HP Network Automation

Software Version 9.11.01

Release Notes

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ANTLR, Apache, Bouncy Castle, GNU, Jaxen, Jython, Netaphor, MetaStuff, Radius, Sleepcat, TanukiSoftware

Documentation Updates

This guide's title page contains the following identifying information:

- Software Version number, which indicates the software version.

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Introduction

These release notes include important information regarding HP Network Automation (NA), Release 9.11. For assistance, please contact Support at http://support.openview.hp.com/contact_list.jsp.

To report product issues, please go to http://support.openview.hp.com/.

Note: NA 9.10 ships with up-to-date drivers. Driver Packs dated November 2010 and later will be compatible.

What's New in NA 9.11

NA 9.11 includes the following new features and enhancements:

- Improved task scheduling:

    o Monitoring
    o Stability
    o Task Load page
    o Task cancellation
    o Memory-management
    o New task search options, including task timing and failure types

- Improved Horizontal Scalability:

    o Reserve one or more NA cores for user interaction
    o Automated task failover in Horizontal Scalability environments
    o Task-related pages include the NA core name
    o Core List page shows core status

    For more information, see the *Network Automation 9.11 Horizontal Scalability Guide*.

- Case-insensitive search of many objects in the NA database on Oracle

- Automatic upgrade of the Java Runtime Environment (JRE) to version 6 update 30 (1.6.0_30)

- Improved performance for comparing large device configurations

- Optimized snapshot task

- Optimized VLAN diagnostics task

- Ability to print compliance policies and rules

For a list of what's been fixed in NA 9.11, see the NA 9.11 patch `readme.txt` file.

What's New in NA 9.10

NA 9.10 includes many new features and enhancements, including:

- Autopass — There are now two types of NA 9.10 licenses:

  — InstantOn — InstantOn NA 9.10 licenses are shipped with the product. Each InstantOn license is limited to 250 devices and 60 days of use after installing the product.

  — Permanent — Permanent NA 9.10 licenses must be obtained via the HP License Key Delivery Service. Permanent NA 9.10 licenses do not have an expiration date and can be used in conjunction with one NA add-on feature, such as Horizontal Scalability or Multimaster Distributed Systems. For detailed information on NA licenses, refer to the *Network Automation 9.10 Upgrade and Installation Guide*.

- Viewing Device Groups — You can now view a listing of devices from the perspective of any of the parent groups in its ancestry. This enables batch editing of devices from the desired parent group's perspective. In addition, there is now a tree presentation of the Device Groups page. This replaces the previous multi-page, drill-down navigation design.

- Email Notification — You can now send and receive emails from logged-on NA users.

- Policy Manager API — You can now create policies using the NA API. There are now CLI commands for creating policies, creating rules within policies, creating remediation scripts for the rules, modifying existing policies, and so on. Refer to the *Network Automation 9.10 API Reference Guide* for information.

- HP NNMi-HP NA Integration — The HP NNMi-HP NA Integration Connector is no longer used in NA 9.10. NNMi to NA integration occurs through the WebServices call between the two products. The new HP NNMi-HP NA integration:

  — Simplifies deployment
  — Improves topology synchronization reliability
  — Increases synchronization speed between NNMi and NA

  All HP NNMi-HP NA integration configuration is done in the NNMi console. For information about configuring and using the integration, see the *NNMi 9.10 Deployment Reference*. Note that due to new NNMi-NA integration architecture, NA 9.10 supports only NNMi 9.10.

  NOTE: When upgrading the integration from versions previous to 9.10, the connector must be uninstalled from the NNMi management server and the connector jar file must be removed from the NA application server. See the *NNMi 9.10 Deployment Reference*.

- Single Sign-on — You can now login to NA and NNMi using the same user credentials. For information on NA/NNMi integration, refer to the *HP NNMi 9.10 Deployment Reference* for information.

- Improved searching — Performance has been improved when searching on text and/or LOB columns, such as configuration or diagnostic data. You can now quickly search device configurations using a full text editor.

- SNMP v3 Support — Network devices using SNMPv3 for device discovery are now detectable. Using less secure network device detection methods is avoided when SNMPv3 protocol is used, enabling the use of the most up-to-date SNMP security mechanisms.

What's Been Fixed in NA 9.10

The following issues have been fixed in NA 9.10.

Issue Number	Summary
QCCR1D68111	The Detect Network Devices task can now detect devices with a SNMPv3 configuration.
QCCR1D78689	ACL handles are no longer causing Oracle database errors when NA updates the Oracle database.
QCCR1D82459	You now need Admin permissions to create, execute, and delete Quick Launches.
QCCR1D83072	You can now search for configuration text that includes HTML characters.
QCCR1D83198	You can now enable the *FTPMonitor* on a Solaris platform.
QCCR1D83226	You can now delete device issues in a NNMi-NA integration environment.
QCCR1D83230	You can now select device groups from the drop-down menu on the Device Groups page.
QCCR1D83490	Block text for port scanning is now supported.
QCCR1D83957	There is now an option to disable dynamic device group recalculation on the Administrative Setting's Server page.
QCCR1D84076	A new VLAN link is available on the Device VLANs page for devices that support VLAN provisioning.
QCCR1D84210	You can now run a policy compliance task against a device using the NA API.
QCCR1D84234	Policy created dynamic groups names now contain the name of the policy.
QCCR1D84368	Workflow logic now works with task command scripts.
QCCR1D84682	The device description from Cisco ASA 5550 support for iOS 8.0(4)32 now accepts more than 128 characters.
QCCR1D84865	The Event Notification script box is now populated.
QCCR1D85147	The "show port" CLI command now functions properly.
QCCR1D85419	The SNMP community string is now listed only once when running the Deploy Password task.
QCCR1D85910	The "list image" CLI command now includes all configured sites.
QCCR1D85911	Password rules are now listed on the Edit Device page.
QCCR1D111222	NA now includes the functionality for synchronizing deleted devices with NNMi (when the integration is configured).

Documentation Addendum

NA 9.10/BSA Essentials 2.01 Compatibility

For NA 9.10 to support BSA Essentials 2.01, please contact BSA Essentials Support for assistance. Refer to the *Network Automation 9.10 Support Matrix* for detailed information on HP cross product compatibility.

Creating Polices

When creating a policy using a diagnostic rule that is to be exported to a file, when you import the policy, the diagnostics to which the policy applies must have the same name as they are referred to in the policy. If you rename a diagnostic on which a policy is based, you will lose the policy rules condition.

Multi-task Projects: Setup an option to continue or stop when a sub-task displays a Warning status

For multi-task projects, if a sub-task completes with a Warning status, you can continue to run subsequent sub-tasks or cancel all of the remaining sub-tasks. This feature enables you to cancel tasks that are running against a device that could be experiencing issues.

