arcserve customers, actual volume of backups significantly exceeds the published effective capacity.

Available Capacity of the 9000 Series Appliance is a sum of free spaces on all HDD volumes dedicated to backup data stores. Generally, available capacity is equal to usable capacity minus the size of the volumes dedicated to OS, recovery and EFI partitions, totaling approximately 250GB.

Q   Why is the disk capacity shown in Windows less than stated in Arcserve's documentation?

All capacities provided in the Arcserve documentation, technical specifications and this FAQ are provided according to common standards of storage industry – in **decimal** gigabytes and terabytes – with 1GB equal to 10^9 or 1,000,000,000 bytes, and 1TB equal to 1,000GB, 10^{12} or 1,000,000,000,000 bytes.

Components of Windows operating system, including Windows Disk Management and other tools, use **binary** gigabytes and terabytes – with 1GiB equal 2^{30} or 1,073,741,824 bytes and 1TiB equal 2^{40} or 1,099,511,627,776 bytes.

This may cause indicated GB and TB capacities to be different from the Arcserve specifications by up to 10%, and this difference should be expected.

Q Can storage capacity of the 9000 Appliance Series be expanded?

Yes! Models 9072DR, 9096DR, 9144DR, 9192DR, 9240DR, 9288DR and 9360DR can be expanded with a compatible Expansion Kit that consists of additional hard drives, RAM and expanded software licenses.

The Expansion Kit installs into the appliance itself and does not require any additional space in your rack cabinets, extra wiring, power or cooling, making the installation process easy and straightforward.

Here are the details of available five models of expansion kits and the resulting effective capacity of your appliance:

	Expansion Kit model	9X-48	9X-96	9X-144	9X-192	9X-216
Specs	Additional Effective Capacity (TB)	48	96	144	192	216
	Additional Usable Capacity (TB)	16 TB	32 TB	48 TB	64 TB	72 TB
	HDDs	4x8TB	6x8TB	8x8TB	10x8TB	11x8TB
	Extra RAM	64GB (4x16)				
Compatible Appliance Models	9072DR	120	168	216	264	288
	9096DR	144	192	240	288	-
	9144DR	192	240	288	-	-
	9192DR	240	288	-	-	-
	9240DR	288	-	-	-	-
	9288DR	336	384	-	-	-
	9360DR	408	-	-	-	-

Notes:

- Expansion Kit compatibility depends on the model of the appliance and the kit itself. Only the compatible models and configurations are supported and listed in the table above.
- If an appliance has an optional SSD Flash Expansion Kit installed, only the highlighted Expansion Kits combinations can be installed in the compatible appliances.
- An Expansion Kit can be installed on the appliance only once.
- Expanding appliance capacity is only possible via Expansion Kits supplied by Arcserve.

Q How is an Expansion Kit installed?

Installation guide for Arcserve Appliance 9000 Series Expansion Kits is available on the Arcserve Support Website.

Q Are the Expansion Kits available for purchase?

Yes, expansion kits are available for purchase since May 1, 2019.

Q   What is an optional SSD Flash Expansion Kit?

Arcserve 9000 Appliance Series **SSD Flash Expansion Kit** allows to significantly expand Disaster Recovery capabilities of the appliance to spin up copies of production servers in case of a disaster – by delivering superior performance with enterprise-grade SAS SSDs:

- You can use the Kit with UDP Virtual Standby to prepare for a spin-up servers when disaster strikes or servers malfunction.
- For mission-critical servers, you can use an optional Continuous Availability to store the system replica on the SSDs.
- You can also create a dedicated, ultra-high performance UDP datastore to store copies of mission-critical servers on the SSD to be started by UDP's Instant VM functionality.

Note, that expanding default, primary datastore to the SSD Flash Expansion Kit is not supported.

Here are the 9000 Series models compatible with the SSD Flash Expansion Kit, the HDD slots, and the maximum number of Kits that can be installed:

SSD Flash Expansion Kit		
Specifications	SSDs	4x 3.84TB SSD Flash drives
Compatible Appliance Models	9072DR	Maximum 2 SSD Flash Expansion Kits in slots 5-8 and 9-12
	9096DR	
	9144DR	
	9192DR	Maximum 1 SSD Flash Expansion Kit in slots 9-12
	9240DR	
	9288DR	
	9360DR	

Notes:

- SSD Flash Expansion Kit compatibility depends on the model of the appliance. Only the compatible models and configurations are supported and listed in the table above.
- Installing an SSD Flash Expansion Kit consumes the available HDD slots, and limits the set of compatible Expansion Kits that can be installed on the appliance.
- Similarly, installing an Expansion Kit consumes the available HDD slots, and may limit an ability to install SSD Flash Expansion Kit.

