

# **System Administration**

## **ZENworks® Mobile Management 3.0.x**

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# Accessing the Dashboard

## Requirements

*ZENworks Mobile Management* dashboard requirements:

- Microsoft Internet Explorer, Firefox, or Safari
- Adobe Flash Player 10.1.0
- Minimum screen resolution: 1024 x 768
- Desktop computer running Windows OS

In your Web browser, enter the server address of the *ZENworks Mobile Management* server, followed by **/dashboard**

Example: <https://my.ZENworks.server/dashboard>

## Standard Login

Log in to the *ZENworks Mobile Management* dashboard using your administrative login credentials in one of the following formats:

- Locally authenticated logins enter:  
email address and password
- LDAP authenticated logins enter:  
domain\LDAP username and LDAP password

A system administrator can create additional logins to the dashboard with system administrator, organization administrator, or support administrator privileges. See the [System Administrator Logins](#) and [Organization Administrator Logins](#) sections in this guide for details.



## OpenID Login

Use your OpenID credentials to log in.

1. At the *ZENworks Mobile Management* login screen, select the icon identifying the OpenID provider you use: *ZENworks*, *Google*, *Yahoo!*, or *Facebook*.
2. Enter the **Zone** or **Organization**, an easy to remember name *ZENworks Mobile Management* uses to redirect you to the OpenID provider portal.
3. At the provider site, enter your OpenID credentials.

**Note:** If this is the first time you have logged in to *ZENworks Mobile Management* with an OpenID or your OpenID information has changed, you will be prompted for a PIN code before entering the *ZENworks Mobile Management* dashboard.

Zone Name and new PIN codes are emailed to you from the *ZENworks Mobile Management* server.



Admin Setup Pin Code

Enter Admin Setup Pin Code

Zone Name

OpenID Identity

OK



# Administrator Roles and Logins

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## System Administrator Roles

See also [Organization Configuration: Organization Administrator Roles](#)

### Predefined System Administrator Roles

There are six predefined roles built in to the *ZENworks Mobile Management* system. The permissions for these roles cannot be altered. You can view the set permissions for these roles via the *Role Permissions* option in the *System* view: *System Administrative Roles* or *Organization Administration Roles*. Three of the predefined roles are used for organization administrator logins. (See [Organization Configuration: Predefined Organization Administrator Roles](#).)

The three predefined system administrator roles are:

- **Full System Admin** – There are no limitations with this type of login credential. It gives full administrative permissions in every organization created on the *ZENworks Mobile Management* server. An administrator with this type of login can add organizations and switch organizations without logging off the *ZENworks Mobile Management* server. They can also apply *ZENworks Mobile Management* server updates via the *ZENworks Mobile Management Update Manager* application and configure the *Database Task Scheduler*.
- **Support System Admin** – Gives limited administrative access or read only access in every organization created on the *ZENworks Mobile Management* server. System Administrators can switch organizations without logging out of the *ZENworks Mobile Management* server. Although they cannot apply *ZENworks Mobile Management* server software updates, they can access the Update Management page in the dashboard where they can check for and download *ZENworks Mobile Management* patches in preparation for the application of the update.
- **Restricted System Admin** – Restricted from viewing private data such as Location, MMS/SMS Log, Phone Log, and File Archive. Has Read only permissions for all other views. Restricted administrators can switch organizations without logging out of the *ZENworks Mobile Management* server.

System Administrator credentials give access to all organizations on the *ZENworks Mobile Management* server. System Administrators can switch organizations without logging off the *ZENworks Mobile Management* server. Credentials may be authenticated via an LDAP server and may be assigned *Full Admin*, *Support Admin* (read only), or *Restricted Admin* (limited read only) permissions.

System Administrators also have access to the *Update Management* information on the dashboard. System administrator credentials with *Full Admin* permissions are required to use the *Update Manager* application.

The administrative login created during the process of installing the *ZENworks Mobile Management* server application is a System Administrator Login with the predefined *Full Admin* permissions.

See the table below for details on the various System Administrator roles or view the permissions via the *Role Permissions* option in the *System* view.

### Who Should Have System Administrator Logins

A system administrator login is required for anyone who needs access to all organizations on the *ZENworks Mobile Management* server. Some examples are:

- Administrators of a system where users have been grouped into separate organizations.
- Administrators who will apply *ZENworks Mobile Management* server software updates.
- Administrators who will configure database cleanup tasks.

SYSTEM ADMINISTRATOR ROLES		
Dashboard View	Support System Admin	Restricted System Admin
Activity Monitor	Read-only access; cannot disable or snooze alerts	Read-only access; cannot disable or snooze alerts
Users	<ul style="list-style-type: none"> <li>• Can add or remove users and perform all the functions in the right-hand <i>Details</i> panel, except <i>Show Recovery Password</i></li> <li>• Can email an individual user, but cannot use <i>Group Emailing</i></li> <li>• Can perform most functions in the left panel of <i>User Profile</i></li> <li>• Can view the grids in the <i>Audit Data</i> and <i>Search Text Message Log</i> options (<i>User Profile</i>), but cannot view the body or attachments of a text message</li> <li>• Can choose the Visible Columns for the <i>Users</i> list</li> </ul>	<ul style="list-style-type: none"> <li>• Restricted from adding or removing users and from all functions in the right <i>Details</i> panel</li> <li>• Restricted from sending an email to an individual user or a group</li> <li>• Restricted from the <i>Location Data</i>, <i>Audit Data</i>, <i>Search Phone Log</i>, <i>Search Text Message Log</i>, and <i>File Archive</i> options in the left-hand panel of <i>User Profile</i></li> <li>• Read-only access to options in the left panel of <i>User Profile</i></li> <li>• Can choose the Visible Columns for the <i>Users</i> list</li> </ul>
Organization	Read-only access	Read-only access
Reporting	Full access (view and export)	Full access (view and export)
System	<ul style="list-style-type: none"> <li>• Read-only access</li> <li>• Can switch between organizations without logging out of the <i>ZENworks Mobile Management</i> server</li> <li>• Can view the <i>Update Management</i> page; Can check for and download server software updates. Cannot apply updates, because Support Admins do not have access to the <i>Update Manager</i></li> </ul>	<ul style="list-style-type: none"> <li>• Read-only access</li> <li>• Can switch between organizations without logging out of the <i>ZENworks Mobile Management</i> server</li> <li>• Can view the <i>Update Management</i> page; Can check for and download server software updates. Cannot apply updates, because Restricted Admins do not have access to the <i>Update Manager</i></li> </ul>

## Customized System Administrator Roles

Administrators can create customized system administrator roles to tailor the permissions associated with *ZENworks Mobile Management* dashboard login credentials. When a custom role has been created, it appears as a choice in the drop-down list of the *Add Administrator* wizard's **Role** field. See [System Administrator Logins](#).

Administrators who are logged in when changes are made to role permissions must log out and log in again for permission changes to take effect.

1. Select **System > System Administration > System Administrative Roles > Role Permissions > Add Role**.



2. Choose a method for creating a System Administrative Role:
  - Use the sliders to determine the role's initial settings. The new role copies the settings of the predefined *System Full Admin*, *Support Admin*, or *Restricted Admin*.
  - Copy the settings of an existing role
3. Specify the role permissions to copy.
4. Enter a **Role Name** and **Description**.
5. Click **Finish** to save the new role.
6. Find and select the role in the *System Administrative Roles* grid.
7. Set the permissions associated with dashboard access. See [Appendix A: Role Permissions](#) for a comprehensive list.

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# Configuring an OpenID Provider for System Administrators

OpenID is an open standard that allows administrators to log in and authenticate using an outside source. Configuring the system includes defining the OpenID provider settings and enabling or disabling the OpenID option for each administrator. See also [Organization Configuration: OpenID Configuration for Organization Administrators](#).

## Manage the OpenID Provider for System Administrators

You can enable or disable the OpenID provider configured for System Administrators. You can also change its settings or reset the OpenID Pin for all users logging in through this OpenID provider.

1. Select **System > System Administration > OpenID Provider**.
2. Configure the following settings:

- **Enabled** – mark the checkbox to enable the provider; to disable a provider, verify that no administrators are using the provider, then remove the mark from this checkbox.
- **Predefined Providers** – select from a drop-down list of provider types: *Facebook, Google, Yahoo!, or ZENworks*
- **OpenID Provider URL** – (ZENworks provider) enter the URL of the ZENworks Primary Server in the following format: <https://<server>:<port>/zenworks/?requestHandler=ZENOpenIDHandler>
- **OpenID Return URL** – enter the URL of the server to which the user is returned after successful provider validation. The default is the current *ZENworks Mobile Management* server URL.
- **Description and Notes**

The screenshot shows the 'OpenID Provider' configuration page. At the top, the breadcrumb is 'Settings > System Administration > OpenID Provider'. The page title is 'OpenID Provider'. There are several settings: 'Enabled' with a checked checkbox; 'Predefined Providers' with a dropdown menu showing 'Google'; 'OpenID Return URL' with a text input field containing 'https://ssl.novell.zm' and a 'Use Default' button; and 'OpenID Pin' with a 'Reset All Pins' button. Below these are two large text areas: 'OpenID Provider Description' and 'Notes for OpenID Provider'.

3. The **OpenID Pin** reset button will reset all administrator pins and issue emails to administrators with the new 4 character pin.

The first time administrators log in to *ZENworks Mobile Management* with an OpenID they are prompted for a PIN code before entering the *ZENworks Mobile Management* dashboard. If any of the provider settings are updated or you reset pins with this button, new PIN codes are generated and emailed to administrators from the *ZENworks Mobile Management* server.

4. Enable the OpenID option for each administrator you will allow to log in with OpenID credentials. See also [OpenID Authenticated Administrator Logins](#).

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# System Administrator Logins

See also, [Organization Configuration: Organization Administrator Logins](#)

## Creating System Administrator Logins

A *System Administrator* with full admin privileges is created during the initial installation of *ZENworks Mobile Management*. It is a local system administrator login in that it authenticates directly against the *ZENworks Mobile Management* server with the unique password you created during the installation.

Additional system administrator logins with assigned roles can be created through the dashboard. For information on roles see [System Administrator Roles](#).

**Login Passwords:** Administrators can change their login passwords from an option located in the dashboard header.



**Best Practices:** Always maintain at least one local system administrator that authenticates directly against the *ZENworks Mobile Management* server and that does not use LDAP or OpenID authentication. This will provide access to the dashboard that is not subject to the availability of external authorities.

To create a System Administrator Login, select **System > System Administration > System Administrators > Add System Administrator**.

Choose how the administrator should be authenticated: **Manual** (local), **LDAP**, **OpenID**. The *Add System Administrator* wizard steps you through creating login credentials for system administrators.

- [Add a Manually \(locally\) Authenticated Administrator Login](#)
- [Add an LDAP Authenticated Administrator Login](#)
- [Add an OpenID Authenticated Administrator Login](#)

Enter the administrator details, then choose the account settings.

## Add a Manually (locally) Authenticated System Administrator Login

Add a system administrator login that authenticates directly against the *ZENworks Mobile Management* server with a unique password.

1. Use the administrator's email address for the **Administrator Login**.
2. Enter a **Display Name**.
3. Enter the administrator's **Email Address**.
4. Create and confirm a **Password** for the administrator login.
5. Mark the checkbox to prompt the administrator for a **Password Change** at his/her first login.
6. Click **Next**.

