KACE® Systems Deployment Appliance (K2000) 4.1 Beta

Release Notes

Table of Contents

Quest® KACE® Systems Deployment Appliance (K2000) 4.1 Release Notes

This release notes document provides information about the Quest KACE Systems Deployment Appliance (K2000) version 4.1.

About the KACE Systems Deployment Appliance (K2000) 4.1

The KACE Systems Deployment Appliance (K2000) provides a network-centric solution for capturing and deploying images. The K2000 provides a seamless cross-platform imaging solution from a single Administrator Console enabling you to provision Microsoft® Windows® and Apple® OS X® platforms. You can deploy the configuration files, user states, and applications as an image to a single device or to multiple devices simultaneously.

The K2000 provides the tools necessary to automate deployments in both homogeneous and heterogeneous hardware environments, and provides reliability of large-scale image deployments with multicast and task engine capabilities. The built-in driver feed automatically downloads Dell driver models, and the Package Management feature enables uploading third-party driver packages. You can also integrate the K2000 with the KACE Systems Management Appliance (K1000) to image the K1000 inventory. The K2000 is available as a virtual or physical appliance.

The KACE Systems Deployment Appliance (K2000), version 4.1 is a minor release of the product which brings several Remote Site Appliance (RSA) improvements and additional OS support to the appliance. Many capabilities that have been added to the core appliance over the last couple of releases, have been brought into the RSA. These include RSA user state capture, RSA image capture, and RSA multicast capabilities. Additionally, support for Mac OS X® Sierra (10.12) and Windows Server® 2016 have been added.

New features and enhancements

The following new features and enhancements are included in this release:

- **RSA improvements**.
    - Starting in this release, the RSA supports multicast deployments (ESMEA-1710).
    - The RSA can now capture system images (ESMEA-1967) and user states (ESMEA-1968).
    - When changes are made to WIMs, DMGs and K-Images, Save and Sync from the RSA is required (ESMEA-587).
- **Extended platform support**.
    - Windows Server 2016 and Mac OS Sierra (10.12) are now supported (ESMEA-1057, ESMEA-2168).
- **KBE (K2000 Boot Environment) improvements**. UEFI (Unified Extensible Firmware Interface) and Legacy/BIOS information is added to the KBE footer (ESMEA-2610).

To find out more about the new features in this release, watch the video tutorials available on our Support site: https://support.quest.com/kace-systems-deployment-appliance/kb?k=what%27s%20new.

Deprecated features

The following is a list of features that are no longer supported by the KACE Systems Deployment Appliance (K2000).

Table 1. Deprecated Features

Feature	Issue ID
The previous RSA is no longer supported and a K2000 running version 4.0 cannot sync data to the older 32-bit RSA. There is a tool and a process to migrate data from your existing 32-bit RSA to the new 64-bit version. Refer to "Migrate existing 32-bit RSA to 64-bit" for more details about the migration process.	RSA v3.7
Using Windows® User State Migration Tool (USMT) 10 to deploy User State profiles scanned with USMT 4 tools is not supported. **i** NOTE: USMT 5 tools are uploaded as USMT10 using the Windows Media Manager.	USMT 4

Resolved issues

The following is a list of issues resolved in this release.

Table 2. Resolved Issues

Resolved issue	Issue ID
The automated deployment of a 32-bit OS image failed on a 64-bit processor machine with iPXE.	ESMEA-2705
The RSA upgrade process log showed *Updating K2000* instead of *Updating RSA*.	ESMEA-2692
Some K-Image deployments of Windows 8.1 x64 and x86 were failing with an error in various locations.	K2-6565
MAC Address lists under *Selected Devices* were cleared when the user switched from the K2000 appliance to the RSA, while creating a boot action from device inventory.	K2-6556

Resolved issue	Issue ID
Windows Media Manager was unable to build a KBE and upload it when space is in a Samba share password.	K2-6553
Some computer models hanged at the KBE boot logo (Windows or manufacturer logo) while loading the UEFI KBE.	K2-6551
The *Driver Feed* page was not displaying a blue arrow when a driver was updated or new.	K2-6539
When a file name of a certain length was added as a pre/post task, it was not easy to replace when using Google® Chrome™ on Windows.	K2-6538
Some UEFI-enabled machines would not boot to the local hard disk after loading the iPXE menu.	K2-6526
The NetBoot Image for Mac OS X 10.11 was too large.	K2-6483
Photos were not being removed from `/ Applications` on Mac OS X 10.11, on NetBoot creation.	K2-6481
Question marks were displayed instead of the application icons for Maps and iBooks on dock in the Mac OS X 10.11 NetBoot environment.	K2-6480
jQuery is removed from the online help (Administrator Guide).	K2-6400

Known issues

The following is a list of issues, including those attributed to third-party products, known to exist at the time of release.

