# Installation, Configuration and Administration Guide



# eHD10.4



## *everything* HelpDesk<sup>®</sup> Installation, Configuration and Administration Guide

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eHD10.4 November 2014

# everything HelpDesk™

*everything* HelpDesk 10.4 combines the full feature sets of integration, mobile management and superior support in a single unified environment.

The *e*HD user guide presents an overview of installation, configuration, administration, along with an overview of highlighted features.

A great product is nothing without superior support. That is why we are interested in hearing your suggestions and recommendations, as well as any questions that you may have, to ensure that we are providing you with the highest quality support materials.

GroupLink Support Services info@grouplink.net





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# Getting Started

## **Your License**

You have received your GroupLink *everything* HelpDesk license via email. See Appendix 4 for a complete copy of your License Agreement.

Make sure you thoroughly read the attached information before beginning installation of GroupLink's *everything* HelpDesk. It is extremely important to complete the Pre-Installation Checklist before continuing with the installation process.

# Service Support

The following documentation will give you information about pre-installation, installation, and configuration of GroupLink's *everything* HelpDesk software on your system. It will also give information to administrators on how to configure and setup your HelpDesk once it is installed.

If you have further questions or need to contact GroupLink Support, please fill out a support ticket. See Chapter 6 (Service Support) for instructions on how to log a support ticket or to contact a support technician.

# Overview of everything HelpDesk

*everything* HelpDesk is a completely web-based, mobile and user-friendly help desk solution built on ITIL best practices. Whether deployed for education, government, healthcare, financial services, or other IT service support functions, this everything solution helps you become an IT Hero while reducing your total IT cost of ownership (TCO).

*e*HD is designed as the cross platform service desk solution. It runs smoothly on Windows, major Linux distributions, Macs and Novell platforms. The illustration below demonstrates how *e*HD integrates with your IT infrastructure.



With *everything* HelpDesk, you can expand your help desk capabilities with Incident Management, Change Management, Project Management and Problem Management with ITIL best practices. Business processes and Reporting are both made easier with Ticket Templates and Scheduled Reports. Because *e*HD integrates with Exchange, GroupWise, Gmail, and other SMTP servers, keeping up with tickets and tasks is as easy as checking your email. Best of all, the *e*HD application is simple to use for End Users and with world class customer service Technicians, Managers, and Administrators will have a great experience as well.

# **Pre-Installation**

*everything* HelpDesk is designed to be setup with minimal downtime so you can start using it right away. The following pages take you through an overview of all pre-installation requirements and recommendations, including:

- Hardware Recommendations
- Software Requirements
- Pre-Installation Checklist

# Hardware Recommendations

The hardware listed below is a recommendation by GroupLink for efficient *e*HD operation. Note that each server (database, Tomcat, etc.) does not need to reside on a separate system, although it is recommended in larger installations (with more than 20,000 users).

#### **Client Workstations**

For best performance, we recommend that your client workstations meet the recommended system specifications for your desired browser. eHD is best viewed with a minimum of 800x600 resolution

#### **Server Machines**

Minimum of 2GB of RAM Minimum of 1GB of free hard drive space for database (expandable as needed)

## Software Recommendations

*everything* HelpDesk is very flexible at incorporating and integrating the software and operating systems you use most. The following is a complete list of all software requirements needed before installing *e*HD:

#### **Client Workstations - Supported Browsers**

Internet Explorer 10 or higher, with compatibility mode disabled Mozilla Firefox 2.5 or higher Safari 4 or higher Chrome 6 or higher

These are the browsers we have tested on and found stable for this release. Users may use newer versions of the operating systems but must be advised that they have not been fully tested.

#### **Server Machine**

#### **Operating System**

GroupLink's *everything* HelpDesk is flexible enough to run on several operating systems. The operating systems supported by *everything* HelpDesk are:

Microsoft Windows (Server 2000 or higher) Major Linux Distributions (Ubuntu, redhat, Fedora) Novell's OES, OES2, SUSE, SLES 9 or higher Mac OS X 10.4 or higher

These are the operating systems that we have tested on and found stable for this release. Users may use newer versions of the operating systems but must be advised that they have not been fully tested.

When installing everything HelpDesk, it is recommended that you use the new all-inclusive installer. The installer comes pre-packaged with all the software components needed to run eHD (Java, Tomcat Server, and MySQL Database). If you would like to follow our recommendation, skip to the pre-installation check-list section on page 12.

**NOTE:** If you are using the all-inclusive installer, disregard the following information about Java JDK Environment, Tomcat Server, and Database Server.

