

RELEASE NOTES

EMC® Avamar®
7.0

Release Notes

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REV 06

March 11, 2014

These release notes contain supplemental information about EMC Avamar release 7.0 and release 7.0 Service Pack 1. Topics include:

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Revision history

The following table presents the revision history of this document.

Revision	Date	Description
06	March 11, 2014	<ul style="list-style-type: none"> Added a documentation errata item for the <i>EMC Avamar Administration Guide</i>. Updated “Avamar release 5.x and earlier clients no longer supported” on page 70.
05	February 6, 2014	<ul style="list-style-type: none"> Added “EMC Avamar for IBM DB2 User Guide” on page 68 to “Documentation errata” on page 68 to document a missing parameter that you must include in a flag file when you perform a DB2 CLP redirected restore. Added bug 48465 to “Fixed problems for the Avamar 7.0 Service Pack 1 GA release” on page 33. Updated “Oracle” on page 10 to include more information about supported environments.
04	January 20, 2014	<ul style="list-style-type: none"> Added the section “Fixed problems for the Avamar 7.0 Service Pack 1 GA release” on page 33. Added “EMC Avamar NDMP Accelerator User Guide” on page 68 to “Documentation errata” on page 68 in order to document the correct list of actions that comprise a virtual machine “stun” action, which must be performed after changed block tracking is enabled.
03	November 25, 2013	<ul style="list-style-type: none"> Added the section “Fixed problems for the Avamar 7.0 Service Pack 1 DA release” on page 30. Updated the “Known problems and limitations” on page 36 section as follows: <ul style="list-style-type: none"> Updated “Server” on page 36 to include issues 52105 and 56207 and remove issues 49965 and 52105. Updated “All backup clients and plug-ins” on page 38 to include issues 34166, 52366, 52496, 56606 and remove issues 32873, 34166, 52366, 52496. Updated “Avamar Web Restore” on page 41 to include issues 56767 and 56912. Updated “Avamar Client Manager” on page 41 to include issue 56909. Updated “Windows Cluster File Server plug-in” on page 42 to include issue 56909 and remove issues 46598, 50090, and 50875. Updated “Microsoft SQL Server plug-in” on page 48 to include issues 52299 and 55655 and remove issues 50779 and 52299. Updated “Oracle database plug-in” on page 50 to include issues 46892, 52700, and 54133 and remove issue “Restore from a Data Domain system to a Windows Server 2008 system is slow.” Updated “NDMP Accelerator” on page 52 to include issue 48059. Updated “Sybase ASE plug-in” on page 53 to include issue 56299. Updated “VMware” on page 53 to remove issues 22448, 30681, 35331, and 37511. Removed the section “Documentation errata” because all documentation errata was corrected in Avamar 7.0 Service Pack 1.

Revision	Date	Description
02	October 11, 2013	<ul style="list-style-type: none"> Updated “Known problems and limitations” on page 36 to remove bugs 52484 and 50875, which were fixed. Added the section “Fixed problems for the Avamar 7.0 GA release” on page 29. Updated “Technical notes” on page 60 to add information about support for removable media in Avamar Desktop/Laptop. Updated “Oracle database plug-in” on page 50 to include workarounds for bugs 50021 and 46892. Updated “Documentation errata” on page 68 to add corrections for the Port and Network Requirements appendix of the <i>EMC Avamar Product Security Guide</i>. Updated “Documentation errata” on page 68 to add corrections to the <i>EMC Avamar Operational Best Practices</i>, <i>EMC Avamar Backup Clients User Guide</i>, and <i>EMC Avamar for Oracle User Guide</i>. Added support for Oracle Exadata configurations in “Oracle” on page 10.
01	July 10, 2013	Initial release of Avamar 7.0.

Product description

EMC® Avamar® is backup and recovery software with integrated data deduplication technology. Avamar solves the challenges associated with traditional backup, enabling fast, reliable backup and recovery for remote offices, VMware® environments, and data center LANs. Unlike traditional solutions, Avamar reduces the size of backup data at the source — before it transfers across the network and stores to disk. As a result, Avamar delivers fast, efficient daily full backups despite slow or congested infrastructure, and data encryption for added security. Avamar uses patented RAIN technology for high availability, and a scalable grid architecture enables you to upgrade capacity and performance when necessary.

New features and changes

The following topics provide details on the new features and changes in Avamar 7.0 and Avamar 7.0 Service Pack 1 for each product component.

IMPORTANT

If you are upgrading to Avamar 7.0 or Avamar 7.0 Service Pack 1 from an earlier release to take advantage of new features and changes, review the information in [“Upgrade requirements for Avamar 7.0 and Avamar 7.0 Service Pack 1” on page 70](#) before the upgrade.

Avamar server

The following topics list the new features and changes for the Avamar server in release 7.0.

IPv6 networking

Avamar 7.0 supports Avamar server and client components in both IPv6 networks and IPv4 networks.

Note: Avamar support for IPv6 is not available for the HP-UX PA-RISC platform.

Elimination of the blackout window

The Avamar server now supports backups during the garbage collection (GC) operation. In earlier releases, backups could not occur during GC, which ran during a blackout window between the backup and maintenance windows.

GC now takes place at the beginning of the maintenance window. Backups are allowed during the maintenance window.

Backup performance is typically slower during the maintenance window, particularly during GC.

Launcher dashboard

Avamar now provides an enhanced dashboard screen, which provides a quick "at-a-glance" view of important system statistics, and the ability to launch various feature windows.

Internal document store

User documentation is available from the Documentation and Downloads page.

Policy-based replication

Avamar 7.0 replaces the previous cron-based replication mechanism with a new policy-based mechanism. This feature provides more granular control of replication parameters, such as which clients to include in each job, the number of client backups to replicate, and scheduling.

Increased client storage node connections

The default number of client storage node connections has increased from 30 to 80.

Avamar Extended Retention

Avamar Extended Retention 7.0 supports Avamar 7.0. When you use Avamar Extended Retention 7.0, the Media Access node and all Avamar servers with backups to export to tape must use version 7.0.

Data Domain system support

Avamar 7.0 supports version 5.3 of the Data Domain Operating System (DD OS).

This release also adds support for storing backups of the following data on a Data Domain system:

- ◆ Windows System State data (added in Avamar release 7.0 Service Pack 1)
- ◆ Windows Clustering backups (added in Avamar release 7.0 Service Pack 1)
- ◆ File system data
- ◆ NDMP Accelerator data
- ◆ Lotus Domino data
- ◆ Remote Blob Storage (RBS) in a Microsoft SharePoint environment
- ◆ Microsoft Exchange logs

Note: The Avamar NDMP Accelerator does not support storing backups of EMC Isilon NAS devices on a Data Domain system.

The *EMC Avamar Compatibility and Interoperability Matrix* on EMC Online Support at <https://support.EMC.com> provides information about specific platform and operating system support.

Metadata capacity for backups stored on Data Domain systems

The *EMC Avamar Metadata Capacity Reporting and Monitoring Release 7.0 Technical Note* provides more information about metadata capacity for backups stored on Data Domain systems. This technical note is available from EMC online support (<https://support.emc.com>).

Instant access of virtual machine backups

You can now restore an entire virtual machine from backups stored on a Data Domain system. This type of restore is called *instant access*. You can boot the restored virtual machine directly from the Data Domain system. This reduces the amount of time required to restore an entire virtual machine.

Single-node server checkpoint backups

Avamar now includes the ability to enable checkpoint backups of single-node Avamar servers to a Data Domain system.

Upgrade information

The *EMC Avamar and EMC Data Domain System Integration Guide* provides information on how to upgrade from an earlier Avamar release when you store backups on a Data Domain system.

Avamar Virtual Edition

Avamar Virtual Edition (AVE) is used to deploy Avamar on VMware virtual machines. AVE 7.0 supports virtual disks with 4 TB of storage capacity.

Avamar Client Manager

Avamar Client Manager includes the following new features and enhancements in Avamar 7.0:

- ◆ A redesign of the Avamar Client Manager user interface to be more task-oriented and easier to use.
- ◆ Error message enhancements to make the messages more clear and useful for resolving errors.
- ◆ Addition of support for push upgrades to Mac, Solaris, Debian Linux, Ubuntu Linux, and NDMP Accelerator clients.

Avamar Desktop/Laptop (DT/LT)

Avamar Desktop/Laptop includes the following new features and enhancements in Avamar 7.0:

- ◆ Transparent logins for Linux and Mac users, as well as users who do not have backups with an embedded `userinfo.xml` file.
- ◆ Improved performance in loading the DT/LT user interface.
- ◆ Allows the customer to select whether to restrict the ability of domain administrators to recover files to alternate computers. If the **checkAlternateComputerOwnership** key in the `dtlt.properties` files is set to true, domain administrators are only allowed to recover files to alternate computers if they have ownership rights to those files.
- ◆ Addition of operating system support for Mac OS X 10.8 and Windows 8.
- ◆ Addition of browser support for Internet Explorer 10 and Google Chrome.
- ◆ Addition of localization support for Traditional Chinese, which brings the total number of supported languages to 12.

Avamar Web Restore

Avamar Web Restore includes the following new features and enhancements in Avamar 7.0:

- ◆ A redesign of the Avamar Web Restore user interface to be more task-oriented and easier to use.
- ◆ Support for authentication through either Avamar authentication or LDAP v.3-compliant directory service.
- ◆ Support for localization in 12 languages.
- ◆ Support for users to restore files from workstation backups to iPad, Android, and Windows tablet devices.
- ◆ Support for access to Avamar user documentation and software downloads.

Backup clients

Avamar clients and plug-ins were updated in release 7.0 and release 7.0 Service Pack 1 to include several new features and enhancements.

Details on new and existing platform and environment support is available in the *EMC Avamar Compatibility and Interoperability Matrix* on EMC Online Support at <https://support.EMC.com>.

New features for multiple clients

Multiple clients and plug-ins include the following new features and enhancements in release 7.0 and release 7.0 Service Pack 1:

- ◆ Avamar release 7.0 Service Pack 1 includes new client platform support:
 - MAC OS X 10.9 (Maverick)
 - Ubuntu 12.04, 12.10, 13.04 and 13.10
 - Debian 7
- ◆ Avamar clients and plug-ins now support installation to a non-default directory.

Note: For the SAP with Oracle plug-in, if you set the `setuid` or `setgid` bits on the `brbackup` or `brarchive` executables on UNIX or Linux systems, then you must install the file system client and plug-in in the default installation directory.

- ◆ Client logs are now located in the `C:\Program Files\avs\var\clientlogs` folder, where `C:\Program Files\avs` is the Avamar client installation folder on Windows computers. On Linux and Mac computers, the logs are in the `/usr/local/avamar/clientlogs` folder. This folder allows full access to users that do not have root or administrator privileges.
- ◆ Avamar client and plug-in software requires that the client computer have an additional 2 GB of available permanent hard drive space for each 1 million files that Avamar backs up.
- ◆ A new configuration wizard, the Avamar Cluster Configuration Tool, enables you to configure a cluster client for backup and restore of shared data in a Windows cluster for all Avamar plug-ins that support Windows clusters.
- ◆ The IBM DB2, IBM Lotus Domino, Oracle, SAP with Oracle, and Sybase ASE plug-ins now support multiple concurrent backup and restore operations. You can select a maximum of six concurrent operations.

IBM DB2

The Avamar Plug-in for DB2 includes the following new features and enhancements in release 7.0 and release 7.0 Service Pack 1:

- ◆ Avamar release 7.0 Service Pack 1 includes support for IBM DB2 10.5.
- ◆ Support for multiple DB2 versions on a single host.
- ◆ Multi session backup and recovery.
- ◆ Data deduplication optimization.

- ◆ Support for the DB2 Command Line Processor (CLP) for backup, restore, recover, and roll forward operations. The Avamar Plug-in for DB2 supports the `db2 backup`, `db2 restore`, `db2 recover`, and `db2 rollforward` commands.
- ◆ Redirected restores of automatic table spaces.
- ◆ Support for backups of archived transaction logs, which you can later use for rollforward operations.

IBM Lotus Domino

The Avamar Plug-in for Lotus Domino includes the following new features:

- ◆ Multiple installations of the Domino server on a single UNIX host in release 7.0.
- ◆ Multiple backup streams. The use of multiple backup streams enables the Avamar Plug-in for Lotus Domino to back up the Domino files and the transaction logs in parallel streams. Multiple backup streams can improve the rate at which the Avamar Plug-in for Lotus Domino writes data to the Avamar server or the Data Domain system.

Microsoft Exchange VSS

The Avamar Plug-in for Exchange VSS includes the following new features and enhancements in release 7.0:

- ◆ Support for Exchange Server 2013.
- ◆ Support for granular level recovery (GLR) of mailbox items to a different mailbox than the original mailbox.
- ◆ New option that enables you to choose whether to back up passive database copies, active database copies, or a combination of both in a Database Availability Group (DAG) or cluster environment.

Microsoft Hyper-V VSS

The Avamar Plug-in for Hyper-V VSS includes the following new features and enhancements in release 7.0 and release 7.0 Service Pack 1:

- ◆ Avamar release 7.0 Service Pack 1 includes Hyper-V 2012 R2 support and 2-5 times faster Hyper-V backup using multiple proxies.
- ◆ Support for Hyper-V on Windows Server 2012 with the following types of virtual machine storage:
 - Local volumes
 - Cluster Shared Volumes (CSV)
 - Server Message Block (SMB) 3.0 file shares
- ◆ New option to promote backups from copy to full for the in-guest shadow copy that occurs during an image-level backup of a Hyper-V server with Windows Server 2012.
- ◆ Support for excluding virtual machines from both on-demand and scheduled image-level backups.
- ◆ New command to control how long the temporary file system for granular level recovery (GLR) remains mounted.

Microsoft SharePoint VSS

The Avamar Plug-in for SharePoint VSS adds support for SharePoint Server 2013 in release 7.0.

Microsoft SQL Server

The Avamar Plug-in for SQL Server includes the following new features and enhancements in release 7.0 and release 7.0 Service Pack 1:

- ◆ Avamar release 7.0 Service Pack 1 includes support for Windows 8.1 and Windows Server 2012.
- ◆ Enhanced support for SQL Server 2012 AlwaysOn availability groups, including backups on secondary replicas.
- ◆ Support for SQL Server 2008 and SQL Server 2012 in Windows Server 2012 cluster environments.

Microsoft Windows

The Avamar Client for Windows includes the following new features and enhancements in release 7.0 and release 7.0 Service Pack 1:

- ◆ Avamar release 7.0 Service Pack 1 includes support for SQL on Windows Server 2012 R2.
- ◆ Support for file system backups, Bare Metal Recovery (BMR) backups, and Active Directory backups on Windows Server 2012.

On Windows deduplicated volumes, you can back up and restore files in an optimized or de-optimized state.

The Avamar Client for Windows also supports file system backups of volumes with the ReFS file system on Windows Server 2012 and Windows 8. Backing up open files present under Reparse Points on ReFS is not supported.

- ◆ Support for Windows Server 2012 clusters.
Avamar uses a new proxy architecture to back up and restore file system data on shared storage in a Windows Server 2012 cluster. The shared storage can be a Scale-Out File Server (SOFS) or a clustered file server for general use.
- ◆ Support for BMR of UEFI systems.
- ◆ Support for Physical-to-Virtual (P2V) BMR.
- ◆ Improved memory use through smaller cache memory requirements, where only cache related to the current directory is loaded in memory.

NDMP Accelerator

The Avamar NDMP Accelerator includes support for the following new features and enhancements in release 7.0:

- ◆ NetApp ONTAP 8.1.
- ◆ VNX 7.1.34.0 and VNXe 2.3.0.
- ◆ EMC Isilon NAS devices.
- ◆ Backup from a Celerra replication target.

Oracle

The Avamar Plug-in for Oracle includes the following new features and enhancements in release 7.0:

- ◆ Support for incremental backups with Block Change Tracking either enabled or disabled.
- ◆ Improved data deduplication performance through the **Filesperset** option, which specifies the number of files to include in each backup set.
- ◆ Support for level 1 cumulative backups, which include database blocks that have changed since the most recent level 0 backup. This is in addition to support for level 1 differential backups, which include all database blocks that have changed since the most recent incremental backup or level 0 backup. Level 1 differential backups were already supported by the Avamar Plug-in for Oracle.
- ◆ Support for offline backups by using RMAN.
- ◆ Support for the ability to select whether or not to use reset logs after roll-forward recovery by using the **Open the database with resetlogs after recovery** advanced option in Avamar Administrator.
- ◆ Support for preprocessing and postprocessing scripts for both backup and restore operations that you perform in Avamar Administrator. Preprocessing and postprocessing scripts are user-written shell scripts (`.sh`) on UNIX or Linux. On Windows, scripts are batch scripts (`.bat`), Visual Basic scripts (`.vbs`), and JScripts (`.js`).
- ◆ Support for Oracle Exadata for the following configurations:
 - Oracle Database Machine
 - Exadata Storage Server (attached to an external database server)

The Avamar Plug-in for Oracle supports the same environment for Oracle Exadata (including the Oracle database versions, operating system versions, and Avamar versions) as the environment that the Avamar Plug-in for Oracle supports for Oracle RAC. The *EMC Avamar Compatibility and Interoperability Matrix* provides more information about supported environments for the Avamar Plug-in for Oracle.

You must install and configure the Avamar Plug-in for Oracle on the Exadata database server the same way you install and configure the Avamar Plug-in for Oracle in Oracle for Real Application Clusters (RAC) configurations. To run backups and restores of data stored in an Oracle Exadata configuration, follow the same instructions for Oracle RAC environments. The *EMC Avamar for Oracle User Guide* provides more information.

SAP with Oracle

The Avamar Plug-in for SAP with Oracle includes the following new features and enhancements in release 7.0 and release 7.0 Service Pack 1:

- ◆ Avamar release 7.0 Service Pack 1 includes support for SAP BR*Tools 7.40.
- ◆ Support for multiple BR*Tools versions and multiple Oracle versions on the same SAP server host. You cannot have 32-bit and 64-bit versions of the SAP plug-in on the same SAP server host.
- ◆ Support for backup and restore of files with UNC pathnames on Windows.
- ◆ Support for backups of more than 1,000 files to a Data Domain system.
- ◆ Display of SAP plug-in CLI restore and recovery operations in the Activity Monitor in Avamar Administrator.
- ◆ Restore of access control lists (ACLs) associated with a backup.
- ◆ New `--semaphore-timeout` parameter for on-demand backups from the CLI to specify the time that `backint` waits for `brbackup` to delete a semaphore file during an online backup.

Sybase ASE

The Avamar Plug-in for Sybase ASE includes the following new features and enhancements in release 7.0:

- ◆ Support for five different types of Sybase database consistency checks, including `dbcc checkcatalog`, `dbcc checkdb`, `cbcc checkdb skip ncindex`, and `dbcc checkstorage`. The checks can run before a scheduled or on-demand backup, after a restore, or as a separate operation from backup or restore.
- ◆ Support for multiple Sybase versions on the same Sybase server host, and multiple Sybase instances as long as the Sybase instances use different names.

You can install both 32-bit and 64-bit versions of Sybase on the same host on 64-bit Linux or 64-bit Windows. You must install the 32-bit Sybase plug-in package on the 64-bit Linux or Windows system.
- ◆ Support for backup or restore of multiple databases through the `avsybase` command from the CLI. To specify multiple database names, separate items in the format `server_name/database_name` on the `avsybase` command line. You can also specify multiple database names with the `avsybase` command for a `print-headers` operation.
- ◆ Support for features of Sybase ASE release 15.7.x, including Sybase database compression, the shrink log feature, and the threaded kernel option.
- ◆ New location for client logs and cache files. The new location is the `var/clientlogs` directory, which provides full access to non-root users. To use existing caches created by the previous plug-in release, you must manually move the caches from the `var` directory to the `var/clientlogs` directory.

VMware

Avamar support for VMware includes the following new features and enhancements in release 7.0 and release 7.0 Service Pack 1:

- ◆ Avamar release 7.0 Service Pack 1 includes support for VMware vSphere 5.5.
- ◆ Support for vSphere 5.1 and EXT4 filesystems, and enhanced LVM support.
- ◆ Container-level policies for managing vApps, virtual machine folders (that is, any folder below the datacenter level), and resource pools as integral objects rather than as a collection of individual virtual machines. You can define one of the following inclusion settings for each container:
 - Dynamic inclusion, which includes all contents of the vCenter container, but also continuously monitors the container entity in vCenter so that if changes occur (for example, virtual machines or folders are added or deleted), those changes are automatically reflected in Avamar.
 - Static inclusion, which includes only what is in the vCenter container at the time it is added to Avamar. Subsequent changes in vCenter are not reflected in Avamar.