To enable this feature:

1. From the Admin menu, navigate to the Custom Data Setup page.

2. Scroll down to the 6th API Name field under the Tasks section.

3. In the 6th API Name field, enter: **subtask_control**

4. In the Display Name field, enter: **Cancel remaining tasks that have warning messages**

5. In the Values field, check the *Limit to*: checkbox and enter: **Yes, No**

6. Click the Save button.

If this feature is enabled, when you create sub-tasks for multi-task projects, the following field is displayed under the Comments field on all multi-task sub-task pages:

Cancel remaining tasks that have warning messages

This field includes the following options:

- Blank — The remaining sub-tasks continue to run.

- Yes — The remaining sub-tasks are canceled.

- No — The remaining sub-tasks continue to run.

Note: To disable this feature, uncheck the 6th API Name checkbox on the Custom Data Setup page and click the Save button.

Enabling FIPS Mode

The Federal Information Processing Standardization (FIPS) specifies cryptography requirements for both software and hardware. For NA managed devices, FIPS functionality is only pertinent for SSH/SCP device access or SNMPv3 use. Devices that do not support SSH/SCP or SNMPv3 are not affected.

Enabling FIPS mode provides the following in terms of device access:

- Restricts what encryption algorithms can be used (for example, AES and 3DES are allowed, however Blowfish and DES are not).

- Replaces implementation of other encryption algorithms with a FIPS-compliant one.

Note: Enabling FIPS restricts the algorithms NA uses to communicate with devices and as a result could render some non-FIPS compliant devices unreachable.

To enable FIPS mode:

1. Add the following line to the *adjustable_options.rcx* file:

   ```
   <option name="crypto/fips/enabled">true</option>
   ```

2. Restart NA. On NA startup, the following is displayed in the log file when FIPS mode is enabled. (It is not displayed when FIPS mode is not enabled.)

   ```
   {system/crypto} [main] 75 FIPS140Mode: Loading FIPS JCE Provider
   ```

3. Login to NA as Admin.

4. Navigate to the View Details page (Admin → System Status → BaseServerMonitor → View Details). The following is displayed:

   ```
   crypto/fips/cipher_list = [3des-cbc, aes128-cbc, aes128-ctr, aes192-cbc
   crypto/fips/mac_list = [hmac-sha1, hmac-sha1-96]
   ```

To disable FIPS mode:

1. Add the following to the *adjustable_options.rcx* file:

   ```
   <option name="crypto/fips/enabled">false</option>
   ```

2. Restart NA.

Changing NA credentials when connecting to a new database location

If the NA database has been moved to a new server, you can configure NA to connect to the new database location using the *tc_tools* utility.

The *tc_tools* utility enables you to update the following information on the NA server:

- Database server name

- Database name

- Database username

- Database user password

Note that the *tc_tools* utility requires that the new database location includes a valid NA database. As a result, the NA database must be configured through database administration tasks or through the NA install procedure. Please refer to your Database Administrator and/or the *NA 9.10 Upgrade and Installation Guide* for information on installing the NA database.

The *tc_tools* utility is located at:

- `<installdir>/client/tc_tools.bat` (Windows platform)

- `<installdir>/client/tc_tools.sh` (Unix platform)

To execute the *tc_tools* utility:

1. Run the *tc_tools* utility. The following options are displayed:

   ```
   1 – Change database connection information
   2 – Save device passwords to file
   3 – Reset update in progress information
   4 – Exit
   ```

2. Select Option 1 – Change database connection information. The following sample information is displayed:

   ```
   Database Server [devsql2k]:Database Name [Caladan_Bruce]:Database
   User [sa]:Database Password [********]:Database connection
   information changed.
   ```

   Note: The entries inside the brackets are the previous values. If you are confirming an existing value, you can retype it or simply press [Enter]. To confirm all existing values without updating them, you can exit the script by entering ctrl-C.

3. Make any necessary updates and save the file.

4. Select Option 4 – Exit (or enter ctrl-C).

5. Restart the NA Management Engine.

10/18/2013: Additional Product Issues

NA does not retrieve the correct email address from the directory service

For a user defined in a directory service accessed through lightweight directory access protocol (LDAP), NA creates the user's email address from the user name instead of retrieving the actual email address from the correct field in the user definition. QCCR1D102542

Solution: On the NA server, update the value of the `ldap_server/attr_mapping/ActiveDirectory/email` option to change the order of the LDAP server fields that NA searches for an email address. Follow these steps:

1. Back up the `adjustable_options.rcx` file to a location outside the `<NA_HOME>` directory.
2. In the `appserver.rcx` file, locate the following line:
   `<option name="ldap_server/attr_mapping/Generic/email">userprincipalname,mail,email,emailAddress</option>`
3. Copy the entire line from the `appserver.rcx` file to the `adjustable_options.rcx` file.
4. In the `adjustable_options.rcx` file, change the copied line to:
   `<option name="ldap_server/attr_mapping/Generic/email">`**mail, userprincipalname**`,email,emailAddress</option>`
5. Save the `adjustable_options.rcx` file.
6. Reload the .rcx settings by doing one of the following:
   - Run the reload server options command from the NA proxy.
   - Restart the NA services.
7. Verify that the email address of the user is correct.

java.lang.OutOfMemoryError: PermGen space

NA requires a larger PermGen than the Java default allocation. QCCR1D86144

Workaround: To increase the space allocated to the PermGen, follow these steps:

1. Change to the following directory:

   a. *Windows*: <NA_HOME>\server\ext\wrapper\conf

   b. *UNIX*: <NA_HOME>/server/ext/wrapper/conf

2. Back up the jboss_wrapper.conf file.

3. In a text editor, such as WordPad or vi, edit the jboss_wrapper.conf file as follows:

   a. Locate the line that contains the string MaxPermSize=.

   b. Increase the allocation:

      - If the NA application server runs on a 64-bit machine, update this line to read: MaxPermSize=512M

      - If the NA application server runs on a 32-bit machine, update this line to read: MaxPermSize=192M

4. Restart the NA management engine.

Cannot move devices with context to a different partition

Attempting to move a device that has contexts to a different partition results in an error: Add Partition failed. (Duplicate IP Address). QCCR1B120041

This issue was introduced with 9.11.01.

Workaround: Disable the check of device secondaries while moving the device to a different partition. Follow these steps:

1. Back up the `adjustable_options.rcx` file to a location outside the `<NA_HOME>` directory.
2. In the `adjustable_options.rcx` file, add the following line:

   `<option name="ip_management/add_device_check_secondaries">false</option>`

3. Save the `adjustable_options.rcx` file.
4. Reload the .rcx settings by doing one of the following:
   - Run the reload server options command from the NA proxy.
   - Restart the NA services.
5. Move the device to a different partition.
6. In the `adjustable_options.rcx` file, change the following line:

   `<option name="ip_management/add_device_check_secondaries">false</option>`

   To read:

   `<option name="ip_management/add_device_check_secondaries">true</option>`

7. Save the `adjustable_options.rcx` file.
8. Reload the .rcx settings by doing one of the following:
   - Run the reload server options command from the NA proxy.
   - Restart the NA services.