#### Java JDK Environment

Since *e*HD is programmed in the widely used Java language, it is required that the Java environment be setup and configured before installing HelpDesk. The Java version that is now required to run *e*HD is Sun JDK version 1.5. It is essential that Java be installed on the same server as Tomcat. If you would like more information on downloading, installing and configuring the Java environment, please visit their website (http://java.sun.com/javase/downloads/index\_jdk5.jsp).

If you have Java installed, we recommend making sure that you have it working before installing Tomcat. You can test the install of Java by opening up a command line interface and typing "**java** –**version**." If you receive version information about the Java environment, your installation should be complete. After installing the Java JDK 1.5, you will also need to set the JAVA\_HOME variables. See Appendix 4 for instructions on how to do that.

This is the Java version that we have tested and have found to be stable with *e*HD. Users may use newer versions of Java but must be advised that they have not been fully tested.

### Tomcat Server

Apache Tomcat is the servlet container for the *e*HD application. It is used to service the Java Servlet and JavaServer pages. Without Tomcat, *e*HD will not operate. It is required that Tomcat be configured and running before starting the installation of *e*HD. The recommended version of Tomcat is 5.5 or higher for all supported operating systems. Tomcat 5.5 can be run on Linux and Windows operating systems. Note that we have not been able to test on Tomcat 6.0, but many users running on Tomcat 6.0 have not experienced any problems.

If you would like more information on downloading, installing and configuring Tomcat, please visit their website (http://tomcat.apache.org/download-55.cgi). If you would like assistance with installing and setting up your Tomcat server, GroupLink support can help, but this does not qualify for the two hours of training provided with your license purchase.

You can test your installation of Tomcat, along with Java, by going to the Tomcat home page on your local machine. Open Internet Explorer and point your browser to **http:**//*<ip\_address\_of\_server>***:8080** (Only use port 8080 if it is configured). An example of this would be: http://ehelpdesk.grouplink. net:8080. If you can properly load the page, you have correctly installed both Java and Tomcat. If you have any additional problems with Java or Tomcat, please visit their individual websites for more information.

During the installation of *everything* HelpDesk you will need access to the Tomcat services. You will need to be able to shutdown and startup the server several times during the installation. If you are running on Linux you will also need rights to edit some configuration files.

This is the Tomcat version that we have tested and have found to be stable with *everything* HelpDesk. Users may use newer version of Tomcat but must be advised that they have not been fully tested.

GroupLink's *everything* HelpDesk supports several platforms of databases. The supported databases are:

MS SQL Server 2000, 2005, 2008Oracle 8i, 9i, 10g, 11gSybase 15 or lowerMySQL 5.0PostgreSQL 7.3

These are the database versions that we have tested and found to be stable with *e*HD. Users may use newer version but must be advised that they have not been fully tested.

When it has been decided what platform will be used, a separate container (or database) must be created for *e*HD. Also, the database server must have permissions and privileges appropriately setup for *e*HD to communicate with the server.

As with all databases, you should ensure that there is plenty of hard drive space available for the database to expand.

If you have any questions about how to setup your database please consult your database manual or online resources.

During the installation of *e*HD you will need to know the database server name and/or IP address and the name of the database you previously set up with its associated username and password. This username and password should have read and write access to the database.

If you would like assistance in installing and setting up your database server, GroupLink support can help (regular service charges will apply.)

## **Pre-Installation Checklist**

## License File and Application Download

- Unpack the license file from the email that was sent to you and store the **grouplink.zlx** file in a directory that can be accessed locally.
- Download the distribution of the application you would like to run at <a href="http://downloads.grouplink.net">http://downloads.grouplink.net</a>

### LDAP Server (if applicable)

Fill in the information below for your LDAP configuration.

Server Type	(e.g., Novell Directory Ser- vices)
Server Name	(e.g., <i>e</i> HDServer)
Server IP Address	(e.g., 192.0.0.1)
Server Port Number	(e.g., 636)
LDAP Username (Administrator) (As distinguished name)	(e.g., cn=JohnDoe,ou=users, DC=grouplink,DC=net)
LDAP Password (Administrator)	(Recommended that you do not write this down but have access to it)
LDAP Base Test	(e.g., u=users,o=grouplink)

- Test LDAP Information
  - Complete by opening an internet explorer window and typing the following command with "localhost" and "ou=users,o=grouplink" substituted with your own information.
  - **Idap:**//localhost/ou=users,o=grouplink??sub?
  - If this command returns information about your LDAP users, you have completed the LDAP test successfully.
  - If this command does not return any information, check your server name and base context for your users. If further problems arise, consult your LDAP service type manual.