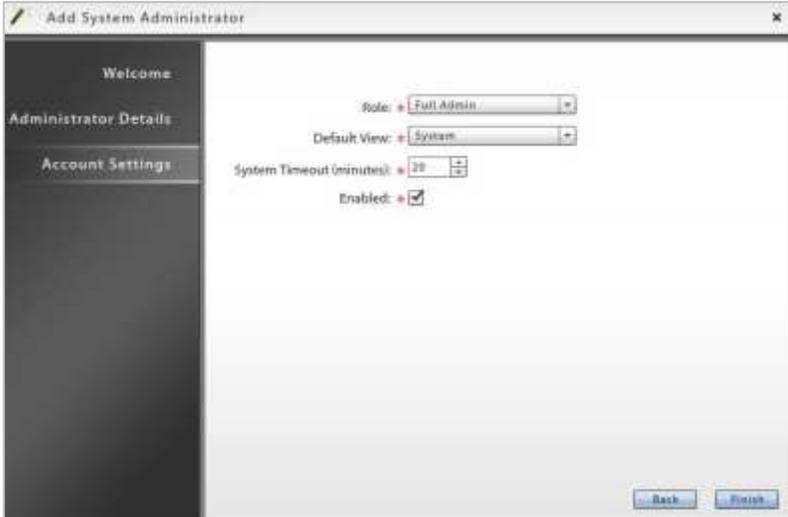


The screenshot shows the 'Add System Administrator' wizard window. The left sidebar has three sections: 'Welcome', 'Administrator Details', and 'Account Settings'. The 'Administrator Details' section is active. The main area contains the following fields and options:

- Administrator Login:
- Display Name:
- E-mail Address:
- Password:
- Confirm Password:
- Prompt For Password Change At First Login:

Buttons for 'Back' and 'Next' are located at the bottom right.

7. Enter the [Account Settings](#).



The screenshot shows the 'Add System Administrator' wizard window, now on the 'Account Settings' step. The left sidebar has three sections: 'Welcome', 'Administrator Details', and 'Account Settings'. The 'Account Settings' section is active. The main area contains the following fields and options:

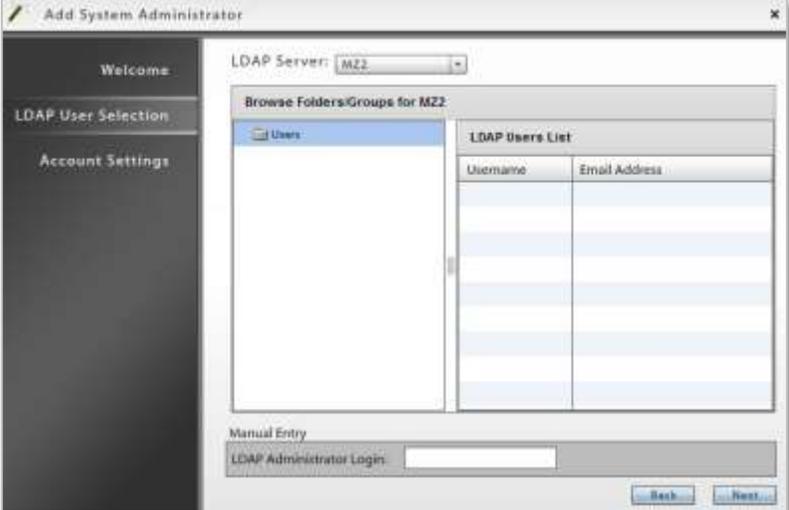
- Role:
- Default View:
- System Timeout (minutes):
- Enabled:

Buttons for 'Back' and 'Finish' are located at the bottom right.

## Add an LDAP Authenticated System Administrator Login

Add a system administrator login that authenticates using the administrator's LDAP credentials.

1. Select an LDAP server and browse the LDAP folders/groups to select the administrator, or manually enter the administrator's LDAP server user name in the **LDAP Administrator Login** field.
2. Click **Next**.



The screenshot shows the 'Add System Administrator' dialog box. On the left is a sidebar with 'Welcome', 'LDAP User Selection', and 'Account Settings'. The main area is titled 'LDAP Server: M22' and 'Browse Folders/Groups for M22'. It features a tree view with 'Users' selected and an 'LDAP Users List' table with columns for 'Username' and 'Email Address'. Below the table is a 'Manual Entry' section with an 'LDAP Administrator Login' text box. 'Back' and 'Next' buttons are at the bottom right.

3. Enter a **Display Name** and the **Email Address** for the administrator.
4. Enter the remainder of the [Account Settings](#).



The screenshot shows the 'Add System Administrator' dialog box in the 'Account Settings' step. The sidebar is the same. The main area is titled 'Settings to be applied to the new administrator.' and contains the following fields: 'LDAP Administrator Login' (jdoe@company.com), 'Display Name' (John Doe), 'Email Address' (jdoe@company.com), 'Role' (Full Admin), 'Default View' (System), 'System Timeout (minutes)' (20), and 'Enabled' (checked). 'Back' and 'Finish' buttons are at the bottom right.

## Add an OpenID Authenticated System Administrator Login

Add a system administrator login that authenticates using the administrator's OpenID credentials.

1. Enter the **Display Name** for this login.
2. Enter the administrator's **Email Address**.
3. Click **Next**.



The screenshot shows the 'Add System Administrator' window with the 'OpenID Details' tab selected. The 'Display Name' field contains 'John Doe' and the 'Email Address' field contains 'jdoe@company.com'. The 'Back' and 'Next' buttons are visible at the bottom right.

4. Enter the [Account Settings](#).



The screenshot shows the 'Add System Administrator' window with the 'Account Settings' tab selected. The 'Role' dropdown is set to 'Full Admin', the 'Default View' dropdown is set to 'System', the 'System Timeout (minutes)' spinner is set to 20, and the 'Enabled' checkbox is checked. The 'Back' and 'Finish' buttons are visible at the bottom right.

## System Administrators Account Settings

- **Role** – Assign a permissions level to the login. Choose from:
  - Predefined **Full Admin** – Full administrative permissions
  - Predefined **Support Admin** – Read-only permissions with limited editing capabilities
  - Predefined **Restricted Admin** – Read-only permissions with private data restrictions; cannot view Location Data, Audit Data, MMS/SMS or Phone Logs, and File Archive
  - **Any custom System Administrator role created for the system**
- **Default View** – Select the default view at login
- **System Timeout** – Select an inactivity timeout in minutes for this login
- **Active Status** – Select the box to *enable* this administrative login
- **Password** – Assign a password if you are creating a login that does not use LDAP authentication.

## Managing System Administrator Logins

You must be logged into the *ZENworks Mobile Management* server with system administrator (*Full Admin*) credentials in order to edit or remove a System Administrator.

**Best Practices:** Always maintain at least one *System Administrator* that authenticates directly against the *ZENworks Mobile Management* server and that does not use LDAP or OpenID authentication.

## Managing Individual Administrator Logins

1. Select **System** > **System Administration** > **System Administrators**. Click the **System Administrators** tab.

2. Select an administrator from the list. Edit the settings and click **Save Changes**.

You can also remove the administrator by clicking **Remove System Administrator**.

The screenshot displays the 'System Administrators' configuration page in the ZENworks Mobile Management interface. The page is divided into a left-hand navigation pane and a main content area. The navigation pane includes options like 'Add System Administrator', 'Remove System Administrator', and 'Save Changes'. The main content area shows a table of system administrators with columns for Display Name, Administrator User, OpenID Identity, Contact E-Mail, Role, Enabled, and Created. The 'John Doe' administrator is selected, and its configuration form is visible below the table. The form includes fields for User Name, Display Name, E-mail Address, Password, LDAP, Role, Default View, System Timeout (minutes), Enabled (checkbox), and Created By. The Date Created is shown as 01/14/2013 11:49 AM (-05:00 GMT).

Display Name	Administrator User	OpenID Identity	Contact E-Mail	Role	Enabled	Created
Whitehouse	Whitehouse		Whitehouse@dc03.net	Full Admin	true	01/14/2013 11:49 AM
Robin		http://www.google.com/accounts/o	ngpencer@ex07.net	Full Admin	true	01/14/2013 11:49 AM
John Doe	jdoe@company.com		jdoe@company.com	Full Admin	true	01/14/2013 11:49 AM
ctestki	ctestki@dc03.net		ctestki@dc03.net	Full Admin	true	01/14/2013 11:49 AM
cschuster2	cschuster2		cschuster2@ex07.net	Full Admin	true	01/14/2013 11:49 AM
cschuster2	cschuster2@ex07.net		cschuster2@ex07.net	Full Admin	true	01/14/2013 11:49 AM
admin@dc03.net	admin@dc03.net		admin@ex07.net	Full Admin	true	01/14/2013 11:49 AM

Use OpenID:

User Name:

Display Name:

E-mail Address:

Password:

LDAP:

Role:

Default View:

System Timeout (minutes):

Enabled:

Created By: admin@dc03.net

Date Created: 01/14/2013 11:49 AM (-05:00 GMT)

## Importing System Administrator LDAP Groups

Importing system administrator LDAP groups into the *ZENworks Mobile Management* server eliminates the need to create administrator logins. Any member of the imported LDAP group can log in to the *ZENworks Mobile Management* dashboard as long as their LDAP credentials are successfully authenticated. At the first successful login, an account on the *ZENworks* server is created for the administrator using the provisioning settings associated with the group.

1. Select **System > System Administration > System Administrators**. Click the **Administrator Groups** tab.
2. To import an LDAP administrator group, select an LDAP server from the dropdown list. Click the **Import LDAP Group** button to select an administrator group to import.

Administrators should familiarize themselves with the LDAP server structure and verify that groups they choose for use with the *ZENworks Mobile Management* server contain the following necessary attributes: User Identification Attribute, Group Membership Attribute, Group Object Class, and User Object Class. Groups without these attributes should not be used.

The screenshot shows the 'System Administrators' interface with the 'Administrator Groups' tab selected. An 'LDAP Server' dropdown is set to 'MZZ'. A table lists imported groups, with 'Enterprise Admins' having a priority of 1, a role of 'Full Admin', a default view of 'Activity Monitor', and a system timeout of 20. To the right of the table are priority adjustment arrows. At the bottom, the 'Import LDAP Group' button is circled in red.

Priority	Imported LDAP Groups	Role	Default View	System Timeout
1	Enterprise Admins	Full Admin	Activity Monitor	20

3. Select a group to import and click **Finish**.

The 'Import/Prioritize Groups' dialog box is shown. It displays 'Groups on LDAP Server' for 'EX 07'. A search field is empty. A list of groups is shown, with 'HelpServicesGroup' selected. Other groups include 'TolnetClients', 'IS\_WPG', 'WINS Users', 'DHCP Users', and 'DHCP Administrators'. 'Cancel' and 'Finish' buttons are at the bottom.

4. To choose provisioning settings for members of this group, select an *Administrator Group* from the grid and configure these settings for the group.
  - Enforced Role
  - Default View
  - System Timeout
  - Is Alert Recipient (administrators receive *ZENworks Mobile Management* SMS/email alerts)
  - Carrier (required if administrators are an alert recipients)

The screenshot displays the 'System Administrators' configuration interface. At the top, there are tabs for 'System Administrators' and 'Administrator Groups'. Below the tabs, the 'LDAP Server' is set to 'MZ2'. A table lists administrator groups with columns for Priority, Imported LDAP Groups, Role, Default View, and System Timeout. The 'Enterprise Admins' group is selected, showing a priority of 1, role of 'Full Admin', default view of 'Activity Monitor', and a system timeout of 20 minutes. To the right of the table are arrows for adjusting the group's priority. Below the table are buttons for 'Import LDAP Group' and 'Remove LDAP Group'. At the bottom, configuration details for the 'Enterprise Admins' group are shown, including the group name, LDAP server name, enforced role (Full Admin), added by (admin@dc03.net), and date added (01/14/2013 11:55 AM (-05:00 GMT)). A separate box contains settings for 'Default View' (Activity Monitor) and 'System Timeout (minutes)' (20).

Priority	Imported LDAP Groups	Role	Default View	System Timeout
1	Enterprise Admins	Full Admin	Activity Monitor	20

Group Name: Enterprise Admins  
 LDAP Server Name: MZ2  
 Enforced Role: Full Admin  
 Added By: admin@dc03.net  
 Date Added: 01/14/2013 11:55 AM (-05:00 GMT)

Default View: Activity Monitor  
 System Timeout (minutes): 20

5. If there are administrators that belong to multiple groups, use the arrows to the right of the group grid to prioritize the groups.

