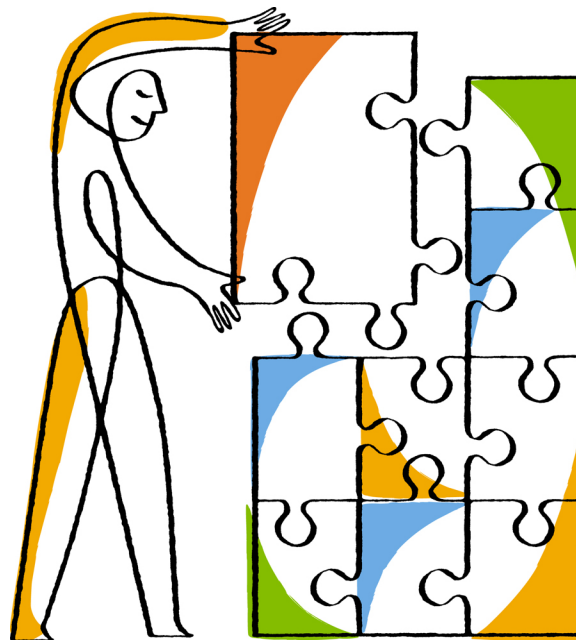




NetApp®

OnCommand® Shift 1.1

Release Notes



NetApp, Inc.
495 East Java Drive
Sunnyvale, CA 94089
U.S.

Telephone: +1 (408) 822-6000
Fax: +1 (408) 822-4501
Support telephone: +1 (888) 463-8277
Web: www.netapp.com
Feedback: doccomments@netapp.com

Part number: 215-10346_A0_ur001
December 2015

Contents

Product overview	4
How OnCommand Shift works	4
New in this release	5
Fixed issues	5
Upgrade notes	5
Verifying support for your configuration in the IMT	6
New and changed commands	7
Known limitations	8
Known issues	9
Where to get help and find more information	10
Copyright information	11
Trademark information	12
How to send comments about documentation and receive update notifications	13
Index	14

Product overview

OnCommand Shift is a Windows PowerShell-based interface that enables you to convert virtual machines from one hypervisor format to another.

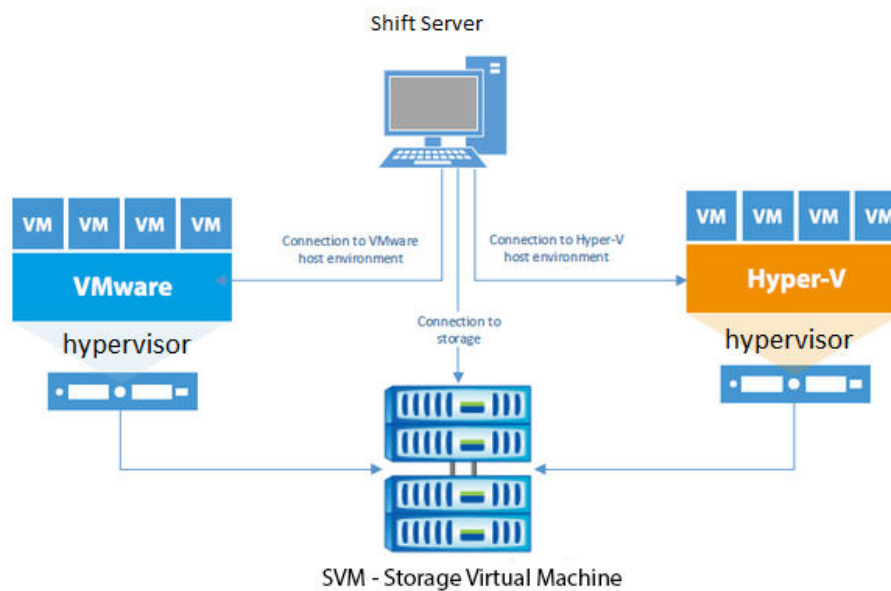
The product leverages NetApp FlexClone technology to support rapid bidirectional conversion of virtual machine hard drives as follows:

- VMware ESXi to Microsoft Hyper-V
- Microsoft Hyper-V to VMware ESXi

OnCommand Shift replaces the MAT4Shift tool.

How OnCommand Shift works

At conversion time, OnCommand Shift connects the Shift server to Microsoft Hyper-V and VMware ESXi hosts and to shared NetApp storage. The server leverages NetApp FlexClone technology to convert VM hard drives from one hypervisor format to the other.



New in this release

OnCommand Shift 1.1 provides support for a new configuration wizard that simplifies setup. PowerShell cmdlets remain available for scripting and other tasks. OnCommand Shift also provides support for internationalization.

