

Manage HQ Users and Roles

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1. Create and Manage User Accounts

Topics marked with*relate to features available only in vFabric Hyperic.



1.1. Introduction to User Accounts in Hyperic

You create an account in Hyperic for each user.

In Hyperic HQ, a user account specifies the user's name, username, and contact information, including the email and SMS addresses for receiving alert notifications.

In vFabric Hyperic, a user account is also associated with one or more *roles*, the mechanism by which resource access and associated permissions are granted to users. Note that in vFabric Hyperic, to have access to resources, a user account must be assigned at least one role to which resources are assigned. Roles are not supported in Hyperic HQ — all users have all permissions to all resources in inventory. Similarly, any Hyperic HQ user has the permission to create other users.

For information about roles, see <u>Understand Roles in vFabric Hyperic</u>.



1.2. Built-in Accounts

There is one built-in user account in Hyperic HQ, and two in vFabric Hyperic.

1.2.1. hqadmin Account

Both Hyperic HQ and vFabric Hyperic have a built-in hqadmin account, which has the superuser role, and can:

- · Administer the HQ Server
- and, in vFabric Hyperic:
 - · Assign alert definitions to resource types
 - · Modify role-based dashboards

1.2.2. guest Account

vFabric Hyperic has a built-in guest account, which, when enabled, allows anonymous, view-only access to the HQ user interface. The guest user has the built-in guest role. Note that the guest role provides **View** permissions for all types, but unless resource groups are assigned to the role, anonymous users will not be able to view any resources. To allow anonymous users to view resources in HQ you must enable the guest account and assign the groups of resources you wish to expose to the guest role.

You can expose all resources to the guest role without assigning groups to the role. To do so, insert the following row into the database. Note that there is no user-interface that can revert this assignment and that you will have to remove the row manually from the database to disable it.

INSERT INTO EAM_ROLE_RESOURCE_GROUP_MAP VALUES (2, 1);



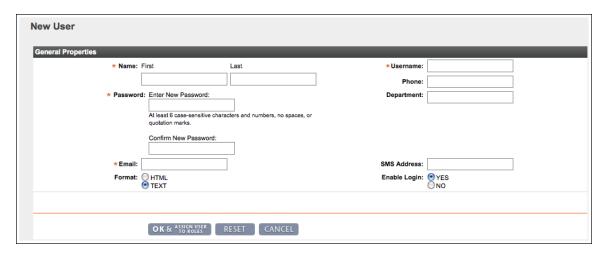
1.3. Create a New User Account

The sections below have instructions for creating a user, and in vFabric Hyperic, assigning roles to the user.

1.3.1. Define User Account Attributes

To create a new Hyperic user:

- 1. Click **New User** on the **Administration** page.
- 2. The **New User** page appears.



- 3. Enter values for:
 - Name
 - Username The username the user logs in with.
 - Phone
 - Department
 - Password Passwords must contain at least 6 case-sensitive characters and numbers, and no spaces or quotation marks.
 - Email User's email address.
 - Format Toggle the radio button to select HTML or plain text.
 - SMS Address An email-to-SMS gateway email address for the user's SMS device.
 - For a cellular phone on the Cingular network, this might look like 4155551212@mobile.mycingular.com. Check with the service provider for details about an email-to-SMS configuration. Basic alert notification sent to this user's SSS address will be in long format, which can result in up to five separate messages on the SMS device each time notification is sent by HQ. Hyperic recommends that SMS alerting be used in conjuction with escalations, not basic alert notification, but short format is used there.
 - **Enable Login** Toggle the radio button to disable or enable the account. The user cannot log in when the login is disabled.

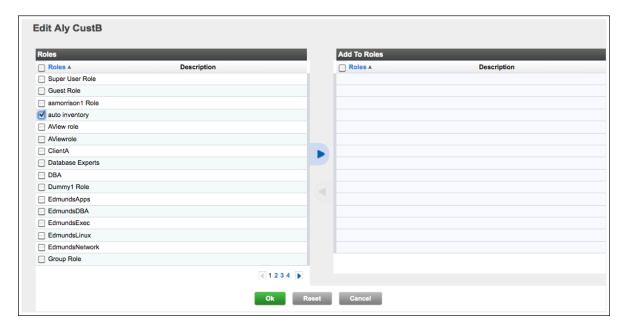


- 4. Click:
 - **OK** in Hyperic HQ to save the new account.
 - OK and Assign to Roles in vFabric Hyperic.

1.3.2. Assign Roles to a New User Account *

In vFabric Hyperic, the roles to which a user is assigned govern which resources the user may access, and the operations the user can perform on those resources. Each role in vFabric Hyperic defines a permission matrix; users with a role may exercise the permissions it grants, on the resources in groups assigned to the role.