The group with the highest priority will determine an administrator's provisioning assignments when he or she is added at the first successful login.

---

# Organization Administrator Roles and Logins

**Who should have an organization administrator role and login.** Organization Administrator Roles and Logins are ideal for those responsible for configuring and maintaining a single organization on a hosted server or on a system with groups of users that have been divided into separate organizations.

See full documentation on this topic at: [Organization Configuration and Management: Organization Administrator Roles and Logins](#)

## Roles

Like System Administrator roles, there are three predefined Organization Administrator roles: Full Admin, Support Admin, and Restricted Admin. The permissions for these roles cannot be altered.

In addition, administrators can create customized organization administrator roles to tailor the permissions associated with *ZENworks Mobile Management* dashboard login credentials. You can set permissions for these roles via the *Role Permissions* option under the *System Management* view: Select **Organization Administration Roles > Role Permissions**

## OpenID Authentication

OpenID is an open standard that allows organization administrators to log in and authenticate using an outside source. Configuring the system includes defining the OpenID provider settings and enabling or disabling the OpenID option for each administrator.

**Best Practices:** Maintain at least one local organization administrator that authenticates directly against the *ZENworks Mobile Management* server and that does not use LDAP or OpenID authentication. This will provide access to the dashboard that is not subject to the availability of external authorities.

## Logins

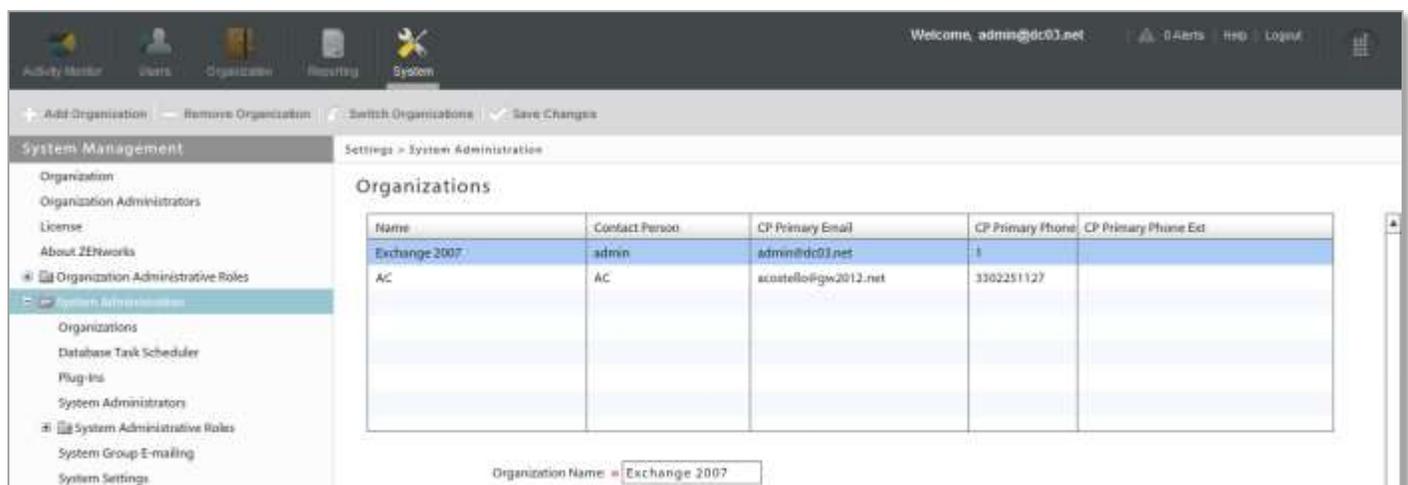
An organization administrator login gives access to only one organization. It can authenticate against the *ZENworks Mobile Management* server, an LDAP server, or an OpenID provider.

# System Administration

This section of the guide documents topics related to system level management of the *ZENworks Mobile Management* server. The dashboard areas where system tasks are performed require system administrator login credentials. System Administration can include the management of multiple organizations. In addition to all the Organization administration permissions documented in this guide, a system administrator with full admin status has the following system level permissions:

- View all organizations on the *ZENworks Mobile Management* server
- Add, edit or remove organizations
- Switch organizations without logging out and back in to another organization
- Create administrative roles and administrative logins
- Send group email to one or all organizations, administrators, and users
- Access *System Settings* to upload a signing certificate
- View server and device logs
- Set database cleanup tasks
- Apply a plug-in
- Check for and download *ZENworks Mobile Management* server software updates

System management tasks are performed from the **System** view. This view is only accessible with a system administrator login. The login you create when installing the *ZENworks Mobile Management* server software is a system administrator login.



The screenshot displays the 'System Administration' interface. At the top, there is a navigation bar with icons for Activity Monitor, Users, Organizations, Reporting, and System. The 'System' icon is selected. Below the navigation bar, there are buttons for '+ Add Organization', '- Remove Organization', 'Switch Organizations', and 'Save Changes'. The main content area is titled 'System Management' and contains a sidebar with a tree view of system management options. The 'System Administration' option is selected, and the 'Organizations' sub-option is highlighted. The main area shows a table titled 'Organizations' with the following data:

Name	Contact Person	CP Primary Email	CP Primary Phone	CP Primary Phone Ext
Exchange 2007	admin	admin@dc03.net	1	
AC	AC	acastello@gw2012.net	3302251127	

Below the table, there is a text input field labeled 'Organization Name' with the value 'Exchange 2007' entered.

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# Managing Multiple Organizations

## Multi-Tenant ZENworks Mobile Management Systems

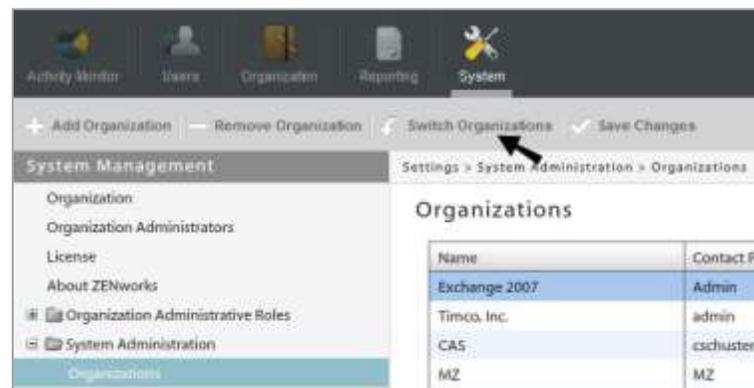
A single instance of the *ZENworks Mobile Management* server application supports a multi-tenant architecture, which allows an enterprise to manage one or multiple organizations.

Multiple organizations might be used to categorize various divisions of a company. For example: Production/Sales/Management departments can each be an “organization” on the same *ZENworks Mobile Management* server or Seattle/Chicago/Boston divisions can each be a separate “organization.”

## Switching Organizations

When you are logged in to the *ZENworks Mobile Management* system with a system administrator login, you initially choose the organization you want to view. You also have access to all other organizations existing on the server through the *System Administration* menu. Switching from one organization to another is accomplished by using the **Switch Organizations** option.

From the *System* view, select **System Administration > Organizations**. Click **Switch Organizations** in the gray option bar.

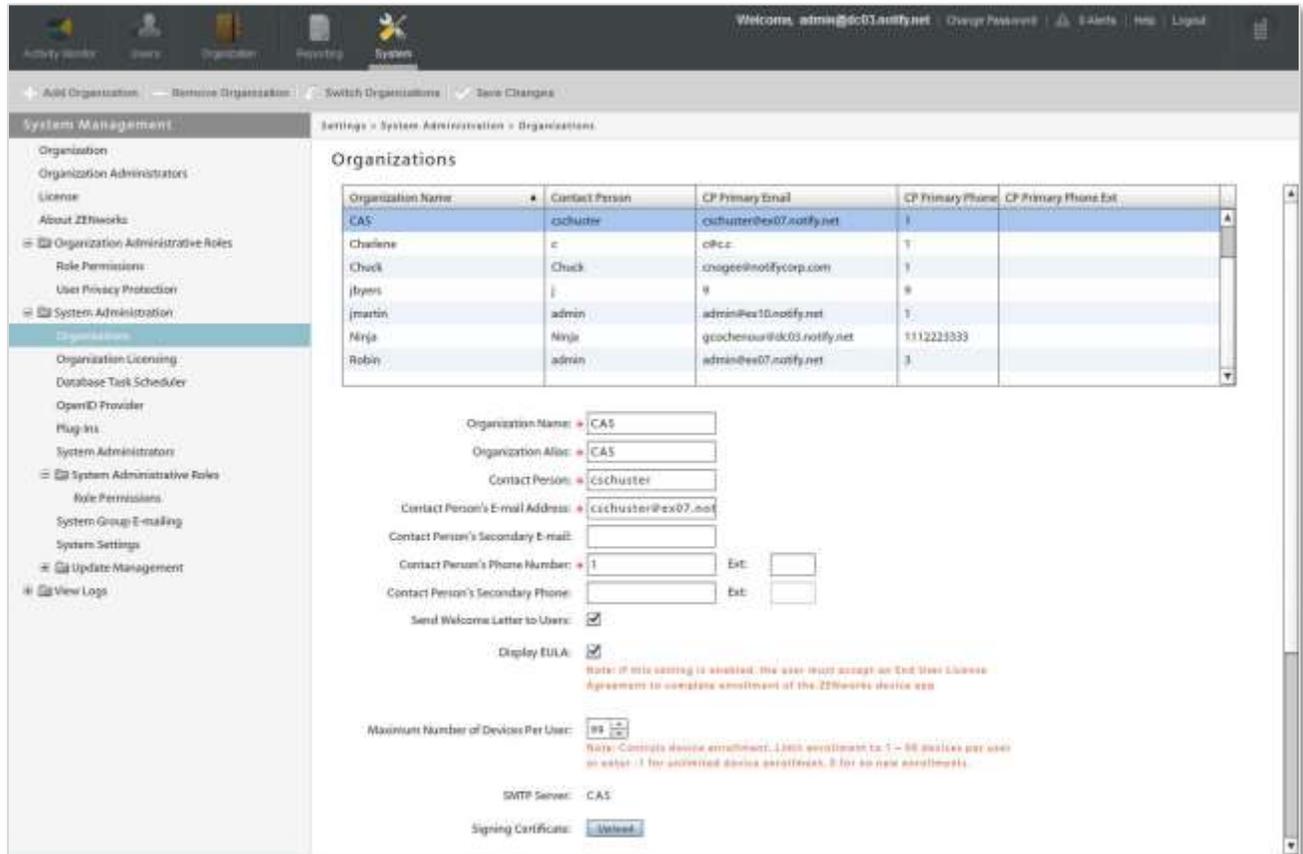


## The Organization List

The organization list gives you access to the configured settings of each organization on the server. Select an organization from the list to view or edit the configured settings for the organization.

- Organization name and contact information
- Welcome letter enablement – emails a welcome letter when users are added
- EULA enablement - When enabled, users must accept an End User License Agreement to complete ZENworks Mobile Management app enrollment
- Maximum Number of Devices Per User – limits the number of devices users can enroll
- SMTP server name
- Signing Certificate *Upload* button ([description](#))
- Organization and Hands-Off enrollment defaults
  - Policy Enforcement Type
  - Policy Schedule
  - Policy Suite(s)
  - Device Connection Schedule
  - (Administrative) LDAP Server
  - Liability
  - Local Groups

From the *System* view, select **System Administration > Organizations**.