Table 3. General known issues

Known issue	Issue ID
The Boot Manager Password feature does not function in the new UEFI-compatible booter.	Boot Manager Password
When running scripted install of Windows 7.x on a system configured with NVMe (non-volatile memory express) that uses the PCIe (Peripheral Component Interconnect Express) bus, the following error occurs: `Windows needs the driver for device [Standard NVM Express Controller]`	Microsoft

Known issue	Issue ID
This issue is unrelated to the K2000 appliance and therefore support is not provided. **Workaround**: The following workaround is available as is, without support. For more information, read the following KB article: https://support.quest.com/kace-systems-deployment-appliance/kb/185551	
On the *Driver Feed* page, a blue arrow icon is displayed in the wrong location after upgrades.	ESMEA-2841
After changing the time zone, the progress screen is displayed, but the date/time page does not appear, as expected.	K2-6582
Occasionally, a Mac image cannot be captured if the hard drive has a space in the name.	K2-6580
When the Default Boot Action is set to *Boot to the Hard drive*, the client machine boots into the Boot Menu through iPXE.	K2-6579
Munin stops updating do to large amount of `graph.temp` files being left behind.	K2-6576
When capturing a WIM image, the progress indicator does not move during the *Creating file list for WIM image* or Capturing WIM image stages.	K2-6573
When entering command parameters for an application pre-, mid-, or post-installation task, if the parameters are not specified using all lowercase characters, the task engine does not record the parameters correctly.	K2-6571
When creating a new LDAP server, the **Test** button does not work as expected.	K2-6566
A warning about sysprepped-images appears, even if formatting takes place in a DiskPart script.	K2-6560
Some models freeze during the *initializing devices* stage, and is not able to get the KBE menu when UEFI PXE booting. **i** NOTE: This is a known issue related to the manufacturer BIOS version. Upgrading or downgrading the BIOS version may resolve the issue.	K2-6552
When an RSA is using offboard storage, Mac client machines are unable to boot in NetBoot from the RSA.	K2-6502

Known issue	Issue ID
The K2000 appliance cannot boot to iPXE (for UEFI) on a virtual machine (VM)created on ESXi 5.x with the network adapter setting NIC set to E1000E. **Workaround**: Configure the VM network adapter setting NIC to E1000.	K2-6496
Windows XP scripted installations fail when deploying through WINPE10, a KBE created using ADK (Windows Assessment and Deployment Kit) 10. **Workaround**: Use WINPE5, a KBE created using ADK 8.1, to successfully deploy Windows XP Scripted Installs.	K2-6484
The NetBoot login screen is displayed on the client machine when deploying a Mac OS X 10.11, ASR (Apple Software Restore)/K-Image, and the boot action is set. **Workaround**: It is recommended for users to wait until the NetBoot environment has completed the pre-processing steps for Mac OS X 10.11, which occur when the login screen displays the password box and K2000 IP at the bottom of the screen. Also, the deployment progress can be observed in the K2000 Administrator Console. If a login is attempted before these processes are complete, the K2000 imaging utility is not shown on dock and the user will need to reboot into the NetBoot environment.	K2-6479
Scanning Windows XP user states using Windows USMT (User State Migration Tool) 5 or USMT 10 remains in progress intermittently on the K2000 server. **Workaround**: Windows XP user states can be scanned with Windows PE, which is the workaround recommended by Microsoft. For more information, visit https://social.technet.microsoft.com/Forums/en-US/83ddb84e-d919-4acc-91ca-78d4f1478df1/scanstateexe-from-usmt-50-from-windows-81-adk-fails-on-windows-xp-with-1-is-not-a-valid-win32.	K2-6477
Editing a file with `Notepad.exe` or editing the Registry is not working properly while using Windows PE 10.0 in K2000 Boot Environment (KBE) Recovery Console.	K2-6436
When the PO task `join domain` successfully associates a machine to a domain, it is incorrectly logged as `failed` in deployment log.	K2-6407
After successfully deploying a MAC image, the progress status is not updated properly.	K2-6406