IMPORTANT

If you use the existing VMware file-level restore feature, ensure that you review the requirements and limitations in the *EMC Avamar for VMware User Guide* to avoid failures or unexpected behavior when you browse to or restore files.

Fixed problems

This section provides details on the fixed problems for Avamar 7.0 and its service pack releases.

Fixed problems for the Avamar 7.0 DA release

This section provides details on fixed problems for the Avamar 7.0 DA release.

Table 1 Fixed problems for the Avamar 7.0 DA release (page 1 of 18)

Issue number	Product feature	Problem summary
36739	Administration Guide	CLONE: bug 36074-Need to mention to restart DTLT when using change-passwords
37741	Administration Guide	CLONE: bug 37666-CLONE: bug 33707-Escalation 3718:Verify CITI Avamar Hardening Recommendations (M10 - Implement Timeout For MCGUI)
38775	Administration Guide	CLONE: bug 38774-CLONE: bug 38698-Escalation 4569:DTLT Pass through Authentication issue
41286	Administration Guide	Escalation 4903:Downloader Server not grabbing the latest files manifest.xml file is not being retrieved correctly
45293	Administration Guide	Escalation 5209:In the case of replicate we should shutdown MCS on the target BEFORE running root - root replication
46143	Administration Guide	Escalation 5455:Documentation - backups marked

Table 1 Fixed problems for the Avamar 7.0 DA release (page 2 of 18)

Issue number	Product feature	Problem summary
49352	Administration Guide	Escalation 5842:Axionfs crash on SP1 server ade_restore.cpp
32236	Avamar Administrator	CLONE: bug 32233-Escalation 3703:Create zip file of Logs saves log in incorrect path with garbled filename
33081	Avamar Administrator	CLONE: bug 33080-Escalation 3790:The files owned by the Administrators group cannot be selected for restore via DTLT
34688	Avamar Administrator	CLONE: bug 34686-CLONE: bug 34682-Escalation 4028: Correctly use http vs https depending on server version
37308	Avamar Downloader Service	Escalation 4426:Avamar Downloader Service -- password length limitation causes installation failure
34629	Avamar File System	CLONE: bug 34349-The Upgrade Workflows Should Stop the AvFS Service Before Stopping the GSAN
12983	Avamar server	RFE: Escalation 66: Testintegrity and auto-repair should know how to repair user data parity stripes
17000	Avamar server	Escalation 784 - Testintegrity should better account for persistent store stripe errors
18882	Avamar server	RFE: Escalation 1085 - Need better validation of user accounting stripes during hfscheck
27333	Avamar server	Escalation 2871 - possibly stale device information used during reader thread initialization on gsan restart
29485	Avamar server	Escalation 2910:HFScheck and GC failing 3 stripes cxor mismatch and 2 hash referenced but not defined
29711	Avamar server	CLONE: bug 25551-Escalation 2291: gsan deadlocked on index cache loading
29807	Avamar server	Escalation 3042:system went to unresponsive state while doing garbage collection, one node stuck on GCDELETEUNREFERENCEDCHUNKS
31008	Avamar server	Escalation 3563: It is possible for stripe counts to be incorrectly reduced past 0 during aborted balancing
34258	Avamar server	Improper authorization checks on Java RMI method calls allowed authenticated users to carry out potentially unauthorized functions within vulnerable system.
32455	Avamar server	Escalation 3555: Non-monotonic Clock Caused Deadlock When Adding Node
34778	Avamar server	Escalation 4026: Bad hint in hint cache causes offline media error under certain circumstances
34960 48338 49535	Avamar server	Critical security updates for Oracle Java (JRE 6u41) and Apache Tomcat (Tomcat 7.0.33).
35018 35271	Avamar server	Avamar security hardening: All CGI pages have been removed from Avamar
35018 35271	Avamar server	Multiple cross frame scripting vulnerabilities. Avamar web interface did not properly validate the input parameters allowing frames to be injected. This potentially allowed the malicious user to monitor legitimate web users' activity and compromise any sensitive input that user entered.
35309	Avamar server	Escalation 4105 - servmain reference counts can become invalid

Table 1 Fixed problems for the Avamar 7.0 DA release (page 3 of 18)

Issue number	Product feature	Problem summary
35310	Avamar server	Escalation 4084 - stripes are put in an unknown state after balance times out for said stripe
35450	Avamar server	CLONE: bug 32114-Escalation 3634: maintenance scheduler has wrong DST information for Australia
35451	Avamar server	CLONE: bug 33228-Escalation 3761: Need to update maintenance scheduler for change in Russian DST
35456	Avamar server	Escalation 4092: auto-repair should test data stripes before testing other stripe types
35574	Avamar server	CLONE: bug 26381-Escalation 2296: gsan can deadlock if two nodes have sent cancelsched to each others
36030	Avamar server	CLONE: bug 34707-Escalation 4007:Backup failures during rebuild on node 0.1 on a 7.8TB node system
36089	Avamar server	CLONE: bug 36065-Escalation 4008:ESC Review - SR#45305892 - Gsan capacity on node 0.2 very high
36161 37706 37464	Avamar server	The web server was configured to allow one (or more) of the following HTTP methods (verbs): DELETE, TRACE, HEAD, OPTIONS, PUT. These have now been restricted.
36483	Avamar server	Escalation 4301 - server should limit outbound connections to LM
36740	Avamar server	Escalation 4341: long-running gsan maintenance scripts can delay maintenance tasks
36793	Avamar server	Escalation 4327 - wrong values used for comparison during composite hint generation
36833	Avamar server	Escalation 4358: XOR Cache Out of Sync Following Node Restart\Balancing on 6.0.1-65
36963	Avamar server	Escalation 4384 - validatehashspace overflows on large hfs index matchbits values
37280	Avamar server	Escalation 4435 - stripe controller not accessible after sync runlevel during gsan startup with a node down
37487	Avamar server	Escalation 4419:3 nodes OFFLINE (re-init mem usage variables for indexcaching)
37647	Avamar server	Escalation 4486: maintenance tasks can re-run after maintenance scheduler restart
37663	Avamar server	CLONE: bug 37661-Escalation 3808:Checkpoints intermittently fail with MSG_ERR_TIMEOUT since upgrading to 6.0.1-65
37989	Avamar server	CLONE: bug 37964-Escalation 4297:HFSCheck time increased after installing 6.1 pre-RA
38156	Avamar server	Escalation 4331:Upgrade from 5.0.4-30 to 6.0.1-66 GSAN will not restart due to
38230 38229 38281 33706	Avamar server	Avamar security hardening: SSH login as root to the Avamar grid is disabled.
38478	Avamar server	Escalation 4108: auto-repair rebuilt wrong stripe

Table 1 Fixed problems for the Avamar 7.0 DA release (page 4 of 18)

Issue number	Product feature	Problem summary
38805	Avamar server	Escalation 4612:RCA - Node Offline with FATAL » stripetab::getnodestripeiterator
39004	Avamar server	Escalation 4635 - RFE: gsan should exit without segfaulting with non-default permissions
39298	Avamar server	Escalation 4535:Node 0.2 Offline Due to FATAL
39454	Avamar server	Escalation 4669:RCA - hfscheck running slow
40106	Avamar server	Escalation 4783:Gen 4 7.8 TB single node down, SSD 100%
40111	Avamar server	Escalation 4747:HFS check stuck in Terminating State
40265	Avamar server	Escalation 4710:DialHome for 'unsafestriperwrite readonly iogroup size' Reporting in v6.0.1-66
41124	Avamar server	Escalation 4830:Backup scheduler down for 18 hours after starting a node rebuild
41158	Avamar server	Escalation 4766:SR#48734346 - 2 nodes went offline on Gen4 grid running Avamar release 6.1.
41292	Avamar server	CLONE: bug 41220-Escalation 4849:Backup with encryption fails for most of the clients
41382	Avamar server	Escalation 4908 - server deadlock if SSL client stalls out when attempting to close idle connection
41902	Avamar server	Escalation 4964 - Validate device major/minor numbers for disk block devices during updates
41918	Avamar server	Escalation 4837:Two nodes offline, both with FATAL asserts
41956	Avamar server	CLONE: bug 40856-Escalation 4773: maintenance scheduler stops after leap second
42072	Avamar server	Escalation 4999 - Continue to remove directories/files from recover_do_not_touch directory even when errors occur
42269	Avamar server	Escalation 5011:System in an admin mode after the node went offline during the testintegrity initiated by the hfscheck.
42627	Avamar server	Escalation 4993: fatal assert error in scripttask when no threads available
42653	Avamar server	Escalation 4996: access mode stuck in admin if node leading checkpoint dies
42760	Avamar server	CLONE: bug 42648-Escalation 4937 - Hfscheck failed on a persistent store parity stripe
42929	Avamar server	Escalation 5067: rebuilt node creates stripe with the same id as migrated stripe
42936	Avamar server	Escalation 4914: Stripe migration from node A to node B uses old, possibly corrupt, stripe information still existing on node B
44025	Avamar server	Escalation 5126:Tracking escalation: Checkpoint failed with MSG_ERR_TIMEOUT on Avamar release 6.1
44420	Avamar server	CLONE: bug 42080-Escalation 4972: GC skipped due to backups in progress even when set to kill
44732	Avamar server	Add debug to the path to diskinfo::update

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Issue number	Product feature	Problem summary
45751	Avamar server	Escalation 5375 - gsan should exclude locked backup records when date range flags
47120	Avamar server	Escalation 5542: Create general framework to handle exceptions from ~/src/common
47910	Avamar server	While adding a new node, GSAN crashes sometimes with assert error (t.isrequest())
48331	Avamar server	Escalation 5607: Deadlock caused by persistent spare stripe thread selecting a stripe already in message chain
48575	Avamar server	Escalation 5756:node offline caused HFSCheck issues
48627	Avamar server	Escalation 5765:2nd checkpoint of the day timing everyday.Avamar version 6.1, Gen 4 7.8 TB
48920	Avamar server	Escalation 5832:suppress warning messages WARN: <0348> tcpsockimpl::sendfunc waitwriteable timed out if socket is closed
49093	Avamar server	CLONE: bug 44218-Escalation 5138 - Hfsccheck encounters fatal assertion error during transition from datasweep to refcheck phase
49236	Avamar server	Escalation 5845:1 stripe OFFLINE_MEDIA_ERROR with stripe::flush io error (Bad file descriptor=9) during flush for 0.3-5212 on disk #4
50323	Avamar server	Escalation 6000 - gsan should not repeatedly load/unload index caches
51271	Avamar server	Escalation 6048:The stripe in OFFLINE_MEDIA_ERROR on the single node Gen4 system
42138	Avamar Virtual Edition	Escalation 4859:AVE does not log DDR
35870	Backup	CLONE: bug 35663-Escalation 4153:Legacy client UI not available on Avamar client 6.x
36724	Backup	Escalation 4343:DTLT: Incorrect shutdown of GSAN (powerfailure) leads to DTLT login error
12999	Client	Client gets hung on file or mount point named "/"
13964	Client	Escalation 331:The avatar over-reports size of EmailXtender vaults when VSS does not freeze volumes
18708	Client	Escalation 1042:Windows (vm) systemstate backups crash in mtf post processes with no error or warning reported
23162	Client	Escalation 1878:RFE - Need DR instructions for RedHat to cover kernel customizations
26411	Client	Escalation 2560:Backup of 0 bytes completes with success
34492	Client	CLONE: bug 34490-Escalation 3910: HPUX File system backup failed with "FATAL ERROR: <0001> Fatal signal 4" even with openssl libraries at v0.9.8n
35353	Client	Escalation 3709:Backup sizes are changing occasionally when change blocks are used
35570	Client	Escalation 3908:Backup timed-out but status Failed - unknown error 255
35963	Client	Escalation 4197:Incorrect file size in Avamar backup

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Issue number	Product feature	Problem summary
36311	Client	CLONE: bug 36299-Escalation 4258: Avamar release 6.1: assert error (elements->size) <= (size_t)maxsendentries), /local/abs2/work/src/avclient/nbackdir.cpp line 396
37343	Client	Escalation 4449:CBT denied 'Disk order..' for all backups for some vms after mc HF 35255
37883	Client	Escalation 4506: Display strong error message when no Microsoft VSS providers are found on the system
38472	Client	CLONE: bug 38471-Escalation 4539:snapview creating taking more than 4 hours and ndmp backups are failing
38844	Client	Escalation 4660:(Avamar 7.0)Restore failing to Windows 2008 R2 Storage Server with SIS error
39274	Client	CLONE: bug 39273-Escalation 4713:DTLT user can restore from alternate computers after SMS install
42194	Client	Escalation 4900: Avtar does not backup/restore encrypted files correctly after previous backup of the same unencrypted files
42325	Client	CLONE: bug 42324-Escalation 4931: - Avtar "--cpu-throttle" option does not seem to work reliably on multi-processor clients
42517	Client	CLONE: bug 42516-Escalation 4929:DTLT Restore : No backups found post
42848	Client	CLONE: bug 42847-Escalation 5047:Not able to backup/browse NFS mount point
42897	Client	Escalation 5065: avtar import mem leak causes gsan process kill on AER node
43699	Client	CLONE: bug 43698-Escalation 5163: DTO Avtar: Restore of FS backup fails due to FIFO files
44435	Client	Escalation 5235 - ACL-ONLY Restores to Sub Folders Exhibiting Unexpected Behavior
44882	Client	CLONE: bug 44881-Escalation 5253:CentOS 32bit cannot backup/browse 64bit inodes on NFS mount points
46030	Client	Escalation 5434:Command line backup to DD fails with error code on client but is marked good (30000) on server
46478	Client	CLONE: bug 46477-Escalation 5480:Schedule backup generates warning event
47416	Client	CLONE: bug 47415-Escalation 5331:avexvss DAG node backups are slow
47635	Client	CLONE: bug 47632-Escalation 5650:(Avamar 7.0)Avtar Error "Path not found. Verify that path exists on the system"
47687	Client	CLONE: bug 47669-Escalation 5148:(Avamar 7.0)cluster backup problem
48216	Client	Escalation 5723:Replication failed for ADT job
48341	Client	Escalation 5740:Can't export their SAP client data to tape
49609	Client	Escalation 5786:SQL Transaction Log backups randomly fail with Dropped Session
51469	Client Manager online help	Escalation 6074:(Doc) A customer was trying to use Client Manager to migrate an NDMP client to another Avamar system

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Issue number	Product feature	Problem summary
32889	Data Domain system integration	Escalation 3760:Avamar Garbage Collection completion dependant on ddrmaint response
34485	Data Domain system integration	Escalation 5247 - update product security guide with log location "/usr/local/avamar/var/log/switch_monitoring.log"
36956	Data Domain system integration	CLONE: bug 36955-CLONE: bug 36922-Escalation 4332:Hfsccheck failing with Error: hfsccheck-finish Backup directory missing for backup
37457	Data Domain system integration	Escalation 4428:Garbage Collection does not terminate, waiting for the response of DD
37458	Data Domain system integration	Escalation 4428:Garbage Collection does not terminate, waiting for the response of DD (MCS - GC Overdue)
38897	Data Domain system integration	Escalation 4637:gsan passes wrong --endtime to ddrmaint gc-finish
39003	Data Domain system integration	Browsing VMware backups stored on Data Domain systems may fail
39123	Data Domain system integration	CLONE: bug 39080-CLONE: bug 39076-Escalation 4688:Server-side:Hfsccheck failing with MSG_ERR_DDR_ERROR because of change of a CID on a VM image level client
40241	Data Domain system integration	CLONE: bug 39965-Escalation 4749:DDR GC does not complete within the blackout window
42953	Data Domain system integration	Escalation 5051:Hfsccheck is failing with MSG_ERR_DDR_ERROR - missing backups on DD
35846	DB2 plug-in	CLONE: bug 35845-Escalation 4179:SR#45921230 - Installation of AIX DB2 plug-in hangs.
48280	DB2 plug-in	Escalation 5726:DB2 backups failing with Could not get the list of tablespaces in the backup for partition
48412	DB2 plug-in	CLONE: bug 48411-Escalation 5762:avdb2 crashes in a DPF environment - due to line text format of db2nodes.cfg
35747	Desktop/Laptop	CLONE: bug 35639-Escalation 4174:Need hotfix to disable DTLT popup for replicated backups
38240	Desktop/Laptop	CLONE: bug 38236-Escalation 4562:DTLT search box doesn't function when setting the language as Russian
44739	Desktop/Laptop	Add a new DTLT property to allow user force a file ownership check on alternate restore
46631	Desktop/Laptop	Escalation 5522 - Unable to browse Windows 7 clients via DTLT
52878	Desktop/Laptop	CLONE: bug 50766-Escalation 5931:DTLT browse shows no backups although there are backups. (edit
33975	dpnutils	RFE: Esc#3885: rebuild.node to disable auditd
45779	dpnutils	asktime incorrectly sets system time when run in Australia
45980	dpnutils	ESC 5424: Gsan upgrade should not over-write custom cert.pem and key.pem files.
35755	Enterprise Manager	CLONE: bug 35732-Escalation 4158:Cannot add clients to include for selective replication via EMS

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Issue number	Product feature	Problem summary
36918	Enterprise Manager	CLONE: bug 36332-Escalation 4244:Need clarification on expected behavior on how EM GUI reads dstaddr information from repl_cron.cfg
37281	Enterprise Manager	Avamar Enterprise Manager response time very slow when managing offline Avamar
37734	Enterprise Manager	CLONE: bug 36397-CLONE: bug 36396-Escalation 4255 - Discrepancy in "Completed Activities - Exceptions" and "Completed Activities - Failed" reports when seen from EMS and MCS
37735	Enterprise Manager	CLONE: bug 37262-CLONE: bug 37261-Escalation 4431:EM New Bytes report incorrectly includes Restore MODSENT bytes
48625	Enterprise Manager	CLONE: bug 48616-Escalation 5758:Some reports stopped reporting through the EM following Avamar upgrade to 6.1.1-81
48830	Enterprise Manager	CLONE: bug 48828-Escalation 5784:Only System tab in EM is extremely slow while fetching Average Daily Change Rate For Server
34742	Exchange VSS plug-in	CLONE: bug 34055-Escalation 3826:(Avamar 7.0 - main branch merge)Exchange GLR failed on some databases with error
34771	Exchange VSS plug-in	CLONE: bug 34566-Escalation 3977:(Avamar 7.0 - main branch merge)Exchange GLR Browse Operation Fails
36642	Exchange VSS plug-in	CLONE (Avamar 7.0): bug 36640-Escalation 4253:GLR: "Backup browse result is empty" with special char
37717	Exchange VSS plug-in	CLONE: bug 37657-Escalation 4326:(Avamar 7.0)Exchange 2007 GLR restore fails with STATE_EVENT_IGNORED and restores of mailbox folders with smaller no. of items fails to restore objects even when the restore completes successfully.
38334	Exchange VSS plug-in	Escalation 4497: Backup User Config tool - for Exchange 2010, remove Organization Management group roles
38830	Exchange VSS plug-in	CLONE: bug 38827-Escalation 4574:(Avamar 7.0)can't perform granular restore for Exchange.
39801	Exchange VSS plug-in	CLONE: bug 39799-Escalation 4760:(Avamar 7.0) Redirect restore from federated backup doesn't work
39937	Exchange VSS plug-in	CLONE: bug 39864-Escalation 4765: (Avamar 7.0) Unable to Browse GLR
40648	Exchange VSS plug-in	CLONE: bug 40646-Escalation 4753:(Avamar 7.0)Exchange GLR v6.1 fails with "No items present in the folder"
41858	Exchange VSS plug-in	CLONE: bug 41507-Escalation 4868: GLR: Port TEMPFS changes from NetWorker NWFS to AvFS
41929	Exchange VSS plug-in	CLONE: bug 41927-Escalation 4895:(Avamar 7.0)Exchange 2007 GLR Restore Failure
43362	Exchange VSS plug-in	CLONE: bug 43359-Escalation 4905:(Avamar 7.0)RCA avexvss DAG incr backups promoted to full
43902	Exchange VSS plug-in	CLONE: bug 43900-Escalation 5151:(Avamar 7.0)Exchange GLR not showing all mailboxes for restore
44170	Exchange VSS plug-in	CLONE: bug 44168-Escalation 4865:(Avamar 7.0) Exchange -- misconfigured system with duplicate databases causes backup failure with error "Object reference not set to an instance of an object"