The screenshot shows the ZENworks Mobile Management System Administration interface. The left sidebar contains a navigation menu with the following items: Organization, Organization Administrators, License, About ZENworks, Organization Administrative Roles, Role Permissions, User Privacy Protection, System Administration (selected), Organizations (highlighted), Organization Licensing, Database Task Scheduler, OpenID Provider, Plug-ins, System Administrators, System Administrative Roles, Role Permissions, System Group E-mailing, System Settings, Update Management, and View Logs. The main content area is titled "Organizations" and contains a table with the following data:

Organization Name	Contact Person	CP Primary Email	CP Primary Phone	CP Primary Phone Ext.
CAS	ccluster	ccluster@ex07.notify.net	1	
Charlene	c	c@c.	1	
Chuck	Chuck	cnogee@notifycorp.com	1	
Jbyers	j		8	
Jmartin	admin	admin@ex10.notify.net	1	
Nirja	Nirja	gcochenou@uk03.notify.net	1112223333	
Robin	admin	admin@ex07.notify.net	3	

Below the table is a form for editing the selected organization (CAS). The form fields are: Organization Name (CAS), Organization Alias (CAS), Contact Person (ccluster), Contact Person's E-mail Address (ccluster@ex07.notify.net), Contact Person's Secondary E-mail (empty), Contact Person's Phone Number (1), Contact Person's Secondary Phone (empty), Send Welcome Letter to Users (checked), Display EULA (checked), Maximum Number of Devices Per User (99), SMTP Server (CAS), and Signing Certificate (Upload).

Notes for the Maximum Number of Devices Per User field: Note: Controls device enrollment. Limit enrollment to 1 - 99 devices per user on exten. 1 for activated device enrollment, 2 for no new enrollments.

## Signing Certificate Upload: Organization Level

The signing certificate is a security measure that authenticates the server and allows iOS devices to recognize it as a trusted source. The signing certificate **Upload** button allows you to *add a signing certificate for the organization*. This must be a CA signed certificate, because self-signed certificates are currently not supported.

The SSL certificate being used on the server can also be used as the signing certificate. Export the SSL certificate to a file, selecting the box that ensures that the private key gets exported with the certificate. Then upload it to the *ZENworks Mobile Management* server.

A signing certificate designated here for the organization overrides the system-wide signing certificate defined in *System Settings*.

See also, [Signing Certificate Upload: Server Level](#).

1. Select **System > System Administration > Organizations**.
2. Select an organization from the list and click the **Upload** button next to the **Signing Certificate** field.
3. Click the **Browse** button, then navigate to and select the file containing the certificate.
4. Enter the **Password** associated with the certificate and click **Upload**.
5. Click **Save Changes** on the gray option bar.



# Managing Organization Licensing

If you are extending a *ZENworks Mobile Management* software evaluation license or moving an organization to a license for a purchased copy of the software, you must enter a new license key for the server.

You can also enter the TouchDown volume license key here, then enable the TouchDown policy to push the license to Android devices using TouchDown. (*Organization > Policy Suites > (policy suite) > TouchDown > Installation > Push TD enterprise license to device*)

Updating licenses requires full system admin login credentials.

## The Organization License

1. To access the *License* page, select **System > License**.
2. The **License Type** and number of **Days Remaining** on the license display.
3. Enter the license key provided by your Novell Sales Representative in the **ZMM License Key** field and click **Update**.
4. Enter the license key provided by your Novell Sales Representative in the **TD Volume License Key** field and click **Update**.

The screenshot shows the 'System Management' interface with the 'License' page selected. The left sidebar contains a navigation menu with 'License' highlighted. The main content area is titled 'Settings > License' and 'License'. Under the 'ZMM' section, it displays 'ZMM License Type: Evaluation' and 'Days Remaining: 59 days and 23 hours'. Below this is a 'ZMM License Key' input field and an 'Update' button. Under the 'TouchDown' section, it displays 'TD Volume License Key: BWBWGHPRH8X' and an 'Update' button.

## Licenses for Multiple Organizations

If there are multiple organizations on the *ZENworks Mobile Management* server, System Administrators can view a list of organizations and the associated licenses. Any one of the licenses can be updated from this page, as long as the administrator has full system admin login credentials.

1. To access the *Organization Licensing* page, select **System > System Administration > Organization Licensing**.
2. The grid displays each organization on the server, its *Status*, *License Type*, and number of *Days Remaining* on the license.
3. To update a license, select it on the grid and enter the new license key provided by your Novell Sales Representative in the **Update License Key** field. Click **Save Changes**.

Save Changes

System Management

Settings > System Administration > Organization Licensing

### Organization Licensing

Organization Name	Status	LicenseType	Days Remaining
CAS	Valid	Extended Evaluation	55
Linked	Valid	Evaluation	55
MZ	Valid	Production	Unlimited

Update License Key:

---

## Database Task Scheduler

For full documentation on the *Database Task Scheduler*, see the [Database Table Maintenance](#) guide.

When devices make a connection to the *ZENworks Mobile Management* Server, information regarding those connections is logged in the database and stored for potential troubleshooting purposes.

The amount of information that is logged depends on several factors, such as the number of users on the *ZENworks Mobile Management* Server, the type of traffic being sent back and forth, the amount of logging taking place, and the frequency of device connection intervals. Over time, this information can build up in the database and grow excessively.

Administrators with full admin login credentials can use the **Database Task Scheduler** to set clean-up jobs to run at regular intervals in order to clear excess data and maintain optimal database performance.

To access the *Database Task Manager*, select **System > System Administration > Database Task Scheduler**.

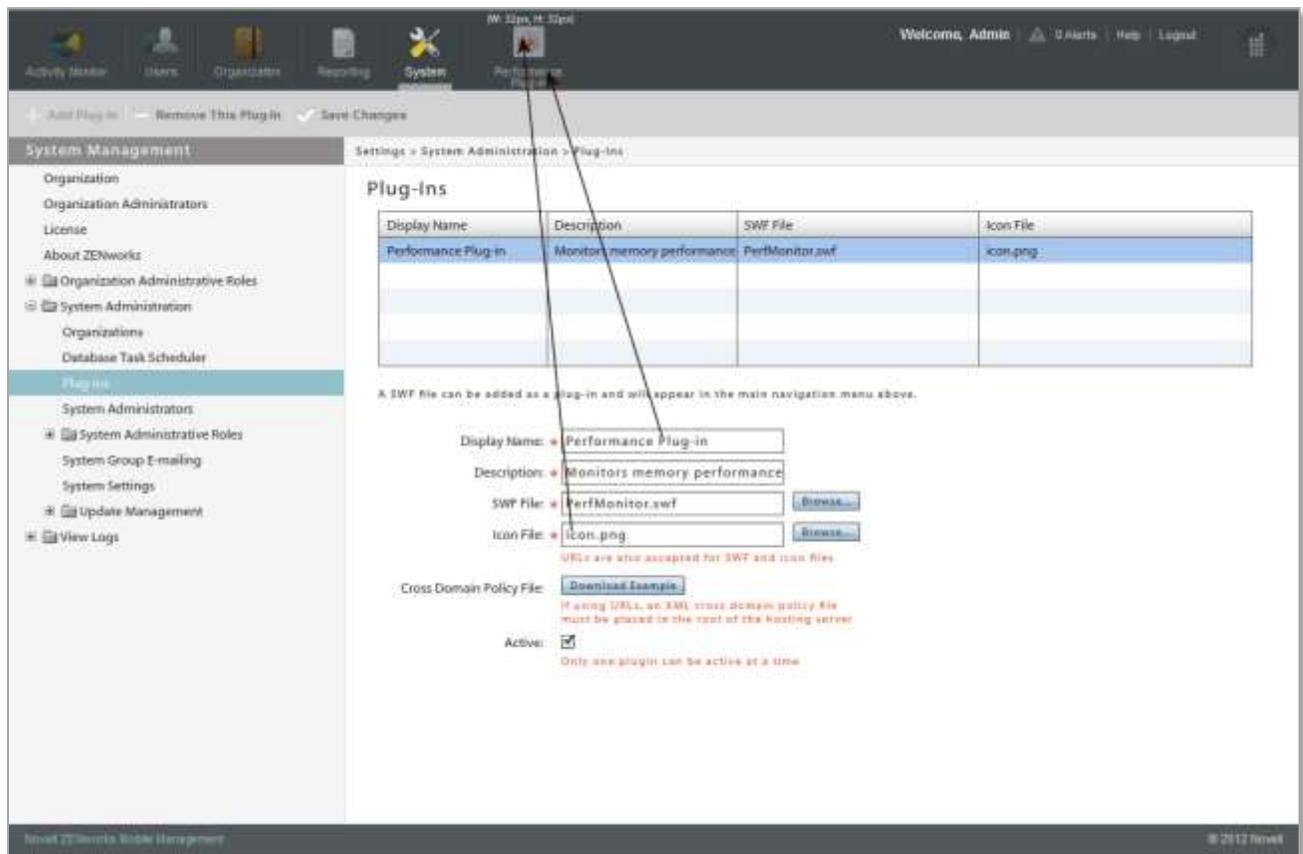
# Plug-Ins

The *ZENworks Mobile Management* Plug-Ins feature allows administrators to plug a SWF (Adobe Flash file) into the *ZENworks Mobile Management* dashboard. This lets you add a way to interface with another console to the dashboard.

From the *System* page of dashboard, administrators can define the location of any SWF (Adobe Flash file) they have created.

To further customize the *ZENworks Mobile Management* server pages, administrators can insert custom logos and icons via the [System Settings](#) that appear on the *ZENworks Mobile Management* login page and in *ZENworks Mobile Management* dashboard navigation menu.

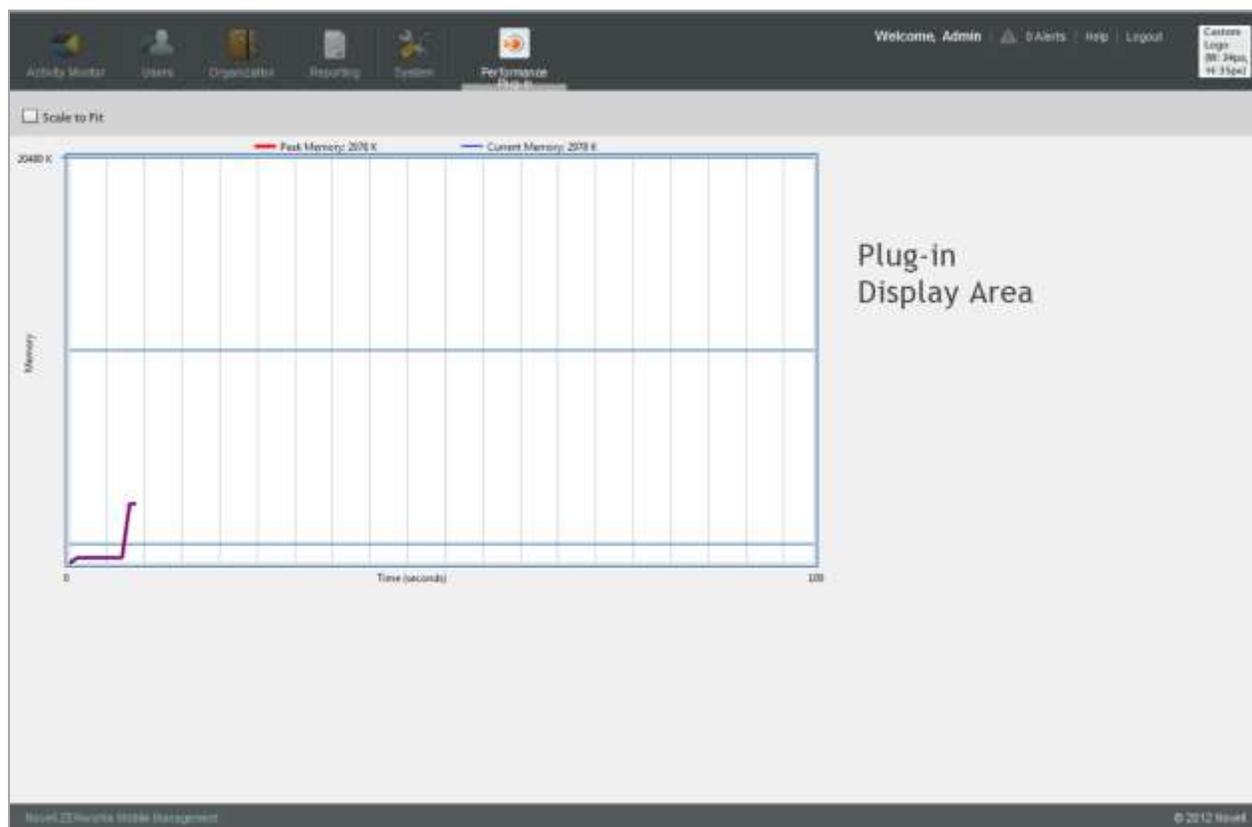
To access *Plug-Ins*, select **System > System Administration > Plug-Ins**. You must be a system administrator with full admin login credentials.