To assign roles to a user:

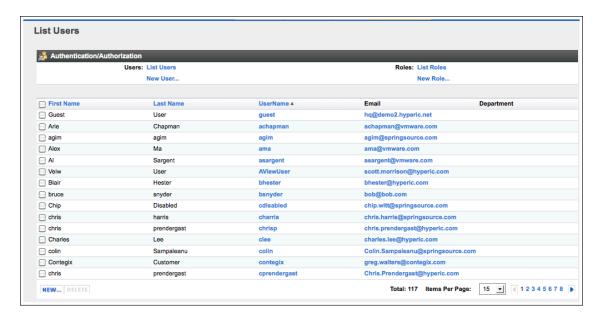


- 1. In the "Roles" panel on the left side of the page, checkmark each role to which you want to assign the user, and click the blue arrow to move the roles to the "Add to Roles" panel.
- 2. Click **OK** when you are done adding users to the role.

1.4. List User Accounts

- 1. Click **List Users** on the **Administration** page.
 - The **List Users** page appears.
 A screenshot of the **List Users** page is shown below.





The **List Users** page lists the following information for each user account.

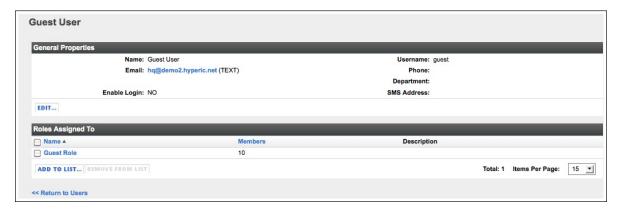
- First Name
- · Last Name
- UserName Click a user name to view and edit the user account.
- Email Click an email address to send mail to the user.
- Department



1.5. View a User Account

- 1. List user accounts, following the instructions in <u>List User Accounts</u>.
- 2. Click the **UserName** for the user account you wish to view.
 - The *UserName* page appears.

A screenshot of the user account page is shown below.

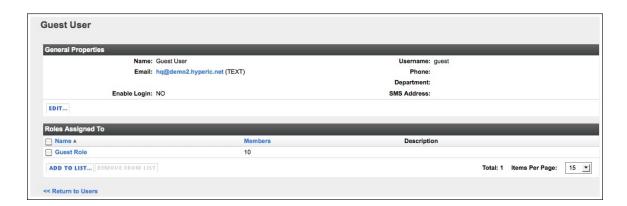


- The **General Properties** section contains this information:
 - Name
 - **Username** The username the user logs in with.
 - Phone
 - Department
 - Password The user's password is not displayed. If you have the permission to modify the password, a
 Change... link is present.
 - Email User's email address. Click to send an email to the user.
 - Format Format for email notifications sent to the user HTML or plain text.
 - SMS Address An email-to-SMS gateway email address for the user's SMS device.
 - Enable Login Indicates whether or not the account is enabled. The user cannot log in when the login
 is disabled.
- The Roles Assigned To section contains:
 - A list of the roles to which the user is assigned.
 - An **Add to List** button click it to assign additional roles to the user.



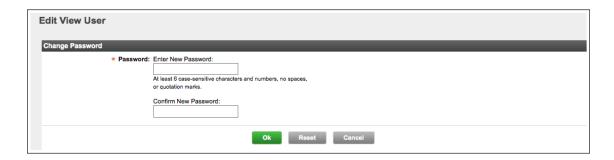
1.6. Modify User Account Settings

1. Navigate to the user account, as described in View a User Account.



1.6.1. Change Password

- 1. Click Change in the password field on the UserName page.
 - The Change Password page appears.



- 2. If you are do not have the SuperUser role, the page prompts you to supply the previous password.
- 3. Enter a password in the Enter New Password field.
- 4. Enter a password again in the **Confirm New Password** field.
- 5. Click OK.

1.6.2. Edit Account Settings

- 1. Click **Edit** in the "General Properties* section of the *UserName* page.
 - The *Edit *UseName* page appears.
 A screenshot of the **Edit User** page is shown below.