Known issue	Issue ID
Online user states captured from Windows 7x86 are not successfully deployed to Windows 8.1x64.	K2-6405
An Explorer window opens during the Windows PO tasks when deploying Windows 10.	K2-6389
If you attempt to enter konfig for the login and password on the console to make changes to the 3.7 SP2 appliance, an error for incorrect link aggregation IP and details is displayed if link aggregation is enabled. **Workaround**: If link aggregation is enabled, go to the **Network Settings** page to enter the hostname and IP address.	K2-5957
The *Appliance Performance* page does not display disk usage for external storage.	K2-5893
When you create a Windows or Mac® boot environment from a FreeBSD 10 ISO, the boot environment is not set by default on the **General Settings > Default K2000 Boot Environments** page.	K2-5836
When you close or cancel an alert or warning message, the message re-appears when you navigate back to the Dashboard page or refresh the Dashboard page.	K2-5806
Imported ASR image deployments fail if no ASR images were captured from the K2000 appliance. **i** NOTE: The appliance creates the ImageStore directory for ASR images captured from the K2000 appliance. **Workaround**: Create the **ImageStore** folder in the **petemp** directory.	K2-5758
When you click **Save** after editing a file in a K-Image, the **Commit** and **Revert** options disappear, and the edited file no longer appears in the image file browser. **Workaround**: Duplicate the image to display the **Commit** and **Revert** options, and to display the original file in the image file browser.	K2-5740
An application-type pre-installation task that contains a batch file within a ZIP file fails to execute.	K2-4577
If you boot a 10.9.2 Mac® device in to NetBoot image, and the appliance is set to a locale other than English, the keyboard layout does not display the specified locale.	K2-4562

Known issue	Issue ID
When a scan user state task fails, and you attempt to retry the task from the Task Error page, the status displays as succeeded. However, the selected user states are not scanned or uploaded to the appliance. **Workaround**: Reboot the target device from the Task Error page, then boot the device back in to the KBE and restart the deployment. Rebooting the device creates a new working directory for the USMT profile data so that the profiles can be captured successfully.	K2-4427
Device names are not retained while deploying sysprepped K-Images and scripted installations for x64 and x86 Japanese Windows® operating systems.	K2-3170
When performing manual upgrades, sometimes the upgrade process is not visible in the K2000 Administrator Console.	K2-3007
If the license for the K2000 appliance reaches its maximum limit, and you boot a Mac® device that is not in the K2000 Device Inventory, the error message *License exceeded* does not display on the target device. Instead, the target device continues trying to boot from the appliance.	K2-2815
The K2000 becomes inaccessible when you attempt to access the Package Management page if an offboard-storage device connection to the K2000 is lost.	K2-2654

Table 4. Hyper-V known issues

Known issue	Issue ID
Upgrading with Microsoft Hyper-V® does not always mount the appropriate disk partition.	K2-6561
The RSA status does not automatically update when a synch is completed.	K2-6558
The Network Utilization section on the Dashboard page does not display information for Hyper-V® platforms.	K2-5902
When you run the K2000 on the Hyper-V platform, the Hyper-V console continuously displays the error message, runtime went backwards. **Workaround**: The K2000 does not require modification. You can ignore the message and continue with the deployment.	K2-5843

Table 5. Multicast deployment known issues

Known issue	Issue ID
When deploying a dual or multiple partition WIM image through multicast instead of unicast, only the first partition deploys. **Workaround**: A workaround is available for this issue. For more information, read the following KB article: https://support.quest.com/kace-systems-deployment-appliance/kb/212975	K2-5393
Deleting a multicast deployment does not terminate the process. This means that you cannot start a new multicast deployment. **Workaround**: Adjust the deployment timeout period. The default multicast deployment timeout is 10 minutes.	K2-4286
Multicast deployments do not continue on errors. **Workaround**: Do not set multicast deployments to continue on errors.	K2-4180/ESMEA-624

Table 6. Remote Site Appliance known issues

Known issue	Issue ID
The RSA becomes inaccessible when you reboot the RSA during reverse migration from offboard to onboard storage. **i** NOTE: To avoid data loss, export the RSA data to a different location or device, and do not unplug or reboot the RSA until the reverse migration has completed	K2-3775
When attempting to upload media to an RSA, the Media Manager displays the error message: Invalid Response: Please check the hostname provided. **Workaround**: Verify that the hostname or the IP address is the hostname or IP address of the K2000, and not the RSA.	K2-3290
When switching between linked appliances, the drop-down list in the top-right corner of the Administrator Console should display only the linked appliances instead of all of the appliances to which you logged in to using single sign on (SSO) from the K2000.	K2-3241

Table 7. Drivers known issue

Known issue	Issue ID
An issue occurs while injecting drivers if a forward slash (/) is present within a manufacturer's name.	K2-6370

Table 8. Scripted Installations known issue

Known issue	Issue ID
A Windows 10 64-bit scripted installation does not show a that a Boot Environment is available when one actually exists.	K2-6371

Table 9. Media Manager known issue

Known issue	Issue ID
Downloading the Media Manager from the Latin American Spanish K2000 appliance displays the Media Manager product name in Spanish (Spain) on the MSI Installer and on the shortcut icon.	K2-5585

System requirements

The minimum version required for installing version 4.1 is 4.0.695 (version 4.0). If your appliance is running an earlier version, update to the listed version before installing this major release and restart the appliance after the update is installed. To check the version number of your appliance, log in to the KACE Systems Deployment Appliance Administrator Console, then click About K2000 at the bottom left of the window.