### SMTP Server

Fill in the information below for your SMTP server. Note that you have the ability to choose from the following security options: no security, TLS (if available), TLS (required), or SSL.

SMTP Server Name	(e.g., smtp.grouplink.net)
SMTP Server IP Address	(e.g., 192.0.0.4)

If you would like to follow the recommendation to user eHD's all inclusive installer, please skip to the installation section on page 15.

## Database Server

Fill in the information below for your Database Server Configuration

Server Type	(e.g., Microsoft SQL Server)
Server Name	(e.g., HDDatabaseServer)
Server IP Address	(e.g., 192.0.0.2)
Database Username (Administrator)	(e.g., sa)
Database Password (Administrator)	(Recommended that you do not write this down but have access to it)
Container (Database) Name	(e.g., HelpDesk)

- Login to your database administrator program and ensure that the container name is spelled correctly, that it does exist, and no user-defined tables have been created.
  - If you need more information on how to perform this action please consult your database manual and online resources.
- Check the permissions on the created database so the Tomcat server can read and write to the database.
  - In most cases if the Tomcat server is on the same machine as the database server, using the "root" or "sa" login and password will work.

## *Tomcat Server (Disregard if using the installer)*

- Install Java 1.6 (JDK version) on server
  - Java can be downloaded from http://java.sun.com/javase/downloads/index\_jdk5.jsp
  - Test Java installation by going to a command line interface and typing the following command:
    - » java -version
  - If version information is returned, the Java environment is operating.

Install Tomcat 5.5 or 6.0 on server.

- Tomcat can be downloaded from http://tomcat.apache.org
  - » http://tomcat.apache.org/download-55.cgi
  - » (See Appendix 2 for installation instructions)
- Start the Tomcat server if it is not already started.
- Test the installation of the Tomcat server by pointing your browser to:
   http://<servername>:8080
- If the Tomcat home page is displayed, Tomcat is operating.
- If you have any problems with Tomcat, please visit their website for more information on how to configure the program.
- Fill in the information below for your Tomcat Server.

Server Name	(e.g., HelpDesk)
Server IP Address	(e.g., 192.0.0.3)
Server Listening Port	(e.g., 192.0.0.3)
Server Admin Name	(e.g., root)
Server Admin Password	(Recommended that you do not write this down but have access to it.)

- Have access to the Tomcat Server and be able to copy the *everything* HelpDesk installation file over to the specified directory. (Requires read and write permissions)
  - Have access to the Tomcat Server and be able to shutdown and startup server several times.
  - Have access to administrator rights so folder permissions can be changed.

# 3

# **I**nstallation

## Instructions for Installation Wizard

After completing the Pre-Installation Checklist, you are ready to install *everything* HelpDesk. An Installation Wizard has been created to make this process very simple and easy to use. To begin, point your browser to downloads.grouplink.net and select the appropriate version of *e*HD for your platform. Launch the installer to open the Wizard and begin the installation process.

• Select the language you would like the Installation Wizard to appear in and click the Next button

•

• When the welcome screen appears, click the Next button to proceed

icense Agreement		_	1
Please read the following important information	before continuing.	4	
Please read the following License Agreement. Yo before continuing with the installation.	ou must accept the ter	ms of this agreem	ent
GroupLink Product			~
LICENSE AGREEMENT			
20071017			
Defense and a state the test lighting of this -			
the	ortware, you must act	ept the terms or	
following license agreement. Indicate your acc	entance or rejection o	f this agreement	
by clicking		, and agreement	~
		1. II <del>v</del>	10501
O I accept the agreement			
(a) I do not accort the advectment			
T do not accept the agreement			
O I do not accept the agreement			



Read the terms of the GroupLink License Agreement, select the "I accept the agreement" radio button and click Next



- Select which components you would like to install (Custom Installation only)
  - everything HelpDesk
  - Tomcat Web Container
  - MySQL Database

If one or more components are already installed, deselect them and click Next

**Note**: It is recommended that GroupLink's customized version of Tomcat be installed. If another version exists, uninstall it and install the GroupLink version with the installation process.