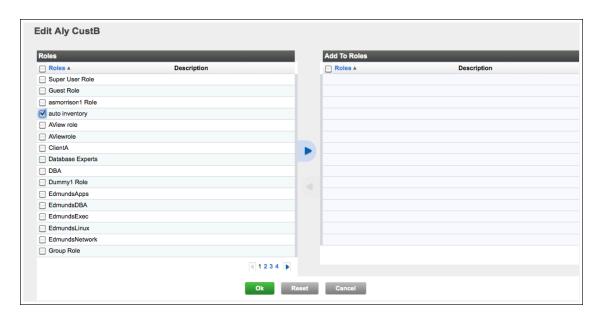


- 2. Enter values for:
 - Name
 - Username The username the user logs in with.
 - Phone
 - Department
 - **Email** User's email address.
 - Format Toggle the radio button to select HTML or plain text.
 - SMS Address An email-to-SMS gateway email address for the user's SMS device.
 - For a cellular phone on the Cingular network, this might look like 4155551212@mobile.mycingular.com. Check with the service provider for details about an email-to-SMS configuration. Basic alert notification sent to this user's SSS address will be in long format, which can result in up to five separate messages on the SMS device each time notification is sent by HQ. Hyperic recommends that SMS alerting be used in conjuction with escalation, not basic alert notification, but short format is used there.
 - **Enable Login** Toggle the radio button to disable or enable the account. The user cannot log in when the login is disabled.
- 3. Click OK.

1.6.3. Update Roles Assigned to a User *

- 1. Click **Add to List** in the "Roles Assigned To* section of the *UserName* page.
 - The *Edit *UserName* page appears.





- 2. In the "Roles" panel on the left side of the page, checkmark each role to which you want to assign the user, and click the blue arrow to move the roles to the "Add to Roles" panel.
- 3. Click \mathbf{OK} when you are done adding users to the role.



2. Create and Manage Roles in vFabric Hyperic

Available only in vFabric Hyperic

2.1. Understand Roles in vFabric Hyperic

In vFabric Hyperic, every user is assigned one or more roles. Roles enable:

- Access control A role defines what resources the users added to the role *role users* can access, and the types of operations view, edit, create, and so on they can perform on those resources.
- Alert notification A role with users but no resource groups assigned to it can serve simply as a distribution list
 for alert notifications. Role-based notification makes it easier to maintain alert definitions, and enables shiftbased alert notifications. For around-the-clock operations, you can define multiple roles, with complementary
 alert calendars that specify when role users are on duty. If you assign the several complementary roles as
 recipients for the same alert, when the alert fires, HQ will send notifications only to the role with currently
 active calendar.
- Role-Specific Dashboards When you create a role, HQ creates a new Dashboard for the role, which you
 can customize to meet the needs of role users.

The sections below describe the information you define for a role in vFabric Hyperic.

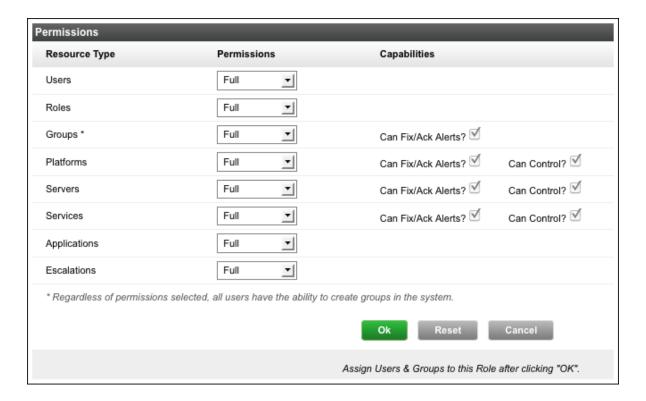
2.1.1. Permission Matrix: Grants Access to Resource Types

The permission matrix for a role defines the level of access that role users have to configurable items in vFabric Hyperic. There are several types of targets to which you can define a permission level:

- User management types The permission levels to **Users** and **Roles** determines what level of access, if any, role users have to view and manage HQ user accounts and HQ roles.
- Inventory resource types The permission level to inventory types Platforms, Servers, Services, Groups, and Applications controls the level of access, if any, role users have to that inventory type. Note: Granting access to an inventory type does not grant access to specific resource instances.
- Escalations The permission level for Escalations controls the level of access, if any, role users have to view
 or manage escalations defined for use in alert definitions.

The screenshot below shows the permission matrix you define for a role.





About Permission Levels

You assign one of the following permission levels to each type.

- None No access at all to instances of the type.
- Read-Only Allows role users to view instances of the type, but not create, edit, or delete them. For Platforms, Servers, Services, Groups, also enables:
 - **Read-Only** access to alert definitions for the inventory type.

A role with **Read-Only** permission level does **not** have permissions to enable/disable/fix/ack alerts or control resources - these capabilities must be explicitly granted.

- **Read-Write** Allows role users to view and edit instances of the type, but not create or delete them. For **Platforms**, **Servers**, **Services**, **Groups**, also gives:
 - Full access to alert definitions for the inventory type,
 - Permission to manage alerts (enable/disable, fix, acknowledge) for the inventory type.
 - Permission to perform supported control operations on resources of the inventory type.
- Full Allows role users to create, edit, delete, and view instance of the type. For Platforms, Servers, Services, Groups, also gives:
 - Full access to alert definitions for the inventory type.
 - Permission to manage alerts (enable/disable, fix, acknowledge) for the inventory type.
 - Permission to perform supported control operations on resources of the inventory type.



