IBM Copy Services Manager
6.3.16

Release Notes
December 2025

IBM

> **Note:**
>
> Before using this information and the product it supports, read the information in "Notices" on page 16.

This edition applies to Version 6, Release 3, Modification 16, of IBM® Copy Services Manager and to all subsequent releases and modifications until otherwise indicated in new editions.

Contents

About this document

This document contains the release notes in support of IBM Copy Services Manager Version 6, Release 3, Modification 16.

Summary of changes

New functions introduced in IBM Copy Services Manager 6.3.16 are described here.

Version 6, Release 3, Modification 16

This table provides the current technical changes and enhancements to Copy Services Manager as of December 2025.

Table 1. Summary of changes in Copy Services Manager 6.3.16 (December 2025)	
Function or feature	**Description**
Allow new update certificate feature from 6.3.15 through CSM CLI and REST	IDEA CSM-I-221 – Provide more details in subject of email notifications, to allow for easier filtering.
IDEA CSM-I-210 – New option to view a scheduled task without having to open the modify wizard	New DS8000 support for enabling Time-locked Expirations on SGC backups.
IDEA CSM-I-211 – Ability to manually start a scheduled task from any step	More enhancements for FlashSystems Snapshot and PBR support .
New ability to cancel a currently running task	New FlashSystems support for Restore from a thin clone's snapshot
IDEA CSM-I-212 – View running status and last run status of actions within a scheduled task	New support for handling FlashCore Module Threat Detection events for FlashSystems directly from CSM and **automatically invoking automation!**

Chapter 1. Prerequisites

Prerequisites for Copy Services Manager include supported operating systems, browsers, and storage systems.

The Copy Services Manager prerequisites can be found at http://www.ibm.com/support/docview.wss?uid=ssg1S1005402.

Chapter 2. Getting support and information

There are several resources available for obtaining additional information and support.

IBM System Storage products website
IBM System Storage products: http://www.ibm.com/servers/storage

IBM Copy Services Manager Support Portal
Copy Services Manager Support Portal (https://ibm.biz/Bdqrwj)

Note: You might need to enter your IBM ID when you first enter this portal.

IBM Support representative
Contact your IBM support representative.

Chapter 3. Publications and related information

Product guides, other IBM publications, and websites contain information that relates to IBM Copy Services Manager.

To view a PDF file, you need Adobe Reader. You can download it at no charge from the Adobe website (get.adobe.com/reader/).

Online documentation

The Copy Services Manager online product documentation contains all of the information that is required to install, configure, and manage IBM Copy Services Manager. The online documentation is updated between product releases to provide the most current documentation.

Publications

Table 2. IBM Copy Services Manager product publications		
Title	**Description**	**Publication**
IBM Copy Services Manager Installation and Configuration Guide	This guide provides task-oriented information for anyone who installs and configures IBM Copy Services Manager.	Publications and related information
IBM Copy Services Manager User's Guide	This guide provides task-oriented information for users of IBM Copy Services Manager. Users should be familiar with the following topics • Copy Services concepts • General principles of IBM AIX®, Linux®, Windows, and the IBM z/OS operating systems • Simple Network Management Protocol (SNMP) concepts • Storage Area Network (SAN) concepts	Publications and related information
IBM Copy Services Manager Command-line Interface User's Guide	This guide provides information for customizing and using the command-line interface for IBM Copy Services Manager. This guide provides information for customizing and using the command-line interface for IBM Copy Services Manager.	Publications and related information
IBM Copy Services Manager Release Notes	This document contains the release notes in support of IBM Copy Services Manager.	Publications and related information

Related websites

View the websites in the following table to get more information about IBM Copy Services Manager.

Table 3. IBM Copy Services Manager related websites	
Title	**Description**
IBM website (ibm.com®)	Find more information about IBM products and services.
IBM Support Portal website (www.ibm.com/support/home)	Find support-related information such as downloads, documentation, troubleshooting, and service requests and PMRs.
Copy Services Manager Support Portal (https://ibm.biz/Bdqrwj)	Find technical support information that is specific to IBM Copy Services Manager.
IBM Directory of Worldwide Contacts website (www.ibm.com/planetwide)	Find contact information for general inquiries, technical support, and hardware and software support by country.
IBM Redbooks® website (www.redbooks.ibm.com/)	Find technical information developed and published by IBM International Technical Support Organization (ITSO).
IBM System Storage Interoperation Center (SSIC) website (www.ibm.com/systems/support/storage/config/ssic)	Find information about supported host system models, operating systems, adapters, and switches.
IBM Fix Central (www.ibm.com/support/fixcentral)	Find fixes and updates for your system's software, hardware, and operating system.