Select Components	
Which components should be installed?	
Select the components you want to install; cle Click Next when you are ready to continue.	lear the components you do not want to instal
🗹 📩 Tomcat Web Container 🧕	
🔤 🛃 MySQL Database 🧕	
stall41	

Select Destination	Directory			_
Where should ever	rything HelpDesk™ be i	nstalled?		
Select the folder w Next.	here you would like ev	erything HelpDesk™ t	o be installec	l, then click
Destination direc	tory			
C:\Program File	s\GroupLink\everythin	g HelpDesk		Browse
Required disk space	e: 532.2 MB			
Free disk space:	75,310 MB			

Select the directory where you would like *everything* HelpDesk installed and click Next

**Note**: In Windows, you will be asked to select the Start Menu folder in which you would like Setup to create the program's shortcuts - make the selection and click Next

- You have the option to complete an Express installation or a Custom installation
  - Custom is recommended for new installations in order to select which components are best for your environment.
  - Express is only recommended for upgrading *e*HD 9.1 or newer

- If Tomcat was selected to be installed, the Tomcat Configuration screen will appear
  - Enter the port number you would like Tomcat to run on

Note: Entering a port number less than 1000 in Linux will require Tomcat to be run as root.

- Choose the context for your help desk this will determine the URL location
- Click the Next button



et MySQL port an Choose a port for account.	nd root password MySQL to listen on and a password for the MySQL root	
Port	3306	
Password	•••••	
Repeat password	•••••	

If MySQL was selected to be installed, the MySQL Configuration screen will appear

- Enter the port number that MySQL will run on
- Enter and repeat a secure password
- Click the Next button

**Note**: For both Tomcat and MySQL, ensure the specified port(s) are not already in use.

•

- A Confirmation page will appear make sure the information is correct and click Next
- The installation process will proceed
- Once the installation is complete, click the Finish button
  - Tomcat will start automatically and the *everything* HelpDesk will be ready for use

Confirm Co	nfiguration				_
Please conf installation.	irm that your se	ttings are correc	t. Clicking next wil	l begin	
everything	HelpDesk installa	ation directory: C	:\Program Files\G	roupLink\everythi	ng HelpDesk
Install Tom	at: ves				
Tomcat por	t: 8080				
Context: el	nelpdesk				
Install MyS	QL: yes				
MySQL por	: 3306				

# Instructions for Upgrade

Be sure you know the location of your license file when upgrading *everything* HelpDesk.

The latest version of *e*HD is available for download at http://downloads.grouplink.net. If you are upgrading from 10.0 or newer and initially used the all-inclusive installer, your settings from your previous installation will be remembered. Simply hit next at the Custom or Express installation. To upgrade your existing installation (9.X to 10.0.X), we recommend you remove your existing version as well as Tomcat and use the *e*HD Installer which comes bundled with its own customized version of Apache Tomcat. (**Note**: This will NOT affect your data as all the data is stored in the database.) If you are reinstalling fresh on a new server, we also recommend you use the bundled version of MySQL as your database.

After you have removed your existing installations, run the appropriate installer for your platform (Linux/ Windows 32/64 bit).



Continue through the installer until you are presented with the installation type screen. If you have an existing database, choose "custom installation"; otherwise, choose "express installation".

### **Custom Installation**

In a custom installation, you will be asked which components to install. Choose **everything HelpDesk** (automatically chosen for you) and **Tomcat Web Container**.

Setup - everything HelpDesk™ 9.1	
Select Components Which components should be installed?	
Select the components you want to install; clear the component Click Next when you are ready to continue.	ts you do not want to install.
- V R everything HelpDesk	
- V 💦 Tomcat Web Container 🞯	
🛄 💦 MySQL Database 🥑	
tali4j	
C - Park	Mark S. Canad

You will be asked to select the folder where you would like *e*HD installed. The next screen will present you with Tomcat's Port Number and Context Location configuration screen.

*Note:* In Linux, ports lower than 1024 are Priviledged ports and will require the application to be executed as "root" to run. Also, pointing a browser to the base context will automatically redirect to the *e*HD context.

😽 Setup -	everything HelpDesk <sup>™</sup> 9.1	_ 🗆 🛛
Tomcat P Choose a the eHelp	ort Number and Context Location a port number for Apache Tomcat to run on as well as a location for oDesk context.	
Port	8080	
Context	ehelpdesk	
Your Inst	allation of everythinghelipDesk will be available at: calhost:8080/ehelpdesk	
install4j —	< Back Next >	Cancel

Setup - e	verything HelpDesk™ 9.1	
Database C Connection	onnection Properties Properties	
Enter your	database connection details below.	
MySQL	<b>v</b>	
Host	localhost	
Port	3306	
Database	myexistingdatabase	
Username	root	
Password	••••••	
Test Co	nnection	
stall4j ——		
	< Back Next >	Cancel

For an existing database custom upgrade, you will be asked to provide your database connection information. Fill in the information and press the "Test Connection" button. This must be done in order to successfully connect to your database and allow you to proceed with the installation.