10/22/2012: Additional Product Issues

Enabling SCP Transfers from a Satellite

By default, NA supports TFTP only for backing up device software and configurations through the satellite gateway. QCCR1B89278

Solution: To enable SCP transfers from remotely-managed devices to the satellite, follow these steps:

1. Identify an SCP account to use. Navigate to the FTP and SSH Device Access section of the Administrative Settings - Device Access page (**Admin > Administrative Settings > Device Access**).
   - If values are specified for the FTP/SSH User and FTP/SSH Password fields, you must use this information for the SCP account.
   - If no values are specified for the FTP/SSH User and FTP/SSH Password fields, determine a user name and password to use for the SCP account. Configure that account.

   Note: The FTP/SSH user name must be different from the NA user names for accessing the NA console.

2. On the satellite system, configure the identified SCP account. For example, the following commands configure an account with username `nascp` and password `napass`:

   ```
   chmod -R o+rx /opt/opsware/nassat/server/ext/tftp
   useradd -d /opt/opsware/nassat/server/ext/tftp/tftpdroot nascp
   passwd napass
   ```

   Note: The home directory for this user must be `/opt/opsware/nassat/server/ext/tftp/tftpdroot`.

3. On the NA application server, add the `DeviceAccess/scp/allow_satellite` option to the `adjustable_options.rcx` file:
   a. Back up the `adjustable_options.rcx` file to a location outside the <NA_HOME> directory.
   b. In the `adjustable_options.rcx` file, add the following line:

      ```
      <option name="DeviceAccess/scp/allow_satellite">true</option>
      ```

   c. Save the `adjustable_options.rcx` file.
   d. Reload the .rcx settings by doing one of the following:
      — Run the reload server options command from the NA proxy.
      — Restart the NA services.

Unexpected Behavior with Multiple Web Browser Windows

When the same user is logged in to NA from multiple web browser windows on the same system, unexpected behavior might result. The cause of this behavior is that some NA components are user-based.

Running NA from multiple web browser windows for the same user is not fully supported. QCCR1B102985

Last Successful Snapshot is Really the Last Successful Access Date

The "Last Successful Snapshot" field on the Device Details page in the NA console displays the last successful access date to the device instead the last successful snapshot date. This naming can be misleading. QCCR1B102382

Workaround: Rename the "Last Successful Snapshot" field to "Last Successful Access Date" as follows:

1. Back up the `adjustable_options.rcx` file to a location outside the <NA_HOME> directory.
2. In the `appserver.rcx` file, locate the following lines:

   ```
   <option name="formatting/show device/stdout/body">Device ID :
   $Device.DeviceID$

   …

   Last Successful Snapshot : $Device.LastAccessSuccessDate$

   …

   $CustomData$Comments : $Device.Comments$</option>
   ```

3. Copy the entire option definiton from the `appserver.rcx` file to the `adjustable_options.rcx` file.
4. In the `adjustable_options.rcx` file, locate the following copied line:

   ```
   Last Successful Snapshot : $Device.LastAccessSuccessDate$
   ```

5. Change the copied line to:

   ```
   Last Successful Access Date : $Device.LastAccessSuccessDate$
   ```

6. Save the `adjustable_options.rcx` file.
7. Restart the NA services.

The NA FTP Service Cannot be Controlled from the NA Console (UNIX only)

The NA FTP service does not respond to the **Start**, **Stop**, and **Restart** buttons on the Start/Stop Services page in the NA Console. QCCR1B107775

Solution: To enable these buttons, update the FTP service configuration as follows:

1. Change to the following directory:

   ```
   <NA_HOME>/server/ext/wrapper/conf
   ```

2. Back up the following file to a location outside <NA_HOME>:

   ```
   ftp_wrapper.conf
   ```

3. In a text editor (such as vi), open the `ftp_wrapper.conf` file.
4. Search for the string pid to locate the following line:

   ```
   wrapper.pidfile=/var/run/Ftp.pid
   ```

5. Change the capitalization of the service name in the located line to:

   ```
   wrapper.pidfile=/var/run/FTP.pid
   ```

6. Restart the NA services:

   ```
   /etc/init.d/truecontrol restart
   ```

11/03/2011: Additional Product Issue

Autopass license overrides legacy license

Introducing an HP Autopass license key prevents NA from using a legacy license key. This issue affects customers who upgrade to NA 9.10. It can take two forms:

- A fresh installation of NA 9.10 that activates the Instant-On license during installation. In this case, the product runs fine until the Instant-On license expires. Upon expiration of the Instant-On license, NA does not recognize the legacy license, so NA is not usable.
- Application of an additional capacity Autopass license to an NA 9.10 system that was upgraded in place from a previous version of NA and is still using a legacy license. In this case, NA recognizes only the newly added capacity.

QCCR1B95407

Workaround: In either case, the solution is to remove the Autopass license key as follows:

1. Locate the Autopass license file:
   - *Windows*: <NA_HOME>\autopass\license\lickeys.dat
   - *UNIX*: <NA_HOME>/autopass/license/lickeys.dat
2. In a text editor, delete the contents of the lickeys.dat file, and then save the empty file.
3. Verify that an appropriate legacy NA license (license.dat file) exists in the NA root directory.
4. If an additional capacity Autopass license caused the issue, contact your HP Sales Representative to request a legacy format license key for the additional capacity, and then apply that key.
5. Restart the NA management engine.
   NA nows runs with the legacy license from the license.dat file.

08/01/2011: Additional Product Issue

Enabling cross-site scripting checks causes garbled characters in NA 9.10.01 on SJK systems

On a non-English system, when the "Cross site scripting check" check box is selected on the Admin > Administrative Settings > User Interface page, user-entered values, such as group, policy, and policy rule names, might include garbage characters. QCCR1B91853

07/22/2011: Additional Product Issues

Incorrect SNMPv3 Configuration Prevents Correct Device Detection

For a device whose NA configuration includes SNMPv3 settings, NA first tries to communicate with the device using SNMPv3. NA then tries the SNMPv1 or SNMPv2c settings. If the SNMPv3 settings are incorrect, NA does not recognize that the SNMPv3 connection failed and detects the device as a non-active node or an unrecognized host. Therefore, NA does not attempt SNMPv1 or SNMPv2c communication with the device. QCCR1B86730

Workaround: Correct the SNMPv3 settings or remove the SNMPv3 configuration so NA uses only SNMPv1 or SNMPv2.

Using SNMPv3 with Privacy and AES192 and AES256 Encryption

Several tasks, including Detect Network Devices and Discover Driver, do not correctly use SNMPv3 with the AES192 or AES256 encryption privacy protocol. QCCR1D88942

Workaround: Use a different encryption method, such as AES128.