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Issue number	Product feature	Problem summary
45214	Exchange VSS plug-in	CLONE: bug 45211-Escalation 5328:(Avamar 7.0)GLR not working :: Powershell Error
45851	Exchange VSS plug-in	ESC5416: writecache registry setting is empty
45860	Exchange VSS plug-in	CLONE: bug 45859-ESC5268: DDR zero hash causing AvFS findfile failure
45911	Exchange VSS plug-in	CLONE: bug 45909-Escalation 5418:(Avamar 7.0)Exchange Federated backups fails to process the Sub workorder
46316	Exchange VSS plug-in	CLONE: bug 46294-Escalation 5268:(Avamar 7.0)Failed GLR 2010 (Unable to move src file) (Unable to move database files)
47853	Exchange VSS plug-in	CLONE: bug 47850-Escalation 5615:(Avamar 7.0)Exchange 2007 RSG restore failed due to slow AD replication
47978	Exchange VSS plug-in	CLONE: bug 47974-Escalation 5673:(Avamar 7.0)Progress Avtar.exe is hung after Exchange Backup Completes
37203	Exchange VSS user guide	Escalation 4274:6.0.100-592 Exchange VSS redirect restore failed.
38712	Exchange VSS user guide	Escalation 4623:DOCS:(Avamar 7.0 Doc bug) Exchange restore configuration requirements inconsistency between 6 and 6.1 manuals
38802	Exchange VSS user guide	Escalation 4653:(Avamar 7.0 Docs) Exchange GLR failed with error
44140	Exchange VSS user guide	CLONE: bug 43904-Escalation 5136:(Avamar release 6.1 SP1 Doc) Exchange VSS backups fail if more than one database is in dataset
42695	Extended Retention	Escalation 5060: ENHANCEMENT REQUEST: Event Viewer---Customer would like to be able to select all events so he can ack them
43593	Extended Retention	Escalation 5157:Two minor issues with avamar-er-dr
45772	Extended Retention	Escalation 5410:library not showing up in AER GUI
46010	Extended Retention	CLONE: bug 45936-Backup Service Throws NullPointer when getting NetWorker client list
47336	Extended Retention	Escalation due to root password being changed after initial cleanse
48769	Extended Retention	Escalation 5824:MAN with "-" in the name does not reregister on reset of import server
49333	Extended Retention	Escalation 5886:Backup Browse/Import does not show any of the exports under the MAN
49602	Extended Retention	Escalation 5914:AER not showing ALL tapes in the library
42684	Hyper-V VSS plug-in	Backup from Dataset should include Hyper-V GUID (from Escalation 5052)
43845	Hyper-V VSS plug-in	CLONE: bug 43831-Escalation 5143:(Avamar 7.0)Unable to restore Hyper-V VMs
43944	Hyper-V VSS plug-in	CLONE: bug 43930-Escalation 5154:(Avamar 7.0)Hyper-V restore fail avhypervss Error <0000>:
45205	Hyper-V VSS plug-in	CLONE: bug 45204-Escalation 5162:(Avamar 7.0)Hyper-V backup of image client hangs/does not complete
47129	Hyper-V plug-in	GLR unable to browse and restore folders/files that do not have SYSTEM - ESC 5396
35471	Installation	CLONE: bug 34442-Escalation 3577:nodes are swapping during GC

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Issue number	Product feature	Problem summary
36350	Installation	Escalation 4210:AVInstaller baffled by root login answer-back message -- crashes AVInstaller
36695	Installation	CLONE: bug 36693-Escalation 4226:Verify Drive Native Command Queuing (NCQ) settings failed in workflow
41427	Installation	Escalation 4915:EMS/Tomcat is down because avamar-tomcat symlink points to a folder that doesn't exist
41729	Installation	CLONE: bug 40512-Escalation 4827:UpgradeFrom60To6.1.0-402 Workflow accepts invalid IP ADDR values for internal switches, Fails updating firmware
43372	Installation	CLONE: bug 43370-Escalation 5101:client install package disappeared from client manager
45290	Installation	Escalation 5320:Installation Workflow Fails During tools.rb task when connecting to Node
48251	Installation	Escalation 5640:22922 does not include package version
36979	kickstart	Escalation 4388:suse_register script present in /etc/cron.d
39780	kickstart	Escalation 4756: (Leap Second) Multiple utility nodes / Single nodes are excessively slow
43267	kickstart	Escalation 5080 - Request to install glibc-locale-32bit-2.11.1-0.17.4.x86_64.rpm in SUSE kickstart ISO
38446	Lotus Domino user guide	Escalation 4570 - Signal 11 on Lotus Notes nsf redirected restore from full backup
36021	Lotus Domino plug-in	Escalation 3309 - Lotus client connections to grid do not close when backup is done
41736	Lotus Domino plug-in	Escalation 4861 - Lotus avtar "File access share error" on nlo files
46642	Lotus Domino plug-in	Escalation 5378:avlotus.exe crash caused domino server restart
35284	Management Console	CLONE: bug 35122-Escalation 4035:File system browse for all clients shows no content on the right side pane after browsing SQL database.
35328	Management Console	Escalation 4085:cp/hfscheck completes but is always reported as overdue. ErrorLogCache doesn't work after nodelistPoller was restarted.
36050	Management Console	Escalation 4086:mcserver.xml value got reverted post upgrade.
36787	Management Console	Escalation 4353:MCS is failing to start after rollback
36820	Management Console	Escalation 4304 - DPN Summary report includes "MODNOTSENT" bytes from back-end capacity report
38265	Management Console	CLONE: bug 38233-Escalation 4557:Cannot login in MC GUI with users with
39442	Management Console	CLONE: bug 39440-Escalation 4728:ldap maps does not work with short name
40136	Management Console	Escalation 4750:On Guest+VM backup, delete guest fails vm backup
40151	Management Console	Escalation 4728: Need to allow user to authenticate against one domain and run ldap query against another domain
40830	Management Console	Escalation 4855:RFE - Cannot see clients in MCS after activating them with an extra / by mistake

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Issue number	Product feature	Problem summary
40832	Management Console	CLONE: bug 40831-Escalation 4856:Avamar 6.1 bug in schedules when changing Windows region settings
41275	Management Console	Escalation 4869:GUI report error when editing system profile.
41595	Management Console	Escalation 4946:EM Server Flush Failing because /EM_BACKUPS not present.
41651	Management Console	Escalation 4941:Vcenter protection
42562	Management Console	CLONE: bug 42561-Escalation 5046:Redirected restores do not redirect, but restore to the original location when started from 'select by File/Folder' tab.
45512	Management Console	CLONE: bug 45507-Escalation 5366:avldap fails with javax.naming.AuthenticationNotSupportedException Error
47792	Management Console	CLONE: bug 47788-Escalation 5678:cannot log in with AD credentials after LDAP map has been added
48327	Management Console	CLONE: bug 48253-Escalation 5706:Import multiple clients to Virtual Machines is very slow after upgrade of Avamar to 6.1.1-87
48416	Management Console	CLONE: bug 48414-Escalation 5774:Getting error configuring Avamar with AD
48619	Management Console	CLONE: bug 48618-Escalation 5735:LDAP Authentication works when 'mcgui.trace=true', otherwise it failed
49068	Management Console	Escalation 5786:SQL Transaction Log backups randomly fail with 'Dropped Session' (MC)
23069	Management Console Server	Improve scheduling algorithm for VM jobs
30635	Management Console Server	Escalation 3510:Total capacity is reported different in Avamar version 5 and version 6.
31217	Management Console Server	Escalation 3557:Backup is failing to Avamar Server that has vlan group.
32122	Management Console Server	Escalation 3689:MCS is down and not restoring - Error message: xml declaration not at start of external entity at line 3, column 0, byte 2
33607	Management Console Server	Escalation 3643:ntp daemon is shown as disabled on MCS but ntpd process is running
33699	Management Console Server	Escalation 3862:MCGUI: Un-checking DD selection in Dataset still results in DD backup
33708	Management Console Server	Escalation 3611:MCS not getting the message for checkpoint validation completion
33735	Management Console Server	ESC 3864: dbUpdateCIDAndUnregister.pl failed to update proxy client CID
34774	Management Console Server	CLONE: bug 34773-CLONE: bug 34769-Escalation 3974 - Tons of syslog errors logged on new years
34806	Management Console Server	CLONE: bug 30410-CLONE: bug 30408-Escalation 3491:ConnectEMC 503 localhost Duplicate HELO/EHLO
35258	Management Console Server	CLONE: bug 35139-Escalation 3896:VM Backup to DDR fails:Error <10631>: Failed to rename backup dir + disk size check detect
35814	Management Console Server	BRSLAB - Statistics within the Avamar Administrator- Server is not updating
36335	Management Console Server	CLONE: bug 36334-Escalation 4218:MCS down issue on Avamar release 6.1 server

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Issue number	Product feature	Problem summary
36444	Management Console Server	Escalation 4273:vm retired clients are disabled. Unable to re-add - greyed-out
36712	Management Console Server	Escalation 4314:In the MCS Activity Monitor, there is a significant discrepancy between New Bytes on Backup jobs and Replication jobs for VMware image backups done via Data Domain.
37231	Management Console Server	TCE: Escalation 4422:RFE: MCS should refuse to restore flushes with unreasonable timestamps
38729	Management Console Server	Escalation 4633:FLR BROWSE cannot see files
40084	Management Console Server	Escalation 4779:Activity drill down sessions do not show backup logs for vm image jobs
40195	Management Console Server	Escalation 4458:RCA - Customer need RCA for MCS shutdown unexpectedly
41301	Management Console Server	CLONE: bug 35474-CLONE: bug 34876-Escalation 3906:CID location corrupted in mcdb cid=
41917	Management Console Server	Escalation 4967:v_node_space table has entries from year 2031
41978	Management Console Server	Escalation 4916:Job timed out on greenlist; Job lost client after pickup:
42810	Management Console Server	Escalation 5020:Peer Review SR: 49491038 vmimage jobs not getting picked up by available proxies
44092	Management Console Server	Escalation 5212 - "Activities - Exceptions (extended)" report fails with user authentication failure
44330	Management Console Server	Escalation 5239:oracle password are in clear text in mc server logs
44663	Management Console Server	Escalation 5171:Backups failing with No Proxy and No VM
45084	Management Console Server	Escalation 5293:MCS flush hung and maint service can't start
45301	Management Console Server	CLONE: bug 44598-Escalation 5218:Enterprise Manager shows the Forecast as
45829	Management Console Server	Escalation 5406:getReplicateClientInfoList in WebServices is taking more then 2 minutes to respond
45832	Management Console Server	Escalation 5296:MCS/WebServices takes more than 3 minutes to provide a list of 997 clients in 21 domains
46795	Management Console Server	TCE Issues based on ESC 5449
46908	Management Console Server	CLONE: bug 46904-MCS publishes duplicate 22211 events with empty event data - causes BRM adaptor to hang
47005	Management Console Server	Escalation 5555:All Backups to DD failing ddr_info file missing DD info
47420	Management Console Server	CLONE: bug 47418-Escalation 5640:Event code 1 disappeared in MCS GUI in profile
47548	Management Console Server	Escalation 5605:The last backup is not deleted even the client has been deleted.
47847	Management Console Server	Escalation 5696:email home attachments fill up the root (/) partition
48111	Management Console Server	CLONE: bug 47922-Escalation 5674:Backup gets timeout response. MCS gets queue connection full and SLEEPING during backup window.
49381	Management Console Server	Escalation 5904:VM backups fail with "no vm"
51602	Management Console Server	Escalation 5891:Communications module scanner encountered an error

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Issue number	Product feature	Problem summary
51863	Management Console Server	Escalation 6199:6.1.1.-87 Upgrade workflow fails updating MCS - Update Failed: Error processing preferences file merge
31545	MCCLI	Escalation 3583 - Extend backup expiration date based on current expiration date for mccli backup edit command
40984	MCCLI	CLONE: bug 40983-Escalation 4870:MCCLI command internal failed while showing all client in verbose mode
41957	MCCLI	RFE - Escalation 4985:MCCLI: Needs features to manage proxy-datastore mapping
42983	MCCLI	Escalation 5089:RFE: 'mccli server' needs 'stop, start, restart' service
46325	MCCLI	ESC - 5467 - mccli backup show command displays field "Files" with empty result
34544	MCCLI guide	CLONE: bug 31545-Escalation 3583 - Extend backup expiration date based on current expiration date for mccli backup edit command
42369	MCCLI guide	DOCS: bug 41957-RFE - Escalation 4985:MCCLI: Needs features to manage proxy-datastore mapping
43007	MCCLI guide	DOCS: bug 42983-Escalation 5089:RFE: 'mccli server' needs 'stop, start, restart' service
44561	MCCLI guide	Escalation 5173:Interoperability Bug between Linux MC GUI and dpmccli RPMs on same client
48336	MCCLI guide	Escalation 5767:Unable to run mccli commands after upgrade unless mccli upgraded
13745	NDMP Accelerator	RFE: Escalation 328: SnapSure timeout, NDMP getting 10024 errors, some of which were due to problem described in PowerLink solution emc182067
18496	NDMP Accelerator	Escalation 959: 24 hour NDMP session timeout shows as Failed, 5.0.100-409 Backup Failing
26230	NDMP Accelerator	CLONE: bug 26229-Escalation 2461:Can not do restores
26657	NDMP Accelerator	Doc bug, Escalation 2625:NDMP Errors when Celerra nThream Parameter is set to 128 not 64 the default
27512	NDMP Accelerator	Escalation 2802:NDMP backup fails when busy gsan causes inode2hash checking to take over 20 minutes
35857	NDMP Accelerator	CLONE: bug 28138-esc 2895: RFE provide mechanism for celerra (and other) backups to store acl in dephash rather than inline in direlem
36362	NDMP Accelerator	CLONE: bug 36361-Escalation 4270:Destination account [/ADT/NDMP_TEST] is unregistered and/or domain does not exist
42629	NDMP Accelerator	Escalation 4944: causes Medium Error
45958	NDMP Accelerator	CLONE: bug 45937-Escalation 5379:(Avamar release 6.1 SP1HOTFIX)NDMP restore replaces ACL of Virtual Data Mover
47987	NDMP Accelerator	Escalation 5703:NDMP backup is doing a level 0 backups when there is a Level 1 available
38050	NetWorker integration	CLONE: bug 38041-CLONE: bug 33877-Escalation 3668:about 10-15 clients fail to backup because of

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Issue number	Product feature	Problem summary
38815	NetWorker integration	Issue with NetWorker backups taken to Avamar (Investigation as part of MC Escalation 4367)
36150	Oracle plug-in	CLONE: bug 34982-Escalation 3985:Oracle backup exception - Failed to create snapview, as one of the elements required for path not found
36543	Oracle plug-in	CLONE: bug 36540-Escalation 4294:oracle restore from command line are failing for backups older than 7 days
38115	Oracle plug-in	CLONE: bug 38112-Escalation 4521:Oracle backups failing on RAC 10gR2
39611	Oracle plug-in	Escalation 4721:rac_config does not take into account customer's umask and creates a directory tree that is not accessible by Oracle's user
40834	Oracle plug-in	CLONE: bug 40653-Escalation 4812:avtar --history is too slow
42965	Oracle plug-in	CLONE: bug 42956-Escalation 5056:Oracle backups are failing
43764	Oracle plug-in	Escalation 4884:oracle restores very slow due to avtar --history
47156	Oracle plug-in	CLONE: bug 47109-Escalation 5525:Avamar backup 5 Oracle database but backup only show 3 database
47940	Oracle plug-in	Escalation 5690:slow oracle backups due slow --history
29961	Replicator	Escalation 3427:Backend report over-reports backend data amount because hash cache overflows
39653	Replicator	CLONE: bug 39650-Escalation 4606:MCS crashing due to OS going out of memory
43036	Replicator	CLONE: bug 43029-Escalation 5048:After upgrade to 6.1, RPQ for replication across a dedicated network stopped working (eth3 no longer in LISTEN state on Target Data)
47319	Replicator	Escalation 5552:During replication, avtar misreports status for connections to source and destination
36171	Reports	CLONE: bug 35994-Escalation 4190:DTLT Activity shows incorrect list for failed backup session
34909	Restore	CLONE: bug 34908-CLONE: bug 34907-Escalation 4045: "Replicated Backups Available" message via DTLT even though no replication performed
45552	SAP plug-in	CLONE: bug 45500-Escalation 5360:SAP restores failing.(backups mixed with file system) -Urgent
47329	SAP plug-in	CLONE: bug 47326-Escalation 5591:SAP plugin backups failing intermittently when creating the snapview
40615	Security guide	SSL Server allowed anonymous SSL ciphers. Product Security Guide updated to include steps to disable weak ciphers.
44407	Security guide	Escalation 5247 - update product security guide with log location "/usr/local/avamar/var/log/switch_monitoring.log"
45981	Security guide	Escalation 5424: Issue installing client/server Authentication certificate
50745	Security guide	Escalation 6020:SSLCertificateChainFile directive is commented out in the default installation (PSG Update)
44149	SharePoint VSS user guide	DOCS: bug 44145-DOCS: bug 43904-Escalation 5136:(Avamar release 6.1 SP1 Doc) VSS backups fail if more than one database is in dataset

Table 1 Fixed problems for the Avamar 7.0 DA release (page 15 of 18)

Issue number	Product feature	Problem summary
33089	SharePoint VSS plug-in	CLONE: Bug 34109 - Escalation 3920:(Avamar 7.0 - main branch merge) MOSS VSS GLR: Axionfs/DDR is too slow and can timeout when using Kroll
43003	SharePoint VSS plug-in	CLONE: bug 42999-Escalation 4364:(Avamar 7.0)avmossvss Error <0000>: The back-end client [SPDNW01V] will be dropped later in the process. Please examine its activity logs for more information.
35294	SQL Server plug-in	CLONE: bug 35289-Escalation 4051:(Avamar 7.0) MCS has issues browsing SQL database for SQL 2008R2 multihomed clusters
37654	SQL Server plug-in	Escalation 4489:Avamar 6.1 - SQL Full backups with forced incremental complete with warnings
39657	SQL Server plug-in	Escalation 4629:Performance issues with Avamar SQL plugin 6.1.100-333 with backups of 850 DBs
39658	SQL Server plug-in	Escalation 4629:Performance issues with Avamar SQL plugin 6.1.100-333 with backups of 850 DBs
39659	SQL Server plug-in	Escalation 4629:Performance issues with Avamar SQL plugin 6.1.100-333 with backups of 850 DBs
41662	SQL Server plug-in	CLONE: bug 41656-Escalation 4923:(Avamar 7.0)SQL backups completed with exceptions ...PBGSQSDLC01\PBGSQSDLC08
42908	SQL Server plug-in	CLONE: bug 42830-Escalation 5031:(Avamar 7.0)Redirect Restore of a backup created from 6.0 fails on 6.1 server
44313	SQL Server plug-in	CLONE: bug 44308-Escalation 5036:(Avamar 7.0)Unable to exclude a SQL instance
44584	SQL Server plug-in	Escalation 5207:CLONE: ESC#5186 - avsql v6.1 command-line backups not reflected in MC reports
46467	SQL Server plug-in	CLONE: bug 46443-Escalation 5207:CLONE: ESC#5186(Avamar 7.0)-avsql v6.1 command-line backups not reflected in MC reports
46677	SQL Server plug-in	CLONE: Escalation 5341: (Avamar 7.0): MCS with 'non-unique sessionID' error
45369	SQL Server user guide	DOCS: bug 45368-Escalation 5349:SQL - (Avamar 7.0 Docs) SMO requirement is not documented in Avamar SQL User Guide
51917	SQL Server user guide	Escalation 6214:DOC: In SQL 7.0 guide Max stream transfer size value can be lowered from default to 64k using --max-transfer-size variable
51918	SQL Server user guide	Escalation 6215:DOC: Document SQL restore restrictions when restoring across servers like done for Exchange
43644	Sybase plug-in	Escalation 5155:Sybase backups failing with: The Sybase meta data file '/var/avamar/sybmeta.xml' could not be created
12951	Technical Addendum	avscf.cfg is ignored
41026	Technical Addendum	CLONE: bug 41025-Escalation 4872 - Technical Addendum - modify-snapups-documentation
34344	tools	Escalation 3922 - Disk drive failure rate seems to be accelerating at US Bank on two grids initialized in May 2011
37660	tools	CLONE: bug 36052-getnodelogs misses files required for diagnosis
29138	Upgrade	Escalation 3158:AVInstaller workflow stopped with ERROR restarting gsan failed

Table 1 Fixed problems for the Avamar 7.0 DA release (page 16 of 18)