Sample ZENworks Dashboard with SWF Plugged In

## Adding a Plug-In

1. Click **Add Plug-In** in the option bar.
2. Enter a **Display Name** and **Description**. The name you enter appears in the *ZENworks Mobile Management* dashboard navigation menu under the plug-in's icon.
3. In the **SWF File** field, enter a URL for a remote storage location or store the .swf file on the *ZENworks Mobile Management* server and enter the file name.  
A file stored locally should be in /Novell/ZENworks/mobile/web/dashboard/plugins/swfs/
4. In the **Icon File** field, enter a URL for a remote storage location or store the icon file on the *ZENworks Mobile Management* server and enter the file name. This icon appears in the *ZENworks Mobile Management* dashboard navigation menu. Clicking on this icon in the *ZENworks* menu opens the Plug-In display area.
  - A file stored locally should be in /Novell/ZENworks/mobile/web/dashboard/plugins/icons/
  - Acceptable file formats are .png, .jpg, or .gif
  - Image size - W:34px, H:35px
5. If you are using URLs, place an XML **Cross Domain Policy File** at the root of the hosting server.  
So that Adobe Flash does not prevent *ZENworks Mobile Management* from accessing data on the remote locations you have designated, the cross policy file must define exceptions. Click **Download Example** to download a template to assist you in creating an XML file with the appropriate content.
6. Mark the plug-in as **Active** for it to take effect.

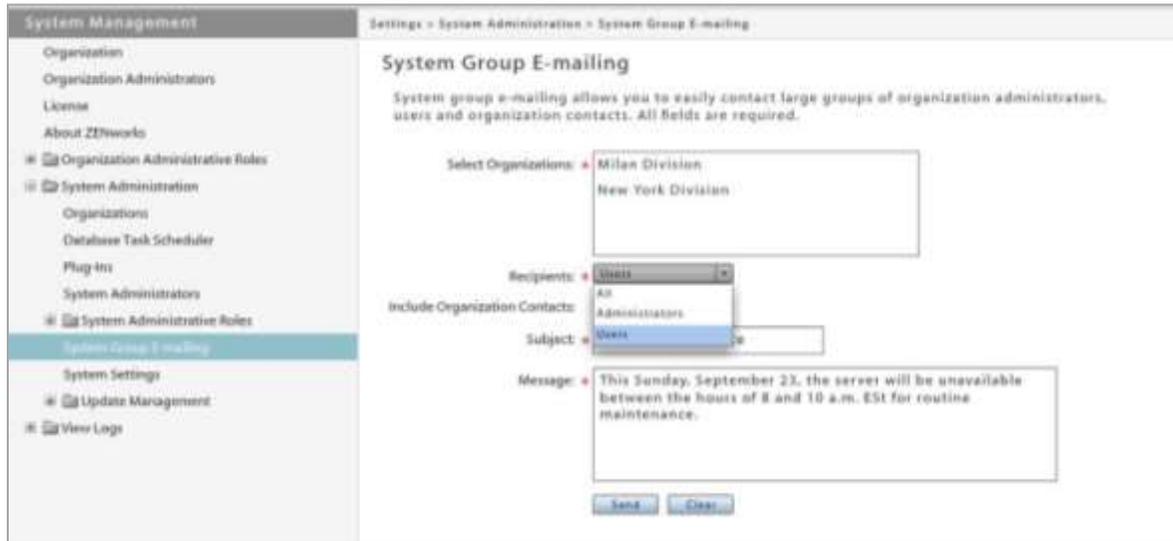


Sample of the plug-in display area

# System Group Emailing

*System Group E-mailing* gives the administrator the ability to send a system-wide email to one or multiple organizations and can include administrators, users or both. The sender can also elect to copy the organization contacts.

To send a group email, select **System > System Group E-mail**.



# System Settings

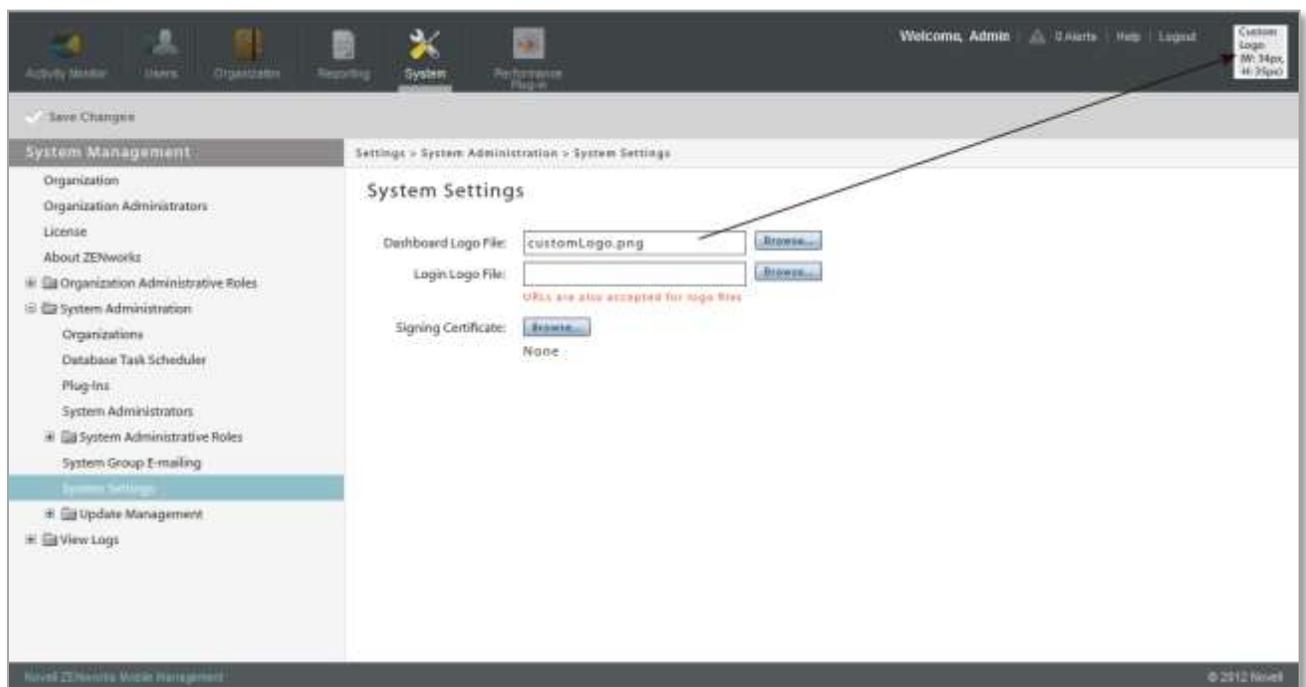
## Custom Dashboard and Login Logos

To customize the *ZENworks Mobile Management* server pages, administrators can insert custom logos and icons that appear in *ZENworks Mobile Management's* dashboard navigation menu and on the *ZENworks Mobile Management* login page.

To insert logos, select **System > System Administration > System Settings**. You must be a system administrator with full admin login credentials.

In the **Dashboard Logo File** field, enter a URL for a remote storage location or store the file on the *ZENworks Mobile Management* server and browse to select the file name. This logo appears in the upper left corner of the *ZENworks Mobile Management* dashboard, next to the navigation menu.

- A file stored locally should be in  
Novell/ZENworks/mobile/web/dashboard/images/CustomLogos/
- Acceptable file formats are .png, .jpg, or .gif
- Image size: W:34px, H:35px



Sample Customized Dashboard Logo

In the **Login Logo File** field, enter a URL for a remote storage location or store the file on the *ZENworks Mobile Management* server and enter the file name. This logo appears on the *ZENworks Mobile Management* login page.

- A file stored locally should be in  
/Novell/ZENworks/mobile/web/dashboard/images/CustomLogos/
- Acceptable file formats are .png, .jpg, or .gif
- Image size: W:256px, H:129px



Sample ZENworks Mobile Management Login Page with Customized Login Logo

## Signing Certificate Upload: Server Level

The signing certificate is a security measure that authenticates the server and allows iOS devices to recognize it as a trusted source.

The signing certificate **Upload** button in *System Settings* allows you to *add a signing certificate for any organization across the ZENworks Mobile Management system*. This must be a CA signed certificate, because self-signed certificates are currently not supported.

A signing certificate defined for a single organization will override this system-wide signing certificate.

See also, [Signing Certificate Upload: Organization Level](#).

1. Select **System > System Administration > System Settings**
2. Click the **Upload** button next to the signing certificate field.



3. Click the **Browse** button, then navigate to and select the file containing the Certificate.
4. Enter the **Password** associated with the certificate and click **Upload**.

5. Click **Save Changes** on the gray option bar.

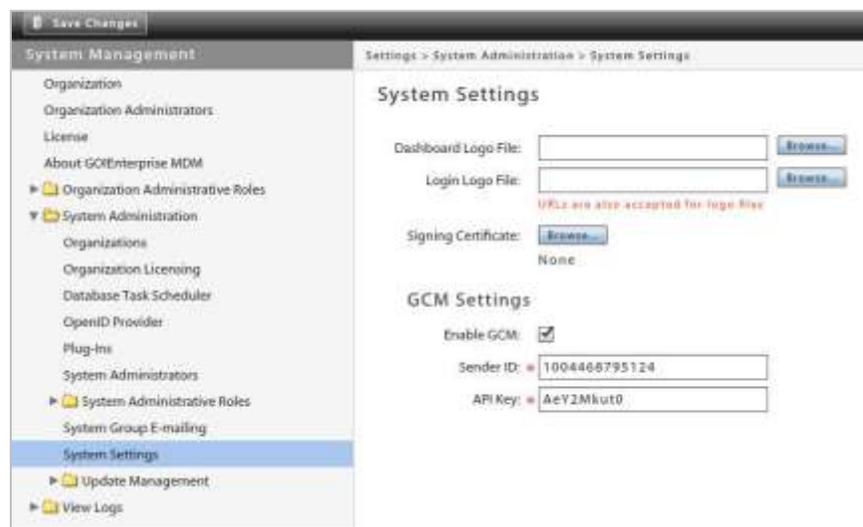
## Enabling GCM Service for the System

*ZENworks Mobile Management* can use the Google Cloud Messaging service to let Android devices know that it is time to synchronize. Whenever notifications for the device are available, the *ZENworks Mobile Management* server connects with GCM servers. GCM then pings the Android device telling it to synchronize with *ZENworks Mobile Management*. This method of initiating synchronization is used in place of the *ZENworks Mobile Management* app's device connection schedule, eliminating delayed updates to the device.

**Obtain your GCM Credentials.** You must first create a Google API project and obtain GCM credentials via the Google APIs Console (see the [GCM for Android Setup](#) guide). Only one set of credentials is required per system, regardless of the number of organizations the system hosts. The GCM service can be turned on or left off for each individual organization.

Once the GCM credentials have been obtained, the GCM service must be enabled for the system on the *ZENworks Mobile Management* server under *System Settings*. GCM credentials (Sender ID and API Key) are also entered here.

1. From the *ZENworks Mobile Management* dashboard, select **System > System Administration > System Settings**.



2. Check the box next to **Enable GCM**.
3. Enter the **Sender ID** and the **API Key** that were generated via the Google API Console.
4. Click **Save Changes**.
5. From the *Organization Settings*, turn on the service for each organization that will use GCM.

## Toggle the service on for each organization that will use GCM

Once the GCM credentials have been entered in the *System Settings*, the GCM service can be turned for individual organizations in *Organization Settings*.