Before upgrading to or installing version 4.1, make sure that your system meets the minimum requirements. These requirements are available in the K2000 technical specifications.

- For physical appliances: Go to http://documents.quest.com/kace-systems-deployment-appliance/technical-specifications-for-physical-appliances/.

- For virtual appliances: Go to http://documents.quest.com/kace-systems-deployment-appliance/technical-specifications-for-virtual-appliances/.

Product licensing

If you currently have a K2000 product license, no additional license is required.

If you are using K2000 for the first time, see the appliance setup documentation for product licensing details. Go to More resources to access the appropriate guide.

> **i** NOTE: Product licenses for version 4.1 can be used only on K2000 appliances running version 4.1 or later. Version 4.1 licenses cannot be used on appliances running earlier versions of the K2000, such as 4.0.

Installation instructions

You can update the appliance using an advertised update or by manually uploading an update file.

Prepare for the update

Before you update the K2000 appliance, verify that your appliance meets the following requirements:

- **Current version**: The minimum version required for installing K2000 4.1 is 4.0.695 (version 4.0). To check the version number of your appliance, log in to the K2000, then click **About K2000** at the bottom left of the window. If your appliance is running an earlier version, you must update to the listed version before proceeding with the 4.1 installation.

- **Disk space**: The K2000 appliance must have more than 20 percent free disk space available. On physical appliances, this disk space must be on the appliance's main drive.

  > **i** IMPORTANT: In order to provide customers with more flexibility, the virtual KACE Systems Deployment Appliance (VK2000) and the virtual RSA software in this version (4.1) has been configured with 500 GB and 1 TB of disk space. Note that a virtual K2000 appliance or RSA initially configured with the 1 TB disk space will not change after upgrading from version 4.0 to version 4.1. To reduce the size of the disk space, you can choose to install a new 4.1 virtual K2000 appliance or RSA. For more information about system requirements, see the *Technical Specifications for Virtual Appliances*.

Additional recommendations:

- **Allow plenty of time**: If you have a large database, more than 150 MB in size, the update process can take several hours.

- **Back up before you start**: Export all items on your K2000 appliance using the instructions provided in the following Knowledge Base articles:
  - K2000 Backup Best Practices
  - How to back up a K2000 appliance

- **Enable SSH**: Enable SSH in the *Security Settings* section of the K2000 Administrator Console.

- **Reboot the K2000 server**: On the *Appliance Maintenance Settings* page, reboot the K2000 server prior to updating.

Update the appliance using an advertised update

You can update the appliance using an update that is advertised on the appliance *Dashboard* page or on the *Appliance Maintenance* page of the Administrator Console.

! CAUTION: Never manually reboot the appliance during an update.

1. Export all items on your K2000 appliance using the instructions provided in the following Knowledge Base articles:

   • K2000 Backup Best Practices

   • How to back up a K2000 appliance

2. On the left navigation bar, click **Settings** to expand the menu, then click **Appliance Maintenance**, to display the *Appliance Maintenance* page. Scroll to the bottom of the page and click **Reboot**. Click **Yes** in the *Confirmation* dialog to restart the server.

3. On the left navigation bar, click **Settings** to expand the menu, then click **Appliance Maintenance** to display the *Appliance Maintenance* page.

4. Click **Apply Update** to initiate the upgrade process.

   The time required to update the appliance varies depending on the content present on the K2000, do not manually hard shut down the appliance. Also, the appliance reboots automatically (potentially several times) during the upgrade process until it is complete.

5. Click **Check for Server updates**.

   The appliance reboots automatically when the upgrade is complete.

Upload and apply an update manually

If you have an update file from Quest KACE, you can upload that file manually to update the appliance.

! CAUTION: Never manually reboot the appliance during an update.

1. Export all items on your K2000 appliance using the instructions provided in the following Knowledge Base articles:

   • K2000 Backup Best Practices

   • How to back up a K2000 appliance

2. Using your customer login credentials, log in to the Quest website at https://support.quest.com/kace-systems-deployment-appliance/download-new-releases, download the K2000 Server 4.1 Update, and save the file locally.

3. Log in to the Administrator Console.

4. On the left navigation bar, click **Settings** to expand the section, then click **Appliance Maintenance** to display the *Appliance Maintenance* page.

5. Under *K2000 Appliance Updates > Manual Updates*, click **Browse** to select the update file, then click **Open**.

6. Click **Update Server**.

   The time required to update the appliance varies depending on the content present on the K2000, do not manually hard shut down the appliance. Also, the appliance reboots automatically (potentially several times) during the upgrade process until it is complete.

More resources

Additional information is available from the following:

- Online product documentation (http://documents.quest.com/ProductsAZ.aspx#K)

  - **External I/O connection reference**: Go to http://documents.quest.com/kace-systems-deployment-appliance/13g-external-io-reference/.

  - **Technical specifications**: Information on the minimum requirements for installing or upgrading to the latest version of the product.

    For physical appliances: Go to http://documents.quest.com/kace-systems-deployment-appliance/technical-specifications-for-physical-appliances/.
    For virtual appliances: Go to http://documents.quest.com/kace-systems-deployment-appliance/technical-specifications-for-virtual-appliances/.

  - **Administrator guide**: Instructions for setting up and using the appliance. Go to http://documents.quest.com/kace-systems-deployment-appliance/administrator-guide/ to view documentation for the latest release.

Globalization

This section contains information about installing and operating this product in non-English configurations, such as those needed by customers outside of North America. This section does not replace the materials about supported platforms and configurations found elsewhere in the product documentation.

This release supports any single-byte or multi-byte character set. In this release, all product components should be configured to use the same or compatible character encodings and should be installed to use the same locale and regional options. This release is targeted to support operations in the following regions: North America, Western Europe and Latin America, Central and Eastern Europe, Far-East Asia, Japan.

The release is localized to the following languages: French, German, Japanese, Portuguese (Brazil), Spanish.

About us

We are more than just a name

We are on a quest to make your information technology work harder for you. That is why we build community-driven software solutions that help you spend less time on IT administration and more time on business innovation. We help you modernize your data center, get you to the cloud quicker and provide the expertise, security and accessibility you need to grow your data-driven business. Combined with Quest's invitation to the global community to be a part of its innovation, and our firm commitment to ensuring customer satisfaction, we continue to deliver solutions that have a real impact on our customers today and leave a legacy we are proud of. We are challenging the status quo by transforming into a new software company. And as your partner, we work tirelessly to make sure your information technology is designed for you and by you. This is our mission, and we are in this together. Welcome to a new Quest. You are invited to Join the Innovation.

Our brand, our vision. Together.

Our logo reflects our story: innovation, community and support. An important part of this story begins with the letter Q. It is a perfect circle, representing our commitment to technological precision and strength. The space in the Q itself symbolizes our need to add the missing piece — you — to the community, to the new Quest.

Contacting Quest

For sales or other inquiries, visit www.quest.com/company/contact-us.aspx or call 1-949-754-8000.

Technical support resources

The Support Portal provides self-help tools you can use to solve problems quickly and independently, 24 hours a day, 365 days a year. The Support Portal enables you to:

- Submit and manage a Service Request
- View Knowledge Base articles
- Sign up for product notifications
- Download software and technical documentation
- View how-to-videos
- Engage in community discussions
- Chat with support engineers online
- View services to assist you with your product.

Legal notices

to specifications and product descriptions at any time without notice. Quest Software does not make any commitment to update the information contained in this document.

If you have any questions regarding your potential use of this material, contact:

Quest Software Inc.

Attn: LEGAL Dept

4 Polaris Way

Aliso Viejo, CA 92656

Trademarks

Quest, KACE, and the Quest logo are trademarks and registered trademarks of Quest Software Inc. in the U.S.A. and other countries. For a complete list of Quest Software trademarks, please visit our website at www.quest.com/legal. All other trademarks, servicemarks, registered trademarks, and registered servicemarks are the property of their respective owners.

Legend

> **!** CAUTION: A CAUTION icon indicates potential damage to hardware or loss of data if instructions are not followed.

> **■** WARNING: A WARNING icon indicates a potential for property damage, personal injury, or death.

> **i** IMPORTANT, NOTE, TIP, MOBILE, or VIDEO: An information icon indicates supporting information.

KACE Systems Deployment Appliance (K2000) Release Notes

Updated - April 2017

Software Version - 4.1