Permission Tips

Defining a Role's Permission Matrix

For roles that:

- Add resources to inventory and create alert definitions use Full or Read-Write permission levels. These permission levels enable a role to also process fired alerts and control resources.
- Monitor resources, respond to alerts and control resources use the Read permission level, and
 then grant Fix/Ack and Control capability, or both. This allows operations staff to respond to alerts,
 see the details of alert definitions, and perform routine or as-needed resource control tasks but not
 create/modify/delete resources and alert definitions.
- **Need visibility only** Use **Read** permission level for roles that view and monitor resources, but do not (1) create/modify/delete resources and alert definitions, or (2) response to alerts.

How HQ Validates Platform-Server-Service Permission Level Assignments

HQ Enterprise does a bottom-up validation of the permission levels a role grants to Platforms, Servers, and Services.

A role with **Full** access (which enables resource deletion) to an inventory type must have at least **Read-Only** access to the parent type (if there is one) and Full to the child type (if there is one).

For example, Full access to Servers requires at least Read access to Platforms and Full access to Services.

2.1.2. Groups: Grant Access to Specific Resources

In addition to defining a permission matrix for a role, you assign one or more resource groups to the role. Together, the permission levels and groups defined in the role determine the *specific* inventory resources that role users can work with.

If you create a role simply for use in role-based alert notifications, you do not have to assign any resource groups to the role.

Permission levels to **Platforms**, **Servers**, **Services**, **Groups**, and **Applications** define the level of access role users have to each of those inventory *types*. The operations that a role enables for an inventory type apply *only* to resources that belong to a group assigned to the role. (You cannot assign individual resources to a role, you must create groups of resources, and assign groups to roles.)

For example, the **Full** permission to **Platforms** granted by a role may only be exercised on platforms that belong to a group assigned to the role. So, a group assigned to a role may well contain resource types to which the role does not grant access.

You can assign the same resource group to multiple roles, and you can assign the same user to multiple roles. This allows for the fact that different users may need different levels of access to the same resources. For instance, you can create one role for users that need **Read-Only** access to the members of a resource group, and another for users that need **Full** permission, and assign the same resource groups to both roles.

2.1.3. Alert Calendar: Enable Shift-Based Notifications

An Alert Calendar is an optional component of a role that builds on the notion of role-based notification. In role-based alert notifications, the notification recipient is a role - notifications are sent to all users with the role. An



Alert Calendar for role defines the time periods during a work week that role users are on duty. You can define multiple roles to span the week - each with a different availability calendar, and assign all of the complementary roles as the notification recipients. In this case, HQ Server will send alert notifications only to the role that is currently on-duty, based on the alert calendars defined in the roles.

The screenshot below shows the alert calendar you can define for a role.



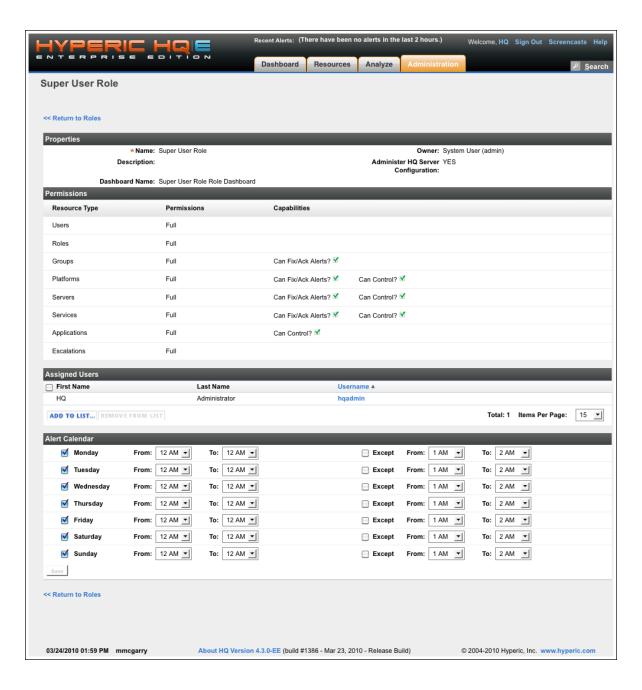


2.2. Built-in Roles

vFabric Hyperic has two built-in roles, which are described in the sections below.