Issue number	Product feature	Problem summary
35990	Upgrade	CLONE: bug 35037-CLONE: bug 31055-Escalation 3510:Total capacity is reported different in Avamar version 5 and version 6.
37054	Upgrade	Escalation 4394:Updating Enterprise Manager Server Failed (Workflow) -> take_checkpoint.rb
37059	Upgrade	Escalation 4394:Updating Enterprise Manager Server Failed (Workflow) -> update_ems.rb
37113	Upgrade	Escalation 4394:Updating Enterprise Manager Server Failed (Workflow) -> Retry Task
37949	Upgrade	CLONE: bug 37947-Escalation 4512:Upgrade workflow 6.0.1-66_WF021 (refresh 3) failed to re-boot data nodes on Gen 4 grid
38124	Upgrade	CLONE: bug 38123-CLONE: bug 38122-Escalation 4537:Unable to log in via LDAP after upgrade completion. Login Manager needs restart in workflow.
39127	Upgrade	Escalation 4683:The upgrade workflow fails to validate the storage due to the battery in the Learning state
39484	Upgrade	Escalation 4279:Avamar release 6.1 (6.1.0-280) Upgrade completed but dpnserver and gsan are still at previous 6.0.1-65 version
40411	Upgrade	CLONE: bug 39752-RFE: use timeout==7200 and mapall_args===parallel
41172	Upgrade	Escalation 4891:Updating AVInstaller Database Failed (UpgradeFrom60To6.1.0-402.avp) -> take_checkpoint.rb task
41174	Upgrade	Escalation 4891:Updating AVInstaller Database Failed (UpgradeFrom60To6.1.0-402.avp) -> (rpmhandler)
41216	Upgrade	Escalation 4898:UpgradeFrom60To6.1.0-402 Upgrade workflow encrypts root's mcclimcs.xml the wrong MCUser password
41227	Upgrade	Escalation 4846:UpgrdaeFrom60To6.1.0-402 Workflow is not restarting Login Manager (lm) service (seems re-boot/Gen 4 specific)
41792	Upgrade	CLONE: bug 41791-Escalation 4922:Workflow Halted with error: Verifying Drive Native Command Queuing NCQ Settings Failed
42576	Upgrade	Escalation 5005:Upgrade Workflow Stopped Bringing Gsan Up Failed.
42581	Upgrade	Escalation 4979:AVI_BACKUPS backup very large - 3GB
45660	Upgrade	CLONE: bug 45616-Escalation 5376:6.1.1-81 upgrade workflow completes but skips many tasks
46773	Upgrade	Escalation 5540:6.1.1-87 Upgrade Workflow seems to cause nodes to go offline before first CP - Case 1
47519	Upgrade	CLONE: bug 47518-Escalation 5651:The UpgradeFrom61To611 workflow fails to check one of the nodes.
48746	Upgrade	CLONE: bug 47980-Escalation 5471:Avamar Client Manager upgrade of a client is failing with Fatal GSAN connection problem
48833	Upgrade	Escalation 5810:Hotfixes 36424 & 45974 prevent upgrades to 6.0.2-156 and 6.1.1-87, respectively. Bonus: Upgrades to 7.0.
27632	VMware	Escalation 2777:Avagent log is misleading because it reports failed backups as finishing with

Table 1 Fixed problems for the Avamar 7.0 DA release (page 17 of 18)

Issue number	Product feature	Problem summary
33685	VMware	Escalation 3875:RFE to remove checkbox selection for VMware FLR plugin in Select for Backup View
36556	VMware	Escalation 4309:RFE - unified VMimage proxy to use DDNS & DHCP
40355	VMware	CLONE: bug 39351-Escalation 4706: Avamar 7.0 boot/root partition support
42867	VMware	CLONE: bug 42858-RFE: Escalation 5070: Request to not display/restore unsupported file types from the browse/restore process
43953	VMware	Escalation 5198:Avamar release 6.1 proxy 208.5 day bug
46043	VMware	Escalation 5413:Why failed backup showed up in Restore GUI
46085	VMware	CLONE: bug 46083-Escalation 5399:vmware FLR browse fails on directories that contain a
46410	VMware	CLONE: bug 46406-Escalation 5450:FLR Non-Standard System Reserved Partitions
46534	VMware	Escalation 5451:Avtar continues to run a lot longer than avvcbimage plugin and this is causes a subprocessstimeout
37797	VMware user guide	Escalation 4480 - FLR restore performance is very slow.
42857	VMware user guide	Escalation 5070:Document no support for linux named piped for VMware FLR
45476	VMware user guide	Escalation 5325:changing DNS setting for proxy server via web doesn't work
46243	VMware user guide	DOCS: bug 46191-Escalation 5445:Upgraded VMware proxies from v6.1.0 to v6.1.101-81 and backups are now failing
48556	VMware user guide	Escalation 5778:Problem with avvcbimage Datastore_check feature
21310	Web Restore	Escalation 1599:Webrestore display docx, xlsx as zip file, pptx displays well
37064	Web Services	Escalation 4400:EM replication configuration silently fails if credentials are incorrect
47182	Web Services	CLONE: bug 47165-Escalation 5578:The export fails after 30 minutes with all clients failing because of a duplicate VM.
42349	Windows Cluster Config Wizard	[* Federated Init *] Add prerequisite for federated DAG regarding pre-existing var dir
44054	Windows server user guide	CLONE: bug 44053-Escalation 5153:(Avamar 7.0 Docs) Documentation required for Microsoft Distributed File System (DFS) backups and Avamar
44148	Windows server user guide	DOCS: bug 44146-DOCS: bug 44145-DOCS: bug 43904-Escalation 5136:(Avamar release 6.1 SP1 Doc) VSS backups fail if more than one database is in dataset
45032	Windows server user guide	Escalation 5303:Document fix - Windows cluster client upgrade steps
24587	Windows VSS plug-in	RFE (Escalation 2241):Windows VSS ASR support for EFI
32863	Windows VSS plug-in	Escalation 3764:VSS Plugin backup errors backing up certain shares (VSS plugin should detect UNC path before adding to snapshot)
35912	Windows VSS plug-in	CLONE: bug 35889-Escalation 4130:(Avamar 7.0)VSS SYSTEM STATE BACKUP FAILS Unable to allocate wide string of length 0
35940	Windows VSS plug-in	CLONE: bug 35908-Escalation 4167:(Avamar 7.0)Windows client connections to grid do not close when backup is done

Table 1 Fixed problems for the Avamar 7.0 DA release (page 18 of 18)

Issue number	Product feature	Problem summary
37686	Windows VSS plug-in	CLONE: bug 37528-Escalation 4469:(Avamar 7.0)Windows 2008 Avamar backup failing with exceptions.
38372	Windows VSS plug-in	CLONE: bug 38343-Escalation 4470:(Avamar 7.0)Cluster WinPE disaster restore fails if critical service installed on a cluster shared disk
40003	Windows VSS plug-in	CLONE: bug 39962-Escalation 4781:(Avamar 7.0)VSS Backup Completed Successfully size is 0 (after upgrade to v6)
43564	Windows VSS plug-in	CLONE: bug 43560-Escalation 4702:(Avamar 7.0)WINPE not finding disks on multipath blade
34930	Workflows	CLONE: bug 34913-Clone 33390 - get_output': undefined method `valid_hash_param?' for Tools:Class (NoMethodError)
37131	Workflows	Escalation 4393:ADS4 - 6.0.1-66 - Utility Node Replacement Failure (package name clarification)
39919	Workflows	CLONE: bug 39700-Escalation 4758:Hotfix 35147 is failing when accelerator node operating system is Redhat

Fixed problems for the Avamar 7.0 GA release

This section provides details on fixed problems for the Avamar 7.0 GA release.

Table 2 Fixed problems for the Avamar 7.0 GA release

Issue number	Product feature	Problem summary
53776	Avamar server	Escalation 6452:Degraded HFSCheck performance after upgrade to 7.0.0-396 - we are checking ALL stripes during a rolling HFSCheck
54468	Avamar server	Escalation 6546:Avamar 7.0 Client backups fail if the Pre-Avamar 7.0 server goes readonly during maintenance operations
54964	Data Domain system integration	Escalation 6585: Avamar release 7.0 DA - Couldn't reserve 1 ddr stream(s) for ddrIndex
55049	Data Domain system integration	CLONE: bug 55039-Escalation 6628:hfscheck failed with result MSG_ERR_DDR_ERROR because of missing container files
52636	MCGUI	Provide means in MCGUI to track various capacity limits when Avamar is used as a DD metadata storage node
53769	MCGUI	Escalation 6406:Avamar 7.0 - VC Web GUI refreshes the restore job from complete to 20% repeatedly
54239	MCGUI	Escalation 6515:Avamar 7.0 - Backups that timeout do not show in MC GUI start-page
54183	Replication	Escalation 6508:Avamar 7.0 v7.0.0-396 replicate script changes behavior for --force-move use - Causing replication to fail
50973	Security	Escalation 5982:Insecure permission errors when logrotate runs
43952	VMware	Escalation 5042: Multiple Partition Support on a Single VMDK
5886	Workflows	Escalation 6615:7.0.0-423 Upgrade workflow fails -- Creating 12GB Swap File Failed - timeout error

Fixed problems for the Avamar 7.0 Service Pack 1 DA release

This section provides details on fixed problems for the Avamar 7.0 Service Pack 1 DA release.

Table 3 Fixed problems for the Avamar 7.0 Service Pack 1 DA release (page 1 of 3)

Issue number	Product feature	Problem summary
54263	Administration Guide	CLONE: bug 54239-Escalation 6515:Avamar 7.0 SP1 - Backups that timeout do not show in MC GUI start-page
43202	Avamar File System	Escalation 5066:Axionfs not updated in Proxy after resart Avamar server
50394	Avamar server	CLONE: bug 49356-Escalation 5881: index caches stuck unloading if forced to unload during GC
51074	Avamar server	Escalation 6015:RFE: Add the systemid to status.dpn.
54392	Avamar server	CLONE: bug 50723-Escalation 5871:Escalation Review 53188020 Replication will intermittingly hang
54610	Avamar server	CLONE: bug 54609-Escalation 6506:Scheduled replication (dpn) jobs are unable to use hash cache files if initial replication job is run from the MCS/EMS GUI (user admin)
51605	Client	CLONE: bug 50145-Escalation 4955:HP-UX backup Network errors and reconnection to Avamar
53647	Client	Escalation 6361 - plugins should exit with error if "--parallel" flag is used
55158	Client	Escalation 6198:Slow backup Performance Multiple ACL's set on 5 million files in user home directories and folders beneath
50317	Client Manager online help	Escalation 6018:Avamar 7.0 » German Help Menu in English & German
55382	ConnectEMC	CLONE: bug 55381-Escalation 6678:Reduce Avamar SYR Traffic for Symptom Code 1 & 22713
50090	Data Domain integration	Data Domain option appears but is not supported
52443	Data Domain integration	CLONE: bug 52111-Escalation 6184:Several backups should not have been removed from Data Domain during GC
55039	Data Domain integration	Escalation 6628:hfscheck failed with result MSG_ERR_DDR_ERROR because of missing container files
56069	Data Domain integration	Escalation 6715:NDMP Restore is slow from DD with v7.0 DA
52723	DB2 plug-in	CLONE: bug 52721-Escalation 6302:DB2 backup fail - check_dpf_options error
55436	DB2 user guide	Escalation 6650 - DB2 backup failed due to codepage mismatch - Documentation
50768	Desktop/Laptop	CLONE: bug 50766-Escalation 5931:DTLT brose shows no backups although there are backups.
51999	Desktop/Laptop	CLONE: bug 51998-Escalation 5883:Popup message has returned post Hotfix 41951 but only on one of three Avamar Servers
51175	Exchange VSS plug-in	CLONE: bug 51172-Escalation 6112:(Avamar 7.0 SP1)Restore to RDB hangs if debug is used
51217	Exchange VSS plug-in	CLONE: bug 51072-Escalation 6046:Exchange 2010:(Avamar 7.0 SP1)GLR Browse Failure : Unable to read mailbox information from PowerShell

Table 3 Fixed problems for the Avamar 7.0 Service Pack 1 DA release (page 2 of 3)

Issue number	Product feature	Problem summary
51494	Exchange VSS plug-in	CLONE: bug 51493-Escalation 6029:(Avamar 7.0 SP1)Exchange 2010: GLR Browse works but fails to restore Complete Inbox
52090	Exchange VSS plug-in	CLONE: bug 52088-Escalation 5213:(Avamar 7.0 SP1)Exchange backups failing with VSS errors
52368	Exchange VSS plug-in	CLONE: bug 52367-Escalation 6188:(Avamar 7.0 SP1)AvamarBackupUser tool buffer size limitation for Exchange Server listing
53678	Exchange VSS plug-in	Escalation 6430 - Backup User CFG Tool does not complete MAPI profile creation in EX 2013
53773	Exchange VSS plug-in	Problem with browsing Exchange 2013 backups in environments that have Exchange 2010, Exchange 2013, and CAS servers in the same domain
53957	Exchange VSS plug-in	CLONE: bug 53955-Escalation 6258:(Avamar 7.0 SP1) -- Allow for a GLR proxy server that is not a member of a DAG.
54557	Exchange VSS plug-in	CLONE: bug 54555-Escalation 6512:(Avamar 7.0 SP1)Exchange 2010: Restore to RDB fails for Non-DAG member
48416	Management Console	CLONE: bug 48414-Escalation 5774:Getting error configuring Avamar with AD
53622	Management Console	Upgrade JRE to newer version
53810	Management Console	CLONE: bug 53808-Escalation 6451 - VM client move between the groups moves non-desired clients after a sort in v7.0.0-396
53988	Management Console	CLONE: bug 53738-RFE: Escalation 6440:Using lower version Avamar Administration console on a 6.1.1-87 Utility grid causes clients to be removed from a Domain group.
54306	Management Console	Escalation 6503
54732	Management Console	Escalation 6595:Avamar 7.0 DA MC GUI shows Red X icon for replication status when cron-based replication is still used
53699	Management Console server	CLONE: bug 53365-Escalation 6398:Randomly and Intermittently, physical clients failing backup
54420	Management Console server	CANCEL jobs at group level no longer works (from Escalation 6526)
54451	Management Console server	Escalation 6539:7.0 Plug-in based replication jobs were stuck in
54513	Management Console server	"No Vm" workoder is not generated. Escalation 6526:Avamar 7 Scheduled backups not running
54695	Management Console server	Escalation 6585:Avamar 7.0 - Couldn't reserve 1 ddr stream(s) for ddrIndex:
55109	Management Console server	Escalation 6610:cannot edit vm client's policy settings when the vm is inside a static container
55151	Management Console server	Default Pseudo-random Number Generator (PRNG) algorithm has been changed to HMACDRBG256 in MCCipher.
55829	Management Console server	Encounter javax.xml.rpc.JAXRPCException while cloning connection. Escalation 6526:Avamar 7 Scheduled backups not running
55990	Management Console server	Enabled checkpoint backups always fail after upgrading to Avamar 7.0
56361	NDMP plug-in	CLONE: bug 53439-Escalation 6413

Table 3 Fixed problems for the Avamar 7.0 Service Pack 1 DA release (page 3 of 3)

Issue number	Product feature	Problem summary
52243	Oracle plug-in	CLONE: bug 52222-Escalation 6186:oracle backups failure due to communication between avamar oracle library and avoracle and avoracle failing with mutex errors
55182	Oracle plug-in	CLONE: bug 55136-Escalation 6618:Oracle restores fails when using --nohist and hotfix: Bug 50191 - Escalation 5923:request a hotfix that combines HF48405, HF47185 and HF47109
55454	Security	Incorporate the most current OS/security patch that is a cumulative roll-up of the OS/security updates made available for the applicable versions of both RHEL (4.8) and SuSE (11.1).
46223	SQL Server plug-in	Escalation 5390:(Avamar 7.0 SP1) SQL 2005 SP4 browse and backup failed after upgrade the Avamar to 6.1.0-402
50779	SQL Server plug-in	Differential or incremental backups are incorrectly forced to full after previous backup was forced to full
51405	SQL Server plug-in	CLONE: bug 51352-Escalation 5291:(Avamar 7.0 SP1)Failed to browse SQL instances, pbg1sql01v312, pbg1sql01v305
52915	SQL Server plug-in	CLONE: bug 50500-Escalation 5912:(Avamar 7.0 SP1)SQL DB Restore with FILE STREAM data Failing
55018	Technical Note	Escalation 6559:'hfscheckresults' file is empty after checkpoint restore from DD
54982	Upgrade	CLONE: bug 54886-Escalation 6615:7.0.0-423 Upgrade workflow fails -- Creating 12GB Swap File Failed - timeout error
55269	Upgrade	CLONE: bug 55268-Escalation 6666:Upgrade61To6.1.2-47 Workflow failure - Validating Node Database failed
30681	VMware plug-in	Special characters are not allowed in datastore, folder, or datacenter names
55195	VMware plug-in	Escalation 6657:ESX 5.5 incompatible w 6.1 proxy/VDDK - HotAdd forward compatibility
55250	VMware plug-in	Avamar release 7.0 not compatible with ESXi 5.5
55773	VMware plug-in	Escalation 6681: Unending stack trace at startup with bad login
55697	VMware user guide	Escalation 6720:Improve documentation for backing up VirtualCenter with avamar
55318	vSphere plug-in	Escalation 6669:Changes on avamar proxies via MC GUI are not retained on Avamar 7.0
50438	Windows VSS plug-in	CLONE: bug 50387-Escalation 6024:(Avamar 7.0 SP1)Unable to restore a critical volume X: through WinPE

Fixed problems for the Avamar 7.0 Service Pack 1 GA release

This section provides details on fixed problems for the Avamar 7.0 Service Pack 1 GA release.

Table 4 Fixed problems for the Avamar 7.0 Service Pack 1 GA release

Issue number	Product feature	Problem summary
57770	Avamar server	CLONE: bug 57769-esc 6972:7.0.1 - During Checkpoint Maintenance "ERROR: <0001> stripe::unsafestripewrite readonly iogroup size=1..."
57293	Desktop/Laptop	CLONE: bug 52976-esc 6370 NAT and cannot access the browse local hard drive
58225	Management Console GUI	CLONE: bug 57788-esc 6976:Backing up a client from the policy backups the wrong client when the clients are sorted even after hotfix 57330 is installed
57412	Security	CLONE: bug 57409-esc 6798:Application-Level Security Vulnerabilities
57960	Upgrade	esc 6748:6.1 to 7.0 Upgrade workflow fails updating MCS
48465	VMware plug-in	Restore to a new virtual machine operation fails if Storage vMotion occurs during the restore.
55109	VMware plug-in	esc 6610:cannot edit vm client's policy settings when the vm is inside a static container
57731	VMware plug-in	esc 6827:BRSIL: Avamar 7 VMware backups hanging after migration to vCenter 5.5 with ESXi 5.1 hosts
58675	VMware plug-in	esc 7084: FLR fails with error "Failed to generate session handle" if the filename contains "%20s"

Environment and system requirements

The following topics describe specific environment and system requirements.

Client, server, and platform compatibility

Details on client, server, and platform compatibility is available in the *EMC Avamar Compatibility and Interoperability Matrix* on EMC Online Support at <https://support.EMC.com>.

Client hardware requirements

Client hardware requirements are listed in each client user guide, such as the *EMC Avamar for Oracle User Guide*, *EMC Avamar for Windows Server User Guide*, or *EMC Avamar for SQL Server User Guide*. A full list of Avamar documentation is available in [“Documentation” on page 65](#).

Server dependencies for client features

The following client features require specific versions of Avamar server software:

- ◆ Server dependencies for client features:
 - Granular Level Recovery (GLR) with the Exchange VSS plug-in requires build 6.0.0-580 or later.
 - The SharePoint VSS plug-in requires build 6.0.0-580 or later.
 - The Avamar Client for LifeLine requires build 5.0.2-41 or later.
 - The SQL Server plug-in requires release 6.1 or later.
- ◆ To store backups on a Data Domain system, you must use build 6.0.0-580 or later.

Server dependencies for Avamar Client Manager

Some of the features in Avamar Client Manager that are fully supported when working with clients activated to Avamar server version 6.0 and later have limited support when working with clients activated to Avamar server version 5.x.

Move clients to a new server

When you move a client to a new server, the original server must release the client's activation before the new server can activate the client. Avamar Client Manager requires the ability to respond to a remote command to release an activation. This ability became available in Avamar server version 5.0.1.31.

The following table describes the support for moving clients to a new server in Avamar Client Manager. Support is based on the source server version, and is limited by the target server version.

Table 5 Limitations on moving clients to a new server

Source server version	Move permitted?	Limitations
5.x from 5.0.1.31	Yes ¹	Target server must be version 5.0.1.31 or later.
6.0 and later	Yes	Target server must be version 6.0 or later.