1. From the *ZENworks Mobile Management* dashboard, select **System > Organization**.
2. Check the box next to **Use GCM** to turn on the service for the organization.

## APNs Settings

If you have System Administrator privileges, you can apply an existing APNs certificate to multiple organizations on the *GO!Enterprise MDM* server.

For example, on-premise systems that have categorized various divisions of a company by creating multiple organizations can allow those organizations to share one APNs certificate.

From the *ZENworks Mobile Management* dashboard, select **System Management > System Administration > System Settings**.

A list of organizations appears in the **APNs Settings** grid. If there is an APNs certificate associated with the organization, the Apple ID, Expiration Date, and Certificate Topic (certificate file) are listed beside it.



Organization Name	Apple ID	Expiration Date	Certificate Topic
Robin		Aug 21 2015 12:46PM	com.apple.mgmt.External.96dd653a-0735-4533-9be2-243b095d35f7
jmartin		Aug 21 2015 12:46PM	com.apple.mgmt.External.96dd653a-0735-4533-9be2-243b095d35f7
CAS	cschuster@ex07.notify	Aug 21 2015 12:46PM	com.apple.mgmt.External.96dd653a-0735-4533-9be2-243b095d35f7
Ninja			
jbyers		Aug 21 2015 12:46PM	com.apple.mgmt.External.96dd653a-0735-4533-9be2-243b095d35f7
arivera		Aug 21 2015 12:46PM	com.apple.mgmt.External.96dd653a-0735-4533-9be2-243b095d35f7
Archana		Aug 21 2015 5:46AM	com.apple.mgmt.External.96dd653a-0735-4533-9be2-243b095d35f7
cmclmore		Aug 21 2015 12:46PM	com.apple.mgmt.External.96dd653a-0735-4533-9be2-243b095d35f7

Buttons: Set Up, Enable, Disable, Delete, Copy To

There are several functions you can perform from this grid.

- **Set Up** an APNs certificate for the first time for one or multiple organizations  
See also, [APNS Certificate Generation](#).
- Renew an APNs certificate for one or multiple organizations (click **Setup**)  
See also, [APNS Certificate Generation](#).
- **Disable/Enable** or **Delete** an APNs certificate for one or multiple organizations
- Copy an existing APNs certificate from one organization to one or multiple organizations (**Copy To**)  
*Caution:* Copying a certificate will overwrite any existing certificate associated with the organization(s) selected.

To select multiple consecutive organizations in the grid, hold the SHIFT key and click on the first and last organization.

To select multiple random organizations in the grid, hold the CTRL key and select organizations.

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# Update Management

The *ZENworks Mobile Management* server product has integrated update management features that facilitate smooth and convenient software updates to the *ZENworks Mobile Management* server. These features consist of the dashboard's *Update Management* page and the **Update Manager** application, which is used on the physical *ZENworks Mobile Management* server(s) to apply updates.

*Update Management* in the dashboard provides:

- Sections that display current information about available updates and historical information about versions already applied using the Update Manager application
- An option to check for updates
- An option to download the available updates

Updates cannot be applied from the dashboard. A system administrator must use the *ZENworks Mobile Management Update Manager* application to install the updates.

For more information on the *Update Management* page and the *ZENworks Mobile Management Update Manager* application, see the [Update Management Guide](#).

## Checking for Updates and Update Notifications

The *ZENworks Mobile Management* server automatically checks for updates once every 24 hours. You can also initiate an on-demand check by using the **Check For Updates** button in the *Update Management* page of the dashboard.

When an update is available, system administrators logging into the *ZENworks Mobile Management* dashboard see a notification for the update in the lower left corner of the dashboard. The notification fades away automatically or the administrator can dismiss it. Clicking the notification navigates to the *Update Management* section of the dashboard where the administrator can view information about the available updates or download the updates.



## The Update Management Page

The *Update Management* page is located under the *System* view of the dashboard and is only accessible with a system administrator login. There are two sections of this page, the *Manager* section and the *History* section.

### Update Management: Manager

From the *Manager* section, you can view information about the updates that are currently available. The server automatically checks for updates every 24 hours, however, you can initiate an on-demand check for updates from this page. Although updates cannot be applied from this page, you can download updates in preparation for a scheduled maintenance. When you check for updates, you are prompted for Novell login credentials if you have not used them previously to access updates, or if they have changed. You can also reload updates. This removes updates that have been downloaded, but not installed. Available updates are then automatically reloaded. This might be used in a case where an update became corrupted for some reason and could not be installed.

### Update Management: History

From the *History* section, you can view statistics about software updates that have already been applied via the *ZENworks Mobile Management Update Manager* application.

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# Administrator Audit Trail

ZENworks Mobile Management's administrator audit trail provides traceability and accountability for changes, adjustments, and actions performed by *ZENworks Mobile Management* administrators.

Audit trail records can assist administrators in:

- Determining the cause of unexpected behavior or system states
- Identifying compromised administrator accounts
- Identifying malicious administrator activity
- Tracking the source of changes
- Finding trends
- Maintaining general corporate auditing records

Phase One of the Administrator Audit Trail feature audits administrator login/logout activity, updates to Policy Suites, as well as administrator-initiated security and device compliance actions. These logs can be accessed from the database and include sufficient details to restore the historic state of the system.

Phase One functionality does not provide dashboard accessibility. However, Novell Technical Support Staff, can assist *ZENworks Mobile Management* administrators with techniques in using the raw data for troubleshooting and restoration purposes, where applicable.

Phase One of the *Administrator Audit Trail* feature audits the following activities:

- Administrator login/logout activity
- Deletion of an organization
- Updates to policy suites
- Security actions performed from the dashboard
  - Lock Device
  - Selective Wipe
  - Full Wipe
  - Show Recovery Password
  - Wipe Storage Card
  - Disable/Enable Device
- Administrator actions
  - Clear Device Enrollment
  - Clear Passcode
  - Send Welcome Letter
  - Clear ZENworks Authorization Failures
  - Clear ActiveSync Authorization Failures
  - Clear SIM Card Removed or Changed Violation
  - View Device Violation Details

## Accessing the Data

Although Phase One does not provide dashboard accessibility, the information listed above is logged and can be viewed in the database or accessed via database queries.

Please contact our Novell Technical Support Staff, for assistance with techniques in using the raw data for troubleshooting and restoration purposes. You can also reference [Accessing Administrator Audit Records](#) in the Knowledge Base, which provides a script to get the audited information and several stored procedures that an administrator can run to view the records.

Future development of ZENworks Mobile Management's Administrator Audit Trail will provide further functionality. The following features are planned for several phases of development:

- In addition to traceability for actions performed by administrators, future functionality will also track actions performed by users via the Desktop and Mobile User Self-Administration Portals.
- Additional log entries for:
  - Creating/removing organizations and users
  - Server configurations and changes
  - Compliance Manager configurations and changes
  - File Share and Managed Apps updates
  - Certificate uploads or removals
  - Update Manager usage
  - Device Connection Schedule updates
  - Custom Columns updates
  - iOS user resource configurations, changes, and assignments
  - Administrator login/logout
- Dashboard access
  - Viewing audit trail log entries in the UI
  - Custom sorting/filtering/searching functionality
  - Audit trail export functionality
  - Viewing detailed record values

# Server Logging

System level logs assist administrators with diagnosing problems and in understanding the communications between devices and the server. Both server and device logging options are available.

## Viewing Organization and System-Wide Logs

Select the **System** view and expand the **View Logs** option in the left panel. Choose one of the logs.

The following logs can be selected for viewing system-wide information, information from one or more organizations, or information for one or all devices.

- **ActiveSync Log** – Allows you to view events logged during connections between the *ZENworks Mobile Management* server and the ActiveSync server and between the devices' ActiveSync client and the *ZENworks Mobile Management* server.
- **GCM Log** – Allows you to view successful events logged during connections between the *ZENworks Mobile Management* server and the Google Cloud Messaging (GCM) server and between the *ZENworks Mobile Management* server and Android devices using GCM service.
- **iOS MDM Sync Log** – Allows you to view successful events logged during connections between the *ZENworks Mobile Management* server and the Apple iOS MDM server and between the *ZENworks Mobile Management* server and the device's iOS MDM functions. Unsuccessful events (errors) are logged in the Error Chain Log. (iOS device specific)
- **ZENworks Sync Log** - Allows you to view events logged during connections between the device's *ZENworks Mobile Management* app and the *ZENworks Mobile Management* server.
- **Data Usage Log** – Allows you to track the amount of data being exchanged:
  - Between the device's *ZENworks Mobile Management* app and the *ZENworks Mobile Management* server
  - Between the device's ActiveSync client and the *ZENworks Mobile Management* server
  - As iOS MDM traffic between the device and the *ZENworks Mobile Management* servers
  - Between the *ZENworks Mobile Management* and ActiveSync servers.
- **Device Log** – Allows you to view a list of the device logs that have been previously requested. To request a new log, use the user level *Device Log* option associated with a user's profile.
- **Error Chain Log** – Allows you to view detailed messages for errors logged in the *iOS MDM Sync* log. (iOS device specific)

The following log can be selected for viewing information for one or more organizations.

- **Mail Message Log** – Allows you to view records of group emails sent from the dashboard.

The following logs only display system-wide information.

- **Database Task Scheduler Log** – Allows you to view all database task scheduler tasks that executed successfully or that gave an error.
- **Licensing Log** – Allows you to view server license validations that executed successfully or that gave an error.

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## Synchronization Logs

Synchronization logs give administrators the ability to view events logged during connections between servers and events logged during device connections with servers. There are three logs of this type:

The **ActiveSync Log** logs events that occur during connections between the *ZENworks Mobile Management* server and the ActiveSync server and between the devices' ActiveSync client and the *ZENworks Mobile Management* server.

The **GCM Log** logs successful events that occur during connections between the *ZENworks Mobile Management* server and the Google Cloud Messaging server and between the *ZENworks Mobile Management* server and Android devices using GCM service.

The **iOS MDM Sync Log** logs successful events that occur during connections between the *ZENworks Mobile Management* server and the Apple iOS MDM server and between the *ZENworks Mobile Management* server and the device's iOS MDM functions. Unsuccessful events (errors) are logged in the Error Chain Log. (iOS device specific)

The **ZENworks Sync Log** logs events that occur during connections between the device's *ZENworks Mobile Management* app and the *ZENworks Mobile Management* server.

The logs display:

- Organization – Organization name
- DeviceSAKey – A device's internal identifier
- Log code – Code number associated with the logged event
- Description – Description associated with the log code
- Function Name – Displays a returned error; blank when log event is successful
- Details – Description or reason for the error; blank when log event is successful
- Time stamp – Date and time of the log event

Select **ActiveSync Log**, **ZENworks Sync Log**, **GCM Log**, or **iOS MDM Sync Log**.

The **Log Level** defaults to **Normal** and the log populates the grid with system-wide data from the past hour. If you change the log level to **Verbose**, click **Search**.

Narrow or expand the results of the search by:

- Editing the **From/To** filter
- Selecting one or more **Organizations** (hold the SHIFT or CTRL key to select multiple items; hold the CTRL key to unselect an item)
- Choosing one device by entering its **DeviceSAKey**, all devices, or devices without an SAKey (Null)

Click **Search**. When you edit the date/time filter or the search criteria, the system maintains the changes as preferred settings for all system level log views until you change the settings or log out of the dashboard.

When the server log has populated, it can be sorted by any of the grid columns and data can be exported to a .CSV or .XLS file.