Once installation is completed, the *e*HD Tomcat service will automatically start. You can then open a web browser and navigate to *everything* HelpDesk. You will need to log in as ADMIN and upload your license file before you can start using the application.

For more detailed information, see Knowledgebase Article #52 on GroupLink's support site.

# 4

# Configuration

Now that the installation of GroupLink's *everything* HelpDesk is complete, you can move on to the configuration process. The step-by-step instructions listed below will guide you through the configuration of *e*HD.

After logging in to the HelpDesk as the System Administrator, you can begin the Application Configuration. There is only one System Administrator who has access to the Application Configuration (System), as well as the ability to add or delete groups, locations, and users. The System Admin does not have access to tickets. See page 34 for more information on user roles.

To begin the Application Configuration, click on **Settings**, then **System**.

# System Application Configuration

### General

The Base URL allows you to change the Base URL if your server IP address or DNS name changes. This will change the links in all email notifications and knowledgebase article links. Here you can set the maximum upload size (in MB) of attachments. The size you choose must correspond with the maximum packet limit of your database.

### **Database Connection**

The Database Connection page will show you your database information and allow you to change the database information if needed. Your current database should already be connected, but if you make changes to this area, make sure you restart Tomcat for the changes to take effect.

### Mail

To configure the mail settings, click on the following sequence: **Settings** -**Mail**. Mail Setup can only be configured by theAdministrator. Here you can configure your SMTP settings as well as the email notification settings. The same account should be used for outbound as well as inbound for the email to ticket feature to work correctly.

> *Note:* The email notifications setup can be overridden by checking the "send email notification" checkbox on each individual ticket screen.

mail display name	Server
DemoReply	smtpftp1
Email from address	Security
demo@testehd.com	None
When ticket changes	© TLS
Votify technician Votify user	© SSL
	Port
Send Ticket Link on Email Notification?	25
	Username
	grouplink
	Password
	•••••
Save	

Each field in the Outgoing section of Mail must be filled in with the appropriate information, as defined below:

- **Email display name**: The name entered here acts as the name of the email account. For example "Matt" for the address mattjensen@grouplink.net.
- Email from address: Enter the address that will be used to send all emails.
- **Email technician on ticket changes?** Checking this box determines the default for the **Notify? Technician** option on the tickets. Checking this box will make the check box on each ticket checked. Leaving this check box blank will leave the check box on the ticket blank.
  - The **Notify? Technician** box will appear on the bottom of the every ticket for Technicians, Managers, and the Administrator, as long as they are not the Technician assigned to the ticket.
  - Technicians, Manager, and the Administrator also have the option to check or uncheck the **Notify? Technician** box when creating the ticket.
- **Email user on ticket changes?** Checking this box determines the default for the **Notify? User** option on the tickets. Checking this box will make the check box on the ticket checked. Leaving this check box blank will leave the check box on the ticket blank.
  - The **Notify? User** option will appear at the bottom of every ticket for Technicians, Managers, and the Administrator, as long as they are not the **Contact** of the ticket.
  - Technicians, Manager, and the Administrator also have the option to check or uncheck the **Notify? Technician** box when creating the ticket.
- Send Ticket Link on Email Notification? Checking this box determines whether or not a link to the ticket will be sent in the email notifying the technician or the user. Checking this box means the link is included in the email and will allow the Ticket to be opened from the email by clicking the link. If you are not logged into the application, clicking the link will lead you to the HelpDesk login screen. After entering your Username and Password, the Ticket window will appear.
  - If you would like to navigate to the My Tickets screen from the open ticket, click on the My Tickets tab at the top of the screen.

Leaving this check box blank means the link will not be included in the emails.

- Server: Enter the name of your mail server.
- **Security**: The system will support different types of cryptographic protocols. When configuring your SMTP connection on your outgoing SMTP server, you have the ability to choose from the following security options:
  - None
  - TLS, if available
  - TLS
  - SSL
- Port: When the TLS, if available or the TLS radion button is selected the port will default to 587. If the SSL radion button is selected then the port will default to 465; however, this is customizable to fit your needs.
- **Username**: Some mail servers require a username. If your mail server requires a Username, enter it here.
- **Password**: If your mail server requires a username it will, most likely, require a password. Enter it here.
- **Encoding**: This is mainly for using different languages. Enter the same encoding that you are using on your mail server. An example of encoding is UTF-8.

After entering the necessary information, click the **Save** button.

- **Test Email**: Enter in a valid email address and then click the **Test Email** button. An email will be sent to that account, confirming that the system is working.

### **Incoming: Email to Ticket Feature**

From the **Incoming** section of **Mail** you can set up an inbox that will turn the emails sent into tickets. This is known as our Email to Ticket feature.