1. Moving clients to a new server from an Avamar server version 5.0.1.31 or newer fails when attempted immediately after the MCS is restarted and while it is still initializing. Wait until initialization is complete before using the Move Clients to New Server feature. Waiting for MCS initialization is not required for clients activated to Avamar server version 6.x.

Move clients to a new domain

Moving clients to a new domain is not supported for clients activated to Avamar server version 5.x.

Retire or delete clients

You cannot use Avamar Client Manager to retire or delete clients activated to an Avamar server older than version 5.0.1.31.

It is possible to use Avamar Client Manager to retire or delete clients activated to Avamar server version 5.0.1.31. However, the task fails when attempted immediately after the MCS is restarted and while it is still initializing. Wait until initialization is complete before using the Retire Clients or Delete Clients features.

You do not have to wait for MCS initialization for clients activated to Avamar server version 6.x or later.

Upgrade

You cannot use Avamar Client Manager to upgrade clients activated to Avamar server version 5.x. The remote upgrade process used by Avamar Client Manager requires methods that are only available on Avamar server version 6.0 and later.

Username search

Username search is not available for clients activated to Avamar server version 5.x. The method required to obtain account information for users of a specific client is only available in Avamar server version 6.0 and later.

Client details

For clients activated to Avamar server version 5.x, the Client Details window does not provide information in the **Users on this Client** field. The method required to obtain account information for users of a specific client is available on Avamar server version 6.0 and later.

Dataset, retention policy, and schedule details

For clients activated to Avamar server version 5.x, the dataset details, retention policy details, and schedule details windows may display some empty fields.

Known problems and limitations

The following topics discuss known issues and limitations in this release of Avamar. Temporary solutions are provided if they are available.

Server

The following table lists known problems for this release of the Avamar server.

Table 6 Avamar server known problems

ID	Description
46224	<p>Scheduled backups missed during daylight savings time transitions</p> <p>During days when Daylight Saving Time transitions occur, if you have backups scheduled to run during the following times, the backups do not occur:</p> <ul style="list-style-type: none"> • For the Spring Daylight Saving Time transition, daily backups scheduled during the hour from 2:00 a.m. through 2:59 a.m. do not occur. • For the Autumn Daylight Saving Time transition, daily backup scheduled during the hour from 1:00 a.m. through 1:59 a.m. do not occur. <p>The interim solution to this problem is to avoid scheduling backups during these time ranges, or to perform an ad-hoc backup if the scheduled backup does not occur.</p>
48932	<p>Message box may fail to close when Installation Manager restarts</p> <p>When the Installation Manager restarts as part of a package installation or upgrade, an “Installation Manager is still shutting down...” message box may fail to close even after the Installation Manager restarts.</p> <p>To clear the message box, close and reopen the browser. This will clear the message box.</p>
52105	<p>Large cache file size</p> <p>When you back up a very large number of files, the size of the cache files may be very large. This may have a negative impact on available disk space.</p>
56207	<p>User with administrator authority to a subroot Avamar domain cannot perform GLR recovery</p> <p>An Avamar user with administrator authority to a subroot Avamar domain cannot perform a GLR recovery. Redirected restore is disabled, and the option to change the plugin type is disabled. The interim solution to this problem is to perform the recovery with Avamar root domain (/) administrator access.</p>

Avamar Client Manager

The following table lists known problems for this release of Avamar Client Manager.

Table 7 Avamar Client Manager known problems

ID	Description
48138	<p>Avamar Client Manager cannot manage clients of Avamar servers that have the additional firewall hardening feature installed</p> <p>When you install the firewall hardening feature on an Avamar server, the firewall blocks an Avamar server port that must be open for full functionality of Avamar Client Manager.</p> <p>The <i>EMC Avamar Product Security Guide</i> describes a workaround for this problem.</p>
45872 49451	<p>Avamar Client Manager cannot activate more than one batch of 1,000 clients</p> <p>This problem occurs when Avamar Client Manager is used to activate several batches of 1,000 clients each. The first batch of clients activate successfully, but subsequent batches are queued with a connection exception.</p> <p>The root cause of the problem is an overflow in the ARP cache of the Avamar server associated with the clients. The problem occurs on both RHEL and SLES servers, and the workaround is the same on both.</p> <p>To work around this problem, complete the following steps to increase the ARP cache size before using Avamar Client Manager to activate clients on an Avamar server:</p> <ol style="list-style-type: none"> 1. Follow the procedure for logging in as root on the Avamar server associated with the clients. 2. Type the following command with no line break: <pre>echo "net.ipv4.neigh.default.gc_thresh1=1024" >> /etc/sysctl.conf</pre> 3. Type the following command with no line break: <pre>echo "net.ipv4.neigh.default.gc_thresh2=2048" >> /etc/sysctl.conf</pre> 4. Type the following command with no line break: <pre>echo "net.ipv4.neigh.default.gc_thresh3=4096" >> /etc/sysctl.conf</pre> 5. Type the following command: <pre>sysctl -p</pre>

Avamar Administrator

The following table lists known problems for this release of Avamar Administrator.

Table 8 Avamar Administrator known problems

ID	Description
1078	<p>Jobs do not appear in the Activity Monitor after server restart</p> <p>If you stop and then restart the administrator server, then jobs that started before the administrator server stop do not appear in the Activity Monitor.</p>
6781	<p>Client name change impacts license quota</p> <p>If you rename a client, the old name of the client remains for activities reporting data for the client. Avamar treats new activities for the same client as if they were for a new client, leading to double counting the number of bytes protected for licensing purposes. If a client name change is required, consult EMC Customer Service to ensure that the database is correctly updated.</p>

All backup clients and plug-ins

The following table lists known problems in this release for all backup clients and plug-ins.

Table 9 General backup client known problems

ID	Description
1403	<p>Backups longer than seven days might fail due to session ticket expiration</p> <p>Backups that take longer than seven days to complete might fail if they are forced to re-establish a connection with the server and their session ticket has expired. However, the data that was backed up is not lost. To complete the process, perform another backup.</p>
20822	<p>Wildcard in exclusion list ignores some Unicode characters</p> <p>The question mark (?) wildcard character may fail to encompass some Unicode characters when used as part of an exclusion list path designation to represent any single character.</p> <p>To work around this issue, use an explicit path designation.</p>
34166	<p>Backup of a Single Instance Storage environment requires Avamar client 6.0 or later</p> <p>If you use an unsupported Avamar client to back up a Single Instance Storage (SIS) environment, then restores may fail with one of the following avtar errors:</p> <ul style="list-style-type: none"> • <5187>: Path ".system_info\sis.hs" not found in backup • errorcode Element 'sis.hs' not found • <9935>: Unable to discover SIS enabled drives from backup. <p>You must use an Avamar client release 6.0 or later to back up an SIS environment.</p>
52366	<p>Problem browsing client in dual-stacked cluster environments</p> <p>You cannot browse data on shared storage by using the Avamar cluster client in dual-stacked cluster environments.</p> <p>To resolve this issue, rerun the Cluster Configuration Tool to remove and then reconfigure the Avamar cluster client.</p>
52496	<p>Cluster Configuration Tool fails to activate virtual cluster clients in dual stack environments</p> <p>In a dual stack environment, when the Avamar server's IPv6 address is used during configuration with the Avamar Cluster Configuration Tool, the Cluster Configuration Tool fails to properly activate virtual cluster clients.</p> <p>The interim solution to this problem is to use the Cluster Configuration Wizard to create the cluster client, but uncheck the Bring the cluster client online and activate it with the Avamar server checkbox. Then manually create the virtual cluster client and with the Avamar Administrator, and in Policy Management, edit the client and check the Activated checkbox in the Edit Client dialog box.</p>
56606	<p>Level 1 backup to Data Domain with over 16 critical disks may default to level 0</p> <p>After a level 0 backup has been performed for a client with over 16 critical disks, cache file information for one or more of the disks may no longer be available and subsequent level 1 backups will be performed as level 0.</p>
N/A	<p>Limited client-based restores</p> <p>Client restores through Avamar Web Restore are performed using a web browser and should be limited to only a few files. If you need to restore many files, then use Avamar Administrator for the restore.</p> <p>This restriction applies only to the legacy web restore interface. It does not apply to client restores through the web UI provided by Avamar Desktop/Laptop.</p>

Microsoft Windows client

The following table lists known problems for this release of the Avamar Client for Windows.

Table 10 Windows backup client known problems (page 1 of 2)

ID	Description
26326	<p>Hard links are not preserved by default</p> <p>To successfully back up and restore hard links on Windows clients, add the <code>--x18=1048576</code> option to the dataset for scheduled group backups or to the Backup Command Line Options dialog box for on-demand backups. You should also always back up and restore the hardlink file and target file together.</p>
26348	<p>Restoring a large number of SIS links may be very slow</p> <p>When restoring a large number of Single-instance Storage (SIS) link files, SIS architecture reports that for every SIS link, the corresponding common store file must be restored. This may result in the common store file needing to be restored multiple times for each SIS link and therefore may result in a longer restore time.</p>
26802	<p>Corrupted Office XML files may need special flag to restore correctly</p> <p>If you back up a corrupted Office XML file (.docx, .xlsx), then an error message similar to the following may appear when you restore the file and open it:</p> <p>Excel cannot open the file 'Spreadsheet.xlsx' because the file format or file extension is not valid...</p> <p>or</p> <p>The Office Open XML file filename.docx cannot be opened because there are problems with the contents, Word found unreadable content in documentfile.docx. Do you want to recover the contents of this document? If you trust the source, click Yes.</p> <p>If you open the file anyway, the file may be empty or unusable. When this occurs, rerun the restore using the <code>--deflateofficexml=false</code> flag in the Restore Command Line Options dialog box. After restore, when you open the corrupted file you may get the same Office error message, but if you click OK to open the file anyway, the file should open correctly.</p>
54642	<p>Unable to ping DNS addresses in a mixed IPv4/IPv6 environment when Bare Metal Recover wizard is used to configure the addresses</p> <p>When using the Bare Metal Recover wizard to configure a system with two NICs, one using IPv4 and the other using IPv6, the DNS addresses are unpingable. The interim solution to this problem is to disable the NIC that is on the IPv4 network, using the following command:</p> <pre>netsh interface set interface "Ethernet 2" disable</pre>
N/A	<p>Interaction with Samba mounts</p> <p>Restores of network mounted drives across Samba to UNIX might not result in the proper file user and group permissions.</p>
N/A	<p>Incompatibility with Venturi Wireless client</p> <p>If the SSL encryption option is enabled when you back up Windows clients, then the backup sporadically fails with older versions of the Venturi Wireless client. To resolve the incompatibility, upgrade the Venturi Wireless client to version 3.1.4 or later.</p>

Table 10 Windows backup client known problems (page 2 of 2)

ID	Description
N/A	<p>Certain Avamar warnings that appear in Windows Server 2008 System State restore can be ignored</p> <p>When performing a Windows client System State Restore in Windows Server 2008 using Avamar, warnings like the following can be ignored:</p> <p>2013-06-27 21:24:48 avtar Warning <7834>: Access denied due to security constraints, path:"C:\ProgramData\Application Data".</p> <p>2013-06-27 21:24:48 avtar Warning <7870>: Pre-existing directory cannot be restored, path:"C:\ProgramData\Application Data".</p> <p>2013-06-27 21:24:48 avtar Warning <7834>: Access denied due to security constraints, path:"C:\ProgramData\Desktop".</p> <p>2013-06-27 21:24:48 avtar Warning <7870>: Pre-existing directory cannot be restored, path:"C:\ProgramData\Desktop".</p>
N/A	<p>Windows Server Update Services role may not be recovered correctly</p> <p>When performing a disaster recovery of a Windows Server 2008 R2 computer with the Windows Server Update Services (WSUS) role, the WSUS role may not be recovered correctly and the following errors might appear:</p> <p>The Reporting Web Service is not working The API Remoting Web Service is not working The Server Synchronization Web Service is not working The Client Web Service is not working The SimpleAuth Web Service is not working The DSS Authentication Web Service is not working</p> <p>To work around this issue, reconfigure the WSUS role after recovery.</p>
N/A	<p>VSS-based backup fails when a VHD is on a critical volume</p> <p>Microsoft states that Volume Shadow Copy Service (VSS) does not support creating a shadow copy of a virtual volume such as a VHD file (for example drive D), and the system drive (for example drive C), in the same snapshot set. This VSS limitation applies to any VSS-based backup by any vendor, and is not an Avamar limitation. The Microsoft TechNet article "Servicing and Backing Up Virtual Hard Disks" http://technet.microsoft.com/en-us/library/gg318053%28v=WS.10%29.aspx describes best practices and recommendations for setting up VHDs so that they can be backed up with VSS snapshots.</p> <p>The solution is to adhere to the following requirements:</p> <ul style="list-style-type: none"> • Store critical data outside of or on a separate volume from the VHD file (drive D), by storing it on the system drive (drive C), which is a non-VHD critical disk. • Use Avamar Windows File System to back up a VHD file (drive D). • Use Avamar Windows VSS plug-in to back up critical volumes required for BMR (drive C) -- the system drive and non-VHD disks containing third-party services.

Avamar Web Restore

The following table lists known problems for this release of Avamar Web Restore.

Table 11 Avamar Web Restore known problems

ID	Description
42284	<p>Avamar Web Restore replaces special characters in file name during restore</p> <p>Restoring a file with special characters in the file name results in replacement of the characters in the restored file name.</p>
47514	<p>Browser address caching can cause Page Not Found errors</p> <p>Avamar Web Restore completely replaces the Avamar web services available in previous releases. Services such as the Documents and Downloads page are now handled through the Avamar Web Restore UI.</p> <p>To access previous versions of Avamar web services, users would enter the URL for an Avamar server in their web browser address bar and the session would redirect to the login page for Avamar web services. This redirection feature is also available in Avamar Web Restore, but the redirected address is different. When a web browser has cached the old redirected address, then it incorrectly uses the old address and a Page Not Found error can occur.</p> <p>To fix this problem, clear the web browser cache.</p>
56767	<p>Avamar Web Restore browse page may hang while displaying backups</p> <p>Web restore may become unresponsive during browse operation of backups containing large number of files under a single folder (5000 or more files). The interim solution to this problem is to use the Desktop/Laptop interface to restore the files.</p>
56912	<p>Avamar Web Restore is not rendering properly on Internet Explorer 11 browser</p> <p>The Web Restore does not display properly on Internet Explorer 11. The interim solution to this problem is to enable compatibility mode for Web Restore by selecting Settings > Compatibility View settings and adding the Web Restore URL.</p>

Avamar Client Manager

The following table lists known problems for this release of Avamar Client Manager.

Table 12 Avamar Client Manager known problems

ID	Description
56909	<p>Avamar Client Manager is not rendering properly on Internet Explorer 11 browser</p> <p>The following issues have been observed when running the Avamar Client Manager on Internet Explorer 11:</p> <ul style="list-style-type: none"> • There may be overlapping of widgets and tabs in Navigation Panel (for Overview, Clients, Policies, Queues and Logs). • Some columns (activated clients, failed clients, and other columns) may need to be expanded to view their contents. • Activation of new clients via selection from Active directory does not correctly display the client list. <p>The interim solution to this problem is to enable compatibility mode for Avamar Client Manager by selecting Settings > Compatibility View settings and adding the Avamar Client Manager URL.</p>

Windows Cluster File Server plug-in

The following table lists known problems for this release of the Windows Cluster File Server plug-in for Windows Server 2012 clusters.

Table 13 Windows Cluster File Server known problems

ID	Description
46598	<p>Backups of encrypted files and folders on a clustered file server for general use fail when the proxy node is not the owner node</p> <p>Backup fails when there are encrypted files and folders on shares on a clustered file server for general use and the proxy node is not the owner node for the file server. Non-encrypted files and folders on the file server are backed up successfully. You can restore the non-encrypted files and folders from the failed backup.</p>

Avamar Desktop/Laptop

The following table lists known problems for this release of Avamar Desktop/Laptop.

Table 14 Avamar Desktop/Laptop known problems (page 1 of 2)

ID	Description
39138	<p>Some Mac and Linux users cannot restore an entire directory structure to the original location</p> <p>Restore fails when all of the following are true:</p> <ul style="list-style-type: none"> • A user logs in to a Mac or Linux computer with a user account that does not have administrative privileges on that computer. • The user logs in to the Avamar Desktop/Laptop web UI using Avamar authentication. • On the Browse page, the user selects the entire directory structure for restore. • The user does not select a new restore location. <p>To work around this problem, do either of the following:</p> <ul style="list-style-type: none"> • Restore to a new location. • Restore less than all of the directory structure. For example, in the restore set, clear one file from the lowest directory.
40841	<p>In browse-only mode, Avamar Desktop/Laptop replaces special characters in file name during restore</p> <p>When using Avamar Desktop/Laptop in browse-only mode, restoring a file with special characters in the file name results in replacement of the characters in the restored file name.</p>
42538	<p>Administrator has limited access in Avamar Desktop/Laptop UI</p> <p>In rare cases, Avamar Desktop/Laptop incorrectly records an administrator as a non-administrator. When this happens, the user on a Windows server sees no files in the Avamar Desktop/Laptop UI, and the user on other Windows computers sees only the files owned by the user.</p> <p>To troubleshoot this problem, review the client log.</p>
48168	<p>Root user on Mac computers cannot see backups</p> <p>The root user account on Mac computers is considered a “special” account that should only be used for specific administration or monitoring tasks. Backups of files for this account cannot be seen in the Avamar Desktop/Laptop UI. To restore files owned by this account, use Avamar Administrator.</p>

Table 14 Avamar Desktop/Laptop known problems (page 2 of 2)

ID	Description
48272	<p>Folder hierarchy that is more than 20 folders deep can cause a JavaScript time-out</p> <p>When using the Avamar Desktop/Laptop UI to back up a file in a folder hierarchy that is more than 20 folders deep, the web browser can encounter a JavaScript time-out. To work around this problem, follow the web browser instructions to increase the JavaScript time-out value.</p>
49824	<p>Online help requires compatibility mode in Internet Explorer 10 browsers</p> <p>Internet Explorer 10 (IE10) uses “Quirks” mode by default. This mode prevents the web browser from using the recommended viewing mode (compatibility mode) for a page. This causes problems with the Avamar Desktop/Laptop online help. To work around this problem, click the broken page icon in the IE10 address bar while in Quirks mode to temporarily enable compatibility mode. To permanently correct the problem, set IE10 to “Standard” mode. This mode permits IE10 to use compatibility mode as needed to correctly display web pages.</p>
48208 48209	<p>Backups for usernames with non-ASCII characters do not appear in the Avamar Desktop/Laptop UI</p> <p>Users who have non-ASCII characters in their usernames cannot see backups in the Avamar Desktop/Laptop UI. For those users, perform restores by using Avamar Administrator or Avamar Web Restore.</p>
N/A	<p>Back up System State option not recommended</p> <p>For datasets with the Windows file system plug-in, do not enable the Back up System State option when using Avamar Desktop/Laptop. A System State backup is treated as a unique backup and is compared to the filesystem backup during indexing. This causes the indexing to exceed the session time-out value and forces the user to log in again.</p>
N/A	<p>Entourage support requires default installation location</p> <p>The Avamar Client for Mac OS X supports Microsoft Entourage by using scripts that shut down the Microsoft Database daemon before starting a backup, and restart it after the backup completes. These scripts do not work when you install the Avamar Client for Mac OS X in a non-default location. On clients that need support for Entourage, use the default location when installing the Avamar Client for Mac OS X.</p>
N/A	<p>Viewing logs from the Mac console requires default installation</p> <p>When you install the Avamar Client for Mac OS X in a non-default location, you cannot view work order logs from the Avamar client console. To view a work order log in this situation, use a text editor to open it from the <code>clientlogs</code> folder.</p>
N/A	<p>Default limit for process data segments is too low</p> <p>On Mac OS X, the default limit for process data segments (6 MB) is lower than the limit of 96 MB that EMC recommends. Any value below 96 MB has an impact on backup and restore performance.</p> <p>In this release, during installation of the Avamar for Mac OS X Client, the installer looks at the value of this setting. If it is less than 96 MB, then the installer changes it to 96 MB. The new value takes effect after the computer restarts.</p> <p>At the conclusion of the installation, the installer launches a restart reminder. To ensure optimal performance, restart the computer as soon as possible after completing the installation.</p>
N/A	<p>Extended drives are visible on some operating systems</p> <p>On some operating systems, extended or mapped network drives can be seen in the Restore Location dialog box. While a restore to such a drive may work, depending on permissions and domain settings, it is not supported.</p>

AIX, FreeBSD, HP-UX, Linux, CentOS, and Solaris clients

The following table lists known problems for this release of the Avamar clients for AIX, FreeBSD, HP-UX, Linux, and Solaris.