2.2.1. SuperUser

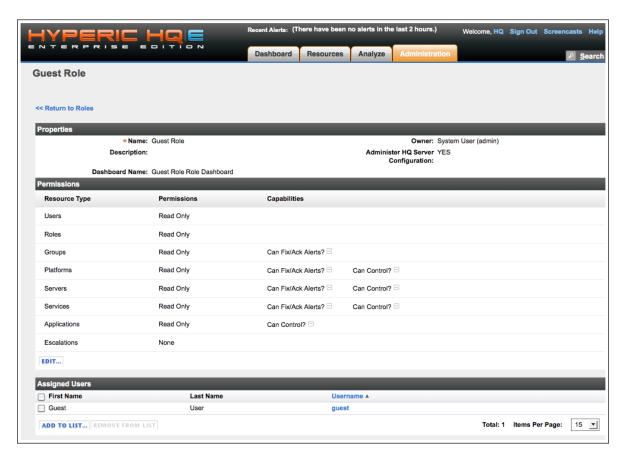
The screenshot below is the permission matrix for the HQ SuperUser. The built-in hqadmin account has the SuperUser role.





2.2.2. Guest Role

The screenshot below is the permission matrix for the HQ SuperUser. The built-in guest account has the Guest role.





2.3. Create a New Role

The sections below provide instructions for creating and editing roles.

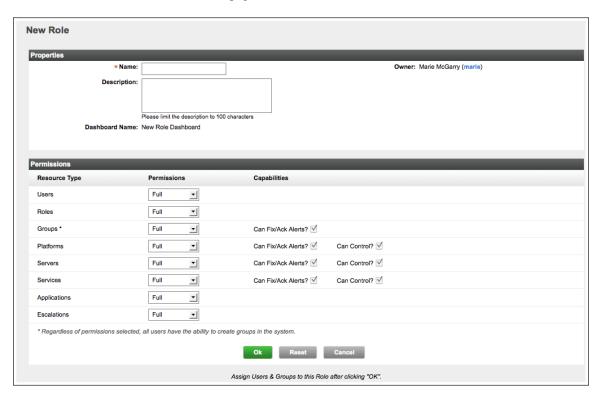
2.3.1. Define Role Permission Matrix

In this step you create a permissions matrix for the role.

Note: If you are creating a role purely for the purpose of role-based alert notification, skip to <u>Assign Users to the Role</u>.

Learn About Roles

- For an introduction to roles in vFabric Hyperic, see <u>Understanding Roles in HQ Enterprise</u>.
- For information about permission levels, see About Permission Levels.
- 1. Click **New Role** on the **Administration** page.



- 2. In the "Properties" section of the **New Role** page, enter:
 - Name
 - **Description**, if desired.
- 3. In the **Permissions** section, select select a permission level **Full**, **Read-Write**, **Read-Only**, or **None** for each type:
 - a. Users



- Grant Full to enable role users to create and delete HQ user accounts.
- · Grant Read-Write to enable role users to edit HQ users accounts.

b. Roles

• If you select **Full**, which enables role users to create roles, HQ will ensure that the role's permission level to Users and Groups is at least **Read-Only**, because to create a role, you need to view users and groups.

c. Groups

- Grant Full to enable role users to delete groups created by others.
- Grant **Read-Write** to enable role users to modify groups created by others.
- Note that regardless of the permission level you select, any user can create groups, and as the owner
 of such groups, delete them.

d. Platforms

- If you select **Full**, which enables role users to delete platforms and their child resources, HQ will require that the role's permission level to Servers and Services is also **Full**.
- If you select Full or Read-Write, HQ will automatically checkmark the Can Fix/Ack Alerts? and Can Control? capabilities.
- If you select Read-Only, you have the option to grant alert management or resource control capabilities by clicking Can Fix/Ack Alerts? or Can Control? respectively.
- If you select None, you cannot grant alert management or resource control permissions.

e. Servers

- If you select **Full**, which enables role users to delete servers and child services, HQ will require that the role's permission level to Platforms is at least **Read-Write**, and its permission level to Services is **Full**.
- If you select Full or Read-Write, HQ will automatically checkmark the Can Fix/Ack Alerts? and Can Control? capabilities.
- If you select **Read-Only**, you have the option to grant alert management or resource control capabilities by clicking **Can Fix/Ack Alerts?** or **Can Control?** respectively.
- If you select None, you cannot grant alert management or resource control permissions.

f. Services

- If you select Full, HQ will require that the role's permission level to Servers is at least Read-Write.
- Grant at least Read-Only if you are going to grant the role Full permission to Applications.
- If you select Full or Read-Write, HQ will automatically checkmark the Can Fix/Ack Alerts? and Can Control? capabilities.
- If you select **Read-Only**, you have the option to grant alert management or resource control capabilities by clicking **Can Fix/Ack Alerts?** or **Can Control?** respectively.