### ActiveSync Log

Log Level: Normal

From: 06/05/2012 3:00 PM

To: 06/05/2012 4:00 PM

DeviceSAKey:  ALL  NULL

Organization

CAS

EX 2003

Exchange 2007

Organization	DeviceSAKey	Log Code	Description	Fur
Exchange 2007	213	421	Processing Ping Command	
Exchange 2007	213	413	Processing Folder Sync Command	
Exchange 2007	213	428	Processing Sync Command	
Exchange 2007	213	421	Processing Ping Command	
Exchange 2007	213	421	Processing Ping Command	
Exchange 2007	213	413	Processing Folder Sync Command	
Exchange 2007	213	421	Processing Ping Command	
Exchange 2007	213	421	Processing Ping Command	
Exchange 2007	213	428	Processing Sync Command	
Exchange 2007	213	421	Processing Ping Command	
Exchange 2007	213	428	Processing Sync Command	
Exchange 2007	213	428	Processing Sync Command	
Exchange 2007	213	428	Processing Sync Command	
Exchange 2007	213	413	Processing Folder Sync Command	

*Sample Sync Log Grid*

# Database Task Scheduler Log

The Database Task Scheduler Log enables the administrator to view all database cleanup jobs that executed successfully or that gave an error.

The log displays:

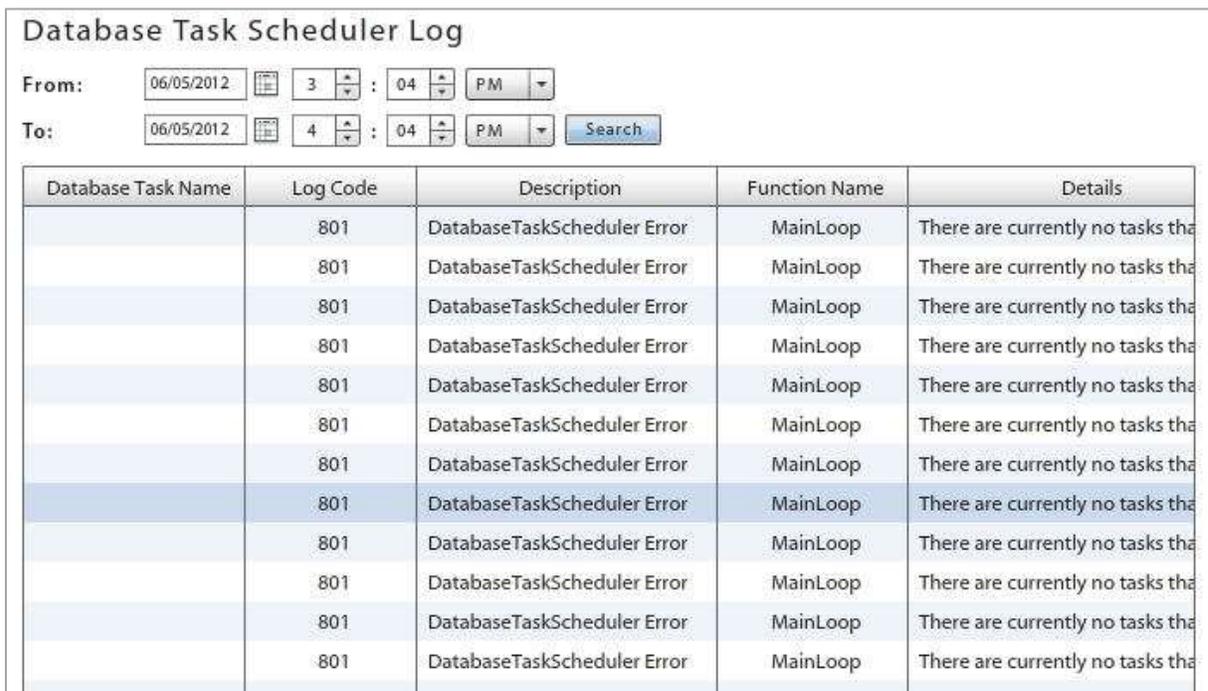
- Database Task Name – Name assigned to the database cleanup task
- Log Code – Code number associated with the logged event
- Description – Description associated with the log code
- Function Name – Displays a returned error; blank when the log event is successful
- Details – Description or reason for the error; blank when the log event is successful
- Time stamp – Date and time a database cleanup job was executed

Select **Database Task Scheduler Log**.

The log populates the grid with system-wide data from the past hour.

Narrow or expand the results of the search by editing the **From/To** filter. Click **Search**. When you edit the date/time filter, the system maintains the changes as preferred settings for all system level log views until you change the settings or log out of the dashboard.

When the database task scheduler log has populated, it can be sorted by any of the grid columns and data can be exported to a .CSV or .XLS file.



The screenshot shows the 'Database Task Scheduler Log' interface. At the top, there is a search filter with 'From:' and 'To:' fields. The 'From:' field is set to '06/05/2012' at '3:04 PM'. The 'To:' field is set to '06/05/2012' at '4:04 PM'. A 'Search' button is located to the right of the 'To:' field. Below the filter is a table with the following columns: 'Database Task Name', 'Log Code', 'Description', 'Function Name', and 'Details'. The table contains 12 rows of data, all showing 'DatabaseTaskScheduler Error' with 'Log Code' 801, 'Function Name' 'MainLoop', and 'Details' 'There are currently no tasks that...'. The table is alternating between light blue and white rows.

Database Task Name	Log Code	Description	Function Name	Details
	801	DatabaseTaskScheduler Error	MainLoop	There are currently no tasks that
	801	DatabaseTaskScheduler Error	MainLoop	There are currently no tasks that
	801	DatabaseTaskScheduler Error	MainLoop	There are currently no tasks that
	801	DatabaseTaskScheduler Error	MainLoop	There are currently no tasks that
	801	DatabaseTaskScheduler Error	MainLoop	There are currently no tasks that
	801	DatabaseTaskScheduler Error	MainLoop	There are currently no tasks that
	801	DatabaseTaskScheduler Error	MainLoop	There are currently no tasks that
	801	DatabaseTaskScheduler Error	MainLoop	There are currently no tasks that
	801	DatabaseTaskScheduler Error	MainLoop	There are currently no tasks that
	801	DatabaseTaskScheduler Error	MainLoop	There are currently no tasks that
	801	DatabaseTaskScheduler Error	MainLoop	There are currently no tasks that
	801	DatabaseTaskScheduler Error	MainLoop	There are currently no tasks that

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## Data Usage Log

The data usage log displays the amount of data being exchanged between the device and servers; and the amount of data associated with the device that is proxied to and from the ActiveSync server. The types of data traffic that are logged include:

- Data between the device's *ZENworks Mobile Management* app and the *ZENworks Mobile Management* server
- Data between the device's ActiveSync client and the *ZENworks Mobile Management* server
- iOS MDM traffic between the device and the *ZENworks Mobile Management* servers (iOS devices only)
- Data between the *ZENworks Mobile Management* and ActiveSync servers

A summary report of data usage statistics is also available in the *Reporting* section.

The log displays:

- Organization – Organization name
- DeviceSAKey – A device's internal identifier
- Traffic Type – ActiveSync, iOS MDM Sync, or *ZENworks*
- Direction – Incoming or Outgoing
- Size (Bytes) – Size of the data transferred
- Time stamp – Date and time of the data transfer

Select **Data Usage Log**.

The log populates the grid with system-wide data from the past hour.

Narrow or expand the results of the search by:

- Editing the **From/To** filter
- Selecting one or more **Organizations** (hold the SHIFT or CTRL key to select multiple items; hold the CTRL key to unselect an item)
- Choosing one device by entering its **DeviceSAKey**, all devices, or devices without an SAKey (Null)

Click **Search**. When you edit the date/time filter or the search criteria, the system maintains the changes as preferred settings for all system level log views until you change the settings or log out of the dashboard.

When the data usage log has populated, it can be sorted by any of the grid columns and data can be exported to a .CSV or .XLS file.

## Data Usage Log

From: 06/05/2012 3 : 08 PM

To: 06/05/2012 4 : 08 PM

DeviceSAKey:  ALL  NULL

Organization
EX 2003
Exchange 2007
...

Search

Organization	DeviceSAKey ▲	Traffic Type	Direction	Size (Bytes)	Time ▲
Exchange 2007	213	iOS MDM Sync	Incoming	306	06/05/2012 4:0
Exchange 2007	213	iOS MDM Sync	Outgoing	0	06/05/2012 4:0
Exchange 2007	213	iOS MDM Sync	Incoming	1447	06/05/2012 4:0
Exchange 2007	213	ActiveSync	Incoming	13	06/05/2012 4:0
Exchange 2007	213	ActiveSync	Outgoing	153	06/05/2012 4:0
Exchange 2007	213	ActiveSync	Incoming	153	06/05/2012 4:0
Exchange 2007	213	ActiveSync	Outgoing	13	06/05/2012 4:0
Exchange 2007	213	iOS MDM Sync	Outgoing	362	06/05/2012 4:0
Exchange 2007	213	iOS MDM Sync	Outgoing	4143	06/05/2012 4:0
Exchange 2007	213	ActiveSync	Outgoing	0	06/05/2012 4:0
Exchange 2007	213	ZENworks Sync	Outgoing	33	06/05/2012 3:5
Exchange 2007	213	ActiveSync	Incoming	52	06/05/2012 4:0
Exchange 2007	213	ActiveSync	Outgoing	72	06/05/2012 4:0

# Device Logs

The Device Logs option at the system level is simply a list of previous requests for device logs. The dashboard grid does not display log records, but gives information on when logs were received. Device logs are available from any device running the *ZENworks Mobile Management* app.

The grid displays:

- Organization – Organization name
- DeviceSAKey – A device’s internal identifier
- Time Requested and Requester
- Received – Whether or not log has been received
- Time Received – Date and time a response was received
- Error – Error message if log could not be obtained

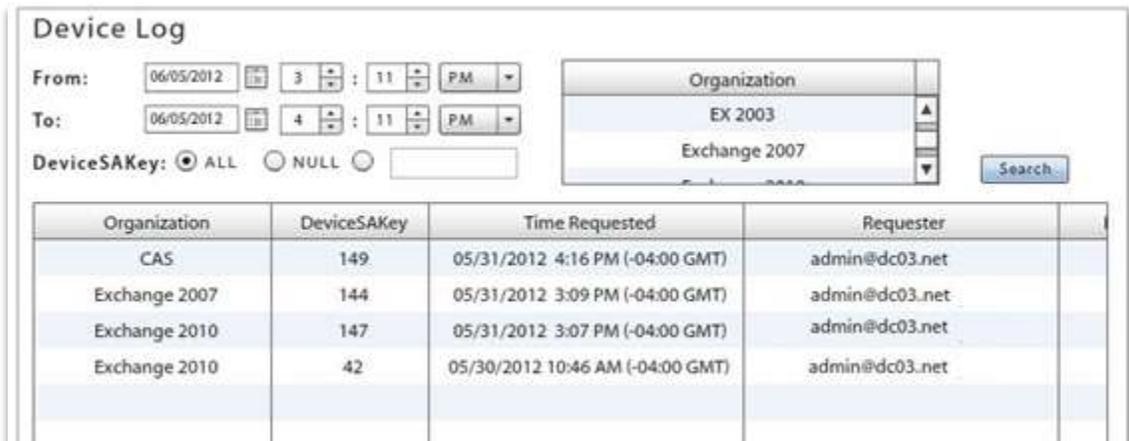
Select **Device Log**.

The log populates the grid with system-wide notifications of log receipts from the past hour.

Narrow or expand the results of the search by:

- Editing the **From/To** filter to filters the time stamp of the logs (not the records in the log)
- Selecting one or more **Organizations** (hold the SHIFT or CTRL key to select multiple items; hold the CTRL key to unselect an item)
- Choosing one device by entering its **DeviceSAKey**, all devices, or devices without an SAKey (Null)

Click **Search**. When you edit the date/time filter or the search criteria, the system maintains the changes as preferred settings for all system level log views until you change the settings or log out of the dashboard.



