



Release Note for the Cisco Application Networking Manager

July 21, 2010



Note

The most current documentation for released products is available on cisco.com.

This release note applies to software version 3.0, 3.1, and 3.2 for Cisco Application Networking Manager (ANM). It contains the following sections:

- [New Features in ANM 3.0](#)
- [New Features in ANM 3.1](#)
- [Supported Devices and Software](#)
- [ANM Product Documentation Set](#)
- [Installing the ANM 3.x Software](#)
- [ANM Operating Considerations](#)
- [Software Version ANM 3.2 Resolved and Open Caveats](#)
- [Software Version ANM 3.1 Resolved and Open Caveats](#)
- [Software Version ANM 3.0 Resolved and Open Caveats](#)
- [Copyright Notices](#)
- [Obtaining Documentation and Submitting a Service Request](#)



Caution

The ANM 3.x images do not support upgrading from beta or pre-FCS ANM versions. Upgrading from a beta or pre-FCS version may cause ANM to remove data when you install the ANM image. If any data loss occurs, you will need to reimport all devices and modules that you previously imported.



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New Features in ANM 3.0

This section describes the new and updated features of ANM 3.0 and includes the following topics:

- [Home Page, page 2](#)
- [Guided Setup, page 2](#)
- [Network Monitoring Enhancements, page 2](#)
- [ACE Module A2 \(3.0\) Feature Support, page 3](#)
- [Simplification and Rework of ANM GUI Windows, page 4](#)

Home Page

Homepage is a launching point to selected areas within ANM. It appears under the Home option menu. Homepage includes quick access to a series of operational tasks, monitoring functions, Guided Setup tasks, configuration functions, critical alarms and events, and quick links to the associated user documentation. By default, the ANM Homepage is the first page that appears after you log in. From the ANM Homepage, you can specify a different page that appears as the default page after you log in.

Guided Setup

ANM 3.0 includes Guided Setup, which provides a series of setup sequences that offers screen guidance and networking diagrams to simplify the configuration of ANM and its associated ACE modules or appliances.

Guided Setup steps you through the following tasks:

- Establish communication between ANM and ACE devices.
- Configure ACE devices that are new to the network by establishing network connectivity in either standalone or high-availability (HA) deployments.
- Create and connect to an ACE virtual context.
- Set up a load-balancing application from an ACE to a group of backend servers.

To access Guided Setup in the ANM GUI, choose **Config > Guided Setup**.

Network Monitoring Enhancements

ANM 3.0 includes the following network monitoring enhancements:

- **Dashboards**—Allows faster and more accurate assessment and analysis of device and virtual context health and usage, as well as performance. Corresponding monitoring views allow for quick access to details for further investigation into potential problems highlighted in the dashboards. Graphs, as well as monitoring screens, allow you to view historical data and compare the performance with the peer objects.

To access the dashboard feature in the ANM GUI, do the following:

- For an ACE-specific dashboard, choose **Monitor > Devices > ACE > Dashboard**.
- For a context-specific dashboard, choose **Monitor > Devices > *virtual_context* > Dashboard**.

- For the all devices dashboard, choose **Monitor > Devices > Groups > All Devices > Dashboard**.
- Historical Graphs—Displays data recorded during the last hour, 2-hour, 4-hour, 8-hour, 24-hour interval, or 30-day (last month) interval.
To access the historical graphs in the ANM GUI, choose **Monitor > Devices**, click on any view, and click the **Graph** button that is located at the bottom of the table.
- Dedicated Real Server and Probe Views—Displays load-balancing information that is related to real servers and the probes that monitor the health and availability of a real server.
To access the dedicated real server and probe views in the ANM GUI, do the following:
 - Choose **Monitor > Devices > device > Load Balancing > Real Servers**.
 - Choose **Monitor > Devices > ACE > Load Balancing > Probes**.
- New Polling and Monitoring Features—Enables polling and monitoring through thresholds and alarm generation for newly supported ACE MIB attributes, such as virtual server statistics and some specific probe statistics.
To access the new polling and monitoring features in the ANM GUI, choose **Monitor > Alarm Notifications > Threshold Groups and Alarms**.

ACE Module A2 (3.0) Feature Support

ANM 3.0 allows you to configure the following new features associated with the ACE module A2 (3.0) release:

- SSL HTTP Header Insertion—Enables the ACE module to provide the server with the following SSL session information by inserting HTTP headers into the HTTP requests that it receives over the connection:
 - Session Parameters—SSL session parameters that the ACE module and client negotiate during the SSL handshake.
 - Server Certificate Fields—Information regarding the SSL server certificate that resides on the ACE module.
 - Client Certificate Fields—Information regarding the SSL client certificate that the ACE module retrieves from the client when you configure the ACE module to perform client authentication.
 To access the SSL HTTP header insertion feature in the ANM GUI, choose **Config > Devices > virtual_context > Expert > HTTP Header Modify Action Lists**, click **Add**, and then click the **SSL Header Insert** tab.
- Secondary IP Addresses—Allows you to create up to four secondary IP groups per VLAN or BVI (in addition to the primary IP address) for accepting client, server, or remote access traffic.
To access the configuration areas of the ANM GUI where the secondary IP addresses feature is located, do the following:
 - For VLAN interfaces, choose **Config > Devices > virtual_context > Network > Vlan Interfaces**.
 - For BVI interfaces, choose **Config > Devices > virtual_context > Network > BVI Interfaces**.
- Fail Action Reassign Across VLANs—Instructs the ACE module to reassign the existing server connections to the backup real server on a different VLAN interface (commonly referred to as a bypass VLAN) if the real server fails.

To access the fail action reassign feature in the ANM GUI, do either of the following:

- Choose **Config > Devices > *virtual_context* > Load Balancing > Server Farms.**
- Choose **Config > Devices > *virtual_context* > Load Balancing > Virtual Servers** (located under Server Farm Attributes).
- Redirect Upon SSL Session Setup Failure—Instructs the ACE module to redirect client certificate validation failures to either a redirect server farm or a redirect URL.

To access the redirect feature in the ANM GUI, choose **Config > Devices > *virtual_context* > SSL > Parameter Maps** and click the **Redirect Authentication Failure** tab.

- Secure Backup & Restore—Allows you to back up or restore the configuration and dependencies of an entire ACE module or of a particular virtual context.

To access the backup and restore features in the ANM GUI, do either of the following:

- For multiple ACEs, choose **Config > Global > All Backups.**
- For specific contexts, choose **Config > Devices > *virtual_context* > System > Backup/ Restore.**
- Sample SSL Certificate and Key Pair—Enables demonstration of the SSL functions (the certificate does not have a valid domain).