Click **Set up new Inbox**. Clicking on this link will open a window for the Email to Ticket Configuration. Required fields are marked with an \*. Fill in each field with the appropriate information. The fields are defined (with examples), below:

- Server: Enter your Server IP address.
- Server Type: Choose whether you are using IMAP or POP.
- **IMAP Folder:** If using IMAP enter the name of the folder. If you are using POP, this field is not there.
- **Security** The system will support different types of cryptographic protocols. When configuring your Incoming Mail server, you have the ability to choose from the following security options:
  - None
  - TLS, if available
  - TLS
  - SSL
- Port: When the TLS, if available or the TLS radion button is selected the default port for IMAP will be 143 and the default port for POP will be 110. If the SSL radion button is selected then the default port for IMAP will be 993 and the default port for POP will be 995. However, the ports are customizable to fit your needs.
- **Username:** Enter the Username for the email account you are using.
- Password: Enter the Password for the Username chosen above.

- **Re-Type Password:** To make sure we have the right information, enter the password one more time. You cannot continue if the passwords don't match.
- **Emails from non-users:** You can now select how the application handles emails from anonymous email accounts. Choos whether you want to **Reject Mail**, use an **Anonymous Account**, or **Create** an **Ac count** from the new user's email address.
- **Reply Name:** Just like the Email display name from the Outgoing section, the name entered here acts as the name of the email account. For example "Mike," for the address mnielson@grouplink.net Note: This is not a required field.
- Reply Address: The address entered here has two functions. First, it is the email address of the inbox where the emails that are to be tickets are sent. Second, any emails that come from the *every-thing* HelpDesk<sup>™</sup> system, in regards to the tickets created by this feature, will use this address. It is possible to update an existing ticket, one already created by this feature, by replying to the email, as long as you keep the subject line the same. When you are using the Email to Ticket feature, this reply address takes the place of the outgoing reply address for the group picked below.
- Location: The ticket created will have this location.
- **Group:** The ticket created will belong to this group. The ticket that is created will go into the ticket pool of the group you specify. You will have to give the ticket a category, category option, and reassign it from there.
- **Priority:** The ticket created will be given this priority.
- **Locale:** Allows you to pick the language you want to use for your incoming email to ticket configuration.
- **Send default mail notification**: Here, you can choose whether or not the person who sent the email/created the Ticket will receive an email notification of the Ticket creation. If you do not wish to have the person notified, leave the box unchecked. If you wish to have the person notified with the Ticket Number, check this box.

After filling in the necessary information, click the **Test** button. You will get a message telling you if everything worked. Click the **Save** button when you are finished, or click **Cancel** to start over. Once you have saved your new Inbox, you will see the following column headers: Mailbox, Server, Location, Group, and Priority. There are also three icons. The first one should be moving in a circular motion **••**, letting you know that the Email to Ticket feature is running for this inbox. The second is the edit icon which lets you make any changes to the Inbox. The third and final is the delete icon **©**. You can delete any inboxes you no longer want.

Server fields	eHelpDesk fields
Server	Emails from non-users
	Reject Mail
Server Type IMAD Foldor	Anonymous Account
IMAP Inhox	Create Account
© POP	Location
Comunitar	
None      TIS if available      TIS      SEL	Group
Port	Priority
143	
Username	
	English
Password	
	Send default mail notification
Reply Name	
Reply Address	
est Save Changes Cancel	

\***NOTE**: Once the email to ticket feature is running, emails that have been turned into tickets will be deleted from your inbox.

### LDAP

GroupLink's *e*HD supports several types of LDAP services. The supported services are:

Novell eDirectory Service Microsoft Active Directory Service Apple Open Directory Service

Your LDAP directory should be setup and configured. During installation, it will be important for you to know the name of your LDAP server, LDAP password, the Distinguished Name (DN) for an administrator, and the base context where the user information can be found.

We highly recommend that you test your LDAP service before installing *e*HD. You can test your LDAP server information by opening an Internet Explorer window and in the address bar typing the following information substituting localhost with your LDAP server name and ou=users,o=grouplink with your base context for users.

#### **Idap:**//localhost/ou=users,o=grouplink??sub?

If your information is correct you should receive a list of the users that are located in your LDAP. If you do not receive any information you will need to re-check the base context and server name. Note: You may be able to return LDAP information on any users but it is necessary that the user name you configure is setup as an administrator and has a password. In order for *e*HD to properly lookup, user information and password must be configured.

If you would like assistance in installing and setting up your LDAP server, GroupLink support can help (regular service charges will apply).