Q   How is an SSD Flash Expansion Kit installed?

Installation guide for the Arcserve Appliance 9000 Series SSD Flash Expansion Kit is available in the Arcserve Appliance Documentation.

Q   Are the SSD Flash Expansion Kits available for purchase?

Yes, SSD Flash Expansion Kits are available for purchase since **November 16, 2020**.

Q   **Can the RAM of the 9000 Appliance Series be expanded?**

Yes! All models allow expansion of the RAM capacity, to spin up virtual copies of more mission-critical servers in case of hardware failure or any other local disasters.

Here are possible configurations and the resulting RAM sizes:

Appliance Model	Base RAM	Total DIMM Slots	RAM Expansion Kit	Expanded RAM Capacity		
				1 Kit	2 Kits	3 Kits
9012	48GB (6x8)	10*	16GB (2x8)	64GB (8x8)	80GB (10x8)	-
9024						
9048						
9072DR	192GB (12x16)	24	64GB (4x16)	256GB (16x16)	320GB (20x16)	384GB (24x16)
9096DR						
9144DR						
9192DR						
9240DR						
9288DR						
9360DR						
9504DR	384GB (12x32)	24	128GB (4x32)	512GB (16x32)	640GB (20x32)	768GB (24x32)

Notes:

- Arcserve Appliance RAM can be expanded with 2x8GB, 4x16GB or 4x32GB DIMM bundles.
- Appliance models 9012, 9024 and 9048 have 16 DIMM slots on the dual-socket motherboard, however as these models have only one CPU installed, maximum 10 DIMM slots can be populated.
- To maintain maximum performance, expanded DIMMs must have the same capacities and models as the RAM installed in the base model originally.
- Expanding appliance RAM capacity is only possible via RAM expansion bundles supplied by Arcserve and only in compatible configurations listed above.

Q   **Are the RAM Expansion Kits available for purchase?**

Yes, RAM Expansion Kits are available for purchase since **May 1, 2019.**

Q   Can the RAM of the 9000 Appliance Series be upgraded?

Yes! For critical servers with large amounts of RAM, the RAM capacity of the appliance can be upgraded with optional **RAM Upgrade Kits** to spin up virtual copies of these servers in the event of hardware failure or during other local disasters.

A RAM Upgrade Kit includes 4x 64GB RDIMM DDR4-2400 RAM that is designed to replace original RAM in the appliance. While adding one RAM Upgrade Kit is possible and supported for some models, doing so may reduce performance of the appliance. If a kit is added, the new RDIMM modules must be distributed evenly across CPU RAM channels to reduce the performance impact.

Here are the possible configurations and resulting RAM sizes:

Appliance Model	Base RAM	Total DIMM Slots	Adding 1x Kit	Replacing RAM (Recommended)					
			1 Kit	1 Kit	2 Kits	3 Kits	4 Kits	5 Kits	6 Kits
9012	48GB (6x8)	10*	-	256GB (4x64)	512GB (8x64)	-	-	-	-
9024									
9048									
9072DR	192GB (12x16)	24	448GB (4x64 + 12x16)	256GB (4x64)	512GB (8x64)	768GB (12x64)	1,024GB (16x64)	1,280GB (20x64)	1,536GB (24x64)
9096DR									
9144DR									
9192DR									
9240DR									
9288DR									
9360DR									
9504DR	384GB (12x32)	24	640GB (4x64 + 12x32)	256GB (4x64)	512GB (8x64)	768GB (12x64)	1,024GB (16x64)	1,280GB (20x64)	1,536GB (24x64)

Notes:

- Arcserve Appliance RAM can be upgraded only with RAM Upgrade Kits described above.
- Appliance models 9012, 9024 and 9048 have 16 DIMM slots on the dual-socket motherboard, however as these models have only one CPU installed, maximum 10 DIMM slots can be populated.
- Upgrading appliance RAM capacity is only possible via RAM Upgrade Kits supplied by Arcserve and only in compatible configurations listed above.