To display the sample SSL certificate or key pair in the ANM GUI, do either of the following:

- For the sample certificate, choose **Config > Devices > *virtual_context* > SSL > Certificates.**
- For the sample key pair, choose **Config > Devices > *virtual_context* > SSL > Keys.**

Simplification and Rework of ANM GUI Windows

For ANM 3.0, several of the GUI windows have been modified to enhance functionality and improve ease of use of the following functions:

- Configuration tasks—Improves access to the most commonly performed tasks and advanced tasks in frequently used configuration windows. The windows with the most significant modifications are the VLAN Interfaces and Primary Attributes windows.

To access these windows in the ANM GUI, do the following:

- For the VLAN configuration window, choose **Config > Devices > *virtual_context* > Network > VLAN Interfaces.**
- For the Primary attributes window, choose **Config > Devices > *virtual_context* > System > Primary Attributes.**
- Configuration details displays—Allows you to easily troubleshoot device configurations. Many configuration screens now have a Details button at the bottom of the page that shows the status of the configuration. There is an option in the Details popup window that allows you to do a side-by-side comparison of status from two consecutive polls.

To access the windows in the ANM GUI that now contain the Details button, do the following:

- For virtual server configurations, choose **Config > Devices > *virtual_context* > Load Balancing > Virtual Servers.**
- For VLAN configurations, choose **Config > Devices > *virtual_context* > Network > VLAN Interfaces.**
- For real server configurations, choose **Config > Devices > *virtual_context* > Load Balancing > Real Servers.**

- For server farm configurations, choose **Config > Devices > virtual_context > Load Balancing > Server Farms**.
- Operational status displays of ACE entities—Allows you to display the operational status of ACE VLANs, virtual servers, real servers, and server farms. The status information is polled using SNMP and is displayed with the configuration data in the corresponding window.

To access the operational status displays in the ANM GUI, do the following:

- For VLANs, choose **Config > Devices > virtual_context > Network > VLAN Interfaces**.
- For virtual servers, choose **Config > Devices > virtual_context > Load Balancing > Virtual Servers**.
- For real servers, choose **Config > Devices > virtual_context > Load Balancing > Real Servers**.
- For server farms, choose **Config > Devices > virtual_context > Load Balancing > Server Farms**.

New Features in ANM 3.1

This section describes the new and updated features of ANM 3.1 and includes the following topics:

- [Integration of ANM with VMware Virtual Data Center Environment, page 5](#)
- [Enhanced User Role Configurations, page 5](#)

Integration of ANM with VMware Virtual Data Center Environment

ANM 3.1 includes a plug-in that allows you to integrate ANM with VMware vCenter Server, which is a third-party product for creating and managing virtual data centers. Using VMware vSphere Client, you can access ANM functionality and manage the ACE real servers that provide load-balancing services for the virtual machines in your virtual data center.

For more information, see Appendix B, “Using ANM With Virtual Data Centers,” in the *User Guide for the Cisco Application Networking Manager 3.1* at:

http://www.cisco.com/en/US/docs/app_ntwk_services/data_center_app_services/application_networking_manager/3.1/user/guide/UG_vdatacenter.html

Enhanced User Role Configurations

ANM 3.1 allows greater flexibility when creating user roles. Before ANM 3.1, the operating privilege that you assigned to a parent task was assigned to the subordinates and could not be changed. Using ANM3.1, you can assign a different operating privilege to the subordinates if needed; however, you can only assign an operating privilege that is greater than or equal to the operating privilege assigned to the parent task.

For more information, see the “Creating User Roles” section in the *User Guide for the Cisco Application Networking Manager 3.1* at:

http://www.cisco.com/en/US/docs/app_ntwk_services/data_center_app_services/application_networking_manager/3.1/user/guide/UG_admin.html#wp1053865

Supported Devices and Software

For information on Cisco devices supported by ANM, see the *Supported Devices Table for the Cisco Application Networking Manager 3.x* located at:

http://www.cisco.com/en/US/products/ps6904/products_device_support_tables_list.html

ANM Product Documentation Set

In addition to this release note, the ANM documentation set includes the following publications. You can access the ANM documentation on www.cisco.com at

http://www.cisco.com/en/US/products/ps6904/tsd_products_support_series_home.html

- *Installation Guide for the Cisco Application Networking Manager 3.x*—Includes complete installation and configuration information for the ANM 3.x software.
- *User Guide for the Cisco Application Networking Manager 3.x*—Includes complete information about ANM functionality and detailed procedures for its use. Contains all of the information found in online help. Available either on cisco.com or from the ANM online help.
- Context-sensitive online help—Includes help topics for all pages in the UI (also provides access to PDFs of the user guide). Select an option from the ANM GUI, and click **Help**.
- *Supported Devices Table for the Cisco Application Networking Manager 3.x*—Includes complete supported device and firmware versions for ANM 3.x.
- *Supplemental License Agreement for the Cisco Application Networking Manager*—Describes licensing limitations and restrictions.

Installing the ANM 3.x Software

For complete instructions on how to install your ANM 3.x software, see the *Installation Guide for the Cisco Application Networking Manager 3.x*. It provides step-by-step directions for installing and for upgrading the ANM software.



Note

Your ANM server must be running Red Hat Enterprise Linux (RHEL) 5 to support ANM 3.x. If your server is currently running Red Hat Enterprise Linux (RHEL) 4 and an earlier version of ANM, you must upgrade to RHEL 5 before you upgrade to ANM 3.x. The ANM installation process prevents you from installing ANM 3.x on a server running RHEL 4.

Depending on the version of ANM software that you are installing (3.0, 3.1, or 3.2), click one of the links below to access the appropriate ANM installation guide:

- *Installation Guide for Cisco Application Networking Manager 3.0:*
http://www.cisco.com/en/US/docs/app_ntwk_services/data_center_app_services/application_networking_manager/3.0/installation/guide/InstallGuide.html
- *Installation Guide for Cisco Application Networking Manager 3.2/3.1:*
http://www.cisco.com/en/US/docs/app_ntwk_services/data_center_app_services/application_networking_manager/3.1/installation/guide/InstallGuide.html

ANM Operating Considerations

Assigning Names to ACE Objects

When naming ACE objects (such as a real server, virtual server, parameter map, class map, health probe, and so on), use a string of typical length 1- 64 characters, with no spaces. ANM supports strings that include alphanumeric characters (a-z, A-Z, 0-9) and the special characters underscore (_), hyphen (-), dot (.), and asterisk (*) only.

If you are using ANM with an ACE module or ACE appliance and you configure a named object at the ACE CLI, keep in mind that ANM does not support all special characters that the ACE CLI allows you to use when configuring a named object. If you use special characters that ANM does not support, you may not be able to import or manage the ACE using ANM.

