CA Server Automation

Rapid Server Imaging Server Release Notes

12.6

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The following terms are used interchangeably and refer to the same things in the documentation:

- *Rapid Server Imaging (RSI) server* and *DynaCenter server*
- *RSI agent* and *DynaCenter Provisioning Agent* (*DPAD*)
- *RSI* and *Management Workstation* (*MWS*)

Introduction

These notes describe new features, changed features, and known issues specific to the DynaCenter release.

Supplemental Documentation

- *Rapid Server Imaging Server Installation Guide*
- *Rapid Server Imaging Server Administration Guide*
- *Rapid Server Imaging for AppLogic Installation and User Guide*

New Features

DynaCenter 4.1

Red Hat 5.6 64-bit required for DynaCenter

DynaCenter now requires RedHat Enterprise Linux 5.6 64-bit edition.

Japanese Locale Support

DynaCenter now supports capture and deploy operations on the following operating systems installed with the specified Japanese locale:

- Red Hat Enterprise Linux 5.x with the ja_JP.UTF-8 locale. Both 32- and 64-bit versions are supported.
- Microsoft Windows Server 2008 R2 with the Shift JIS locale.
- Microsoft Windows Server 2003 with the Shift JIS locale. Both 32- and 64-bit versions are supported.

Additional Cloud Vendor Support

DynaCenter now supports AppLogic and GoGrid in addition to Amazon, Rackspace, and Terremark.

Note: CA Server Automation integration with DynaCenter only supports AppLogic as a cloud vendor.

Reference: See the *Rapid Server Imaging for AppLogic Installation and User Guide* for information on working with DynaCenter in AppLogic environments.

Image Compression Control

In earlier versions of DynaCenter, images were automatically compressed during the capture operation. You can now specify whether images should be compressed or not using the `compress_image` option in the `[capture]` section of the oem.ini file. The default behavior is to compress images.

DynaCenter 4.0

Single-Port MWS

The Management Workstation now uses a single port for capture and deploy operations.

Support for Unicode UTF-8

DynaCenter now supports the use of Unicode UTF-8 characters in input fields. Testing was completed for Japanese, Chinese, German, and French character sets.

Support for International Date and Time Formats

DynaCenter now supports international date and time formats.

Support for Network DAV and S3 Storage

DynaCenter now supports the use of any DAV server as a storage location for captured images (depot).

Registering External Networks

You can now manage servers that are not part of a client network but that are routable to the MWS. For example, networks that traverse web proxies or port forwarding firewalls are routable and DynaCenter can now manage servers on these networks using the `dccmd register external network` command.

Note: The external network feature only works with ramdisk-based agent images. As agent images for Solaris systems boot over the network using the Network File System (NFS) protocol, they do not support this feature.

DynaCenter Cloud API 2.1

Additional Cloud Vendor Support

DynaCenter now supports AppLogic and GoGrid in addition to Amazon, Rackspace, and Terremark.

Note: CA Server Automation integration with DynaCenter only supports AppLogic as a cloud vendor.

Reference: See the *Rapid Server Imaging for AppLogic Installation and User Guide* for information on working with DynaCenter in AppLogic environments.

Enhanced Support for Deploy Profiles

DynaCenter now supports storage statements in deploy profiles for deploy operations in cloud environments.

DynaCenter Cloud API 2.0

Support for Capture Operations in Cloud Environments

DynaCenter now supports the capture of cloud server images.

Additional Cloud Vendor Support

DynaCenter now supports Terremark in addition to Amazon and Rackspace.

Changed Features

DynaCenter 4.1

Deprecated Command Line Interface (CLI) --depot Argument

This release deprecated the `--depot` argument used in the following commands:

- dccmd show image
- dccmd modify image
- dccmd deploy image
- dccmd remove image

Use the `image_uri` argument in the command to specify the depot where the referenced image is located. The `image_uri` argument allows DynaCenter to support multiple depots.

Deprecated Operating System Support

This release deprecated support for the following operating systems:

- SLES 9 (32- and 64-bit)
- Solaris 9
- AIX 5.3

Image Deploy with More Than Four Slices

When you deploy an image to a Linux or Windows system, if the source image has more than four slices in one volume or if you specify that you want more than four slices in one volume in the deploy profile, DynaCenter will place slice four and above on an extended partition that is divided into logical partitions.

Changed Behavior when Using a Deploy Profile

Previously, DynaCenter would only deploy a filesystem from a source image if the profile used to deploy the image created a matching filesystem on the target server. This meant that, if the profile did not create a matching filesystem, DynaCenter would not deploy the data on that filesystem.

In this release, DynaCenter will deploy all of the data in the filesystems in the source image. If there is a matching filesystem created by the profile, DynaCenter will deploy the filesystem as directed; however, if the profile did not create a matching filesystem DynaCenter will deploy the data from the source filesystem to the root filesystem.

Changed Behavior when Registering a Hypervisor

Previously when you registered a hypervisor, DynaCenter would set the running state of the server to match the power state of the virtual machine. When you assigned an agent to a running server, DynaCenter would first try

to shut the server down; however, because there was no agent installed yet, DynaCenter was not able to shut it down.

In this release when you register a hypervisor, DynaCenter will leave the power state of the server as not running. This will allow you to assign an agent to the VM and begin managing the VM. After the agent is installed on the server, the running status of the server will be updated automatically in DynaCenter.

Changed Behavior when Deploy or Capture Profile is Empty

Previously, DynaCenter would raise an error during a capture or deploy operation if the operation used an empty profile.

In this release, DynaCenter will no longer raise an error when a capture or deploy operation uses an empty profile.