**Note**: Before you proceed with your LDAP import, we recommend you make a back up of your database.

- Login as admin
- From side menu, select System and click on the LDAP link

	@ LDAP FIELD SETUP
✓ Integrate with LDAP	
LDAP URL 🕀	
ldap://10.10.1.10 Fetch DNs	
Base Search DN 🛞	
OU=GL,DC=grouplink,DC=net ▼	
LDAP Login 🕕	
cn=Administrator,OU=GL,DC=grouplink,DC=net	
LDAP Password ④	
Username Attribute (1)	
(objectClass=*)	
✓ eHD Fallback ④	
Location Attribute 🖲	
Create Location 🖲	
Inclusive Search DN's (B)	
Save Changes	

- Clicking the link will open the LDAP configuration page which contains two sections:
  - Above is LDAP integration fields that need to be filled out completely for the integration
  - Below is the LDAP browser window
- Begin integration by checking the LDAP Integration checkbox as demonstrated above
  - Unchecking the checkbox will prevent LDAP integration, leaving only the *e*HD database to authenticate users
- Enter the LDAP URL: Idap://(<IP address or DNS name> of your LDAP server)
  - If you are running a secure LDAP, you need to run and install an SSL certificate. See our Knowledgebase article at http://support.grouplink.net/ehelpdesk/kb/kbView.glml?kbld=71 or contact Grouplink Support (support@grouplink.net).
  - Once you have setup the SSL certificate, enter the LDAP URL ldaps://<IP address or DNS Name> of your LDAP server.
- In a large LDAP Tree a Base Search DN can be defined to determine where eHD begins searching for users. Note that any users above this Base Search DN level will be excluded from *e*HD's LDAP search.
- If you are using Novell's eDirectory, a Base Search DN is not required. If integrating with Microsoft Active Directory, you must enter a Base Search DN.
  - The first way to enter this information is to enter it <u>manually</u> using a Distinguished Name format.
  - The second way is to click on the Fetch DNs button Fetch DNs to pull up a selection list of your available DN. Double-click on the preferred DN and it will be populated in the Base Search DN field.
- The LDAP Login field can be left blank if your LDAP allows for anonymous bind requests; otherwise, enter the fully distinguished name of the administrator or any other user that has full read-only privileges to your entire tree.
- Next, enter the user's LDAP password
- The Username Attribute filed is where you will enter the LDAP attribute where the usernake for the eHD user account is stored usually this would be "uid", however Active Directory uses "samAccountName". Another common value is "cn". If provided, only this attribute will be searched on. If left blank, eHD will search for the username in the following order: uid, samAccountName, cn.
- Click the Save button at the bottom of the LDAP Integration section this will connect *e*HD to your LDAP tree and display it in the LDAP Tree browser located at the bottom of the window.
- The Search Filter field is an optional field where LDAP results can be filtered for a specific type of object or data subset. This is advantageous if you have an especially large LDAP tree.
  - For example, to filter LDAP search results to only return User objects, enter: objectClass=user
- If the eHD Fallback checkbos is checked, everything HelpDesk will attempt to authenticate to eHD's lo cal user database in the case that a user is not found in LDAP.
- The Inclusive Search DN's field lets you define which containers and its users can log into the help desk. If left blank, all users within the container unser the Base Search DN will be allowed to log in. There are two ways to enter this information:
  - You may enter the distinguished name (DN) in the text field above the Inclusive Search DN's window and click the Add to Inclusive Search DN's button

- The second way is to find the DN in the LDAP tree below and double-click its name to add it over to the Inclusive Search DN's window
- Note that only the DNs and the users they contain will be able to log into the help desk
- Leaving the Inclusive Search DN's blank will ensure that everyone in your LDAP tree will be able to log into the help desk
- If you would like to remove a DN from the Inclusive Search DN's field, highlight it and click the Remove Selection button.

### LDAP Field Setup

- In the LDAP field setup window, you can decide which LDAP attributes you would like to have displayed on the Ticket, in the User's Account page, or both
- Click on the LDAP field setup link at the top of the LDAP configuration page this will bring up the LDAP field setup window
- Enter the fully distinguished name of the administrator or user that has access to all LDAP fields you wish to display from LDAP (minus the LDAP Base search if you have one defined) and click the Submit button
- Clicking the Submit button will generate a list of available LDAP attributes for the selected user in the bottom window.
  - You can add the attributes to the LDAP field list by clicking the green plus sign  $\pm$
  - Enter a Display name for the LDAP attribute that will be used as the field label on the ticket and User Account page
  - If you wish to display these fields on Tickets under the Contact Information section, click the Show Field on Ticket checkbox next to the desired field; if not, the added LDAP attribute will only be displayed on the User's account page
  - To remove an attribute from the Ticket and/or the User Account page, click the trash can icon sat the end of that attribute's row
- When you are finished selecting attributes, exit out of the LDAP field setup window by clicking the X in the upper right-hand corner

### Collaboration

Collaboration is part of the application configuration and can only be done by the administrator. This is where you can set up your integration with GroupWise. There are a few different ways of setting up GroupWise integration with the HelpDesk.