Using Homepage

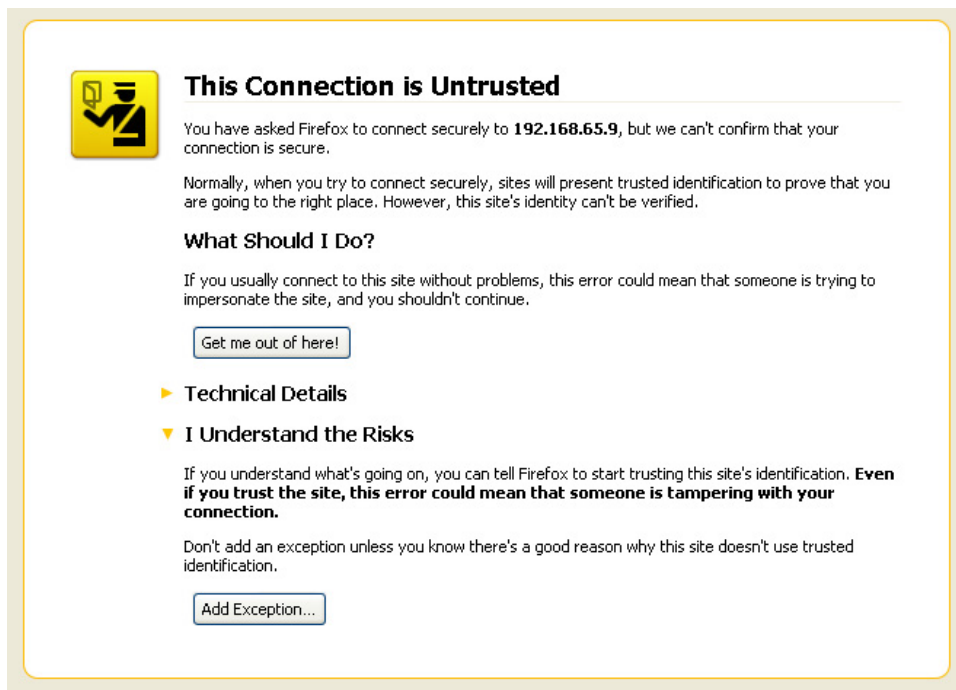
When upgrading from a release that is earlier than ANM 3.0, if you had previously configured the First menu option from Admin > RBAC > Users, after you complete your upgrade to ANM 3.x, the First menu default Login page will be automatically reset to Homepage. Beginning with ANM 3.0, the First menu option has been replaced by the Default login page drop-down list in Homepage.

Homepage is a launching point for quick access to selected areas within ANM. It appears under the Home option menu (Home > Welcome). See Chapter 2, *Using Homepage*, in the *User Guide for Cisco Application Networking Manager 3.x* for details.

Using the Firefox Web Browser to Access ANM 3.x

The ANM 3.x client supports use with Firefox 3.5 on Windows XP or Windows Vista. When you use Firefox 3.x to access ANM for the first time, the Firefox web browser displays a warning that the site is untrusted (see [Figure 1-1](#)).

Figure 1-1 Firefox 3.5 Untrusted Connection Warning



When Firefox displays this warning, follow the prompts to add a security exception and download the self-signed certificate from the ANM server. After you complete this procedure, Firefox accepts the ANM server as a trusted site both now and during all future login attempts.

Procedure

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- Step 1** In the This Connection Is Untrusted window, click **I Understand the Risks**.
- Step 2** Click **Add Exception** to add a security exception to the Firefox web browser.
The Add Security Exception popup window appears identifying the location of the ANM server.
- Step 3** In the Add Security Exception popup window, click **Get Certificate**.
Firefox retrieves the ANM self-signed certificate and the window's Confirm Security Exception button becomes active.
- Step 4** Click **Confirm Security Exception**.
Firefox recognizes the ANM server as a trusted site and the ANM Login window appears.
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Software Version ANM 3.2 Resolved and Open Caveats

The following sections contain the resolved and open caveats in ANM software version 3.2:

- [Software Version 3.2 Resolved Caveats](#)
- [Software Version 3.2 Open Caveats](#)

Software Version 3.2 Resolved Caveats

Table 1 lists the resolved caveats that apply to ANM software version 3.2.

Table 1 Resolved Caveats in Software Version 3.2

Bug ID	Summary	Explanation
CSCta74908	Admin VC is not listed in the available items list of building block tag.	Admin VC is not listed in the available items list of the building block tag.
CSCtf57213	Activate/suspend rserver might trigger auth CLI sync.	Whenever you activate or suspend a large number of real or virtual servers from the Operations screens belonging to different devices. It takes a long time for the screen to respond as the CLI syncs are triggered. Workaround: None.
CSCtf79254	Monitoring Dashboard displays Operational status as unavailable.	Monitoring Dashboard reports the Operational stats for all entities (real server, virtual server, probes and so on) as unavailable, even though these statistics are available when queried at the context level in the corresponding monitoring views. Workaround: Delete the cat6k chassis and re-add a new one, the previously unused name/sequence of strings and re-import the corresponding ACE modules and the issue should be resolved.
CSCtf94141	ANM does not display any error messages when it fails to activate or suspend a server on the ACE.	ANM does not display any error messages when it fails to activate or suspend a server on the ACE, because of the missing user-defined Admin privileges on the ACE.
CSCtf79806	SSL cert expiration alarms not generated on non-admin contexts.	ANM does not generate certificate expiration alarms for certificates that belong to non-admin contexts. Workaround: Manual on-demand polling could trigger the certificate expiration evaluation and trigger an alarm generation, but otherwise no real workaround is available.
CSCtg09285	ANM overall discovery timeout and individual CLI timeout is not configurable.	ANM cannot discover a cat6k chassis, because the show run response was slow. Hence ANM reports a discovery timeout exception. Cat6k has very slow response for a show run request using Telnet or SSH. Workaround: None.

Table 1 Resolved Caveats in Software Version 3.2 (continued)

Bug ID	Summary	Explanation
CSCtg12246	ANM does not apply management settings from the building blocks to ACE in some cases.	<p>If you deploy a building block from the Virtual Context Configuration window using existing settings on the window and if you try to deploy some of the same settings from a building block, the settings will not be applied because the same settings from the Virtual Context Configuration windows will be re-applied after the building block is deployed.</p> <p>Workaround:</p> <ol style="list-style-type: none"> 1. Deploy the building block configurations from the Global > Building Blocks > Primary Attributes window instead. This workaround is only valid for contexts other than the Admin context. 2. Apply the configuration manually or deploy the config from the ANM from the regular configuration window and not from the building blocks.
CSCtg12787	SSL Key import does not show the imported key in ANM GUI.	<p>Key imported through ANM GUI does not show up on the ANM GUI. Although the key is imported successfully into the ACE, it does not show up the ANM GUI keys listing. This condition occurs only when the number of certs in the context is greater than 50.</p> <p>Workaround: Perform a manual synchronization of the context after the key is imported. The missing key will show up fine in the ANM GUI.</p>
CSCtg20203	Password change for a chassis deletes the username in ANM.	<p>If you change the password for a chassis using Config > Devices > Device Management - Update Password button deletes the username in ANM. ANM can no longer access the chassis.</p> <p>Workaround: Delete and reimport the chassis with the same name.</p>
CSCtg30437	Any probe with a '/' or '\' in the probe name is not displayed under the ANM monitoring page for probes.	<p>Any probe with a '/' or '\' in the probe name is not displayed under the ANM Monitoring page for probes. The same probe is correctly displayed in the ANM configuration page under 'Health Monitoring'.</p> <p>Workaround: Do not use '/' or '\' in the probe name.</p>
CSCtg35841	Some real servers may not be activated or suspended if a large number of real servers are selected on CSM using SSH.	<p>The real server will not be activated or suspended if a large number of real servers are selected on a CSM using SSH.</p> <p>Workaround: Use telnet or activate or suspend with the smaller set of unfinished real server.</p>
CSCtg38174	ANM cannot import the catalyst switch if VRF instance name contains "/".	<p>ANM will not import a catalyst chassis if a VRF instance has a name that contains a forward slash (/).</p> <p>Workaround: Use the VRF instance without a forward slash (/).</p>
CSCtg50788	The maximum size of the Syslog X_LOG database should be trimmed.	<p>After login, ANM becomes very slow to display the initial user page, while all other pages come up fast. ANM receives a large number of syslog messages (more than 1,000,000 per day) and the mysqld process runs at 100% during login.</p> <p>Workaround: None.</p>