SNMP Timeout Value Might Be Too Short for SNMPv3 Communications

If you encounter frequent timeouts during communications with SNMPv3 devices, increase the value of the SNMP Timeout setting on the Device Access tab of the Administrative Settings page. QCCR1B87867

Telnet and SSH Sessions (IPv6 devices)

NA does not cache telnet or SSH sessions to IPv6 devices. Therefore, these histories are not available from the device information page. QCCR1B87641

Alternate Driver Discovery (IPv6 devices)

Alternate driver discovery incorrectly interprets the first colon (:) of an IPv6 address as indicating a port on the device. QCCR1B87801

Driver Discovery with SNMP (IPv6 devices)

Driver discovery using a supplied SNMP community string fails for IPv6 devices. QCCR1B87825

Users Without Permissions to All Partitions Might Not Be Able to Compare Device Configurations

Users with access to some, but not all, partitions do not see the options for comparing devices on the Configuration Changes tab of the Devices page. QCCR1D94263

Product Issues

Custom Diagnostics

NA enables you to define custom diagnostics to capture specific information that is useful in your environment. If the name of a custom diagnostic is longer than 80 characters, the Device Diagnostic page shows the content of the most recent diagnostic. However, the Diagnostics History table at the bottom of the page does not appear due to a rendering error. QCCR1B86671

Polices Page

Users with Admin permissions can view the full list of policies on the Policies page and segment polices into separate policy tags. However, users with Full Access permissions cannot filter policies based on policy tags when there is more than one site partition. QCCR1D86308

NA-NNMi Integration (IPv6 devices)

NA-NNMi integration does not support synchronizing IPv6 devices. Only IPv4 devices are supported. QCCR1B86228

Using the "mod authentication" command

When using the "mod authentication" command, if there are no device specific authentication records to modify for a device, the system reports an error: `GEN_FAILURE: The Device Password Information for Device you requested can not be found. It may have been deleted.` QCCR1D116666

Workaround: You can use the "add authentication" command to create a new entry.

Multi-task Projects

When you click the "Add to Quick Launches" link on the Task Templates page, the Quick Launch link is displayed in the Quick Launches section under the "My Workspace" area. However, creating a Quick Launch link for a multi-task project does not work. QCCR1D115330.

Network Diagrams

Network diagrams can be viewed in either Visio, static JPEG, or interactive JPEG format. When installing NA 9.1 on Windows Server 2008, JPEG formatted network diagrams do not contain icons. QCCR1D113667

RSA Server Authentication Manager

RSA device authentication is only available on Windows 2003, 32-bit. QCCR1D115349

Oracle Database Server

Oracle Database Server does not support case insensitive queries. As a result, all searches in NA are case sensitive if you are using Oracle Database Server. QCCR1D75206

Memory Allocation Error

If you have installed NA on a Linux platform, you might see the following error in the log messages or within the results of failed NA tasks:

```
Caused by: java.io.IOException: java.io.IOException: error=12, Cannot allocate memory
```

This error occurs when the JVM (Java process) attempts to run an external shell script, such as a custom action or memory monitor. To run the external shell script, the system must fork its process--a mechanism that requires the parent process to copy itself for the child process. Making a copy of the parent process could send a request to the system kernel for more memory than the system can allocate. (Note that this can occur on either a 64-bit or 32-bit server.) QCCR1D114717

Workaround: As root, run the following command at the root shell prompt:

```
echo 1> /proc/sys/vm/overcommit_memory
```

Uninstalling NA 9.10

After upgrading from NA 7.60.2 to NA 9.10, when uninstalling NA 9.10, the NA 7.60.02 version of the NA Uninstaller is used. QCCR1D113930

Workaround: If you upgrade a 32-bit NA platform to a 64-bit NA platform, check the NA install directory. If there is a directory named "jre_old", do the following before uninstalling NA:

1. Stop NA services (this includes TFTP, Syslog, SWIM, and FTP).

2. Rename *<NA install dir>/jre.*

3. Rename *<NA install dir>/jre_old* to *<NA install dir>/jre.*

4. Run the NA Uninstaller.

FTP Server error

The System Status page displays the results of the most recent monitor runs. If the following error message is displayed, the FTP server could be running properly. As a result, the error message will go away when the NA Management Engine is restarted. QCCR1D114963

```
Unknown IOException: com.oroinc.net.ftp.FTPConnectionClosedException: FTP
response 421 received. Server closed connection.
```

FTP Service (Starting)

If you restart NA through the CLI on a Linux or Solaris platform, the FTP service will not start. You must start the FTP service via the NA Web UI after the NA has been started. QCCRID114411

Note that there are cases where FTP configuration is changed and the FTP service needs a restart to reflect the changes. In this case, you must do this via the NA Web UI.

FTP Service (Stopping)

In some UNIX environments, you cannot stop the FTP service from the NA Web UI. QCCRID114923

Workaround: Manually stop the FTP service via the console by executing the following:

```
<NA install dir>/server/ext/wrapper/bin/StopFTPWrapper.sh
```

FTP Accounts

The NAUserManager class utilizes a configuration option to identify the username and password of the authorized FTP account. There is only one FTP account at this time. If the NA administrator changes the configuration value in NA, the FTP server will not be aware of the change until it has been restarted because the FTP server does not reload configuration options before performing a user check. QCCR1D112098

Workaround: The FTP server runs as a separate process outside of NA and is not notified when changes to the .rcx files are made. Restart the FTP server if the FTP account username or password is changed.

VLAN Data Gathering Diagnostic

If you are running several diagnostics, including the VLAN Data Gathering diagnostic, on a device that does not support the VLAN Data Gathering diagnostic, there is no Session Log available for that task. QCCR1D102848

Workaround: Remove the VLAN Data Gathering diagnostic from the task.

SA/NA Integration

When integrating HP Server Automation (SA) with HP Network Automation (NA), you will encounter out of memory errors due to increased memory requirements when integrating SA with NA. QCCR1D113638

Workaround:

1. Stop NA.

2. Edit the *<na root>/server/ext/wrapper/conf/jboss_wrapper.conf* file and find the entry for `wrapper.java.maxmemory=512`.

3. Increase value to 1024 and save the file.

4. Restart NA.

CLI driver discovery via Bastion Host does not work for some devices

When configuring a device to use a Bastion Host server with SSH, the Discover Driver task fails with the following error message: `This task did not complete`

In addition, the Session Log is not stored for the failed task. QCCR1D104772

Workaround: Discover the driver without the Bastion Host or manually assign the driver.

Oracle Database Log Files

Oracle database users could encounter the following error in their log files, associated with a failed query:

```
java.sql.SQLException: ORA-00600: internal error code, arguments: [kglhdgn_1],
[0xA000000], [0], [2], [], [], [], []
```

This is an Oracle internal error, normally handled by the DBA and Oracle Support. The error is shown below:

```
ORA-00600 internal error code, arguments: [string], [string], [string],
[string], [string], [string], [string], [string]
```

This is the generic internal error number for Oracle program exceptions. It indicates that a process has encountered a low-level, unexpected condition. Causes of this message include:

- Timeouts
- File corruption
- Failed data checks in memory
- Hardware, memory, or I/O errors
- Incorrectly restored files

The first argument is the internal message number. Other arguments are various numbers, names, and character strings. The numbers may change meanings between different versions of Oracle. QCCR1D1114453

Workaround: Report this error to your DBA or Oracle Support Services.

