SolarWinds Web Help Desk

Administrator Guide

WEB HELP DESK

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About SolarWinds

SolarWinds, Inc develops and markets an array of network management, monitoring, and discovery tools to meet the diverse requirements of today's network management and consulting professionals. SolarWinds products continue to set benchmarks for quality and performance and have positioned the company as the leader in network management and discovery technology. The SolarWinds customer base includes over 45 percent of the Fortune 500 and customers from over 90 countries. Our global business partner distributor network exceeds 100 distributors and resellers.

Contacting SolarWinds

You can contact SolarWinds in a number of ways, including the following:

Team	Contact Information
Sales	1.866.530.8100 www.solarwinds.com
Technical Support	www.solarwinds.com/support
User Forums	support.solarwinds.net/support you need a customer account to access the Customer Support area of the website.

Conventions

The documentation uses consistent conventions to help you identify items throughout the printed and online library.

Convention	Specifying
Bold	Window items, including buttons and fields.
Italics	Book and CD titles, variable names, new terms
`Fixed font`	File and directory names, commands and code examples, text typed by you
Straight brackets, as in [*value*]	Optional command parameters
Curly braces, as in {*value*}	Required command parameters
Logical OR, as in *value1*|*value2*	Exclusive command parameters where only one of the options can be specified

SolarWinds Web Help Desk Documentation Library

The following documents are included in the SolarWinds Orion documentation library:

Document	Purpose
Administrator Guide	Provides detailed setup, configuration, and conceptual information.
Quick Start Guide	Provides installation, setup, and common scenarios for which Orion provides a simple, yet powerful, solution.
Release Notes	Provides late-breaking information, known issues, and updates. The latest Release Notes can be found at www.solarwinds.com.

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Chapter 1

Introduction to SolarWinds Web Help Desk

SolarWinds Web Help Desk (WHD) creates a structured and consistent system for help desk processes and communications. Several key features are available for Enterprise or Managed Service Provider help desks.

Key Features of SolarWinds WHD

Do-It-Yourself Deployment

Install and configure WHD in less than an hour when preparations have been made. No consultants or special equipment are required.

Manage Multiple Customers

WHD manages help desk and ticketing processes for multiple customers allowing you to separate customer inventories, tickets, and processes. You can assign technicians, managers, and processes to one or more customers.

Automated Asset Discovery

Save countless hours of manual input, WHD imports client asset information by using a variety of asset management system exports.

Automated email notifications

WHD sends trouble ticket emails when a ticket is opened, escalated, updated, or closed. You control who gets email ticket notifications and the text of the message to each party.

Email Ticket Origination and Updating

You, your technicians, and your customers can open and update tickets by sending an email to the WHD system. WHD then takes predefined actions based on the email content.

Automated Help Desk Procedures

You can set the procedures for each step of the ticket process from origination, dispatch, parts ordering, billing, and escalation through to closure, ensuring consistent service.

Change Control

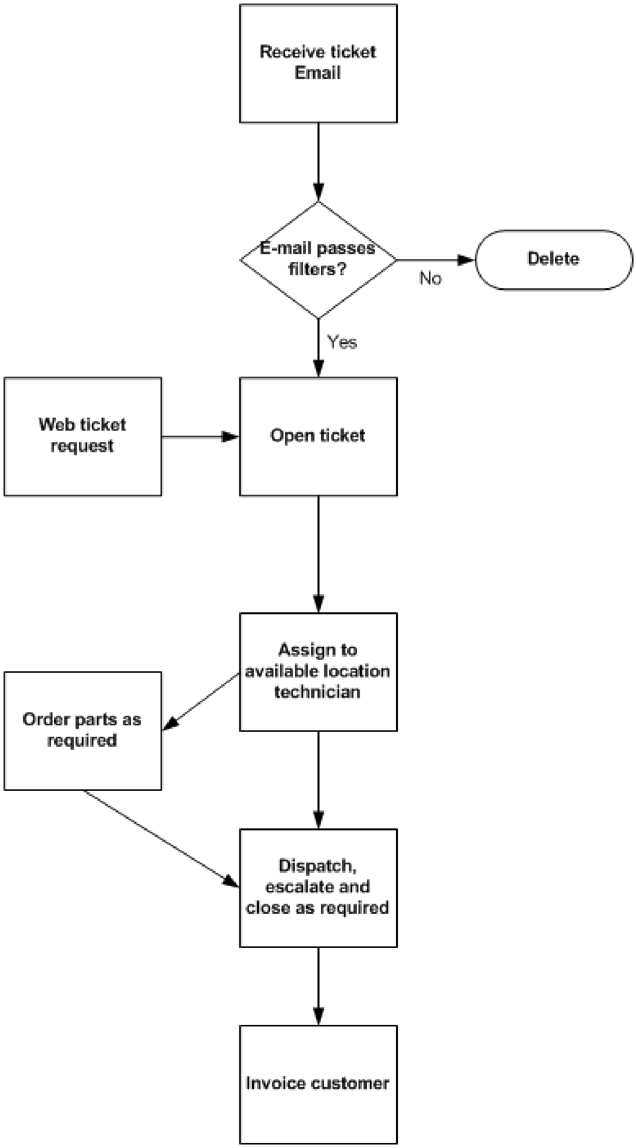
WHD contains a per customer change approval process, including roles for submitters and multiple levels of approvers.

How SolarWinds Web Help Desk Works

WHD initiates and manages your help desk processes through the WHD web console, email, SMS, and built-in procedures. Once you have configured WHD, it automatically routes tickets to the proper technician and updates your customer. If spare parts are needed, WHD orders them and automatically bills the customers for parts and labor costs. WHD accepts email ticket requests and opens a ticket based on the information in the email. Tickets can also be updated and closed using email.

Each customer has a web console dedicated to their help desk needs. Customers have access to all of their help desk features through a web portal, and they cannot see any information about other customers help desks.

The following depicts the Web Help Desk processes at a very high level.


Receive ticket Email
E-mail passes filters?
No
Delete
Yes
Web ticket request
Open ticket
Assign to available location technician
Order parts as required
Dispatch, escalate and close as required
Invoice customer

Chapter 2

Installing SolarWinds Web Help Desk

When installing Web Help Desk (WHD) for the first time, you should take into account the size of the installation, most importantly, the number of technicians this installation will service at its largest point. Web Help Desk comes prepackaged with a FrontBase© database. If you are installing WHD for less than 10 technicians the embedded FrontBase database will suffice.

If installing WHD for an Enterprise or for an MSP deployment, use SQL Server for your database. In this case, install and configure the SQL first, then install WHD. If you have an existing SQL Server, you have the option to create a WHD database instance on the existing server.

Pre-installation Requirements

SolarWinds recommends that WHD and the WHD database are installed on its own server, with the WHD database hosted separately, on SQL Server or a MySQL server. The following sections give minimum requirements for the WHD and the WHD database server.

Database Options

Careful consideration of the WHD maximum size should be taken, as migration between databases is not supported. A FrontBase database is included in the WHD download. The WHD installer automatically installs and configures the FrontBase database if this option is selected. FrontBase works well for small to medium installations.

For Enterprise or multiple customer installations, SolarWinds highly recommends using SQL Server. Install and configure SQL Server before installing WHD. SQL Server can reside on the same server as WHD or on a separate server. WHD can also use a new SQL database instance on an existing SQL Server.

WHD Server

The following tables list minimum WHD server requirements:

Software	Requirements
Operating System	• Windows Server 2003, 2008 or 2008 R2. 64 bit OS is recommended for installations with more that 20 technicians. • Apple © Mac OS X 10.5 or later with Java 6. • Red Hat Linux or equivalent with RPM package manager. **Note:** SolarWinds allows evaluations, but does not support production installations of SolarWinds WHD on Windows XP, Vista, or Windows 7 environments.
Web Console Browser	• Microsoft Internet Explorer 7 or higher with active scripting • Firefox 3.0 or higher • Safari 5 or higher

Hardware	
CPU	Dual Core, 2.0 GHz or faster
Hard Drive Space	20 GB
Mac Architecture	64 bit Intel©
Memory	3 GB (Add 1 GB for each group of 10 additional technicians)
Application Ports	8081 (or alternate browser port), 1433 (SQL)

SQL Server (Optional)

The following table lists the minimum software and hardware requirements for the SQL WHD database server.

Requirements	
MS SQL Database	SQL Server 2005 SP1 Express, Standard, or Enterprise SQL Server 2008 Express, Standard, or Enterprise • SQL authentication must be supported. • SQL Server Management Studio Component. • TCP/IP must be enabled. • SQL Server Database Engine • SQL Server Management Tools
CPU Speed	Dual core 2.0 GHz or better
Hard Drive Space	20 GB
Memory	2 GB (+1GB for every 10 Techs)

MySQL (Optional)

The following table lists the minimum software and hardware requirements for the MySQL WHD database server.

Requirements	
MySQL Database	MySQL 5.1 or newer, Community, Cluster , or Enterprise • MySQL Workbench Tools
CPU Speed	Dual core 2.0 GHz or better
Hard Drive Space	20 GB
Memory	2 GB (+1GB for every 10 Techs)

Virtual Machines and Servers

WHD installations on VMware Virtual Machines and Microsoft Virtual Servers are fully supported if the minimum configuration requirements are met for each virtual machine. These requirements are the same as the physical server requirements above.

Server Sizing

WHD manages help desk operations for networks of any size, from small corporate LANs to large enterprise and service provider networks. Most WHD systems perform well on 3.0 GHz systems with 3 GB of RAM. However, when a large number of technicians are created, you should give additional consideration to the hardware used and the system configuration. It is recommended that you should add 1GB of memory to the WHD server for every 10 technicians.

Installing SolarWinds Web Help Desk

The following procedure guides you through installing WHD. Ensure that the computer on which you install WHD meets or exceeds the stated requirements. For more information about hardware and software requirements, see Pre-installation Requirements .

If you will be using MS SQL or MySQL as you database, install the database engine and management tools according to the product instructions. Once SQL server is installed, follow the instructions to configure SQL to work with WHD.

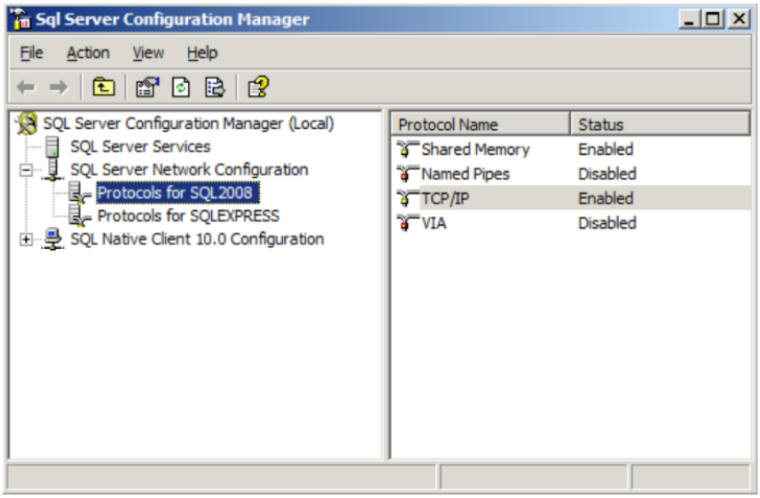
If the embedded FrontBase database is used, skip to "Using the Windows Web Help Desk Installation Wizard" on page 15 and follow the instructions for your OS.

Configuring MS SQL Server

Depending on the version of SQL Server being used, TCP/IP may need to be enabled.

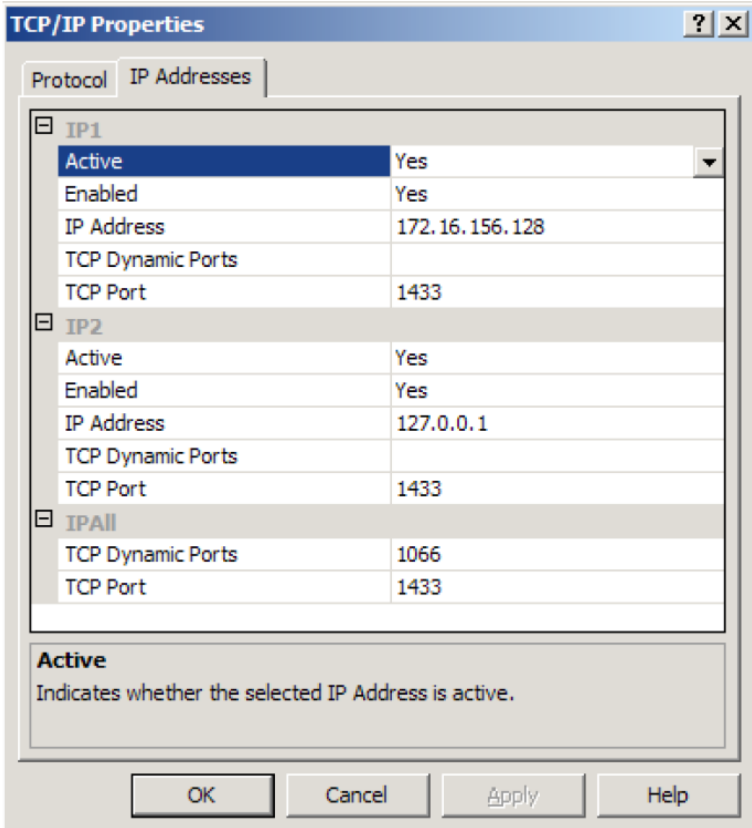
To enable TCP/IP on your SQL Server:

1. Open SQL Server Configuration Manager on your SQL Server.
2. Expand SQL Server Network Configuration section
3. Click **Protocols** for SQLXXX, where XXX is your version of SQL Server.



4. ***If TCP/IP is not enabled in the right pane,*** right-click TCP/IP, and then select **Properties**.
5. Click **Enable.**

6. Click **Save**.
7. Right-click **TCP/IP** again.
8. Click the IP Addresses tab.



9. Ensure that IP is enabled for the server's network IP address and the 127.0.0.1 loopback address. Also ensure that TCP Dynamic Ports is blank and that TCP Port is set to 1433 for the server's IP address and the 127.0.0.1 address.
10. Click **Apply**, and then click **OK**.

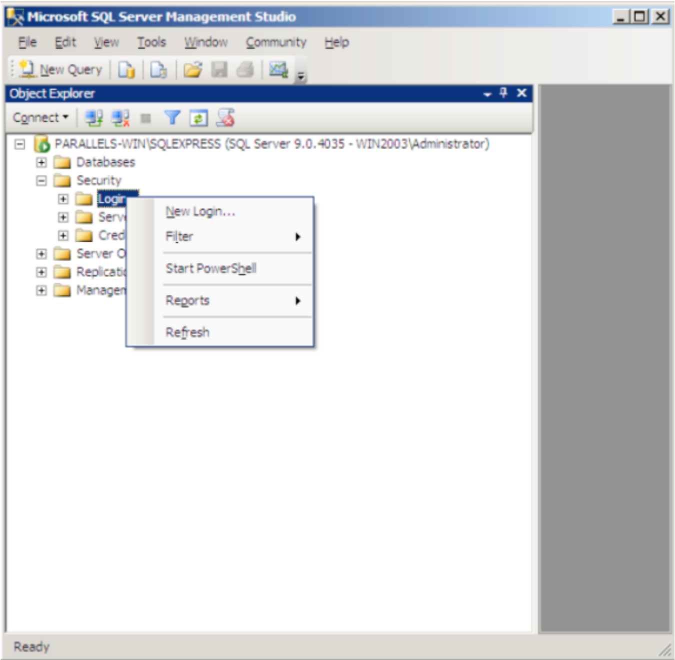
Next, create and configure SQL Server to the WHD database instance.

To create and configure your SQL database:

1. Open SQL Server Management Studio on your SQL Server.
2. Right-click the server name in the Object Explorer pane and select **Properties**.

3. Click **Security** and ensure that **SQL Server and Windows Authentication** mode is selected, and then click **OK.**

4. Expand the **Security** folder and then right-click the Logins folder, and then select **New Login….**



5. Enter `whd` in the **Login name:** field.

6. Click **SQL Server authentication**.

7. Enter a password in the **Password:** field, and then enter the same password in the **Confirm password**: field.

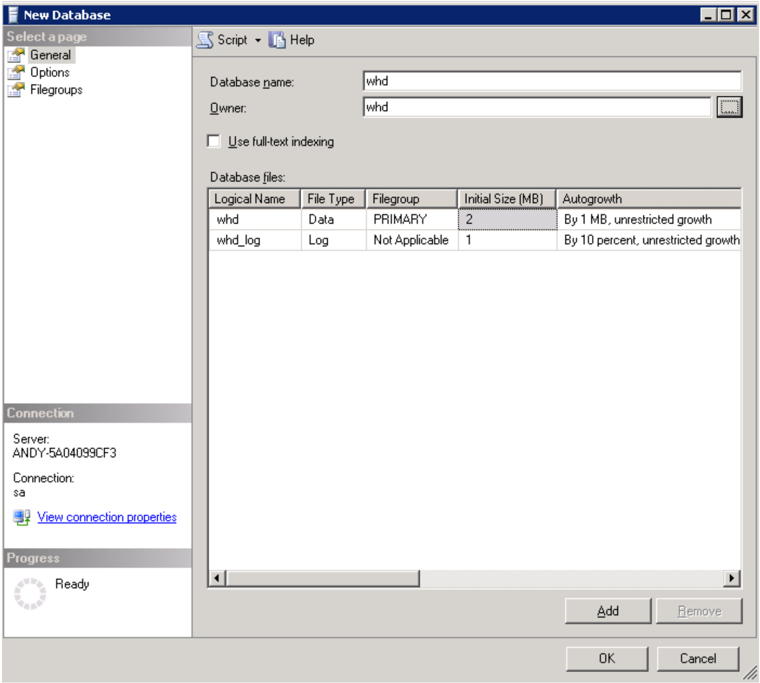
8. Ensure that **Enforce password policy**, **Enforce password expiration**, and **User must change password at next login** check boxes are all not selected.

9. Click **OK**.

10. Right-click the **Database** folder and select **New database…..**

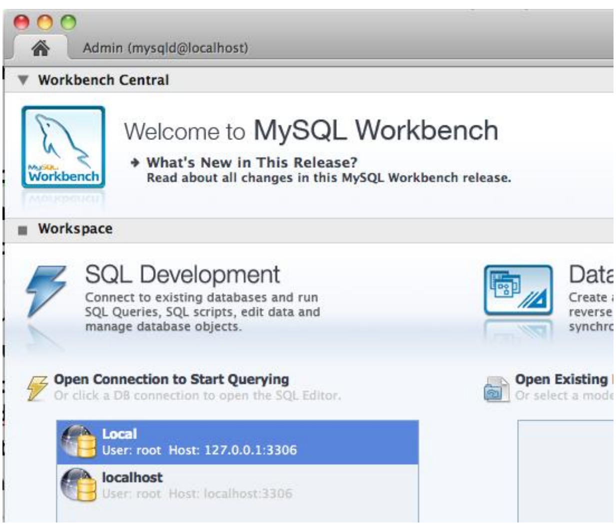
11. Enter `whd` in the **Database name:** field and then assign the whd user as the Owner.

12. Click **OK**.

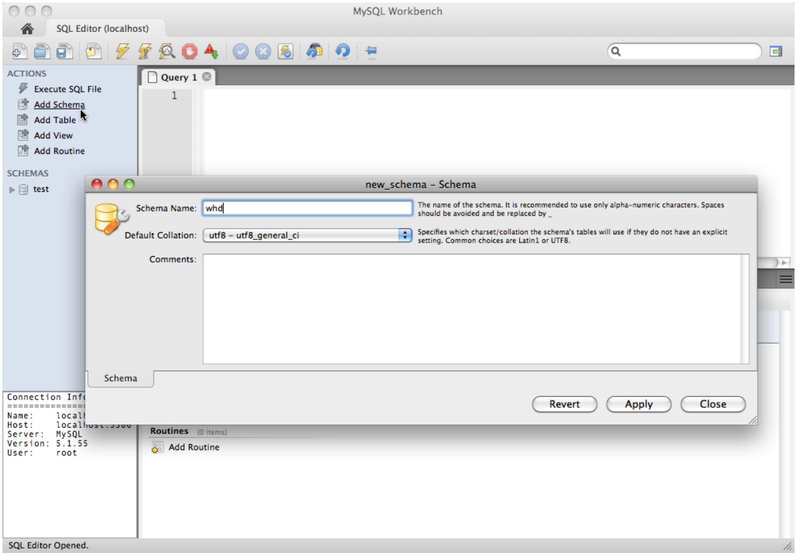


Configuring MySQL for Web Help Desk

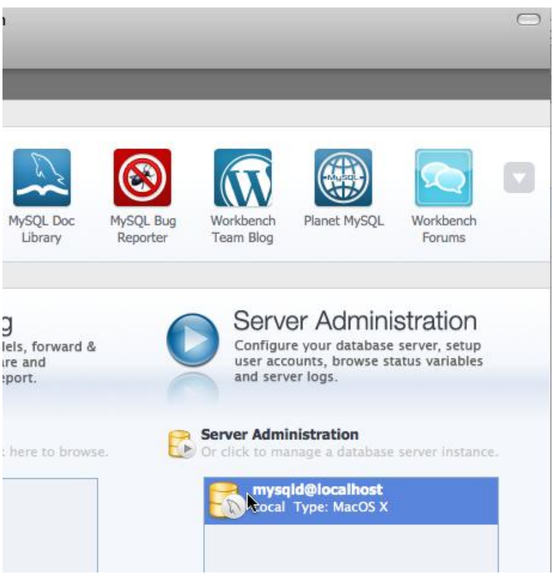
1. Connect to the MySQL database server using the SQL Development pane of the MySQL Workbench application.



2. Select **Actions > Add Schema**.

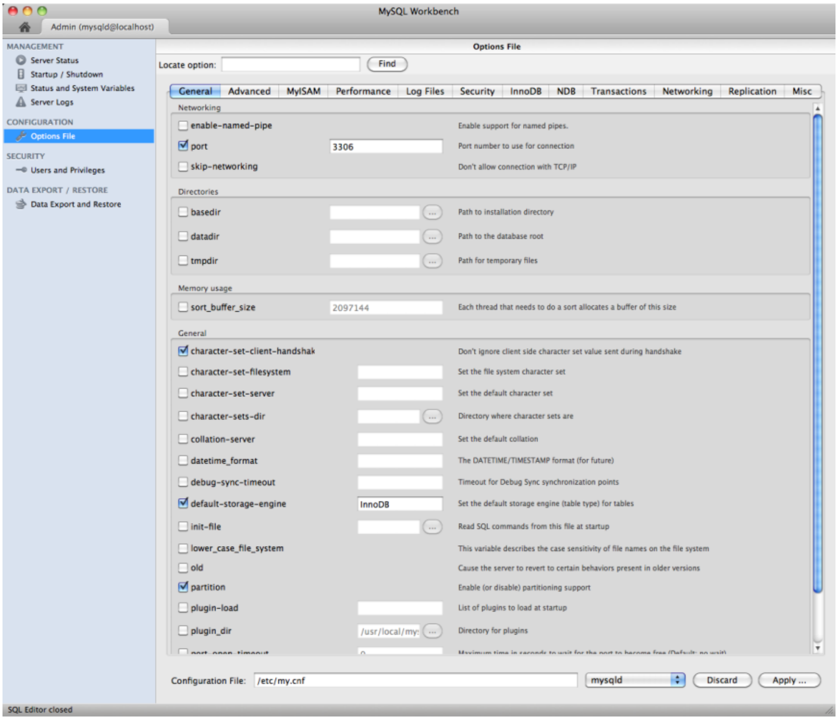


3. Enter **whd** in the Name field, select **utf8 - utf8_general_ci** as the collation type, and then click **Apply**.
4. Click the Home tab and click on your MySQL server.