Chapter 4. Known issues and workarounds

The following information describes current known issues with IBM Copy Services Manager Version 6.3.16 and any associated workarounds.

Table 4. IBM Copy Services Manager 6.3.16 known issues and workarounds

Issue	Explanation and possible workaround
Starting with the 6.3.15 release, the default maximum number of Safeguarded Copy Backups that can be created on DS8000 has been increased to 1024. This change accommodates the enhanced capability to create 1024 backups available in the DS8000 10.1 release. However, when running on DS8000 code levels that only support 500 backups, issues may arise if the session's retention value allows a Scheduled Task to attempt creating more than 500 backups. In such cases, if the system tries to create a 501st backup, the backup creation may fail with a 0fb6 error (reason code 1b). This occurs because the session will no longer automatically delete the oldest backup before attempting to create the new backup, causing the operation to exceed the 500-backup limit.	To avoid this error, one of the following workarounds can be implemented: 1) Adjust the retention time on the Safeguarded Copy session so that the session will expire the oldest backup prior to attempting to create the 501st backup. 2) Set the following property in Server --> Properties so that the maximum backups that can be created on the server is 500 again: `com.server.max_sgc_backups_8k=500` **Note:** A restart of the server is NOT necessary when setting this property.

Table 4. IBM Copy Services Manager 6.3.16 known issues and workarounds (continued)	
Issue	**Explanation and possible workaround**
For new z/OS installations, connections to z/OS over IP may fail due to a deprecated protocol setting in the `zosclient.properties` file. This only affects installations of CSM on a fresh file system that do not have a path prefix or set the default `/opt/IBM/CSM/` during the submission of the IWNINSTL installation job. Users that are upgrading or installing on a fresh file system using `CSM_ProductionRoot=`**`-PathPrefix-`**`/opt/IBM/CSM` set to a value will not be affected by this issue.	The installer does not update properties files if it detects that there is already customization in the existing property file. However, a script bug inaccurately detects the existence of a property rather than looking at the existence of a target file. This prevents the installer from updating the file automatically. The following property can be added to the IWNINSTL job prior to the ending /* which causes the installer to force an update of the properties to match the most current requirements: `FORCE_FULL_INSTALL=TRUE` Then submit (or re-submit if done previously) the IWNINSTL job. Alternatively, customers may edit the following file and update the property manually: `/opt/IBM/CSM/wlp/usr/servers/csmServer/properties/zosclient.properties` Update the following property: protocol=**SSL_TLSv2** to protocol=**TLSv1.2** Save the file and restart the IWNSRV address space for the property to take effect. After the workaround has been completed, the z/OS IP connection will use the correct protocol and properly connect.
When upgrading or restoring Copy Services Manager, the host IP connection does not connect to the z/OS IP server.	When upgrading or restoring Copy Services Manager, if the host IP connection does not connect to the z/OS IP server, check the *install dir*/liberty/wlp/usr/servers/csmServer/properties/zosclient.properties from earlier version, and validate that the property is not using the SSLv3 protocol. To change the protocol from SSLv3 to TLSv1.2, run the **chsystem** command as follows: `csmcli> chsystem -f zosclient -p protocol -v TLSv1.2`