Stopping the NA Management Engine on a Solaris platform

If you are running NA on a Solaris platform, if you click the Start/Stop Services menu option from the Admin menu, and then click the "Stop" option for the Management Engine button on the Start/Stop Services page, the NA Management Engine (also referred to as the NA server) is not stopped. QCCR1D102881

Workaround: Go to the operating system and run */etc/init.d/truecontrol stop*.

VLAN Searches

Previously saved VLAN searches are not valid in NA 9.1 due to the addition of new VLAN features. If you attempt to view a saved VLAN search, you could see the following error message:

```
Error executing query VLAN: PortInVlanName is not a valid field name for this query.
```

Workaround: Remove and re-create the VLAN search. QCCR1D102754

Uploading Large Image Files

Currently, NA is limited to uploading device configurations no greater than 1GB. QCCR1D99027

Provision Device Task

Although the Provision Device task enables you to select more than one device, the task only works with one device (or when using a .csv file for multiple devices). Attempting to select more than one device, or a device group, using the Device Selector will cause an error. QCCR1D102620

Device Selector Display

When using the Device Selector with Internet Explorer 6, some of the Device Selector display features might not work properly due to a browser limitation. QCCR1D101145

Workaround: Upgrade to Internet Explorer 7.

Security Partitions

When modifying Security Partition details, if you save the Security Partition before the Device Selector loads, you will lose all the devices from that Security Partition. QCCR1D102646

Canceling Tasks

If you cancel a task that is currently communicating with a device, NA could mark subsequent attempts to run the task (or similar tasks) as "skipped". This could happen even if communication between the task and the device seem to be hung and you are waiting for a timeout.

This issue can occur because NA is looking for a clean opportunity to end communication between the task and the device before actually canceling the task. As a result, NA will continue to execute the task until that point is reached. Any attempt to rerun the task before it is canceled will appear to NA as if the task is already in progress. As a result, NA will mark the new task as "skipped". You must give NA ample time to finish with the canceled task. Once that has occurred, NA will be able to rerun the task. QCCR1D101509

Using the $tc_device_enable_password$ variable in command scripts

When using the *$tc_device_enable_password$* variable in a command script, if the device enable password contains an at sign (@) character, the @ character will be preceded by a backslash (\) character. QCCR1D100314

Device Managed IP Addresses Page

When making changes to the Device Managed IP Address, because NA attempts to remember a connection path, the change might not take effect. QCCR1D101755

Workaround: On the Device Managed IP Addresses page, click the "Reset last used IP" link.

Setting Parent Task Priority

When changing a parent task's priority that is currently running, any existing child tasks that are in the "Pending" or "Waiting" state will appropriately change their priority to that of the parent task. However, child tasks that have not been created yet or are in another state, such as "Running" or "Paused" will retain the parent task's original priority. If a parent task is not running and its priority is changed, all of the parent task's child tasks take on the new priority. QCCR1D98393

Duplicate VLANs Displayed in Layer 2 Diagrams

When diagramming VLANs, if a VLAN includes an IP address, it is possible for the VLAN port table to include both the VLAN name and the VLAN ID. As a result, duplicate VLANs could be displayed in Layer 2 diagrams since NA assumes the VLAN name and the VLAN ID refer to different VLANs. QCCR1D100138

Testing OpenLDAP User Authentication

When configuring OpenLDAP for NA user authentication, the "Test" function might not work. In this case, be sure to save all of the options before testing if they work. QCCR1D100201

Using LDAP Servers

If you are using a LDAP server for external user authentication, you might need to modify certain LDAP related options in the *appserver.rcx* file. The default settings will work with the ActiveDirectory server under most situations. However, for other types LDAP servers (depending on the LDAP schema configurations), you might need to customize the following settings if you are experiencing issues with the default settings: QCCR1D99663

```
<!-- Attribute mapping for Generic LDAP server-->
<option name="ldap_server/attr_mapping/Generic/group_search">group,organizationalunit,
container,groupOfUniqueNames</option>
<option name="ldap_server/attr_mapping/Generic/group_name">name,cn,commonName</option>
<option name="ldap_server/attr_mapping/Generic/member_search">member,uniqueMember
</option>
<option name="ldap_server/attr_mapping/Generic/username_search">samAccountName,uid,cn
</option>
```

Note: Ignore the following settings. They are not used at this time.

```
<!-- Attribute mapping for SunLDAP server-->
<!-- Attribute mapping for OpenLDAP server-->
```

The "group_search" option specifies the list of LDAP entries to search against for LDAP groups. This information is used Step 3 of the LDAP Setup Wizard, where you define the LDAP groups of which the members are allowed to login to NA. Consult with your organization's LDAP Administrator to ensure that the list contains all necessary group attributes. For example, it might be necessary to add "groupOfName" to the list for the LDAP group search to work.

The same concept applies to "username_search" and "member_search". Both of these are used during the NA login process to positively identify the user and to determine the user's group memberships. If the default LDAP attribute names do not match your LDAP schema configuration, change them accordingly.

The "group_name" option specifies the attribute names that usually contain the group name. If the attribute name for the LDAP group is not "name", "cn", and "commonName", you must modify them accordingly. You rarely need to change this option, however.

After you made appropriate changes, save the *appserver.rcx* file and restart the NA server.

Device Relationships

Scripting to a vSwitch is done via direct API calls to the containing ESX server. As a result, there is no way to prevent scripts from modifying ESX server settings outside those that pertain to the vSwitch. Note that this is true even in cases where MSP permissions are being granted to the vSwitch, but not the containing ESX server. QCCR1D100298

Including URLs in Policies

When creating a policy and including a vendor solution URL and/or a vendor advisory URL, the URL must start with the "http://" prefix, otherwise the link might not be correctly interpreted by the browser. Note that if the URL field is left blank, when selected, the link could open the NA Home page. QCCR1D98621

Running NA on a Solaris Platform

When starting the NA server on a Solaris platform, there is a remote chance that the NA server will crash due to an error in the native *frame_sparc.cpp* file. This is due to a bug in the Solaris JVM Biased Locking feature. QCCR1D99873

Workaround: Add the following VM argument to the *jboss_wrapper.conf* file located in NA_INSTALLED_DIR/server/ext/wrapper/conf:

```
wrapper.java.additional.#=-XX:-UseBiasedLocking
```

Where # is the next number in sequential order of all the parameters. For example, if the jboss_wrapper conf file has the following arguments, the workaround VM argument would be #6.

```
wrapper.java.additional.1=-DTCMgmtEngine=1
wrapper.java.additional.2=-Duser.dir=C:\NA\server\ext\jboss\bin
wrapper.java.additional.3=-Xmn170m
wrapper.java.additional.4=-Djava.awt.headless=true
wrapper.java.additional.5=-Dfile.encoding=UTF8
wrapper.java.additional.6=-XX:-UseBiasedLocking
```

Viewing VLAN Information for a Port/Interface

When viewing device MAC Addresses details on the MAC Address Details page, the VLAN field is not populated. QCCR1D98139

Workaround: To display VLAN information for a port/interface, click the Port Name link for that port on the MAC Address Details page. The Interface Details page opens. Scroll down to the Member VLANs field to view VLAN information.