Table 1 *Resolved Caveats in Software Version 3.2 (continued)*

Bug ID	Summary	Explanation
CSCtg74097	ANM allows a duplicate mechanism to create a role with a space in it.	When a role is duplicated, using the Clone button, if the original name had spaces, the new name is allowed to have spaces with no validation. But trying to delete the role gives an exception and the system does not delete the role. A new role with a valid name needs to be created first, so that the 'Clone' button shows up. Workaround: None.
CSCtg78906	Monitoring fails when device is re-added with same name but a different IP.	ANM monitoring appears to fail and the operational state does not show up on the Operations page, even though SNMP polling is successful. This could occur if a device was deleted from ANM and re-added with a new IP address and same name. The backend monitoring cache still pulls the old IP address and hence all the data for this new name is now incorrect. Workaround: If you ever re-add a different IP address of a device with the same name in ANM, you need to restart ANM for the monitoring cache to be cleared. ANM can be restarted as follows: /opt/CSCOanm/bin/anm-tool restart
CSCtg91302	Historical Data Purging does not clean up the raw data in some instances.	Historical Data Purging does not clean up the raw data and hence the MYSQL file is turning up very large. Workaround: Perform a backup of the ANM system.
CSCth02416	Cannot find the redirect rule after the memory upgrade and reboot.	You cannot log in to the ANM on https/443 after memory upgrade, while 10443 is listening. Workaround: Manually adding the redirect rules on CLI as shown below: iptables -t nat -A PREROUTING -p tcp --dport 80 -j REDIRECT --to-port 8980 iptables -t nat -A PREROUTING -p tcp --dport 443 -j REDIRECT --to-port 10443 iptables -t nat -A PREROUTING -p udp --dport 162 -j REDIRECT --to-port 6120
CSCth25682	Operations activates only ACE active HA peer when autosync disabled.	Only Active ACE is updated when an activate/suspend is performed on the operations pages, autosync is disabled, and the context is in Stby_Hot. Workaround: The Configuration page can be used to update the state.
CSCth29225	Domain Edit: Search does not return results in IE for large inventory.	When you use Internet Explorer, the search in Domain Edit window seems to hang for a large inventory and no results are returned. For example, ~18K servers in CSS devices. Workaround: Use Firefox browser.
CSCth29362	Domain Edit screen does not handle large data sets gracefully.	When you create a domain with many domain objects in RBAC > Domain table, the GUI response time to create a domain or edit a domain with large number of domain objects is very slow. Workaround: None.

Table 1 Resolved Caveats in Software Version 3.2 (continued)

Bug ID	Summary	Explanation
CSCth63366	CSS CLI sync failure causes config data loss.	When performing CLI Sync for CSS device and if the operation fails for some reason, ANM will lose the old CSS configuration. ANM fails to import new CSS configuration during the CLI Sync operation, for example, authentication error and connectivity problem. Workaround: Find out the reason for the CLI Sync failure (like authentication error or connectivity error), fix the problem and do another CLI Sync or remove the CSS device and reimport into ANM again.
CSCth63401 (duplicate bug: CSCth68600)	CSM CLI sync causes erroneous config data	When a VIP or Port is changed on the Vserver and the CSM CLI is synced up to ANM, duplicate CSM Virtual Server entries show up in ANM UI. Workaround: Delete and re-add the CSM within ANM.
CSCth81192	GSS CLI sync failure impacts the management of other GSS devices.	Whenever ANM has a CLI synchronization failure to a GSS, operational access to all GSS are affected. Both GSS VIP Answers and GSS DNS Rules on the Operations page become empty. Also it displays a JAVA error when you try to view the answers/rules assigned in a domain. Workaround: Delete the GSS which has CLI synchronization problem.

Software Version 3.2 Open Caveats

Table 2 lists the open caveats that apply to ANM software version 3.2.

Table 2 Open Caveats in Software Version 3.2

Bug ID	Summary	Explanation and Workarounds
CSCsr75526 (device bug: CSCsu51832)	Config: Cannot edit Expect Status code for health probe.	If you edit a health probe and change the Expect Status Code to a new value or a new range, ANM instructs you that the new values overlap the existing ones and does not remove the old values before adding the new values. Workaround: Delete the existing Min. Expect Status Code and Max. Expect Status Code values before adding the new values.
CSCsu22694 (device bug: CSCsv35266)	Editing a Layer 4 Payload sticky configuration reports exceptions.	When a Layer 4 Payload sticky configuration is edited within ANM, if the “response sticky” option is removed from that sticky configuration, then removing some other sticky options such as offset, length, or timeout, may report exceptions. This condition should not occur. If it does occur, ANM becomes out-of-sync with the CLI and you will need to do a manual synchronization to recover. Workaround: Synchronize the context in which this exception occurs so that ANM has the updated CLI from the device context, and then proceed with the edits.