Configuration wizard

You can use the configuration wizard to perform the following tasks:

- Configure the OnCommand Shift server as a CredSSP client
- Configure OnCommand Shift server connections to Hyper-V and ESXi hosts and to the guest OS of the VMs to be converted
- Create the new Data ONTAP Storage Virtual Machine (SVM) to which you will move the VMs you want to convert
- Configure the Data ONTAP cluster management IP address and destination path of the conversion

Internationalization

OnCommand Shift 1.1 provides support for the following:

- Installing and running on a non-English-language operating system (Japanese, German, and simplified Chinese)
- Entering configuration information in Unicode.

Note: There is one exception to this support. The guest OS password must be entered in ASCII.

- Converting a non-English-language guest OS running on non-English-language hypervisors (Japanese, German, and simplified Chinese)

Newly supported software

OnCommand Shift provides first-time support for the following:

- Data ONTAP 8.3.2 (including support for adaptive compression volumes)
- ESXi 6.0
- Java 8

Fixed issues

It is a good practice to review the known issues fixed in a new release before upgrading to it. If a Bugs Online report is available, the bug ID contains a hyperlink to the report.

Bug ID	Description
905136	Multi-byte characters are not preserved in virtual machine names when performing a conversion operation
907744	When the ESXi guest OS username is wrong, OnCommand Shift does not abort quickly

Upgrade notes

Upgrade notes describe new requirements and changes in support between the last release of the product and this one, including any deprecated features. Review this information carefully before

upgrading to the new release. See the NetApp Interoperability Matrix (IMT) for supported configurations and the product user documentation for complete system requirements.

Upgrading to OnCommand Shift 1.1

You can upgrade to OnCommand Shift 1.1 from version 1.0. Run the installation program the same way you would run it if you were installing OnCommand Shift for the first time. For complete installation instructions, see the [OnCommand Shift 1.1 Installation and Setup Guide](#).

No additional configuration is necessary. A running OnCommand Shift 1.0 server is stopped and the new program files are installed. For OnCommand Shift 1.1, Java 8 is installed alongside Java 7 (which was required for OnCommand Shift 1.0).

User configuration files in the Tomcat 7 `config` folder for the OnCommand Shift web application are backed up before the new version is installed. After successful installation, these configuration files are written back to the `config` folder and the system is started again, so that no user configurations are lost.

Verifying support for your configuration in the IMT

You can use the NetApp Interoperability Matrix (IMT) to verify product support for your configuration: Data ONTAP software, host operating system, and so on. Verify support for your configuration before you install or upgrade to the new release.

Steps

1. Access the IMT.
[NetApp Interoperability Matrix Tool](#)
2. If OnCommand Shift is not the selected Storage Solution, click **Change** and select it under the **Server Suite** category.



3. In the **Component Explorer** pane, select each component you want to verify and click **Add** when prompted.

When you add an item, incompatible items are grayed out.

Tip: Select the parent of a set of components to select all of its children.

4. When you are satisfied with your choices, click **Show Results**.

The IMT lists each supported configuration.

5. You can:
 - Scroll across a configuration to view the supported components and any notes or alerts for the configuration.
 - Click the configuration name to display complete information for supported components, including support history and NetApp policies and guidelines for the selected Storage Solution category.
6. If no results are returned for your configuration, use the feedback wizard to report the problem to technical support:
 - a. Click **Feedback** in the upper right corner of the IMT.

- b. Select **I cannot find my configuration** and then click **Next**.
- c. Choose OnCommand Shift in the **Solution** drop-down list and then type your comments and click **Submit**.

New and changed commands

Review these changes to product commands before upgrading to the new release. You need to be sure that the changes will not break any scripts that you use to execute the commands.

cmdlet	Change
convert-VirtualMachine	Renamed to convert-ShiftVirtualMachine. Two new parameters have been added: - rollback specifies whether to roll back the source virtual machine. Useful for debugging. If a conversion fails when rollback is set to false, the user can log in to the guest OS and troubleshoot the issue. If not specified, the default is true. - uninstallvmtools specifies whether to uninstall VMware tools on the source virtual machine. If not specified, the default is true.
new-SVM	Renamed to new-ShiftSVM. The routingGroup parameter has been deprecated.
restore-VirtualMachine	Renamed to restore-ShiftVirtualMachine

Known limitations

Known limitations identify platforms, devices, or functions that are not supported by this release of the product, or that do not interoperate correctly with it. Review these limitations carefully.

Guest OS password must be entered in ASCII

OnCommand Shift does not support entering the guest OS password in Unicode. You must enter the password in ASCII.