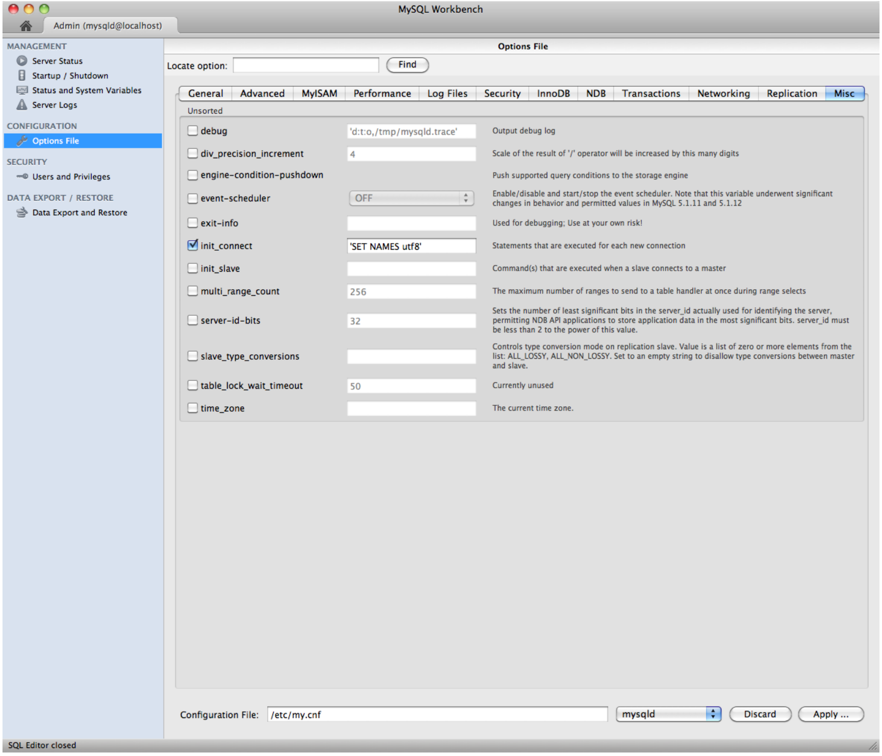
5. Select **Configuration > Options File > General.**
6. Select the **port** check box and enter **3306** in the port field**.**

7. Select the default-storage-engine check box, enter **InnoDB** in the default-storage-engine field, and then click **Apply**.

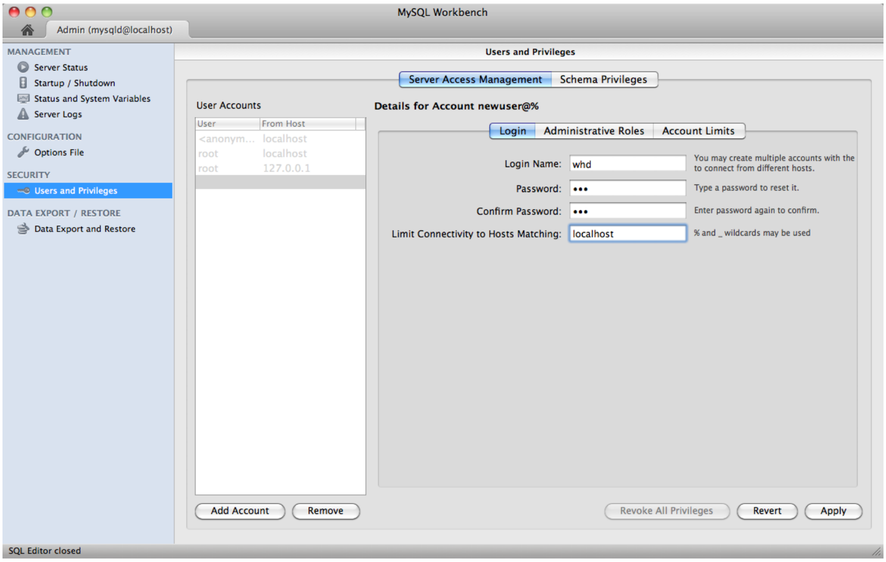


8. Select **Configuration > Options File > Misc**.

9. Select the **init_connect** check box, enter **SET NAMES utf8**, and then click **Apply**.



10. Click on **Startup/Shutdown** and click **Stop Server**.
11. Click **Startup/Shutdown** and click **Start Server**.
12. Click **Security > Users and Privileges** then click **Add Account**.
13. Enter `whd` in the **Login name:** field.
14. Enter and confirm a password.
15. Enter the host name for the WHD server in the **Limit Connectivity to Hosts matching:** field. If MySQL is on the same server as WHD enter `localhost`.
16. Click **Apply**.

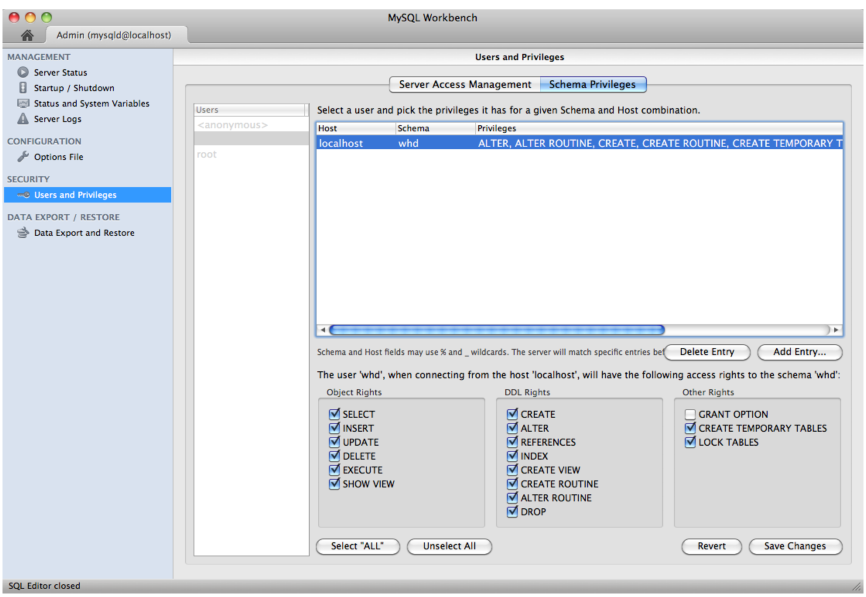


17. Click the **Schema Privileges** tab, select the **whd** user from the left column, and then click **OK**.

18. Click **Add Entry...**

19. Select your host in the Host box, click **Selected Schema** and **whd** in the Schema box, and then click **OK**.

20. Click **Select All** and then click **Save Changes**.



Using the Windows Web Help Desk Installation Wizard

1. Using an account with local administrative privileges, log on to the server where you want to install SolarWinds WHD.

   Notes:

   - To avoid permissions issues, this account should not be a domain account, and it should not be subject to any local or group policy restrictions.
   - If you are installing WHD on a Windows 2008 server you must use the Run as administrator option when launching the installer.
   - It is recommended that you quit all other programs before running the installer.

2. ***If you downloaded the product from the SolarWinds or the Web Help Desk website,*** navigate to your downloaded `.zip` file, extract the evaluation package to an appropriate location, and then launch the WebHelpDesk executable. For a Windows 2008 server, right-click the installer, and then choose **Run as administrator**.
3. ***If you received physical media,*** browse to the WebHelpDesk executable, and then launch it.
4. Review the Introduction text, and then click **Next**.
5. Accept the terms of the license agreement, and then click **Next**.
6. Confirm the installation location or click **Choose** to provide another location on the **Choose Destination Location** window, and then click **Next**.
7. Choose a location for the WHD program icons. The default location is recommended.

   Note: Icons are only created at the location you select. If you select a location other than in a new Program Group, the icons will not be available in **Start > All Programs**.

8. Review the Pre-Installation Summary information**,** then click **Install**.
9. If you will be using the embedded FrontBase database, and then click **Continue**.
10. ***If you will be using SQL or MySQL as your WHD database,*** follow these steps to connect WHD to SQL.

a. Clear the **Use Embedded Database** check box.

b. Click the down arrow on the right of the Vendor list, and then select **Microsoft SQL Server 2005+**, or **My SQL**.

c. Enter the IP Address of the SQL server in the left **Host** field and `1433` in the **Port** field.

d. Enter `whd` in the **Database** and **Username** fields.

e. Enter the SQL whd user's password, and click **Save.**

g. Close the WHD web console.

h. Click **Done**.

i. Click **Start >All Programs > Web Help Desk >Stop Web Help Desk.**

j. Click **Start > All Programs > Web Help Desk >Start Web Help Desk.**

k**.** Click **Continue…** to initialize the SQL database and start WHD.

11. Enter `admin` for the user email address and `admin` for the password, and then click **Log In**.

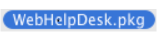
Using the Mac Web Help Desk Installation Wizard

Note: It is recommended that you quit all other programs before running the installer.

1. Using an account with local administrative privileges, log on to the server where you want to install SolarWinds WHD.

2. ***If you downloaded the product from the SolarWinds or the Web Help Desk website,*** navigate to your downloaded `.dmg` file, and double click to mount this file.

3. ***If you received physical media,*** browse to the `.dmg` executable, and then double click to mount it.

4. Double click **WebHelpDesk.pkg** 

in the initial splash screen.

5. Review the Introduction text, and then click **Continue**.

6. Review the terms of the license agreement, and then click **Continue**.

7. Click **Agree** to accept the license terms.

8. Review the installation information, and then click **Continue**.

9. When the installation completes, click **Close**.

10. Launch your browser and navigate to 127.0.0.1:8081.

11. If you will be using the embedded FrontBase© database, click **Continue**.

12. ***If you will be using SQL as your WHD database,*** click **Cancel** and follow these steps to connect WHD to SQL.

a. Clear the **Use Embedded Database** check box.

b. Click the **down arrow** on the right of the Vendor list, and then select **Microsoft SQL Server 2005+.**

c. Enter the IP Address of the SQL server in the left **Host** field and `1433` in the **Port** field.

d. Enter `whd` in the **Database and Username** fields.

e. Enter the SQL whd user's password, and click **Save**.

g. Close the WHD web console.

i. In the Applications folder double click **Stop Web Help Desk.**

j. In the Applications folder double click **Start Web Help Desk.**

k. Click **Continue…** to initialize the SQL database and start WHD.

13. In the WHD web console, enter `admin` for the user email address and `admin` for the password, and then click **Log In**.

Using the Linux Web Help Desk Installation

Note: It is recommended that you quit all other programs before running the installer.

1. Using an account with local administrative privileges, log on to the server where you want to install SolarWinds WHD.

2. ***If you downloaded the product from the SolarWinds or the Web Help Desk website,*** navigate to your downloaded `rpm.gz` file, and double click to mount this file.

3. ***If you received physical media,*** browse to the .`dmg` executable, and then run `gunzip webhelpdesk-10.x.x-1.noarch.rpm.gz,` where `x.x` is the downloaded WHD version.

4. Run the installer using the command `sudo rpm -ivh webhelpdesk-10.x.x-1.noarch.rpm`

5. Review the Introduction text, and then click **Next**.

6. Review the terms of the license agreement, and then click **Agree**.

7. Review the installation information, and then click **Next**.

8. When the installation completes, click **Close**.

9. Launch your browser and navigate to 127.0.0.1:8081.
10. ***If you will be using the embedded FrontBase database,*** click **Continue**.
11. ***If you will be using SQL as your WHD database,*** click **Cancel** and follow these steps to connect WHD to SQL.
    a. Clear the **Use Embedded Database** check box.
    b. Click the **down arrow** on the right of the Vendor list, and then select **Microsoft SQL Server 2005+**.
    c. Enter the IP Address of the SQL server in the left **Host** field and `1433` in the **Port** field.
    d. Enter whd in the **Database** and **Username** fields.
    e. Enter the SQL whd user's password, and click **Save**.
    g. Close the WHD web console.
    i. In the Applications folder double click **Stop Web Help Desk.**
    j. In the Applications folder double click **Start Web Help Desk.**
    k. Click **Continue…** to initialize the SQL database and start WHD.
12. In the WHD web console, enter `admin` for the user email address and `admin` for the password, and then click **Log In**.

Apache Integration

By default, the Web Help Desk runs on port 8081.

If you don't need Apache, and would prefer to run the application on port 80,

1. Stop Apache.
2. Set the DEFAULT_PORT variable in `webhelpdesk/conf/whd.conf` to 80.
3. Restart Web Help Desk using `/usr/local/webhelpdesk/whd start.`

If you want to have Apache running on port 80, you can allow it to proxy requests to the Web Help Desk on port 8081. This will make it appear as if the application is running on port 80.

To proxy port 8081 requests:

1. Open `webhelpdesk/conf/whd.conf.`
2. **Set** `URL_DEFAULT_PORT=80`
3. Save the `webhelpdesk/conf/whd.conf` file.

4. Enable `mod_proxy` as described in this following reference:
5. Add the following lines at the end of your Apache configuration file (httpd.conf):

```
ProxyPass /helpdesk http://localhost:8081/helpdesk
ProxyPassReverse /helpdesk http://localhost:8081/helpdesk
```

6. Save the file, and then restart Apache

WHD and IIS Installations

Web Help Desk does not integrate with IIS. WHD runs on port 8081 by default.

To run WHD on port 80 and shut off IIS on Server 2008:

1. Stop Web Help Desk.
2. Go to **Startup > Administrative Services > Server Manager**.
3. Click **Roles**.
4. Select to **IIS**, click **Remove Roles**.
5. Click **Confirm.**
6. Open \Program Files\WebHelpDesk\conf\whd.conf.
7. Set `DEFAULT_PORT= 80`.
8. Save \Program Files\WebHelpDesk\conf\whd.conf.
9. Start Web Help Desk.

To run WHD on port 80 and shut off IIS on Server 2003:

1. Stop Web Help Desk.
2. From **Control Panel**, click **Add or Remove Programs**.
3. Click **Add/Remove Windows Components**.
4. Select **Application Server**.
5. Clear the **Internet Information** service check box.
6. Click **Yes** to confirm.
7. Click **OK**.
8. Click **Next**.
9. When Windows Component Wizard completes, click **Finish**.
10. Open \Program Files\WebHelpDesk\conf\whd.conf.
11. Set `DEFAULT_PORT= 80`.

12. Save \Program Files\WebHelpDesk\conf\whd.conf.

13. Start Web Help Desk.

Notes:

If there are multiple IP addresses on the machine and one of them uses IIS, bind IIS and Web Help Desk to separate IP addresses

To specify the IP address for Web Help Desk, edit the \Program Files\WebHelpDesk\conf\whd.conf file and set the IP_ADDRESS option.

To bind IIS to an interface on Windows 2003 with multiple NICs:

1. At a command prompt, navigate to the \Program Files\Support Tools folder.

2. At the \Program Files\Support Tools prompt ,enter `httpcfg set iplisten -i xxx.xxx.xxx.xxx`, where xxx.xxx.xxx.xxx is the IP address on which you want to run IIS.

3. To check your settings, enter `httpcfg query iplisten`.

4. Restart your server after making this change.

To bind IIS to an interface on Windows 2008:

1. Log on with the local Administrator account.

2. Open a command prompt window, and then enter `netsh http add iplisten ipaddress= xxx.xxx.xxx.xxx`.

3. To check your settings, enter `netsh show iplisten`.

4. Restart IIS.

Upgrades

To upgrade to the latest version of Web Help Desk:

1. Backup the Web Help Desk server and any database server involved with Web Help Desk.

2. Double click Stop Web Help Desk 

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3. Launch the new Web Help Desk installer.

4. Accept the terms.

5. When the upgrade completes, close any browsers and double click Start Web Help Desk 

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Note: For Windows 2008 server and above right click **Start Web Help Desk** and select **Run as administrator**.

Chapter 3

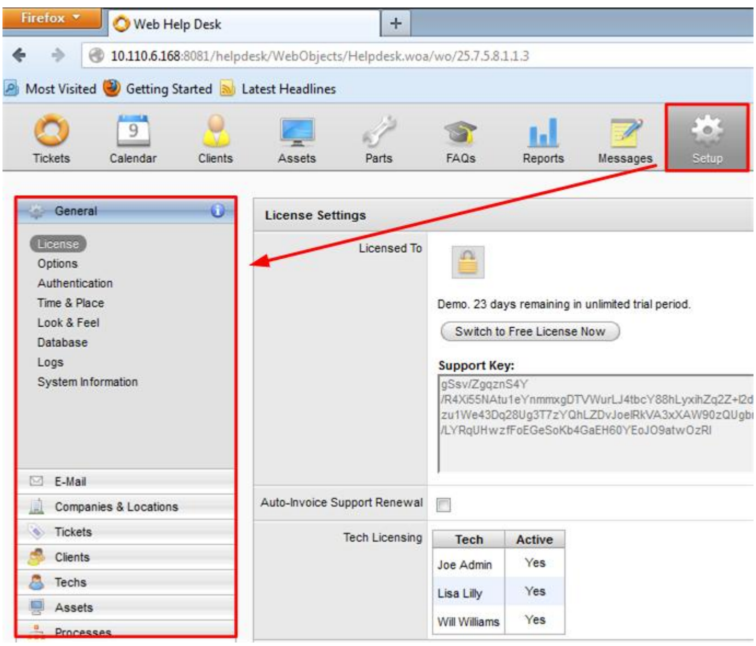
Getting Started with SolarWinds WHD

This section assists you in configuring the initial settings. These setting enable you to send and receive email about trouble tickets, create tickets, and create assignments for service locations and service technicians. With these setting in place, WHD automatically matches an available technician with customers and customer locations, and creates a ticket as appropriate.

Note: Web Help Desk has an extensive library of popup tooltips. To activate a tooltip hover over the area in question.

Configuring the Web Help Desk Server

Settings are made in WHD using setup  which initializes the left setting navigation bar. The left navigation bar is comprised of setting topics and individual settings pages within each topic. Detailed tooltip help is available for most items on each settings page.



Initial Security Settings

Changing the admin password is the first task in the setup configuration.

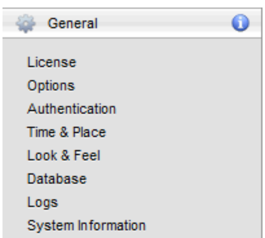
WHD installs one account active, the admin account. Because this account uses a default password, you should change the admin password to add security to your WHD server:

1. To change the admin account password, click setup in the top navigation bar, and then click **Techs > My Account** on the left navigation bar.
2. ***If you want to use an administrator name other than the default (admin),*** enter the new admin name in the **User Name** field.
3. Enter a new password in both the **Password** and **Confirm Password** fields.
4. Enter the administrator's email address in the **E-Mail** field.
5. The remaining fields are not required at this point and can be filled in at your discretion.
6. Click **Save**.

Each of the following Setup sections begins with the left Setup navigation bar.

To access the left setup bar click the Setup button on the top menu bar.

Setup – General



License

Web Help Desk installs with a fully functional, 30-day trial license.

To apply a purchased perpetual license key:

1. Click **lock** in the License screen.
2. Copy the license key text and paste it over the existing License Key text.
3. Click **Save**.

Options

No changes are required in the Options settings page for a basic configuration. You may set any of the options to fit your environment. For most environments, use the defaults. ***If you make changes on this page,*** click **Save** to save the changes.

Authentication

You may change the login message to one more suitable for your use case. Most of the other settings on this page are related to login security. Change these to fit your security requirements. Do not use the API Key area at this time. ***If you do make changes on this page,*** click **Save** to save the changes.

Time & Place

The Time & Place page is used to indicate time zone and local work hours for locations your help desk manages.

To add a new location and set the business hours:

1. Click **New**.
2. Enter a name for the location.
3. Select the **Time Zone** for the location.
4. Select the **Country** for the location.
5. Use a **Currency Precision** to for the countries monetary system. The default setting will often work.
6. Select the proper time and date formats for the location.
7. Select the **Business Hours** and **Work Days** for the location, and then click **Save**.

Look & Feel

The Look & Feel page allows you to place your company logo on the web console. Follow the instructions and guidelines on the page to make this change. ***If you make changes on this page,*** click **Save** to save the changes.

Database

The Database page displays information about your database. This is a read only page.

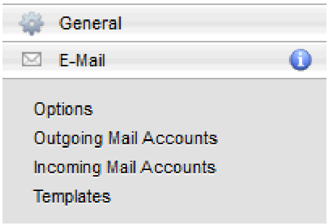
Logs

The Logs page allows you to set a criticality level for logging. This is not necessary for your initial configuration and is typically used for troubleshooting. ***If you make changes on this page,*** click **Save** to save the changes.

System Information

The System Information page contains information for troubleshooting and understanding your server's configuration. This is a read only page and is typically used for troubleshooting.

Setup – E-Mail



E-Mail is used extensively to automate communications and actions in WHD. Each item in the E-mail pages has a popup tooltip to explain how to set the option and the effect the settings will have on your installation.

Options

The Options page contains advanced settings for restricting email formats, senders, and contents. Most of the options can accepted at the default settings.

Simplify the incoming mail process by configuring WHD to accept email from unknown persons in your client's domains. Otherwise you will have to define and maintain lists of each email sender for each client.

To simplify managing emails, complete the followings steps:

1. Click **Only if e-mail matches an Accepted Domain** in the Create Accounts for Unrecognized Senders section.
2. Enter the domain names for your clients separated by a comma and then a space. For example, solarwinds.com, example.com.
3. Click **Save**.

The **Ignored Senders** box allows you to deny email from senders who may be sending SPAM or other unwanted email.

The **Regular Expression Filters** allow you to filter out email, based on specific criteria for the Subject, Body, Content, or Attachments. The tooltip provides detailed information on using each of these filters.

Review the remaining options settings and make any changes required for your email environment.

If you make any other changes on the page, click **Save** to submit the changes.

Outgoing Mail Accounts

You define your SMTP server(s) and help desk email address in the Outgoing Mail Options page.

To configure your outgoing WHD mail:

1. Click **New**.
2. In the **SMTP Server** field, enter the IP address of your SMTP server. Use port 25 unless your server uses something other than the default port.
3. ***If your SMTP server requires SSL authentication,*** click the **SSL** check box.
4. Enter the **SMTP Username** and **SMTP Password**.
5. Enter the administrator's email address in the **E-Mail** field.
6. The **Accepted Domains** field defines the domains to which your SMTP server sends email. Enter the domain names for each of your help desk customer domains. Separate each name with a comma and then a space.
7. Enter the administrator's email address in the **E-Mail** field.

   Note: If you have specific mail.smtp or mail.from requirements for your SMTP server, enter those requirements in the Advanced E-Mail Properties field. Hover your mouse over the field title to see details on these properties.

8. When you have completed entering information on this page, click **Save**.

A green dot to the right indicates a connection has been made to your SMTP server. A red dot indicates a failure to connect to the SMTP server. The error message at the top of the page indicates the nature of the failure.

> **Note:** Be certain to delete the sample outgoing server that was installed by default. The sample server may interfere with your actual SMTP server.

Incoming Mail Accounts

The Incoming E-mail Accounts page defines the requirements for accepting e-mail and initiating some of the automated e-mail processes.

To setup Incoming E-Mail:

1. Click **New** on the Incoming Mail Accounts page.
2. ***If you want to be able to open tickets automatically from incoming e-mail,*** select the **Enable E-mail Tickets** check box.
3. ***If this server is your default incoming mail server,*** click **Make Default**.
4. Enter the **E-Mail Address** for the Web Help Desk incoming e-mail.

Note: This should be a new email inbox for WHD. Do not use a personal inbox. E-mail in this inbox is processed and deleted.

5. Select the **Account Type** (IMAP, POP3 or Exchange2007/2010).

6. Leave **Compatibility Mode** cleared.

7. Enter the **Incoming Mail** server IP Address, port, and then select **SSL** if your server requires SSL.

8. Enter the **User Name** and **Password** for the email account

9. Leave **Inbox Folder** as **INBOX**.

10. For the Outgoing Mail Account, select the server defined on the Outgoing Mail Accounts page.

11. Click the **Allow Auto-Submitted E-Mail** check box.

12 Special settings may be required for your e-mail server to properly process incoming mail. Leave the **Advanced E-Mail Properties** blank at this point. If your server fails incoming email tests, you may have to troubleshoot this area. Hover your mouse over **Advanced E-Mail Properties** for more information.

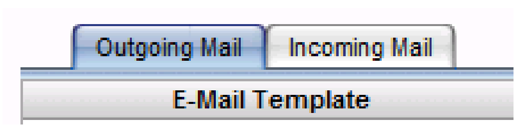
13 Click **Save**.

<u>Templates</u>

E-Mail Templates allow for incoming and outgoing e-mail to be auto-populated with various information. WHD comes with several ready to use E-mail Templates.

To modify an existing E-mail message:

1. Choose Outgoing Mail or Incoming Mail using the tabs at the top of the page.



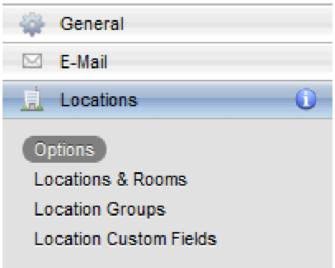
2. Click the message to be modified.

3. Modify the text as required using plain text and the tags shown on the screen.

4. ***If you want the message sent in multiple languages***, click the **Add** button under **Other Languages.** You must enter the text in the language you choose. WHD does not translate languages.

5. When you are done editing the message, click **Save**.

Setup – Locations



The Locations Setup tab provides the ability to store information about customer locations, and map those locations to technicians in the same geographical area. Populating the location pages is another step towards automated ticket processing and technician dispatch.