Table 2 Open Caveats in Software Version 3.2 (continued)

Bug ID	Summary	Explanation and Workarounds
CSCsu46598 CSCsx51244 (device bug: CSCsu67729	Modifying a port for a backup server adds new instances of the backup server.	Each time that you modify the port for the backup server under the server farm, ANM creates a new instance of the backup server instead of updating the existing one. These instances do not show up in the Real Server table under the server farm. This condition causes ANM to go out of synchronization with the device configuration. In addition, if you delete the primary server from the server farm, the backup servers do not get deleted. This condition is caused by the ACE known problem CSCsu67729. Workaround: Do a CLI synchronization on the virtual context. Before editing the port for the backup server, delete the backup server under the server farm.
CSCsu51106	The real server and backup server port for the server farm should have a default value.	The real server and backup server port fields under the server farm should be initialized with default values for the correct server farm type. Currently, only the primary real server port is initialized with a default value of 0. According to the CLI, the minimum is 1. In addition, if the server farm type is Redirect, both the primary and backup server ports must be 0. Workaround: None. However, Port 0 on ANM indicates that the real server is configured to take “any” port, and ANM will not send data port 0 while generating the CLI.
CSCsu76450	The action list name field allows special characters.	The Action list name field on the ACE allows special characters, for example, “(!,@,\$,%,&)” but ANM does not allow them. If special characters have been used in the CLI, ANM will discover them, but you cannot create them within ANM. Workaround: Do not use the special characters in the Action list name.
CSCsu85936	The UI does not refresh to display a new class map from the reference table.	When you do the following: add a Virtual Server with HTTP as its protocol, select L7 Load Balancing, add a new rule with the match condition type “class-map”, click on the “+” icon to add a new class map, and click the Close button in the Class Map window, the virtual server screen does not refresh to display the new class map. Workaround: Exit out of the Edit screen and return.
CSCsv40714	CSS/CSM: The operations state column of the VIP on the CSS and CSM should be N/A.	The CSS and CSM Virtual Server Operational state should appear as “N/A” because this column does not apply for these devices. Instead it is empty. This condition happens each time. Workaround: None.
CSCsv40734	The message should be refined so that it does not look like an exception.	Errors on the Operations pages have the string “Exception” even when errors from the device are being presented to the user. This might give the user the impression that the issue is more severe than it is. This problem occurs whenever an error occurs. For example, this problem occurs when a device is unreachable, or active CSS Content Rules are being activated. Workaround: None.

Table 2 *Open Caveats in Software Version 3.2 (continued)*

Bug ID	Summary	Explanation and Workarounds
CSCsv99351	If a mount point has a space in its name, the disk usage reporting code fails to deal with it correctly.	If a mount point has a space in its name, the disk usage reporting code fails to deal with it correctly and throws an exception. Workaround: Change the mount point to ensure that there are no spaces in it. This may not be possible in all circumstances; however, if the server is used as a dedicated ANM server as intended, it should be possible.
CSCsx61268	The netmask field of the stickiness page is showing incorrect values.	The Netmask field of the Stickiness page is showing values of the cookie name, sticky type, or header name for sticky types where this netmask field is not applicable. Workaround: None.
CSCsy87577	ANM GUI—Redundant CSS pair—HA VRRP status does not show up correctly.	When you manage CSS redundant pairs, high availability information is missing. When you pair two CSS devices together using the redundant device feature, the System View page (Monitor > Devices > System View) displays high availability information that does not include the VRRP states. In this case, the page displays “INIT” and other default information. Workaround: None.
CSCsz94062	Expanded drawer/device tree cannot be closed when using Firefox 3.	When you use the Firefox 3 browser and expand a drawer/device, you cannot close it. Workaround: Use Internet Explorer 6 or 7 for a browser.
CSCtd26323	Perf: A “Transform error=cuesXPath is not defined” error message displays on ANM.	When the ANM GUI is transitioning between some pages, a popup window sometimes appears that contains the error message “Transform error=cuesXPath is not defined” or some other “cuesXPath” error message. This error message, which is triggered by the backend GUI model code, is harmless and is to be ignored. Workaround: Click OK to close the popup window and continue using the ANM GUI.
CSCtd61405	Mismatch between the numbers that display in the monitor dashboard and the launched views.	When you go from the dashboard window and to a monitor view that the dashboard launches, the number of entities (real servers, VLANs, and so on) shown in the launched monitor view can be less than the number shown in the dashboard. The reason for this discrepancy is that the dashboard obtains its entity counts from the configuration information of an imported virtual context; however, the launched monitor view shows only the SNMP-based data of the polled entities. If polling is disabled or fails for a virtual context, the dashboard count and the count shown in the launched monitor view will not match. Workaround: None.
CSCtf20628	ANM plugin: SLB Tab: property of tab: that request tunneled through local proxy	In some rare cases, in webplugin for vsphere, the requests to ANM are tunneled through a local proxy on the client machine. This can cause problems with timely refresh of the plugin screens. This appears to be an erratic and uncommon intermittent issue with no clear cause. Workaround: None

Software Version ANM 3.1 Resolved and Open Caveats

The following sections contain the resolved and open caveats in ANM software version 3.1:

- [Software Version 3.1 Resolved Caveats](#)
- [Software Version 3.1 Open Caveats](#)

Software Version 3.1 Resolved Caveats

Table 3 lists the resolved caveats that apply to ANM software version 3.1.

Table 3 Resolved Caveats in Software Version 3.1

Bug ID	Summary	Explanation
CSCtc85284	ANM issues java error device: java.net.SocketTimeoutException: Readtimed.	<p>When you configure ANM for SSH when communicating with a CSS, ANM may issue the following java error when you attempt to suspend the service on the CSS:</p> <pre>Device: java.net.SocketTimeoutException: Readtimed out</pre> <p>Workaround: Reconfigure ANM to use Telnet to communicate with the CSS instead of SSH.</p>
CSCtd70830	Guided Setup tab does not respect RBAC setting.	When a user without configuration privileges logs in to ANM, the Config > Guided Setup tab, which should be hidden from them, appears. Workaround: None.
CSCtd94658	Need to discover Cat6k switchport interface with subinterface defined.	<p>When a sub-interface is defined on a switchport, ANM discovery of the Cat6k chassis fails and issues the following error message:</p> <pre>Device discovery failed: Exception occured for model:VlanModel Exception occured for model:InterfaceModel com.cisco.nm.dice.pkgs.features.interfaces.dmL2Trunk cannot be cast to com.cisco.nm.dice.pkgs.features.interfaces.dm.RoutedPort</pre> <p>All parent interfaces of sub-interfaces are assumed to be routed and because this requirement is not true in newer SUP releases, ANM reports an error message and cannot import. Workaround: Remove the offending lines of sub-interface configuration from the Cat6k chassis, import the chassis into ANM, and then add these sub-interface configurations once again to the Cat6k chassis. Because ANM does not perform any periodic automatic synchronizations with the Cat6k configuration, no future discovery errors occur unless you perform a manual synchronization with a Cat6k configuration that contains the sub-interface definition for a switchport.</p>

Table 3 Resolved Caveats in Software Version 3.1 (continued)