Using Active Directory

If you are using Active Directory, you must modify the corresponding options in the *appserver.rcx* file to include the correct attributes in the search mapping session. QCCR199633

1. In the *appserver.rcx* file, locate <!-- Attribute mapping for Generic LDAP server--> session.

2. Make sure that:

   "groupOfName" is included in the "group_search".
   "uid" is included in the "username_search".
   "member" is included in the "member_search".

3. Save the changes to the *appserver.rcx* file.

4. Restart the NA server.

Using ActiveState ActivePerl on Windows

Due to limitations of ActiveState ActivePerl on Windows, if you use this environment you will not be able to use SSH connections with the NA Perl API.

Workaround: Install the NA client on a supported Linux or Solaris system and run the NA Perl API from that system. QCCR1D92850

Java Plug-in Version

If the Connect function fails and the NA server hangs, check what version of Java you have running on your Windows system. This is an issue with the Java Plug-in to your Web browser. The issue is not on the NA server.

To check what version of Java you are running:

1. Go to Start → Control Panel.

2. Double-click **Java**.

3. In the General tab, click the About… button.

If you have Version 6 Update 11 or later, you must install an older JRE on your Windows system. Version 6 Update 10 and earlier are known to work. QCCR1D88659

Using the Device Group Selector

Some Chinese characters will not be displayed when using the Device Group Selector. QCCR1D98865

Workarounds: (1) Remove the device from NA, add the device to NNMi, and then run the Import task to import the device into NA. (2) Navigate to the Administrative Settings → Server → Device Import page and set the 'Overwrite Existing Devices' option to "yes" and then run the NNMi Import task to import the device into NA.

Creating advanced Perl scripts

When creating an advanced Perl script, keep in mind that NA treats `$some_text$` as reserved variables. If you use '$' pairs in the script that are not NA variables, ensure you separate them with a space. QCCR1D97574

For example:

Incorrect: `my($host,$port,$user,$pass) = ('localhost','$tc_proxy_telnet_port$', '$tc_user_username$','$tc_user_password$');`

Correct: `my($host, $port, $user, $pass) = ('localhost','$tc_proxy_telnet_port$', '$tc_user_username$','$tc_user_password$');`

Error when viewing results for diagnostics with single quotes in their name

When creating a diagnostic with single quotes in its name, such as "Ana's Diagnostic", after running the diagnostic against a device, the diagnostic results are not displayed. QCCR1D95437

Workaround: Do not use single quotes in diagnostic names.

Diagnostic Name Limit

When naming a diagnostic, you are able to enter up to 100 characters. However, when running the diagnostics, the name is limited to 50 characters. QCCR1D96090

Workaround: Limit diagnostic names to 50 or less characters.

Using SCP with devices in remote Realms

Devices in remote Realms cannot use the Secure Copy (SCP) Transfer Protocol because in most cases, the remote Gateway Satellite Agent cannot use SSH/SCP port 22, since the Gateway OS is already using the port. QCCR1D87003

Workaround: Disable SCP for devices in remote Realms.

MySQL Install and Upgrade

If you are using a MySQL database and MySQL is installed or upgraded on a NA build prior to February 5, 2009, do the following:

1. Stop NA services.

2. On Windows, open the *my.ini* file (under the MySQL Install folder). On Solaris or Linux, open the */etc/my.cnf* file.

3. Search for `max_allowed_packet`. If not found, append `max_allowed_packet=16776192` to the bottom of the file. If found, change its value to `16776192`.

4. Restart MySQL.

5. Restart NA services.

For information on how to stop and start MySQL and NA services, refer to Chapter 5, Starting and Stopping NA Services, in the *Network Automation 9.10 Upgrade and Installation Guide*. QCCR1D87961

Solaris and SecurID

Configuring NA to use SecurID as the authentication method can cause the management service to crash. The SecurID libraries provided by RSA are the source of the problem. Currently, the problem can occur on Solaris 10 with a version string of "SunOS 5.10 Generic_118833-22", while version "SunOS 5.10 Generic_120011-14" works fine. Please update your OS to at least this version if you are experiencing problems with SecurID on Solaris until this issue can be resolved. QCCR1D86370

Using SCP on Linux and Solaris

The Secure Copy (SCP) Transfer Protocol enables you to securely transfer files between a local and remote host or between two remote hosts using the Secure Shell (SSH) protocol. When using SCP on a Linux platform, you will need to modify your system's SSH daemon (SSHD) to run on an alternate port and restart the SSHD service. Port 8022 is recommended.

Once the system's SSHD is reconfigured, you can restart NA so that it can bind to Port 22. System administrators will need to `ssh -p 8022 username@host` to login via the system's SSHD after the change is made.

Note: Use `ssh username@host` for a direct connection to the NA proxy.

When logged-in to NA, you can navigate to the Device Access page (Admin → Administrative Settings → Device Access). Scroll down to the SSH Device Access field. Enter a SSH User and SSH Password. The device driver will use this information when copying files to the NA server.

Note: The device specific settings must be configured to enable SCP and SSH to function properly. In addition, the device and the device driver must support SCP to use the NA SSH server for SCP.

To use SCP with remote Realms, the SCP connection must be made back to the managing NA server. A SCP connection to the NA Gateway will not succeed because the NA Gateway runs the Linux and Solaris system SSHD. The NA Gateway sets the host to the NA Gateway and not the managing NA Core. This can be overridden by setting an access variable (TFTPServer) to the IP address of the managing NA Core. Refer to the *Network Automation 9.10 Satellite User's Guide* for detailed information. QCCR1D82379

Using SCP

The SSH protocol runs on port 22. Secure Copy (SCP) is a data transfer mechanism that uses the SSH protocol. By default, Linux and Solaris installs run on port 8022. Windows installs run on port 22. For Windows installs, if the port is switched to 8022, there could be connectivity issues. (Because most devices do not allow for the specification of an alternate port, this issue if uncommon.)