Unsupported VM guest OS

Windows Server 2003

Windows Server 2012 Foundation

Unsupported hypervisor platforms

Windows Server 2008 Hyper-V

Windows Server 2008 R2 Hyper-V

vSphere ESX and ESXi 4.x

vCenter Server

OnCommand Shift does not support vCenter Server. You cannot use your vCenter Server IP address for your hypervisor map. You must use your ESXi Server for your hypervisor map for host name, IP address, user name, and password when using `Set-ShiftHypervisorConfig`.

Microsoft System Center Virtual Machine Manager

OnCommand Shift does not support Microsoft System Center Virtual Machine Manager. You cannot use your Microsoft System Center Virtual Machine Manager IP address for your hypervisor map. You must use your Hyper-V Server for your hypervisor map for host name, IP address, user name, and password when using `Set-ShiftHypervisorConfig`.

IPv6

IPv6 is not supported; only IPv4 is supported.

Install PowerShell 2.0 on Windows Server 2008 on guest OS

If you are running Windows Server 2008 on the guest OS, you must install Windows PowerShell 2.0. PowerShell is not installed by default on Server 2008.

MetroCluster

OnCommand Shift does not support MetroCluster.

Known issues

Known issues identify problems that might prevent you from using this release of the product successfully. NetApp Bugs Online provides complete information for most known issues, including any workarounds.

[NetApp Bugs Online](#)

If a Bugs Online report is available, the bug ID contains a hyperlink to the report.

Known issues identified in this release

The following issues have been added to the release notes since the last release:

Bug ID	Description
904346	Default ONTAP configuration values cause an ASUP error
910552	VMWARE_DEST_DATASTORE_NOT_FOUND error when different LIFs are used for CIFS and NFS
928829	Silently uninstalling OnCommand Shift 1.1 and using OnCommand Shift 1.0 executable causes some installation packages to be left over
925896	The VM name is case-sensitive. The Shift server automatically changes non-conforming names during VM conversion
936884	Need to decompress the data after the volume is changed from compressed to non-compressed
953634	When uninstallation is initiated, the DataONTAP PSTK is in a running state. The error message will not present a problem during uninstallation, as all files are removed
956816	A VM will reboot twice after conversion to set the network configuration

Known issues identified in previous releases

The following issues were reported in previous editions of the release notes:

Bug ID	Description
881118	Multiple dynamic volumes with multiple disks do not get preserved after Hyper-V to ESXi conversion operation
883971	NetApp OnCommand Shift conversion operation can be interrupted by Windows Product Activation
893280	There is no cmdlet to restart the Shift server
894171	Connecting to remote server failed due to time and/or date difference
896828	ESXi to Hyper-V conversion failed to uninstall VMware tools because Windows update was in progress
900355	Uninstall Apache Tomcat before JRE

Where to get help and find more information

The NetApp Support Site provides access to troubleshooting tools, product documentation, and technical assistance. You can use NetApp Community forums to connect with peers, and the NetApp Library to access technical reports and white papers.

- [*NetApp Support*](#)
Access troubleshooting tools, product documentation, and technical support assistance.
- [*NetApp Communities*](#)
Connect with peers, ask questions, exchange ideas, find resources, and share best practices.
- [*NetApp library of technical reports and white papers*](#)
Access technical reports, white papers, and other documents.

Copyright information

Copyright © 1994–2015 NetApp, Inc. All rights reserved. Printed in the U.S.

No part of this document covered by copyright may be reproduced in any form or by any means—graphic, electronic, or mechanical, including photocopying, recording, taping, or storage in an electronic retrieval system—without prior written permission of the copyright owner.

Software derived from copyrighted NetApp material is subject to the following license and disclaimer:

THIS SOFTWARE IS PROVIDED BY NETAPP "AS IS" AND WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE HEREBY DISCLAIMED. IN NO EVENT SHALL NETAPP BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

NetApp reserves the right to change any products described herein at any time, and without notice. NetApp assumes no responsibility or liability arising from the use of products described herein, except as expressly agreed to in writing by NetApp. The use or purchase of this product does not convey a license under any patent rights, trademark rights, or any other intellectual property rights of NetApp.

The product described in this manual may be protected by one or more U.S. patents, foreign patents, or pending applications.

RESTRICTED RIGHTS LEGEND: Use, duplication, or disclosure by the government is subject to restrictions as set forth in subparagraph (c)(1)(ii) of the Rights in Technical Data and Computer Software clause at DFARS 252.277-7103 (October 1988) and FAR 52-227-19 (June 1987).