Bug ID	Summary	Explanation
CSCte08994	Unable to import IOS device with “type tunnel” interface configured.	<p>When you attempt to import an IOS device into ANM that has the following type of configuration:</p> <pre>interface Virtual-Template10 type tunnel no ip-address</pre> <p>ANM issues the following error message:</p> <pre>Device discovery failed: Exception occurred for model:VlanModel Exception occurred for model:InterfaceModel java.lang.NullPointerException</pre> <p>Workaround: Remove the two configuration lines shown above, import the IOS device into ANM, and then add the “type tunnel” interface configuration to the IOS device. The error will not occur again unless you manually perform a CLI synchronization on the IOS device. ANM does not perform automatic CLI synchronization on an IOS device.</p>
CSCte25910	After upgrading to ANM 3.0, some threshold group settings report an error.	<p>After upgrading to ANM 3.0, ANM cannot create threshold groups that contain the following attributes: Virtual Server Current Connections, Virtual Server Operational State, and Probe Health. When a threshold group contains these attributes, ANM issues the following error message:</p> <pre>Cannot find the referenced entry for the entered data</pre> <p> Note This issue occurs for ANM 3.0 upgrades only. It does not occur after a fresh install of ANM 3.0.</p> <p>Workaround: If the ANM 2.x backup contains threshold groups, restarting ANM resolves the issue. To restart ANM, see the following URL: http://www.cisco.com/en/US/docs/app_ntwk_services/data_center_app_services/application_networking_manager/3.0/installation/guide/InstallGuide.pdf</p> <p>If the ANM 2.x backup does not contain any threshold groups, we recommend that you create at least one threshold group on the ANM 2.x system and generate a new backup to be used for the ANM 3.0 upgrade. Also, after the upgrade, we recommend that you perform a restart of ANM as referenced above.</p>
CSCte39384	ANM - Audit logs record incorrect User and Client IP.	<p>When more than one user is logged in to ANM and making changes to any of the devices, the ANM audit logs may record incorrect values in the User and Client IP columns for some of the log entries.</p> <p>Workaround: Allow only one user to be logged in at a time.</p>

Table 3 *Resolved Caveats in Software Version 3.1 (continued)*

Bug ID	Summary	Explanation
CSCte68130	Suspend and Clear connection generates an error.	<p>When you suspend and clear a connection for a real server, ANM issues the following error message:</p> <pre>Failed to send request to device: CLI Command: configure terminal, reason: Configuration mode is currently disabled</pre> <p> Note This issue does not occur in ANM 2.1(0).</p> <p>Workaround: None.</p>
CSCte84274	Error in VC sync up, error in Virtual transactions in ANM.	<p>When you create a new context using the ACE CLI and ANM does a context-level CLI synchronization, ANM issues the following error message:</p> <pre>Error in VC syncup,Error in Virtual transactions</pre> <p>This issue occurs with every context-level CLI synchronization.</p> <p>Workaround: Perform the CLI synchronization from the ACE module/appliance level.</p>
CSCte98520	Real server view page loading very slow and has missing data.	<p>When ANM has to monitor over 2000 real servers, the Real Servers monitoring view at the All Devices, Group, and device levels take a long time to load. Also, some data might be missing on the launched page.</p> <p>Workaround: Use the context level listing of the Real Servers monitoring view because this level shows the correct information and does not take as long to load.</p>

Software Version 3.1 Open Caveats

Table 4 lists the open caveats that apply to ANM software version 3.1.

Table 4 Open Caveats in Software Version 3.1

Bug ID	Summary	Explanation and Workarounds
CSCsr75526 (device bug: CSCsu51832)	Config: Cannot edit Expect Status code for health probe.	If you edit a health probe and change the Expect Status Code to a new value or a new range, ANM instructs you that the new values overlap the existing ones and does not remove the old values before adding the new values. Workaround: Delete the existing Min. Expect Status Code and Max. Expect Status Code values before adding the new values.
CSCsu22694	Editing a Layer 4 Payload sticky configuration reports exceptions.	When a Layer 4 Payload sticky configuration is edited within ANM, if the “response sticky” option is removed from that sticky configuration, then removing some other sticky options such as offset, length, or timeout, may report exceptions. This condition should not occur. If it does occur, ANM becomes out-of-sync with the CLI and you will need to do a manual synchronization to recover. Workaround: Synchronize the context in which this exception occurs so that ANM has the updated CLI from the device context, and then proceed with the edits.
CSCsu46598 CSCsx51244 (device bug: CSCsu67729)	Modifying a port for a backup server adds new instances of the backup server.	Each time that you modify the port for the backup server under the server farm, ANM creates a new instance of the backup server instead of updating the existing one. These instances do not show up in the Real Server table under the server farm. This condition causes ANM to go out of synchronization with the device configuration. In addition, if you delete the primary server from the server farm, the backup servers do not get deleted. This condition is caused by the ACE known problem CSCsu67729. Workaround: Do a CLI synchronization on the virtual context. Before editing the port for the backup server, delete the backup server under the server farm.
CSCsu51106	The real server and backup server port for the server farm should have a default value.	The real server and backup server port fields under the server farm should be initialized with default values for the correct server farm type. Currently, only the primary real server port is initialized with a default value of 0. According to the CLI, the minimum is 1. In addition, if the server farm type is Redirect, both the primary and backup server ports must be 0. Workaround: None. However, Port 0 on ANM indicates that the real server is configured to take “any” port, and ANM will not send data port 0 while generating the CLI.
CSCsu76450	The action list name field allows special characters.	The Action list name field on the ACE allows special characters, for example, “(!!, @@@)” but ANM does not allow them. If special characters have been used in the CLI, ANM will discover them, but you cannot create them within ANM. Workaround: Do not use the special characters in the Action list name.

Table 4 Open Caveats in Software Version 3.1 (continued)

Bug ID	Summary	Explanation and Workarounds
CSCsu85936	The UI does not refresh to display a new class map from the reference table.	When you do the following: add a Virtual Server with HTTP as its protocol, select L7 Load Balancing, add a new rule with the match condition type “class-map”, click on the “+” icon to add a new class map, and click the Close button in the Class Map window, the virtual server screen does not refresh to display the new class map. Workaround: Exit out of the Edit screen and return.
CSCsv40714	CSS/CSM: The operations state column of the VIP on the CSS and CSM should be N/A.	The CSS and CSM Virtual Server Operational state should appear as “N/A” because this column does not apply for these devices. Instead it is empty. This condition happens each time. Workaround: None.
CSCsv40734	The message should be refined so that it does not look like an exception.	Errors on the Operations pages have the string “Exception” even when errors from the device are being presented to the user. This might give the user the impression that the issue is more severe than it is. This problem occurs whenever an error occurs. For example, this problem occurs when a device is unreachable, or active CSS Content Rules are being activated. Workaround: None.
CSCsv43603	ANM cannot import GSS if a user with a different password is in the GSS GUI and the GSS CLI.	ANM will not be able to import a GSS if a GSS user configured with different password is in both the GSS GUI and the GSS CLI. Workaround: The GSS user should be configured with the same password in both the GSS GUI and GSS CLI.
CSCsv99351	If a mount point has a space in its name, the disk usage reporting code fails to deal with it correctly.	If a mount point has a space in its name, the disk usage reporting code fails to deal with it correctly and throws an exception. Workaround: Change the mount point to ensure that there are no spaces in it. This may not be possible in all circumstances; however, if the server is used as a dedicated ANM server as intended, it should be possible.
CSCsx61268	The netmask field of the stickiness page is showing incorrect values.	The Netmask field of the Stickiness page is showing values of the cookie name, sticky type, or header name for sticky types where this netmask field is not applicable. Workaround: None.
CSCsy87577	ANM GUI—Redundant CSS pair—HA VRRP status does not show up correctly.	When you manage CSS redundant pairs, high availability information is missing. When you pair two CSS devices together using the redundant device feature, the System View page (Monitor > Devices > System View) displays high availability information that does not include the VRRP states. In this case, the page displays “INIT” and other default information. Workaround: None.
CSCsz94062	Expanded drawer/device tree cannot be closed when using Firefox 3.	When you use the Firefox 3 browser and expand a drawer/device, you cannot close it. Workaround: Use Internet Explorer 6 or 7 for a browser.
CSCtd26323	Perf: A “Transform error=cuesXPath is not defined” error message displays on ANM.	When the ANM GUI is transitioning between some pages, a popup window sometimes appears that contains the error message “Transform error=cuesXPath is not defined” or some other “cuesXPath” error message. This error message, which is triggered by the backend GUI model code, is harmless and is to be ignored. Workaround: Click OK to close the popup window and continue using the ANM GUI.