Note: SCP will not work if the device is in a remote Realm and access to the device is managed via a NA Satellite. You must run the NA SSHD proxy on port 22. If you use port 8022 on any platform, SCP copies from a device to NA will not work. Refer to the *Network Automation 9.10 Satellite User's Guide* for information on configuring NA Satellites. QCCR1D80180

Using a non-English operating system

When running NA 9.10 on a non-English operating system, unreadable text is displayed in the "Password Information" section on the Edit Device page when you select a Partition from the drop-down menu. QCCR1D86705

Proxy Interface

If you login to NA as a limited access user and attempt to connect to a device via the proxy interface, you will be dropped at the username/password prompt. QCCR1D86391

Searching for Diagnostics

When searching for diagnostics, in the list of diagnostic types, there are two options for the NA Topology Data Gathering diagnostic: NA Topology Data Gathering and Topology. Selecting either will search for the NA Topology Data Gathering diagnostic. QCCR1D79575

SNMP Timeouts

Using SNMP device discovery over networks with latency can cause SNMP timeouts. To resolve this issue:

1. Login to NA.

2. On the menu bar under Admin, select Administrative Settings and click Device Access. The Administrative Settings - Device Access page opens.

3. Scroll down to the Detect Network Devices and Port Scan Task Settings section and set SNMP Timeout to a higher value, for example 2500 (milliseconds). QCCR1D75228

-sync option

When Workflow is enabled, attempting to run a CLI or API task with the –sync option will fail with a "No such directory' error. QCCR1D79600

Database Passwords

Any NA user input cannot contain multiple dollar signs ($$). As a result, if the password you use to connect to the database contains multiple dollar signs, you must modify the password before installing NA. QCCR1D61595

Installation Address

The IPv4 address range 169.254.0.0/16 is reserved for link-local usage (referred to as APIPA: Automatic Private Internet Protocol Addressing, by Microsoft) and is not applicable addressing for a network application server such as NA. For more information, refer to http://www.ietf.org/ (rfc 3330 and rfc3927). QCCR1D78975

SSH Communication

NA 7.50 utilizes a new set of keys for SSH communication. In previous releases, NA used one Digital Signature Algorithm (DSA) key for all installations. When you install NA 7.5, NA creates two, new 1024 bit keys. The first key uses the DSA algorithm. The second key uses the RSA algorithm. These keys are used when you connect to NA via SSH. QCCR1D78861

Custom Data Setup

Custom data fields enable you to assign useful data to specific devices, configurations, users, and so on. This gives you added flexibility and enables you to integrate NA with other applications.

To add custom data, on the menu bar under Admin click Custom Data Setup. The Custom Data Setup page opens. Custom data field can include alphanumerics and underscores. While you can use dashes, custom data field names with dashes cannot be used with *tc_device_custom* device variables in custom scripts. QCCR1D77153

Advanced ACL Scripts

Selecting the "Update Script" button when specifying an advanced ACL script can lock-in values. As a result, running (or re-running) the script could result in variables not being updated properly. QCCR1D74295

Workaround: Avoid using the "Update Script" button with advanced ACL scripts.

Use of Dollar Signs ($) in Scripts

If generating a script from a Telnet/SSH session log, the script will fail or perform in unexpected ways if the session contains dollar signs ($) in the executed commands. QCCR1D69342

OS Analysis Task

When using NA in an environment with overlapping IP addresses, the OS Analysis task is not supported for devices behind remote Realm gateways. OS Analysis tasks run on devices in the locally reachable network. This could result in an image recommendation being incorrect for devices behind the gateway. Keep in mind that NA will report OS recommendations for a device in the default Realm instead of a remote Realm if they share an IP address. QCCR1D67566

Device tasks ignores the user-defined *enforce_save* device variable

Device tasks that modify a device's configuration, such as the Deploy Password or Deploy Configuration tasks ignore the setting for the *enforce_save* device access setting. As a result, the current configuration is always saved to startup (via a mechanism such as "write memory"). QCCR1D64674

Workaround: The "DeviceInteraction/EnforceConfigurationSave/ConfiguringModels" configuration option (in appserver.rcx) can be set to false. This has the effect of disabling the save from running to startup configuration for all device tasks that reconfigure the device.

Email Report Task

When scheduling an Email Report task, if you select a report other than Summary Reports in the "Reports to run" field, the task is reported as failed. However, the report is successfully emailed to the recipient. Please disregard the error message. QCCR1D69342

Template Scripts

When using template scripts (i.e., Batch insert line into ACL by handle), selecting the Run Again option will rerun the same script. Attempting to change fields will not change the script that is run. QCCR1D70552

NA Core Gateways

You cannot configure redundant NA Core Gateways in the same NA Realm as a single NA Core. QCCR1D68751

Workaround: Edit the *adjustable_options.rcx* file and add the other NA Core Gateways' IP address(es):

```
<array name="rpc/allowed_ips">
<value>10.255.54.10</value>
</array>
```

Oracle database errors cause failed tasks and other issues

Oracle database errors cause failed tasks and other issues due to a bug in the JDBC Oracle driver. As a result, it is possible for the driver to cause database errors—causing tasks to fail and other issues. The error message information is OALL8 is in an inconsistent state. QCCR1D69094

Workaround: It is recommended that you update your version of Oracle Database Server.

Potential for task failure when using reserved NA characters in device prompts

There are eleven characters with special meanings to NA:

- Opening square bracket ([ )
- Opening round bracket and the closing round bracket (( )).
- Backslash (\ )
- Caret (^)
- Dollar sign ($)
- Period or dot (.)
- Vertical bar or pipe symbol (|)
- Question mark (?)
- Asterisk or star (*)
- Plus sign (+)

If you use these characters in a device prompt, there is the possibility that null pointer exception errors could occur during tasks execution. As a result, the task will fail. QCCR1D70102

Workaround: Avoid using these characters when naming devices that interact with NA.

ACLs with the same name, but different case in NA, is not recommended

NA supports case-sensitivity in ACL names. As a result, you can have two ACLs with the same name, but different case. If you delete one of those ACLs, however, all ACLs with the same name are deleted, regardless of the case. HP does not recommend multiple ACLs with the same name, but differing case in NA. QCCR1D61744

Use of the dollar sign ($) in Perl code

If you convert a Telnet/SSH Proxy session that contains a dollar sign ($) to Perl (such as a script that puts a $ in the banner), NA does not properly escape the dollar sign ($) in the generated Perl code. QCCR1D61867

Workaround: Edit the script and put a backslash (\) in front of the dollar sign ($).

Batch editing parent device groups or device groups

When you batch edit parent device groups or device groups/partitions that have no devices, an invalid error message is displayed: `You do not have Modify Device Permission for any of the devices you selected.` QCCR1D61742

Workaround: To batch edit all devices in a parent device group, do a batch edit against each child group in the parent device group.

Downloading software images from Cisco.com

You can download software images from Cisco.com for devices that are not currently in your NA system. However, to be able to successfully deploy the software image, you may need to modify the driver and/or model information. QCCR1D66891

Workaround:

1. From the Devices menu, select Device Tools and click Software Images. The Software Images page opens.

2. In the Action column, click Edit for the software image you want modify. The Edit Software Image page opens.

3. In the Image Set Requirements field, modify the driver and/or model information to be compatible with the device in NA.