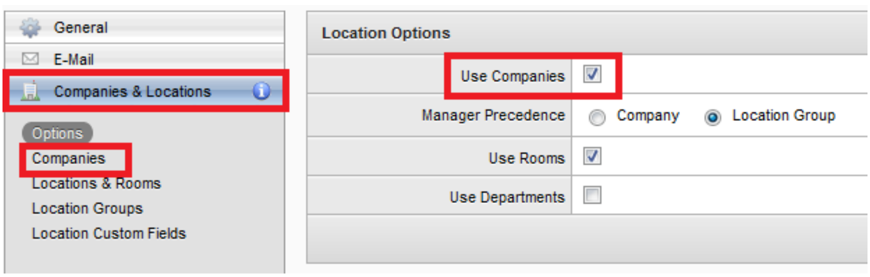
Note: When you first use the Locations tab, only the four Location pages (Options, Locations & Rooms, Location Groups, and Location Custom Fields) are listed, as seen above. Depending on the features you choose, the tab name and pages will change.

Options

The options page implements the Company option. This makes Managed Service Provider (MSP) installations possible.

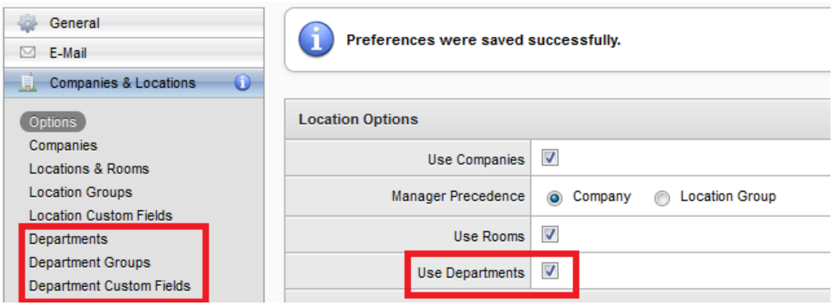
1. ***If you want to separate data and tickets by Companies,*** click the **Use Companies** check box.

   Note: The Locations tab changes to Companies & Locations, and a Companies page is added to the tab selections as seen below.



2. ***If you want to be able to breakdown ticket assignments and billing by department,*** click the **Use Departments** check box, then click **Save.**

   Note: Department setting pages are now added to the tab selections as seen below.



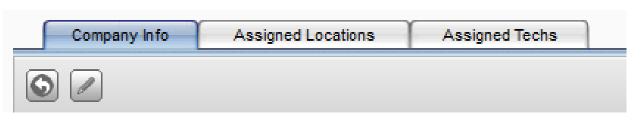
Companies

To add a new company from the Companies& Locations > Companies page:

1. Click **New**.
2. In the Company Info page, enter the pertinent information, and then click **Save**.

   Notes:

   - The Assigned Locations and Assigned Techs page now displays as shown below. These fields are populated after defining Locations and Techs.
   - You cannot assign a Manager other that the default account or default location at this point as those are yet to be created.



3. To add another Company, click back  in the Company Info page, and then repeat steps 1 and 2 above.

Locations & Rooms

Locations are street addresses or similar information that is used to locate a client facility. Rooms are specific to individual Locations and are used to further specify the location.

To add a new Location from the Settings > Companies& Locations > Locations and Rooms page:

1. Click **New**.
2. In the Location Info page, enter the pertinent address information.

3. ***If the location is going to be used to store spare parts,*** select **Yes** in the Store Parts option. This allows you to track inventory levels and create inventory alerts as described in Chapter 9, Parts & Billing.

   Note: If you set a Default Priority for the location, this will override all tickets' status for this location. It is recommended you leave this set to **None**.

4. ***If you have defined individual Companies,*** select the company associated with this location from the **Company** list.

5. Select a Business Zone from the **Business Zone** list.

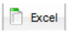
All other fields may be left at default.

6. Click **Save**.

The Room Editor page tab displays as shown below.

To add a new Room from the Settings > Companies& Locations > Locations and Rooms > Room editor page:

1. Click **New**.
2. Enter the Room Name.
3. Click **Save**.

   Note: The TSV  and Excel  buttons allow you access to downloadable spreadsheet templates for bulk Company importing. This eliminates the need to manually fill in each Location Info page and Room Editor page. For additional information on importing see the Chapter 12 Importing Data.

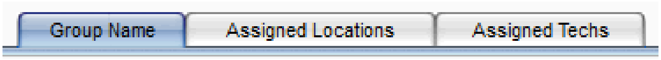
Location Groups

Location Groups are used to specify locations that are in the same general area. This makes it possible to assign a group of technicians to a location group, so a technician from the proper area can be located.

To add a new Location Group and assign Locations to Location Groups, from the Settings > Companies& Locations > Locations Groups page,

1. Click **New**.
2. Enter the Group Name description for the general location**.** For example "Los Angeles", or "Metro NYC" or "South Florida.".
3. Click **Save.**

Note: The Assigned Locations and Assigned Tech page tabs are now available as shown below.



4. Click **Back** .
5. Select the name of the new **Location Group**.
6. Click the **Assigned Locations** page tab.
7. Click **Edit**.
8. Click the check box next to the locations you want to assign to this group, and then click **Save**.
9. Click **back** .

Repeat steps 1 through 9 above to define all of your location groups. The Assigned Techs will be addressed after Techs have been added.

Note: A Location can be assigned to only one Location Group.

Location Custom Fields

You add information about locations using Location Custom Fields. These fields allow you to add information about the location such as entrance instructions or point of contact information.

Departments

Departments are useful when a client divides their business units by department.

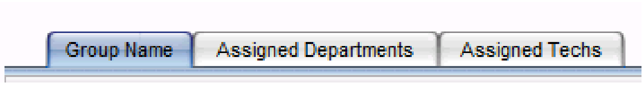
To add a new Department from the Settings > Companies& Locations > Departments page:

1. Click **New**.
2. Add the department group name.

Note: The Client Admins have not yet been defined. You may change the settings for Client Admins and those will be granted to the Client Admins as Admins are created.

3. Click **Save**.

   Note: The Assigned Departments and Assigned Techs page tabs displays as shown below.



Department Groups

To add a departments to a department group,

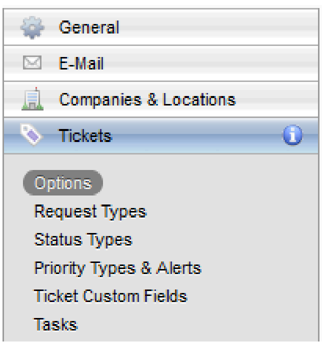
1. Click **New.**
2. Enter the **Group Name**.
3. Click **Save.**
4. Click the **Assigned Departments** tab.
5. Click **Edit**.
6. Select the boxes for the departments to be added.
7. Click **Save.**

   Note: Techs and Admin roles have yet to be created. You can assign Tech and Admins once those have been added.

Department Custom Fields

You add information about departments using Department Custom Fields. These fields allow you to add information about the location such as entrance instructions or a point of contact.

Setup – Tickets



The Tickets tab defines several ticketing functions, such as how tickets are generated, routed, updated, and closed.

Options

The Ticket Options page is used to set ticket contents, generation, and ticket access options. Options are categorized into three categories; General Options, Client Options, and Tech Options.

Ticket options include:

- Default setting for e-mail recipients for tickets with no Tech Group
- Enable clients to set priority on initial help request
- Lock the ticket to the client's assigned location so that service locations remain private
- Field style for rooms (text or popup menu)
- Requiring the use of an assigned asset
- E-Mail auto-reply settings
- Tech note sorting
- Simultaneous ticket edit warning options

1. Review each field and make changes as needed. Tooltips are available for each item by hovering the mouse over the item name.

   Note: The Enter Work Time As option allows you to enter time in minute intervals or as tenths (6 minutes) of an hour.

2. Click **Save** when finished reviewing and making changes.

Request Types

Define the types of tickets your help desk services in the Request Types page. Request types define what type of issue the customer is experiencing and what action needs to be taken. When a user opens a ticket, they choose a request type.

Request types can be defined as a parent and child types. An example is a request to have a password reset. The parent type may be "IT Software Assistance" and the child type may be "password reset".

Build all of your parent types first, and then add child types. If you build a child type but have not built the parent type, you will not be able to set the child type as a child.

To add a new Request Type, from the Settings > Tickets > Request Types page:

1. Click **New**.

2. Enter the Request Type name.

3. ***If this is a child request type,*** select the parent type from the Parent Type list.

4. Tech groups have not been defined at this point, so leave Tech Group blank.

5. Place the text you want the requestor to see in the **Detailed Instructions** text box.
6. Approval Processes, Lead Technicians, and Surveys have not been defined, so leave these as they are.
7. Review the other options and set them appropriately for your help desk and for your clients. Refer to the tooltip help on each item for details.
8. Click **Save.**

Repeat steps 1 through 8 above to define each of your request types.

Status Types

Each ticket is assigned a status from the available Status Types. The following status types are predefined:

- Open
- Pending
- Closed
- Cancelled
- Resolved

To enable Change Access Board (CAB) features, you add Pending Approval, Approved and Denied status types.

Note: Adding these status types is not necessary if you do not implement CAB Process. It is recommended that you add these status types in case you need to enable the CAB feature in the future.

To add Approved, Approval Pending, and Denied status types:

1. Navigate to **Setup > Tickets > Status Types** and click **New**.
2. In the Name field enter **Denied**.
3. In the Description field enter **CAB Status Type**.
4. Click **Alerts Enabled**.
5. Click **Client Reminders**, and then click **Save**.

Repeat steps 1 through 5 above to add the **Approved** and **Approval Pending** Status types.

After adding the above status types, you set the Status Types Options to allow the CAB features.

To set the Status Type Options for the CAB feature:

1. Navigate to **Setup > Tickets > Status Types > Options**.
2. Set the **Needs Approval Status Type** to **Pending** approval.
3. Set the **Approved** status type to **Approved**.
4. Set the **Approval Denied** status type to **Denied**, and then click **Save**.

Priority Types and Alerts

This section defines flow of automated e-mail alerts. The following Priority Types are predefined:

- Urgent
- High
- Medium
- Low

  Notes:

  - Each Priority Type has adjustable Alert Levels for automatic e-mail escalation.
  - Alert levels are set at three levels with an Alert Level 3 being the highest severity.
  - “Not Completed” condition is considered more important than the “Not Updated”, which is more important than “Not Assigned”.
  - If alert levels have matching criteria, the highest severity level will be used.

To set the Alert Triggers for a Priority Type:

1. Click the **Priority Type** name.
2. Leave the **Name and Display Order** as is.
3. Choose a Color (optional).
4. Set the **Due Time** to the proper time to close a ticket with this priority.
5. Set the proper **Conditions** (time interval, criteria and E-mail To:) for each Alert Level starting at Alert Level 1 and working downward.
6. After you have completed the Conditions for each Alert Level, set the Alert Repeat Interval time (optional).
7. Click **Save**.

Repeat steps 1 through 7 above for each Priority Type.

Ticket Custom Fields

This section allows you to insert custom fields into tickets.

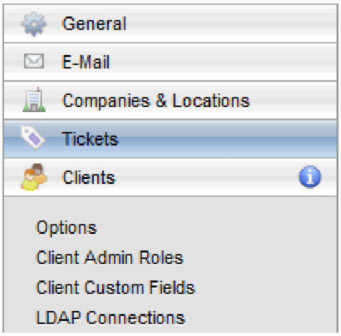
Tasks

Tasks are used to create *scheduled* events and are made up of elements. Each element generates a ticket and can be set to trigger on creation of the element, or when the element's ticket status equals a set value.

To create a new task:

1. From **Setup > Tickets > Tasks** click **New**.
2. Enter the **Task name**.
3. Click **Scheduled** to create a recurring task.
4. Complete the scheduling intervals and start date.

Setup – Clients



The Clients tab pages define how WHD client users enter WHD and how they are defined. When a new client accesses WHD and are accepted by the system, they are automatically given the access and interaction you have defined for that client.

Data import and LDAP synchronization options allow for client information import. This helps avoid adding clients manually.

Options

Most of the Options page settings can be accepted at default. If you want clients to be able create accounts, Only if client's e-mail matches Accepted Domains is recommended. Use the tooltip help to assist on other settings.

Click **Save** when you have completed any changes on this page.

Client Admin Roles

A Client can be assigned limited administrative roles. Typically, this is used for simple tasks such as resetting a user's password.

To Create a Client Admin Role:

1. Click **New** on the Client Admin Roles setup page.
2. Enter a **Role Name**.
3. Select the proper **Request Types Supported** check boxes.

Note: The Request Types Supported are populated from the Request Types you defined in the **Tickets -> Request Types** section above.

4. Click **Save.**

Client Custom Fields

This defines custom fields clients see on the web console or in e-mail.

LDAP Connections

LDAP Connections allows bulk importing or updating information on clients from a client's LDAP server.

Notes:

- The person configuring and using this LDAP import should be experienced with LDAP or Active Directory administration.
- You will need to work with a customer representative who is also familiar with LDAP and has administrative access to the customer's LDAP server. This person will also need to be familiar with the LDAP structure in place.
- If your LDAP directory contains mostly users who will not be using WHD, we recommend you do not perform a bulk LDAP import.

To connect to a client LDAP server and synchronize users:

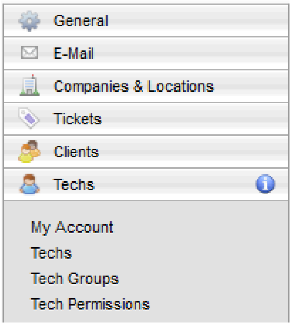
1. From the **LDAP Connections > Connection Basics** page, enter a **Connection Name** that describes the connection.
2. Fill in the **User Base DN**, **Group DN**, and **Search filter** with information from the customer's LDAP representative.
3. Leave **Clear Unmapped Values** cleared.
4. Leave **Ignore Blank LDAP Values** selected.
5. ***If this is a new sync, not an update,*** leave **Sync With Existing WHD Clients Only** not selected.

6. Set **When LDAP Records are Removed** to reflect how to handle WHD client accounts for persons who are no longer with the customer.
7. Set the **Authentication** settings according to information from the customer.
8. Do not select **Enabled** box for Bulk Synchronization. (See note above)
9. Set the **Cache Time Period** to the length of time required for an LDAP resynchronization.
10. Click **Save.**
11. Click the **Attribute Mappings** page tab.
12. Click **Pencil** to edit the page.
13. Enter **Attribute Mappings** as specified by the customer's LDAP representative.
14. Click **Done**.

To manually add clients:

1. Click **Clients** on the top menu bar.
2. ***If you are taken to an existing client form,*** click the ***back button*** to go to the Clients page***.***
3. Click **New**
4. Fill in the pertinent information for this client.
5. In the **Help Desk Location** section, assign a company, and a primary location.
6. Click **Save.**

Setup – Techs



The Techs tab pages define the WHD technicians, the Tech Groups they belong to, and what Permissions the techs have. Once Tech Groups are created they are assigned to Location Groups, Customers, and Business Zones. This is the last portion of the WHD configuration that makes automatic ticketing possible.

My Account

The My Account page allows you to enter additional information for the account used to log in.

To change your account information:

1. Click  to enter edit mode**.**
2. Update your information.
3. Click **Save**.

Techs

Create Techs and define their work schedules, Location Groups, and Business Zones on the Techs pages.

Note: When you add techs, add non-supervisorory techs first. This will allow you to assign tech to supervisors as you create the supervisors.

To add Techs,

1. Click **New**.
2. Fill in the pertinent information for the user's name, email and contacts.
3. Assign a password for the user.
4. Assign an **Account Type** from the Account Type list.
5. ***If this user will be a supervisor,*** select the techs assigned to this supervisor in the **Supervisor** list.

6. Select the proper **Notifications** for this tech.

7. Assign a **Business Zone** for this user.

8. ***If this user works a schedule other than the one defined in the assigned Business Zone,*** select the Specify Work Schedule check box, and then fill in the tech's schedule.

9. Click **Save**.

To create additional Techs, repeat steps 1 through 9 above.

Tech Groups

This option allows you to group techs together with similar skills, technical expertise, and by the type of requests they can service. Typical Tech Groups would be "Phone Techs", "Systems Techs" or "Software Techs."

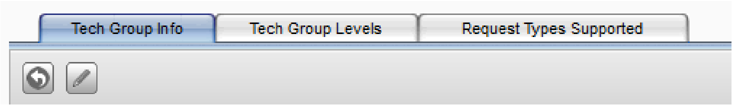
To create Tech Groups:

1. Click **Tech Groups** in the settings bar at the left of the screen.

2. Click **New.**

3. Enter a **Group Name**, such as "Phone Techs".

Note: The Tech Group Levels and Request Types Supported page tabs display as shown below.



4. Click **Save**.

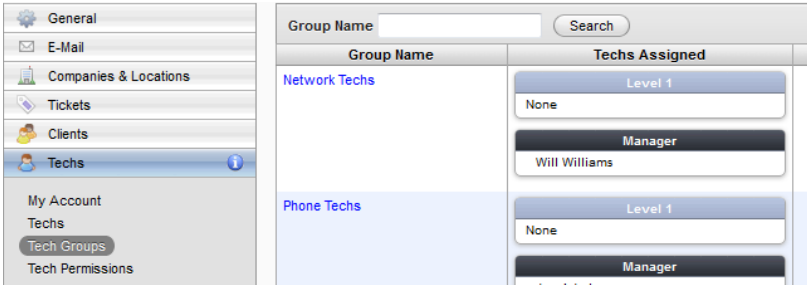
5. **Click back** **.**

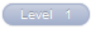
Repeat steps 1 through 5 above to add all of your Tech Groups.

Technical groups are assigned Tech Group Levels to indicate the members' level of expertise. These are typically Level 1, Level 2, and Level 3.

To assign Tech Group Levels:

1. From the Tech Groups home display, click the name of a **Tech Group**.



2. Click the **Tech Group Levels** tab.
3. Click **Level 1** 

.
4. To allow automatic ticket assignment to this level of tech, select the type of tech you want to receive the ticket. (A Level Tech, Group Manager, or Lead Tech.)
5. Choose an **Assignment Algorithm** to indicate how to distribute the tickets.
6. Do not select the **Ignore Location and Department** check box.
7. Choose your preferences for email notifications and recipients.
8. Select one or more Level Tech using the **Level Techs** check boxes.
9. Click **Add Level** to add another level.

Repeat steps 4 through 8 above to add additional levels.

To assign Request Types Supported:

1. Click the **Request Typed Supported** page tab.
2. Click **Edit.**
3. Select one or more **Request Types** for this group to receive.
4. Click **Done.**

   Note: You must repeat the above two procedures to assign Tech Group Levels and Support Types to each Tech Group.

To assign Tech Group Levels to the rest of the groups, return to Step 1 in the Tech Group Levels section above.

To assign Request Types Supported to the rest of the groups, return to Step 1 in the Tech Group Levels section above.

<u>**Tech Permissions**</u>

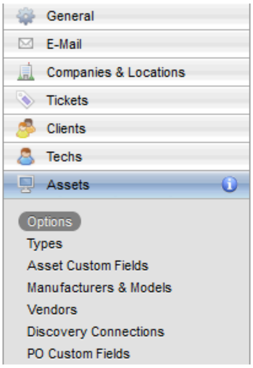
The Tech Permissions pages allow you to control what features techs can access. There is a default set of permissions that can be edited and any number of additional permission sets can be defined and assigned to techs.

Permissions are divided into five main sections:

- Location Permissions
- Ticket Permissions
- Client Permissions
- Asset Permissions
- Other Permissions

Once permissions are defined, use the Assigned Tech tab to link techs to the permission. The tooltips provide more information about each permission. A tech can only be linked to one permission at a time.

Setup – Assets



Assets are typically customer-owned software and hardware. Because customers usually have large numbers of assets, and assets have a large number of properties associated with each one, assets are not typically entered manually. WHD has an extensive selection of asset import and discovery options. These include interface to:

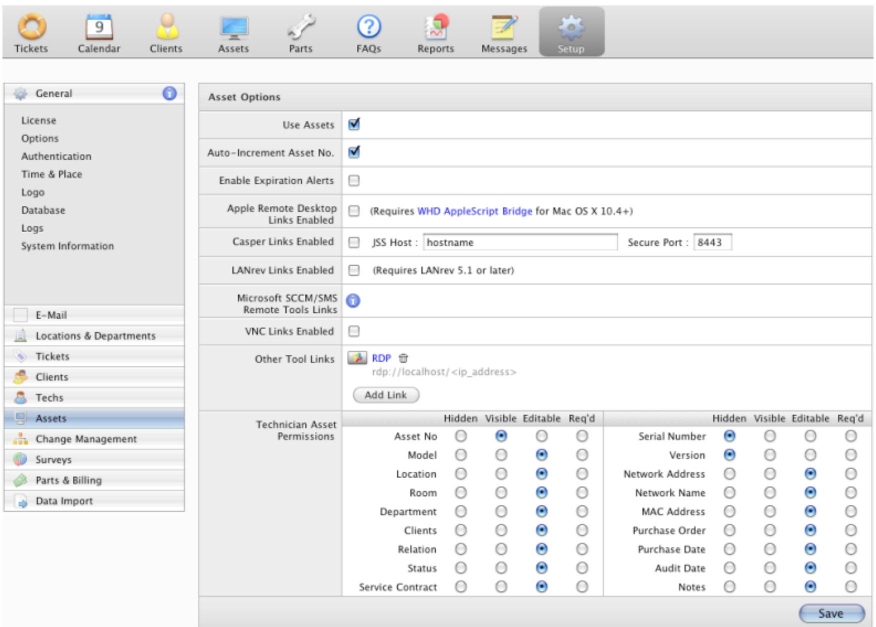
- LANrev© Absolute Manager
- Apple© Remote Desktop
- JAMF© Casper
- LANSweeper©

- Microsoft© SMS/SCCM
- Spreadsheet import
- CSV or TSV imports

Asset importing is detailed in Chapter 12.

Options

This page sets options for asset import and assigns asset permissions for techs. Fill in the pertinent information on this page. Popup tooltips are available in the application to describe each item and its function. Hover the mouse cursor over an item to see the tooltip.



Note: If you select to enable an import tool, you will also need to enable that tool in **Setup > Techs > My Accoun**t or **Setup > Techs > Techs > {Tech} > Account Info**

When you are finished making any changes on this page, click **Save**.

Types

If you will be using an asset importing tool, asset types are included within the data import, so you do not need to specify them manually at this point. If you find after import that there are undefined asset types, you will need to return to this page and define them.

To manually add asset types:

1. Navigate to **Setup > Assets > Types**.
2. Click **New**.
3. Enter The **Name** for the new type, and then click **Save**.

Status Types define the current status of an asset. WHD comes with the **Deployed** status type defined.

To manually add asset status types:

1. Navigate to **Setup > Assets > Types**.
2. Click the **Asset Status Types** tab.
3. Click **New**.
4. Enter The **Name** for the new type, and then click **Save**.

Asset Custom Fields

Custom Fields can be used to extend the types properties associated with assets.

Manufactures & Models

This information is also populated from the asset import. You can manually add manufacturers and models from this section if you need to add one or two devices.

Vendors

The Vendors field defines the contacts for ordering customer parts or software. Fill in the pertinent information for each vendor contact and click **Save** when finished.

Discovery Connections

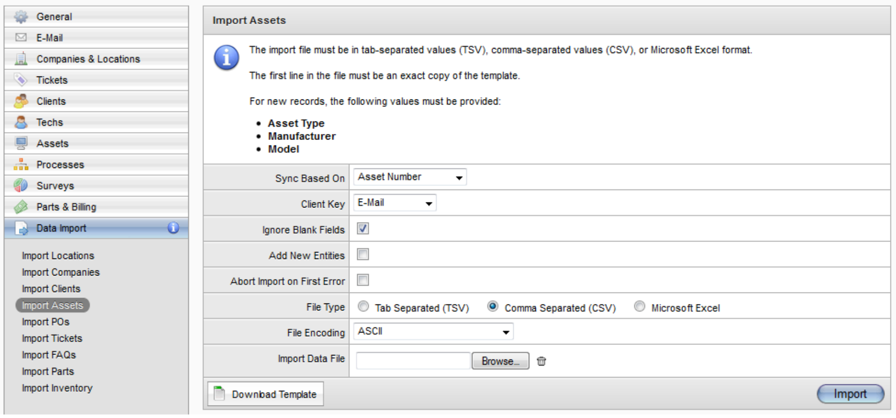
Discovery Connections sets up the basic information for the asset import tool chosen. It also defines the mappings of the imported data fields to WHD database fields. This can also be managed using the Asset Data Import below.