Trademark information

NetApp, the NetApp logo, Go Further, Faster, AltaVault, ASUP, AutoSupport, Campaign Express, Cloud ONTAP, Clustered Data ONTAP, Customer Fitness, Data ONTAP, DataMotion, Fitness, Flash Accel, Flash Cache, Flash Pool, FlashRay, FlexArray, FlexCache, FlexClone, FlexPod, FlexScale, FlexShare, FlexVol, FPolicy, GetSuccessful, LockVault, Manage ONTAP, Mars, MetroCluster, MultiStore, NetApp Insight, OnCommand, ONTAP, ONTAPI, RAID DP, RAID-TEC, SANtricity, SecureShare, Simplicity, Simulate ONTAP, Snap Creator, SnapCenter, SnapCopy, SnapDrive, SnapIntegrator, SnapLock, SnapManager, SnapMirror, SnapMover, SnapProtect, SnapRestore, Snapshot, SnapValidator, SnapVault, StorageGRID, Tech OnTap, Unbound Cloud, and WAFL and other names are trademarks or registered trademarks of NetApp, Inc., in the United States, and/or other countries. All other brands or products are trademarks or registered trademarks of their respective holders and should be treated as such. A current list of NetApp trademarks is available on the web at <http://www.netapp.com/us/legal/netapptmlist.aspx>.

How to send comments about documentation and receive update notifications

You can help us to improve the quality of our documentation by sending us your feedback. You can receive automatic notification when production-level (GA/FCS) documentation is initially released or important changes are made to existing production-level documents.

If you have suggestions for improving this document, send us your comments by email to doccomments@netapp.com. To help us direct your comments to the correct division, include in the subject line the product name, version, and operating system.

If you want to be notified automatically when production-level documentation is released or important changes are made to existing production-level documents, follow Twitter account @NetAppDoc.

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
- Fax: +1 (408) 822-4501
- Support telephone: +1 (888) 463-8277

Index

B

- bugs
 - considerations before upgrading to this release [9](#)
 - fixed in this release [5](#)

C

- changes
 - considerations before upgrading [5](#)
 - to commands in this release [7](#)
- commands
 - changes in this release [7](#)
- comments
 - how to send feedback about documentation [13](#)
- community forums
 - help and information you can find on [10](#)
- configurations
 - verifying support for system [6](#)
- considerations
 - before upgrading to this release [5](#)

D

- documentation
 - how to receive automatic notification of changes to [13](#)
 - how to send feedback about [13](#)
 - where to get more product [10](#)

F

- features
 - new in this release [5](#)
- feedback
 - how to send comments about documentation [13](#)
- fixed issues
 - in this release [5](#)
- functions
 - new in this release [5](#)

H

- help
 - where to get more product information and [10](#)

I

- IMT
 - using to verify support for system configurations [6](#)
- information
 - how to send feedback about improving documentation [13](#)
 - where to get more product help and [10](#)
- Interoperability Matrix
 - See* IMT
- issues
 - considerations before upgrading to this release [9](#)

fixed in this release [5](#)

K

- known issues
 - considerations before upgrading to this release [9](#)
- known limitations
 - considerations before upgrading to this release [8](#)

L

- libraries
 - help and information you can find on [10](#)
- limitations
 - considerations before upgrading to this release [8](#)

N

- NetApp Interoperability Matrix
 - See* IMT

O

- OnCommand Shift
 - functional illustration [4](#)
 - graphical overview [4](#)
 - product overview [4](#)
- overview
 - OnCommand Shift [4](#)

P

- prerequisites
 - for upgrading to this release [5](#)
- product documentation
 - where to get more [10](#)
- product help
 - where to get more [10](#)
- product overview
 - OnCommand Shift [4](#)
- public forums
 - help and information you can find on [10](#)

R

- release notes
 - changes to commands in this release [7](#)
 - considerations before upgrading to this release [5](#)
 - issues fixed in this release [5](#)
 - known issues in this release [9](#)
 - known limitations in this release [8](#)
 - new features and functions in this release [5](#)
 - where to get more product help and information [10](#)
- requirements
 - for upgrading to this release [5](#)

S

- suggestions
 - how to send feedback about documentation [13](#)
- support
 - verifying system configuration [6](#)
- support changes
 - considerations before upgrading [5](#)
- support site
 - help and information you can find on [10](#)
- system configurations
 - verifying support for [6](#)

T

- technical reports
 - where you can find [10](#)
- tools

- where to get information about troubleshooting [10](#)
- troubleshooting tools
 - where to get information about [10](#)
- twitter
 - how to receive automatic notification of documentation changes [13](#)

U

- upgrade considerations
 - changes from last release to this release [5](#)
 - issues fixed in this release [5](#)
 - known issues in this release [9](#)
 - known limitations in this release [8](#)

V

- verifying support for system configurations [6](#)