Table 15 AIX, FreeBSD, HP-UX, Linux, CentOS, and Solaris client known problems

ID	Description
10392	<p>Avamar directory protection issues</p> <p>Only the root user can create files in the VARDIR (<code>/var/avamar</code> or <code>/usr/local/avamar/var</code>, depending on the installation). However, certain applications, such as Oracle, are known to require access to the Avamar VARDIR by other user accounts. If this is the case, modify the ownership of <code>/var/avamar</code> or <code>/usr/local/avamar/var</code> to allow read/write access by the necessary user accounts.</p>
10460	<p>Solaris path length limitation</p> <p>Solaris imposes a maximum path length limit of 1,023 characters. Therefore, you cannot specify paths greater than 1,023 characters at any time.</p>
10531	<p>Backup cannot proceed when mandatory locks are encountered</p> <p>Avamar client software honors all mandatory locks in the target file system. However, this can cause backup operations to hang indefinitely if a mandatory lock is held by another application on files that Avamar is backing up. To work around this issue, specifically exclude all files and directories with mandatory locks from the backup dataset, and then perform another backup.</p>
26077	<p>Push upgrade on Linux fails for non-default installation location</p> <p>Using Avamar upgrade to push an Avamar client upgrade to a Red Hat Enterprise Linux or SuSE Linux Enterprise Server client fails when the Avamar client software is installed in a non-default location. The use of the <code>rpm</code> option <code>--relocate</code> to install the Avamar client in a non-default location causes subsequent push upgrades to fail.</p>
45520	<p>Push upgrade for 32 bit CentOS 5 upgrades to the wrong version of the RHEL binary</p> <p>The Avamar push upgrade for Avamar 7.0 does not push the correct client package for the 32-bit CentOS 5 client.</p> <p>The interim solution to this problem is to install the RHEL 4.0 binary on the client before the push upgrade or to perform the upgrade manually.</p>
N/A	<p>NFS mounts are ignored by default</p> <p>When backing up a computer, any Network Filesystem (NFS) mounts are ignored unless you specify to back up the directory of the NFS mount.</p>

Novell NetWare client

The following table lists known problems for this release of the Avamar Client for NetWare.

Table 16 Novell NetWare client known problems

ID	Description
30603	<p>Pre-6.1 client incompatibilities with 6.1 and 7.0 servers</p> <p>Beginning with version 6.1, Avamar servers use a strengthened FIPS 140-2 compliant SSL/TLS protocol that is incompatible with earlier versions of the Avamar Client for NetWare. In most cases, if an earlier version client attempts to connect to an Avamar 6.1 or 7.0 server, then the connection is rejected by the server.</p> <p>This situation can be remedied by any of the following actions:</p> <ul style="list-style-type: none"> • Upgrade the Avamar Client for NetWare software to 6.1 or 7.0. • Use unencrypted connections to communicate with the server. • Use encrypted connections but disable FIPS mode on the server.
12641	<p>Maximum backup size and number of files</p> <p>For optimal performance, limit backups with the Avamar Client for NetWare to a maximum total size of 500 GB and less than 1 million files.</p> <p>Furthermore, for best results, limit the maximum hash cache size to 10 MB. This behavior is controlled by the Maximum client hash cache size (MBs) plug-in option.</p>
19822	<p>Stunnel limitation</p> <p>There is a known issue with <code>STunnel.NLM</code> in which 656 bytes of memory is allocated but not released. The NetWare operating system reclaims this memory when <code>STunnel</code> unloads.</p>
N/A	<p>Using encryption significantly increases backup times</p> <p>Using encryption during backup operations significantly increases the amount of time required to perform a NetWare backup. Typically, the amount of time required to perform the backup increases by 50% or more.</p> <p>Because on-demand backups are always allowed to complete no matter how long they take, there is little practical impact to on-demand backups. However, because scheduled backups can only run as long as the schedule allows them to, if you use High or Medium encryption settings in the datasets used to back up NetWare servers, ensure that the time allotted by the schedule is long enough to complete these backup operations.</p>
N/A	<p>NSS compression should be suspended during backups</p> <p>NSS volumes with compression enabled can cause memory contention issues during backups. Therefore, you should suspend compression during backup operations. For either on-demand or scheduled backups with Avamar Administrator, select the Suspend NSS Compression backup option to suspend NSS compression during backups and automatically resume NSS compression afterward.</p>

Microsoft Exchange VSS plug-in

The following table lists known problems for this release of the Avamar Plug-in for Exchange VSS.

Table 17 Microsoft Exchange VSS plug-in known problems (page 1 of 2)

ID	Description
14998	<p>Exchange Public Folders and items permissions changed after recovery</p> <p>Avamar can recover folders and items within Exchange Server Public Folders. However, the recovered items might take ownership and permissions from the recovery process, instead of recovering those attributes as they originally existed in the Exchange Server. To work around this issue, after recovering the Public Folder folders and items, log in with the username that performed the recovery (typically, AvamarBackupUser) and reset permissions as needed.</p>
50291	<p>Browsing backups by using the command line interface on Exchange 2013 hangs</p> <p>Using the command line interface to browse backups on Exchange 2013 systems will hang unless you are logged in as Domain Administrator.</p>
50724	<p>DAG client is still registered to the Avamar server after uninstall</p> <p>When you uninstall the DAG client by using the Cluster Configuration Tool, the client uninstalls from the DAG servers but remains registered to the Avamar server. The interim solution to this problem is to manually unregister the client by using Avamar Administrator.</p>
53773	<p>Corrupt database in Active Directory Domain Services causes browsing the Exchange Information Store to fail</p> <p>Corrupt database in Active Directory Domain Services, browsing the Exchange Information Store will time out and no databases will return. As an interim solution, if browsing the Exchange Information Store fails, determine which database is corrupt using the "Get-MailboxDatabase" command from Exchange Management Shell, which will return an error similar to:</p> <p>"The Exchange server for the database object "Database1" wasn't found in Active Directory Domain Services. The object may be corrupted."</p> <p>Delete the corrupt database and browsing will be successful.</p>
53773	<p>Cannot browse Exchange Information Store after upgrade to Exchange 2013 CU2</p> <p>When using the Microsoft Exchange VSS plug-in with Exchange 2013 CU2, an attempt to browse the Exchange Information Store times out without returning any databases. The interim solution to this problem is:</p> <ol style="list-style-type: none"> 1. In the Exchange Management Shell, manually delete the RDB that was created by the previous GLR attempt using the remove-mailboxdatabase cmdlet. 2. Using the services.msc app or another tool, manually kill the axionfs service. 3. Using Windows Explorer or other tool, manually delete the avs\var\avfscache folder.
N/A	<p>Contents of existing RDBs cannot be browsed with the GLR plug-in</p> <p>When browsing with the GLR plug-in, you can view an existing RDB. However, if you expand the RDB, the contents may appear empty even though it is not empty. You can only expand an RDB that is mounted by the Windows Exchange GLR plug-in.</p>

Table 17 Microsoft Exchange VSS plug-in known problems (page 2 of 2)

ID	Description
N/A	<p>Public Folders permissions requirements</p> <p>To back up public folders, set the Exchange Permission Level on the public folders for the account that is performing the backup to a minimum of Reviewer. In other words, set the Read permission to Full Details and the Other permissions to Folder Visible on the Permissions tab of the Mailbox Properties dialog box.</p> <p>To restore public folders, the account that is performing the restore must have sufficient permissions to write to the folders and their parent folders. In other words, the Write permission must have Create Items and Create Subfolders selected, and the Other permissions must be set to Folder Visible. If the account that is performing the restore does not have write permissions, then the recover operation is reported as successful, but no data is restored.</p> <p>Note: You can set permissions to hide public folders by clearing the Folder Visible option in the Other permissions on the Permissions tab of the Mailbox Properties dialog box. If a folder is hidden from the account that is performing the backup, then the folder is hidden from the backup process. The hidden folder is not saved, and no errors or warnings are provided.</p>
N/A	<p>Upgrade of the Exchange VSS Plug-in with UAC enabled does not offer Exchange GLR plug-in option</p> <p>When upgrading the Exchange VSS Plug-in from release 5.x to release 6.0 or later, with User Account Control (UAC) enabled, you cannot select the Exchange GLR plug-in if you use the Windows Control Panel > Add/Remove Programs feature for the upgrade. To enable GLR, disable UAC and use the Add/Remove Programs feature, or run the Avamar Exchange VSS MSI file from an Administrator command prompt.</p>

Microsoft SharePoint VSS plug-in

The following table lists known problems for this release of the Avamar Plug-in for SharePoint VSS.

Table 18 Microsoft SharePoint VSS plug-in known problems

ID	Description
N/A	<p>Issues after upgrade to Windows SharePoint Services 3.0 SP2</p> <p>When you upgrade from Windows SharePoint Services 3.0 or 3.0 SP1 to 3.0 SP2 on a system with the Avamar Plug-in for SharePoint VSS, the SharePoint topology does not display correctly in Avamar Administrator. This may prevent you from backing up a SharePoint farm.</p> <p>This issue is discussed in detail in Microsoft knowledge base article 913384 at http://support.microsoft.com/kb/913384. This knowledge base article provides detailed instructions for resolving these issues, which might include removing .NET frameworks later than 2.0 and applying the patch discussed in the article before reapplying updated framework software.</p>

Microsoft SQL Server plug-in

The following table lists known problems for this release of the Avamar Plug-in for SQL Server.

Table 19 Microsoft SQL Server plug-in known problems (page 1 of 2)

ID	Description
19575	<p>Tail-log backup of a small amount of data may result in data not available</p> <p>If the tail-log backup fails for any reason during a restore, then an error message appears and the restore is aborted. However, if the amount of data added or changed since the most recent backup is very small (less than about 25 MB) then SQL Server may not be able to retain the information. The recovery exits with an error, and the tail-log backup is not available.</p>
33288	<p>Restore with a new database name from a differential or incremental backup in an earlier release fails</p> <p>If you upgrade the Avamar server and the Avamar Plug-in for SQL Server to release 6.1 or 7.0 and then you attempt to restore a database with a new name from a differential or incremental backup in an earlier Avamar release, then the restore fails.</p> <p>To work around this issue, perform a full backup after the upgrade and restore only from backups with release 6.1 or 7.0. If you must restore from a backup in an earlier release, then restore only from a full backup.</p>
35262	<p>Subsequent restores with a new database name fail when restoring from a backup set that includes a tail-log backup</p> <p>Restore fails if the following scenario occurs:</p> <ol style="list-style-type: none"> 1. You successfully perform a tail-log backup and restore a database. 2. You restore to a new database from the same backup set, which now includes the tail-log backup, and you specify a new name for the database. <p>The restore to the new database fails, and the new database remains in the restoring state. (The database that you restored in step 1 is not affected by this failed restore.)</p> <p>To work around this issue, restore the backup to a file, and then use SQL Server Management Tools to restore from the file to the new database.</p>
49416	<p>Restore of differential backup after database is removed from availability group may fail</p> <p>After a database is removed from an availability group, restores from differential backups of the database may fail.</p>
50055	<p>FILESTREAM data restores to the database folder during redirected restore</p> <p>FILESTREAM data restores to the folder with the database files, even if the FILESTREAM data was originally in a different folder than the database files, when the following conditions are true:</p> <ul style="list-style-type: none"> • You are restoring the database to a different location than the original location at the time of the backup. • You specify the new location by using the Alternate database location box on the Restore Command Line Options dialog box. <p>To avoid this issue, specify the restore location for both the database files and the FILESTREAM data in the Set Destination dialog box.</p>
50495	<p>Restore fails when the folder with FILESTREAM data is open</p> <p>Restore of a database with FILESTREAM data fails when the folder with FILESTREAM data is open in a program such as Windows Explorer.</p> <p>To avoid this issue, close the program that is accessing the folder with the FILESTREAM before you perform the restore. However, if the FILESTREAM folder is open and the restore fails, then perform the restore again and select the WITH REPLACE option to force the restore and bring the database online.</p>

Table 19 Microsoft SQL Server plug-in known problems (page 2 of 2)

ID	Description
50730	FILESTREAM datafiles appear as Rows Data in Avamar Administrator FILESTREAM datafiles appear with a description of Rows Data on the Restore tab of the Backup, Restore and Manage window in Avamar Administrator. The description in Avamar Administrator is different than the Filestream data description that appears in SQL Server Management Studio.
52299	Restore from a Data Domain system fails after upgrade If you store backups on a Data Domain system, then you must perform a full backup after you upgrade the Avamar Plug-in for SQL Server to a newer version. Otherwise, restore fails when you restore from either a tail-log backup or an incremental backup that occurs after the upgrade.
55655	Redirected Restore to a Different Instance with Existing Database Fails A redirected restore of an SQL Database to a different instance on same machine or to different machine fails to restore the database when the SQL REPLACE option is used.

Microsoft Hyper-V VSS plugin

The following table lists known problems for this release of the Avamar Plug-in for Hyper-V VSS.

Table 20 Microsoft Hyper-V VSS plug-in known problems

ID	Description
37177	Conflict between Hyper-V host and guest backup application If you install backup applications on a Hyper-V virtual machine and you perform image-level backups with the Hyper-V VSS plug-in, then the two backups may conflict. To work around this issue, exclude virtual machines with backup applications from image-level backups.

Data Domain integration

The following table lists known problems for this release with Data Domain integration.

Table 21 Data Domain integration known problems (page 1 of 2)

ID	Description
46433	Original Bytes are displayed as twice the original size The Original Bytes value appears as twice the original size when you execute the Data Domain <code>fileSYS show compression</code> command is executed in the Avamar namespace on the Data Domain system.
51085	New Bytes % displays 0% until backup is complete When performing file system backups to a Data Domain system, the New Bytes % field displays 0% until the backup completes.
51684	New Bytes % incorrect for replicated VMware image backups When performing replication of VMware image backups that are stored on a Data Domain system, the New Bytes % is reported incorrectly.

Table 21 Data Domain integration known problems (page 2 of 2)

ID	Description
53567	<p>hfscheck fails after clients are removed from /REPLICATE domain and then re-replicated</p> <p>After removing clients from the /REPLICATE domain, garbage collect removes their backup files from the Data Domain used for replicating the client. If the client is then replicated to the Data Domain again, subsequent hfschecks fail with a MSG_ERR_DDR_ERROR error.</p>

IBM DB2 plugin

There are no significant known problems for this release of the Avamar Plug-in for DB2.

Lotus Domino plug-in

There are no significant known problems for this release of the Avamar Plug-in for Lotus Domino.

Oracle database plug-in

The following table lists known problems for this release of the Avamar Plug-in for Oracle.

Table 22 Oracle database plug-in known problems (page 1 of 2)

ID	Description
27939	<p>Warning messages for the Avamar client on SLES 11 with Oracle Grid installed</p> <p>On SLES 11 systems with Oracle Grid installed, installation of the Avamar client prints the following warning messages to the console:</p> <pre> insserv: warning: script 'K19ohasd' missing LSB tags and overrides insserv: warning: script 'init.ohasd' missing LSB tags and overrides insserv: Default-Start undefined, assuming default start runlevel(s) for script `init.ohasd' insserv: warning: script 'ohasd' missing LSB tags and overrides </pre> <p>The installation succeeds and these warning messages can be safely ignored.</p>
46892	<p>RMAN backup script fails with media management errors</p> <p>An RMAN script that you create from the Schedule Backup page in the Oracle Enterprise Manager does not include the RMAN send command. For example, the following script was generated by using the Oracle Enterprise Manager user interface:</p> <pre> run { allocate channel oem_sbt_backup1 type 'SBT_TAPE' format '%U' parms '"SBT_LIBRARY=/usr/local/avamar/lib/libobk_avamar64.so"'; backup incremental level 1 cumulative database; backup archivelog all not backed up; } allocate channel for maintenance device type 'SBT_TAPE' parms '"SBT_LIBRARY=/usr/local/avamar/lib/libobk_avamar64.so"'; delete noprompt obsolete recovery window of 31 days device type 'SBT_TAPE'; </pre> <p>The script is missing the RMAN send command.</p> <p>To work around this problem use the Edit RMAN Script button from the Oracle Enterprise Manager to add the appropriate RMAN send command. The <i>EMC Avamar for Oracle User Guide</i> provides more information about creating RMAN scripts.</p>

Table 22 Oracle database plug-in known problems (page 2 of 2)

ID	Description
51927	<p>DD OS 5.3 Oracle Optimized Deduplication option not supported</p> <p>When backing up Oracle databases to Data Domain systems, the Oracle Optimized Deduplication option is not supported.</p>
52700	<p>Point-in-time recovery of a pluggable database (PDB) fails</p> <p>A point-in-time recovery of a PDB, which uses a manual channel, fails with the following errors:</p> <pre data-bbox="597 520 1442 678"> RMAN-00571: ===== RMAN-00569: ===== ERROR MESSAGE STACK FOLLOWS ===== RMAN-00571: ===== RMAN-03002: failure of recover command at 07/05/2013 01:00:29 RMAN-03015: error occurred in stored script Memory Script RMAN-06034: at least 1 channel must be allocated to execute this command </pre> <p>This issue is a known bug in Oracle 12C:</p> <p style="padding-left: 40px;">Bug 17080042 : RMAN-6034 POINT IN TIME PDB OR TABLE RECOVERY ERRORS WITH RMAN MANUAL CHANNELS.</p> <p>To work around this problem, use automatic channels for a point-in-time recovery of a PDB.</p>
54133	<p>Level-1 backup of a large database on a Windows system fails with a snapview timeout</p> <p>A level-1 backup of a large (300 GB) database that you perform from Avamar Administrator fails with a snapview timeout. The log file contains the following error messages:</p> <pre data-bbox="597 993 1455 1150"> 2013-04-03 16:04:26 avoracle Error <7011>: Unable to successfully process snapview workorder because of timeout on wait for snapview workorder MOD-1364973477725#0 (pid:3002-Oracle). Please increase subprocess timeout using --[avoracle]subprocesstimeoutsecs option and try again. 2013-04-03 16:04:26 avoracle Info <7271>: Final summary generated subwork 1, cancelled/aborted 0, snapview 24, exitcode 0 </pre> <p>To work around this issue, set the -- [avoracle]subprocesstimeoutsecs option to 350:</p> <ol style="list-style-type: none"> 1. In the Backup Command Line Options dialog box, click More. The dialog box expands to display the Enter Attribute and Enter Attribute Value fields. 2. Type -- [avoracle]subprocesstimeoutsecs in the Enter Attribute field. 3. Type 350 in the Enter Attribute Value field. 4. Click +. 5. Click OK.

NDMP Accelerator

The following table lists known problems for this release of Avamar NDMP Accelerator.

Table 23 NDMP Accelerator known problems

ID	Description
N/A	NDMP backup performance for large NetApp volumes Performance of NDMP NetApp backups of volumes with more than approximately 10 million files may degrade over time. This is typically seen in backups that exceed 24 hours. Both initial backups and incremental backups are impacted.
23067	International character display issue in Avamar Administrator Some international characters might not display properly when browsing backups in Avamar Administrator. However, the ability to restore these files is not affected.
29455	Number of bytes reported by Avamar for folder sizes Avamar 5.0 and later reports incorrect folder sizes in Avamar Administrator. Folder sizes are routinely shown to be much smaller than the aggregate size of the folder contents. This does not affect actual backup and restore behavior or data integrity.
35153	Redirected restore of multiple volumes does not work Redirected restore of multiple volumes fails and results in the following error: <code>avndmp Error <11803>: [avndmp_assist] Unable to redirect multiple volumes. Please restore them separately</code> To work around this issue, restore each volume separately.
48059	If NDMP push upgrade is started while a backup or restore session is active, the session will fail If a backup or restore is in session and an NDMP push upgrade is started on an accelerator, the backup or restore will fail with a dropped session status.
50433	Push upgrades do not work after rebooting an RHEL-based NDMP Accelerator After rebooting a RHEL-based NDMP Accelerator, push upgrades do not work until the Accelerator has been re-registered with the Avamar server.
51005	Web download description for NDMP Accelerator does not include Isilon Web download description for NDMP Accelerator reads "NDMP Accelerator for EMC Celerra/VNX and NetApp Filers," and should include Isilon in this description.

SAP with Oracle plug-in

The following table lists known problems for this release of the Avamar Plug-in for SAP with Oracle.

Table 24 SAP with Oracle database plug-in known problems

ID	Description
42770	Display issue for SAP restore with Avamar server release earlier than 7.0 If you restore a SAP plug-in backup with an Avamar server release earlier than 7.0, then the Activity Monitor displays the restore as an on-demand backup. <code>On-Demand Backup</code> appears in the Type column in the Activity Monitor instead of <code>Restore</code> .
51203	DD OS 5.3 Oracle Optimized Deduplication option not supported When backing up SAP with Oracle databases to Data Domain systems, the Oracle Optimized Deduplication option is not supported.

