Neuron Inventory Manager

USER'S GUIDE

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HALCYON

MONITORING SOLUTIONS

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Halcyon delivers Infrastructure Management solutions that provide operational visibility, availability, and reliability for business critical services and their underlying infrastructure. Since 1994, numerous Fortune 100 and SMEs, spanning every major geography and sector, have adopted Halcyon solutions.
At Halcyon, we believe the health of the IT infrastructure is integral to the success of a business. Our clients rely on us for complete end-to-end monitoring solutions that are straightforward, easy to deploy and use, and cost-effective, coupled with a history of client service excellence.

Your Infrastructure is Our Business

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1 Preface

1.1 Purpose of the Document

The purpose of this document is to describe the *Neuron Inventory Manager* and how the end-users, managers, and administrators will use it.

1.2 Intended Audience

This guide is written for the following type of audience:

Table 1.2-1: Intended Audience

Role	Usage
End User	The User's Guide is intended for end users who use the product on a daily basis. This guide provides information on how to use the product for tasks such viewing information about specific assets and/or groups of assets.
Manager	The User's Guide provides information for managers who are responsible for preparing the product for use by end users. This will detail how to manage the Inventory assets by enabling/disabling monitoring/data collection and provisioning/deprovisioning Halcyon Neuron Agents.
Administrator	The User's Guide contains information for administrators in order to configure the product.

1.3 Related Documents

The Neuron Inventory Manager is one part of the Neuron Management Suite. For further information regarding the configuration, usage and administration of these products, please refer to the following documents.

These documents may be located in the doc folder of the solution distribution or on the website (www.halcyoninc.com/docs).

Table 1.3-1: Related Documents

Component Name	Related Documents
Neuron Management Suite	▪ Neuron Management Suite Installation Guide
Neuron Event Manager	▪ Neuron Event Manager Release Notes ▪ Neuron Event Manager User's Guide

Neuron Inventory Manager	▪ Neuron Inventory Manager Release Notes
Neuron Configuration Manager	▪ Neuron Configuration Manager User's Guide
Neuron Management Server	▪ Neuron Management Server User's Guide ▪ README.config

2 General Overview

Neuron Inventory Manager is a component of the Neuron Management Suite that allows for the viewing and management of specific and/or groups of assets. Through the *Neuron Inventory Manager*, Users will be able to view the status of assets as well as information about those assets, such as their operating system and version. Managers and Administrators will be able to configure credentials for assets, enable or disable monitoring of the assets as well as deploy Halcyon Neuron Agents to Linux and Solaris assets.

The *Neuron Inventory Manager* is accessed through the Inventory Tab of the *Neuron Management Portal* (please refer to the *Neuron Management Server* User's Guide for details about the Portal).

3 Inventory Tab

The Inventory Tab displays one or more tables that will show the various physical hosts, zones and Oracle VMs for SPARC (formerly known as LDOMs). For Non-Global Zones and Guest Domains, the tables will indicate their Global Zone and Control Domain if they have been discovered. Also viewable here is whether or not a Neuron Agent is installed on the given host.

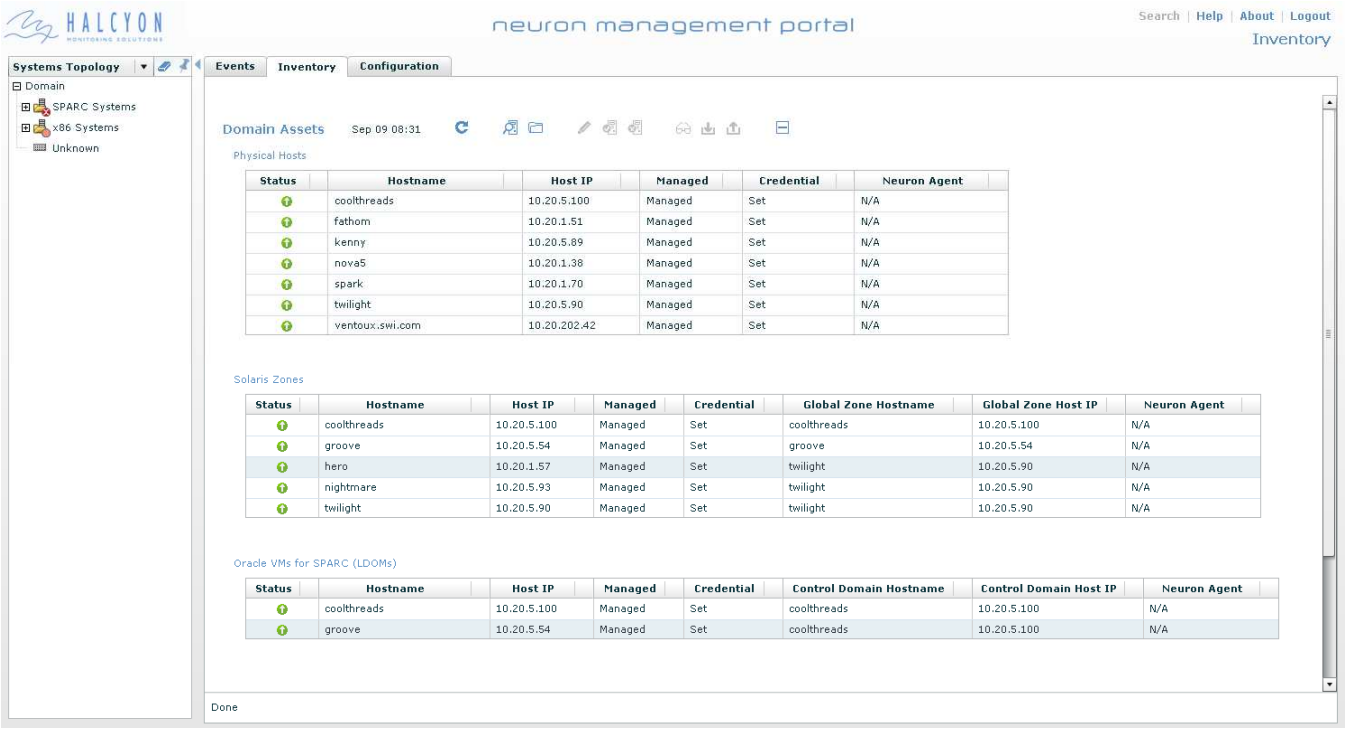

Figure 3-1.3-1: Inventory Tab

Tables can be shown or hidden by clicking either the main header (ie. "Domain Assets", "Solaris 10 Assets") or the down/up arrow button respectively.

To pull the most recent data from the Neuron database, click the refresh button in the tab header. This will update all the tables within that section. The timestamp between the header and refresh button tells you when the display was last updated from the Neuron database.

Figure 3-1.3-2: Refresh

When the *Neuron Inventory Manager* is pulling data from the Neuron database to populate the Inventory Tab tables, a "Loading" bar will appear at the bottom of the display indicating that Neuron is working. When all data has been retrieved and the display fully populated, "Done" will appear at the bottom of the display.

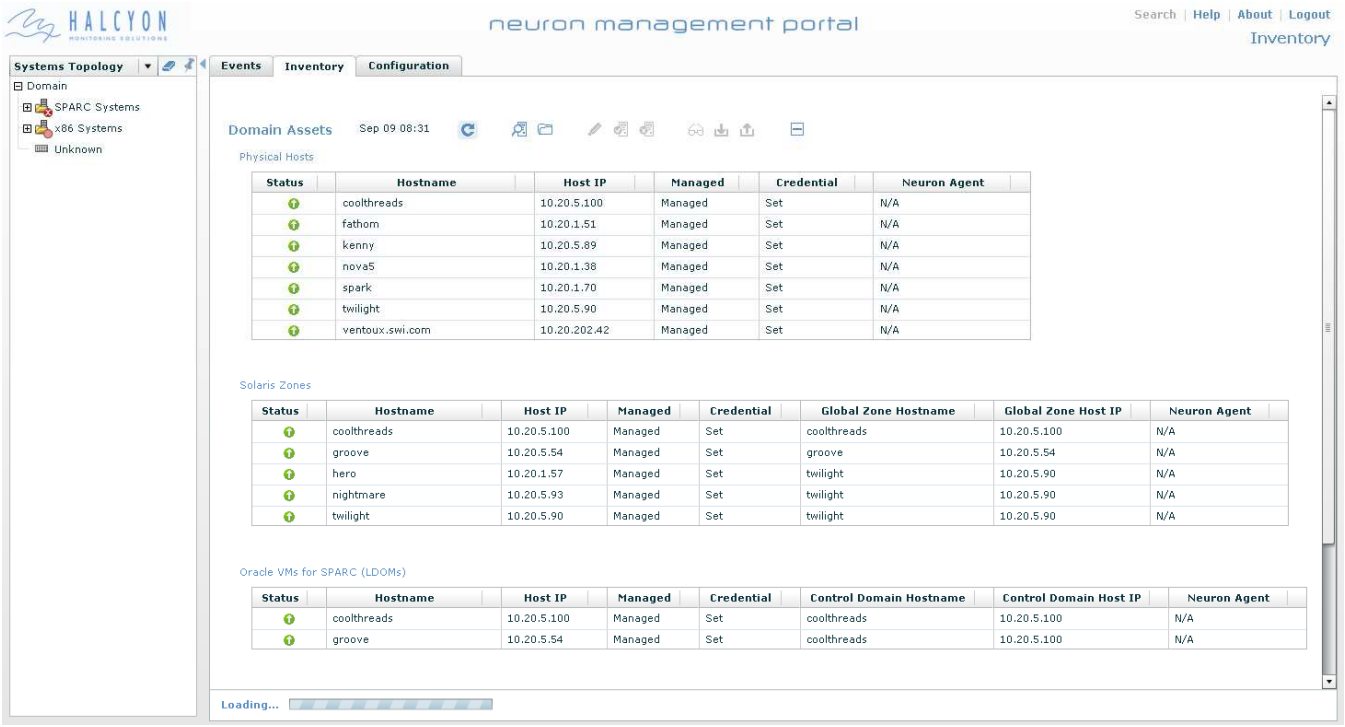

Figure 3-1.3-3: Loading bar appears when data is being retrieved

3.1 Inventory Tab and Topology

The Topology is the panel on the left side of the *Neuron Management Portal* UI. Different types of topologies can be selected from the panel's drop-down header where each topology shows different assets, and/or assets organized in different ways. For instance, the OS Topology shows all the operating systems grouped by OS type. For more details about the Topology, please refer to the *Neuron Event Manager* User's Guide.

