



# onQ Release Notes

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Version 3.9

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# Preface

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This guide is intended for System Administrators who need to keep abreast of new onQ features and ongoing support and who want to upgrade their onQ Appliance.

## Online Help

Online Help for onQ and Archive Vault products are available through their respective portals. Online documentation is available at:

Help	Where to go...
onQ	<a href="http://www.quorum.net/help/3.9/onQ/index.html">http://www.quorum.net/help/3.9/onQ/index.html</a>
AV	<a href="http://www.quorum.net/help/3.9/Vault/index.html">http://www.quorum.net/help/3.9/Vault/index.html</a>

## Chapter Organization

The chapters and appendices of this manual are as follows:

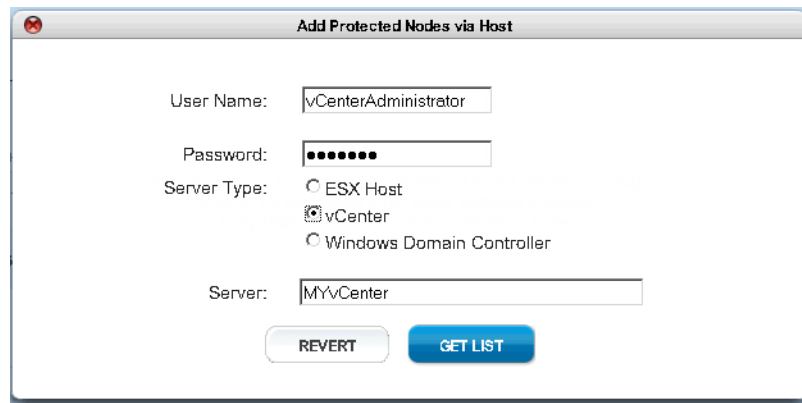
- Chapter 1, *What's New*
- Chapter 2, *Support*
- Chapter 3, *Limitations*
- Chapter 4, *Updates*



## What's New

This release includes the following new features:

- **Centralized enrollment for agent-based PNs.** If you have a large number of agent-based PNs, consider using the onQ centralized installation manager to enroll them in one large batch. With the onQ centralized installation manager, you do not need to log on to each PN separately to install the onQ Service. For platform support, go to [Centralized Enrollment Support](#). For instructions on enrollment, go to onQ Administrator's Guide.
- **Agent-less enrollment support for vCenter.** In addition to enrolling specific ESXi servers, you can now enroll vCenter so as to protect all the virtual machines that vCenter manages across multiple ESXi servers, providing you the quickest deployment possible and vMotion support. For more information, go to onQ Administrator's Guide.

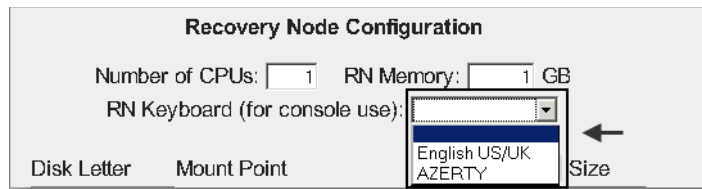


The screenshot shows a dialog box titled "Add Protected Nodes via Host". It contains the following fields and options:

- User Name: vCenterAdministrator
- Password: [masked with 10 dots]
- Server Type:  ESX Host,  vCenter,  Windows Domain Controller
- Server: MYvCenter
- Buttons: REVERT, GET LIST

- **onQ Flex enhancements.** In this release, RN's can now have an RN type. Also, onQ tracks all RN changes, including resources. These improvements to RN management provide you more fine-tuning of your RTO (Recovery Time Objective) and costs for that objective in an effort to conserve Hybrid Cloud and minimize up-front deployment costs. If you want an onQ Flex configuration, contact Quorum Support. For more information about an onQ Flex configuration and the related onQ Portal changes, go to onQ Administrator's Guide.

- **Relaxed restrictions on agent-less enrollment and concurrent backups.** Agent-less enrollment now supports the ability for onQ to run three concurrent PN backups as these PNs can now be on different ESX/ESXi hosts.
- **onQ policy prevents 100% repository disk space utilization.** If an HA Appliance's repository disk space utilization exceeds 85%, onQ disables backups globally and resumes backups when disk space utilization improves (less than 85%); however, during this time, you can perform immediate backups. This policy attempts to prevent your HA Appliance from using 100% of its repository's disk space.
- **Restart Protection option.** onQ Portal streamlined the capability to restart protection from the drop-down menu. Restart is now only one step! You no longer need to stop protection, then start protection (two steps).
- **onQ Portal performance improvements.** Performance improvements include faster status queries including tooltips, DR transfer status, and Dashboard status updates.
- **AZERTY keyboard support.** The RN console is now compatible with an AZERTY keyboard. See [Keyboard Support](#) for a list of supported keyboards.



- **Dell G13 Hardware.** This release supports Dell's next generation hardware, providing you higher performance.



# 2

## Support

- [Platform Support](#)
- [Centralized Enrollment Support](#)
- [Hypervisor Support](#)
- [Browser Support](#)
- [Keyboard Support](#)
- [Bare Metal Restore Support](#)
- [Ontrack Support](#)
- [Windows Cluster Services Support](#)
- [Archive Vault Configuration Support](#)

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### 2.1 Platform Support

Both physical and virtual PNs are supported on the following platforms:

Operating System <sup>a</sup>	Backup Support	RN Support
<i>Windows</i>		
Windows Server 2012 R2, Datacenter and Standard, 64-bit	Yes	Yes
Windows Server 2012, Datacenter and Standard, 64-bit	Yes	Yes
Windows 2008 R2, 64-bit	Yes	Yes
Windows 2008, 32-bit and 64-bit	Yes	Yes
Windows 2003 R2, 32-bit and 64-bit	Yes	Yes

Operating System <sup>a</sup>	Backup Support	RN Support
Windows 7, 64-bit	Limited	Limited
<i>Linux</i>		
Red Hat Enterprise Linux/CentOS <sup>b</sup> 5.6, 5.7, 5.8, 5.9, 6.0, 6.1, 6.2, 6.3, 6.4, 32-bit and 64-bit and 7.0, 64-bit	Yes	Yes
Oracle Enterprise Linux 5.8, 32-bit and 64-bit	Yes	Yes

a.PNs running on OEM licenses can be backed up; however, the RNs may fail to fully initialize because OEM licenses are not transferable to virtual machines.

b.Quorum tested onQ with CentOS 6.4, 32-bit and 64-bit. We expect all other versions to work too.