Sybase ASE plug-in

The following table lists known limitations for this release of the Avamar Plug-in for Sybase.

Table 25 Sybase ASE plug-in known limitations

ID	Description
26375	<p>Parallel restore might fail with Sybase ASE releases earlier than 15.0.2</p> <p>With a Sybase ASE release earlier than 15.0.2, a Sybase plug-in restore with a parallelism value greater than 1 might fail with the following error:</p> <pre>Error from server server_name: Msg 937, Level 14, State 1 Database 'database_name' is unavailable. It is undergoing LOAD DATABASE.</pre> <p>This issue is due to a Sybase ASE defect (CR 467447) that is fixed in Sybase ASE release 15.0.2 ESD 1 and later.</p> <p>To work around this issue, perform one of the following:</p> <ul style="list-style-type: none"> • Ensure that the parallelism value is set to 1 during a Sybase restore. • Upgrade the Sybase ASE server to release 15.0.2 ESD 1 or later.
56299	<p>Sybase operations fail with Sybase ASE network password encryption</p> <p>If Sybase ASE network password encryption is enabled, a Sybase plug-in backup or restore fails with the following error:</p> <pre>avsybase Error <16177>: Adaptive Server requires encryption of the login password on the network.</pre> <p>To work around this issue, disable the Sybase network password encryption by running the following commands:</p> <pre>\$ isql -X 1> sp_configure 'net password encryption reqd',0 2> go</pre>

VMware

The following table lists known problems when using this release of Avamar to protect VMware virtual machines.

Table 26 Avamar with VMware known problems (page 1 of 2)

ID	Description
52675	<p>ContainerClients domain limitations</p> <p>The ContainerClients domain is a special system domain, which is populated with virtual machines residing in VMware container entities. Avamar assumes that when you add a VMware container to Avamar, that you will always manage the container and all virtual machines within it as a single object. Therefore, if only you add these virtual machines to a backup group as individual machines, rather than adding the parent VMware container, they will not be backed up.</p>
58282	<p>All VMware proxies must be at the same version level</p> <p>All VMware proxies must be upgraded at the same time. You cannot have a mix of proxy versions.</p>

Table 26 Avamar with VMware known problems (page 2 of 2)

ID	Description
N/A	<p>Proxy upgrades Due to differences in the virtual machine operating systems, you cannot upgrade 6.1 proxies to version 7.0 or later. If you require version 7.0 or later functionality, you must deploy new 7.0 proxies. If you need to upgrade a 6.1 proxy to a later version 6.1 software, use the instructions in the <i>EMC Avamar 6.1 for VMware Guide</i>.</p>
N/A	<p>Backup of .vmx and nvrAm files might fail because the ESX server has an exclusive lock When using vCenter 4.1 U1 or earlier, backups of .vmx and nvrAm files might fail because the ESX server maintains an exclusive lock on these files. If the vCenter attempts to use an ESX server other than the one that has the exclusive lock on the file to back up the files, then the server without the lock cannot read the .vmx and nvrAm files to back them up. This issue is fixed in vCenter 4.1 U2. To work around this issue, add the --x22=8192 option to the dataset for scheduled group backups, or to the Backup Command Line Options dialog box for on-demand backups. This allows the backup to complete even if the .vmx file is not backed up. Because the .vmx file contains the VM configuration information, when restoring the backup, you can select Restore to original virtual machine or Restore to existing virtual machine, but you cannot select Restore to a new virtual machine. To restore to a new virtual machine, you must manually create a VM with the same configuration as the original VM, then use the Restore to existing virtual machine option to restore the backup to the newly created VM. Restoring to a manually created VM issues new virtual NIC MAC addresses and new virtual disk serial numbers, which may cause license activation issues with VMs running Windows.</p>

Avamar Data Store Gen4

The following table lists known problems for Avamar Data Store Gen4.

Table 27 Avamar Data Store Gen4 known problems

ID	Description
N/A	<p>Limitations when rerunning dpnnetutil You cannot add or change replication and management parameters when rerunning dpnnetutil on ADS Gen4 systems. If you rerun dpnnetutil, the following prompt appears: Use existing dpnnetutil configuration file? If you click Yes (the proper response), then management and replication prompts are excluded in successive screens. To work around this issue, delete the probe.xml file in the /usr/local/avamar/var directory before you rerun dpnnetutil.</p>
N/A	<p>Changing subnets is not allowed on single-node servers You cannot use dpnnetutil to change subnets in a postinstallation single-node server environment. The dpnnetutil utility initially allows you to change the subnet IP address, but an error message appears later that directs you to return the configuration to its original state. To work around this issue:</p> <ul style="list-style-type: none"> • Run a nodedb update if command in the following form: <code>nodedb update if --addr=old_ip_address --new-addr=new_ip_address --new-nwgrp=network_id</code> • Manually update the configurations of network interfaces, such as /etc/sysconfig/network/ifcfg-eth0. • Manually edit the contents of /etc/hosts. • Update the configurations of the Avamar subsystems (that is, gsan, mcs, ems).

Supportability packages

The following table lists known problems for supportability packages.

Table 28 Supportability package known problems

ID	Description
33892	<p>Unnecessary Upgrade Client Downloads package option</p> <p>The Upgrade Client Downloads package presents a Show advanced settings option on the installation page called skip upgrading client download rpms.</p> <p>If you select the Values checkbox and click Continue, then client downloads are not upgraded on the system and the package no longer appears in Avamar Enterprise Manager or Avamar Installation Manager.</p> <p>If you clear the Values checkbox and click Continue, then the client downloads upgrade works as designed.</p> <p>To avoid the problem, do not select Show advanced settings on the installation page.</p>

International language support

These sections provide important information about international language support in Avamar 7.0.

Windows environments

Supported languages for Windows environments include:

- ◆ Arabic
- ◆ Bulgarian
- ◆ Chinese (Simplified and Traditional)
- ◆ Croatian
- ◆ Czech
- ◆ Danish
- ◆ Dutch
- ◆ Estonian
- ◆ Finnish
- ◆ French
- ◆ German
- ◆ Greek
- ◆ Hebrew
- ◆ Hungarian
- ◆ Italian
- ◆ Japanese
- ◆ Korean
- ◆ Latvian
- ◆ Lithuanian
- ◆ Norwegian
- ◆ Polish
- ◆ Portuguese (Brazilian)
- ◆ Romanian
- ◆ Russian
- ◆ Slovak
- ◆ Slovenian
- ◆ Spanish (Iberian and Latin American)
- ◆ Swedish
- ◆ Turkish

The following table describes additional international language support details in Windows environments.

Table 29 Windows environment international language support

Windows data type	International language support details
Windows files and folders	You can back up and restore individual files and folders with file and folder names in local languages. File and folders names appear in the local language in Avamar Administrator and Avamar Web Restore.
Microsoft Exchange databases	You can back up and restore databases with the database name in supported local languages.
Microsoft Exchange folders and messages	You can back up and restore individual folders and messages with the folder or message name in supported local languages.
Microsoft SQL Server databases	You can back up and restore databases with the database name in supported local languages.

UNIX/Linux environments

Supported languages for UNIX/Linux environments include:

- ◆ Arabic
- ◆ Bulgarian
- ◆ Chinese (Simplified and Traditional)
- ◆ Croatian
- ◆ Czech
- ◆ Danish
- ◆ Dutch
- ◆ Estonian
- ◆ Finnish
- ◆ French
- ◆ German
- ◆ Greek
- ◆ Hebrew
- ◆ Hungarian
- ◆ Italian
- ◆ Japanese
- ◆ Korean
- ◆ Latvian
- ◆ Lithuanian
- ◆ Norwegian
- ◆ Polish
- ◆ Portuguese (Brazilian)
- ◆ Romanian
- ◆ Russian
- ◆ Slovak
- ◆ Slovenian
- ◆ Spanish (Iberian and Latin American)
- ◆ Swedish
- ◆ Turkish

The following table describes additional international language support details in UNIX and Linux environments.

Table 30 UNIX/Linux environment international language support

Encoding	International language support details
EUC-JP	<p>You can back up and recover EUC-JP encoded files and directories with names in the Japanese language on Solaris.</p> <p>Note: EUC-JP encoded file and directory names do not render correctly in either Avamar Administrator or Avamar Web Restore. This issue does not apply to the client web UI available through Avamar Desktop/Laptop.</p>
UTF	<p>You can back up and restore individual UTF-encoded files and directories with file and directory names in supported local languages.</p> <p>File and directory names appear in the local language in Avamar Administrator and Avamar Web Restore.</p>

Known limitations of local language support

Keep in mind the following known limitations of local language support:

- ◆ Cross-platform redirected restore of files and directories with international character set names is not supported.
- ◆ Client machine hostnames must consist entirely of ASCII characters.
- ◆ The client software installation path must consist entirely of ASCII characters.
- ◆ Policy objects (such as, users, groups, datasets, schedules, retention policies, notification profiles, and so forth) must consist entirely of ASCII characters.
- ◆ Log files do not correctly render non-ASCII characters.
- ◆ Error, warning, and informational messages incorrectly render non-ASCII characters, both to the screen and to log files.
- ◆ Log files based on user-defined names (for example, database names) do not work correctly.
- ◆ You cannot use non-ASCII characters in options and flags. If a flag or option takes a file, folder, or identifier (for example, a database name) then that option is only assured to work for ASCII names.
- ◆ Sorting is not localized. Sorting is strictly by byte-ordinal value.
- ◆ You cannot enter local language characters in the Avamar user interface using a keyboard.
- ◆ The Avamar Management Console Command Line Interface (MCCLI) and `avtar` support only ASCII arguments on the command line.

Restoring international characters with Avamar Web Restore

The Avamar Web Restore feature restores directories or multiple files in the form of a Zip file. When you unzip the Zip file, file and directory names with international characters might not restore properly due to inherent limitations in some Zip utilities. Therefore, to correctly restore files with international characters by using the Avamar Web Restore feature, use a Zip utility that fully supports international characters. Examples of Zip utilities that have been confirmed to work properly include:

- ◆ Winrar 3.80 or later
- ◆ Winzip 12.0 or later
- ◆ 7zip 4.65 or later

Also, do not use Microsoft Windows compressed folders with the Avamar Web Restore feature, as it is known that these compressed folders do not reliably handle international characters.

Support for non-UTF8 locales in the Management Console

Avamar 7.0 adds support for browsing non-UTF8 file systems from the Management Console. The following Java character sets are supported:

- | | | |
|---------------|------------------|-----------------|
| ◆ Big5 | ◆ Big5-HKSCS | ◆ COMPOUND_TEXT |
| ◆ EUC-JP | ◆ EUC-KR | ◆ GB18030 |
| ◆ GB2312 | ◆ GBK | ◆ IBM-Thai |
| ◆ IBM00858 | ◆ IBM01140 | ◆ IBM01141 |
| ◆ IBM01142 | ◆ IBM01143 | ◆ IBM01144 |
| ◆ IBM01145 | ◆ IBM01146 | ◆ IBM01147 |
| ◆ IBM01148 | ◆ IBM01149 | ◆ IBM037 |
| ◆ IBM1026 | ◆ IBM1047 | ◆ IBM273 |
| ◆ IBM277 | ◆ IBM278 | ◆ IBM280 |
| ◆ IBM284 | ◆ IBM285 | ◆ IBM297 |
| ◆ IBM420 | ◆ IBM424 | ◆ IBM437 |
| ◆ IBM500 | ◆ IBM775 | ◆ IBM850 |
| ◆ IBM852 | ◆ IBM855 | ◆ IBM857 |
| ◆ IBM860 | ◆ IBM861 | ◆ IBM862 |
| ◆ IBM863 | ◆ IBM864 | ◆ IBM865 |
| ◆ IBM866 | ◆ IBM868 | ◆ IBM869 |
| ◆ IBM870 | ◆ IBM871 | ◆ IBM918 |
| ◆ ISO-2022-CN | ◆ ISO-2022-JP | ◆ ISO-2022-JP-2 |
| ◆ ISO-2022-KR | ◆ ISO-8859-1 | ◆ ISO-8859-13 |
| ◆ ISO-8859-15 | ◆ ISO-8859-2 | ◆ ISO-8859-3 |
| ◆ ISO-8859-4 | ◆ ISO-8859-5 | ◆ ISO-8859-6 |
| ◆ ISO-8859-7 | ◆ ISO-8859-8 | ◆ ISO-8859-9 |
| ◆ JIS_X0201 | ◆ JIS_X0212-1990 | ◆ KOI8-R |
| ◆ KOI8-U | ◆ Shift_JIS | ◆ TIS-620 |

- ◆ US-ASCII
- ◆ UTF-16LE
- ◆ UTF-32LE
- ◆ windows-1251
- ◆ windows-1254
- ◆ windows-1257
- ◆ x-Big5-Solaris
- ◆ x-eucJP-Open
- ◆ x-IBM1046
- ◆ x-IBM1112
- ◆ x-IBM1124
- ◆ x-IBM33722
- ◆ x-IBM856
- ◆ x-IBM921
- ◆ x-IBM933
- ◆ x-IBM939
- ◆ x-IBM943
- ◆ x-IBM949
- ◆ x-IBM964
- ◆ x-ISO-2022-CN-CNS
- ◆ x-JIS0208
- ◆ x-MacArabic
- ◆ x-MacCyrillic
- ◆ x-MacHebrew
- ◆ x-MacRomania
- ◆ x-MacTurkish
- ◆ x-MS950-HKSCS
- ◆ x-SJIS_0213
- ◆ X-UTF-32LE-BOM
- ◆ x-windows-874
- ◆ x-windows-iso2022jp
- ◆ UTF-16
- ◆ UTF-32
- ◆ UTF-8
- ◆ windows-1252
- ◆ windows-1255
- ◆ windows-1258
- ◆ x-euc-jp-linux
- ◆ x-IBM1006
- ◆ x-IBM1097
- ◆ x-IBM1122
- ◆ x-IBM1381
- ◆ x-IBM737
- ◆ x-IBM874
- ◆ x-IBM922
- ◆ x-IBM935
- ◆ x-IBM942
- ◆ x-IBM943C
- ◆ x-IBM949C
- ◆ x-IBM970
- ◆ x-ISO-2022-CN-GB
- ◆ x-JISAutoDetect
- ◆ x-MacCentralEurope
- ◆ x-MacDingbat
- ◆ x-MacIceland
- ◆ x-MacSymbol
- ◆ x-MacUkraine
- ◆ x-mswin-936
- ◆ x-UTF-16LE-BOM
- ◆ x-windows-50220
- ◆ x-windows-949
- ◆ UTF-16BE
- ◆ UTF-32BE
- ◆ windows-1250
- ◆ windows-1253
- ◆ windows-1256
- ◆ windows-31j
- ◆ x-EUC-TW
- ◆ x-IBM1025
- ◆ x-IBM1098
- ◆ x-IBM1123
- ◆ x-IBM1383
- ◆ x-IBM834
- ◆ x-IBM875
- ◆ x-IBM930
- ◆ x-IBM937
- ◆ x-IBM942C
- ◆ x-IBM948
- ◆ x-IBM950
- ◆ x-ISCII91
- ◆ x-iso-8859-11
- ◆ x-Johab
- ◆ x-MacCroatian
- ◆ x-MacGreek
- ◆ x-MacRoman
- ◆ x-MacThai
- ◆ x-MS932_0213
- ◆ x-PCK
- ◆ X-UTF-32BE-BOM
- ◆ x-windows-50221
- ◆ x-windows-950

Technical notes

This section describes important notes and tips for using Avamar 7.0.

Password best practices

This section provides recommendations for password best practices.

Best practices for creating passwords

This section provides best information about creating passwords.

Personal Identifiable Information

Do not use Personal Identifiable Information (PII) in your password such as:

- ◆ Your name
- ◆ Your user name
- ◆ Your birthday
- ◆ Names of pets
- ◆ Names of your children
- ◆ The name of your alma mater
- ◆ Keywords associated with your hobbies

Using words from the dictionary

Do not use any word that can be found in the dictionary as your full password.

Using strong passwords

Always use strong passwords when creating passwords. Strong passwords include:

- ◆ At least eight characters
- ◆ Special characters such as a percent sign or ampersand
- ◆ Non-alphabetic characters
- ◆ Upper and lower case characters

Use different passwords for user accounts

Always use a different password for each user account.

Changing your password

Recommendations for changing your password:

- ◆ Change your most critical passwords on a regular basis.
- ◆ Change your passwords at least every 6 months.
- ◆ Avoid using variations of a previous password.

- ◆ Immediately change your password if you expect another person has access to your account, or knows your password.
- ◆ Always change your password as soon as you receive an account.

Password protection best practices

You should always create a password that you can remember without needing to store it. However, if the password must be stored, follow these recommendations:

- ◆ Use a password vault application to protect and help manage your passwords.
- ◆ If passwords must be written down on a piece of paper, store the paper in a secure place and destroy it when it is no longer needed.
- ◆ Do not put your username and password on a post-it note under your keyboard.
- ◆ Do not write down your username and password in the same place.
- ◆ Use caution regarding where passwords are saved on computers. Some dialog boxes, such as those for remote access and other telephone connections, present an option to save or remember a password. Selecting this option poses a potential security threat.
- ◆ Never share your passwords with anyone and do not give your password to anyone over the phone.

Avamar server technical notes

The following technical notes apply to the Avamar server.

Remove test data

Before starting the server or starting a new node for the first time, ensure that all test data has been removed from `/data*/partitions`. In particular, if you ran disk tests before startup, you might need to delete directories named `QA`.

Do not use the `avmgr` command

Improper use of the `avmgr` command line utility can destroy all access to data in the Avamar system. Use this command only at the explicit direction of EMC Customer Service.

Vulnerability scanning

As part of every Avamar release, the product is scanned for vulnerabilities using at least two common vulnerability assessments tools. This release was scanned with Foundstone and Nessus. The Avamar solution has also been scanned by various customers by using tools such as eEye Retina without issue. However, it is possible that the usage of other port/vulnerability scanners might cause disruption to normal operation of the Avamar server. Therefore, it might be necessary to disable scanning of the Avamar server if problems occur.

Avamar Administrator technical notes

The following technical notes apply to Avamar Administrator.

Avamar Administrator directory browsing limitation

When browsing a client file system with Avamar Administrator, directories with very large numbers of files can cause Avamar Administrator to run out of memory. For this reason, Avamar Administrator is configured by default to only retrieve the first 50,000 files in each directory. You can change this limitation by editing the `max_browse_entries` settings in `mcserver.xml` and `mcclient.xml`. However, doing so could cause unpredictable application behavior.

Schedule start times and end times

If you select a different start time in the schedule, you must reselect the desired end time.

Additional “cold start” messages from netsnmp

To resolve an issue where SNMP stops responding, Avamar must frequently restart the `netsnmp` agent. Because the `netsnmp` agent generates a “cold start” message on each restart, additional “cold start” messages appear that are not related to actual restarts of the Avamar system or incorrect operation of the system. Unfortunately, there is currently no way to distinguish between a real “cold start” message that is triggered by an Avamar system restart and a “cold start” message generated as the result of `netsnmp` agent restarts.

Software conflicts with Black Ice and Timbuktu

The Avamar Administrator software is known to have conflicts with software packages such as Black Ice and Timbuktu.

Backup client technical notes

The following technical notes apply to backup clients.

Linux client installation binaries

Because various Linux operating systems are compatible, not all supported Linux operating systems have natively-built installation binaries. As a result, the names of installation binaries do not always match the name of the operating system. For example, client installation binaries for Red Hat Enterprise Linux 6 are built on SUSE Enterprise Server 11 and therefore refer to SLES 11 in the name of the installation binaries. Nonetheless these installation binaries are appropriate for installation on Red Hat Enterprise Linux 6.

IPv6 not supported on HP-UX PA-RISC

Avamar support for IPv6 is not available for the HP-UX PA-RISC platform.

Log files are time/date stamped in UTC time

Some client log and other files created in the VARDIR are time/date stamped in Universal Time Code (UTC) time (Greenwich Mean Time), and not the local time. This can cause confusion when you look for a particular log file.

Firewall software must be configured to allow communication with the Avamar server

Firewall software inherently interferes with communication between the Avamar server and Avamar clients by disabling inward connections to most data ports. Therefore, if you use firewall software on a client computer (for example, ZoneAlarm, Norton, McAfee, and so forth) or if you upgrade a Windows client to Windows XP Service Pack 2 (which includes a new integrated firewall), then you must configure the firewall application to allow bidirectional communication between the Avamar client and the Avamar server. This is normally accomplished by adding the EMC Client Agent to an “allowed” or “exceptions” list. The exact procedure for doing this depends on the firewall application. The documentation for the firewall should provide additional information.