Table 4. IBM Copy Services Manager 6.3.16 known issues and workarounds (continued)	
Issue	**Explanation and possible workaround**
Safeguarded Copy session contains backups which do not exist in the hardware anymore.	If a Copy Services Manager Safeguarded Copy session for Storage Virtualize storage systems becomes out of sync with the hardware, add the following property to the server properties: `server.csm.server.enable.auto.specv.sgc=false` After adding the above property, wait until all of theStorage Virtualize Safeguarded Copy sessions are removed from the Copy Services Manager server, and then remove the property. The Copy Services Manager server will rediscover all existing backups and re-setup the scheduled tasks based on the current hardware configuration. The Copy Services Manager server may get out of sync after log periods, if there is no connectivity to the hardware, or if you restore the server from an older backup of the server.
When defined with the same consistency group name, all sessions that share the same DS8000® storage system have the same Master/Subordinate topology, even if there are sessions that do not span the same set of storage systems.	Copy Services Manager supports assigning the same consistency group name to multiple Global Mirror sessions. Master/Subordinate sessions for DS8000 are supported, but limited testing was completed for different combinations of Master/Subordinate configurations, due to environment limitations. Consult with IBM Support to ensure proper coverage of your required configuration.
When more than 256 Copy Services Manager sessions are assigned the same consistency group name, internal issues are encountered.	Limit the number of sessions with the same consistency group name to under 256. This issue will be addressed in a future release.
The Global Mirror options are not synced across sessions that share the same consistency group name. Therefore, when the Global Mirror Master is started, it uses the options that were defined for one of the sessions.	In Copy Services Manager, you can modify certain options for Global Mirror sessions, such as the consistency-group interval time. Ensure that all sessions that have the same consistency group name are also defined with the same Global Mirror options.
When the Global Mirror data for a session is exported, gaps might result with no data while the session was in a suspended state.	When a Global Mirror session that shares a consistency group name with other sessions is suspended, the suspended session is removed from the Master on the hardware while the other sessions are restarted and continue to form consistency groups. When a session is removed from the Master, Copy Services Manager stops collecting historical Global Mirror data for that session. This code limitation has no current workaround.

Table 4. IBM Copy Services Manager 6.3.16 known issues and workarounds (continued)	
Issue	**Explanation and possible workaround**
Copy Services Manager does not support the ability to change the Master of the Metro Global Mirror session from the H2 volumes to the H1 volumes without affecting the other Global Mirror sessions that share the consistency group name.	Copy Services Manager supports the ability to use the same consistency group name across a Metro Global Mirror session. However, when running H1>H2, if you issue either a Start H1>H3 to complete an Incremental Resync, or you issue a Suspend/Recover/Start H2H1H3 to switch the direction of the session, the Global Mirror session is terminated at site 2, which affects the other shared Global Mirror sessions. This is a code limitation with no current workaround.
Copy Services Manager does not support local OS authentication.	When you migrate from a Tivoli® Storage Productivity Center for Replication installation that uses local OS authentication to a Copy Services Manager installation (see the *IBM Copy Services Manager Installation and Configuration Guide* for migration instructions), local OS users are displayed on the **Administration** page with an indication that they were not found in either the LDAP or Basic User Registries. Delete these local OS users, and then either create new basic users for local users, or configure LDAP to use LDAP users or groups for authentication.
There is a known DS8000 issue on certain microcode levels when a relationship is running in Global Copy and switched to a Metro Mirror mode. An error occurs indicating that the multi-target feature is not supported. This problem might be encountered on multi-target Metro Mirror - Global Mirror and multi-target Metro Mirror - Global Mirror with Practice session types.	Suspend the Metro Mirror pairs, and then restart to work around the issue.
After a Recover to Site 3 for a Metro Mirror - Global Mirror with Practice session that uses count-key data (CKD) volumes, when a Start H3->H1->H2 or Start H3->H2->H1 command is issued, the hardware might return an error code 0F74 with Sense Byte 9 set to 0A on the H1-H3 relationships. This situation leads to a full copy of the data from H3 to H1.	There is a known issue after recovering to site 3 for a Metro Mirror - Global Mirror with Practice session using CKD volumes. The Start H3->H1->H3 and Start H3->H2->H1 command attempt to establish failed over relationships from the H3 volume back to H1 to avoid a full copy, as H3 is the target of the FlashCopy® relationship and not in the remote copy relationship between site 1 and site 3. Due to the error in setting up the failback to avoid a full copy, the H3 to H1 relationship performs a full copy of the data.