## 2.2 Centralized Enrollment Support

For a agent-based PN to be enrolled using the onQ centralized installation manager, it must be running on a supported PN platform (see [Platform Support](#)) and meeting the platform requirements below.

To learn more about centralized enrollment, go to onQ Administrator’s Guide.

Domain Controller	Server	Supported
<i>Windows Server 2012 R2 Domain Controller</i> (Forest/Function level 2012 R2, 2012, and 2008 R2)	Windows Server 2012 R2	Yes
	Windows Server 2012	Yes
	Windows Server 2008 R2	Yes
	Windows Server 2008	No
	Windows Server 2003	No

Domain Controller	Server	Supported
<i>Windows Server 2012 Domain Controller</i> (Forest/Function level 2012 and 2008 R2)	Windows Server 2012 R2	Yes
	Windows Server 2012	Yes
	Windows Server 2008 R2	Yes
	Windows Server 2008	No
	Windows Server 2003	No
<i>Windows Server 2008 R2 Domain Controller</i> (Forest/Function level 2008 R2)	Windows Server 2012 R2	Yes
	Windows Server 2012	Yes
	Windows Server 2008 R2	Yes
	Windows Server 2008	No
	Windows Server 2003	No

### Related Topics

[Limitations](#)

[Hypervisor Support](#)

[Browser Support](#)

## 2.3 Hypervisor Support

The guest operating systems outlined in [Platform Support](#) are supported on the following hypervisors:

Hypervisor	Version
VMWare ESX	4.0
VMWare ESXi	5.0, 5.1, 5.5, and 6.0
Hyper-V	6.x
XenServer	5.0, 5.5, 6.0.2, 6.2, and 6.5

## 2.4 Browser Support

onQ supports the following browsers; however, there are some [limitations](#):

Browser	onQ Portal	Agent-based PN Enrollment (“Protect Me” button)
Mozilla Firefox 29.0 and above	Yes	Yes
Mozilla Firefox 10.0-28.0	Yes	Yes (32-bit) No (64-bit)
Internet Explorer 10 and 11	Yes	Yes
Internet Explorer 7, 8, and 9	No	No
Chrome 41.0	Yes	Yes

### Related Topics

[User Interface Limitations](#)

[Keyboard Support](#)

## 2.5 Keyboard Support

onQ Portal support for keyboards is as follows:

Keyboard	Support
US	Yes
UK	Yes
Azerty <sup>a</sup>	Yes

a. Due to a limitation with VNC protocol, the following special characters do not work from an RN console, whether in test mode or production mode: <sup>2</sup>, é, è, ç, à, ù. Also, the following characters cannot be typed using the shift key: °, ¨, £, µ, §.

### Related Topics

[Browser Support](#)

## 2.6 Bare Metal Restore Support

A Bare Metal Restore (BMR) is supported on the following platforms:

Operating System	To Same Hardware	To Dissimilar Hardware
Windows Server 2012 R2, Datacenter and Standard, 64-bit	Yes	Yes
Windows Server 2012, Datacenter and Standard, 64-bit	Yes	Yes
Windows 2008 R2, 64-bit	Yes	Yes
Windows 2008, 32-bit and 64-bit	Yes	Yes
Windows 2003 R2, 32-bit and 64-bit	Yes	Yes

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## 2.7 Ontrack Support

As outlined in onQ Administrator’s Guide, you can use Kroll’s Ontrack application to restore Exchange Server data and mailboxes.

Ontrack is independent of onQ; as such, onQ should work with any version of Ontrack so long as onQ supports the underlying operating system (see [Platform Support](#)).

Kroll OnTrack Power Controls for Exchange application version 7.0.x is required for using Ontrack with Exchange 2013, in order to support EDB files.

## 2.8 Windows Cluster Services Support

MSFT for Windows 2012, Windows 2008 R2, Windows 2008, and Windows 2003 are supported. onQ supports iSCSI connections to a storage device in a SAN environment.

onQ supports an active/passive arrangement, which is sometimes referred to as a Single Copy Cluster (SCC). SCC is one of four high availability options of Exchange 2007. Exchange 2010 does not support SCC. With Exchange, only the mailbox role is supported in a cluster environment. Therefore, cluster support for Exchange is limited to Exchange 2003 and 2007. SQL 2008 and 2008 R2 also support SCC.

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## 2.9 Archive Vault Configuration Support

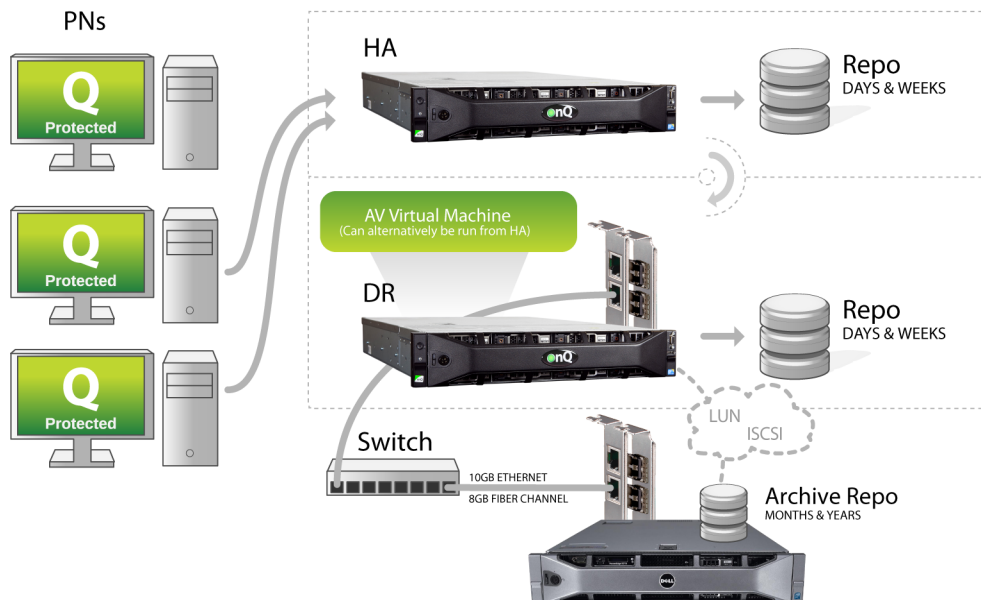
For each onQ Appliance that will host an onQ Archive Vault, an Archive Vault virtual machine (VM) will be present on that onQ Appliance. The Archive Vault VM, in turn, manages either the Archive Vault Storage Modules (SM) directly attached to the onQ Appliance or, in the case of Archive Vault Gateway, external storage.