Avamar icon disappears from Mac system menu bar

On irregular and rare occasions, the Avamar icon disappears from the Mac system menu bar. To restore the icon, restart the Avamar client using the Avamar Client application launcher in the Applications folder.

Backups are not visible in the web UI after Avamar Client Manager moves a client

After you move a client to a new server by using Avamar Client Manager, you cannot view the replicated backups for the client by using the Avamar Desktop/Laptop web UI. The backups are correctly replicated and can be restored using Avamar Administrator.

Removable media requires alternate file browsing method

In the Avamar Desktop/Laptop web UI, removable media is not supported by the default file browsing method. To support removable media, configure Avamar Desktop/Laptop to use the alternate file browsing method. This method uses a Java applet to allow users to back up from removable media and to restore to alternate locations on removable media.

To configure Avamar Desktop/Laptop to use the alternate file browsing method:

1. Open a command shell and log in:
 - For a single-node server, log in to the server as root.
 - For a multi-node server, log in to the utility node as root.
2. Switch user to root by typing:

```
su -
```
3. Change the current working directory by typing:

```
cd /usr/local/avamar/etc
```
4. Open the Avamar Desktop/Laptop properties file, dtlt.properties, in a plain text editor.

5. Add the `useAppletToBrowseLocalFile` key with the value of `true`, as follows:

```
useAppletToBrowseLocalFile=true
```

If the key already exists in `dtlt.properties`, set the value to `true`.

6. Save and close the file.

Standby, sleep, and hibernate states interfere with backups

Issues may occur when computers go into standby/sleep (ACPI state G1-S3), hibernate (ACPI state G1-S4), or hybrid sleep (Windows Vista) modes during a backup.

Upon returning to a working state (ACPI state G0-S0), the network connection between the client and the Avamar server may be lost and yet appear, from the server side, to still be established. Canceling the backup from the client side has no effect.

To drop the backup connection, cancel the backup from the server side. This occurs automatically when the connection is inactive for more than one hour.

To help minimize this problem, be sure the BIOS and drivers on all supported computers are up-to-date.

Avamar Web Restore

The following technical notes apply to Avamar Web Restore.

Enabling the full display on the Avamar log in screen

Avamar Web Restore displays an empty Domain field and an empty Client field on the Avamar log in screen to prevent the display of domain information during a non-domain log in. When using Avamar Web Restore only in a secure domain, change this default setting to enable the full display on this screen.

When the full display is enabled, a list of Avamar domains appears in the Domain field and a list of clients appears in the Client field.

Note: This change does not affect the Avamar Web Restore LDAP log in screen.

To enable the full display on the Avamar log in screen:

1. Open a command shell and log in:
 - For a single-node server, log in to the server as root.
 - For a multi-node server, log in to the utility node as root.
2. Switch user to root by typing:

```
su -
```
3. Change the current working directory by typing:

```
cd /usr/local/avamar/etc
```
4. Open the Avamar Desktop/Laptop properties file, `dtlt.properties`, in a plain text editor.

5. Add the showWRClientList key with the value of true, as follows:

```
showWRClientList=true
```

If the key already exists in dtlt.properties, set the value to true.

6. Save and close the file.

Avamar Enterprise Manager

The following technical notes apply to Avamar Enterprise Manager.

Incorrect Avamar Administrator version may launch after server upgrade

The wrong version of Avamar Administrator may appear the first time that you launch Avamar Administrator using Avamar Enterprise Manager after a system upgrade. The first launch might launch the pre-upgrade version of Avamar Administrator. The correct upgraded version of Avamar Administrator appears in subsequent launches.

Errors when launching Avamar Administrator

Stale Java temporary Internet files can cause errors when you launch Avamar Administrator from an Avamar Enterprise Manager session.

To resolve this issue on Windows computers:

1. From the Windows Control Panel, open the Java Control Panel.
2. In the **Temporary Internet Files** area, click **Delete Files**.
A confirmation dialog box appears.
3. Ensure that all temporary Internet file types are selected, and click **OK**.

Documentation

This section describes the documentation and information products that are available with this release of Avamar. It also provides corrections for documentation errors that are discovered after a publication is finalized.

Avamar product documentation

This section describes the product documentation that is available with Avamar 7.0.

EMC Avamar Administration Guide

This document describes how to configure, administer, monitor, and maintain the Avamar system.

EMC Avamar Operational Best Practices

This document provides best practices for designing, configuring, managing, and tuning the performance of the Avamar system.

EMC Avamar and EMC Data Domain System Integration Guide

This document describes how to install, configure, administer, and use a Data Domain system as a backup target for Avamar.

EMC Avamar Product Security Guide

This document discusses Avamar security considerations, including user authentication and authorization, client/server access and authentication, data security and integrity, system monitoring, server hardening, port usage, and firewall requirements.

EMC Avamar Management Console Command Line Interface (MCCLI) Programmer Guide

This document describes how to install, configure, and use the Avamar Management Console Command Line Interface (MCCLI), which is a Java software application that provides command line access to Avamar Administrator features.

EMC Avamar Release Notes

This document contains information on new features and changes, fixed problems, known limitations, and environment and system requirements for the latest Avamar release.

EMC Avamar Backup Clients User Guide

This document describes how to install and activate Avamar backup clients on all platforms. It also describes how to use the Avamar backup client to back up and restore data.

EMC Avamar for VMware User Guide

This document describes how to install, configure, and use Avamar to back up and restore virtual machines in a VMware environment.

EMC Avamar for Windows Server User Guide

This document describes how to install the Avamar client for Microsoft Windows, and how to back up and restore data on a Windows server.

EMC Avamar for Hyper-V VSS Guide

This document describes how to install Avamar in a Microsoft Hyper-V environment, and how to back up and restore virtual machines using Avamar with Microsoft Volume Shadow Copy Service (VSS) technology.

EMC Avamar for Exchange VSS User Guide

This document describes how to install Avamar in a Microsoft Exchange Server environment, and how to back up and restore data using Avamar with Microsoft Volume Shadow Copy Service (VSS) technology.

EMC Avamar for SharePoint VSS User Guide

This document describes how to install Avamar in a SharePoint environment, and how to back up and restore data using Avamar with Microsoft Volume Shadow Copy Service (VSS) technology.

EMC Avamar for SQL Server User Guide

This document describes how to install Avamar in a Microsoft SQL Server environment, and how to back up and restore SQL Server databases.

EMC Avamar for Lotus Domino User Guide

This document describes how to install Avamar in a Lotus Domino environment, and how to back up and restore data.

EMC Avamar for Oracle User Guide

This document describes how to install Avamar in an Oracle database environment, and how to back up and restore Oracle databases.

EMC Avamar NDMP Accelerator User Guide

This document describes how to install and configure the Avamar NDMP Accelerator, and how to back up and restore data on supported EMC VNX and EMC storage systems and NetApp filers.

EMC Avamar for SAP with Oracle User Guide

This document describes how to install Avamar in an SAP environment with Oracle, and how to back up and restore SAP servers with Oracle databases.

EMC Avamar for Sybase ASE User Guide

This document describes how to install Avamar in a Sybase environment, and how to back up and restore Sybase Adaptive Server Enterprise (ASE) databases.

EMC Avamar for IBM DB2 User Guide

This document describes how to install Avamar in an IBM DB2 environment and how to back up and restore DB2 databases.

EMC Avamar Plug-in for vCenter Administration Guide

This document describes how to install, configure, administer, and use the EMC Backup and Recovery plug-in for vCenter to back up and restore VMware image backups on an Avamar server.

Avamar related documentation

For more information about Avamar 7.0, refer to this documentation:

EMC Avamar Compatibility and Interoperability Matrix

This document provides server, client, and platform compatibility and interoperability information. The document is available on EMC Online Support at <https://support.EMC.com>.

Technical notes and white papers

Avamar technical notes provide technical details on specific product features, including step-by-step tasks, where necessary. White papers provide an in-depth technical perspective of a product or products as applied to critical business issues or requirements. Both technical notes and white papers are available on EMC Online Support at <https://support.EMC.com>.

Documentation errata

This section provides corrections for Avamar 7.0 documentation errors that are discovered after a publication is finalized.

EMC Avamar Administration Guide

To obtain assigned license keys for Avamar products included in EMC Backup Software suite models, find the assigned license keys on EMC Online Support on the license management page.

To access EMC Online Support, type the login credentials provided in the EMC License Authorization (LAC) email sent to you from licensingnorthamerica@emc.com, licensingemea@emc.com, or licensingapj@emc.com. If you cannot find the email, send an email to licensing@emc.com to request that the EMC License Authorization email be sent. Include the EMC product Sales Order (SO) number in the email. The EMC product SO number is required.

To access the license management page on EMC Online Support, click the **Get and Manage Licenses** link below the **Service Center** section of the home page.

EMC Avamar for IBM DB2 User Guide

The “Example procedure to restore an instance to a different instance” topic in Chapter 5 is missing the `--redirected_restore_target=db2inst2` parameter in step 1. The correct list of parameters in the flag file must include the following parameters:

```
--id=user-1@/clients/hostA.avamar.emc
--password=obfuscated password
--sysdir=/usr/local/avamar/etc
--db2-source-instance=db2inst1
--redirected_restore_target=db2inst2
```

EMC Avamar NDMP Accelerator User Guide

When restoring to an NFS or CIFS mount, metadata such as ACLs, alternate data streams, attributes associated with hard links or file compression, is not restored.

EMC Avamar for VMware User Guide

When enabling changed block tracking, each affected virtual machine must undergo a “stun” action in order for it to take affect. The correct list actions that comprise a “stun” action are: reboot, power on, resume after suspend, or migrate.

Your comments

Your suggestions help us to improve the accuracy, organization, and overall quality of the documentation. You may email comments to BSGDocumentation@emc.com.

Please include the following information:

- ◆ Product name and version
- ◆ Document name, part number, and revision (for example, 01)
- ◆ Page numbers
- ◆ Other details to help us address the documentation issue

Installation

The following sections provide information about installation and upgrade in an Avamar 7.0 environment.

Avamar server installation and upgrade

An EMC technical representative must install the Avamar server.

Avamar server upgrades are scheduled and performed by the Avamar Support Upgrade Team. To request an upgrade, go to EMC Online Support, <https://support.EMC.com>, and open an upgrade Service Request. A technical representative then contacts you to gather information about the Avamar environment and to schedule a resource for the upgrade.

Downgrading the Avamar server software to an earlier version is not supported under any circumstances.

To upgrade client download installation packages on the Avamar server, follow the instructions in the *EMC Avamar Client-Only System Upgrades Technical Note* available on the EMC online support website.

Avamar client installation and upgrade

Client installation and upgrade procedures are provided in each client or plug-in user guide, such as the *EMC Avamar for Oracle User Guide*, *EMC Avamar for Windows Server User Guide*, or *EMC Avamar for SQL Server User Guide*. A full list of Avamar documentation is available in [“Documentation” on page 65](#).

Installing and upgrading other Avamar components

The following table provides the location for installation and upgrade procedures for additional Avamar components.

Table 31 Installation and upgrade of other Avamar components

Component	Location for installation and upgrade procedures
Avamar Administrator	<i>EMC Avamar Administration Guide</i>
Avamar Management Console Command Line Interface (MCCLI)	<i>EMC Avamar Management Console Command Line Interface (MCCLI) Programmer Guide</i>

Upgrade requirements for Avamar 7.0 and Avamar 7.0 Service Pack 1

Review the requirements in the following topics before you upgrade to Avamar 7.0.

Upgrading from Avamar 7.0 DA to later versions of Avamar 7.0

If you are upgrading from Avamar release 7.0 DA (7.0.100-396) to a later version of Avamar 7.0 (including service packs) and are performing backups to an Avamar Data Store, you must perform an L0 backup after upgrading.

For customers backing up to Data Domain rather than Avamar Data Store, this is not an issue because the paging cache is enabled by default.

Avamar release 5.x and earlier clients no longer supported

Before you upgrade the Avamar server from release 6.x to 7.0.x, ensure that Avamar clients in the configuration run release 6.0.x, 6.1.x, or 7.0. An Avamar 7.0.x server does not support Avamar clients that run release 5.x or earlier. When you store client backups on a Data Domain system, you must upgrade Avamar clients that run release 5.x or 6.0.x to release 6.1.x or later.

Avamar Data Store Gen1 and Gen2 hardware no longer supported

Avamar software running on Avamar Data Store Gen1, Avamar Data Store Gen2, or any customer provided Dell hardware is not supported with Avamar release 7.0. The minimum hardware requirement that support Avamar release 7.0 will be Avamar Data Store Gen3.

Upgrade requirements in a VMware environment

The following sections describe upgrade requirements in a VMware environment:

Upgrading Avamar version 6.0 proxies

You cannot upgrade Avamar version 6.0 proxies to version 6.1 or later for the Avamar Plug-in for VMware. To use version 6.1 or later functionality, deploy 6.1 or later proxies.

In addition, the Avamar role requires additional privileges for release 6.1 Service Pack 1 or later VMware image proxies. If you continue to use release 6.1 proxies, rather than 6.1 Service Pack 1 or later proxies, the additional privileges are not required.

To set the additional privileges:

1. In the vSphere client, click **Roles**.
2. Right-click the Avamar role and select **Edit Role**.
3. Expand the **Global** privilege and select the following:
 - **Disable method**
 - **Enable method**
 - **Licenses**
4. Expand the **vApp** privilege and select **Export**.
5. Click **OK**.

Rebooting proxy Virtual Machines

Proxy Virtual Machines must be rebooted after an upgrade of the Avamar server has been completed.

Deploying new proxies

To use new functionality in Avamar version 7.0 GA proxies, you cannot upgrade earlier proxies. You must deploy new 7.0 GA proxies.

Upgrade requirements for a security-hardened Avamar server

If you are using a security-hardened Avamar server with release 6.1 or later, you must upgrade the following plug-ins to 6.1 Service Pack 1 or later:

- ◆ Avamar Plug-in for Exchange VSS
- ◆ Avamar Plug-in for Hyper-V VSS
- ◆ Avamar Plug-in for SharePoint VSS
- ◆ Avamar Plug-in for SQL Server
- ◆ Avamar Plug-in for Windows VSS (System State)

Upgrade requirements for the SQL Server plug-in

When you upgrade the Avamar server to release 7.0, the Avamar Plug-in for SQL Server must be release 6.1 or later. Do not use a SQL Server plug-in running release 6.0 or earlier to back up to or restore from an Avamar server with release 7.0.

Upgrade requirements for Avamar Data Transport

To use Avamar Data Transport (ADT) with an Avamar 7.0 server, you must install ADT release 1.0 Service Pack 3.

Upgrade requirements for Avamar Tape Out

To use Avamar Tape Out (ATO) with an Avamar 7.0 server, you must upgrade your ATO software to release 3.1.c.

Upgrade requirements for Avamar with a Data Domain system

You must use DD OS 5.3.0 or later on a Data Domain system with an Avamar 7.0 server.

Before upgrading to Avamar release 7.0, clients backing up to a Data Domain system must be running Avamar client release 6.1.x or higher.

Metadata capacity for backups stored on Data Domain systems

The *EMC Avamar Metadata Capacity Reporting and Monitoring Release 7.0 Technical Note* provides more information about metadata capacity for backups stored on Data Domain systems. This technical note is available from EMC online support (<https://support.emc.com>).

Microsoft Exchange 2003 and Data Domain

If you are backing up Microsoft Exchange 2003 to a Data Domain system, backups will no longer work after upgrading to Avamar release 7.0. Support for Microsoft Exchange 2003 ended with release 6.0.x; there is no support for Microsoft Exchange 2003 in Avamar release 6.1.x or later and upgrading to Avamar release 7.0 will permanently break Microsoft Exchange 2003 backups to Data Domain. Therefore you must either:

- ◆ Upgrade to a later version of Microsoft exchange.
- ◆ Send the Microsoft Exchange 2003 backups to the Avamar system rather than Data Domain using the Avamar release 6.0 Microsoft Exchange plug-in software.
- ◆ Continue to use the Avamar release 6.1.x server and do not upgrade your server to Avamar release 7.0.

Required steps to upgrade from Avamar 6.1 to 7.0

Complete the following required steps in order when you upgrade from Avamar 6.1 to Avamar 7.0:

IMPORTANT

If you fail to perform the upgrade steps or you perform the steps out of sequence, then backup failures and data corruption on the backup device can occur.

1. Ensure that all Avamar clients are running Avamar 6.1 client software.
2. Upgrade the Data Domain systems to DD OS 5.3 or DD OS 5.4.
3. Upgrade the Avamar server to release 7.0.
4. (Optional) Upgrade the Avamar clients to release 7.0.

Required steps to upgrade from Avamar 6.0 to 7.0

Complete the following required steps in order when you upgrade from Avamar 6.0 to Avamar 7.0:

IMPORTANT

If you fail to perform the upgrade steps or you perform the steps out of sequence, then backup failures and data corruption on the backup device can occur.

1. If you are using DD OS 4.9, upgrade to DD OS 5.0.
2. Ensure that all Avamar clients are running Avamar 6.1 client software.
3. Upgrade the Avamar server to release 6.1.
4. Upgrade the Data Domain systems to DD OS 5.3 or 5.4.
5. Upgrade the Avamar server to release 7.0.
6. (Optional) Upgrade the Avamar clients to release 7.0.

Upgrade requirements for Avamar Extended Retention

If you are upgrading from Avamar release 6.1.x to Avamar release 7.0, the Avamar Extended Retention software must be upgraded to 2.1.

Upgrade requirements for Avamar with NetWorker

If you use Avamar with EMC NetWorker[®], review the minimum NetWorker software version requirements before you upgrade the Avamar server to release 7.0. The *NetWorker Software Compatibility Guide* on EMC Online Support at <https://support.EMC.com> provides information on the NetWorker version requirement for specific clients.

Upgrade requirements for environments with LDAP

If you upgrade to Avamar 7.0 from Avamar 6.0.x or earlier and you use LDAP to perform external authentication for either Avamar Administrator or Avamar Desktop/Laptop, then you must configure a new LDAP environment.

The way that Avamar communicates with the domain controller and the external authentication server by using LDAP is different in version 6.1.x and later.

If there is an active older LDAP configuration, then the upgrade process disables the new LDAP configuration method and maintains the older LDAP components without transferring the old configuration values to the new method.

The *EMC Avamar Administration Guide* provides details on configuring the new LDAP environment.

Troubleshooting and getting help

The Avamar support page provides access to licensing information, product documentation, advisories, and downloads, as well as how-to and troubleshooting information. This information may enable you to resolve a product issue before you contact EMC Customer Support.

To access the Avamar support page:

1. Go to <https://support.EMC.com/products>.
2. Type a product name in the **Find a Product** box.
3. Select the product from the list that appears.
4. Click the arrow next to the **Find a Product** box.
5. (Optional) Add the product to the **My Products** list by clicking **Add to my products** in the top right corner of the **Support by Product** page.

Knowledgebase

The EMC Knowledgebase contains applicable solutions that you can search for either by solution number (for example, esgxxxxxx) or by keyword.

To search the EMC Knowledgebase:

1. Click the **Search** link at the top of the page.
2. Type either the solution number or keywords in the search box.
3. (Optional) Limit the search to specific products by typing a product name in the **Scope by product** box and then selecting the product from the list that appears.
4. Select **Knowledgebase** from the **Scope by resource** list.
5. (Optional) Specify advanced options by clicking **Advanced options** and specifying values in the available fields.
6. Click the search button.

Online communities

Visit EMC Community Network (<https://community.EMC.com>) for peer contacts, conversations, and content on product support and solutions. Interactively engage online with customers, partners and certified professionals for all EMC products.

Live chat

To engage EMC Customer Support by using live interactive chat, click **Join Live Chat** on the **Service Center** panel of the Avamar support page.

Service Requests

For in-depth help from EMC Customer Support, submit a service request by clicking **Create Service Requests** on the **Service Center** panel of the Avamar support page.

Note: To open a service request, you must have a valid support agreement. Contact your EMC sales representative for details about obtaining a valid support agreement or with questions about your account.

To review an open service request, click the **Service Center** link on the **Service Center** panel, and then click **View and manage service requests**.

Facilitating support

EMC recommends that you enable ConnectEMC and Email Home on all Avamar systems:

- ◆ ConnectEMC automatically generates service requests for high priority events.
- ◆ Email Home emails configuration, capacity, and general system information to EMC Customer Support.

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For the most up-to-date regulatory document for your product line, go to the technical documentation and advisories section on EMC Online Support.