• If you select None, you cannot grant alert management or resource control permissions.

g. Applications

- Grant Full if you want role users to be able to create and delete applications.
- Grant **Read-Write** if you want role users to be able to modify change applications created by others.

h. Escalations

- Grant Full if you want role users to be able to create and delete escalations groups
- Grant **Read-Write** if you want role users to be able to modify escalations.
- i. The role is saved, and the refreshed role page will have three new sections: "Assigned Users", "Assigned Groups", and "Alert Calendar".

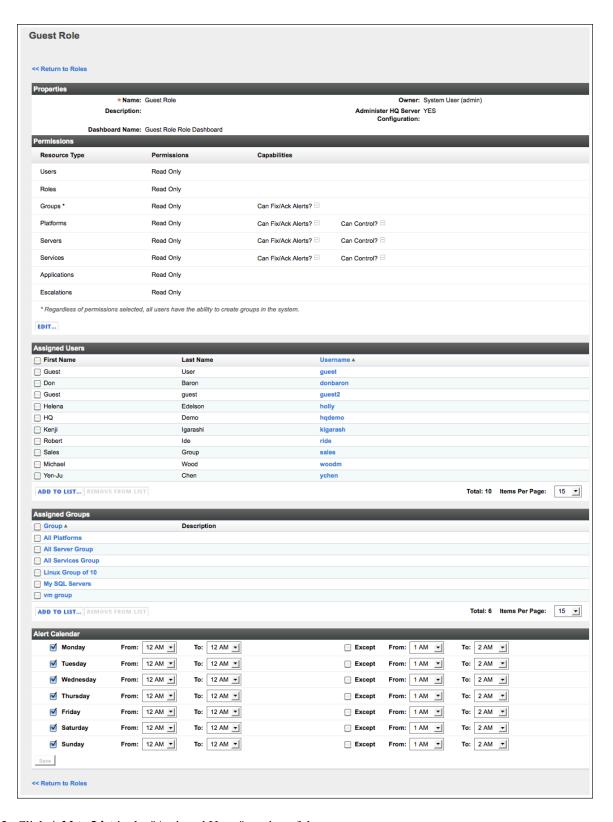
Proceed to Assign Users to a Role.

2.3.2. Assign Users to a Role

In vFabric Hyperic, each user you assign to a role can exercise the permissions defined for the role, on resources in the groups assigned to the role.

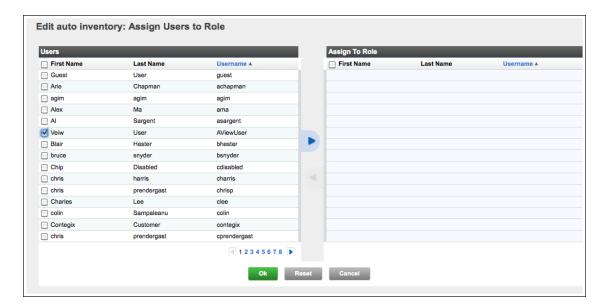
1. If you are not currently viewing the role to which you wish to assign users, navigate to the role.





- 2. Click **Add to List** in the "Assigned Users" section of the page.
 - The Assign Users to Role page appears.





- 3. On the "Users" panel on the left side page, checkmark each HQ user you wish to add to the role, and click the blue arrow to move the users to the "Assign To Role" panel.
- 4. Click **OK** when you are done adding users to the role.

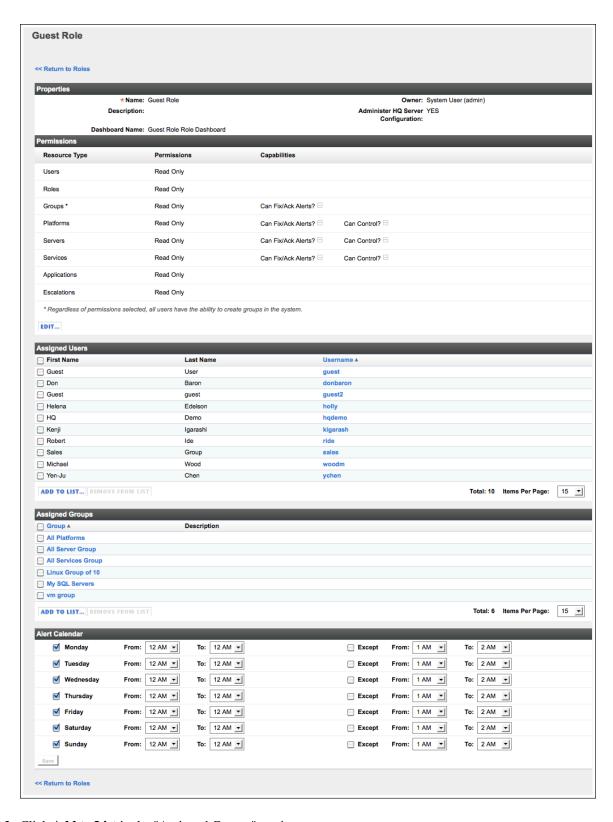
If you are creating a role purely for the purpose of role-based alert notification, skip to <u>Define Alert Calendar for Role</u>. Otherwise proceed to <u>Assign Groups to the Role</u>.