Selecting an asset or group within the Topology will limit the scope of data that appears in the Inventory tables. For instance, selecting a Control Domain asset from the Systems Topology will show only those assets (zones, Guest Domains) related to that Control Domain.

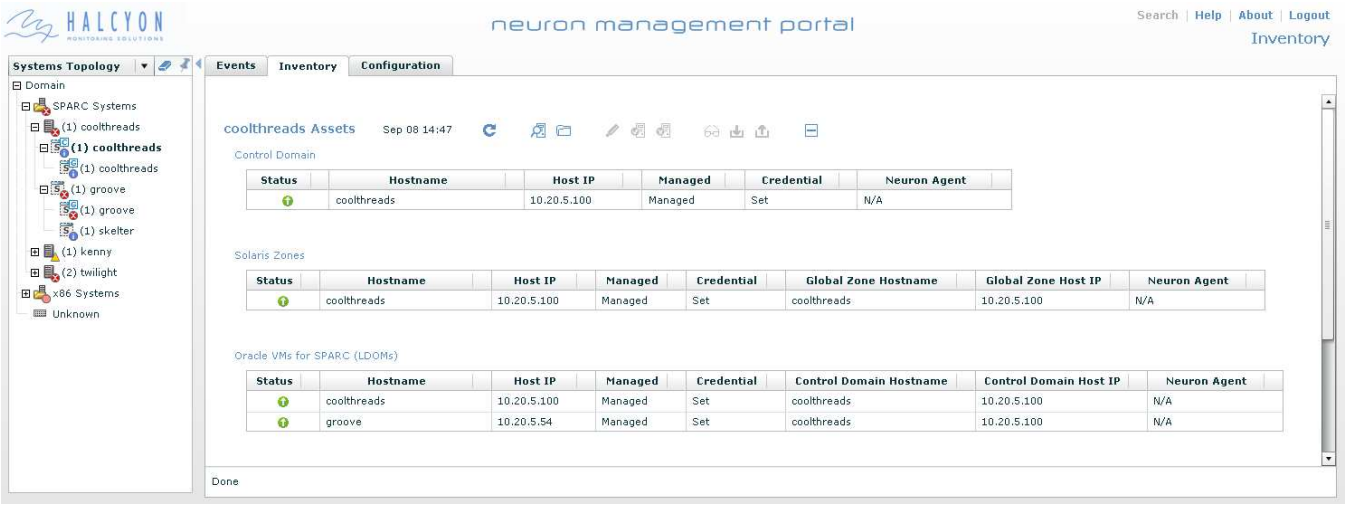

Figure 3.1-1: Inventory Tables reflect selected Control Domain

Different data may also appear in the tables depending on the selected Topology. For instance, when the OS Topology is selected, the tables will include the OS version that's installed.

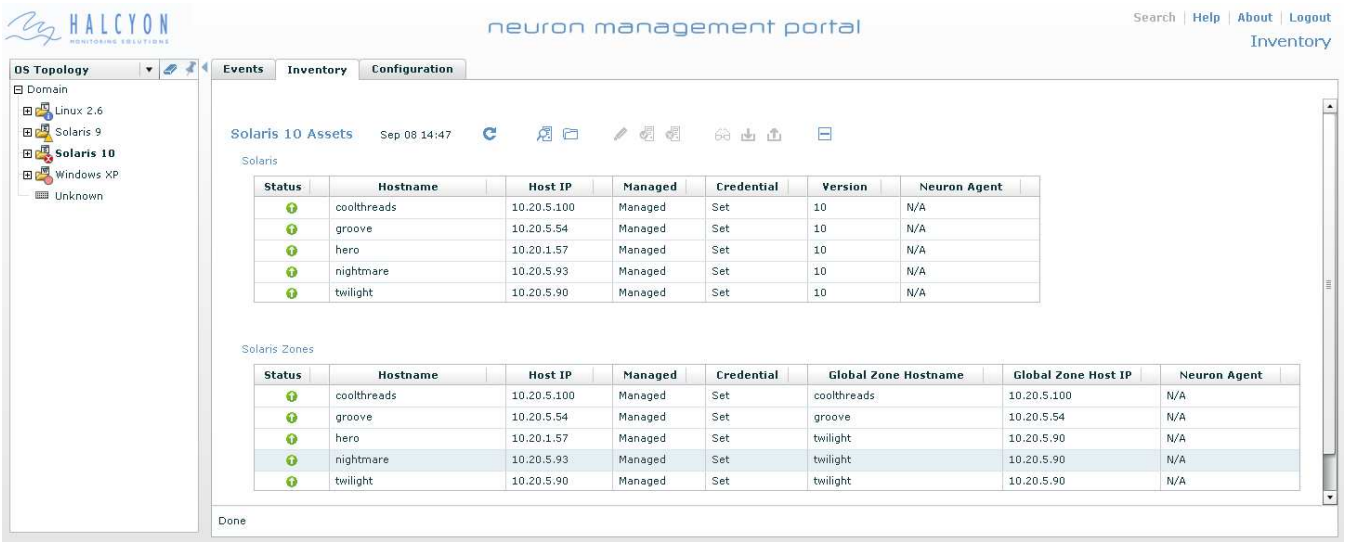

Figure 3.1-2: OS Version shown when OS Topology is selected

If the Topology Tab is not showing what you want or expect to see, you may need to clear the topology selection (click selected bold entry or click the clear button in the topology header) or change the visible topology.

3.2 EOSL Summary and Detail

When the Systems Topology is selected, the Inventory Tab will also show EOSL Summary and EOSL Detail sections. These sections may provide information about the End of Service Life for discovered systems. In order to appear, a system's model must match a model for which Neuron has the End of Service Life data.

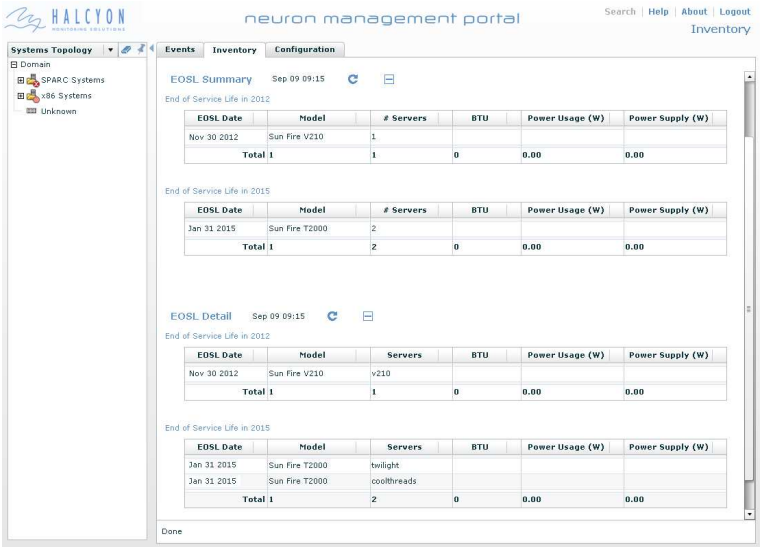

Figure 3.2-1: EOSL Data indicates End of Service Life for recognized systems

NOTE: EOSL data is only available if the Neuron Module for Generic Hardware is licensed.

4 Discovering Assets

Discovery is one of the most basic and important actions to be carried out by the *Neuron Management Suite* because it is the primary way that assets end up in Neuron.

You access the Discovery window by clicking on the Discovery Assets button in the *Neuron Inventory Manager*:

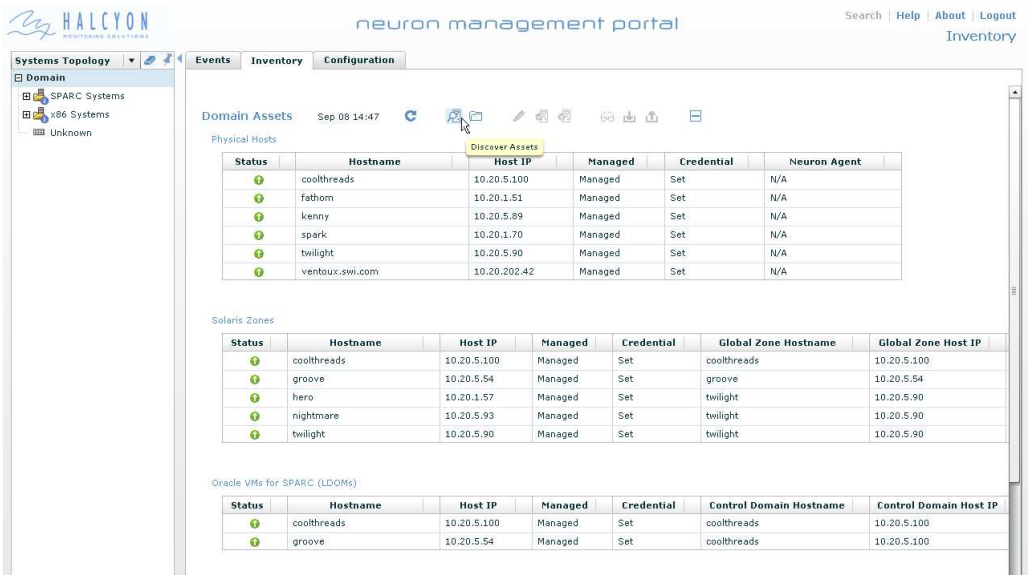

Figure 4-1: Inventory Tab Discovery Button

4.1 Discovery Window

The Discovery popup window is where you tell Neuron what to discover, and how to do that discovery.

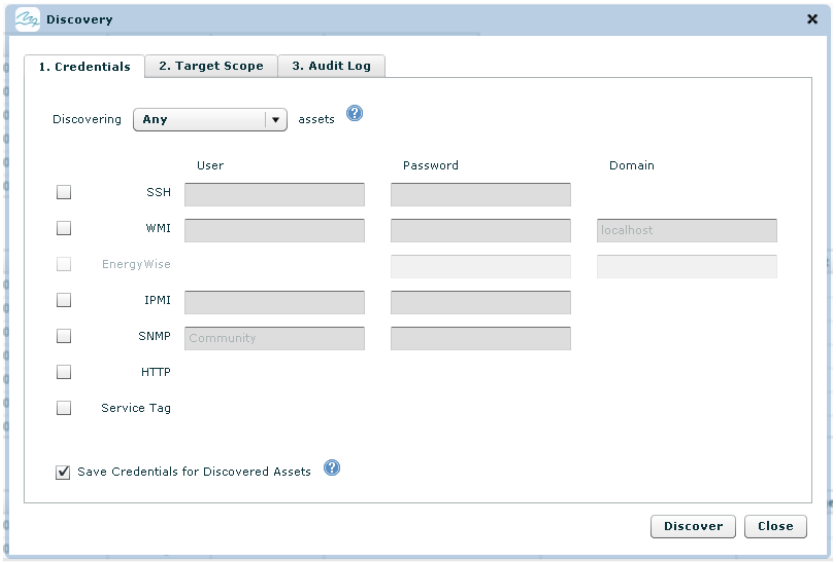

Figure 4.1-1: Discovery Window

Clicking on the Discover button will start the discovery while the Close button closes the Discovery window. Closing the Discovery window will NOT stop any discovery operations that have already been started; they will run to completion in the background.