Documentation Updates

You can find a list of changes to the documentation for this release in the What's New in This Guide section in Chapter 1 of the following guides:

- *Rapid Server Imaging Server Installation Guide*
- *Rapid Server Imaging Server Administration Guide*

DynaCenter 4.0

New Default Timeout Settings

This release changed the following default timeout settings:

- The boot timeout increased to 600 seconds.
- The shutdown timeout increased to 600 seconds.
- The power on and off timeouts increased to 60 seconds.

Known Issues

This section lists and describes known issues with this release.

- If a server name contains any of the following special characters, DynaCenter converts each instance to an underscore (_):

(or)	#	'	;
[or]	$	"	:
{ or }	%	`	?
< or >	^	~	,
!	&	|	
@	*	\	

  Note: After this conversion it is possible that two or more servers might have the same name and, as server names must be unique in DynaCenter, this would leave some servers as unmanageable.

- You should not install anti-virus software on the Management Workstation (MWS).

  During capture operations, anti-virus software might quarantine packets associated with the capture. This leaves the captured image incomplete and causes deploys of that image to fail.

- For Windows images, DynaCenter only supports hostnames that use ASCII characters.

  Workaround: If the server where the image was captured from had a hostname that contained non-ASCII characters, use a deploy profile to specify a hostname that only has ASCII characters.

- When you deploy an image to a system that has both local attached storage and SAN storage, you must use a deploy profile to specify the specific multipath device of the LUN group for the root/boot volume(s) if the root/boot volume(s) are located on the SAN.

- When DynaCenter captures an image of a server with bonded (teamed) NICs, it captures the static IP address information of the bond but not the individual IP addresses of the bonded NICs or the bond type configured for the NICs. Because DynaCenter does not have the information needed to configure the bond on the system that the image is being deployed to, no bond exists between the NICs after the image is deployed.

  Workaround: After you deploy an image that contains teamed NICs, you must use the configuration mechanism appropriate for the operating system to configure the bond between the interfaces on the system.

- An issue where, during a deploy operation, agent images were using the IP addresses of previously deployed images was resolved; however, the

problem might persist after you upgrade to DynaCenter 4.0 if the network data that caused the problem is not correctly purged from the database by the upgrade.

Workaround: Remove the network (`dccmd remove network <network_name>`) and then reregister the network with the `dccmd register network` command. This will clean up the data in the database and resolve future issues.

- When deploying an image to a target server, the target server must have a minimum of 768MB of RAM.
- When a hypervisor controller is overloaded, DynaCenter agent assignment operations and deploy operations might fail because the hypervisor takes too long to respond to the DynaCenter instruction to power on the VM. For agent assignment operations, the agent image is left associated with the VM. If you power on the VM manually, the agent image will boot and can be used for the desired deploy or capture operation. In the case of deploy operations, the VM is restored to its original state.

  For the most reliable operation, reduce the load on the hypervisor controller.

Operating System Issues

Linux

- When moving a Linux image from one server to another, the X Window System configuration might be invalidated and require reconfiguration. For the SLES Linux distribution, this may delay the boot process until the reconfiguration is completed.
- When deploying an image that has SELinux enabled, DynaCenter will disable the SELinux feature. DynaCenter will save the `/etc/selinux/config` file, which contains the SELinux settings, as `/etc/selinux/config.save`, so that you can re-enable the feature if necessary (by naming the file back to `config` and rebooting the system); however, note that re-enabling SELinux on a system where a DPAD is installed can result in the DPAD not operating correctly.
- When deploying a Red Hat 5.x or CentOS 5.x image, the IDE driver might load before the SATA driver; this can cause the SATA drives to be found as /dev/hdx instead of /dev/sdx.

  Workaround: Change the SATA controller BIOS setting from 'native' mode to 'SATA' mode.

Windows

- When a deploy profile is used to set the gateway IP for a server, the gateway address is set in the IP routing table and not on the NIC. If you look at the GUI Properties for the NIC, the Default Gateway setting will be empty. You can confirm that the gateway was set correctly by reviewing the **Persistent Routes** section of the IP routing table, which you can see by running the `route print` command from the command prompt.

- When DynaCenter deploys an image to a system, it removes the hardware configuration of the source system from the image. When the system restarts after the deploy operation completes, Server management tools might fail to start because the original hardware configuration was removed. If you uninstall the server management applications associated with the source system and install the desired server management applications associated with the target system, you will no longer see any "Service Control Manager" message boxes that complain about server management services that did not start. This uninstall/install process may be required even when the source and target systems are the same make and model.
- DynaCenter does not support offline capture of dynamic disk systems.
- DynaCenter has limited support for capture and deploy operations of storage that is mounted as a path:
  - When performing a live capture, DynaCenter will capture multiple volumes into one source.
  - When deploying an image of a system that had multiple volumes, DynaCenter will deploy the volumes as one volume.
  - DynaCenter does not support offline capture of storage that is mounted as a path.

Solaris

- Agent images for Solaris boot over the network using the Network File System (NFS) protocol; as the external network feature only works with ramdisk-based agent images, Solaris systems do not support this feature.

Vendor Support Issues

Microsoft

- The Microsoft Hyper-V guest tools do not contain a legacy NIC driver for Windows Server 2003 64-bit. This means that after a Windows Server 2003 64-bit image is deployed to Hyper-V, the deployed image won't be able to communicate with DynaCenter to signal that the deploy is complete.

  Workaround: Log on to the server to see if the image deployed successfully. If the image deployed successfully, the server will be operational and you will be able to perform deploy and offline capture operations.
- When provisioning a Microsoft Windows image to a Microsoft Hyper-V system you must activate the image before you can use the system.