2.3.3. Assign Groups to a Role

In vFabric Hyperic, the groups of resources you assign to a role constitute the population of resources to which users with that role may exercise the permissions associated with the role. (For example, if the role's permission level to Platforms is **None**, role users will not have access to platforms in groups assigned to the role.

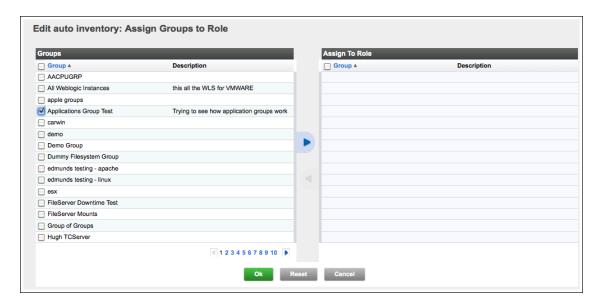
1. If you are not currently viewing the role to which you wish to assign groups, navigate to the role.





- 2. Click Add to List in the "Assigned Groups" section.
 - The Assign Groups to Role page appears.





- 3. On the "Groups" panel on the left side of the page, checkmark each resource group you wish to add to the role, and click the blue arrow to move the groups to the "Assign To Role" panel.
- 4. Click **OK** when you are done adding groups to the role.

Proceed to Define Alert Calendar, as desired.

2.3.4. Define Alert Calendar for Follow-the-Sun Role-Based Notifications

An alert calendar defines the availability calendar during which role users are available for alert notifcations. You should define an alert calendar if:

- · You are creating a role that will be a recipient of alert notifications, and
- The users assigned to the role users are available only during specific intervals only.

By default, a role's alert calendar settings specify that role users are available for notifications 24 hours a day, 7 days a week, with no exceptions. To define a narrower availability calendar:

- 1. For each day in the week,
 - a. Use the first set of **From** and **To** pull-downs to specify a start time and an end time that role users are availability for notifications.
 - b. If there is a period of time within the availability period specified in the previous step, during which role users should *not* receive notifications, click **Except**, and use the **From** and **To** pull-downs on the right to specify that period of time.
- 2. Click **Save** after defining the alert calendar.

You must define additional role or roles with complementary alert calendars to ensure that there is a role whose users are available during periods of time that the current role's alert calendar does not include.



2.3.5. Customize Role-Specific Dashboard

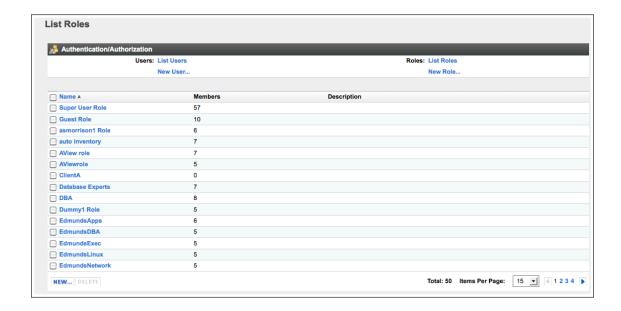
When you create a role, vFabric Hyperic creates a Dashboard with the same name as the role, which is HQ users that have been added to the role can select from the **Select a Dashboard** pull-down in the upper left corner of the HQ Dashboard.

As desired, you can add, remove, or reconfigure the portlets on the role dashboard to meet the needs of role users. For more information see "Role-Based Dashboards in vFabric Hyperic".



2.4. List Roles

- 1. Click **List Roles** on the **Administration** page.
 - The **List Roles** page appears.
 A screenshot of the **List Roles** page is shown below.



The **List Roles** page lists the following information for each role.