Table 4. IBM Copy Services Manager 6.3.16 known issues and workarounds (continued)	
Issue	**Explanation and possible workaround**
The **Start H3H1H2/StartH3H2H1** command on a multi-target Metro Mirror - Global Mirror with Practice session receives a 0F52 hardware error.	During the **Start H3H1H2/Start H3H2H1** command operation for a multi-target Metro Mirror - Global Mirror with Practice session, a failover is issued to the H1/H2 volume to later establish H3 to H1/H2. If there are no paths between H1/H2 and H3, you receive a 0F52 error. The workaround for this scenario is to ensure that there are paths from H1/H2 to H3 and H3 to H1/H2 before you issue the **Start H3H1H2** or **H3H2H1** command.
When you use Copy Services Manager on a DS8000 HMC, the key size for a certificate must be 2048.	On z/OS® 2.1, you might encounter a problem due to the key size of a certificate not defaulting to 2048. You can resolve this issue by adding the SIZE(2048) parameter to the RACDCERT statement when you generate a self-signed certificate. For more information, see the topic that is titled "Configuring a secure communication between HyperSwap® and the client" in the Install Guide or online product documentation. Publications and related information provides details on where to find this information.
When you upgrade from a previous version of Copy Services Manager to Version 6.2.0, you might encounter an error when you edit the port pairings CSV file in the GUI.	A new feature in Copy Services Manager 6.2.0 is the ability to add logical paths by editing a sample CSV file in the GUI. However, in previous versions of this file, one of the lines that is supposed to be a comment starts with a dollar ($) sign instead of a number (#) sign. This situation returns an error. This issue is fixed in Version 6.2.0, but is retained for upgrades. Therefore, be aware that you might encounter this error if you upgrade from an older version of Copy Services Manager.

Table 4. IBM Copy Services Manager 6.3.16 known issues and workarounds (continued)	
Issue	**Explanation and possible workaround**
There are limitations for DS8000 storage systems when you set a property in the `rmserver.properties` file on a multi-target session to support Remote Pair FlashCopy in a multi-target environment.	The only option that is currently supported by DS8000 for Remote Pair FlashCopy (Preserve Mirror) is `Attempt to preserve Metro Mirror consistency but fail FlashCopy if Metro Mirror target consistency can't be preserved`, or restricted mode in the DSCLI.
	You might receive the following error if you use the wrong option: `IWNR1027E : The command Flash in session rpfc-mtc23-12xx has completed with one or more errors. error Jun 6, 2017 4:07:52 PM : csmuser : IWNR2114E : A hardware error occurred during the running of a command for the pair in session rpfc-mtc23-12xx for copy set DS8000:2107.LD581:VOL:1206 with source DS8000:2107.LD581:VOL:1206 and target DS8000:2107.LD581:VOL:1201 in role pair H1-T1. The hardware returned an error code of 0f89. Sense Byte 9: 10.`
Unable to connect to older DS8000 storage systems after upgrading Copy Services Manager .	After you upgrade Copy Services Manager, the Copy Services Manager server might be unable to connect to older DS8000 storage systems due to updated security protocols.
	Contact support if you encounter problems with connecting to the storage system after upgrade.
Discovery of disconnected storage under FICON® during storage systems refresh.	If a storage system disconnects from the FICON attachment under z/OS, its status, along with the parent connection is reported as Degraded and marked with the message: `z/OS Device Path Connection Degraded`.
	During normal operation, after the device reconnects, the status goes back to Connected for both the device and its connection. However, if a device is disconnected and then removed from the Copy Services Manager storage connection panel, the message is not removed from the parent. The parent continues to display `z/OS Device Path Connection Degraded` until Copy Services Manager is restarted.

Table 4. IBM Copy Services Manager 6.3.16 known issues and workarounds (continued)

Issue	Explanation and possible workaround
Removal of a Copy Services Manager user also results in the removal of any users that have the same name, but in a different case.	If you have multiple user IDs with the same spelling, but different case, you should not remove any of these user ID variations. Doing so causes all of the users to be removed from the Copy Services Manager access control list, and none of the users are then able to log in to the account. You can add the deleted user back if necessary with no errors. Remove the other users from the `basicRegistry.xml` file, and then they can be added again.
Migration from Tivoli Storage Productivity Center for Replication to Copy Services Manager on z/OS results in some features that fail to start if the `rmserver.properties` file is in ASCII and not EBCDIC.	Check your `rmserver.properties` file before you migrate from Tivoli Storage Productivity Center for Replication to Copy Services Manager. If the file is encoded in ASCII, change it to EBCDIC encoding before you proceed with the migration. For more information and detailed steps, see "Migrating on z/OS," in the installation procedures. See Publications and related information for where to obtain the Install Guide or view the installation topics in the online help.
On a multi-target Metro Mirror - Global Mirror session with HyperSwap enabled, after the swap occurs, an 0FD2 error might appear on the original Global Mirror leg when you start replication from the new site.	The original Global Mirror leg is non-participating and does not affect replication. However, after you swap back, the leg might continue to show the error. If so, the error puts the session in a Target Available and Severe state, even though the swap was successful. To clear the error on the non-participating role pair, another start can be issued, even if the session is already in a Prepared state.
RACF® LDAP is currently not supported.	LDAP using RACF cannot be supported because the underlying product libraries require full LDAP version 3 compliance. Specifically, it does not support most complex filters.
APAR OA56173 is required to run Safeguarded Copy sessions when managing the storage system without an HMC connection.	If you only have a z/OS connection (either FICON or IP to z/OS) without an HMC connection, then you cannot run Safeguarded Copy sessions until APAR OA56173 has been applied to the z/OS system.

Table 4. IBM Copy Services Manager 6.3.16 known issues and workarounds (continued)	
Issue	**Explanation and possible workaround**
When attempting to add a new copy set into a session, after the new copy set has reached a Prepared state, a failure might occur when adding the new volumes into the hardware consistency group. This situation results in the HyperSwap pairs suspending for both the new copy sets, and the copy sets that are already in the consistency group. **Note:** This is a known issue with the IBM FlashSystem® A9000 and A9000R storage systems because the standby mirror for the new copy set does not match that of the consistency group. This issue will be fixed in the 12.3.2.a release of IBM FlashSystem A9000 and A9000R.	If you encounter this issue before the 12.3.2.a release of IBM FlashSystem A9000 and A9000R is available, see "Known issue: IBM FlashSystem A9000 and A9000R storage systems: Standby mirror for the new copy set does not match that of the consistency group" on page 14 for a detailed workaround procedure.

When Copy Services Manager makes calls to the underlying Liberty Profile, the libraries invoked by SAF make a query to RACF. The libraries require authorized services.
 	
If the caller does not have UID(0) access or permission granted to authorized services, the Angel Process must be used. Otherwise the procedure fails and marks the process as program controlled. If RACF errors occur during calls to authorize the CLI through SAF, additional setup might be required.
	The RACF job has been updated with an example to add permissions to the Angel process. Also, a new sample started task is shipped with the product to start the Angel process.
	
	Use the following workaround:
	
	• Grant the IWNSRV address space owner with UID(0) authority, OR
	
	• Check that an Angel process is running by issuing the following command in ISPF option 6:
	
	`d a,l`
	
	and look for the started task called BBGZANGL.
	
	– If a WebSphere® Liberty Angel process is already running, add the following permissions described here to the IWNSRV address space owner: https://www.ibm.com/support/knowledgecenter/en/SS7K4U_liberty/com.ibm.websphere.wlp.zseries.doc/ae/twlp_config_security_zos.html
	
	– Otherwise, create a new Angel started task as described previously, and add permissions for the IWNSRV address space owner to access the process: https://www.ibm.com/support/knowledgecenter/en/SS7K4U_liberty/com.ibm.websphere.wlp.zseries.doc/ae/twlp_admin_zos.html where the *ROOT* variable should be set to:
	`-PathPrefix-/opt/IBM/CSM/wlp`

Table 4. IBM Copy Services Manager 6.3.16 known issues and workarounds (continued)	
Issue	**Explanation and possible workaround**
Multi-Target Metro Mirror - Metro Mirror Site 4 Replication session type hitting a F94 byte X'04 error.	After after running at site 4, and then recovering back to site 1, when starting at site 1, the hardware is unable to set up the multi-target bitmap between H2 and H3, which causes Copy Services Manager to display the message that a full copy might occur if you try to recover to H2 or H3. To fix this problem, issue a Terminate H3H4, and then restart the session. **Note:** Starting H3H4 will produce a full copy again. This issue is fixed in the following levels of DS8000: • R8.5 SP3.2 • R8.5 SP4.1 • R9.0
Changing the cluster name on the Storwize®/SVC device might not get reflected automatically in Copy Services Manager.	If you change the name of a cluster that is connected to Copy Services Manager, Copy Services Manager should automatically change the name. If Copy Services Manager does not change the name, then attempt to restart the Copy Services Manager server to force a rediscovery and refresh. If that does not work, then you can rebuild the session with the **Remove Copy Set** command, keep the session on the hardware, and rebuild the session action plan.
Error message on zLinux platform installation.	During installation on zLinux platforms the following error message appears, but does not cause any problems with the installation, and can be ignored: `*** Error in `/opt/IBM/CSM/UninstallerData/../ liberty/wlp/IBM/Java/jre/bin/java': free(): invalid pointer: 0x000003ff776971d4 ***`
If you used self-signed certificates to establish a host connection to z/OS over IP before upgrading to Copy Services Manager 6.2.9, you might need to re-certify and reclaim the certificates to successfully connect again after upgrading to 6.2.9.	The newer versions of Java™ (as of version 1.8 -- 8.0.6.10) require a key tag attribute called **CA:TRUE**, which is not available from older, self-signed certificates. **Recommended:** You should purchase a signed CA to provide an additional layer of security. See the IBM Copy Services Manager Implementation Guide (http://www.redbooks.ibm.com/redbooks/pdfs/sg248375.pdf) Redbooks publication located on the IBM Redbooks website (www.redbooks.ibm.com/) for more information on how to generate a self-signed certificate in z/OS.

Table 4. IBM Copy Services Manager 6.3.16 known issues and workarounds (continued)

Issue	Explanation and possible workaround
After Copy Services Manager 6.2.10 is installed, attempting to downgrade the server to an older level (6.2.9 or earlier) does not fail the install because it does not recognize that 6.2.10 is a later build than 6.2.x. However, the server will fail to startup if the downgrade occurs.	If this situation occurs, upgrade the code to a level at or higher than what it was previously and the server should startup again.
Issue exporting Global Mirror RPO or LSS OOS data, or graphically viewing RPO or LSS OOS data in specific situation involving time zones.	When the server time zone and the user time zone are different, and the Global Mirror session was started when it was a different day on the server, there are issues exporting data that include the first day of data. To resolve this problem, change the user time zone to match the server.

Detailed workaround procedures

The following information describes detailed workaround procedures for IBM Copy Services Manager 6.3.16 and earlier, pertaining to certain known issues.

About this task

Some issues might require a specific set of ordered steps for the workaround. These steps are detailed below for the issue described.

Known issue: IBM FlashSystem A9000 and A9000R storage systems: Standby mirror for the new copy set does not match that of the consistency group

About this task
This issue will be fixed in the 12.3.2.a release of IBM FlashSystem A9000 and A9000R.

If the problem occurs, before that release is available, you can perform the following steps to fix the session and add the new copy set or sets into the session:

Note: This workaround involves swapping the new volumes to the alternate site, and then swapping them back.

Procedure

1. Issue **Remove Copy Set from CSM** with the **Yes, keep the base hardware relationships on the storage system** option for the new copy sets that you were attempting to add to the session.
2. From the Copy Services Manager GUI: If the session is **Suspended Partial** or **Suspended**, **Suspend** the session and then **Restart** it. Then wait for it to reach the **Prepared** state again.
3. From Hyper-Scale Manager or the XCLI:

   a. Reactivate the multi-target relationships for the copy set or sets that you were attempting to add to the session (if inactive), and wait for it to reach an operational state.

   b. Deactivate the Asynchronous relationships for all copy sets that you were attempting to add to the session.

   c. issue **switch roles** on the HyperSwap relationships for all copy sets that you were attempting to add to the session.

d. Activate the Asynchronous relationships at the new site for all copy sets that you were attempting to add to the session. At this point the new relationship will be running at the opposite local site from the consistency group, and you will now swap it back.

e. Deactivate the Asynchronous relationships for all copy sets that you were attempting to add to the session.

f. issue **switch roles** on the HyperSwap relationships for all copy sets that you were attempting to add to the session.

g. Activate the Asynchronous relationships at the new site for all copy sets that you were attempting to add to the session. At this point you have swapped the new relationships to the other site, and then swapped them back to match the consistency group direction.

4. From Copy Services Manager, re-attempt to add the new copy sets into the session. Copy Services Manager will assimilate the existing relationships on the hardware, and then will add the new copy sets into the consistency group.

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