The following configurations are supported:

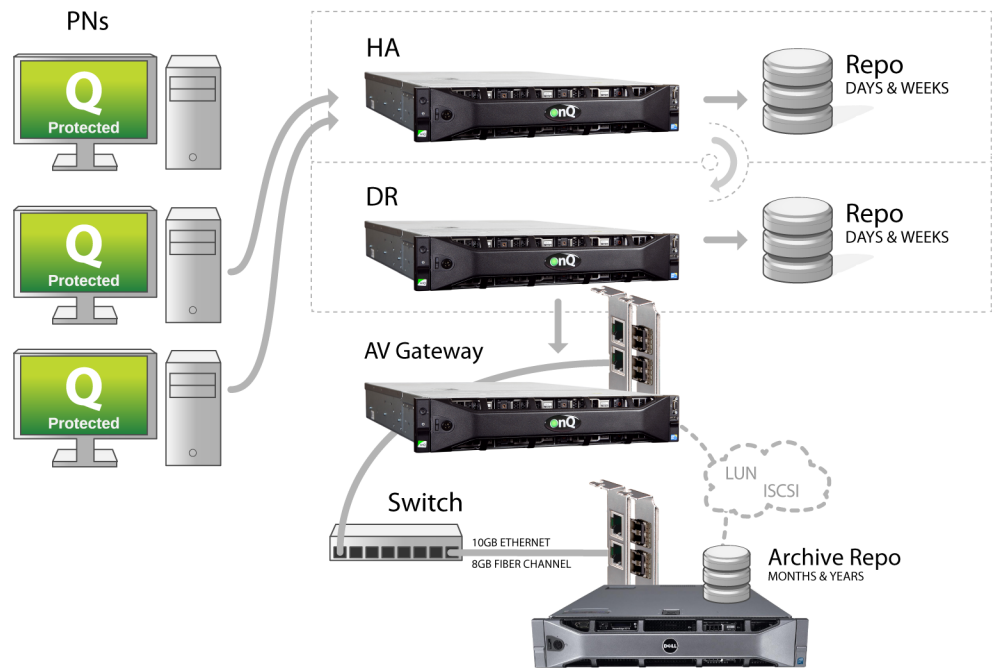
- [AV Gateway Configurations](#)
- [DR-only Configuration](#)
- [Redundant Configuration](#)
- [Shared-Instance Configuration](#)

## 2.9.1 AV Gateway Configurations

In this configuration, the onQ Archive Vault (AV) is running on a standalone onQ Appliance (aka *Archive Vault Gateway*)—or hosted by an HA Appliance or DR Appliance. Unlike all other AV configurations where the AV is directly attached to a JBOD, Archive Vault Gateway is connected to your company’s existing external storage (iSCSI SAN and FC SAN) through a 10Gbps Ethernet or a 8GB fiber channel interface card thereby lowering your archival storage costs. As one might expect, Archive Vault Gateway requires that an HA or DR be present elsewhere on the network to provide snapshots for archival.