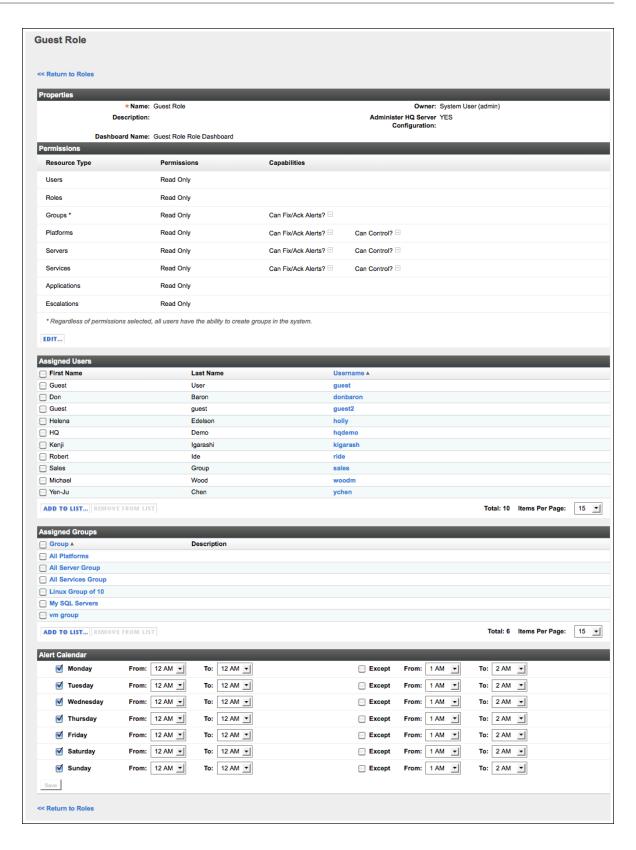
- Name Click a role name to view and edit the role.
- Number of Members
- Description

2.5. View a Role

- 1. List roles, following the instructions in List Roles.
- 2. Click the name of role you wish to view.

A screenshot of the RoleName page is shown below.







2.5.1. Properties Section

The **Properties** section contains this information:

- Name
- **Owner** The user that created the role.
- Description
- · Administer HQ Server Configuration
- · Dashboard Name

2.5.2. Permissions Section

The **Permissions** section displays the permission matrix for the role.

- None No access at all to instances of the type.
- **Read-Only** Allows role users to view instances of the type, but not create, edit, or delete them. For **Platforms**, **Servers**, **Services**, **Groups**, also enables:
 - **Read-Only** access to alert definitions for the inventory type.

A role with **Read-Only** permission level does **not** have permissions to enable/disable/fix/ack alerts or control resources - these capabilities must be explicitly granted.

- **Read-Write** Allows role users to view and edit instances of the type, but not create or delete them. For **Platforms**, **Servers**, **Services**, **Groups**, also gives:
 - Full access to alert definitions for the inventory type,
 - Permission to manage alerts (enable/disable, fix, acknowledge) for the inventory type.
 - Permission to perform supported control operations on resources of the inventory type.
- Full Allows role users to create, edit, delete, and view instance of the type. For Platforms, Servers, Services, Groups, also gives:
 - **Full** access to alert definitions for the inventory type.
 - Permission to manage alerts (enable/disable, fix, acknowledge) for the inventory type.
 - Permission to perform supported control operations on resources of the inventory type. Click Edit to modify
 the permission matrix.

2.5.3. Assigned Users

The **Assigned User** section lists the following information for each user assigned to the role:

- First Name
- Last Name
- UserName Click to view the user.



Click Add to List to add users to the role.

2.5.4. Assigned Groups

The **Assigned Groups** section lists the following information for each group assigned to the role:

- **Group** The name of the group. Click to view the group.
- Description

Click Add to List to add users to the role.

2.5.5. Alert Calendar

The **Alert Calendar** section defines the availability calendar during which role users are available for alert notifications.

Custom alerts calendars enable "follow the sun" alert notifications. To implement a follow the sun notification strategy, you create multiple roles with complementary alert calendars. You assign a user to the role whose alert calendar matches the user's availability.

By default, a role's alert calendar settings specify that role users are available for notifications 24 hours a day, 7 days a week, with no exceptions.

To define an availability calendar for a role:

- 1. For each day in the week,
 - a. Use the first set of **From** and **To** pull-downs to specify a start time and an end time that role users are availability for notifications.
 - b. If there is a period of time within the availability period specified in the previous step, during which role users should *not* receive notifications, click **Except**, and use the **From** and **To** pull-downs on the right to specify that period of time.
- 2. Click **Save** after defining the alert calendar.

You must define additional role or roles with complementary alert calendars to ensure that there is a role whose users are available during periods of time that the current role's alert calendar does not include.



2.6. Edit a Role

- 1. List roles, following the instructions in <u>List Roles</u>.
- 2. Click the name of role you wish to edit.
- 3. To make changes to:
 - Role permissions Click **Edit** in the **Permissions** section of the page. See <u>Define Role Permission Matrix</u> for instructions.
 - Which users are assigned to the role Click **Edit** in the **Assigned Users** section of the page. See <u>Assign Users to a Role</u> for instructions.
 - The alert calendar for role Follow the instructions in ee <u>Define Alert Calendar for Follow-the-Sun Role-Based Notifications.</u>