Q   Are the RAM Upgrade Kits available for purchase?

Yes, RAM Expansion Kits are available for purchase since **November 16, 2020.**

Q   What are the optional Spares Kits?

Optional spare part kits allow you to have a set of parts to replace with or without help of an onsite technician in case of part failure. Spares Kits include spare HDD, SSD, RAM, power supply and a fan. Here are the contents of Spares Kits for specific appliance model:

Appliance Model	HDD	SSD	RAM	Power Supply	Fan
9012	1x2TB				
9024	1x4TB	1x480GB	2x8GB	550W	Included
9048	1x8TB				
9072DR					
9096DR					
9144DR	1x8TB	1x1.92TB	2x16GB	750W	Included
9192DR					
9240DR					
9288DR	1x12TB	1x1.92TB	2x16GB	750W	Included
9360DR					
9504DR	1x12TB	1x1.92TB	2x32GB	750W	Included

Q   What are the form factors for the 9000 Appliance Series?

Models 9012, 9024 and 9048 have a 1U, full-depth, rackmount chassis with ReadyRails sliding rails without cable management arm.

Models 9072DR, 9096DR, 9144DR, 9192DR, 9240DR, 9288DR, 9360DR and 9504DR have a 2U, full-depth, rackmount chassis with ReadyRails sliding rails without cable management arm.

Q   What are the dimensions of the 9000 Appliance Series?

	9012, 9024, 9048	9072DR, 9096DR, 9144DR, 9192DR, 9240DR, 9288DR, 9360DR, 9504DR
In-rack Dimensions	25.9" x 17.1" x 1.7" (65.7 cm x 43.4 cm x 4.3cm)	26.7" x 17.1" x 3.4" (67.9 cm x 43.4 cm x 8.7cm)
Outer Dimensions	28.7" x 19.0" x 1.7" (72.9 cm x 48.2 cm x 4.3cm)	29.6" x 19.0" x 3.4" (75.1 cm x 48.2 cm x 8.7cm)

In-rack dimensions exclude bezel, front panel and power supply handles.

Outer dimensions include bezel, front panel and power supply handles.

Q   What is the power consumption and BTU heat output of the 9000 Appliance Series?

Models 9012, 9024 and 9048 have dual, hot-plug, redundant (1+1) 550W power supplies with 2559 BTU/hr.

Models 9072DR, 9096DR, 9144DR, 9192DR, 9240DR, 9288DR, 9360DR and 9504DR have dual, hot-plug, redundant (1+1) 750W power supplies with 2891 BTU/hr.

Q   How many PCIe slots are available in the 9000 Appliance Series?

Models 9012, 9024 and 9048 have **one** available full-height PCIe slot for any of the optional add-on cards.

Models 9072DR, 9096DR, 9144DR, 9192DR, 9240DR, 9288DR and 9360DR have **three** of a total of four full-height PCIe slots available. One PCIe slot is occupied by the "SAS 12Gbps HBA External Controller," included with these models.

Model 9504DR has **two** of a total of four full-height PCIe slots available. One PCIe slot is occupied by the "SAS 12Gbps HBA External Controller" and one more PCIe slot is occupied by the "Intel X550 Dual Port 10G Base-T Adapter, Full Height, Copper," included with this model.

Q   What add-on PCIe card options are available for the 9000 Appliance Series?

There are a few options for each integration of the appliance into your existing IT infrastructure:

Additional 1GB LAN ports: Models 9012, 9024 and 9048 include 2x 1GB LAN ports. Four more ports can be added with **Broadcom 5719 QP 1Gb Network Interface Card**. Models 9072DR-9504DR include 4x 1GB LAN ports and further extension is generally not required. Network teaming is supported as well.

External SAS devices (12GBps): To connect external SAS devices, like tape drives, autoloaders and libraries, or SAN storage, to models 9012, 9024 and 9048, **SAS 12Gbps HBA External Controller** add-on card is available. Models 9072DR-9504DR include this controller card in the default configuration.