Table 4 *Open Caveats in Software Version 3.1 (continued)*

Bug ID	Summary	Explanation and Workarounds
CSCtd61405	Mismatch between the numbers that display in the monitor dashboard and the launched views.	When you go from the dashboard window and to a monitor view that the dashboard launches, the number of entities (real servers, VLANs, and so on) shown in the launched monitor view can be less than the number shown in the dashboard. The reason for this discrepancy is that the dashboard obtains its entity counts from the configuration information of an imported virtual context; however, the launched monitor view shows only the SNMP-based data of the polled entities. If polling is disabled or fails for a virtual context, the dashboard count and the count shown in the launched monitor view will not match. Workaround: None.
CSCtf20628	ANM plugin: SLB Tab: property of tab: that request tunneled through local proxy	When accessing ANM from a VMware vSphere Client and you right-click the Cisco ACE SLB tab to choose the Properties menu options, the Properties pop-up window displays the following incorrect path to the ANM server: <code>http://127.0.0.1:[someport number]/index.vm?.</code> This issue may lead to refresh issues with the ANM plug-in. Workaround: None
CSCtf79806	SSL cert expiration alarms not generated on non-admin contexts.	ANM does not generate certificate expiration alarms for certificates that belong to non-admin contexts. Workaround: Manual on-demand polling could trigger the certificate expiration evaluation and trigger an alarm generation, but otherwise no real workaround is available.

Software Version ANM 3.0 Resolved and Open Caveats

The following sections contain the resolved and open caveats in ANM software version 3.0:

- [Software Version 3.0 Resolved Caveats](#)
- [Software Version 3.0 Open Caveats](#)

Software Version 3.0 Resolved Caveats

[Table 5](#) lists the resolved caveats that apply to ANM software version 3.0.

Table 5 Resolved Caveats in Software Version 3.0

Bug ID	Summary	Explanation
CSCsv40484	Restore: Restoring data on ANM 2.0 shows the operations state column as blank.	The CSM and CSS Polling is not automatically restarting after an ANM stop/start. This problem occurs after an ANM restart. Workaround: Synchronize from the CLI for each device that is not polling.
CSCsw15103	Chassis: Cannot delete the chassis from ANM after an automation run.	After you attempt to delete a chassis from ANM, the following error appears on every load of a page: Internal Error: cannot find /device/<chassis-name>/module/trinity-<ace module serial number> For example: Internal Error: cannot find /device/spiff/module/trinity-SAD094701MV" Workaround: Restart the ANM services to clear this condition. See the <i>User Guide for the Cisco Application Networking Manager 2.2</i> , Chapter 10, Configuring High Availability, the “CLI Commands for High Availability Processes” section for information about restarting ANM services.
CSCsz82871	ANM: Config > Operations Saved filters cannot be deleted.	Filters created and saved using the Filter button on a Config > Operations screen cannot be deleted from ANM.
CSCta85637	ANM: vserver IDs are not generated consistently with multiple match entries.	When virtual servers do not quite fall into the classic ANM definition of a virtual server, ANM is unable to manage them. When a configuration contains many virtual servers that contain two virtual-address match lines, ANM is inconsistent about which match line to use for the generation of the key that is placed into the domain. This condition results in virtual servers disappearing from the Domain edit window over time.
CSCtb13423	When a context name begins with a digit, it does not work as expected in the Primary Attributes page.	When there are user context names configured on the ACE that are alphabetically less than the Admin context (for example 1AHouse), then all of the context names are assigned with the same resource class name and the Resource Class combo box has only one Resource name. This issue is seen in the Primary Attributes window.

Table 5 Resolved Caveats in Software Version 3.0 (continued)

Bug ID	Summary	Explanation
CSCtb20971	CSM: CLI synchronization of out of band removal of objects not working.	When you use the CLI for out of band removal of real and virtual servers, ANM still shows the real and virtual servers after they have been removed and a CLI synchronization has been performed.
CSCtb75318	ANM showing alarm source ID (srcid) as null.	When you try to set up a threshold group on a CSM device, ANM shows the Source ID column in the Monitor > Alarm Notifications > Alarms window as a null value.
CSCtb79608	ACL edits of an object group do not show up on the ACE.	When you edit the Protocol/Source Network/Destination Network Object Groups of an existing ACL entry after you import and synchronize the context to ANM, the ACL edits to the object group made in ANM do not show up in the ACE after synchronization; however, ANM shows the changes.
CSCtb89475	SSH key and certificates are not matched due to an unavailable ACE SSH session.	When all the SSL certs/keys in a context match up with each other and are defined in SSL proxies, then the SSH session that was set up between ANM and the ACE to validate the cert/key matching does not close. Because the validation sessions do not close, eventually the session limit is reached and no more SSH connections for cert/key verification can be made. SSL certs/key matching is not displayed on the ANM GUI.
CSCtc36967	The agent_ip address populated in ANM alarms maybe incorrect.	When ANM is configured in HA and threshold alarms are generated from the ANM HA peer, the agent_ip in the alarm generated by ANM for threshold crossing has the ANM heartbeat IP address rather than the ANM host IP address.
CSCtc81222	The hacluster/haclient user/group name remains after ANM is uninstalled.	After you uninstall ANM, the hacluster/haclient user/group name remains.
CSCtc85284	ANM experiences a java error device: java.net.SocketTimeoutException: Readtimed.	When ANM is configured to SSH to a CSS, ANM occasionally experiences the following java error when the user attempts to suspend the service on CSS: Device: java.net.SocketTimeoutException: Readtimed out
CSCtc88060	ANM does not update its displayed version for the ACE-4710 or the CSS1150X.	After you either upgrade or downgrade an ACE-4710 or CSS1150X device, ANM does not update the version displayed in the Monitor > Devices > Device Management window.
CSCtd07249	ANM cannot import all modules in the VSS device.	When the exec prompt timestamp command is used on line vty configuration in VSS device, ANM cannot import all of the modules in the VSS device.
CSCtd10741	Class/Rule in loadbalance policy deployed out of order from ANM to CLI.	When you edit a virtual server configuration and modify the sequence of the rules in the L7 Load Balancing section using the up/down arrows, the change to the order of the rules displays correctly in the GUI but the CLI is not updated. This issue occurs only while editing an existing virtual server configuration; it does not occur when creating a new virtual server configuration. This issue can also be seen in the advanced Expert mode on the DM for the L7 loadbalance policy map.