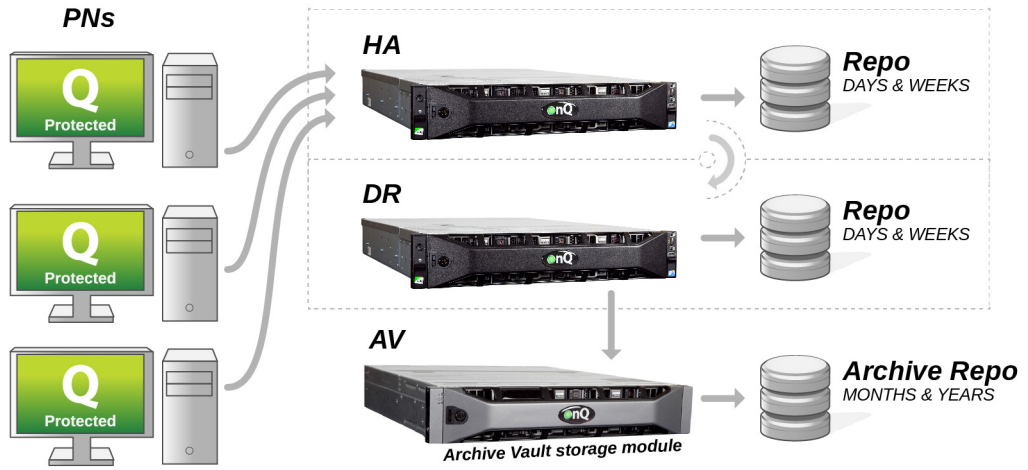






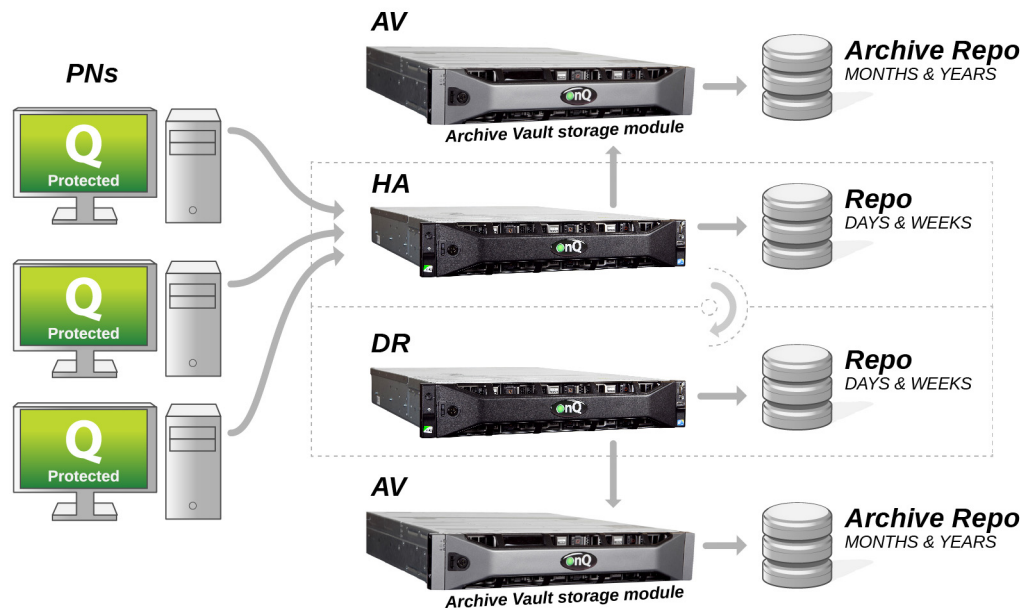
## 2.9.2 DR-only Configuration

In this configuration, the only instance of the onQ Archive Vault is attached to the DR Appliance. Thus, there is a single instance of the long-term archive in a remote location. While protected by numerous fault-tolerant hardware features such as RAID6 disk drives and dual power supplies, this configuration might not satisfy some regulatory compliance standards, since there is no replication of long-term archive data.



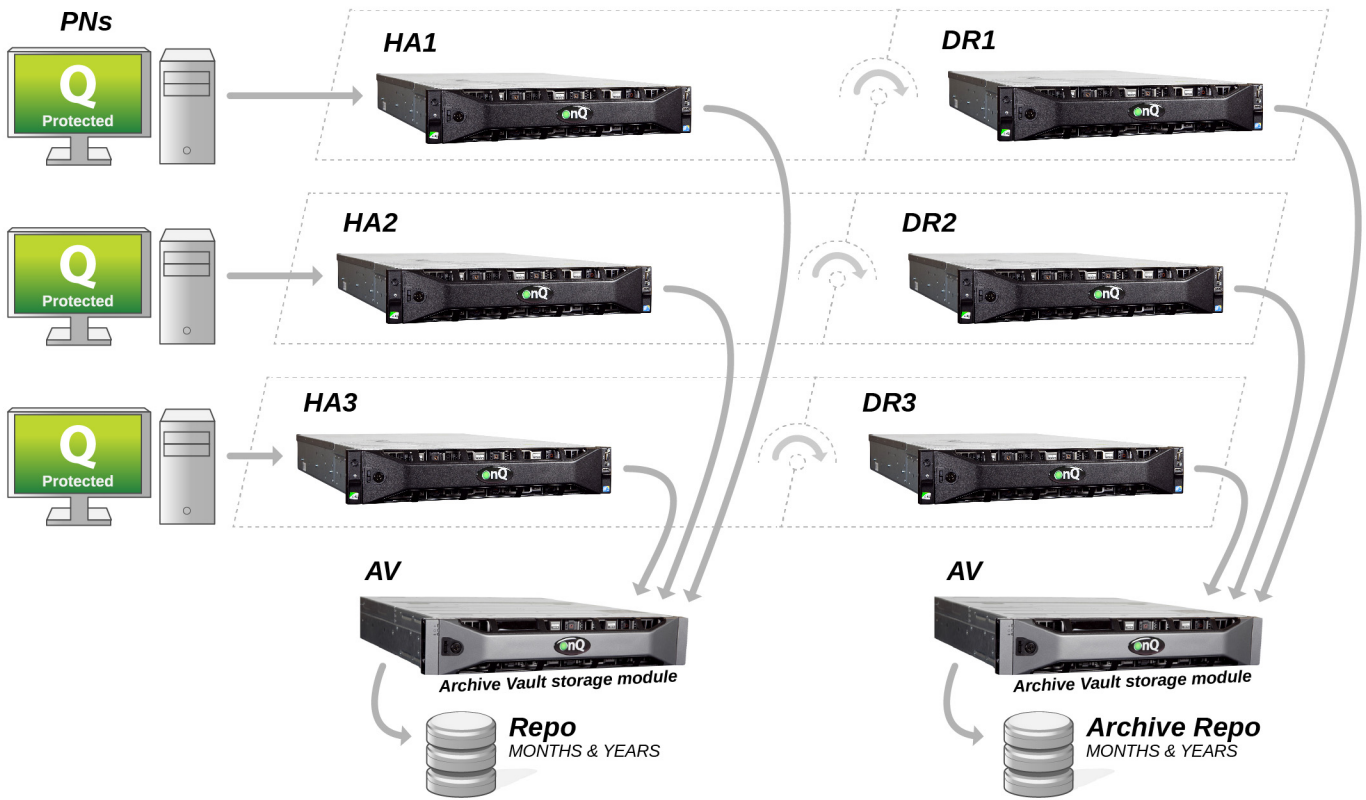
## 2.9.3 Redundant Configuration

In this configuration, there are instances of the onQ Archive Vault attached to both the HA and the DR Appliance. This configuration allows for both remote and redundant storage of long-term archive data, thus satisfying many regulatory compliance standards.



## 2.9.4 Shared-Instance Configuration

In this configuration, multiple HAs or DR Appliances (or multiple tenants in a multi-tenant Appliance installation) are able to access a single onQ Archive Vault. This configuration allows for optimization of storage of long-term archive data on a single onQ Archive Vault even though multiple onQ Appliances might be present. The Shared-Instance configuration is also supported with DR Appliances exclusively, in situations where redundancy is not necessary.