The screenshot shows the 'Device Log' interface. At the top, there are search filters: 'From' (06/05/2012 3:11 PM) and 'To' (06/05/2012 4:11 PM). Below these are radio buttons for 'DeviceSAKey' (ALL, NULL) and a dropdown menu for 'Organization' (EX 2003, Exchange 2007). A 'Search' button is located to the right of the dropdown. Below the filters is a table with the following data:

Organization	DeviceSAKey	Time Requested	Requester
CAS	149	05/31/2012 4:16 PM (-04:00 GMT)	admin@dc03.net
Exchange 2007	144	05/31/2012 3:09 PM (-04:00 GMT)	admin@dc03.net
Exchange 2010	147	05/31/2012 3:07 PM (-04:00 GMT)	admin@dc03.net
Exchange 2010	42	05/30/2012 10:46 AM (-04:00 GMT)	admin@dc03.net

*Device Log Grid*

Select a log file and click the **Download Log** button. Save the log file on the desktop or in another designated folder. The file can be viewed in the .txt format.

---

## Error Chain Log (iOS device specific)

The error chain log provides a view of messages detailing errors logged in the *iOS MDM Sync* log.

The log displays:

- Organization – Organization name
- DeviceSAKey – A device's internal identifier
- Error Code – Code number associated with the error
- Error Domain – Contains internal codes used by Apple useful for diagnostics (may change between Apple releases)
- Localized Description – Description of codes
- Time stamp – Date and time the error occurred

Select **Error Chain Usage Log**.

The log populates the grid with system-wide data from the past hour.

Narrow or expand the results of the search by:

- Editing the **From/To** filter
- Selecting one or more **Organizations** (hold the SHIFT or CTRL key to select multiple items; hold the CTRL key to unselect an item)
- Choosing one device by entering its **DeviceSAKey**, all devices, or devices without an SAKey (Null)

Click **Search**. When you edit the date/time filter or the search criteria, the system maintains the changes as preferred settings for all system level log views until you change the settings or log out of the dashboard.

When the error chain log has populated, it can be sorted by any of the grid columns and data can be exported to a .CSV or .XLS file.

## Error Chain Log

From: 06/05/2012 3 : 13 PM

To: 06/05/2012 4 : 13 PM

DeviceSAKey:  ALL  NULL  [ ]

Organization
EX 2003
Exchange 2007
Exchange 2008

Search

Organization	DeviceSAKey	Error Code	Error Domain	Localized Description
Exchange 2007	213	4001	MCInstallationErrorDomain	Profile Failed to Install
Exchange 2007	213	1009	MCProfileErrorDomain	The profile "MDM iOS ActiveSync File" could not be installed.
Exchange 2007	213	21005	MCEASErrorDomain	An identical Exchange account already exists.
Exchange 2007	213	4001	MCInstallationErrorDomain	Profile Failed to Install
Exchange 2007	213	1009	MCProfileErrorDomain	The profile "MDM iOS ActiveSync File" could not be installed.
Exchange 2007	213	21005	MCEASErrorDomain	An identical Exchange account already exists.
Exchange 2007	213	4001	MCInstallationErrorDomain	Profile Failed to Install
Exchange 2007	213	1009	MCProfileErrorDomain	The profile "MDM iOS ActiveSync File" could not be installed.
Exchange 2007	213	21005	MCEASErrorDomain	An identical Exchange account already exists.
Exchange 2007	213	4001	MCInstallationErrorDomain	Profile Failed to Install
Exchange 2007	213	1009	MCProfileErrorDomain	The profile "MDM iOS ActiveSync File" could not be installed.
Exchange 2007	213	21005	MCEASErrorDomain	An identical Exchange account already exists.

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# Licensing Log

The licensing log is a log of license validations that executed successfully or that gave an error.

The log displays:

- Log Code – Code number associated with the logged event
- Description – Description associated with the log code
- Function Name – Displays a returned error; blank when log event is successful
- Details – Description or reason for the error; blank when log event is successful
- Time stamp – Date and time the license validation occurred

Select **Licensing Log**.

The log populates the grid with system-wide data from the past hour.

Narrow or expand the results of the search by editing the **From/To** filter. Click **Search**. When you edit the date/time filter, the system maintains the changes as preferred settings for all system level log views until you change the settings or log out of the dashboard.

When the licensing log has populated, it can be sorted by any of the grid columns and data can be exported to a .CSV or .XLS file.

The screenshot shows the 'Licensing Log' interface. At the top, there are search filters for 'From' and 'To'. The 'From' filter is set to 06/05/2012 at 3:17 PM. The 'To' filter is set to 06/05/2012 at 4:17 PM. A 'Search' button is located to the right of the 'To' filter. Below the filters is a table with four columns: 'Log Code', 'Description', 'Function Name', and 'Details'. The table contains one row of data: Log Code 502, Description 'LicenseValidator Starting License Validation', Function Name (blank), and Details (blank). There are several empty rows below the first one.

Log Code	Description	Function Name	Details
502	LicenseValidator Starting License Validation		

## Mail Message Log

The mail message log provides an administrator with a method to view the records of group emails sent from the dashboard.

The log displays:

- Organization – Organization name to which the email was sent
- Administrator – The administrator who sent the email
- SMTP Server – The SMTP server through which the email was sent
- Subject – Email subject
- Message – Body text of the email message
- Recipients Emails – Email addresses of recipients of the email
- Timestamp – Date and time the email was sent
- Ownership – Whether device ownership was specified as criteria for recipients; company/personal/any
- Liability – Whether device liability was specified as criteria for recipients; corporate/individual/any

Select **Mail Message Log**.

The log populates the grid with system-wide data from the past hour.

Narrow or expand the results of the search by:

- Editing the **From/To** filter
- Selecting one or more **Organizations** (hold the SHIFT or CTRL key to select multiple items; hold the CTRL key to unselect an item)

Click **Search**. When you edit the date/time filter or the search criteria, the system maintains the changes as preferred settings for all system level log views until you change the settings or log out of the dashboard.

When the mail message log has populated, it can be sorted by any of the grid columns and data can be exported to a .CSV or .XLS file.

The screenshot shows the 'Mail Message Log' interface. At the top, there are search filters for 'From' and 'To'. The 'From' filter is set to '06/05/2012 3:22 PM' and the 'To' filter is set to '06/05/2012 4:22 PM'. To the right of these filters is a dropdown menu for 'Organization' with a 'Search' button. The dropdown menu is open, showing a list of organizations: 'acostello', 'CAS', and 'EX-2007'. Below the search filters is a table with the following columns: 'Organization', 'Administrator', 'SMTP Server', 'Subject', and 'Message'. The table contains one row of data: 'Exchange 2007', 'System Admin Full', 'Exchange 2007', 'Sunday Server Maintenance', and 'The mail server will un'.

Organization	Administrator	SMTP Server	Subject	Message
Exchange 2007	System Admin Full	Exchange 2007	Sunday Server Maintenance	The mail server will un

# Appendix A: Role Permissions

Role permissions associated with dashboard access are listed in a directory tree. There are five parent categories that correspond to the five dashboard views.

The ability to edit a permission in a subset depends on whether or not the categories above the permission are enabled. For example, in order to enable **Lock Device**, **Full Access** needs to be enabled for both the **Users** and **Administration** categories above it.

Parent Category	First Subset Level	Second Subset Level	Third Subset Level	Full Access	Read Only
<b>Activity Monitor</b>				•	•
<b>Users</b>				•	•
	Add User			•	
	Administration			•	
		Clear Passcode		•	
		Disable Device		•	
		Disown Device		•	
		Full Wipe		•	
		Lock Device		•	
		Power Off		•	
		Reboot		•	
		Reset for Enrollment		•	
		Selective Wipe		•	
		Send VPP Invitation		•	
		Send Welcome Letter		•	
		Show Recovery Password		•	
		Suspend Device		•	
		Trigger APN		•	
		Trigger GCM		•	
		Unblock Password Entry		•	
		Wipe Storage Card		•	
	Apple DEP Devices			•	
		Manage Profile		•	
		Name Device		•	

Parent Category	First Subset Level	Second Subset Level	Third Subset Level	Full Access	Read Only
		Sync Apple DEP Devices		•	
	Device Compliance			•	•
		Clear ActiveSync Authorization Failures		•	•
		Clear SIM Card Removed or Changed Violation		•	•
		Clear ZENworks Authorization Failures		•	•
		View Device Violation Details		•	•
	Device Reporting			•	•
	E-mail User			•	•
	Location			•	•
	Logging			•	•
	Messaging			•	•
	Remove User			•	
	Send Notification			•	•
	User Profile			•	•
		All Devices Summary		•	•
		Assign Access Point Names		•	•
		Assign CalDAV		•	•
		Assign CardDAV		•	•
		Assign Exchange Servers		•	•
		Assign LDAP Servers		•	•
		Assign Mail Servers		•	•
		Assign Managed Apps		•	•
		Assign Provisioning Profiles		•	•
		Assign SCEP Servers		•	•
		Assign Subscribed Calendars		•	•
		Assign VPN		•	•
		Assign Web Clips		•	•
		Assign Wi-Fi Networks		•	•
		Audit Data		•	•
		Client Certificates		•	•
		Custom Columns		•	•
		Device Configuration		•	•

Parent Category	First Subset Level	Second Subset Level	Third Subset Level	Full Access	Read Only
		File Archive		•	•
		iOS MDM Settings		•	•
		Last Sync Data		•	•
		Local Groups		•	•
		Location Data		•	•
		Search Phone Log		•	•
		Search Text Message Log		•	•
		Security		•	•
		User Configuration		•	•
		User Information		•	•
		View Logs		•	•
			ActiveSync Log	•	•
			Configuration/Feedback Log	•	•
			Data Usage Log	•	•
			Device Log	•	•
			Error Chain Log	•	•
			GCM Sync Log	•	•
			iOS MDM Sync Log	•	•
			ZENworks Sync Log	•	•
<b>Organization</b>				•	•
	Administrative Servers			•	•
		ActiveSync Servers		•	•
		Administrative LDAP Servers		•	•
		OpenID Provider		•	•
		SAML Identity Providers		•	•
		SMTP Server		•	•
	Android Corporate Resources			•	•
		VPNs		•	•
		Wi-Fi Networks		•	•
	Application Management			•	•
		Manage App Categories		•	•
		Managed Apps		•	•
		Novell Filr		•	•

Parent Category	First Subset Level	Second Subset Level	Third Subset Level	Full Access	Read Only
		Whitelist/Blacklists		•	•
	Compliance Manager			•	•
	iOS Corporate Resources			•	•
		Access Point Names		•	•
		CalDAV Servers		•	•
		CardDAV Servers		•	•
		Exchange Servers		•	•
		LDAP Servers		•	•
		Mail Servers		•	•
		Provisioning Profiles		•	•
		SCEP Servers		•	•
		Subscribed Calendars		•	•
		VPNs		•	•
		Web Clips		•	•
		Wi-Fi Networks		•	•
	Organization Control			•	•
		Custom Columns		•	•
		File Share		•	•
		Group Notifications		•	•
		Local Groups		•	•
	Policy Management			•	•
		Device Connection Schedules		•	•
		Policy Schedules		•	•
		Policy Suites		•	•
<b>Reporting</b>					•
<b>System</b>				•	•

# Appendix B: System Maintenance

Database cleanup and backup are two key elements in maintaining and ensuring efficient system performance. The best practices outlined below should be incorporated into your organization's system maintenance routine.

## Database Cleanup

Verify that the database cleanup tasks have been enabled. When the ZENworks Mobile Management server software is installed, tasks are enabled, by default, with parameters for a system accommodating 1000 devices. Administrators of larger systems should adjust the task parameters according to the recommendations in the Database Maintenance Guide. To verify that the jobs are running, access the Database Task Scheduler from the dashboard and view the task grid. The grid displays which cleanup jobs are enabled, the last time each job was executed, and when each job will run again.

If a database task fails to run, you can check the DatabaseTaskSchedulerLogs database table for errors. See Server Logging in this guide.

## Backup

Periodically backing up the database is an essential practice for system maintenance. A daily backup of the database, preferably streamed off-site, is recommended at minimum.

In addition, back up the MDM.ini file on the Web/Http server. This file is found under the ZENworks directory. Default directory: C:\Program Files\Novell\ZENworks\mobile.

Regular backups ensure that data can be recovered if the database becomes compromised. With both a database backup and a backup of the MDM.ini file, a system can be fully restored if necessary.