10Gbit LAN (Copper): To connect 10GBase-T, copper twisted-pair network, **Intel X550 Dual Port 10G Base-T Adapter** is available for models 9012-9360DR. Model 9504DR includes this adapter in the default configuration. Network teaming is supported as well.

10Gbit Optic Ethernet: To connect 10GBase-SR, optic cable network, **Intel X710, Dual Port 10G SFP+ Adapter** is available for any model. Note, that one or two **SFP+, SR, Optical Transceivers** may also be required in order to connect the optic cable to the appliance.

25Gbit Optic Ethernet: To connect 25GBase-SR, optic cable network, **Broadcom 57414 Dual Port 25GB SFP28 FC Adapter** is available for any model. Note, that one or two **SFP28, SR, Optical Transceivers** may also be required in order to connect the optic cable to the appliance.

16G Fibre Channel: To connect Fibre Channel (FC) devices like tape drives, autoloaders and libraries, or SAN storage, **QLogic 2692 Dual Port 16Gb FC HBA** card is available for any appliance model.

Q   Can other PCI cards, HDDs or RAM be added to the appliance?

Adding non-standard PCI-cards, HDDs, SSDs, or extending RAM without a written consent by Arcserve generally voids the warranty. Please contact Arcserve Support Representative before installing third-party extensions, cards, or components into the appliance.

Q   What external I/O ports do the 9000 Appliance Series come with?

- Models 9012, 9024 and 9048 include 2x 1GB LAN, 2x USB, VGA, Serial and iDRAC dedicated LAN ports.
- Models 9072DR, 9096DR, 9144DR, 9192DR, 9240DR, 9288DR and 9360DR include 4x 1GB LAN, 2x USB, VGA, Serial and iDRAC dedicated LAN ports on the chassis, and 2x SAS external 12GB ports on the SAS 12Gbps HBA External Controller.
- Model 9504DR includes 4x 1GB LAN, 2x USB, VGA, Serial and iDRAC dedicated LAN ports on the chassis, 2x SAS external 12GB ports on the SAS 12Gbps HBA External Controller, and 2x 10G Base-T ports on the Intel X550 Dual Port 10G Base-T Adapter.

Q   What Operating System is installed on 9000 Appliance Series?

- The 9000 Appliance Series shipped from February to December 2019 come with Windows 2016 Standard Server.
- The 9000 Appliance Series shipped starting January 2020 come with Windows 2019 Standard Server.

Q   Does I require OS/Application licenses to run the Virtual Machines on the Appliance?

Arcserve Appliances include Windows 2016 and/or 2019 Standard Server with Hyper-V, technically capable of running an unlimited number of virtual machines on the appliance.

Licensing the virtual replicas of the original production systems on the Arcserve Appliance remains your responsibility.

Many operating systems and applications allow running and using virtual replicas in case of the original system failure. For example, numerous Microsoft agreements and licensing guides include Disaster Recovery Rights, allowing to run the replicas of the production Windows systems in limited circumstances, including disasters and/or for DR testing.

You must refer to licensing of operating systems and applications or contact the relevant vendor for more details.

Q   Is there a remote hardware management for 9000 Appliance Series?

Yes! All models in the Arcserve 9000 Series include complete unlimited iDRAC 9 Enterprise license, allowing you, partners and Arcserve to manage the hardware and diagnose issues.

Q   Can third-party system monitoring tools be used with the 9000 Appliance Series?

Yes, absolutely. In addition, the IPMI interface is available to ensure simple integration with most infrastructure monitoring and management tools.

Q   Should the appliance itself be backed up?

Yes, it is advisable to back up the operating system, boot and EFI partitions of the Arcserve Appliance

Arcserve UDP software on the appliance can be used to perform the backup. A secondary copy of the appliance backup can be stored on the Arcserve Cloud with the Arcserve UDP Cloud Hybrid add-on.

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About Arcserve

Arcserve provides exceptional solutions to protect the priceless digital assets of organizations in need of full scale, comprehensive data protection. Established in 1983, Arcserve is the world's most experienced provider of business continuity solutions that safeguard multi-generational IT infrastructures with applications and systems in any location, on premises and in the cloud. Organizations in over 150 countries around the world rely on Arcserve's highly efficient, integrated technologies and expertise to eliminate the risk of data loss and extended downtime while the reducing the cost and complexity of backing up and restoring data by up to 50 percent.