4.1.1 Credentials

The first option within the Credentials tab is an asset type selector. This allows you to select a type of asset which will limit the displayed protocols to only those used to discover assets of the selected type. For instance, if you're interested in discovering Windows systems, you can select "Windows" and the protocols displayed will be restricted to those that can be used to discover Windows system (just WMI).

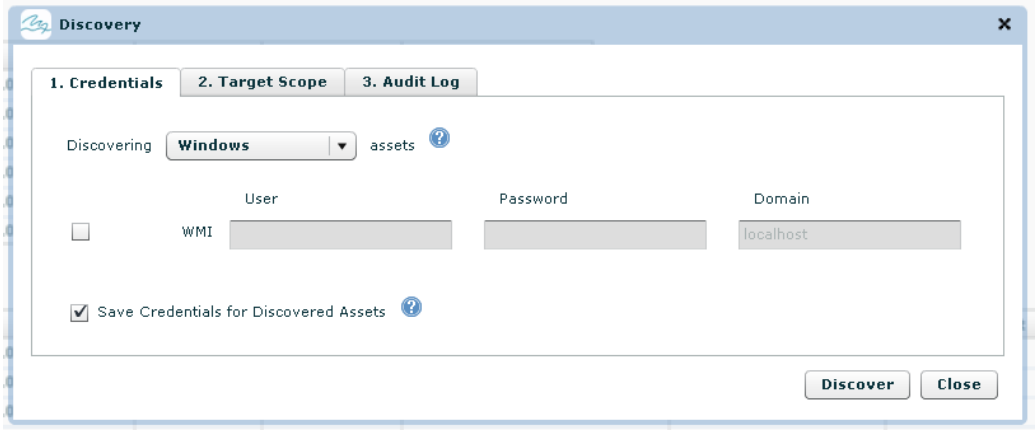

Figure 4.1-2: Search Protocols limited to Windows assets

Initially, the selection will be based on the asset you currently have selected in the topology panel. If you have an asset selected that is known to be one of these types, that type will be automatically selected and the protocols automatically limited. For instance, if you select an asset in the topology panel that Neuron knows to be a Solaris system, opening the Discovery window will automatically limit the protocols to those that can be used to discovery Solaris systems.

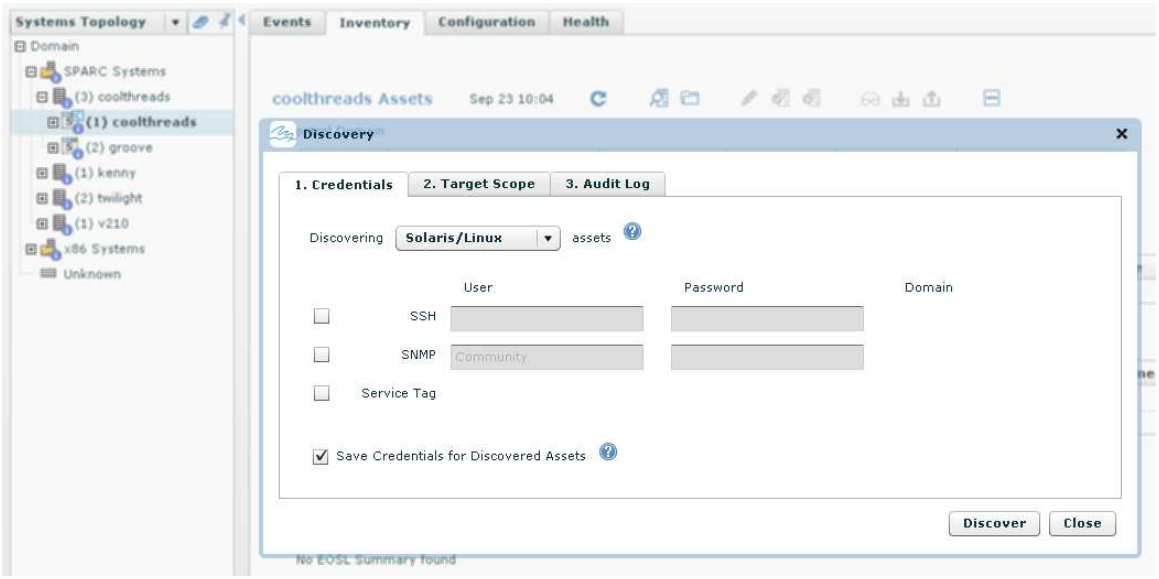

Figure 4.1-3: Solaris Topology selection limits Search Protocols

Be aware that there are some assets that Neuron may not fully know the type of, depending on how Neuron created those assets (via this type of discovery, passively from events from Neuron Agents, from Oracle Enterprise Manager Ops Center, etc).
If you select an asset that you know to be of a specific type (such as Solaris), and the selector continues to show "Any", try discovering that asset through this discovery, that should allow Neuron to determine everything it needs from it.

IMPORTANT: Making a selection here does NOT limit the assets that can be discovered. Selecting "Network Device" and using the SNMP protocol could still discover Solaris or Linux systems, depending on the Search Scope setup (see 4.1.2).
Furthermore, just because a type does not appear listed here does not mean that Neuron can't discovery it.

4.1.1.1 SSH

Neuron can use SSH to discovery most types of systems (including Solaris and Linux) as well as Halcyon Neuron Agents that are running on those systems. SSH is the only protocol that can be used to discover virtualization data (Solaris zones and Oracle VMs for SPARC (LDOMs); please refer to section 4.2). Both User and Password are required.

NOTE: If discovering Neuron Agents, the version can only be determined via SSH for 3.0.0 and later.

4.1.1.2 WMI

WMI is used to discover Microsoft Windows systems. The User and Password must be provided while the Domain is most commonly "localhost".

4.1.1.3 EnergyWise

Neuron can discover devices running Cisco EnergyWise. The EnergyWise secret must be provided as the Password, and the Domain must also be provided.

IMPORTANT: This will only work when Neuron is installed on Linux.

4.1.1.4 IPMI

IPMI discovery will attempt to discover Baseboard Management Controllers (BMC) such as a Sun ILOM.

4.1.1.5 SNMP

Neuron can discover Solaris and Linux hosts, as well as some Cisco and HP network devices using SNMP. The SNMP community string must be provided in the password field.

NOTE: If discovering Neuron Agents, the version can only be determined via SNMP for 3.4.0 and later.

4.1.1.6 HTTP

HTTP discovery is used to discover Halcyon Neuron Agents running on the hosts specified in the Search Scope.

NOTE: If discovering Neuron Agents, the version can only be determined via HTTP for 3.4.0 and later.

4.1.1.7 Service Tag

Hosts that implement the Sun Service Tag technology can be discovered by Neuron.

4.1.1.8 Save Credentials for Discovered Assets

If this is checked, newly discovered assets will have the credentials used to discover them tied to them. Be assured that all passwords stored within the Neuron database are encrypted.

NOTE: Credentials are required for data collection (such as configuration) to occur. Please refer to section 6.2.1.3.

4.1.2 Target Scope

You use the Target Scope to tell Neuron where on your network to look for assets (hosts) to try to discover.

NOTE: By default, Neuron will only attempt to discover at most 256 hosts. This can be changed by editing the "discovery.maxHosts" property of the "Operation Service". Please refer to README.config for more information.

4.1.2.1 IP Addresses

Enter one or more IP addresses or IP ranges that define the IP addresses of assets that should be discovered. Each entry must be separated by commas.

A comma separated list of IP addresses and/or IP address ranges:
10.20.1.1, 10.20.1.5, 10.20.1.100-10.20.1.200

4.1.2.2 Subnets

Enter one or more subnets (CIDR IP addresses) that define the IP addresses of assets that should be discovered. Each entry must be separated by commas.

A comma separated list of CIDR IP addresses:
10.20.1.0/24, 192.168.0.0/16

4.1.2.3 Hosts

Enter one or more host names that should be discovered. Each entry must be separated by commas.

A comma separated list of hostnames:
dbServer1, mail02

4.1.2.4 Manage Discovered Assets

If this is checked, then newly discovered assets will automatically be managed by Neuron. When an asset is managed by Neuron, operations to determine the availability of the asset and collect configuration data (such as Total Swap and CPU Shares) from the asset are run regularly. Refer to the *Neuron Configuration Manager* User's Guide for more about Configuration data.

NOTE: For data collection (such as configuration) to occur, the asset must be managed **and** have credentials. Please refer to sections 4.1.1.8 and 6.2.1.3.

4.1.3 Audit Log

The Audit log provides a listing of what was discovered and when. Assets that were not discovered will not appear in this list.

Only the discovery events of the current discovery operation are displayed. When you start another Discovery, any existing discovery events are removed from the table. The previous discovery will still run to completion.
If all discovery operations are unlicensed the following event will be created:

No assets can be discovered because all applicable discovery operations are unlicensed.

If no discovery operations could be found based on the selected protocols the following event will be created:

No assets can be discovered because no applicable discovery operations could be found.

IMPORTANT: If you try to discover an asset that has already been discovered, it will not appear in the Audit Log and no discovery event will be created.

4.2 Solaris Virtualization Discovery

The Halcyon Neuron Management Suite can be used to discover Solaris zones and Oracle VMs for SPARC (LDOMs), as well as their relationships. This means it can determine that zone X is a global zone on system Y, and that zone Z is a non-global zone on X. It can also determine that Q is a control domain that controls guest domains R and S. These relationships will appear in the Systems Topology on the left side of the screen.

Refer to the *Neuron Event Manager* User's Guide for more information about the topologies.

In order to discover zones and Oracle VMs for SPARC (LDOMs), there are a few requirements that must be met during the discovery:

4.2.1 SSH Protocol

The data required to do zone and Oracle VM for SPARC (LDOM) discovery is only available via SSH commands, so this protocol must be used. If another protocol is used, the assets will be discovered, but no virtualization information about those assets will be retrieved.

4.2.2 Privileged User

Virtualization discovery must not only run using the SSH protocol, but it must run using an SSH user with privileges to run the commands and get the data required. Halcyon recommends using the root user, or a user with root privilege. The commands that are run and data that is retrieved are as follows:

- ldm list
  - This command is run on control domains to list all guest domains that it controls.

- ifconfig –a
  - This command is run on all domains and zones to determine the MAC addresses it has. The MAC address is reported as "ether" in the command output.

If the SSH user being used for discovery cannot run or return the above data, Solaris zones and Oracle VMs for SPARC (LDOMs) will not be completely discovered.

If discovery was run using a different protocol, or if it was carried out using an SSH user that did not have enough privilege and you would like to properly discover the virtualization data and relationships, please re-run the discovery using SSH and an appropriately privileged SSH user. This re-discovery should be carried out against all associated virtualization zones and Oracle VMs for SPARC (LDOMs), even if they appear to have been properly discovered.

All related assets must be "re-discovered" because while the Topology may properly show global zone X, if it was discovered with an un-privileged user there could be background data that was not retrieved that could affect determining virtualization relationships. Also, it is during the discovery that virtualization relationships are determined and created.

4.3 Discovery is Restricted (Max Hosts)

Discovery is restricted by the OperationService's "discovery.maxHosts" configuration property. This property specifies how many hosts Neuron can attempt to discovery at one time. If you attempt to discover more than this limit at once, a warning will appear:

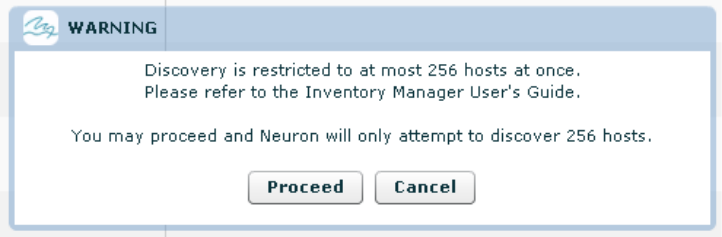

Figure 4.3-1: Prompt when trying to discovery too many hosts at once

Clicking Proceed will tell Neuron to attempt to discover at most the maximum number of hosts. Cancel will abort the discovery.

4.3.1 Changing discovery.maxHosts

First go to the Server Configuration tab within the Neuron Management Portal (please refer to "Accessing Server Configuration Page" in README.config for instructions on accessing this tab).

Now select the OperationService entry and click Edit in the Actions panel to the right. You will need to be in the Admins group in order to edit configuration properties. Refer to the *Neuron Management Server* User's Guide for more details about Users and Groups.

Update the discovery.maxHosts value and Apply the changes.

4.4 Discover Assets

To run a discovery, open the Discovery Window by clicking the Discover Assets button in the Inventory Tab and fill in the Credentials and Target Scope as outlined in sections 4.1.1 and 4.1.2.

You must select at least one Search Protocol from the "Protocol" tab and enter at least one host/ip in the "Scope" tab.

Once all desired parameters have been entered, click on the "Discover" button at the bottom of the window. A discovery request will be sent to the server which then performs the specified discovery operations (such as SSH, WMI and HTTP).
You will automatically be taken to the Log tab where you can watch the Audit Log to see what gets discovered.

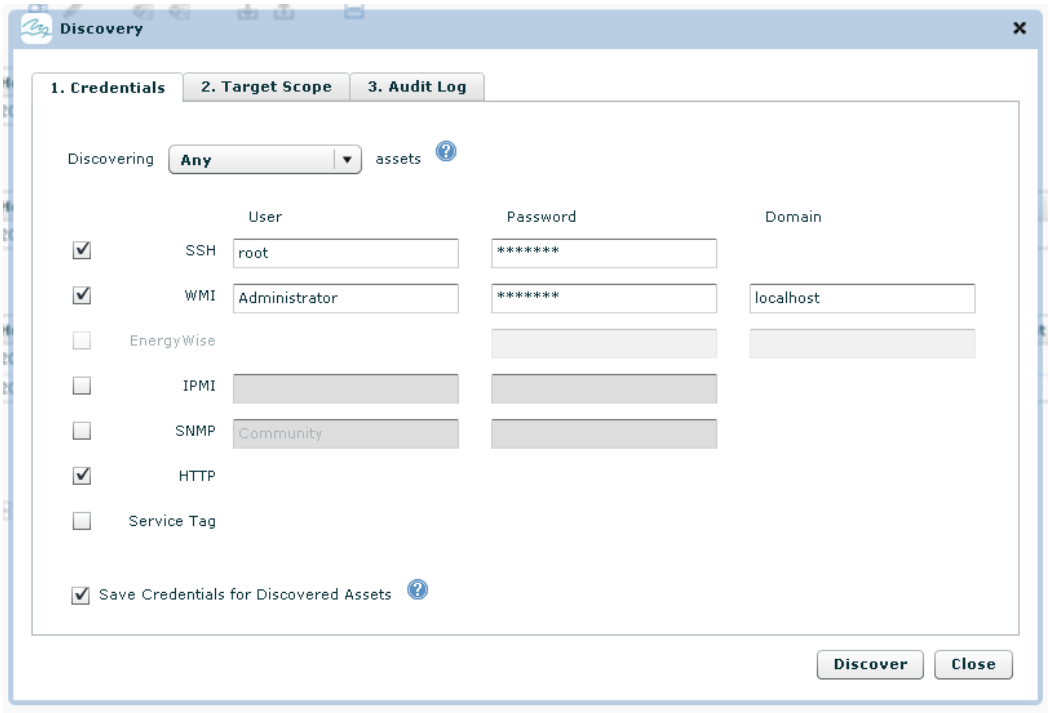

Figure 4.4-1: First, select and specify one or more credentials for discovery

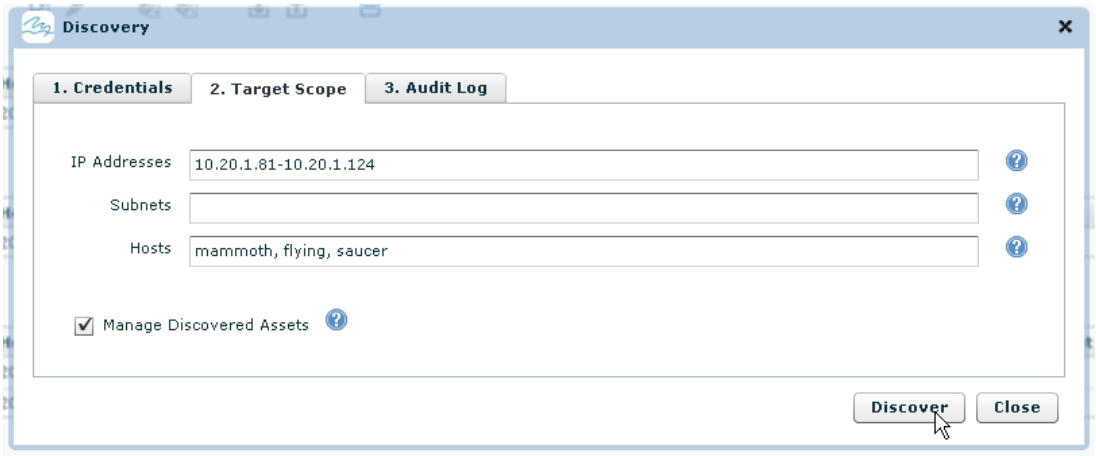

Figure 4.4-2: Second, specify the scope and click Discover

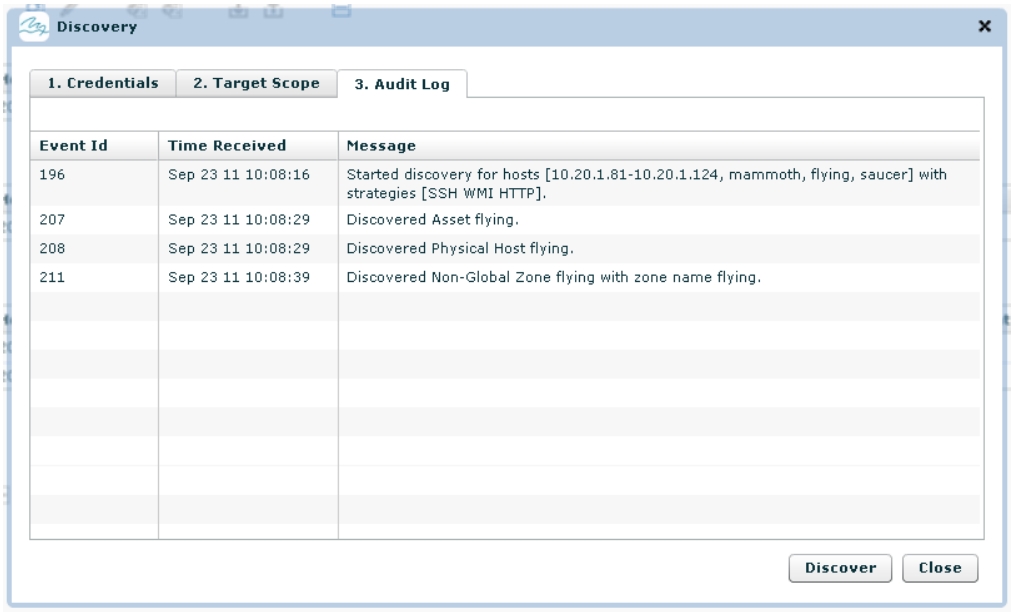

Figure 4.4-3: Finally, watch the log to see what is discovered (or Close the window)

You can close the Discovery Window at any time after submitting the discovery and it will continue to run in the background.

4.4.1 Discovery and Module Licensing

While modules do not need to be enabled in order to perform discovery, they do need to be licensed. For instance, if the Solaris Virtualization Module is not licensed, then no virtualization data will be determined for assets during discovery.

By default all modules come with a 14-day trial license.

5 Grouping Assets (Logical Groups)

Logical Groups are a way for each user to customize the grouping of assets however they want. For instance, you could create a Logical Group that contains all your Web Servers.

You can then access you Logical Groups via the Logical Group Topology in the left panel of the Neuron Management Portal and use it to filter events in the event viewer (see *Neuron Event Manager* User's Guide) or display and manage those assets in the Inventory tab.

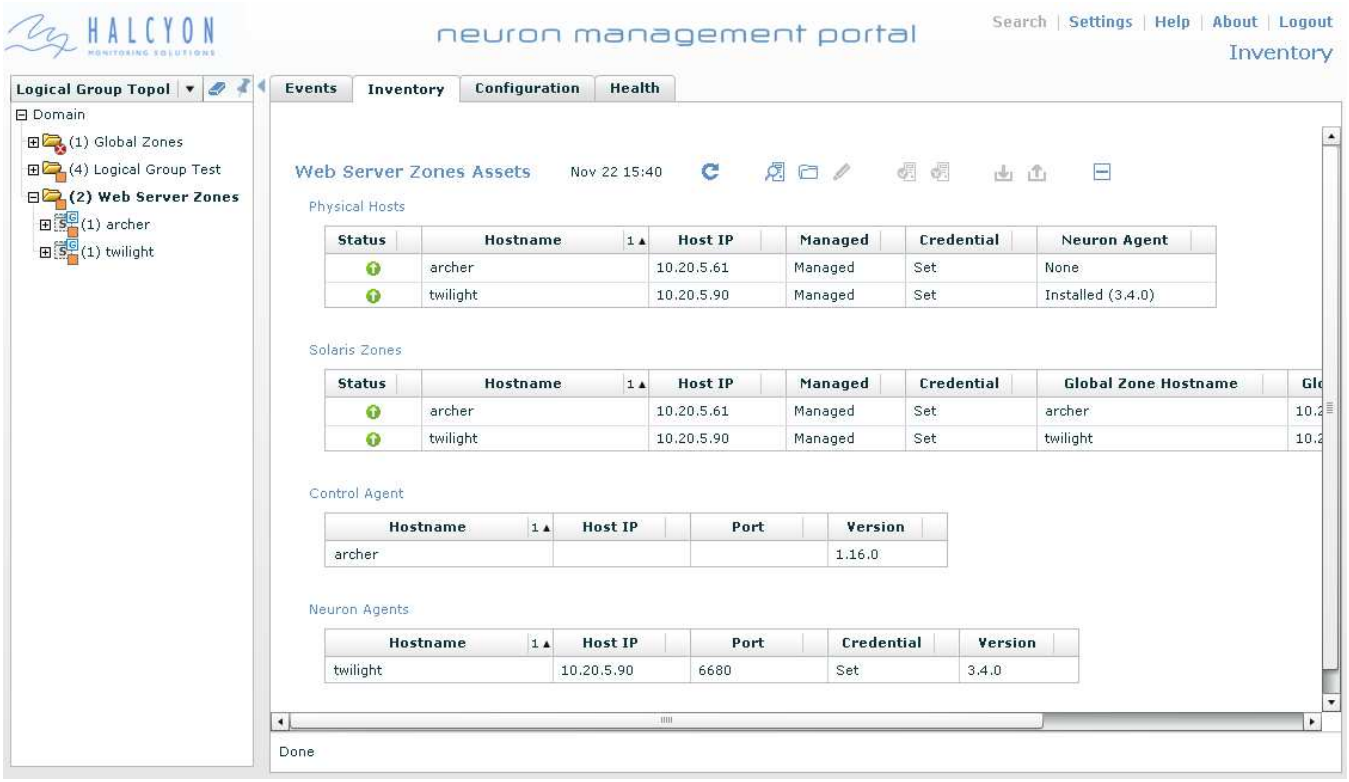

Figure 5-1: Manage just your Web Servers via a Logical Group

Logical Groups are managed via the Logical Group Manager that is accessible from the Inventory Tab (click).

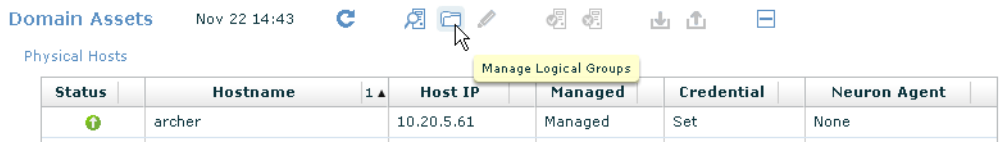

Figure 5-2: Open Logical Group Manager

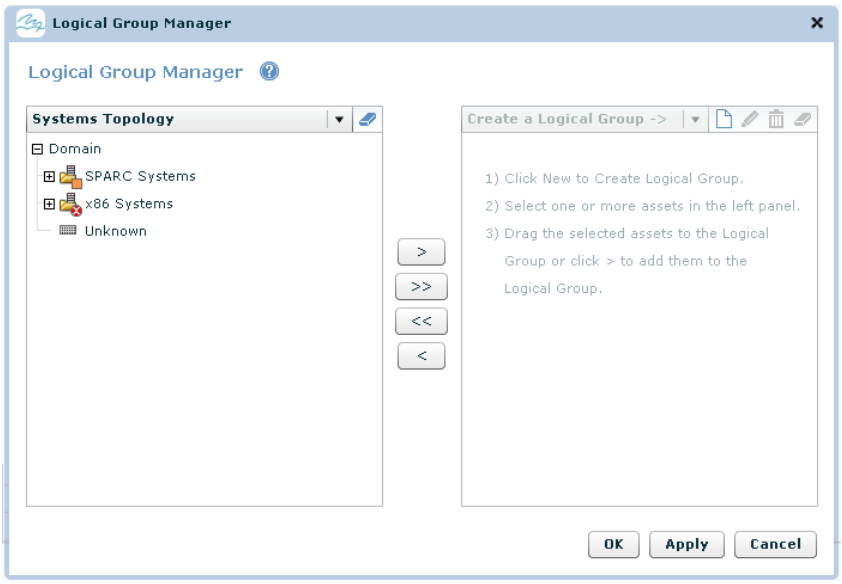

Figure 4.45-3: Logical Group Manager

Through the Logical Group Manager you will be able to create and delete Logical Groups, as well as edit details and add and remove assets to and from the groups.

The left panel of the Logical Group Manager displays the Neuron Topologies and the assets that are in each topology. The right panel displays the Logical Groups and the assets that are in each group. You can change which Logical Group is displayed on the right by selecting the group from the drop-down selector at the top of the panel.

By default there are no Logical Groups, so you will need to create one.

5.1 Create/Delete Logical Groups

To create a Logical Group, click the Create icon ( ) and then enter the Logical Group details in the window that opens. Clicking OK will create the group and take you back to the Logical Group Manager where your new Logical Group will appear in the right panel (Apply will create the group, but you will not be returned to the Logical Group Manager).

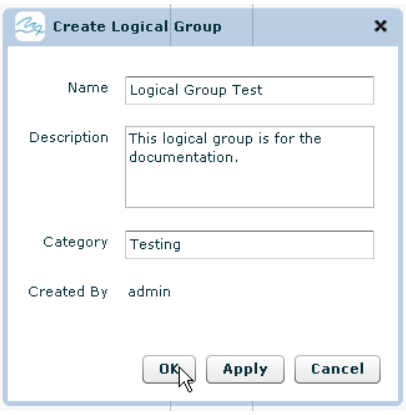

Figure 5.1-1: Create Logical Group Window

To delete a Logical Group, select the Logical Group you want to delete from the drop-down at the top of the right panel and then click the Delete icon ( ). The group will be deleted as soon as you confirm you want to delete it. Deleting a Logical Group will have no impact on the assets that were in that group; they will remain in any other groups they were added to and will remain in the topologies they appeared in before.

5.2 Managing Logical Group Assets

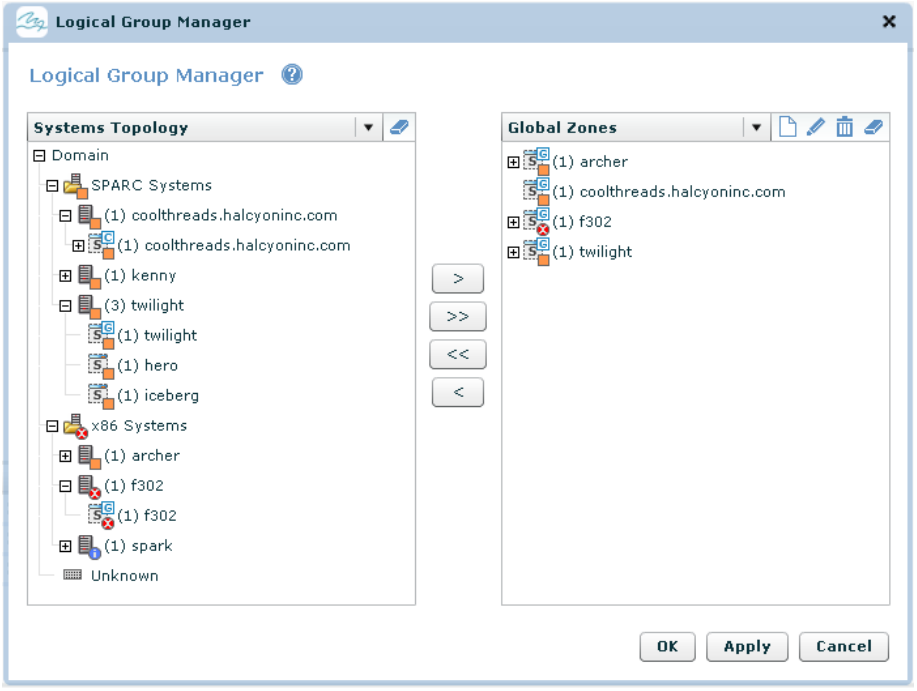

Figure 5.2-1: Logical Group with Global Zones added from Systems Topology

5.2.1 Add Assets to Logical Group

To add assets to a Logical Group, simply select the assets from the left panel and drag them into the Logical Group in the right panel. You could also click > to add the selected assets to the group, or click >> to add all assets from the selected topology to the selected group.

When you add to a Logical Group an asset that has children, those children will automatically be added along with that asset.

5.2.2 Remove Assets from Logical Group

To remove assets from a Logical Group, simply select the assets from the left panel and drag them into the right panel. You could also click < to remove the selected assets from the group, or click << to remove all assets from the selected group.

If an asset with children was added to a Logical Group, you will not be able to remove individual children; they are part of the asset. If you would like the children of any asset in a Logical Group, they can be added separately.

5.2.3 Save Logical Group Changes

When you add assets to or remove assets from a Logical Group, those changes will only be saved when you click OK or Apply. If you click Apply, you will remain where you are in the Logical Group Manager, while clicking OK will return you to the Inventory Tab.

6 Managing Assets

When an asset is managed by Neuron, we regularly run operations to determine the availability of the asset and collect configuration data (such as Total Swap and CPU Shares) from the asset. Refer to the *Neuron Configuration Manager* User's Guide for more about Configuration data.

For data collection (such as configuration) to occur, the asset must be managed (6.1 and 6.2.1.2) and have credentials (6.2.1.3).

6.1 Manage/Unmanage Assets

Assets can be managed and unmanaged from the Inventory Tab by selecting one or more in the Inventory tables and clicking either the Manage or Unmanage buttons in the Inventory Tab header.

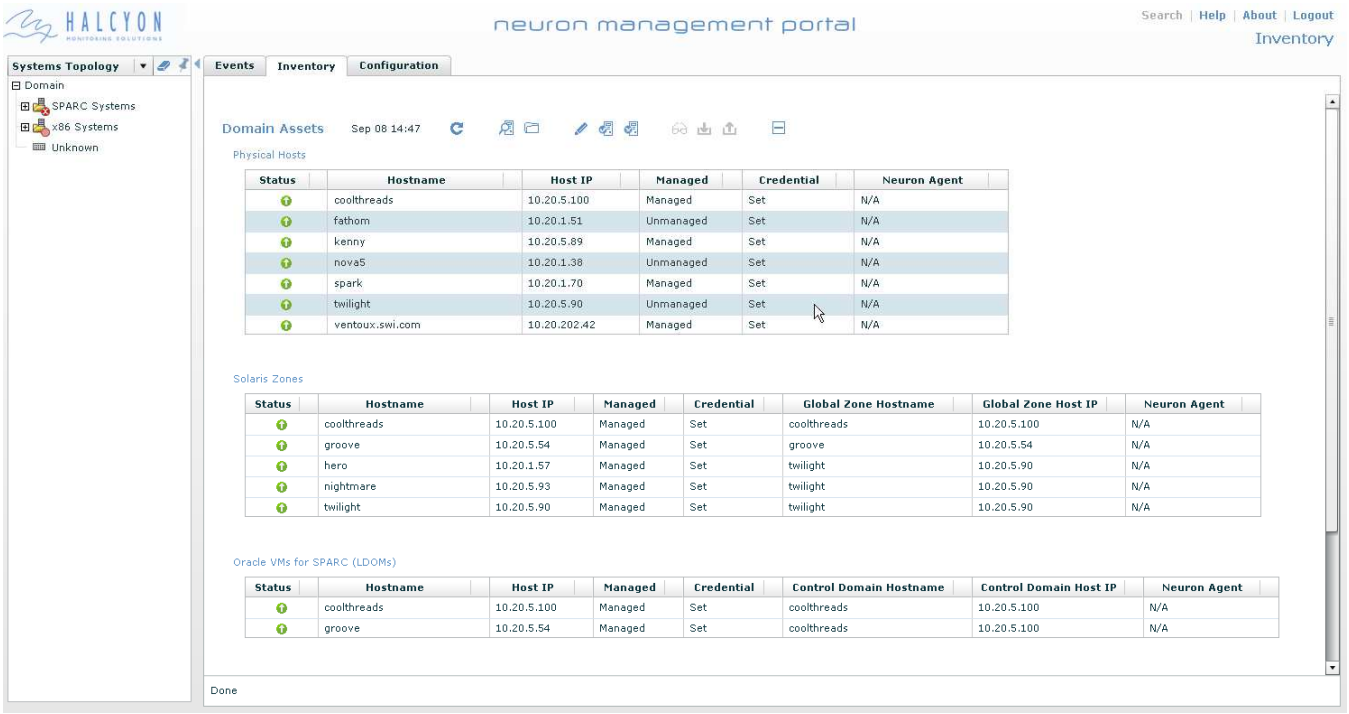

Figure 6.1-1: Select assets to Manage

Figure 6.1-2: Manage and Unmanage buttons

You can select assets from multiple tables at the same time.
To select multiple assets in the same table, use Ctrl-Click.

6.2 Edit Asset

Assets can be edited from the Inventory Tab by selecting one or more in the Inventory tables and clicking the Edit Assets button in the Inventory Tab header.

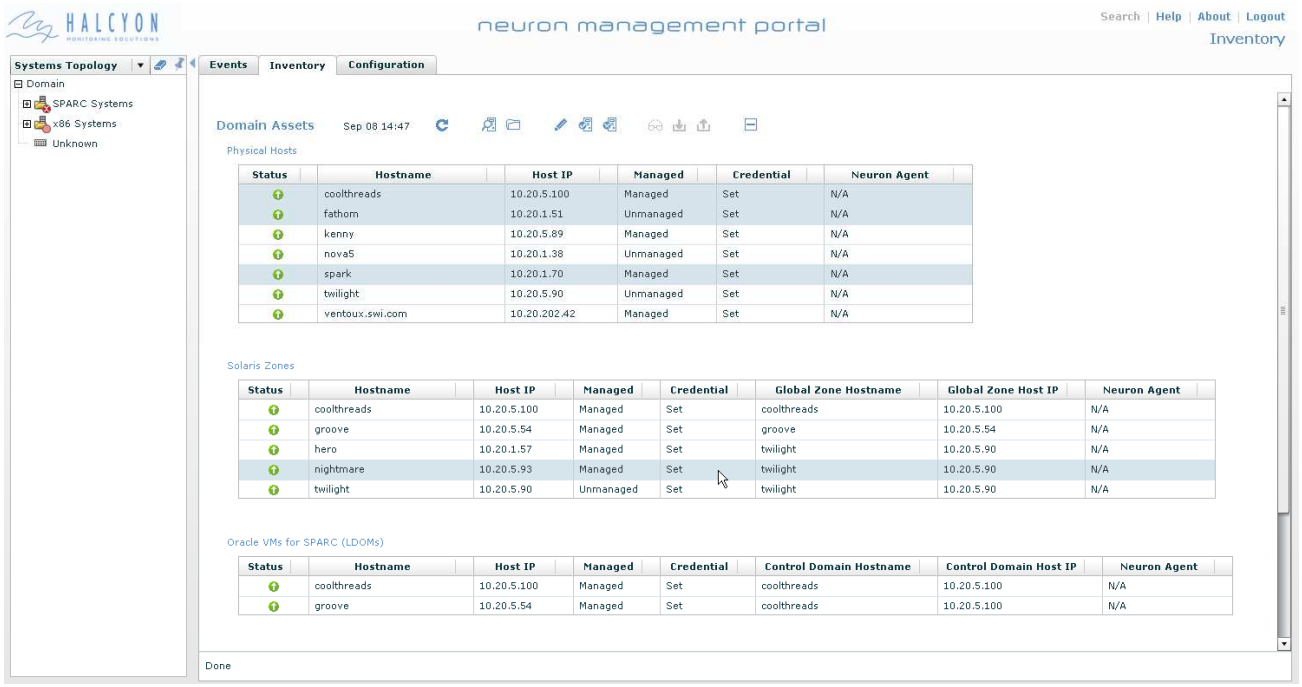

Figure 6.2-1: Select assets to Edit

Figure 6.2-2: Edit Assets Button

You can select assets from multiple tables at the same time.
To select multiple assets in the same table, use Ctrl-Click.

Clicking the Edit Assets button will launch the Asset Editor Window.

6.2.1 Asset Editor Window

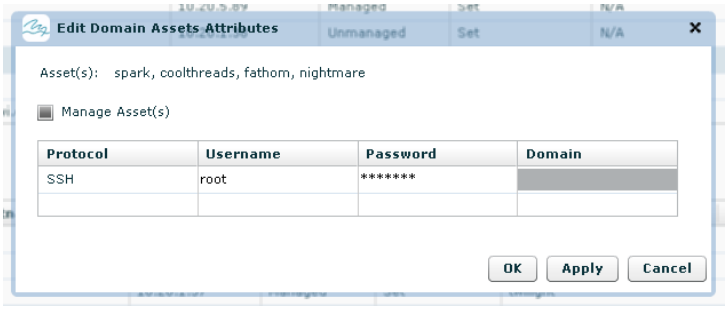

Figure 6.2-3: Asset Editor Window

6.2.1.1 Asset(s)

A list of the assets that were selected in the Inventory tables and will now be edited appears here.

6.2.1.2 Manage Asset(s)

The check-box can be used to manage or unmanage all assets being edited. When OK or Apply are clicked all assets will be managed or unmanaged depending on whether the check-box is respectively checked or not.

If the check-box initially appears filled with gray, then one or more of the assets being edited are managed and one or more are unmanaged. Leaving the box as is will not trigger any changes.

NOTE: No changes will be saved until OK or Apply are clicked.

6.2.1.3 Edit Asset Credentials

The table that appears in the Asset Editor displays all credentials that Neuron associates to the assets being edited. For instance, if you select a Solaris system, you will see a row in the table for an SSH credential, while selecting a Windows system will show a row for a WMI credential.

You are able to edit the Username, Password and Domain fields when appropriate for the credential. Any changes that are made will be applied to the appropriate assets when OK or Apply is clicked.

NOTE: Credentials will only be applied to the appropriate assets. If both Windows and Solaris systems are selected and both SSH and WMI appear in the credentials table, saving credentials will save the SSH credential to the Solaris systems and the WMI credential to the Windows systems.

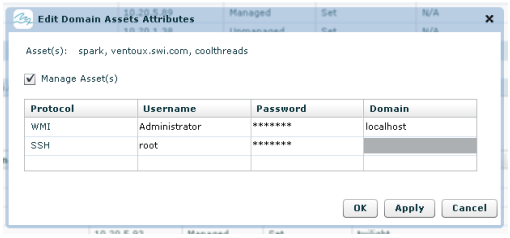

Figure 6.2-4: Asset Editor with multiple credentials

Varied Credentials

If one or more of the selected assets have the same type of credential (such as SSH) but with different values for Username, Password or Domain, the Asset Editor will display "<Varies>" in that field. If left unchanged, then nothing will be changed on OK or Apply. If changed, then the change will be applied to all appropriate assets (assets that have that particular credential).

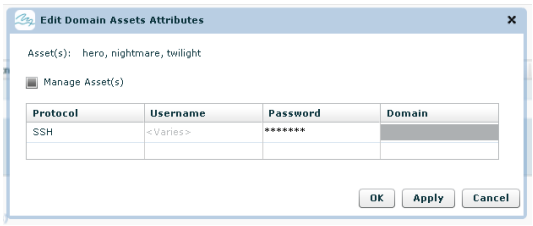

Figure 6.2-5: Asset Editor with varied Username

6.3 Edit, Manage, Unmanage Buttons are Disabled

If the Edit Assets, Manage and Unmanage buttons are disabled, a tooltip will appear when you hover over the button to indicate why it is disabled. One of the following will be the case:

- You do not have at least one asset selected in any of the Inventory tables. Select at least one asset.

Figure 6.3-1: Tooltip indicating you must select an asset

- You are not in the "Managers" or "Admins" user group; they are the only ones allowed to Edit, Manage or Unmanage assets. Refer to the *Neuron Management Server* User's Guide for more details about Users and Groups.

Figure 6.3-2: Tooltip indicating you must be in a different user group

- You have the Grid Engine Topology selected. You can only edit assets from non-Grid Engine topologies such as the Systems Topology and OS Topology. Refer to README.EventViewer for more information about the topologies.

Figure 6.3-3: Tooltip indicating you need to switch topologies

6.4 Provision/Deprovision Neuron Agents

Halcyon Neuron Agents can be provisioned/deprovisioned to/from Linux and Solaris hosts via the Inventory Tab when the OS Topology is selected. You must select the OS Topology in order to provision/deprovision agents from the Inventory Tab. Please refer to README.EventViewer for more information on the topology.

To Provision/Deprovision Neuron Agents:

- Select "OS Topology" from the topology panel's (left panel) drop-down header.
- Select one or more entries in any of the Linux and Solaris tables ("Linux", "Solaris", "Solaris Zones") that appear on the Inventory Tab with the OS Topology selected. Use Ctrl-Click to select or deselect multiple rows.

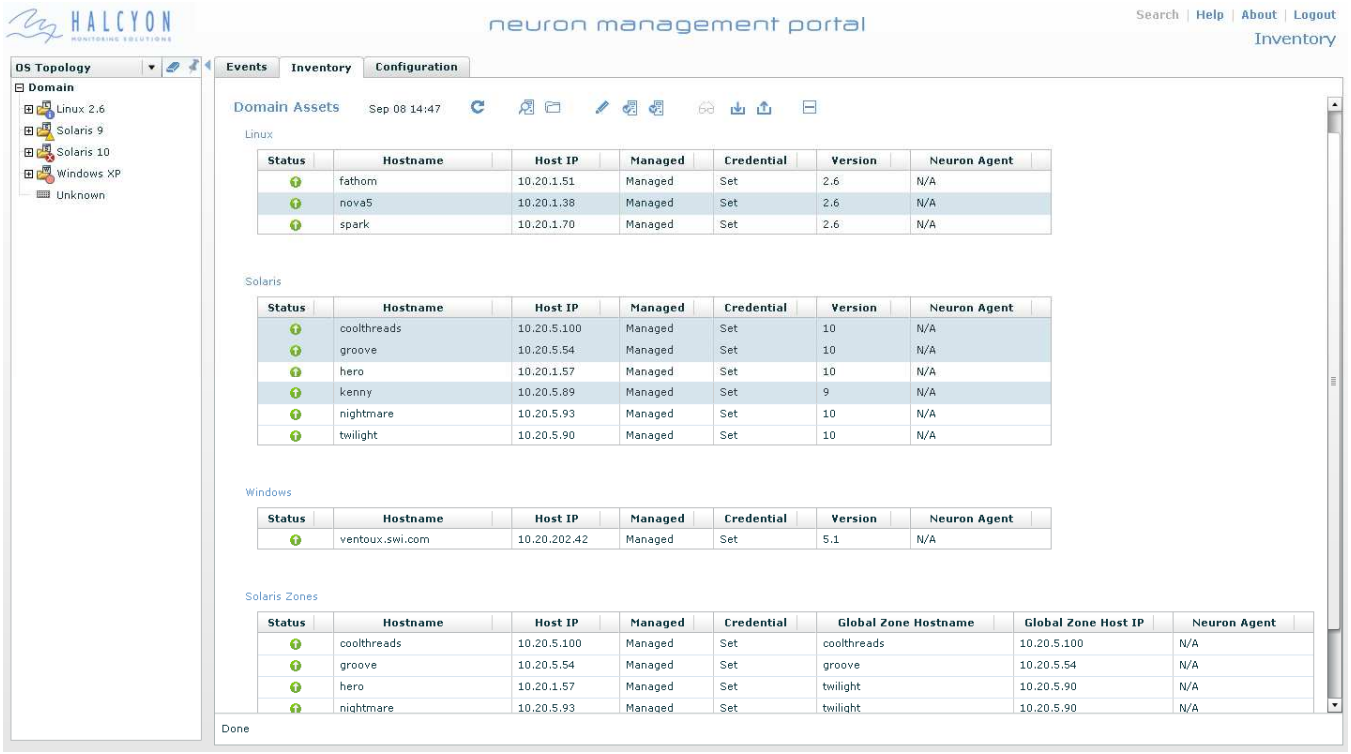

Figure 6.4-1: With OS Topology, select Linux and Solaris assets

- With Linux and/or Solaris assets selected, click one of the Provision or Deprovision buttons in the Tab header.

Figure 6.4-2: Provision and Deprovision buttons

- In the dialog box that appears, enter the root password for the selected hosts and click the "Provision" or "Deprovision" button to kick off the action.

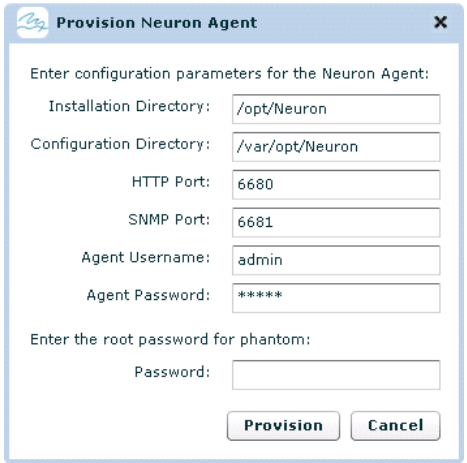

Figure 6.4-3: Dialog for provisioning Neuron Agent

- When provisioning Neuron Agents the following fields can be modified from the provided default values:
    - Installation Directory: This is the location where the Neuron Agent will be installed. This is also called the BASEDIR. Field is used only when provisioning Neuron Agent for Solaris.
    - Configuration Directory: This is the location where run-time files of the Neuron Agent will be installed. This is also called the LOCALDIR. Field is used only when provisioning Neuron Agent for Solaris.
    - HTTP Port: The port on which the Neuron Agent listens for incoming HTTP connections. This is also used for connecting to the user-interface of the Neuron Agent.
    - SNMP Port: The port on which the Neuron Agent listens for incoming SNMP communication.
    - Agent Username: The username for connecting to the user-interface of the Neuron Agent.
    - Agent Password: The password for connecting to the user-interface of the Neuron Agent.

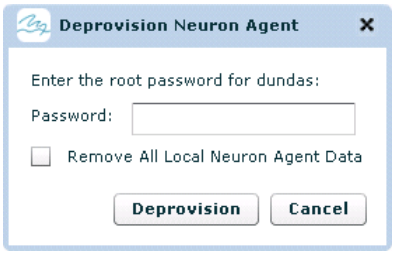

Figure 6.4-4: Dialog for deprovisioning Neuron Agent

- When deprovisioning Neuron Agents the following option can be specified:
    - Remove All Local Neuron Agent Data: When this option is enabled the configuration directory of the Neuron Agent will be removed completely from its host system.

During provisioning, the "Neuron Agent" field will show "Provisioning" when the table is refreshed. During deprovisioning, the "Neuron Agent" field will show "Deprovisioning" when the table is refreshed.

After the provisioning or deprovisioning is complete, the field will show either "Installed" to indicate an agent is installed on the host, or "None" to indicate no agent has been discovered as installed on the host.
Any errors that occur during these provisioning operations will be raised as events that can be seen in the Event Viewer.

6.4.1 Provision/Deprovision Buttons are disabled

If the Provision/Deprovision buttons are disabled, then one or both of the following is the case:

- You do not have the OS Topology open. See section 6.4 and/or refer to "Topology Panel" in the README.EventViewer for more details.
- You do not have a Linux or Solaris host selected in one of the Inventory tables. Select one or more rows in a table with a header like "Linux", "Solaris" or "Solaris Zones".

6.5 Setting Neuron Agent Credentials

When an asset is selected in the Neuron Topology and the Events tab is displayed the View Neuron Agent and Edit Neuron Agent buttons are enabled (see README.EventViewer for more details). In order to view the Neuron Agent's user-interface valid credentials are required. If the Neuron Agent has been provisioned using the Inventory Manager (see section 6.4) then the provided username and password will already be set in the Neuron Management Suite database. If the Neuron Agent was installed manually or if the username or password have been changed directly on the Neuron Agent then you will need to set or update those credentials in the Neuron Management Suite database.

To set or update Neuron Agent credentials:

- Select "Neuron Topology" from the topology panel's (left panel) drop-down header.
- Select one or more entries in the "Neuron Agents" table that appears on the Inventory Tab with the Neuron Topology selected. Use Ctrl-Click to select or deselect multiple rows.
- Click the "Edit Assets" button and set or update the username and password for the NEURON_AGENT protocol. Any changes that are made will be applied to the appropriate Neuron Agent assets when OK or Apply is clicked.
- See section 6.2 for more information on how to edit assets.

6.5.1 Edit Assets Button is disabled

If the Edit Assets button is disabled, then one or both of the following is the case:

- You do not have a Neuron Agent selected in the Neuron Agents table. Select one or more rows in the table with header "Neuron Agents".
- You have a Control Agent selected in the Control Agent table. Deselect the Control Agent using Ctrl-Click.
- You have one or more Neuron Agents and one or more assets of a different type selected. Deselect the non-Neuron Agent assets using Ctrl-Click.

6.6 Viewing a Neuron Agent

Neuron Agents can be accessed in 3 ways:

- Directly through the browser (http://twilight:6680).
- Via the *Neuron Management Portal*'s *Event Viewer* (please refer to README.EventViewer).
- Via the *Neuron Management Portal*'s *Inventory Manager*:

To view a Neuron Agent from the Inventory Tab you must select one row from any of the displayed inventory tables that either represents an asset with an agent installed, or represents an agent itself. If nothing is selected, too many rows are selected, or the selected row does not have an agent, the View Neuron Agent icon () will be disabled.