PO Custom Fields

PO Custom Fields define custom fields and specify view/editing permissions for techs. No client permissions are available for these fields because clients never view purchase orders. Details on Purchase Orders are in Chapter 6, Managing Assets.

Asset Data Import

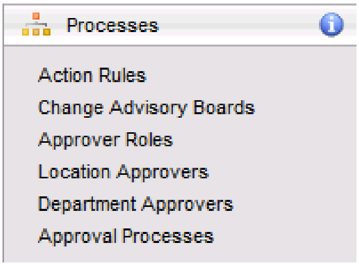
Using the data import function from **Settings > Data Import>Import Asset** is the preferred method of populating asset data.



To Import assets using the Import Assets page:

1. Select a Sync Bases On type. This field synchronizes the data import with any existing asset data.
2. Choose a Client Key. This specifies the key field for database column reference.
3. ***If you expect that some of the table fields will not be*** populated, ensure that Ignore Blank Fields check box is selected.
4. ***If you need to add fields that are not defined on the downloaded template,*** Select Add New Entries.
5. ***If you get poor results after importing your data,*** select Abort Import on First Error.
6. Select the proper File Type and File Encoding. Use MS Excel Unicode for .xls imports.
7. Populate the downloaded template and click **Save**.
8. Use the **Browse** button and specify the saved template.
9. Click Import.

Setup – Processes



Note: Versions prior to 11.0.8 referred to this feature as **Change Management**. The two are functionally equivalent.

Action Rules

Action rules create custom actions that are triggered by events you define. To create an action rule, you will:

- Define the action properties.
- Assign a criterion.
- Define an action.

Action rules can be used to escalate specific events or to reroute the assignment of an event based on the criteria. These are often used to route a ticket to the Change Advisory Board (CAB) when necessary.

To add a new action rule:

1. Click **Setup > Processes > Action Rules**.

2. Enter a **Rule Name** and **Description**.

3. Select **Cascade** if you want all a triggering ticket to trigger all defined actions. Do not select **Cascade** if you want to only have the highest priority action triggered.

4. Click the **Criteria** tab.

5. Enter your criteria options using the menu lists provided.

Notes:

- The upper section of criteria are evaluated using an **AND** condition. **All** of the upper section criteria must be true to trigger this section.
- The lower section is evaluated as an **OR**. **At least one** of the lower section criteria needs to be true to trigger.

6. Click the **Actions** tab.

7. Enter your actions options using the menu lists provided.

8. Click **Save**.

Additional CAB options are detailed in Chapter 7, Change Management Processes.

For Surveys setup, see Chapter 11, Surveys and Messages.

For Parts & Billing setup, see Chapter 9, Parts & Billing.

Chapter 4

Managing Clients

This chapter provides specific information for managing WHD clients, including

What is a Client?

A client is an individual using WHD in the role of a customer. Only customer personnel who will be directly interacting with WHD need be defined as clients. Clients typically interact with WHD using the web interface, but they can be set to also use e-mail or to only interface with WHD in e-mail.

Manual Web Entry

To manually add a new client:

1. Click **Clients** in the tool bar.
2. Click **New Client** in the lower left.
3. Complete the client information, and then click **Save**.

Note: An email will be sent to the client if this option was set in **Setup > Clients > Client Options > E-Mail Client When Account is Created**.

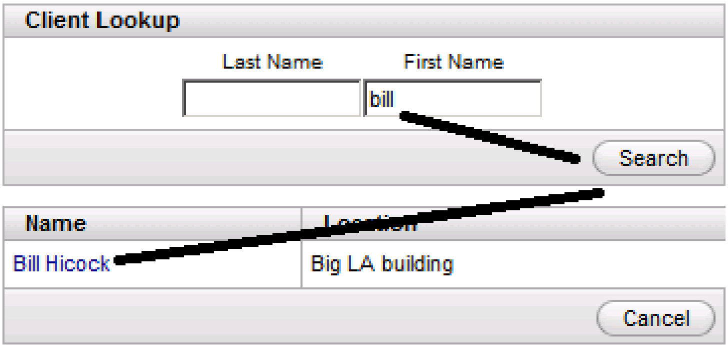
Importing Clients

Chapter 12 details your options importing data for clients.

Assigning Assets

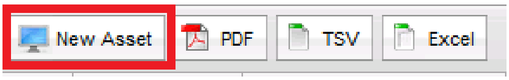
To assign an existing asset to a client:

1. Click **Assets** in the top menu bar.
2. Select the **Assets Basic** tab.
3. Search for the asset using the search parameter options available. The dialog bog lists found assets.
4. Click the asset number to open the edit asset page.
5. Search for the client using the Client Lookup widget.



6. Click the client name link, and then click **Save**.

To manually add a new asset, click New Asset in the Assets > Basic Search page.

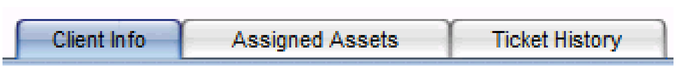


Viewing Client Information

To view information about a client:

1. Click **Clients** .
2. Click a **Client Name**.
3. To edit any information about the client, click Pencil , add the pertinent information, and the click Save.

View all ticket history using the Ticket History tab. View all assigned assets for this client using the Assigned Assets tab.



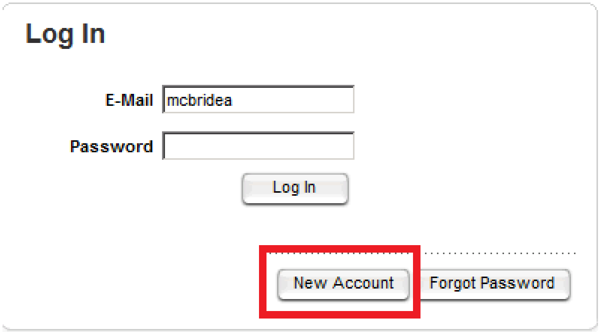
Client Initiated Account Setup

To allow clients to create their accounts upon first login:

Click **Setup > Clients > Client Options** and select **Client Can Create Account**.

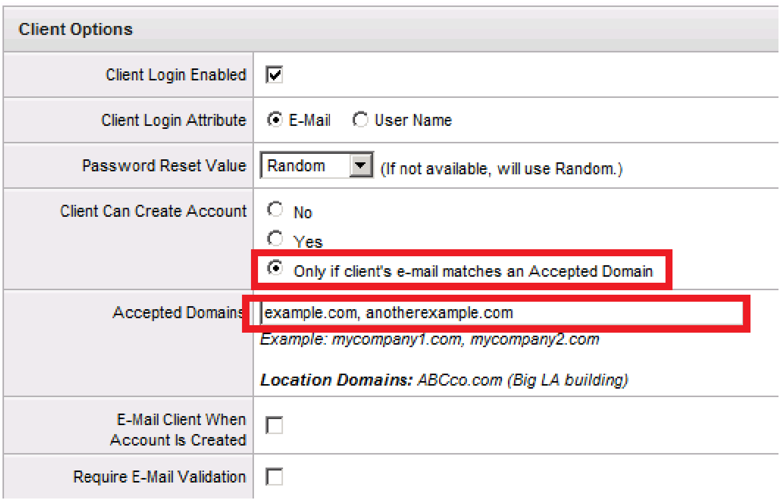
Notes:

- All new clients are now permitted to create an account.
- New clients see the below screen for creating their account.



Notes:

- Clients must be qualified using the email restriction set in **Setup > Clients > Options**.
- It is highly recommended to require domain matching for new clients. See the figure below:



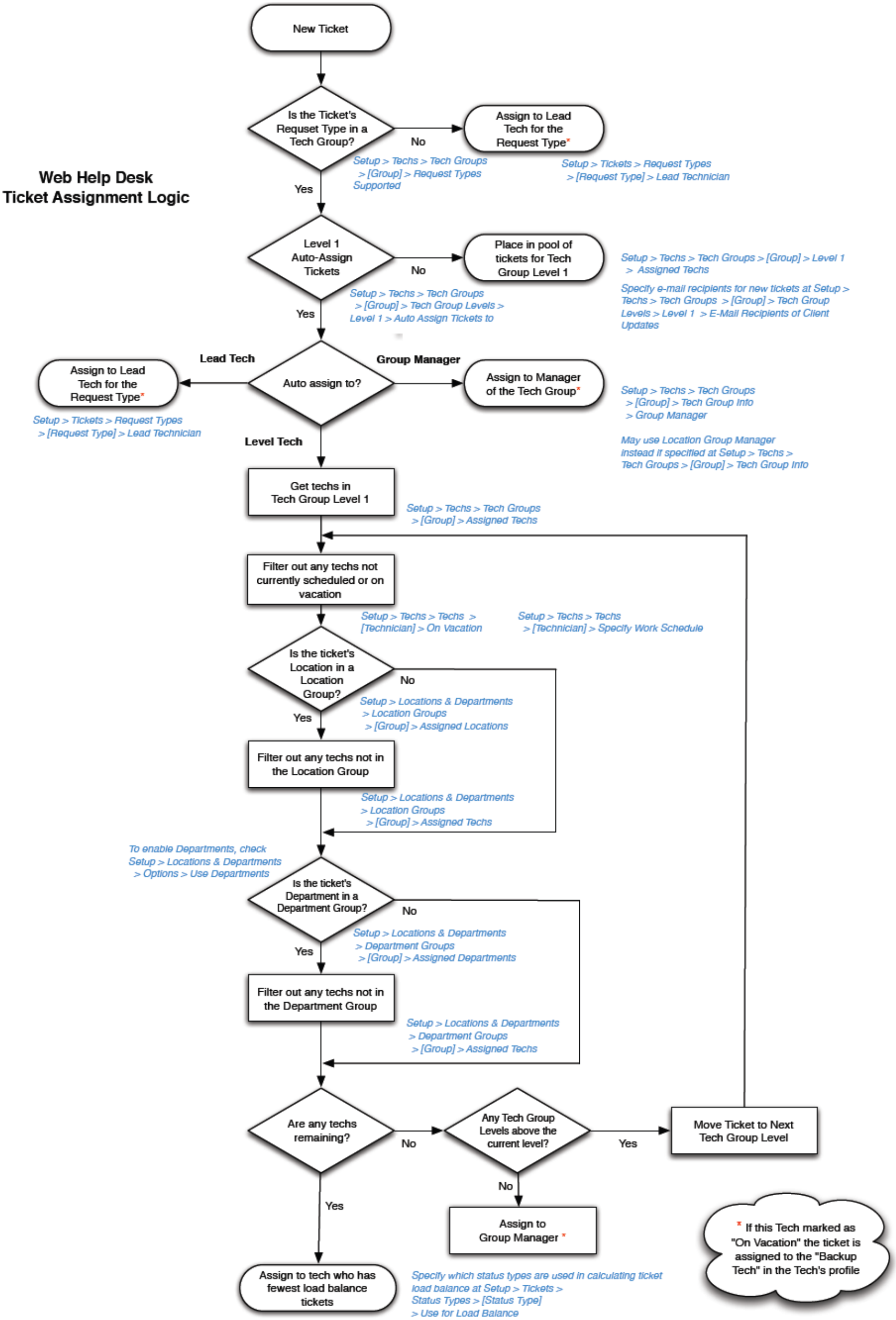
Chapter 5

Managing Tickets

Web Help Desk provides several options for handling tickets in your environment. In addition to e-mail initiated ticketing, The Web Help Desk console allow your clients to open and managed tickets in a web browser. Web Help Desk provides the following ticket functionalities.

- Quick Tickets
- Manual Ticket Creation
- Working with the Ticket Details Page
- About Tech Notes
- Using FAQs in Notes
- Tech Permissions and Tickets
- Ticket E-Mail Recipients

Ticket flow is detailed in the following diagram.

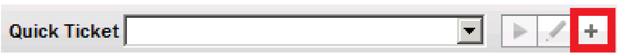

Web Help Desk
Ticket Assignment Logic
New Ticket
Is the Ticket's Requset Type in a Tech Group?
No
Assign to Lead Tech for the Request Type*
Setup > Techs > Tech Groups > [Group] > Request Types Supported
Setup > Tickets > Request Types > [Request Type] > Lead Technician
Yes
Level 1 Auto-Assign Tickets
No
Place in pool of tickets for Tech Group Level 1
Setup > Techs > Tech Groups > [Group] > Level 1 > Assigned Techs
Specify e-mail recipients for new tickets at Setup > Techs > Tech Groups > [Group] > Tech Group Levels > Level 1 > E-Mail Recipients of Client Updates
Setup > Techs > Tech Groups > [Group] > Tech Group Levels > Level 1 > Auto Assign Tickets to
Yes
Lead Tech
Group Manager
Auto assign to?
Assign to Lead Tech for the Request Type*
Setup > Tickets > Request Types > [Request Type] > Lead Technician
Assign to Manager of the Tech Group*
Setup > Techs > Tech Groups > [Group] > Tech Group Info > Group Manager
May use Location Group Manager instead if specified at Setup > Techs > Tech Groups > [Group] > Tech Group Info
Level Tech
Get techs in Tech Group Level 1
Setup > Techs > Tech Groups > [Group] > Assigned Techs
Filter out any techs not currently scheduled or on vacation
Setup > Techs > Techs > [Technician] > On Vacation
Setup > Techs > Techs > [Technician] > Specify Work Schedule
Is the ticket's Location in a Location Group?
No
Setup > Locations & Departments > Location Groups > [Group] > Assigned Locations
Yes
Filter out any techs not in the Location Group
Setup > Locations & Departments > Location Groups > [Group] > Assigned Techs
To enable Departments, check Setup > Locations & Departments > Options > Use Departments
Is the ticket's Department in a Department Group?
No
Setup > Locations & Departments > Department Groups > [Group] > Assigned Departments
Yes
Filter out any techs not in the Department Group
Setup > Locations & Departments > Department Groups > [Group] > Assigned Techs
Are any techs remaining?
No
Any Tech Group Levels above the current level?
Yes
Move Ticket to Next Tech Group Level
No
Assign to Group Manager *
Yes
Assign to tech who has fewest load balance tickets
Specify which status types are used in calculating ticket load balance at Setup > Tickets > Status Types > [Status Type] > Use for Load Balance
* If this Tech marked as "On Vacation" the ticket is assigned to the "Backup Tech" in the Tech's profile

Quick Tickets

,The Quick Ticket dialog opens tickets for repetitive issues, such as a forgotten password. Ticket templates define Quick Tickets.

To define a quick ticket:

1. Click **Tickets** .
2. Click **New Ticket** in the lower left.
3. Click **+** to create a new Quick Ticket.



.

4. In the Quick Tickets Details page, complete the requirements for this ticket type.

   Note: Subject and Request details are required fields.

5. Enter a name for this quick ticket type in the **Save Quick Ticket as:** field.
6. Click **Shared** to allow others to use this quick ticket template.
7. Click **Save**, and then click **Apply**.

To launch a previously saved quick ticket:

1. Select the saved quick ticket from the pull down list.
2. Click **OK** to launch the ticket.

To edit a quick ticket before launching:

1. Select the saved quick ticket from the pull down list.
2. Click **pencil** .
3. Make the required edits.
4. Click **Save**, and then click **Apply**.

Typically the technician or admin edits the client information to assign to the ticket, then runs the Quick Ticket action.

Manual Ticket Creation

To manually create a new ticked:

1. Click Tickets in the tool bar.

2. Click **New Ticket** New Ticket in the lower left.
3. Assign the ticket to a client using the client search dialog box.
4. ***If the ticket will require an asset***, click the **Asset tab**, and add the proper asset.
5. Click the **Ticket Details tab** to assign a location, room, department, tech, schedule and any text instructions.
6. ***If parts or specific labor charges will apply,*** click the **Parts & Billing tab.**

   Note: Parts and Billing are detailed in Chapter 9.

7. Select the applicable parts & billing options, and then click **Save** or **Save and Send E-Mail**.

Save will only save the ticket, Save and E-Mail will trigger the ticket E-Mail process. The ticket will now be sent to the individuals you have specified in the ticket and in the Tech, Clients, Locations, and Tickets set up options.

Working with the Ticket Details Page

The Ticket Detail page was initially configured in Chapter 3. Here we will explore some the options available now that assets, locations and tech have been defined.

Note: You only see tickets under My Tickets and Group Tickets if you belong to a group that has assign tickets, or you have tickets directly assigned to you.

To view the ticket detail page:

1. Click **Tickets** .
2. Open a ticket detail page by:
   a. Click **My Tickets,** and then click a ticket number.
   b. Click **Group Tickets**, and then click a ticket number.
   c. Use the search options to locate the ticket of interest.

To assign a technician to the ticket use the Assigned Tech list, or click **Add Tech** .

To escalate the ticket, click the up triangle on the

Tech Group Tech Group Features Group Level 1 .

All fields in the ticket Details page are editable. This includes:

- Location

- Department
- Ticket Type
- Request Type
- Action Rules
- File Attachments
- Status
- Schedules
- E-Mail Recipients

About Tech Notes

Technicians add information to a ticket using a tech note.

A ticket can have any number of notes, and notes can be added by any technician.

Ticket notes can contain basic HTML tags or BBCode (Bulletin Board Code) tags for formatting.

If Setup > Parts & Billing > Options > Parts & Billing Enabled is selected, *a billing rate for the work can be specified.*

A tech note can also be used to create a new FAQ – the request detail is used as the question and the tech note is used as the answer. New FAQs created from tech notes are set to Unapproved status by default and use the ticket's request type as the FAQ category. FAQs are detailed in Chapter 8.

Using FAQs in Notes

To add a FAQ to a tech note,

1. Open the ticket details page for the ticket of interest.
2. Click **New** in the Notes section.
3. Click **Link FAQ**. The FAQ Search dialog will open.
4. Search for the proper FAQ, and then click the FAQ Number to insert it into the ticket notes.
5. Click the **Save & E-Mail button**.

Tech Permissions and Tickets

Administrators can re-assign technicians, change ticket status and delete tickets. Technicians have various levels of access depending on the permission set they are granted. Permissions are set at **Setup > Techs > Tech Permissions**. The access limits are:

- **Limit to Assigned Tech Groups:** create, view and edit tickets belonging only to Tech Groups to which the tech is assigned.
- **New Ticket Assignment Override:** override the normal Ticket assignment logic and self-assign the Ticket instead.
- **Other's Ticket Status Edit:** allows the tech to change the status of tickets not assigned to them.
- **Change Ticket Dates:** Change the ticket's Open Date, Close Date, Note Date, and Due Date.
- **Request Detail Edit:** allows the tech to update the text of the reported issue.
- **Client Note** Edit: allows the tech to edit a client created note.
- **Allow Re-Assignment:** enables the tech to re-assign the ticket to any other tech. Disabling this option allows the tech to only re-assign jobs to themselves.
- **Change Priority:** allows the tech to change the priority of tickets assigned to themselves or, if Edit Other's Tickets is enabled, the priority of any ticket.
- **Close Tickets:** enables the tech to set tickets to the "Closed" status type.
- **Delete Tickets:** allows tech to delete tickets.
- **Import Tickets:** allows the tech to access **Tickets > Import Tickets**.
- **Task Edit:** allows the tech to create and edit tasks at **Setup > Tickets > Tasks**.
- **Limit by Location Group:** allows the tech access only to those tickets, clients, and assets that are in "assigned" status
- **Limit by Department Group:** allows the tech access to only those tickets, clients and assets that are in assigned Department Groups. This option is only visible if Departments are enabled.

All of the above are Rights are assigned in a grouping called a Permission.

To create a new permission:

1. Navigate to **Setup > Techs > Tech Permissions**.
2. Click **New**.

3. Enter a name for the new permission in the **Permission Name** field.
4. Select the permissions you want this type of user to have.

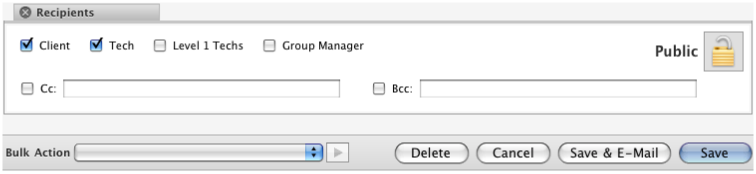
   Note: Hover the mouse over an option's text to see detailed information about that option.

5. Click **Save**.

Ticket E-Mail Recipients

When the ticket is saved, you can e-mail it to the client, assigned technician, level techs, group manager, or other addresses in the cc: and bcc: fields. Select the recipient check boxes and add cc: or bcc: addresses if necessary, then click Save & E-Mail.

Clicking Save does not cause an e-mail to be sent, unless the ticket has been re-assigned. In that case, the newly assigned Tech receives an e-mail. Clicking the padlock toggles the ticket privacy setting – when tickets are private, non-tech users can’t see them.

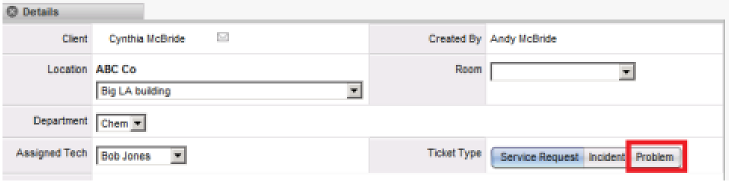


Problem Tickets

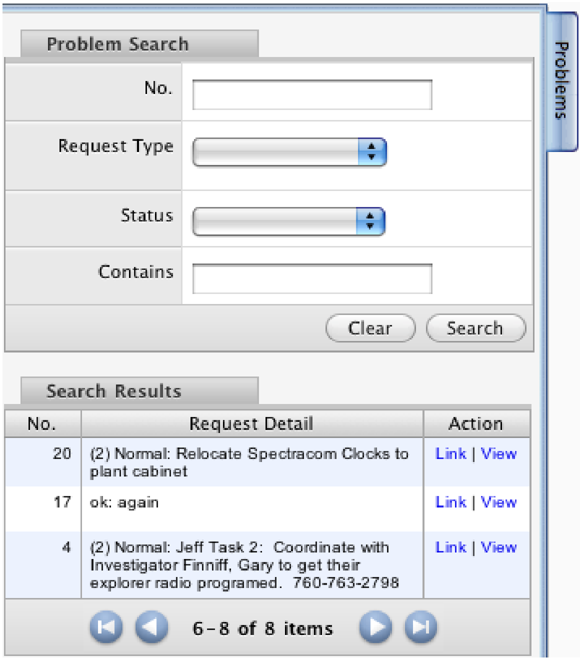
The problem tickets feature links multiple reports of a single incident type. A problem ticket is considered a “parent” and each linked incident is considered a “child”.

To create linked problem tickets:

1. Open the Ticket Details page, for a ticket with a cause in common with other tickets.
2. Click **Problem** in the Ticket Type section. The Problems tab will appear on the upper right.



3. Click the **Problems tab** to expand it.

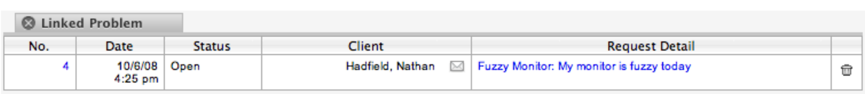


4. Enter terms in the search boxes that are common to all the suspected child tickets.

For example, if the issue is that the connection to building 17 is down, many users in building 17 may open tickets. By searching on “building 17” and perhaps Bldg 17 the possible child tickets will be listed.

5. Click **View** to preview a possible child ticket.
6. Click **Link** to assign the ticket as a child ticket.

A ticket with a linked parent problem ticket adds a row in the Linked Problem tab to display the parent ticket number. The link can be broken by clicking on the **trash can** icon.

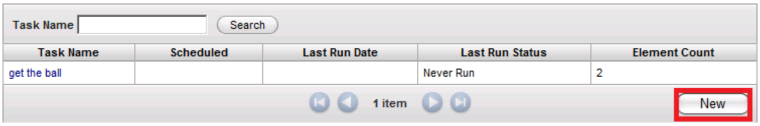


Clicking on the ticket number opens the parent problem ticket. The parent ticket also has a Linked Incidents tab that can be used to switch to any linked child ticket.

Managing Ticket Tasks

A **Task** is a series of one or more separate steps, called **Elements**. A task can be scheduled to repeat at daily, weekly or monthly intervals.

1. To create a new task, go to **Setup > Tickets > Tasks**. Click the **New** button at the bottom of the Task list. The Task Info page will open.

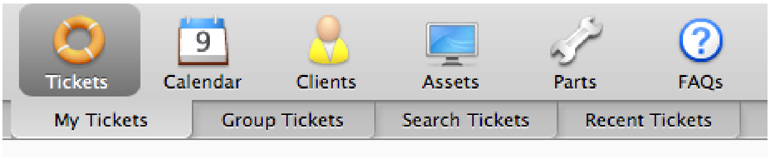


2. Enter a **Task Name**.
3. Use the Client Lookup widget to look up and assign the client.
4. ***If you want to schedule the task to run automatically,*** click **Scheduled**.
   a. Select a **Schedule Interval**.
   b. Click the applicable run times (calendar days, week days or time) you want the task to run.
5. Click **Shared** if you want other to be able to launch this task.
6. Click **Save**.
7. Click the Task Elements tab.
8. Click **New**.
9. Select a **Location**, **Room**, and **Department**.
10. Add a **Subject** and **Request Detail**.
11. Select a **Tech** and **Priority**.
12. Add an **Asset Number**, if applicable.
13. ***If you want to generate all task element tickets when the task is triggered,*** select **On Creation** in the Generate Next Element section.
14. ***If you want to issues the next task element ticket based on the status of this element,*** select **When Status Equals** in the Generate Next Element section, and then select a **Status**.
15. Click **Save**.
16. To create the next element click **New**, and then repeat steps 1 through 15 above.

Tasks run automatically on their scheduled date or they can be triggered manually using the green **Play** triangle next to the task name.

Ticket Views

Several options are available for viewing by clicking the **Tickets** button in the upper tool bar.



The My Tickets and Group Tickets views are pre-filtered tickets lists. Techs only see tickets that have been assigned directly to them in My Tickets. Techs only see tickets that have been assigned directly to a tech group they belong to in Group Tickets.

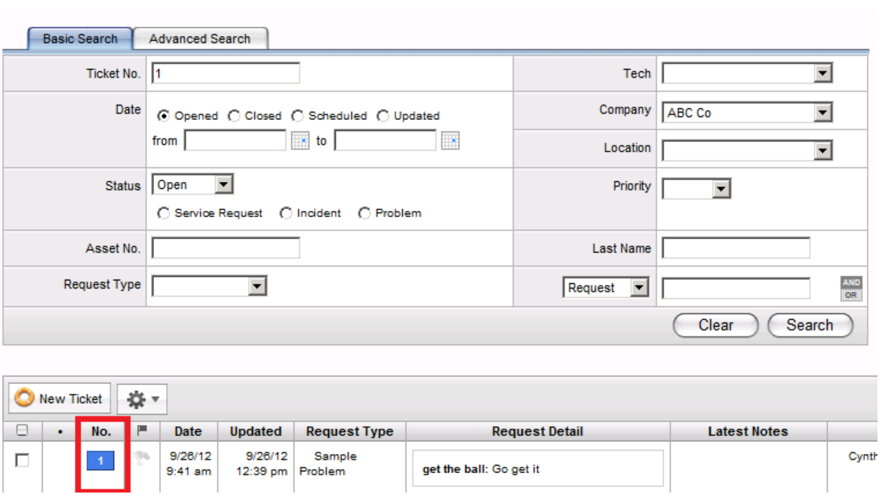
Note: The two restrictions above apply to all accounts, including all admin accounts.

Searching Tickets

Locate tickets quickly using the Search Tickets tab.

To initiate a basic search:

1. Click the **Basic Search** tab.
2. Use the text boxes and lists to narrow the search for the desired ticket.
3. Click **Search**.
4. To view or edit a ticket, click the **Ticket Number (No.)** as shown below.



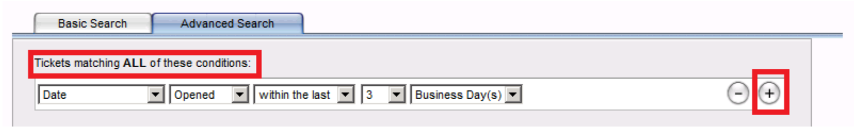
Advanced Search qualifies ticket using Boolean qualifiers.

To create an Advanced Search:

1. Click the **Advanced Search** tab.

2. Select qualifying conditions starting from the left most list and continuing to the right.

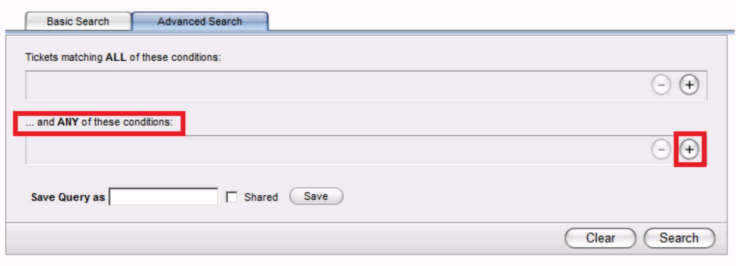
3. ***If you want to add a new qualifying condition to Tickets matching ALL of these conditions,*** click the + button to the right of the top condition.



4. Select qualifying conditions as in step 2.

   Note: The conditions specified in the ALL grouping must all be true to result in a found ticket. These conditions are qualified using the Boolean AND.

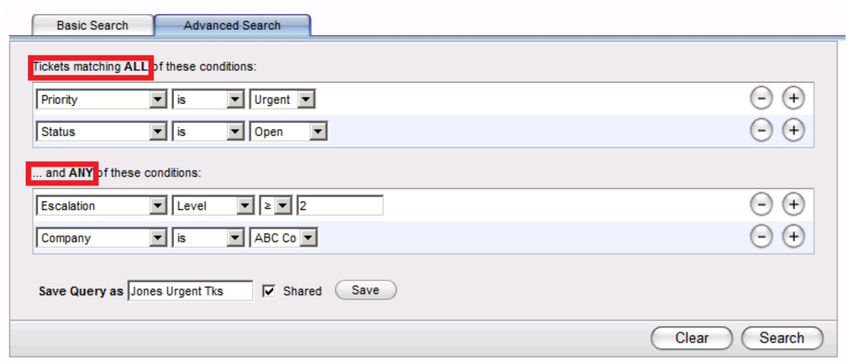
5. If you want to add qualifying condition to Tickets matching ANY of these conditions:, click the + button in the right of the … and ANY of these conditions: section.



Notes:

- The conditions specified in the **ALL** grouping must have **all condition true** to result in a found ticket. These conditions are qualified using the Boolean **AND**.
- The conditions specified in the **ANY** grouping must have **at least one condition true** to result in a found ticket. These conditions are qualified using the Boolean **OR**.
- The **ANY** condition group begins with **…and**. Therefore the **ANY** group is evaluated along with the conditions in the **ALL** condition group, if the **ALL** group is used.
- If no condition exists in the **ALL** group, the **ANY** is evaluated using only the Boolean **OR**.

6. When you have completed entering search conditions, click **Search**.



For the above screenshot, the following illustrates a query that returns tickets that meet these criteria:

- Priority = Urgent
- Status = Open

-- And either –

- Escalation is 2 or above

-- OR –

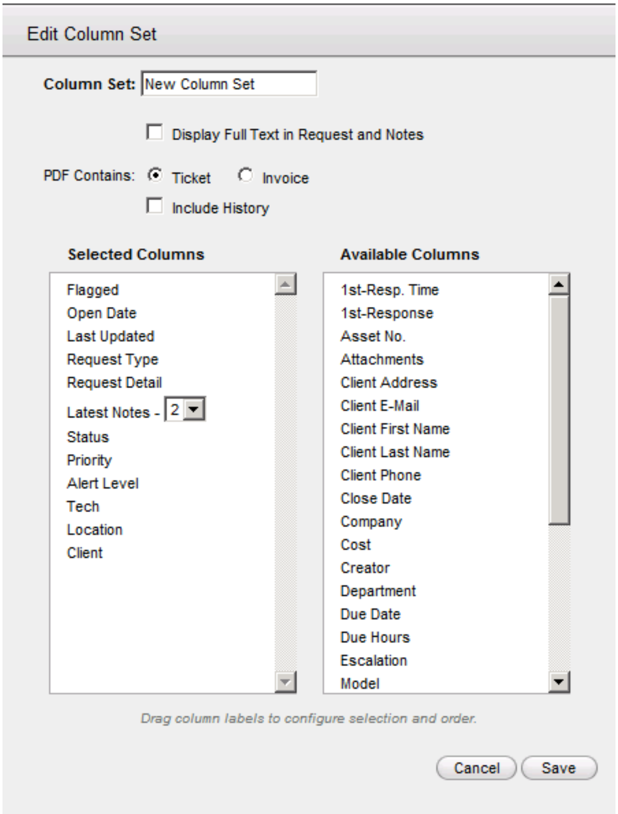
- Company = ABC Co

If you want to save the search enter a query name and then click **Save**. The **Shared** check box allows other techs to access the query.

Refining Search Results

The search results list may display a large amount of ticket data. Filter the results and available using the Column Set widget. The widget is located at the upper right corner of the search results list.

1. ***If you want to modify the column headers,*** click **+** to add a new set, or **Pencil** to edit the selected set.
2. Drag and drop column headers between The **Available Columns** and **Selected Columns** areas.
3. Click **Save**.



Note: Saved column sets are not shared across techs. Each column set can specify a different PDF download option (Invoice or Ticket format) and full text option.

Ticket Bulk Actions

Ticket bulk actions apply pre-defined actions to multiple tickets.

To create an action:

1. Click **+** in the Bulk Actions widget.

2. Select the actions you want to apply to this bulk action.
3. When you have finished specifying actions, enter a name for the action in Save Bulk Action as:, and then click **Save**.

Print Views

To display the ticket information in a printer-friendly view, use the **printer** at the top of the ticket. Clicking the button opens the ticket in a window suitable for printing.

E-Mail Ticket Management

Clients and Techs create tickets by sending an e-mail message to the dedicated help desk e-mail address. A ticket is created for each new message sent to the address. For details on setting up E-Mail Tickets, see Setup – E-Mail.

Chapter 6

Managing Assets

WHD provides a number of options to work with assets. This chapter details the following:

- Adding Assets
- Asset Properties
- Searching Assets
- Adding Purchase Orders
- Reserving Assets

Assets are client-owned software and hardware that Techs work with. The WHD asset features keep tracks several properties of each asset such as:

- Location
- Type
- Status
- Owner
- Serial Number
- Model and Make
- Warrantee Dates
- Lease Types
- Relationship to Other Assets
- Ticket History
- Purchase Orders

Adding Assets

To manually add an asset:

1. Navigate to **Assets > Search Assets** and click **New Asset** at the top of the search results list.

   Note: Asset numbers increment automatically beginning at the highest asset number in use. You can accept the number shown or enter a different number.

2. Click the Asset Basics tab.
3. Enter the information for the asset, and then click **Save**.
4. Click the Asset Details tab.
5. Enter the asset details, and then click **Save**.

Note: Chapter 12, Asset Discovery Tools, details asset import options and asset discovery tools.

Asset Properties

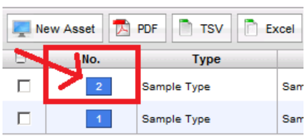
Web Help Desk imports several asset properties when you perform an asset discovery or an asset import operation. The WHD web interface provides a method of adding and editing asset properties.

Basics Properties

Asset basics are the “what, where, and who” of the asset.

To Edit an asset’s basic properties:

1. Click **Assets** .
2. Fill in any search criteria and click **Search**.
3. Click the asset number for the asset you want to edit.



4. Click the **Asset Basics** tab to edit basic information such as the location, client, or status.
5. Click the **Asset Details** tab to edit asset details such as network information, PO, or ownership.
6. Click **Save**.

Asset Details

The asset details tab stores information following information about assets:

- Serial Number
- IP Address
- MAC Address
- Network name

- Purchase Order
- Lease Information
- Audit date
- Attachments
- Notes

None of these fields are mandatory, but all of the fields are helpful in locating and managing assets.

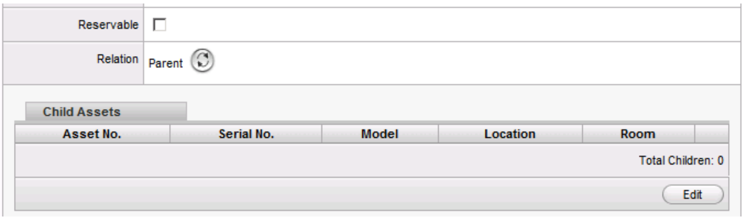
Creating Parent and Child Assets Associations

Using this feature, you link assets as a parent or as a child of another asset. Keep the following in mind when assigning parent/child associations:

- A parent asset can have any number of child assets.
- A child asset cannot be a parent to another asset.
- Removing the parent status orphans all the child assets for that parent.
- Child assets can be removed from individually from a parent.
- A child asset can have any number of parent assets.
- Child assets inherit priorities from the parent objects including location, status and other properties.
- Parent/child status is set by adding child assets to a parent asset. You cannot add a parent to a child.

To add assets as children of a parent asset:

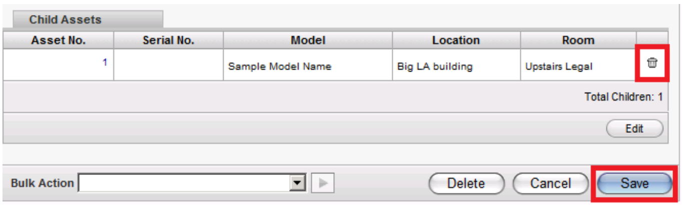
1. Locate the parent asset by clicking **Assets** 
.
2. Click the Asset Basics tab.
3. In the Child Assets box, click **Edit**.



4. Fill in the search criteria to locate the asset you want to make a child.
5. Click **Link** to select one of the listed assets as a child asset.
6. Click **Done**, and then click **Save**.

To remove a child asset from a parent asset:

1. Locate the parent asset using **Assets** .
2. **Click** the Asset Basics tab.
3. Locate the child asset in the Child Assets box.
4. Click the **trash can** next to the child you want to remove.



5. Click **Save**.

Asset History

Asset History displays a read-only history of the asset including:

Creation date

Location/room change

Client change

Status change

Sync date.

Tech that made the change.

Ticket History -

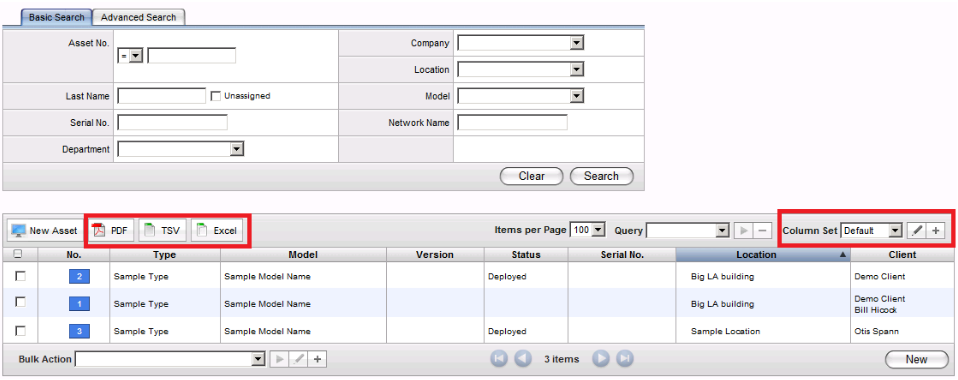
Ticket history provides a list of all tickets created for the asset as well as a link to a ticket detail view for editing.

Searching Assets

You search for assets in either the either Basic or Advanced tabs. Basic searching provides a simplified sub-set of the search criteria available in the advanced search mode.

If you want to sort search results, click on a column header.

If you want to download the search results in PDF format, click the button for the format type you want.



Refining Search Results

The search results list can display a large amount of asset data. To control what information is displayed, use the Column Set widget on the upper right of the search results list to enable or disable specific columns. Click + to add a new column set, or edit the selected column set by clicking  pencil.

Saved Queries

You save searches for future use in the Advanced Search Tab.

To save a query:

1. Define your search criteria using the same method explained in Searching Tickets
2. Provide a name in the **Save Query as:** field.
3. Select the **Shared** box if you want others to be able to use this search.

   Note: Depending on your access level, you may not have access to the share box.

To run a query, select the query name from the Query menu at the top of the search results display. The query will be run automatically upon selection.

Adding Purchase Orders

The purchase orders feature of the Web Help Desk simplifies tracking your assets purchases and leases. This feature is not meant to replace your company's current accounting or ordering systems. Web Help Desk does not create purchase orders but rather stores information about purchase orders.

Define Vendors

Before adding a new PO, one or more vendors must be entered into the database.

To add a new Vendor:

1. Go to **Setup > Assets > Vendors**.
2. Click **New**.
3. Fill in the vendor information, and then click **Save**.

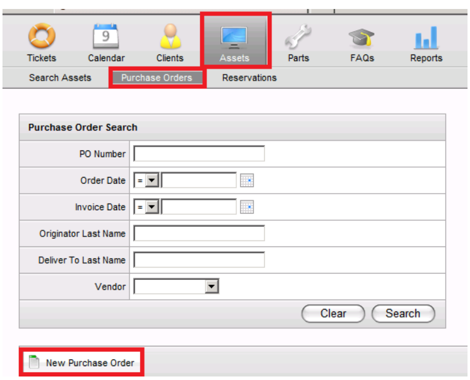
Adding a Purchase Order

Fields in a purchase order include:

- PO Number (must be unique in the database)
- Request Date – the date the purchase order was entered
- Invoice Date – the date the vendor shipped the product (used to help calculate warranty / lease expiration date)
- Vendor
- Originator Name – lookup, by last name, the client who made the PO request.
- Deliver To – lookup, by last name, the client the purchased items should be delivered to
- Attachments **-** link any supporting documentation
- Notes

To add Purchase Order information:

1. Click **Assets > Purchase Orders**.
2. Click **New** at the bottom of the search display list.



3. Fill in the Purchase Order information, and then click **Save**.

Add Purchase Order Line Items

After saving a purchase order, you add line items to the purchase order using the line item editor. You add individual parts and their costs to purchase orders in Line Items.

You associate specific assets by providing a valid asset number. If you attempt to link a line item to an asset number that doesn't exist, or is already linked to another PO, you will receive an error message.

To access the line item editor:

1. Select a purchase order by navigation to **Assets > Purchase Orders**, search for a PO and click the **PO Number** link.
2. Click **Pencil** to edit the PO.
3. Complete the **Line Item** box to the right.
4. If you want to add more line items, click **New Line Item**.
5. When you have completed the line items, click **Save**.

Line items must define a model and may contain part number and price information. TIP An asset can also be associated to a PO from within the asset detail view.

You must have a "free" line item defined in the PO in order to link the asset. If you were to add a new iMac G5 asset, you could associate it with the PO in the example above, because the iMac G5 line item is free (not linked) to any asset number.

Purchase Order Import

See Chapter 12, Importing Data, for details on importing purchase orders.

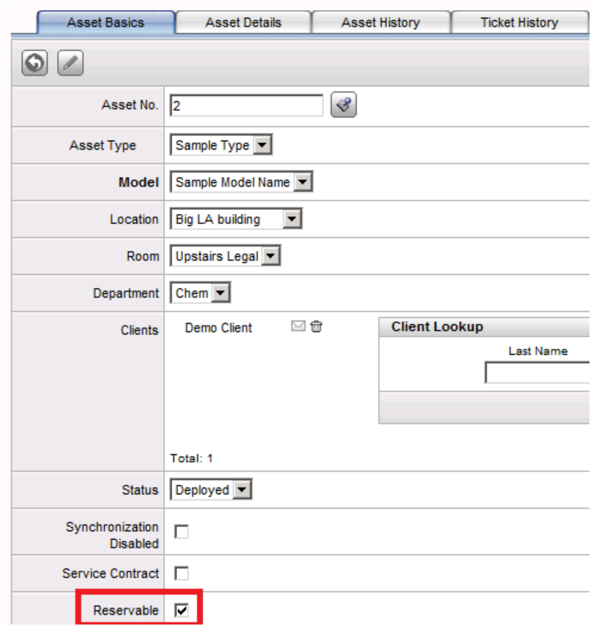
Reserving Assets

You ensure that an asset is available when you need it using the asset reservation feature. Before reserving an asset, the asset must first be set to reservable in the Asset Basics editor.

Making an Asset Reservable

To set an asset as reservable:

1. Navigate to **Assets > Search Assets**
2. Search for and select the asset you want to make reservable.



3. Select the **Reservable** check box.
4. Click **Save**.

Reserve An Asset As A Tech

To set up an asset reservation as a tech:

1. Navigate to **Assets > Reservations** and click **New Reservation**.
2. Use the Client Lookup to select the client who will be checking the asset out, and set the **Scheduled Out** and **Scheduled In** dates and times.
3. Find the asset to be reserved using the Asset Lookup box
4. Click the asset to be reserved, and then click **Save**.

Reserve An Asset As A Client

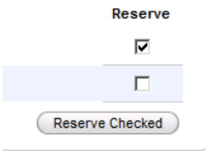
An administrator must give clients permission to reserve assets before clients can use the reserve asset feature.

To allow clients to reserve assets:

1. Navigate to **Setup > Assets > Options**.
2. Click **Clients can Search Assets**.
3. Click **Limit to Assigned and Reservable**, and then click **Save**.

To reserve an asset as a client:

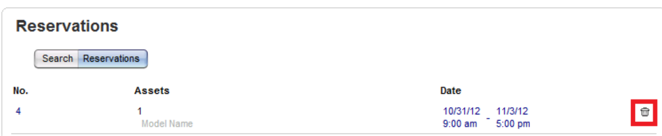
1. Click **Assets**  at the top of the client interface.
2. Click **Search**.
3. Once the desired asset has been located, select the **Reserve** check box and then click **Reserve Checked**.



Upon clicking **Reserve Checked** a calendar window will appear and allow for the selection of a reservation date or range of dates.

To select a reservation date range click on the first date of the reservation, drag the cursor to the last day of the reservation and then click **Save**.

To remove a reservation, click the trash can on the reservations page.

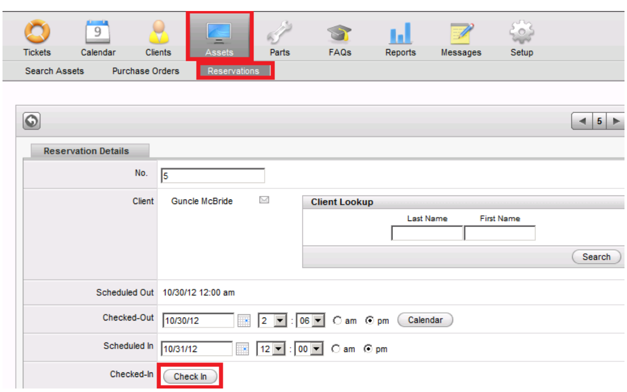


Asset Check Out and Check In

Only Techs can check reserved assets in or out.

Navigate to **Assets > Reservations** and click **Search** to find reserved assets

To check assets in or out, click **Check Out** or **Check In**.



Chapter 7

Change Management Processes

The change management feature provides a controlled environment for managing time sensitive or costly changes You add client personnel that are responsible for approving or denying changes. You define the process work flow and requirements. The Change Management Processes feature enforces these settings and implements the change management processes. This chapter details the following:

- Adding CAB Status Types
- Adding Approver Roles
- Assigning Clients To Location Approval Roles
- **1.** Select **Setup > Process Location Approvers**.

2. Click **Add Role**.

3. Select the **Approver Role** from the list.

4. Click **Search** in the Client Lookup Box.

5. Click the **Name** of the person you want to assign as a Location Approver.

Note: Repeat steps 4 and 5 above to add more approvers.

6. When you have finished assigning approvers, click **Save**.

Assigning Clients To Department Approval Roles

1. Select **Setup > Process Department Approvers**.

2. Click **Add Role**.

3. Select the **Approver Role** from the list.

4. Click **Search** in the Client Lookup Box.

5. Click the **Name** of the person you want to assign as a Department Approver.

Note: Repeat steps 4 and 5 above to add more approvers.

6. When you have finished assigning approvers, click Save.

- **Creating a Change Advisory Board (CAB)**
- Defining the Approval Processes
- Using Approvals

Adding CAB Status Types

The ticket creator assigns a status type when each ticket is created. Before making settings to the Processes section, check the Ticket Status Types to ensure that Change Advisory Board (CAB) status types are configured.

To enable Change Access Board (CAB) features, you add Pending Approval, Approved and Denied status types.

To add Approved, Approval Pending, and Denied status types:

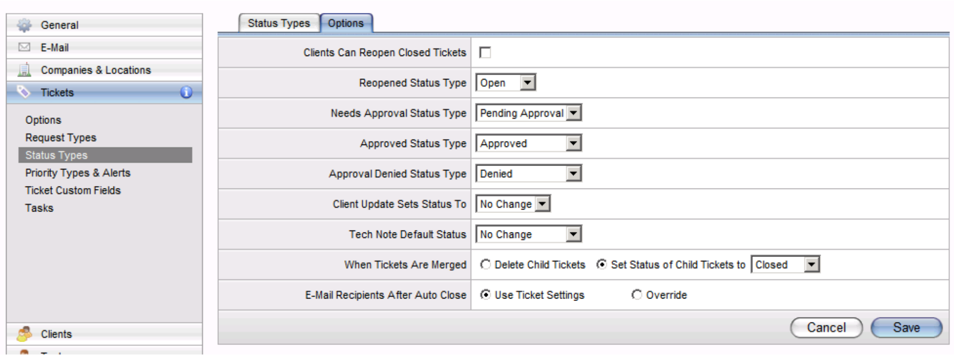
1. Navigate to **Setup > Tickets > Status Types** and click **New**.
2. In the Name field enter **Denied**.
3. In the Description field enter **CAB Status Type**.
4. Click **Alerts Enabled**.
5. Click **Client Reminders**, and then click **Save**.

Repeat steps 1 through 5 above to add the **Approved** and **Approval Pending** Status types.

After adding the above status types, you set the Status Types Options to allow the CAB features.

To set the Status Type Options for the CAB feature:

1. Navigate to **Setup > Tickets > Status Types > Options**.
2. Set the **Needs Approval Status Type** to **Pending** approval.
3. Set the **Approved** status type to **Approved**.
4. Set the **Approval Denied** status type to **Denied**, and then click **Save**.



Adding Approver Roles

Approver roles specify the level of authority for a given approver. These roles are:

- Location Approver - Allows for the assignment of approve for specific locations.
- Department Approver - for the assignment of approve for specific departments.
- Change Advisory Board Member participates in a Change Advisory Board (CAB)

Location Approver Roles

To add a position that will be responsible for approvals for one or more locations:

1. Click **Setup > Change Management > Approver Roles > Location Approver Roles**.
2. Click **New** to bring up a panel that will allow for a new location approver to be added inside the Approver Role Name cell.
3. Enter a **Location Approver Role Name** that describes the role, such as `NYC Approver`, and then click **Save**.

Department Approver Roles

To add a position that will be responsible for approvals for one or more departments:

1. Click **Setup > Change Management > Approver Roles > Department Approver Roles**.
2. Click **New** and add an **Approver Role Name** that describes the role, such as **Legal Dept Approver**, and then click **Save**.

Assigning Clients To Location Approval Roles

1. Select **Setup > Process Location Approvers**.
2. Click **Add Role**.
3. Select the **Approver Role** from the list.
4. Click **Search** in the Client Lookup Box.
5. Click the **Name** of the person you want to assign as a Location Approver.

Note: Repeat steps 4 and 5 above to add more approvers.

6. When you have finished assigning approvers, click **Save**.

Assigning Clients To Department Approval Roles

1. Select **Setup > Process Department Approvers**.
2. Click **Add Role**.
3. Select the **Approver Role** from the list.
4. Click **Search** in the Client Lookup Box.
5. Click the **Name** of the person you want to assign as a Department Approver.

Note: Repeat steps 4 and 5 above to add more approvers.

6. When you have finished assigning approvers, click Save.

Creating a Change Advisory Board (CAB)

Note: In WHD versions prior to 11.0.8 the **Processes** tab was called **Change Management**.

To create a new CAB:

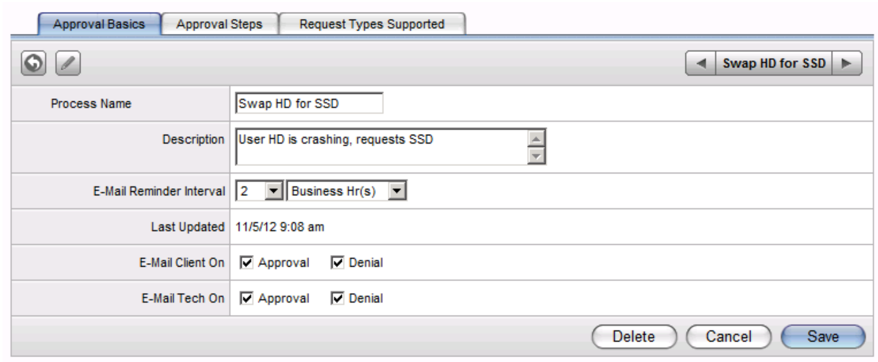
1. Navigate to **Setup > Processes > Change Advisory Boards** and click **New**.
2. Enter a **CAB Name**.
3. Use the **Client** search box to locate CAB members.
4. Add members to the board by clicking on their names.
5. After you have added all the CAB members, select the minimum number of members required to approve a change ticket. The minimum can be any number between one and the number of CAB members.
6. Click **Save**.

Defining the Approval Processes

Now that you have created approver roles, you will now define the approval process.

To define the approval process:

1. Navigate to **Setup > Change Management > Approval Processes**.
2. Click an existing **Approver Process** or click **New**.
3. Enter a **Process Name** and **Description** in the appropriate fields.
4. Select the desired **E-Mail Reminder Interval** for approvers.
5. Select the **e-mail recipients** for any approvals and denials, and then click **Save**.

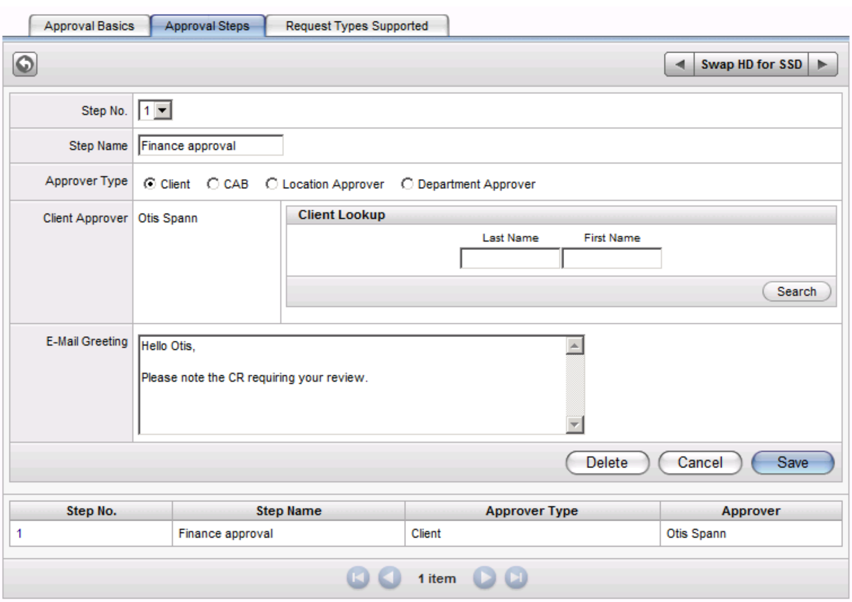


Adding Approval Steps

To add approval steps:

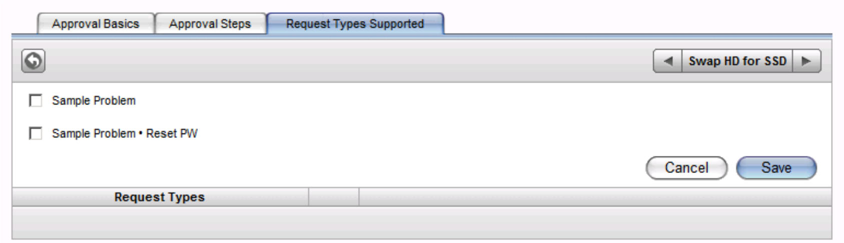
1. Select the **Approval Steps** tab and click **New**.
2. Use the **Step No.** list menu to select the step number of this approval step.
3. In the **Step Name** field add a descriptive name.
4. In the **Approver Type** field, use the radio buttons to select which type of approver will handle the step.

Note: Selecting CAB, Location or Department approver type results in a popup menu for the selection of the specific approver role or CAB to link to the step.



Selecting “Client” as the approver type requires the lookup of a specific Client to assign to the step.

5. Click the **Request Types Supported** tab.
6. Click **Edit**, click the request type , and then click **Save**.



Note: To add additional approval steps, repeat steps 1 through 6 above.

Using Approvals

Ticket Approvals

When a client logs in and creates a new ticket and selects a request type that has been assigned to an approval process, a notification in a large blue field denotes **This Request Type requires approval**.

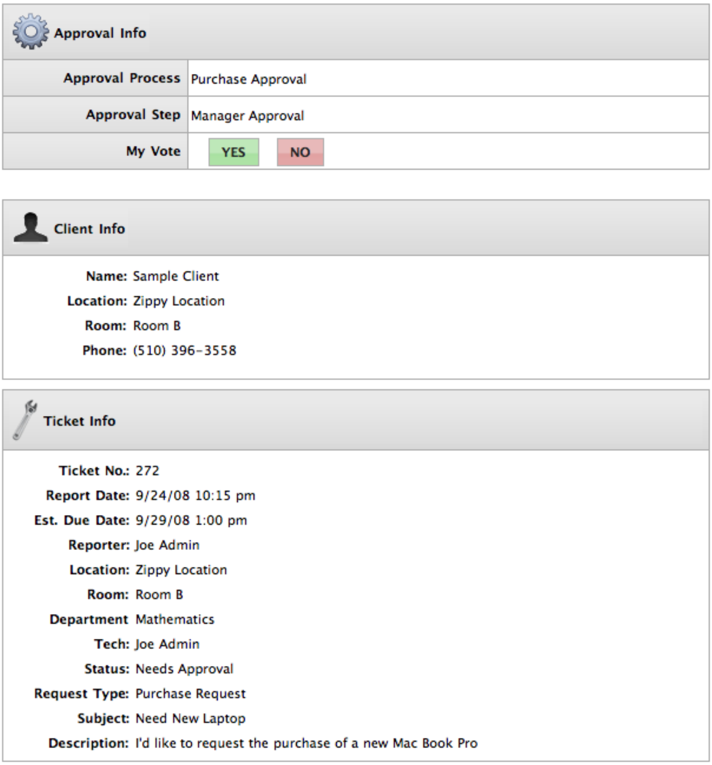
The following describes the approval process:

1. WHD sends an e-mail to the approver assigned to the first step of the approval process.
2. When the first approver approves the change, an email is sent to the next approver.
3. This continues until the ticket is approved or declined as specified in the approval process criteria.

Approver Action

An approver views or responds to the approval request in e-mail or the web interface.

E-Mail Approvals



The following describes the e-mail approval process:

1. Approvers receive e-mail when a ticket has been created that has an approval process assigned to it. The approver responds by clicking **Yes** or **No**.
2. WHD opens a web page asking the approver to confirm their decision.

a. If the required number of required approvers choose **Yes**, the ticket status is changed to **Approved**.

b. If the required number of required approvers do not choose **Yes**, the ticket status is changed to **Denied**.

3. If an approver clicks **No**, the approver is given an **Explanation** text box where they provide reasons for declining the request. The approver also has the option of using a **Visible to Requestor** check box below that allows the explanation to be viewable by the requestor.

Client Web Approvals

To view and approve through the web interface:

1. Click Approvals to view **New Approvals** and vote on each new request and to view **Old Approvals**.
2. Add an explanation if desired.
3. Select **Visible to Requester** to share the denial explanation as a note in the ticket.
4. Click **Save**.

Action Rules

Action rules provide the ability to create a customized process for unique use cases.

To add a new Action Rule:

1. **Navigate to Setup > Processes > Action Rules**, and click **New**.
2. Select a **Priority** for this rule. Priorities determine which action rule will be triggered if multiple rules meet the same criteria.
3. Assign a unique **Rule Name**
4. Add a **Description** for the rule.
5. Select the **Rule Triggering** criteria options to fit your criteria.
6. Click the **Criteria** tab.
7. Select the **Tickets Matching ALL of these conditions** and the **Tickets Matching ANY of these conditions** to fit your criteria.

   Notes:

- The conditions specified in the **ALL** grouping must have **all condition true** to trigger an action. These conditions are qualified using the Boolean **AND**.
- The conditions specified in the **ANY** grouping must have **at least one condition true** to meet the triggering condition. These conditions are qualified using the Boolean **OR**.
- The **ANY** condition group begins with **…and**. Therefore the **ANY** group is evaluated along with the conditions in the **ALL** condition group, if the **ALL** group is used.
- If no conditions exist in the **ALL** group, the **ANY** is evaluated using only the Boolean **OR**.

8. Click the **Actions** tab.
9. Specify the action to be taken when the criteria is met, and then click **Save**.

Chapter 8

Managing FAQs

Using the FAQ feature you create a database of information on common issues. Clients access the FAQs from the

Creating New FAQs

To Create a new FAQ:

1. Click **FAQs**, and then click **New**.
2. Select a category from the **Category** list.

   Note: The category list is populated from the ticket request types. To add additional Ticket request types go to **Setup > Tickets > Request Types**.

3. Enter an answer. Answers can include HTML hyperlinks and formatting, or use Bulletin Board Code (BBC) tags.
4. ***If you want to link this FAQ to a related FAQ,*** click **Link FAQ**, click **Search**, and then click **Link** on the FAQ you want to link.
5. Select the following viewing options:

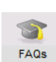
- Audience
- Models
- Companies
- Locations
- Departments

6. Select Approved to publish the FAQ.

Note: Only Administrators can approve FAQs.

7. ***If you want the FAQ to expire,*** add an **Expiration Date** and **Time**.
8. Click **Save**.

FAQ Search

Click 

FAQs in the menu bar.

Filter FAQs by FAQ number, category, location, model, approval, expiration, and question/answer text.

To edit a FAQ, click the FAQ hyperlink number.

To sort the results list, click a column header.

Accessing FAQs

Web Access

FAQs that are available to "Everyone" and are approved can be accessed by anonymous users by connecting to the following URL:

http://{myserver.com}/helpdesk/WebObjects/Helpdesk.woa/wa/FaqActions/viewAll

FAQs that are linked to specific Locations or Departments are not accessible using the public URL.

RSS Feed

An RSS feed of public (Everyone) FAQs is also available at the following URL:

http://{myserver.com}/helpdesk/WebObjects/Helpdesk.woa/wa/FaqActions/rss?type=atom

Clicking on the subject of the RSS entry opens the corresponding FAQ in its own window.

Chapter 9

Parts & Billing

This chapter covers the following:

- Parts & Billing Options
- Rates & Terms
- Managing Parts
- Invoicing

Parts & Billing Options

Disabling Parts & Billing

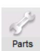
The Web Help Desk Parts & Billing feature tracks parts, inventory and billing on tickets. This functionality is enabled by default.

To disable this feature navigate to **Setup > Parts & Billing > Parts & Billing Options** and clear the **Parts & Billing Enabled** check box.

Disabling parts & billing hides the main Parts icon, the ticket detail Parts & Billing tab, billing preferences and the billing reporting options.

<u>Manual Part Entry</u>

To manually add parts:

1. Click **Parts**  **> New Part**.
2. Enter a Part Number.
3. Select a **Manufacturer and Model**.

   Note: Manufacturers and models are added at **Setup > Assets >Manufacturers & Models**.

4. Add a description of the part.
5. To mark a part as Tax free, select the **Tax Free** check box.
6. If you want to track inventory thresholds, select the **Inventory Alerts Enabled** check box.
7. Enter the desired **Inventory Alert Threshold**.

   Note: Do not leave this number at zero. The alert is triggered when the inventory level is one less than the number you select.

8. Set the **Inventory Alerts Interval** in **Setup > Parts & Billing > Inventory Alerts**.
9. Enter Default Inventory Alert Recipient (Optional)

   Notes:

- This address will only be used to alert for inventory levels where there is no location inventory recipient set.
- Location recipients are set at **Setup > Location & Departments > Locations & Rooms > Edit Location > Location Info**. Select the check box to **Enable Location** to store Parts and then enter an **e-mail recipient**.

Importing Parts Lists

For detailed information on importing parts lists, see Chapter 12, Importing Data.

Rates & Terms

Billing Rates, Terms and Taxes

This feature allows you to define billing rates to use in your tickets. You configure specific billing rates to be consistent with the level of service delivered (Level tech) and the applicable local tax codes.

To define billing rates:

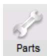
1. Navigate to **Setup > Parts & Billing > Rates & Terms >Billing Rates**
2. Click **New**.
3. Enter a **Rate Name**.
4. Enter an **Hourly Rate**.
5. Select **Subtracts From Time Blocks** if you use time block billing.
6. Select **Travel Rate** if this rate is for travel time only.
7. Click the **Billing Terms tab**.
8. Enter a **Term Name** that reflects the negotiated term, such as **Net 30**.
9. Click the **Tax Rates tab**, and then click **New**.
10. Enter the applicable tax rate.
11. If you want this rate to apply to parts only, Select **Do not Apply** in the **Apply to Labor** section.
12. Select **Apply to Parts** and **Apply to Shipping** as appropriate, and then click **Save**.

Managing Parts

Inventory

WHD tracks part inventory levels for locations that are set to store parts. To designate locations for parts storage see Setup – Locations.

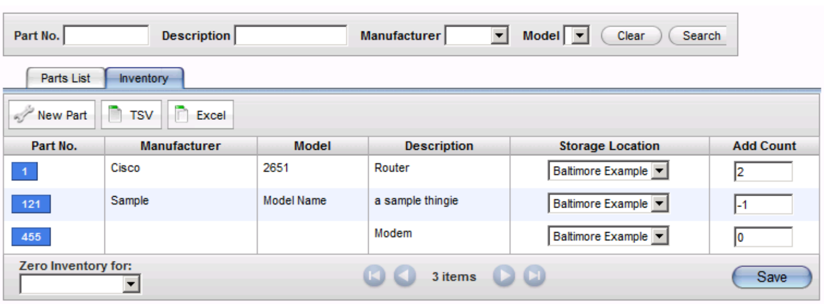
To add parts to a location:

1. Click **Parts** 

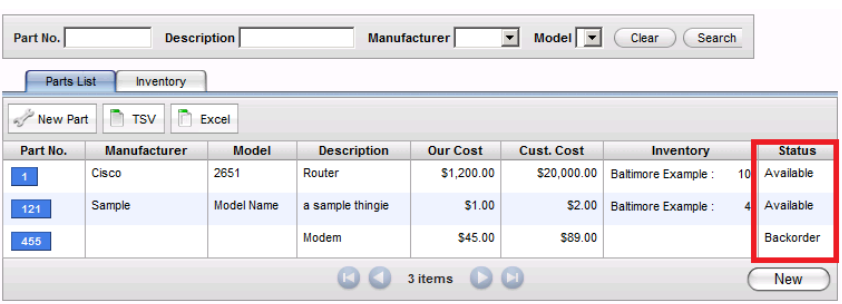
, and then click the **Inventory** tab.
2. Locate the part you want to add to a location using the search box. To list all parts leave the search fields empty and click **Search**
3. Select a **Storage Location**.
4. Add the number of part available at the storage location in the **Add Count Field**.

   Note: To reduce the number of parts available, use a negative number. For example, to change the number of available parts from 6 to 4, enter -2.

5. Click **Save**.



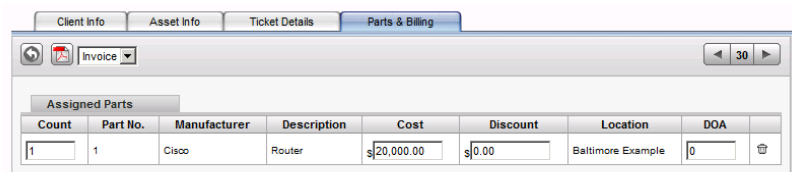
Note: When a part inventory reaches zero the inventory status will change from Available to Back Ordered.



To use parts in a ticket,

1. Click **Tickets** , and then click the ticket number.
2. Click the **Parts and Billing** tab.
3. Locate the part using the **Part Search** box. The Search Results box now displays the location and number of parts available.
4. Click the inventory name or the number available to add the part.

The part now appears in the **Assigned Parts** box.



If ***you want to have defective parts removed from inventory,*** enter the number of parts in the **DOA** field.

WHD removes the cost of the DOA parts from the ticket, and lists DOA parts in a separate area in your billing reports.

To remove an entire parts line item and return the parts back to inventory, click the **trash can** on the right.

When you have finished making changes, click **Save**.

Additional fields available include Billing Terms, PO Number, Shipping, Discount and a Tax Free option.

You configure tax rates in **Setup > Parts & Billing > Rates & Terms > Tax Rates**. If you update your rates, tickets created prior to the update retain their original rate.

To update an old ticket with the new rates, click **Refresh Tax Rate.**

Invoicing

To specify a company contact for invoices:

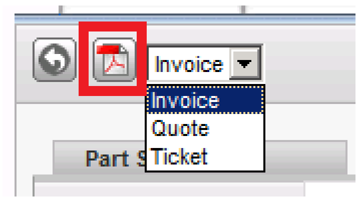
1. Navigate to **Setup > Invoicing Options**.
2. Add the contact information in the Invoicing tab fields.

3. Optionally, add your company logo in the **Logo** tab
4. Click **Save**.

To generate a PDF invoice or quote directly from a ticket:

1. Click **Tickets** 

.
2. Search for your ticket.
3. Click the **ticket number** in the search results.
4. Click the **Parts and Billing** tab.
5. Select the type of PDF you want to generate using the list on the top left of the **Parts and Billing** tab.



6. Click the PDF icon.

Service Time Blocks

This option allows you to offer support to your client locations based on predefined service time blocks.

To enable Time Block Billing:

1. Navigate to **Setup > Parts & Billing > Options**
2. Select **Enable Location Service Time Blocks**, and then click **Save**.
3. Navigate to **Setup > Locations And Rooms**.
4. Click the location for which you want to enable time blocks.
5. Click **Pencil**  to edit the location
6. Select the **Service Time Blocks Enabled** check box.
7. Click **Save**.
8. Click the **Service Time Blocks** tab.
9. Click **New**.
10. Enter the amount of time in the **Time Block** field
11. Optionally, click **Expiring** to define an expiration time and date.

12. Click **Save**.

Notes:

- For an expired block, the usable value may be lower than the block value depending on how much time was used before the block expired.
- The amount of service time available for a location is displayed within the Ticket Details of a ticket under the location popup. If the value is negative, it will display in red.

Chapter 10

Reports

Web Help Desk provides a robust reporting feature that helps clients and administrators to track service quality and billing information. This chapter covers the following:

- Using Sample Reports
- Creating Reports
- Report Groups
- Creating Report Schedules

Using Sample Reports

The Web Help Desk includes a set of sample reports you can use immediately.

To run a sample report click **Reports** and then click the **Play Triangle** on the right side of the screen.

To generate a printable web view in a new window, click the **Print View** icon in the report row.

To create a PDF for downloading or printing, click the **PDF** icon in the report row.

Creating Reports

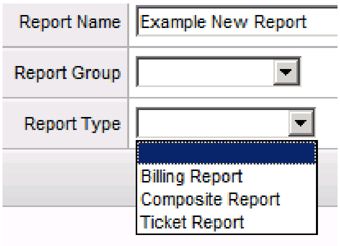
The reports feature creates custom reports for billing information, ticket information, or a mixture of reports linked together.

Billing Reports

Billing Reports generate a table showing the total work time, parts cost, and labor cost accrued for a set of tickets.

To create a new billing report:

1. Click **Reports** and then click **New**.
2. In the **Report Basics** tab, enter the **Report Name**.
3. Optionally, select a **Report Group**.
4. Select **Billing Report** in the **Report Type** list.



5. Click the **Report Details** tab.
6. Select a **Category** to indicate the type of information this report will contain.
7. Select a **Time Range** for the report.

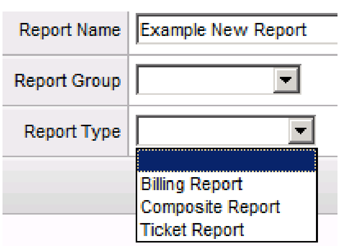
   Note: The default range is not shown, but it is from today, back one month.
8. Select a **Date Attribute for Time Range** from the list.
9. Optionally, click the **Report Filters** tab to add a report filter.
10. Select a **Filter Attribute**. WHD populates the filer values available by this choice.
11. Select a **Filter Type** and the **Filter Values**, and then click **Save**.

Ticket Reports

Four sets of options define ticket reports; categories, metrics, time range, and filters. Categories determine which values various dimensions of the report will represent. Metrics determine which ticket attribute will be used to calculate the length of bars or size of pie slices, and determines which attribute will be included in the table.

To create a new Bar Chart ticket report:

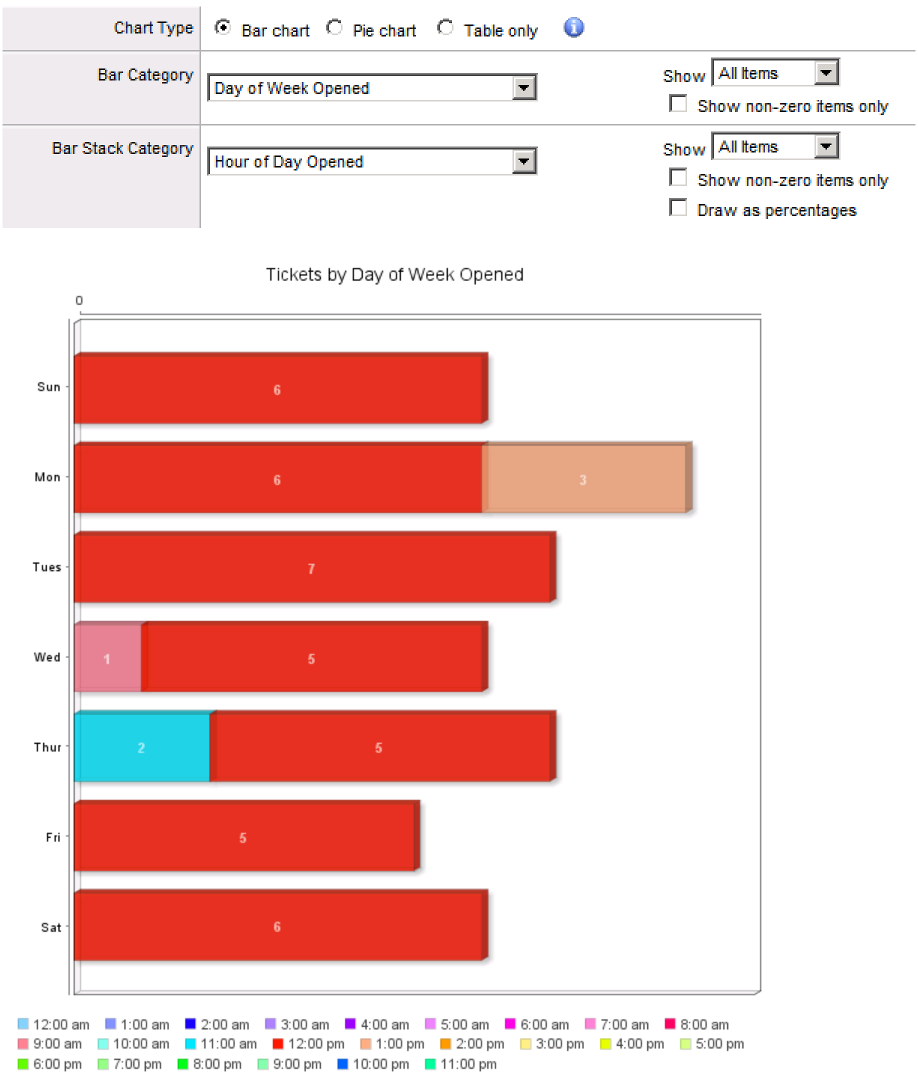
1. Click **Reports** and then click **New**.
2. In the **Report Basics** tab, enter the **Report Name**.
3. Optionally, select a **Report Group**.
4. Select **Ticket Report** in the **Report Type** list.



5. Click the **Report Details** tab.

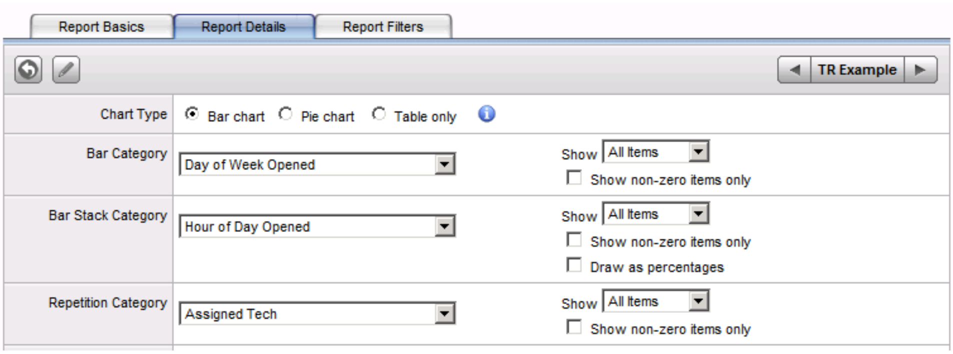
6. Select **Bar Chart** as the **Chart Type**.
7. Select a **Bar Category** to indicate what data the bar will represent.
8. Optionally, choose a **Bar Stack Category** to indicate data to be stacked on the bar.

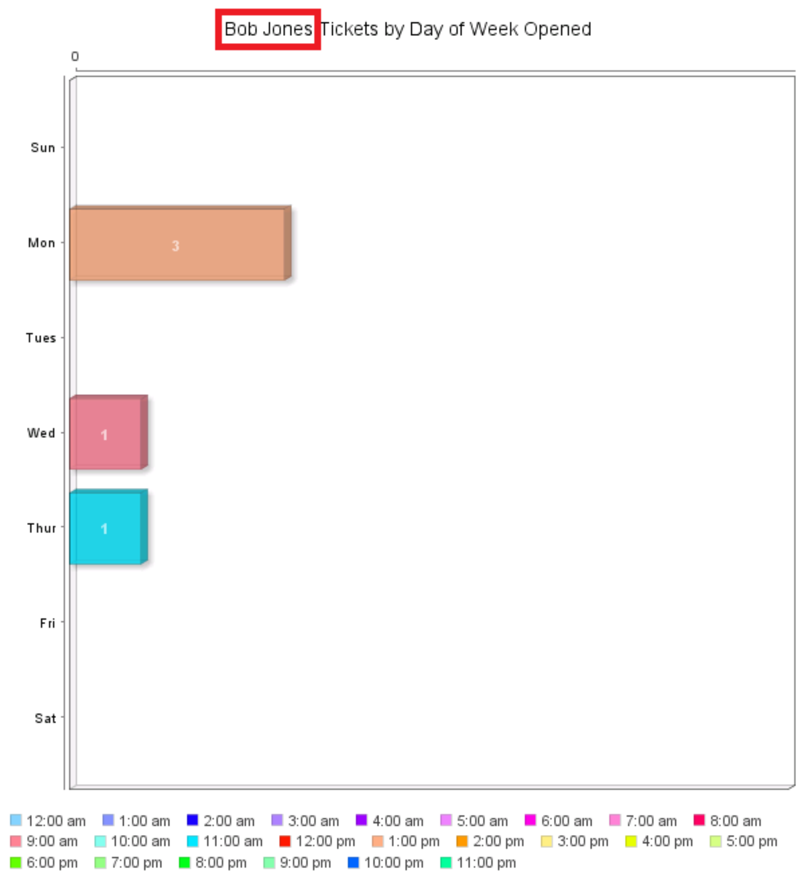
For example, the chart below was created using **Day of Week Opened** as the **Bar Category** and **Hour of the Day Opened** as the **Bar Stack Category**.



9. Optionally, choose a **Repetition Category** to create multiple charts, separated by this field.

For example, the chart below was created using **Day of Week Opened** as the **Bar Category**, **Hour of the Day Opened** as the **Bar Stack Category,** and **Assigned Tech** as the **Repetition Category**. This creates multiple reports, one for each tech.

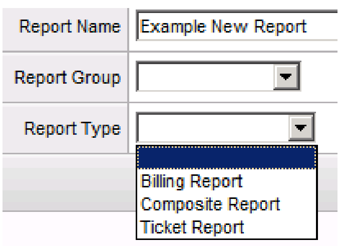




10. Select a **Chart Metric** to indicate the type of measurement. The above examples were created using the **Tickets** metric.
11. ***If you want to show a data table with the chart,*** select **Show Table**.
12. Select a **Time Range** and a **Date Attribute**.
13. Click **Save**.
14. Optionally, click the **Report Filters** tab to add a report filter.
15. Select a **Filter Attribute**. WHD populates the filer values available by this choice.
16. Select a **Filter Type** and the **Filter Values**, and then click **Save**.

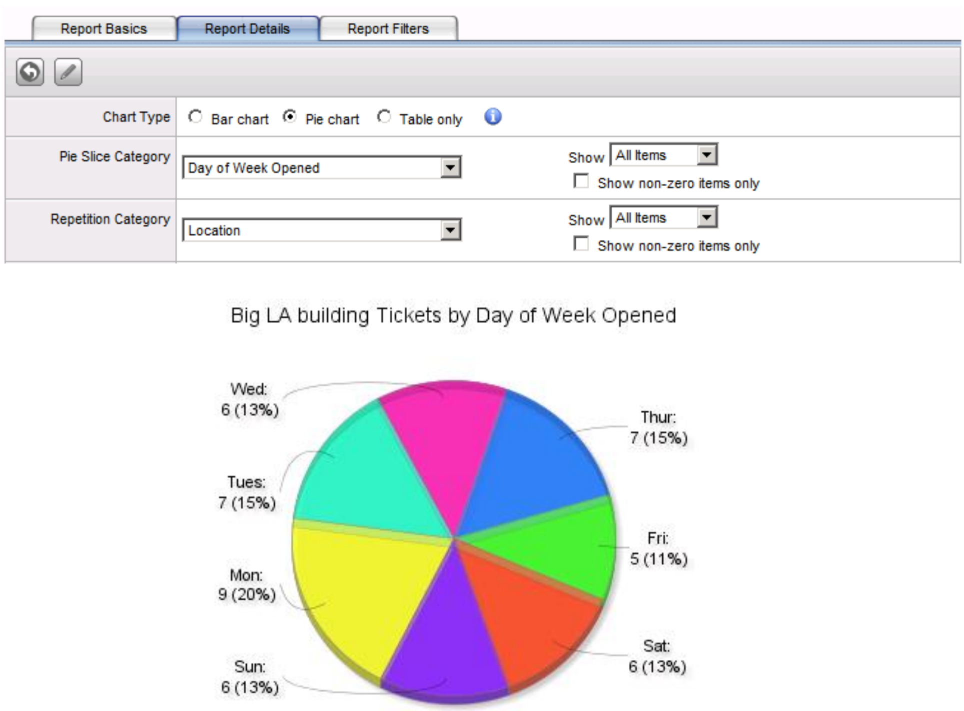
To create a new Pie Chart ticket report:

1. Click **Reports** and then click **New**.
2. In the **Report Basics** tab, enter the **Report Name**.
3. Optionally, select a **Report Group**.
4. Select **Ticket Report** in the **Report Type** list.



5. Click the **Report Details** tab.
6. Select **Pie Chart** as the **Chart Type**.
7. Select a **Pie Slice Category** to indicate what data the slices will represent.
8. Optionally, choose a **Repetition Category** to create multiple charts, separated by this field.

For example, the chart below was created using **Day of Week Opened** as the **Pie Slice Category** and **Location** as the as the **Repetition Category**.



Date Worked On is a unique date attribute as it looks specifically at tech notes created during the specified date range and not ticket dates. Ticket reports using this date attribute include data based on all tech notes in the date range regardless of who created them, however all work time is attributed to the assigned tech on the ticket.

To group request sub-types together within a single entry for their parent type, create a filter that includes the parent request type.

For example, if there are request types for Hardware and Software, and each have subtypes that you do not wish to appear as separate lines in the report, create an inclusive Request Type filter that includes the **Hardware** and **Software** request types. The report shows a single line for Hardware that includes all tickets with subtypes of Hardware, and a single line for Software that includes all tickets with subtypes of Software.

Report Groups

Creating Report Groups

The Report Groups function facilitates organization and helps control access to report data.

Report Groups control access to created reports sorted by Tech and Location Group. This ensures that each Tech is only presented with the reports concerning their scope of work.

To create a new Report Group:

1. Navigate to **Reports > Report Groups**, and then click **New**.
2. Enter a **Report Group Name**.
3. Select the **Tech Groups**, **Location Groups**, and **Department Groups** that will have access to the reports.
4. Click the **Included Reports** tab.
5. Select the applicable **Reports**, and then click **Save**.

Creating Report Schedules

To further facilitate the distribution of reports, WHD includes the Report Schedules function. This function schedules and automates to report creation and distribution.

To create New Report Schedule:

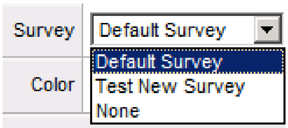
1. Navigate to **Reports > Report Schedules**, and then click **New**.
2. Enter a **Schedule Name**.
3. Specify the **Interval** values.
4. Use the **Client Lookup** widget to search for clients.
5. Click a client **Name** to add a client.
6. Optionally, add non-client and non-tech recipients in the **Other Recipients' E-Mails** field.
7. Click the **Tech Recipients** tab, and the click **Edit**.
8. Select the applicable tech check boxes.
9. Click the **Included Reports** tab, and then click **Edit**.
10. Select the reports you want to include.
11. Click **Save**.

Chapter 11

Surveys and Messages

Surveys provide feedback from your client users. You have the option to link surveys to a specific ticket for a single client, or to send surveys as general questionnaires to a number of clients.

You specify which survey to use for a specific ticket request types at **Setup > Tickets > Request Types**.



- Creating Surveys
- Sending Surveys
- Viewing Survey Results
- Creating Messages

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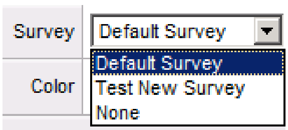


Creating Surveys

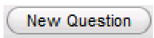
To create a new survey:

1. **Navigate to Setup > Surveys > Surveys**, and click **New**.
2. Enter a **Survey Name** and a **Description**.
3. Enter the **Greeting** and the **Thank You Message**.
4. Enter an **E-Mail Invitation Message**.

Note: See the tooltip help in WHD for a description of the available tags.

5. Select the **Frequency** for this survey.

   Note: Frequency defines the rate at which the survey is sent. A frequency of 1 sends the survey for each ticket. A frequency of 2 sends the ticket on every second ticket.

6. Select the **Max E-Mail Invitations** to specify how many times you want the survey to be sent if the client has not responded.
7. Select an E-Mail Reminder Frequency.
8. Enter an **Email-Reminder Subject**, and an **Email-Reminder Message**.
9. Optionally, enter an e-mail address for **Competition Notification Address**.
10. Click **New Question** 

 in the lower left corner.
11. Select a **Display Order** to indicate the position of this question.
12. Enter the **Question** text.
13. Select the **Answer Type**.
14. Enter the **Answer Options** using semicolons to denote each option.
15. Optionally, select **Allow Explanation** to allow the client to provide feedback on why they chose a specific answer.
16. Click **Save** in the lower right corner of the **Question Editor** widget.

To add more questions, repeat steps 10 through 16.

17. When you have entered all of the question for this survey, click **Save**.

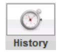
To set the Survey Options:

1. Navigate to **Setup > Surveys > Options.**
2. Optionally, select a **Default Survey** to specify a survey for ticket request types that are marked for Default Survey.

   Note: If the **Default Survey** is set to **None**, no survey will be offered for tickets with a request type using the **Default Survey** selection.

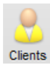
3. Select the **Default Max Survey Invitations** and the **Default Max Survey Reminder Interval**.
4. Enter an **Email-Reminder Subject**, and an **Email-Reminder Message**.
5. Click **Save**.

Sending Surveys

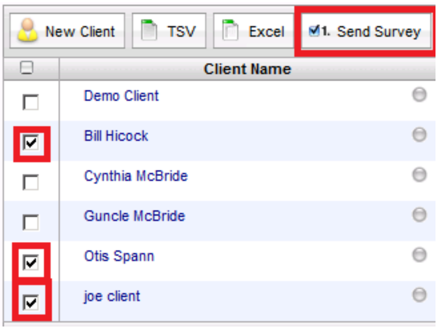
WHD sends e-mail ticket surveys for each closed ticket that has a survey specified in **Setup > Tickets > Request Types**. Clients access surveys either by replying to the e-mail or by selecting History 

from the top menu.

To send a General Survey to one or more clients:

1. Click **Clients** 

, and then click **Search**.
2. Select the check boxes for the clients you want to send surveys.



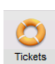
3. Select the **Survey** to be sent, and then click **Save & Email**.

Viewing Survey Results

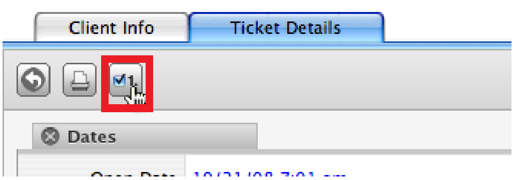
WHD offers two ways to examine survey results, the Ticket Detail View and Survey Results. Ticket Detail Views shows the result for a single ticket where as the Ticket Reports provides the ability to combine and sort results.

<u>Ticket Detail View</u>

To see the results of an individual ticket:

1. Click **Tickets** 

, and then click the number of the ticket you want to view.
2. Tickets with survey results display a Survey View Button. Click the survey results button.



Survey Reports

To view summary data regarding both ticket and general surveys

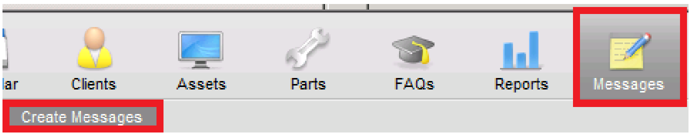
1. Navigate to **Reports > Survey Results.**
2. Select the **Survey** you want to view.
3. Optionally, select any of the other fields to narrow the scope of the results.
4. When you have completed your selections, click **Run Report**.

   Note: Survey Reports are the only way to view the results of a general (non-ticket) survey.

Creating Messages

To create a new message:

1. Navigate to **Messages > Create Message**.



2. Click **New Message**.
3. Enter the **Message** text.

   Note: Messages can contain plain text, HTML tags, and inserted FAQ links.

4. Select an **Audience** for the message.
5. ***If you want to include a link to a FAQ,*** click **Link FAQ**.
   a. Click **Search** and then click **Link**.
   b. To add additional FAQ links repeat steps 5 and 5 a.
6. Optionally, If your message includes Techs, select **Specify Tech Groups**, and then select the groups to receive the message.
7. ***If you want to lock the message so that recipients cannot delete the message,*** select **Locked**.
8. Optionally, select a **Start Date** and an **Expiration Date**.
9. Click **Save** to save and send the message.

Chapter 12

Importing Data

The data import options let you import data in bulk, rather than having to add individual items manually. You import data using either predefined templates, or by using an asset discovery tool. WHD provides templates in three formats; Excel spread sheets, Tab Separated Variable (TSV) files, and Comma Separated Variable (CSV) files.

This chapter covers template data imports for:

Locations

Companies

Clients

Assets

Purchase Orders

Tickets

FAQs

Parts

Inventory

This chapter also covers the following asset import tools:

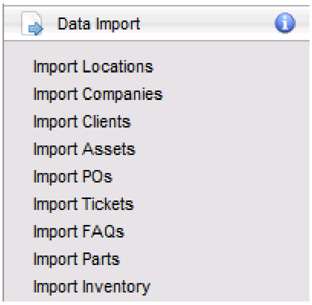
- Absolute Manage
- Apple Remote Desktop
- Casper
- LANSweeper
- Microsoft SMS/SCCM

Importing Data Using Templates

To import data for TSV, CSV and Excel files:

1. **Navigate to Setup > Data Import**.

2. Select an import type.



3. Select a data format for the template.
4. Download the template.
5. Populate the template.
6. Upload the populated template.

The table below specifies.

Type of Import	**Required Fields**
Locations	Location Name
Companies	Company Name, Manager Tech Username
Clients	Last Name, User Name, E-Mail
Assets	Asset Type, Manufacturer, Model
Purchase Orders	PO Number, Vendor
Tickets	Open Date, Request Type
FAQs	Category, Question, Answer
Parts	Part Number, Manufacturer, Our Cost, Customer Cost
Inventory	Part Number, Location, Count

Notes:

- Do not alter the order of the columns or delete any column in any import. Altering the import file in this way results in failed imports.
- All parts within an inventory imports must be defined in WHD before importing inventory.
- If your tickets to import use request sub-types, enter the type and sub-type in the Type column and separate the type and sub-type with a semicolon.
- For parts imports, costs cannot contain commas or currency symbols.

Asset Discovery Tools

Web Help Desk supports several methods of automated asset discovery. Using one of these tools, you synchronize WHD with the tool and import the assets into the WHD database.

Web Help desk support the following import tools:

- Apple Remote Desktop version 3 or later.
- Casper Suite 6 and Casper Recon.
- LANrev 4.6.4 or later.
- Microsoft SMS/SCCM.
- Database Table or View.

Asset Discovery Basics

WHD imports assets using the following process.

First WHD compares the discovered asset against all assets currently associated with any existing Asset Discovery Connection.

Anytime an asset discovery is run, the asset discovery tool provide unique identifiers for each asset. For example, Casper assigns each asset a JSS ID. WHD records this JSS ID as the asset's synchronization identifier.

During subsequent synchronizations, WHD finds each discovered asset's corresponding WHD record by matching the JSS IDs provided by the discovery database against the synchronization identifiers stored in the WHD database.

If a discovered asset is found having a synchronization identifier that matches that of the discovered asset, WHD verifies the asset using the following:

- Asset Number
- Serial Number
- MAC Address

If any of the above fail to match the discovered asset, WHD assume this is new asset and assigns a new synchronization identifier.

Configuring Discovery Tools

This section details the steps required to configure WHD to use the following third party asset discovery tools:

Apple Remote Desktop 3.2

Apple Remote Desktop 3.3

Casper

LANrev

Microsoft SMS/SCCM

Database Table or View Settings

Lansweeper

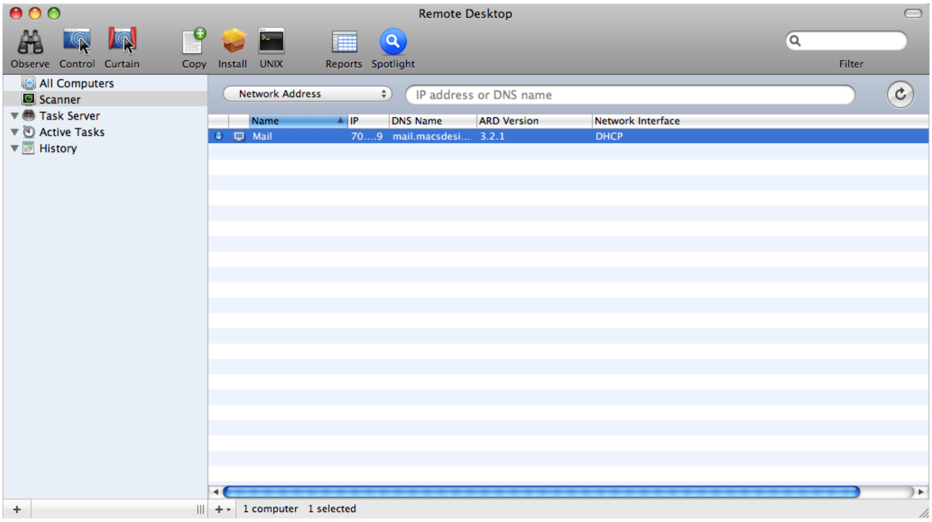
Apple Remote Desktop 3.2

In order to use Apple Remote Desktop 3.2, you enable and configure the ARD PostgreSQL database to allow network connections. WHD provides a setup script to make the configurations for you. Next, you will scan all the assets that must be included in WHD and then run a System Overview report in ARD (The System Overview Report option exports the asset data to the ARD PostgreSQL database.

For more information about the Apple database see: http://developer.apple.com/appleapplications/ardsql.html. The Apple document explains in detail what the WHD script does, and gives instructions on how to manually access the database from the Apple terminal.

To configure an ARD 3.2 connection:

1. Download WHDRemoteDesktopBridge.dmg from http://downloads.solarwinds.com/solarwinds/Release/WebHelpDesk/WHDAppleScriptBridge.dmg
2. Run the bridge installer on the WHD server.
3. Install Apple Remote Desktop on the discovery database server.
4. Start Apple Remote Desktop and ensure it is scanning for computers.



5. Follow the steps in http://developer.apple.com/appleapplications/ardsql.html to configure ARD for TCP/IP access.

   Notes:

   Remote Desktop must be started at before continuing on to configure the database for TCP/IP access.

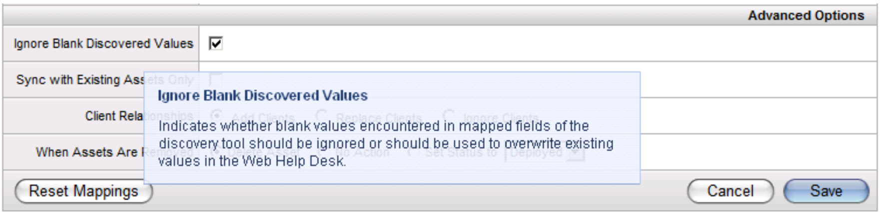
   The Apple script configures the ARD database to enable TCP/IP access, and then displays your database connection information. Take note of these connection settings. You will need to enter them into Web Help Desk.

6. Open Remote Desktop and select the computers to imported.
7. Navigate to **Report > System Overview,** and then click **Run** to run a System Overview Report.

   Note: ARD does not remove computers from the database when they are no longer included in a System Overview report. Remove any retired assets from ARD before synchronizing with WHD.

8. In Web Help Desk, go to **Setup > Assets > Discovery Connections** and click **New**.
9. Select **Apple Remote Desktop** as the discovery type, click **3.2 or earlier** for the version and enter the database connection parameters provided by the database setup script in step 5.
10. Enter the **Remote Desktop PostgreSQL Database Host** IP address and port.
11. Enter the **Database Name**, **Username** and **Password** for the database.
12. Optionally, select an **Auto-sync Schedule**.

13. Set the Advanced Options on the lower section of this screen. See the tooltip help for detailed explanations of each options.



14. Click **Save**.

To view the imported assets, navigate to **Assets > Search Assets**.

Apple Remote Desktop 3.3

As of version 3.3, Apple Remote Desktop uses a local SQLite database to store report data. This means that ARD must be installed on the same machine as your Web Help Desk to sync inventory data.

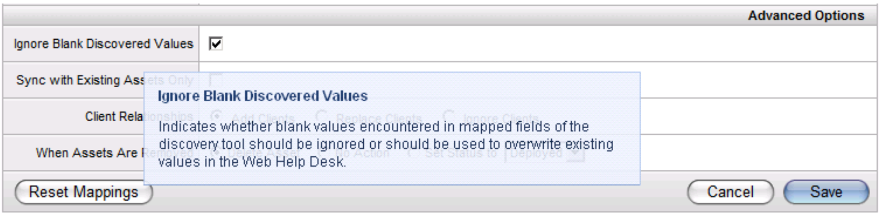
When using ARD 3.3 requires no additional configuration on the SQLite database to make the connection.

To configure an ARD 3.3 connection:

1. Install Apple Remote Desktop on the WHD server.
2. Start Apple Remote Desktop and ensure it is scanning for computers.
3. Open Remote Desktop and select the computers to imported.
4. Navigate to **Report > System Overview,** and then click **Run** to run a System Overview Report.

   Note: ARD does not remove computers from the database when they are no longer included in a System Overview report. Remove any retired assets from ARD before synchronizing with WHD.

5. In Web Help Desk, go to **Setup > Assets > Discovery Connections** and click **New**.
6. Select **Apple Remote Desktop** as the discovery type, click **3.3 or later** for the version.
7. Enter the **Remote Desktop SQLite Database Filename**.
8. Set the Advanced Options on the lower section of this screen. See the tooltip help for detailed explanations of each options.



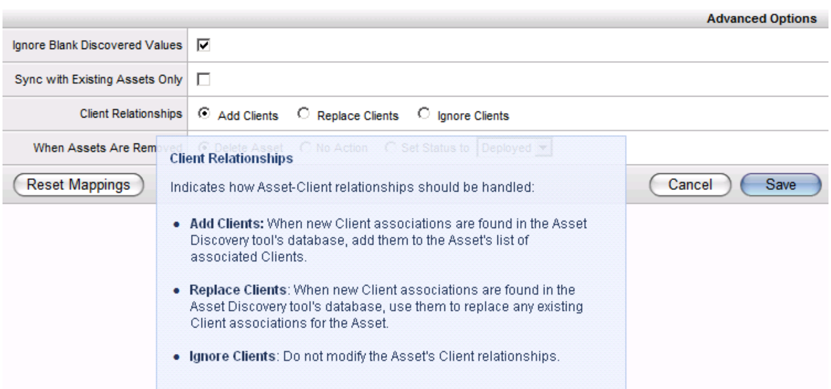
9. Click **Save**.

To view the imported assets, navigate to **Assets > Search Assets**.

Casper

To configure Casper Asset Discovery:

1. In Web Help Desk, go to **Setup > Assets > Discovery Connections** and click **New**.
2. Select **Casper** as the discovery type.
3. Enter the **Casper MySQL Database Host** IP address and **Port**.
4. Enter the **Database Name**, **Username** and **Password** for the database.
5. Optionally, select an **Auto-sync Schedule**.
6. Set the Advanced Options on the lower section of this screen. See the tooltip help for detailed explanations of each options.



7. Click **Save**.

To view the imported assets, navigate to **Assets > Search Assets**.

LANrev

Web Help Desk features an asset discover integration with LANrev 4.6.4. This integration consists of two components:

- A LANrev MySQL ODBC connection to WHD.

- Remote control of LANrev system using a link in WHD.

To implement this integration:

1. Configure the LANrev MySQL ODBC export.
2. Configure the LANrev admin console to respond to HTML requests from Web Help Desk.
3. Configure Web Help Desk to import client inventory data from the LANrev MySQL database and enable the LANrev inventory and remote control links.

Configuring LANrev MySQL ODBC Export

The following link provides a complete walk through of configuring a LANrev My SQL ODBC export. Complete this procedure then return to this document to continue.

http://forums.absolute.com/viewtopic.php?f=10&t=223&p=1855&hilit=ODBC+export#p1855

Configuring the LANrev Admin Console

To prepare the LANrev Admin Console for Mac OS WHD integration:

1. Close the LANrev admin console.
2. Using the Property List Editor, add the following setting to the LANrev admin console preferences in the following location.

```
~/Library/Preferences/com.poleposition-sw.lanrev_ admin.plist
```

Note: Alternately, you may choose to make the change using the Mac terminal by entering these two commands:

```
defaults write com.poleposition-sw.lanrev_admin

HTTPServerEnabled -bool true
```

To prepare the LANrev Admin Console for Windows WHD integration:

1. In Regedit, enter the following two lines.

```
Edit "HKEY_CURRENT_USER\Software\Pole Position Software\LANrev

Admin" registry key

Set HTTPServerEnabled - Boolean/DWORD - Yes/1
```

Configuring Web Help Desk for LANrev Manager

1. In the Web Help Desk Admin interface navigate to **Setup > Assets > Discovery Connections**, and click **New**.
2. Enter a descriptive **Name** for this connection.

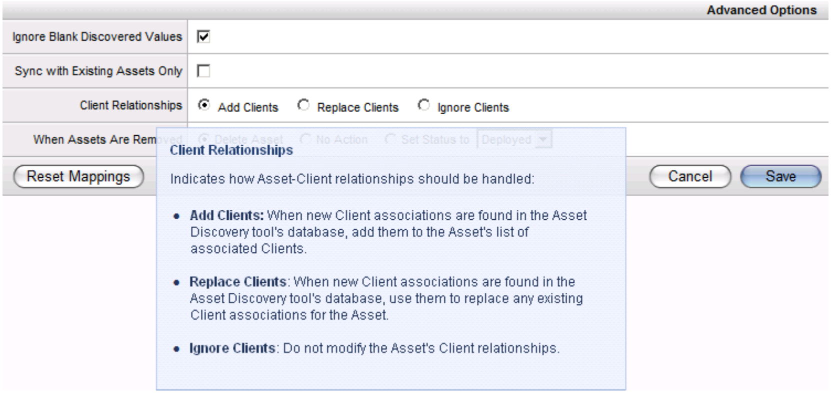
3. Enter the **Absolute Manage Mysql Database Host** IP address and **Port**.
4. Enter the **Database Name**, **Username** and **Password**.
5. ***If you want virtual machine assets included,*** select **Included Virtual Machines**.
6. Optionally, select an **Auto-Sync Schedule**.
7. Use the Attribute Mapping tab of the asset discovery connection to map any custom asset fields to LANrev attributes.
8. Navigate to **Setup > Assets > Options** and select **Absolute Manage Links Enabled**.

   Note: With this enabled, wherever assets are selected in Web Help Desk, icons will appear allowing you to open the asset in the LANrev admin console.

Microsoft SMS/SCCM

To create a discovery connection for Microsoft SMS/SCCM:

1. In the Web Help Desk Admin interface navigate to **Setup > Assets > Discovery Connections**, and click **New**.
2. Select **Microsoft SMS/SCCM** as the discovery type.
3. Enter the **SCCM SQL Database Host** IP address and **Port**.
4. Enter the **Database Name**, **Username** and **Password** for the database.
5. Optionally, select an **Auto-sync Schedule**.
6. Set the Advanced Options on the lower section of this screen. See the tooltip help for detailed explanations of each options.

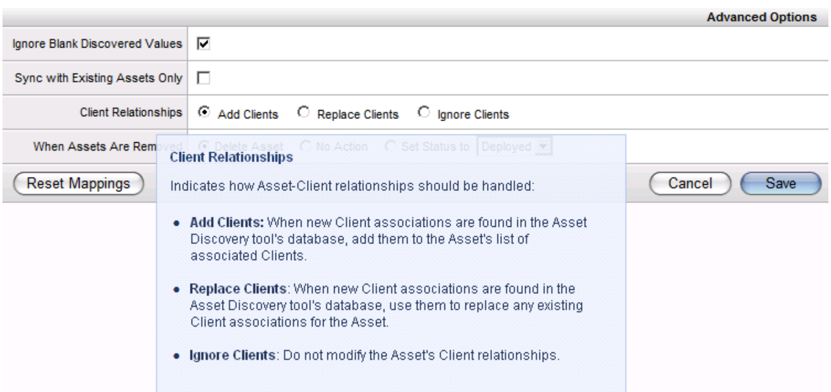


7. Click **Save**.

Database Table or View Settings

To create a discovery connection for a Database Table or View:

1. In the Web Help Desk Admin interface navigate to **Setup > Assets > Discovery Connections**, and click **New**.
2. Select **Database Table or View** as the discovery type.
3. Select the **Database Type.**
4. Enter the database **Host** IP address and **Port**.
5. ***If you are adding a connection to Microsoft SQL, My SQL, OpenBase, PostgreSQL, or Sybase,*** enter the **Database Name**.
6. ***If you are adding an Oracle connection,*** enter the database **SID**.
7. Enter the **Database Name**, **Username** and **Password** for the database.
8. Select a Table or View to be imported.
9. Select s Sync Column
10. Optionally, select an **Auto-sync Schedule**.
11. Set the Advanced Options on the lower section of this screen. See the tooltip help for detailed explanations of each options.



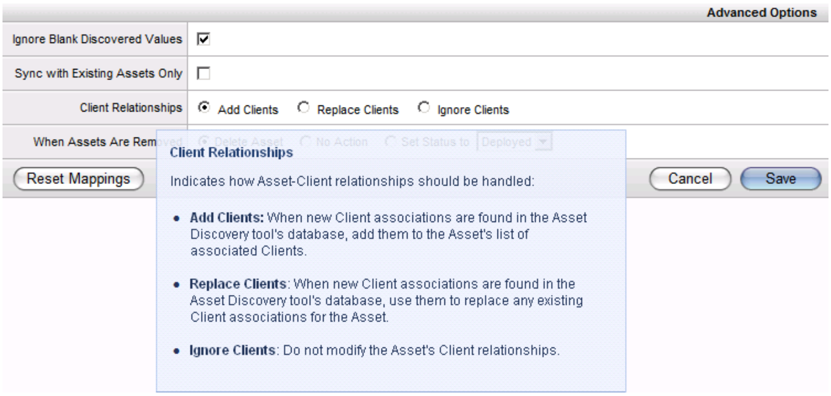
12. Click **Save**.

Lansweeper

To configure Casper Asset Discovery:

1. In Web Help Desk, go to **Setup > Assets > Discovery Connections** and click **New**.
2. Select **Lansweeper** as the discovery type.
3. Enter the **Lansweeper SQL Database Host** IP address and **Port**.

4. Enter the **Database Name**, **Username** and **Password** for the database.
5. Optionally, select an **Auto-sync Schedule**.
6. Set the **Advanced Options** on the lower section of this screen. See the tooltip help for detailed explanations of each options.



7. Click **Save**.

Attribute Mapping

Use the Attribute Mapping tab to map asset custom fields to the discovery tool's attributes. The asset attributes available to be mapped to depend on the particular discovery tool. These values are taken directly from the values provided by the discovery tool's database.

The ARD popup menu is hard coded in the WHD ARD plug-in, based on the values Apple provides in the database. There is no way to customize the attributes that appear in this popup.

Appendix A

Deployment Considerations

Memory Sizing and JVM Options

The main deployment factor to consider is the number of concurrent users you expect your application to support. Tech sessions use much more memory than Client sessions, so use the estimated number of concurrent Tech sessions to determine which type of deployment will work for your needs.

Supporting less than 20 Techs

On a 32 bit OS, the WHD uses a 32 bit Java Virtual Machine (JVM). The maximum memory a 32 bit JVM can address varies slightly by operating system, but 1600 MB is a common maximum value. This maximum supports 10-20 concurrent Techs without a problem.

Ensure you have enough physical memory in your machine to support both the 1600 MB for the JVM as well as the server OS and any other services you run on the machine.

If you want to adjust the maximum memory setting, edit the WebHelpDesk/conf/whd.conf file's MAXIMUM_MEMORY option. The default value is 512 MB.

Supporting more than 20 Techs

If you need to support more that 20 simultaneous Tech sessions, we suggest installing WHD a 64 bit OS and a 64 bit JVM. On a 64 bit JVM you are free to increase the max heap memory to multiple gigabytes in size by editing the WebHelpDesk/conf/whd.conf file's MAXIMUM_MEMORY option.

A 64 bit JVM is available by default on Mac OS X 10.5 for Intel.

To enable the 64 bit JVM, add the following argument to the /Library/WebHelpDesk/conf/whd.conf file's JAVA_ OPTS option:

```
JAVA_OPTS="-d64"
```

For other operating systems, install your own 64 bit JVM (Java 5 or Java 6), then update the JAVA_HOME option in the WebHelpDesk/conf/whd.conf file to point to your Java installation.

WebObjects on Mac OS X Server

WebObjects deployment is supported on Mac OS X 10.4 and 10.5 Server only. WebObjects deployment is not supported on 10.6 Server.

To configure the WHD to run under WebObjects using the Monitor tool:

1. Install the Web Help Desk, and then run the following deployment script in the terminal (as root or sudo):

   ```
   /Library/WebHelpDesk/bin/UpdateWebObjectsConfiguration
   ```

2. In Mac Server Admin, start the Web and the WebObjects services. Enable the Monitor by selecting **Turn Monitor On**. You can leave the default ports.
3. With a web browser, connect to the Monitor tool at http://yourserver.com:56789.
4. Click the Site tab. Provide a valid **URL to Adaptor.**
5. Select **Round Robin** as your load balance scheme and set the **Receive Timeout** value to 300.
6. Click **Update Adaptor Settings** to save.
7. Click the Host tab. Provide the DNS name or IP address of the server and then select **Mac OSX** as the **of type** option. Click **Add Host** button. If this is the only host that will be running the application, enter **127.0.0.1** as **the Host Address**.
8. Click the Application" tab. Add an application called **Helpdesk.** Click **Add Application**.

To configure the new application:

1. Click **Path Wizard** for the **Mac OSX path field** to lookup the following path to the application startup file:

/Library/WebHelpDesk/bin/webapps/helpdesk/ WEB-INF/Helpdesk.woa/Helpdesk

2. ***If you want to capture log files***, provide an **Output Path**.

   Note: The directory you designate must be writable by the appserver user.

3. Provide **Additional Arguments** to specify the max JVM heap size for the application instances. Each instance can handle up to 1600m, but values of 256m to 384m are sufficient. The format is**: -Xmx256m**
4. Click **Push All** to save all settings, and then click on the Applications tab again. You should see your application listed.

5. Click **Detail View** and add the optimal number of instances for your server based on the max JVM memory setting you specified in the application configuration.

   Note: Remember to leave enough free memory for your System and any other services you are running on the machine and leave an additional 64 MB free for the Daemon application which we will add.

6. Click **Add** to create the instances.

7. The instances should startup on their own.

   Notes:

- Optionally, you can speed up the process by clicking the green **Start** button in the ALL INSTANCE row for the Start/Stop column.
- To refresh click the blue hyperlink **Refresh Now** text below the application name.

At this point you should be able to connect to your application by going to the following URL: http://myserver.com/cgi-bin/WebObjects/Helpdesk.woa If you didn't name your application "Helpdesk", make sure to substitute the appropriate application name in the URL.

8. Click Applications tab and add a new application called **Daemon**. This application will have a similar configuration to Helpdesk, but the path to the application startup file is:

   /Library/WebHelpDesk/bin/webapps/WHDReminder- Daemon/WEB-INF/WHDReminderDaemon.woa/WHDReminderDaemon

9. Provide an **Output Path** if you are capturing log files. You can use an additional argument of -Xmx64m for the memory setting.

10. Click **Push All** to save.

11. Go to the **Detail View** for the Daemon application and add one instance of the Daemon.

    Note: It is important that you have only a single instance, as multiple instances will cause problems with e-mail ticketing and alert email generation.

The Web Help Desk is now configured to run under WebObjects using the Monitor tool.

Clearing JVM Heap Memory

WHD deployments may eventually fill up the JVM Heap Memory which may result in degraded performance. To solve this problem, periodically restart WHD to clear the heap memory. The procedure for doing this varies based on the OS where WHD is hosted.

Mac OS X

Note: This procedure requires WHD version 8.4.6.8 or later.

1. Login to your OS as root or admin.
2. Copy the `/Library/WebHelpDesk/bin/com.macsdesign.RestartWebHelpDesk.plist` file into your `/Library/LaunchDaemons` folder.
3. Execute this command:

```
launchctl load com.macsdesign.RestartWebHelpDesk.plist
```

4. You can verify that the plist was loaded successfully with this command:

```
launchctl list
```

5. To unload the LaunchDaemon, use this command:

```
launchctl unload com.macsdesign.RestartWebHelpDesk.plist
```

The plist file provided is configured to restart Web Help Desk each night at 1AM. You can change the schedule by editing the StartCalendarInterval property in the plist. See the Mac OS X documentation for details.

Notes:

This launch daemon works only with the standard Tomcat deployment of Web Help Desk. WebObjects Monitor deployments use the Monitor tool to configure automatic restarts.

When scheduling with the Monitor, make sure to clear **Is Graceful** to force the instances to restart.

Windows

To schedule the WHD application for a nightly restart:

1. Navigate to **Start > Control Panel > Scheduled Tasks > Add Scheduled Task** to start the **Scheduled Task Wizard**.
2. Select any application to run.
3. Select a **Daily** time to run the task.

Select **open advanced** option. Change the **Run** command to be `net stop webhelpdesk`.

To create a second Scheduled Task to restart the WHD application:

Follow the same steps above, but use the Run command `net start webhelpdesk` as the final step.

Note: Schedule the start at least one minute later than the stop command to ensure that the service has completely stopped before attempting to restart.

Linux/Solaris

For Linux and Solaris installations, create a nightly cron job that calls the stop/start scripts as root or using sudo. The following commands would need to be called:

```
/usr/local/webhelpdesk/whd stop /usr/local/webhelpdesk/whd start
```

Appendix B

Multiple Instance WHD Installation

Prior to version 10.0.16, the Web Help Desk consisted of two separate applications: "Helpdesk" and "WHDReminderDaemon." WHDReminderDaemon ran as a background service providing services for tasks such as checking for new e-mail tickets, syncing with LDAP on an automatic schedule, and checking for expired warranties. As of version 10.0.16, the services provided by WHDReminderDaemon are now bundled into a single Helpdesk application.

For standard deployments of Web Help Desk, the installer automatically configures the Helpdesk deployment descriptor (web.xml) to run daemon services in the background.

For multiple instance configurations, however, one instance must be configured to provide daemon services as either dedicated or background. Having more than one instance provide daemon services can result in the creation of duplicate tickets and the unnecessary use of system resources. Consequently, all but one application instance should run without daemon services (WHDDaemonMode=none). The single daemon instance can be set to either dedicated or background.

The other instance must have be set to none. The below describes the function of the daemon settings.

Dedicated

The application instance functions only as a daemon, and the login page is disabled.

Background

The application instance functions as a daemon but users can also log in to it.

None (default)

The application instance does not execute daemon tasks.

To configure a multiple instance installation, set the memory, the tomcat deployment descriptor, and the WebObjects daemon mode.

Memory

Daemon processes should be allocated at least 256MB of memory. If the WHDDaemonMode is set to background, it should be given an additional 256MB of memory beyond the amount given to other instances, since it will provide daemon services in addition to serving the application user interface.

To set the daemon memory:

1. Stop Web Help Desk.
2. Open the \WebHelpDesk\cong\whd.conf file.
3. Change the MAXIMUM_MEMORY setting to `MAXIMUM_MEMORY=1024`.
4. Save the whd.conf file.
5. Restart Web Help Desk.

Tomcat daemon

To set the Tomcat deployment descriptor daemon mode:

1. Stop Web Help Desk
2. Open \WebHelpDesk\conf\tomcat_web_tempate.xml.
3. Set the WHDDaemonMode (near the end of the xml file) for the instance type as described above.
4. Save the file.
5. Restart web Help Desk

WebObjects Daemon

To set the daemon mode for WebObjects Monitor deployments:

1. Stop Web Help Desk.
2. Open \WebHelpDesk\bin\wrapper\conf\wrapper_template.conf
3. Add the following parameter to the end of the # Java Additional Wrappers section.

```
wrapper.java.additional.14=-DWHDDaemonMode=background
```

4. Save the file
5. Restart Web Help Desk.

Note: We recommend creating a separate WebObjects Monitor application for the daemon instance, naming it **HelpdeskDaemon**. This will ensure that the WebObjects adaptor will not attempt to direct login requests intended for the Helpdesk instance to the daemon instance.

Like the other application instances, the daemon instance should have its application path set to /Library/WebHelpDesk/bin/webapps/helpdesk/WEB-INF/Helpdesk.woa/Helpdesk.

Since the default daemon mode is **none**, it is not necessary to set the WHDDaemonMode argument for non-daemon instances.

Appendix C

High Availability Deployments

You create a high availability WHD deployment using one of these three methods:

- Use WebObjects Monitor on Mac OS X.
- Configure a multi-instance Tomcat deployment on Linux.
- Separate instances into virtual machines.

Monitor Deployment on Mac OS X

Mac OS X Server 10.6 and earlier included WebObjects. For later versions, use the instructions provided at

http://wiki.wocommunity.org/display/documentation/Deploying+on+Mac+OS+X+Server.

After installing WebObjects:

1. Run the Web Help Desk installer to extract the application.
2. Install the application to /Library/WebHelpDesk.
3. Run the following script to configure the Web Help Desk to work with WebObjects:

```
sudo /Library/WebHelpDesk/bin/UpdateWebObjectsConfiguration
```

   Note: You must run this script again whenever you apply Web Help Desk update.

4. In WebObjects Monitor, add a new application named **Helpdesk** with the following path:

```
/Library/WebHelpDesk/bin/webapps/helpdesk/WEB-
    INF/Helpdesk.woa/Helpdesk
```

5. Also in Monitor, add a new application named HelpdeskDaemon with the same path as above:

```
/Library/WebHelpDesk/bin/webapps/helpdesk/WEB-
    INF/Helpdesk.woa/Helpdesk
```

6. In the instance configuration page for HelpdeskDaemon, add the following to the "Additional Arguments" setting:

```
-DWHDDaemonMode=dedicated
```

Note: Only one instance of Web Help Desk should ever be running as a daemon.

After starting the applications in Monitor, you should be able to connect to the Web Help Desk with the following URL:

http://localhost/cgi-bin/WebObjects/Helpdesk.woa

Multi-instance Tomcat Deployment on Linux

Follow the instructions for configuring a multi-instance Tomcat deployment provided http://knowledgebase.solarwinds.com/kb/questions/4281/Creating+multiple+instances+of+WHD+on+one+server.

Virtual Machines

Multi-instance Windows deployments are problematic because the service name used for the Web Help Desk and the embedded database are hard coded, so you can't simply install a second instance to a different location. However, you can install another instance on another machine and connect it to the same database. If multiple instances are needed on the same physical machine, multiple instances could be installed on separate virtual machines.

Note:

Web Help Desk can run daemon processes in three different modes: dedicated, background, or none. In a multi-instance deployment, it is important that only one instance be configured to run as the daemon, either in dedicated or background mode. We recommend running it in background mode so that it can be restarted at will, on a more frequent basis than the front-end instances, without interfering with the front-end application. For information on configuring the daemon, see http://knowledgebase.solarwinds.com/kb/questions/4228/How+to+configure+the+Web+Help+Desk+daemon.