Software Version 3.0 Open Caveats

Table 6 lists the open caveats that apply to ANM software version 3.0.

Table 6 Open Caveats in Software Version 3.0

Bug ID	Summary	Explanation and Workarounds
CSCsr75526 (device bug: CSCsu51832)	Config: Cannot edit Expect Status code for health probe.	If you edit a health probe and change the Expect Status Code to a new value or a new range, ANM instructs you that the new values overlap the existing ones and does not remove the old values before adding the new values. Workaround: Delete the existing Min. Expect Status Code and Max. Expect Status Code values before adding the new values.
CSCsu22694	Editing a Layer 4 Payload sticky configuration reports exceptions.	When a Layer 4 Payload sticky configuration is edited within ANM, if the “response sticky” option is removed from that sticky configuration, then removing some other sticky options such as offset, length, or timeout, may report exceptions. This condition should not occur. If it does occur, ANM becomes out-of-sync with the CLI and you will need to do a manual synchronization to recover. Workaround: Synchronize the context in which this exception occurs so that ANM has the updated CLI from the device context, and then proceed with the edits.
CSCsu46598 CSCsx51244 (device bug: CSCsu67729)	Modifying a port for a backup server adds new instances of the backup server.	Each time that you modify the port for the backup server under the server farm, ANM creates a new instance of the backup server instead of updating the existing one. These instances do not show up in the Real Server table under the server farm. This condition causes ANM to go out of synchronization with the device configuration. In addition, if you delete the primary server from the server farm, the backup servers do not get deleted. This condition is caused by the ACE known problem CSCsu67729. Workaround: Do a CLI synchronization on the virtual context. Before editing the port for the backup server, delete the backup server under the server farm.
CSCsu51106	The real server and backup server port for the server farm should have a default value.	The real server and backup server port fields under the server farm should be initialized with default values for the correct server farm type. Currently, only the primary real server port is initialized with a default value of 0. According to the CLI, the minimum is 1. In addition, if the server farm type is Redirect, both the primary and backup server ports must be 0. Workaround: None. However, Port 0 on ANM indicates that the real server is configured to take “any” port, and ANM will not send data port 0 while generating the CLI.
CSCsu76450	The action list name field allows special characters.	The Action list name field on the ACE allows special characters, for example, “(!!, @@@@)” but ANM does not allow them. If special characters have been used in the CLI, ANM will discover them, but you cannot create them within ANM. Workaround: Do not use the special characters in the Action list name.

Table 6 Open Caveats in Software Version 3.0 (continued)

Bug ID	Summary	Explanation and Workarounds
CSCsu85936	The UI does not refresh to display a new class map from the reference table.	When you do the following: add a Virtual Server with HTTP as its protocol, select L7 Load Balancing, add a new rule with the match condition type “class-map”, click on the “+” icon to add a new class map, and click the Close button in the Class Map window, the virtual server screen does not refresh to display the new class map. Workaround: Exit out of the Edit screen and return.
CSCsv40714	CSS/CSM: The operations state column of the VIP on the CSS and CSM should be N/A.	The CSS and CSM Virtual Server Operational state should appear as “N/A” because this column does not apply for these devices. Instead it is empty. This condition happens each time. Workaround: None.
CSCsv40734	The message should be refined so that it does not look like an exception.	Errors on the Operations pages have the string “Exception” even when errors from the device are being presented to the user. This might give the user the impression that the issue is more severe than it is. This problem occurs whenever an error occurs. For example, this problem occurs when a device is unreachable, or active CSS Content Rules are being activated. Workaround: None.
CSCsv43603	ANM cannot import GSS if a user with a different password is in the GSS GUI and the GSS CLI.	ANM will not be able to import a GSS if a GSS user configured with different password is in both the GSS GUI and the GSS CLI. Workaround: The GSS user should be configured with the same password in both the GSS GUI and GSS CLI.
CSCsv99351	If a mount point has a space in its name, the disk usage reporting code fails to deal with it correctly.	If a mount point has a space in its name, the disk usage reporting code fails to deal with it correctly and throws an exception. Workaround: Change the mount point to ensure that there are no spaces in it. This may not be possible in all circumstances; however, if the server is used as a dedicated ANM server as intended, it should be possible.
CSCsx61268	The netmask field of the stickiness page is showing incorrect values.	The Netmask field of the Stickiness page is showing values of the cookie name, sticky type, or header name for sticky types where this netmask field is not applicable. Workaround: None.
CSCsy87577	ANM GUI—Redundant CSS pair—HA VRRP status does not show up correctly.	When you manage CSS redundant pairs, high availability information is missing. When you pair two CSS devices together using the redundant device feature, the System View page (Monitor > Devices > System View) displays high availability information that does not include the VRRP states. In this case, the page displays “INIT” and other default information. Workaround: None.
CSCsz94062	Expanded drawer/device tree cannot be closed when using Firefox 3.	When you use the Firefox 3 browser and expand a drawer/device, you cannot close it. Workaround: Use Internet Explorer 6 or 7 for a browser.

Table 6 *Open Caveats in Software Version 3.0 (continued)*

Bug ID	Summary	Explanation and Workarounds
CSCtd26323	Perf: A “Transform error=cuesXPath is not defined” error message displays on ANM.	When the ANM GUI is transitioning between some pages, a popup window sometimes appears that contains the error message “Transform error=cuesXPath is not defined” or some other “cuesXPath” error message. This error message, which is triggered by the backend GUI model code, is harmless and is to be ignored. Workaround: Click OK to close the popup window and continue using the ANM GUI.
CSCtd61405	Mismatch between the numbers that display in the monitor dashboard and the launched views.	When you go from the dashboard window and to a monitor view that the dashboard launches, the number of entities (real servers, VLANs, and so on) shown in the launched monitor view can be less than the number shown in the dashboard. The reason for this discrepancy is that the dashboard obtains its entity counts from the configuration information of an imported virtual context; however, the launched monitor view shows only the SNMP-based data of the polled entities. If polling is disabled or fails for a virtual context, the dashboard count and the count shown in the launched monitor view will not match. Workaround: None.

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