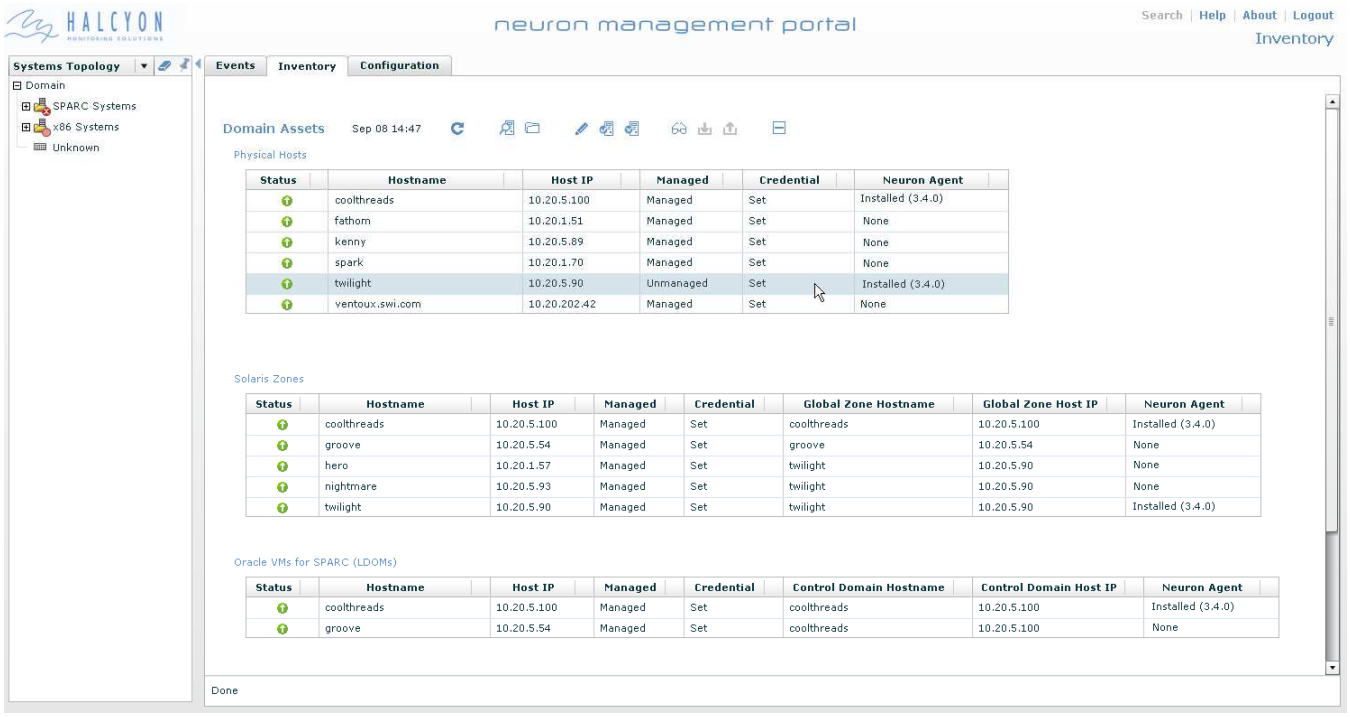

Figure 6.6-1: Select an asset that has an agent installed

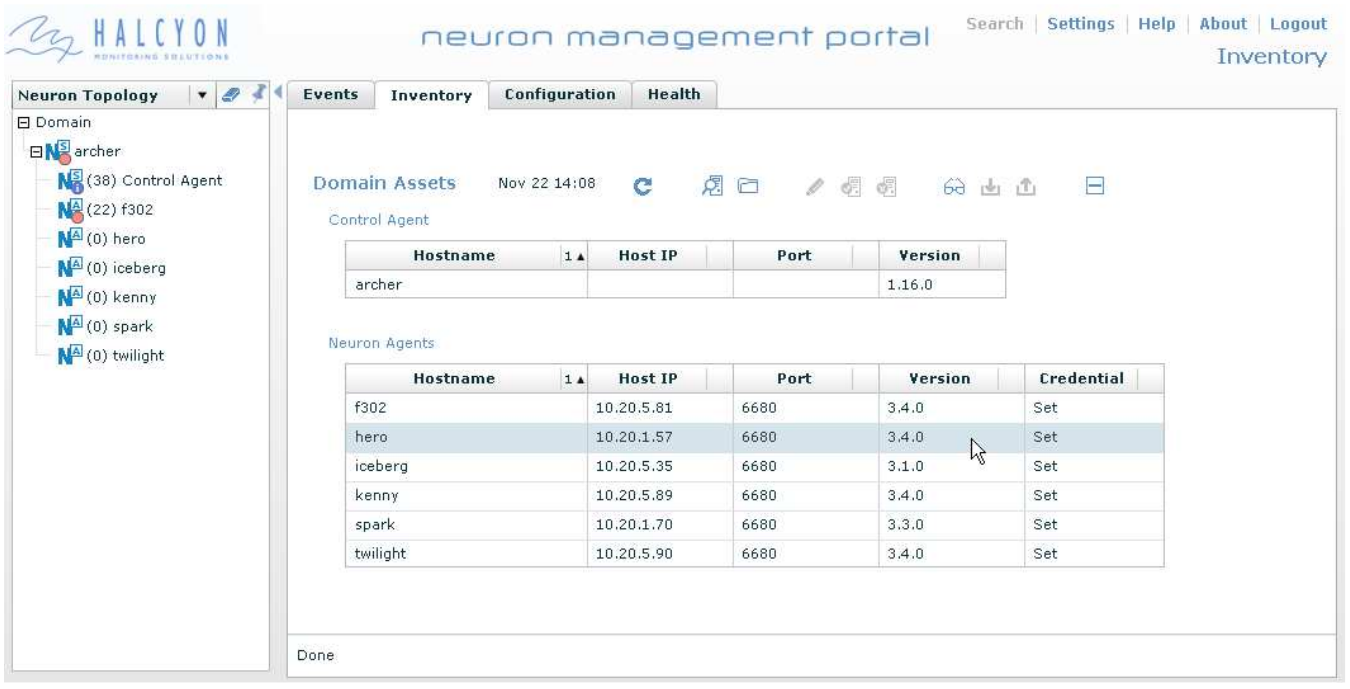

Figure 6.6-2: Select an agent asset (using Neuron Topology)

When a valid row is selected, the View Neuron Agent icon ( ) will become enabled. Simply click this button and the Neuron Agent will be loaded into the *Neuron Management Portal*.

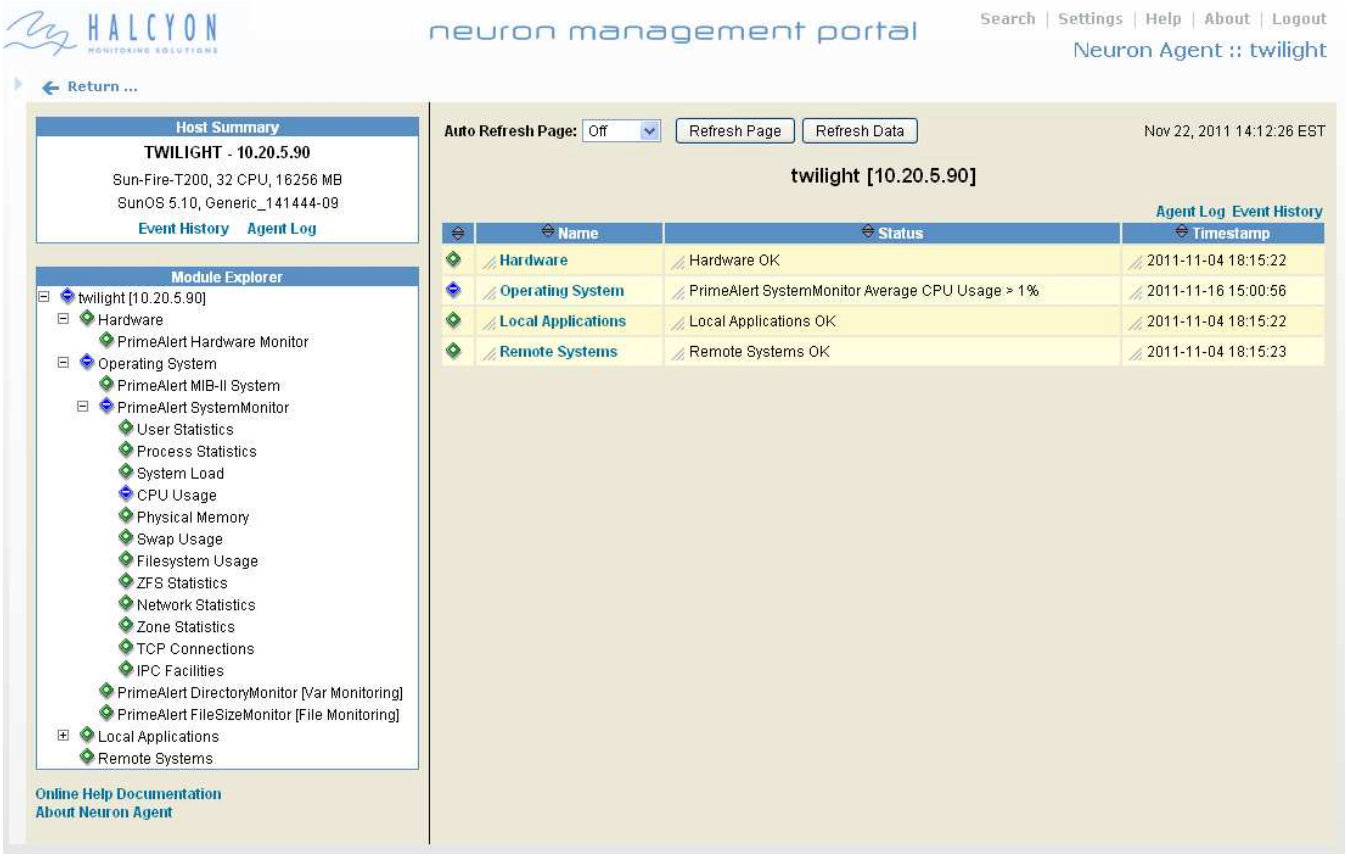

Figure 6.6-3: Neuron Agent loads into *Neuron Management Portal*

If the Neuron Agent does not have any credentials set, you may be prompted to enter them in order to view the agent. These credentials will not be saved; instead if you want to set credentials for an agent, please refer to section 6.5.

When you are finished with the agent, click "Return…" in the top left of the screen.