4. Click the Save Software button.

Multimaster Distributed System: Importing Devices

If you import two devices with identical IP addresses into two separate NA Cores at approximately the same time, there is currently no way to detect the possibility of a duplicated device. QCCR1D59742

Workaround: Manually run the Deduplication task after importing devices. One device will be automatically "de-duplicated" and set to "Inactive." (Refer to Chapter 7, "Scheduling Tasks," in the *Network Automation 9.10 User's Guide* for information on running the Deduplication task.)

Multimaster Distributed System on SQL Server

If you see a conflict for which the *reason_text* field does not reference a constraint name, it is possible that NA automatically resolved the conflict. However, you might have to manually resolve the conflict. In the former case, simply delete the conflict. In the latter case, make the appropriate corrections and then delete the conflict. The following is an example of a *reason_text* field from a conflict that does not reference a constraint name:

```
reason_text  A row insert at 'red-dalmssql102.ds2880db2' could not be
propagated to 'RED-DALMSSQL101.ds2880db1'. This failure can be caused by a
constraint violation. The merge process was unable to synchronize the row.
```

Detect Network Devices Task

The NA system prevents you from inadvertently running more than one Detect Network Devices task concurrently. Although the Detect Network Devices task generates only a minimal level of traffic, NA provides this protection to help minimize additional traffic when running duplicate or additional Detect Network Devices tasks simultaneously.

If a second or third Detect Network Devices task is scheduled while an earlier Detect Network Devices task is running, NA will place the new task(s) in the "Waiting" state. The task(s) will run individually after the first Detect Network Devices task has completed.

Diagramming

NA applies an absolute value for the "text height" attribute for interface and port labels shown in Visio diagrams. When the Visio VDX file is loaded, Visio assigns an incorrect formula to the "text height" attribute. As a result, when you have more than two lines of annotated text (i.e. a label) for an interface or port and you attempt to copy & paste, the label of the new interface or port is displayed improperly and could hide the interface or port icon.

Workaround: Click the "Text Tool" option on the Visio tool bar and move the label so as to expose the interface or port icon.

Multimaster Distributed System Performance

When running a Distributed System, if you are deleting many objects simultaneously, the system may take a while to push transactions for large delete operations.

Multimaster Distributed System External Authentication

When using external authentication in a Multimaster Distributed System environment, the External Authentication Type, for example TACACS+ or Active Directory, is global (i.e., shared between all NA Cores). Specific authentication server information is NA Core specific. QCCR1D53815

Workaround: Set the External Authentication Type to "None" on the Administrative Settings → User Authentication page. Configure each NA Core individually with authentication server information or Active Directory setup. After all NA Cores have been configured, set the External Authentication Type on any NA Core. The External Authentication Type setting is replicated to all NA Cores.

RADIUS External Authentication

When setting up a user to authenticate using RADIUS, if the RADIUS server does not respond, NA still authenticates the user against the NA local password, even if you instruct NA not to fail-over on external authentication. QCCR1D9099

Tasks: Running External Application tasks presents a possible security risk

All Run External Application tasks run the application with root (UNIX) or system (Windows) privileges. This is a potential security risk that should be acknowledged by the System Administrator before using the Run External Application feature. QCCR1D14089

Scripts: Output results in HTML Format

When executing an advanced script or a Run External Application task, any text that the advanced script or external application writes to 'stdout' is stored in NA as the task result. Typically, this output is treated and displayed as plaintext. As a result, before NA displays the task results, it will escape any characters that would affect the HTML rendering, for example converting `<` to `<`.

However, you may want to create an advanced script that outputs its results in HTML format. In this case, none of the output characters would be escaped, so the results displayed would include any applicable HTML formatting. To indicate to NA that your script outputs HTML results, the first item that your script writes to 'stdout' must be `<html>`. If your script output begins with anything other than `<html>`, the script results will be treated as plaintext. QCCR1D21216

Nmap Scanning

Careful consideration should be taken when identifying the network range you are going to scan. Some network topologies can result in very long scans. In addition, it is recommended that you do not scan Internet addresses. If you think your Nmap scan will take more than a few minutes, you can use several Nmap options, for example *--max_scan_delay <milliseconds>*, setting *<milliseconds>* to a value between 1 and 1000. Nmap will throttle up to 1000ms max as packets are dropped.

Keep in mind that Nmap settings can be changed using the Administrative Settings option under Admin on the menu bar, and selecting the Device Access option. Please refer to the Nmap documentation at www.insecure.org for detailed Nmap information. QCCR1D19036

SecurID Software Token Software, Version 3.x

If the NA server is installed with the 3.x SecurID token software, turn off copy protection when exporting SecurID software token keys on the RSA server. Otherwise, NA reports an error when accessing SecurID software tokens. A patched version of the SecurID software is available at RSA's website (http://www.rsasecurity.com). QCCR1D18988

Canceling or Deleting Tasks

Some NA tasks will spawn external processes to run PERL or Expect scripts, or to run user-provided executables or shell scripts. Under certain circumstances, NA may not be able to kill these external processes when the spawning task is cancelled or deleted. This could include scripts that spawn sub-processes or processes that are coded to catch kill signals. QCCR1D16257

Workaround: Manually stop the external process on the NA server.

Tasks: A task scheduled for the 31st might run on the 1st

If you schedule a monthly recurring task for the 31st of every month and that task runs during a month that contains fewer than 31 days, NA will run the task on the 1st, 2nd, or 3rd day of the next month depending on how many days less than 31 the previous month contains. For example, if you schedule a task in February (with 28 days) for the 30th, the task will actually run on March 2nd. If you want to run the task on the last day of the month, you must set the date correctly. QCCR1D11142

Inventory: Data from device overwrites manually entered values

Certain data on the Device Details page (and other pages) is auto-populated. If you manually change the data, NA overwrites the values when the next snapshot occurs. QCCR1D11942

The automatically populated data includes:

- Domain Name
- Host Name
- Model
- Serial Number
- Location
- Vendor

Console Server: SSH access is not supported

NA does not support console server access via SSH. If you use a console server to access a device, you must use the Telnet connectivity. In other words, on the New Device page/Edit Device page, if "Use to access device" is checked in the Console Server Information section, you should make sure that the "Telnet" option in the Connection Information section is also checked. QCCR1D11402

Sending reports to external email addresses

Even though you may have properly configured NA to contact your SMTP server, for network security reasons your SMTP server could have been configured to reject messages from the NA server address. In this case, you would see the following error message, and any NA messages would not be delivered.

```
Error occurred when sending email. Please check the email address and/or your
SMTP server settings.
```

If this occurs, you will need to configure the SMTP server to enable the NA server to relay email messages through it. QCCR1D15982

We appreciate your feedback!

If an email client is configured on this system, by default an email window opens when you click here.

If no email client is available, copy the information below to a new message in a web mail client, and then send this message to ovdoc-nsm@hp.com.

Product name and version: NA 9.11.01

Document title: NA Release Notes, October 2013

Feedback: