

AIX® Host Utilities 6.0

Release Notes

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Contents

AIX Host Utilities 6.0 Release Notes	4
The 6.0 release of the AIX Host Utilities	4
Information on finding system requirements	5
New features in the 6.0 release of the AIX Host Utilities	5
Updates to the Release Notes	5
Important Cautions	7
Known problems and limitations	8
Cannot modify LUN queue depth using SMIT	8
Problem with performance of large files on JFS2	8
(MPIO) After failover, MPIO defines failed paths as missing	8
Ways to view current and fixed product bugs	10
NetApp product documentation	11
How to search for documentation on the NetApp Support Site	11
Links to NetApp product documentation	11
Contact technical support	13
Things to check before you call technical support	13
Information you must provide to technical support	13
How to contact NetApp technical support	13
Copyright information	15
Trademark information	16
How to send your comments	17

AIX Host Utilities 6.0 Release Notes

These Release Notes contain the latest information for the AIX® Host Utilities 6.0, including updates about known problems and limitations, information on tunable parameters, and any important cautions. The Release Notes also include any issues that may have been discovered since the Host Utilities were released.

These Release Notes are updated when new information on using the AIX Host Utilities becomes available. It is a good practice to periodically check the Release Notes to see if new information has been added. See the *Updates to the Release Notes* section to determine whether information has been added since you last checked.

The 6.0 release of the AIX Host Utilities

The AIX Host Utilities enable you to connect an AIX host to NetApp storage.

The AIX Host Utilities support multiple environments and the FC and FCoE protocols. The supported environments are AIX MPIO (Native OS) and PowerVM.

Note: For specific information about the operating system versions and updates that the Host Utilities support, see the support.netapp.com/NOW/products/interoperability.

Note: For more information about PowerVM feature, see the Red Book available at [IBM Technical Support](#)

The Host Utilities software is packaged as a single, compressed file. You can download the compressed file and the documentation from the NetApp Support Site at support.netapp.com. The *AIX Host Utilities 6.0 Installation and Setup Guide* provides instructions for installing and setting up the Host Utilities to work with your environment and protocol.

The compressed file contains the following Host Utilities software packages:

- **SAN_Tool_Kit**
This directory contains the SAN Toolkit software package `NetApp.SAN_toolkit`, which applies to all AIX Host Utilities environments and works with all multipathing solutions.
- The host settings software package for your multipathing solution. The host settings package is an Object Data Manager (ODM) stanza LPP package that includes the following:
 - The NetApp AIX MPIO ODM fileset for NetApp LUNs
 - The common NetApp AIX MPIO message catalog

There is a host settings software package for each multipathing solution that the Host Utilities support:

- MPIO

This directory contains the package `NetApp.MPIO_Host_Uilities_Kit` for environments that use AIX MPIO for multipathing. This applies to both AIX MPIO environments and PowerVM environments.

To install the AIX 6.0 Host Utilities, you need to install both the host settings software package for your environment and the SAN Toolkit software package.

Related information

[AIX Host Utilities 6.0 documentation - NetApp Support Site](#)

Information on finding system requirements

NetApp qualifies additional components between releases of the Host Utilities software.

For the latest information about the system requirements, see the Interoperability Matrix, which is available online at support.netapp.com/NOW/products/interoperability.

New features in the 6.0 release of the AIX Host Utilities

The release of the AIX Host Utilities 6.0 added several updates.

October 2012

- There are no new features at this time of the release.

Some of these changes are transparent to the end-user. The *AIX Host Utilities 6.0 Installation and Setup Guide* contains explanations of these new features where needed.

Updates to the Release Notes

The release notes are updated between product releases as new information is uncovered.

October 2012

The AIX Host Utilities 6.0 Installation and Setup Guide was updated in October to make the following changes:

- Remove information on features not supported in this release of the AIX Host Utilities:
 - References to Data ONTAP operating in Cluster-Mode
At this time, the AIX Host Utilities 6.0 do not support Data ONTAP operating in Cluster-Mode.
 - Information about Veritas Storage Foundation

While Veritas Storage Foundation is no longer qualified with AIX Host Utilities 6.0, it is supported in earlier versions of the AIX Host Utilities. For more information about the versions that support Veritas, see support.netapp.com/NOW/products/interoperability.

- References to iSCSI protocol support with AIX Host Utilities

The AIX Host Utilities 6.0 do not support the iSCSI protocol.

Note: The AIX Host Utilities 6.0 compressed installation file does contain an installation package for a `NetApp.iSCSI_Host Utilities_Kit` for single-path iSCSI. Because iSCSI is not supported with AIX Host Utilities 6.0, information on this package file is not included in the AIX Host Utilities 6.0 documentation.

- To add information that starting with AIX Host Utilities 6.0, the pre-install script automatically clears the Single Path Reserve when it detects a SAN-booted device from a NetApp LUN.
- To add information about the maximum number of paths for a SAN boot configuration with AIX Host Utilities 6.0.

The post-install script releases the Single Path Reserve when a boot device with VID=NETAPP is detected during the installation. As a result the data LUNs have no specific path limit; however, it is recommended that maximum path limit is set to 4 for all AIX SAN boot deployments.

Important Cautions

There are no important cautions at this time.

Known problems and limitations

Some unexpected and potentially undesired behaviors have been identified. In some cases, workarounds to avoid those behaviors have also been found.

For more information about an individual bug and to explore other bug-related tools, see Bugs Online on the NetApp Support Site at support.netapp.com/NOW/cgi-bin/bol.

Cannot modify LUN queue depth using SMIT

You cannot modify the `queue_depth` attribute for Data ONTAP LUNs using SMIT.

At this time, there are no SMIT screens that enable you to modify the `queue_depth` attribute for Data ONTAP LUN devices.

Instead of using SMIT, use the `chdev` command to set the `queue_depth` attribute. For example, to set the `queue_depth` attribute to 64 on `hdisk5`, enter the following command:

```
chdev -l hdisk5 -a queue_depth=64
```

Problem with performance of large files on JFS2

The performance on a large file (over 200 GB) in a JFS2 file system may decline as the file increases in size.

This problem appears to be related to JFS2 and the AIX Virtual Memory Manager (VMM). Additional information will be posted as it becomes available.

Use direct I/O to bypass the VMM. See the *AIX 5L Performance Management Guide* for more information on tuning direct I/O.

(MPIO) After failover, MPIO defines failed paths as missing

If your AIX host reboots when your storage cluster is in a failover state, MPIO defines the failed paths as missing instead of failed.

The workaround for this issue depends on whether you have an HACMP environment.

HACMP environment workaround: To get MPIO to correctly recognize the failed states when you are using HACMP, complete the following steps:

1. Wait until the storage system cluster is no longer in a failover state.
2. Create a pre-event script that forces a bus scan before bringing the resource group online.

Note: If you perform these steps while the storage system cluster is in a failover state, the paths remain in a missing state.

Non-HACMP environment workaround: Rescan the bus before you bring any volume groups online.

For the latest status on this issue, see bug 222296.

Related information

[Bugs Online on the NetApp Support Site at support.netapp.com/NOW/cgi-bin/bol](http://support.netapp.com/NOW/cgi-bin/bol)

Ways to view current and fixed product bugs

NetApp provides an online tool that enables you to search for the most current information about a known bug. You can also use this tool, which is available on the NetApp Support Site, to get a list of current or fixed bugs for a particular product.

Bugs Online, which is online at support.netapp.com/NOW/cgi-bin/bol, enables you to search for information in the following ways:

- By entering the bug number
- By entering keywords related to the bug
- By selecting a software product from the list in the **Bug Type(s)** field or the **Product Type(s)** field.

Some products are listed in one field and some in the other field. You should check both to find the product you want.

Some keyword combinations and Bug Type(s) that you might want to use include the following:

- FCP General: Displays FC and HBA bugs that are not associated with a specific host.
- FCP - AIX

NetApp product documentation

You can access documentation for all NetApp products on the NetApp Support Site at support.netapp.com.

In addition to product documentation, NetApp provides other product information, such as technical reports and white papers.

How to search for documentation on the NetApp Support Site

NetApp provides a variety of documentation on the support.netapp.com site that can be helpful in working with the Host Utilities.

You can use the Search tool on the support.netapp.com site to search through the following information sources:

- Product documentation
- Knowledgebase articles
- Bugs Online
- The support community
- Tools and other documentation
- Partner knowledgebases

Links to NetApp product documentation

The Product Documentation page contains pointers to the most current NetApp documentation for Host Utilities and storage systems.

Links to specific Host Utilities documentation are in the Product Library A-Z page available at support.netapp.com/documentation/productsatoz/index.html for each Host Utilities product.

The following table describes some of the documents on the support.netapp.com site that contain information about host and storage system requirements, supported configurations, and best practices, as well as procedures for installing and managing your storage environment:

If you need more information about...	Go to...
The latest supported configurations	• NetApp Interoperability Matrix • <i>Hardware Universe</i> (formerly the <i>System Configuration Guide</i>) at support.netapp.com/knowledge/docs/hardware/NetApp/syscfg/index.shtml
Configuring and managing your storage system	• The following documents for your Data ONTAP release in the Documentation Library: • The <i>Data ONTAP Software Setup Guide</i> • The <i>Data ONTAP SAN Administration Guide</i> (formerly the <i>Data ONTAP Block Access Management Guide for iSCSI and FC</i>) • The <i>Data ONTAP Release Notes</i> • The <i>Data ONTAP Commands: Manual Page Reference, Volume 1</i> • The <i>Data ONTAP Commands: Manual Page Reference, Volume 2</i> • The <i>Data ONTAP Upgrade and Revert/Downgrade Guide for 7-Mode</i>
Supported Fibre Channel SAN topologies	The <i>Data ONTAP SAN Configuration Guide</i> (formerly the <i>Data ONTAP Block Access Management Guide for iSCSI and FC</i>)
Configuring your host for Host Utilities	The Host Utilities documents in the Host Utilities Documentation Library

Contact technical support

If you have a question that has not been resolved by these Release Notes, contact NetApp technical support.

Things to check before you call technical support

Before you call technical support, there are several things you can try in effort to solve the problem yourself.

They include:

- Go through these *Release Notes* to see if they contain information about your problem.
- Check all cables to make sure that they are connected properly.
- If you are using switches, check the power to the switches to make sure that the system is turned on.
You should also make sure that the system components were turned on in the correct order.
- Review the troubleshooting information provided in the documentation for this product.

Information you must provide to technical support

Before you contact technical support, you must gather information about your system and your problem.

You should have the following information available when you contact technical support:

- Your contact information
- A list of all the NetApp products you are using
- All the error messages from the system
- Information about your system setup
- Your licensing information

How to contact NetApp technical support

You can contact NetApp technical support by telephone or from the NetApp Support Site.

To contact technical support by telephone, use the following numbers:

- 888 4-NETAPP (United States and Canada)
- 00.800.44.NETAPP (EMEA/Europe)
- +800.800.80.800 (Asia/Pacific)

To contact technical support from the web, use the following address:

- support.netapp.com

For a detailed listing of technical support phone numbers, go to the NetApp Support page at [NetApp Support](#).

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You can also contact us in the following ways:

- NetApp, Inc., 495 East Java Drive, Sunnyvale, CA 94089 U.S.
- Telephone: +1 (408) 822-6000
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