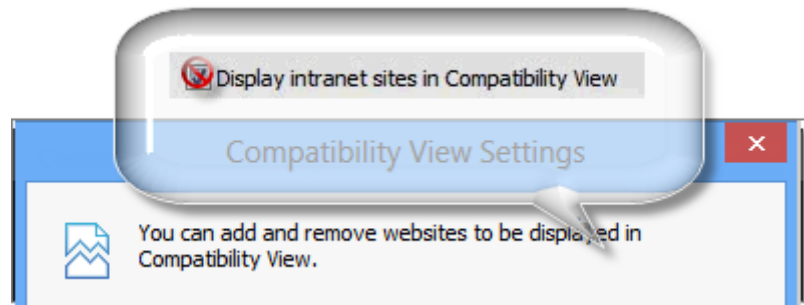
# 3

## Limitations

- [User Interface Limitations](#)
- [Linux Filesystem Format Requirements](#)
- [Linux RN Limitations](#)
- [Windows Server Limitations](#)
- [Volume Mount Limitations](#)
- [CIFS Mount Limitations on Windows](#)
- [Bare Metal Restore Limitations](#)
- [File-level Restore Limitations](#)
- [Windows Cluster Services Limitations](#)
- [Agent-less PN Enrollment Limitations](#)
- [onQ Flex Limitations](#)

## 3.1 User Interface Limitations

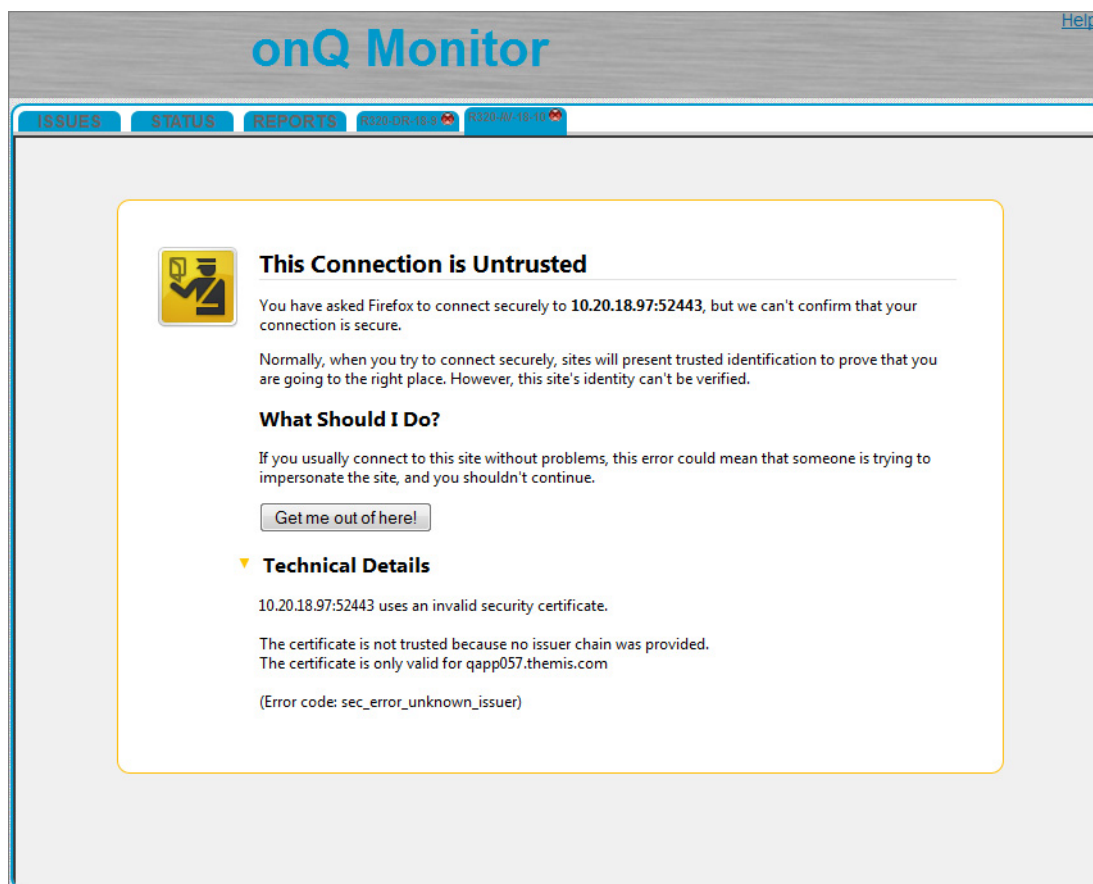
- onQ Portal does not support IE 11 when intranet sites are displayed in Compatibility View mode, which is the default. If you have this setting turned on, the most prominent symptom is that the **Protection Config** tab does not display any PNs/RNs. onQ Portal depends on HTML5, which Compatibility View overrides. Turn off this setting via the Gear icon > Compatibility View settings menu option:



- VNC console is not compatible with IE 10 due to how that browser version handles key events. In this case, launch the Java-based console instead. For more information, go to onQ Administrator's Guide.
- Firefox 10.0-28.0 is not supported for enrollment (Protect Me button) on 64-bit operating systems because Firefox is unable to retrieve the node information that's required.
- When using older versions of some web browsers, you might need to install JRE (Java) 1.5 or above to use the RN console from the UI. For more information, go to onQ Administrator's Guide.
- You might need to modify security and popup settings for proper RN console operations from the UI.
- You must add the security certificate for the onQ Monitor to the permanent exception list using a separate browser window, not a browser tab; if you don't:
  - the onQ Monitor's dashboard does not load and stops short of a certificate error, preventing you from launching the onQ Monitor's UI.
  - onQ Monitor fails to return details of DR Appliance or AV Appliance: the hyperlink in the status page indicates No Response from appliance for DR Appliance and Not Enrolled on AV for AV Appliance.

Because the source URL for an iframe is not made visible, for security reasons, browsers do not allow you to accept unknown security certificates within those iframes.

**To add the certificate to your exception list**, Control-click the same link to open the page in a new browser *window* instead of a browser *tab*. The new page will be subject to pop-up blockers, but the page displays the normal range of browser options, enabling you to add the certificate to the permanent exception list. All future attempts to launch onQ Monitor's UI in a tab work as expected.



- When you launch the RN's console, it opens in a different browser window. If you browse to a different window, the console might lose connection after 60 seconds. In this case, you must launch the console again.

## 3.2 Linux Filesystem Format Requirements

Quorum requires that you set the file format for `/boot` to `ext3` so that the Recovery Node boots correctly. Additional file format support is listed in the table below.

Also, note the following:

- For any Linux PN, you must protect both `/` and `/boot` separately and any other mount points that contain the necessary software to boot the RN.
- When enrolling an agent-less Linux PN, VMware tools, which is used to retrieve guest information from vCenter/ESXi, does not include mount points/volumes with XFS format. Therefore, onQ is not able to enroll these mount points automatically. After enrolling the agent-less Linux PN, manually add the XFS mount points: in the Modify a Protected Node dialog, click the plus (+) button to add a mount point.

**Table 1: Filesystem Format Requirements**

Enrollment Type	Operating System	/	/boot
Centralized	RHEL 7.0	xfs/ext4/ext3	ext3
	RHEL 6.x	xfs/ext4/ext3	ext3
	RHEL 5.x	xfs/ext4/ext3	ext3
vCenter/ESXi	RHEL 7.0	xfs/ext4/ext3	ext3
	RHEL 6.x	xfs/ext4/ext3	ext3
	RHEL 5.x	xfs/ext4/ext3	ext3



## 3.3 Linux RN Limitations

Recovery Nodes running Linux have the following limitations:

- To support booting of Recovery Nodes (RN) for RHEL 5.x servers, you must download the appropriate version of Xen-compatible kernel packages and install them on the Protected Nodes (PN) before enrolling or attempting to build the RNs for such clients. The installed Xen kernel will not be an active kernel on the PN; instead, that kernel will be used to boot the RNs. For more information, go to the onQ Administrator's Guide.
- Linux PNs may return 256 code during an auto-upgrade. If you encounter this error, restart (stop/start) protection to re-initiate the auto-upgrade.
- BMR and incremental failback for Linux nodes are not supported in this release.
- Due to a XenServer limitation (XenServer does not currently support VHDX format), a single protected volume for Linux PNs is limited to a maximum size of 2TB. (This limitation is not applicable to Windows, which supports dynamic disks.) If you try to protect a volume that's greater than 2TB, the onQ Portal returns an error and resets the size to the maximum: Boot disk must fit on single VD so is limited to 1988GB.

**Recovery Node Configuration**

Number of CPUs:  RN Memory:  GB  
 RN Keyboard (for console use):

Protect	Mount Point	Format	VDs	Size
<input checked="" type="checkbox"/>	/	ext3	1	22 GB
<input checked="" type="checkbox"/>	/boot/	ext3	1	2 GB
<input checked="" type="checkbox"/>	/gwstore_dat/	ext3	2	2200 GB

### Related Topics

[Linux Filesystem Format Requirements](#)

## 3.4 Windows Server Limitations

Consider the following limitations if any RN is running Windows Server:

- (*Windows Server 2012 R2 Only*) It is possible that the mouse may not be activated when an RN is running in test mode or production mode and when launched from the RN's VNC console. For more information and workarounds, go to onQ Administrator's Guide. This bug will be resolved pending a XenServer release of a new BIOS or Microsoft fix.
- (*Windows Server 2012 & R2*) When a REFS volume in Windows Server 2012 or R2 is protected, the Recovery Node for the same will be in standard NTFS. This is also true of a Bare Metal Restore.
- (*Windows Server 2012 & R2*) When a deduplicated volume in Windows Server 2012 R2 is protected, the Recovery Node for the same will again be a standard NTFS. This is also true of a Bare Metal Restore. Additional caution should be used in allocating RN disk space as the Quorum agent on the Protected Node will report actual disk usage, which might be far less than when data is stored in its normal form.
- (*All Windows Server platforms*) When the onQ Event Log reports 3010 code for any Windows PNs, both 32-bit and 64-bit, the auto-upgrade fails. Perform *one* of the following workarounds in the order that they are listed:
  - (Agent-based PNs) Restart onQ Service on the PN.
  - Reboot the PN.
  - Uninstall and reinstall the latest msi package at `C:\Program Files\Quorum\installer`.

## 3.5 Volume Mount Limitations

- Volumes only reachable through a GUID path are not supported.
- Backup source arguments that aren't drive letters or volume mount paths that begin with a drive letter are not supported.
- Paths as backup source arguments to onQ that are not volumes or volume mount points are not supported when using with VSS.
- Volume mount points cannot contain the characters outside of A-Z, a-z, 0-9, underscore and a dash. A volume mount point with spaces is supported for Windows RNs, but not for Linux RNs.
- Total string length of drive letter mounts and volume mount points, including separators, in excess of 250 characters is not supported.
- Volume mount point that are based on a volume that has other mount points that refer to it (multiple mount points) are not supported.
- Volume mount points used to protect MS cluster environment on onQ are not supported.
- Volume mount points might not be visible on the RN under certain circumstances if the folder that contains the mount points is hidden or in a system folder. You might need to set the folder attributes to display system/hidden folders so as to display mount points.
- A maximum of 15 logical drives can be protected per agent-based PN and 14 per agent-less PN.

See additional limitations in [Linux RN Limitations](#).

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## 3.6 CIFS Mount Limitations on Windows

- In order for onQ to back up shared volumes, there are some prerequisite steps that you need follow as outlined in onQ Administrator's Guide.
- When file objects are restored from a NAS backup, the kernel security objects may not be written. The data contents of the file will be restored as it was backed up.
- You cannot specify the size of a vdisk when you create or update the vdisk. This limitation is true for both automatic enrollment and manual enrollment.
- You cannot perform a BMR for CIFS drives. BMR continues to support only fixed drives on protected Windows systems.
- Network shared volumes can be extremely large; therefore, restoring to a specific PN is not an efficient way to retrieve data. Instead, restore the data to a NAS appliance. A BMR can only restore to local drives.
- Recovery Nodes will not include data for a network shared drive. However, Recovery Nodes started in production mode can connect to the configured remote drives.
- When an RN boots as part of a self-test or because you choose to boot it in test mode, the remote mounts will not be accessible.
- Backup performance depends on your PN's and NAS's bandwidth, I/O limitations, and other resources.
- File Backup Only option cannot be used with a remote drive.
- See the CIFS limitation outlined in [Agent-less PN Enrollment Limitations](#).

## 3.7 Bare Metal Restore Limitations

- When you perform a failback to restore a protected node to dissimilar hardware-physical or virtual, Windows might require reactivation.
- BMRs that are performed to the same or new hardware require that you upload specific drivers for any disk, network adapter, and any other hardware.
- After an incremental failback to a non-Xen PN (physical PN, ESX PN, Virtual PC PN), users are required to reinstall drivers.
- For a Windows 2012 server, a REF's partition/volume will be restored as standard NTFS.
- For a Windows 2012 server, if you choose to restore a volume with deduplication enabled, the data will be restored to its full size. Simply enable deduplication after the BMR completes.
- See the dynamic disk limitation outlined in [Agent-less PN Enrollment Limitations](#).
- When adding each volume in the disk configuration interface, you might need to wait a short period of time while the volumes are being created.
- There is a maximum allowed duration of 72 hours for a restore to complete. Exceeding 72 hours might result in a reboot of QUARK and a loss of the restored image to that point.

### Related Topics

[Bare Metal Restore Support](#)

[File-level Restore Limitations](#)

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## 3.8 File-level Restore Limitations

- (Agent-based PNs) Restoring using the `Original location of files Target` option is not supported for:
  - Linux.
  - From DR or AV.
  - From a volume on source PN that doesn't exist on the target server. For example: Files from `G:\ volume` on `PN1` cannot be restored to `PN2` where `G:\` doesn't exist.
- (Agent-less PNs) FLR is supported; however, you must use the `Other` option because an FLR to same or different PN relies on an agent running on the target PN. You can combine the `Other Destination PN to restore` option with the `Original location of files Target` option.

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## 3.9 Windows Cluster Services Limitations

- Suppose cluster nodes A and B are configured to use the same disks for their operation. If both of them are enrolled for protection, along with their shared disk configuration, only the cluster node that is currently using the shared disks can be backed up. If you attempt to back up the cluster node that does not have access to the shared disks, the backup will fail. Because the IP address of all the cluster nodes in the host table are set to the IP address of the cluster, any passive node in the cluster will indicate a RED status and backups will fail.
- When you start a cluster RN, you must select the RN for the node that was active at the time your desired backup was generated. For example, if you want the most recent data, then select the node with the most recent backup. The RN for the other nodes will contain stale information. If you want to roll back to a previous backup, you must select the RN that was active at that point in time.
- Recovery Node disks used in this context are basic disks, each with a maximum size limit of 2TB. The logical volume size for these disks is not expandable.
- If the PN configuration is switched between a standard and a cluster, the RN will be reinitialized and rebuilt.

- A cluster node that is protected with this configuration whose RN is brought in production can only be configured to work with virtual SAN. Registry modifications are done in the RN from the information provided in the onQ Portal for the specific node.
- A cluster node protected with this configuration is not suitable for a Bare Metal Restore as cluster service configurations are modified on the RN to work with a virtual SAN. Also, the failover cluster node is evicted from the configuration while preparing the RN. Only application data (SQL database, for example) can be retrieved/restored.
- There are additional cluster limitations if the PNs are agent-less. Go to [Agent-less PN Enrollment Limitations](#).

## 3.10 Agent-less PN Enrollment Limitations

- Clustering, as outlined below, is supported for agent-less PNs; however, a shared network and shared IP is not supported.
- Due to a [VMware limitation](#), VMware does not support dynamic disks. Nonetheless, onQ provides a way to back up dynamic disks as outlined in onQ Administrator's Guide; however, you will not be able to use QUARK to restore the dynamic disks.
- For agent-less PNs, FLR is supported; however, there are limitations. Go to [File-level Restore Limitations](#).
- VMware does not support snapshots of raw disks, RDM physical mode disks, or guest operating systems that use an iSCSI initiator in the guest. As outlined above, snapshots for dynamic disks and logical drives are not supported. Therefore, Quorum protection for agent-less PNs supports cluster nodes and local drives so long as they are primary partitions on basic disks. If the RN of such a cluster node is brought up in production mode, then the RN will connect to a production SAN as configurations from the PN will be replicated and are available on the RN.
- CIFS volumes are not supported. When a NAS share is mounted on a PN, the security credentials are accessible for applications running in the PN. However, in the case of a PN proxy, those security credentials aren't accessible.
- Using the onQ Filter Driver, as described in onQ Administrator's Guide, to back up agent-less PNs is not supported.
- If a PN on the HA has custom (RN) networks defined and the DR has the default network defined, the RN on that DR might be configured with the custom networking information instead of the default networking information. The workaround is to create an `xvf.dat` file, then save it to `C:\Program Files\Quorum\usr` on the HA's PN. As in the example below, edit the file to include the PN's networking information. In the following example, `10.20.16.144` is the default IP of the PN enrolled on the HA, `255.255.248.0` is the default subnet mask, and `10.20.16.1` is the default gateway. Afterward, rebuild the RN. The PN on the HA



continues to show the custom networks while the RN on the DR indicates what you specified in the `xvf.dat` file.

```
@@XV_PN_IP  
10.20.16.144  
@@XV_PN_MASK  
255.255.248.0  
@@XV_PN_GW  
10.20.16.1
```

---

## 3.11 onQ Flex Limitations

At this time, there are only two known limitations to using onQ Flex:

- onQ Flex is not supported in a DR Mirror configuration. If this configuration is of interest to you, let us know!
- onQ Flex tracking records events in UTC, regardless of onQ's time zone; therefore, your invoicing may be in UTC.

- [\(Start Here\) Upgrade Support and Requirements](#)
- [Update Appliance software](#)

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## 4.1 (Start Here) Upgrade Support and Requirements


Upgrading *directly* to version 3.9 is supported for onQ Appliances and protected nodes running any previous release. If you want to migrate to an onQ Flex configuration, simply install your new onQ Flex license—after you upgrade to 3.9 (see onQ Administrator’s Guide).

### Frequently Asked Questions:

Question	Answer
When should I expect to see the <b>Install Updates</b> button?	<p>Upgrade packages are deployed through onQ Central. onQ Appliances and onQ Archive Vaults auto-download the necessary packages when the daily cron job runs. This job runs between 10pm and 2am each day.</p> <p>This deployment occurs for all onQ Appliances and onQ Archive Vaults for which onQ Central is set, by Quorum Support, to allow download of the latest software packages.</p> <p>If you received an upgrade announcement from Quorum Support, but do not see the <b>Install Updates</b> button in the onQ Portal and want to upgrade immediately, contact Quorum Support.</p>

Question	Answer
<p>Do I need to upgrade my Appliances in any particular order?</p>	<p><b>No (Single-tenant).</b> However, be sure to upgrade both HAs, DR Appliances, and onQ Archive Vaults synchronously.</p> <p><b>Yes (Multi-tenant).</b> Upgrade them one tenant at a time and sequentially. Due to the changes in the underlying platform, this approach is required to prevent onQs from becoming non-bootable.</p>
<p>Do I need to initiate a reboot of onQ or appliance?</p>	<p><b>No (On-Premise).</b> onQ upgrade process <i>automatically</i> reboots onQ twice, followed by one onQ Appliance reboot thereby applying an important vulnerability (VENOM) patch for Xen Server.</p> <p><b>Yes (DRaaS).</b> Reboot your HA Appliance after Quorum Support upgrades and reboots your cloud AV/DR. Quorum Support notifies you when the reboot is needed. Quorum Support adheres to the following reboot order: AV &gt; DR &gt; and HA.</p>
<p>Do I need to stop protection to apply Appliance updates?</p>	<p><b>No.</b> If protection is on, onQ quiesces the system, stops protection, applies the new software, then restarts protection.</p>
<p>What if I experience a problem during the upgrade?</p>	<p>Browse the troubleshooting tips in onQ Administrator’s Guide. If you still have an issue, contact Quorum Support.</p>

**Before you upgrade:**

Behavior/Change	What should I do?
<p>In a File Backup Only configuration, onQ does not back up files and folders that do not have the corresponding disks and mount points defined and protected.</p>	<p>Add the disks and mount points to reflect the files and folders in your Include List. For more information, go to onQ Administrator's Guide.</p> 
<p>As outlined in <a href="#">Agent-less PN Enrollment Limitations</a>, onQ is not able to enroll XFS mount points automatically for agent-less Linux PN.</p>	<p>For all previously enrolled Linux PNs with XFS mount points, add the XFS mount points manually: in the Modify a Protected Node dialog, click the plus (+) button to add a mount point.</p>

**After you upgrade:**

Behavior/Change	What should I do?
<p>onQ Portal provides UI enhancements.</p>	<p>Refresh your browser using CTRL-F5. If you don't, portal changes will not be activated and some user actions will not work.</p>
<p>onQ Flex configurations, both new and existing, provides RN type to augment the Build type. onQ Portal sets RN type as follows: Auto RN Creation=Yes &gt; R2R Auto RN Creation=No &gt; OD</p>	<p>Nothing. Automatic. For more information, go to onQ Administrator's Guide.</p>

Behavior/Change	What should I do?
<p><i>(Agent-less PNs only)</i> There are two related changes that require your attention:</p> <p>Due to a change in how onQ interacts with an ESXi host, the upgrade process needs to purge any Quorum history associated with the PNs; afterward, onQ needs to perform a full backup of those PNs.</p> <p>Also, onQ needs to add a Quorum “history” volume (<code>QuorumDisk.vmdk</code>) to the RNs in order to optimize the resources it spends on performing backups.</p>	<p>Prior to restarting onQ protection, re-install all existing proxies to activate these changes. Afterward, re-initialize each agent-less RN to enable onQ to add the Quorum volume.</p> <p><code>QuorumDisk.vmdk</code> is added as a protected volume; therefore, onQ can no longer protect up to 15 volumes: onQ now supports up to 14 volumes for agent-less RNs. If you have an RN that is configured with 15 volumes, unprotect one of those volumes, then re-initialize the RN.</p>

**Next Step:** Now that you’ve read this topic, you’re ready to upgrade. Go to [Update Appliance software](#).

## 4.2 Update Appliance software

Quorum regularly releases new versions of onQ Appliance software, including service packs and, from time to time, hot fixes.

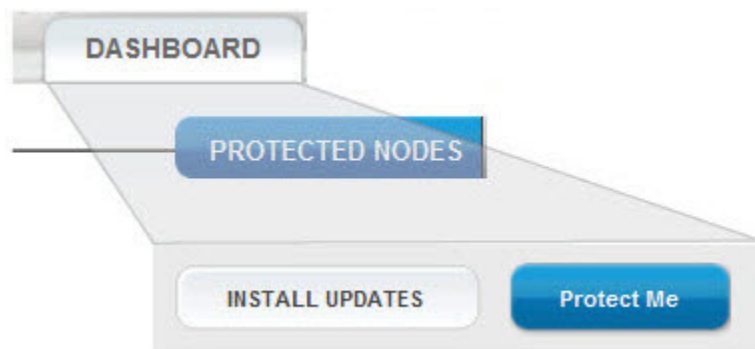
### To *automatically* apply an update:

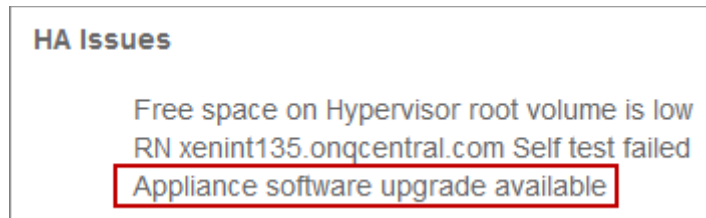
**Before you begin:** learn about any changes you should know about or pre-upgrade and post-upgrade requirements (for example, system reboots). Go to onQ Administrator's Guide.


1. Log on to the onQ Portal. You must log on as `varadmin` user.
2. Trigger the download of the onQ package, if it hasn't already downloaded.
  - a. Go to **APPLIANCE CONFIG** tab > **ADVANCED** button > **Software Upgrades** page.
  - b. Click the **Check for Updates** button.

Mouse-over the Check for Updates button to display the status of the download.

The onQ Portal's **DASHBOARD** displays an **Install Updates** button after the new software downloads from onQ Central. The **onQ STATUS** page > **Issues** pane also displays an Appliance software upgrade available message.





3. Apply the new software:
  - a. Go to the **DASHBOARD** tab.
  - b. Scroll down and click the **INSTALL UPDATES** button.
  - c. From the Install Updates dialog, click the **UPGRADE** button when prompted to initiate the upgrade.
  
4. From the **DASHBOARD**, mouse-over the Updates icon  to display the status of the upgrade, or open the Event log to observe the PN or proxy upgrade.

Immediately after this onQ Appliance upgrade, onQ automatically initiates a PN software (agent-based) and PN proxy software (agent-less) upgrade as outlined in the following topics:

  - [\(Agent-based Windows PNs\) Update node software](#)
  - [\(Agent-based Linux PNs\) Update node software](#)
  - [\(Agent-less Windows/Linux PNs\) Update PN Proxy software](#)
  
5. Verify that all onQ Appliances are running the same software version. Go to [Verify onQ software compatibility](#).

**Next step:** learn about any actions you take to complete the upgrade. Go to onQ Administrator's Guide.