Collaboration
Integrate with
GroupWise 7.X - 8.X
POA SOAP URL
Use SSL
Trusted Application Name
Trusted Application Key
Save Changes

### GroupWise Users

### **Trusted Application**

You can set up GroupLink's *everything* HelpDesk as a trusted application. Novell defines trusted applications as "a third-party program that can log into Post Office Agents (POAs) and Internet Agents in order to access GroupWise mailboxes." With *e*HD set up as a trusted application, integration with GroupWise does not require a password from the end user. You can also integrate with GroupWise without the GroupWise client running. For more information on setting up trusted applications, contact Novell Support. Here is a link with information about setting up a trusted application:

http://developer.novell.com/documentation/gwtapp/index.html?page=/documentation/gwtapp/tapp\_enu/data/bktitle.html

After you have generated a trusted application key, enter the Application Name and Key in the appropriate fields. You will also need to fill out the POA SOAP URL with the port at the end. This should allow GroupWise integration to occur without having to enter a password.

### **Standard Integration with Soap**

- This is the most common type of GroupWise Integration.

You can leave the trusted application information blank and forgo setting up GroupLink as a trusted application, but still integrate with GroupWise. This can be done using SOAP requests to connect directly with the GroupWise server. Make sure SOAP is enabled through GroupWise, then enter your Post Office Agent IP address in the POA SOAP URL field using the following format: *<poaipaddress>*:7191 (example: 10.10.1.104:7191). Also, SOAP must be enabled in the mail server.

Each user should fill in their GroupWise login ID and password on their account management page. This only needs to be done once. When users log in to HelpDesk with this information, GroupWise integration will be enabled. The GroupWise client does NOT need to be opened for this option. The connection to GroupWise will only be open as appointments and tasks are created.

If you are running GroupWise 6.5, GroupWise integration is available only on Internet Explorer with Active X controls enabled. Your GroupWise client also needs to be open in order to integrate with GroupWise. This, however, requires a separate installation.

The following picture demonstrate the way GroupWise integrates with various operating systems.

Linux and Windows systems use SOAP requests to connect directly with the GroupWise server. If *everything* HelpDesk is set up as a trusted application, then integration with GroupWise does not require a password from the end user.

#### Windows/Linux Integration with GroupWise



### Customization

Customization allows you to customize the Home page of HelpDesk. It also allows you to create custom statuses and priorities. This setting is universal for all groups. Add text to the **System Message Text** field to add a banner, which will display across the top of the Home page. This can be found under General on the left side when the Admin user is logged in.

(i) Welcome to GroupLink's everything HelpDesk

**System Message Text:** This is the message at the top of your HelpDesk screen. What you see is what you get with this feature. After you enter your message click **Save Changes** at the bottom of the screen. If you don't want any message, simply leave this field blank.

**Session Timeout Length:** You now have the ability to determine how long until the application will time out. (The application has the timeout feature for security purposes.) The warning box will appear 5 minutes before the time entered is up.

Allow user registration from the login page: This button will determine if users can create their own account from the login screen. If you are integrating with LDAP, turn this off by clicking in the grey area. When the blue disappears, this feature will be turned off.

### **STATUSES**

There are default statuses and priorities already set up. You can edit or add to the statuses already in the system. To create new customized statuses, log in as the system admin. On the left side under Ticket, click Statuses. There will be six default statuses. First, select an initial status and a ticket pool status. This will set the default for tickets assigned directly to a technician (initial status) and tickets assigned directly to the ticket pool (ticket pool initial status). You will also need to select a Closed status, or a custom status, which indicates that the ticket is closed.

Click Add Status 😳 to add a custom status, a blank line will appear. Type a name of a custom status. Click the Red X icon next to the status to delete it. Drag and drop the statuses to the order you would like them to appear on the ticket by clicking the blue icon.

Click Save.

St	tatuses		AVE
•	TICKET POOL INITIAL STATUS	Awaiting Dispatch	
•	INITIAL STATUS	Assigned Not Updated	
•		Work In Progress	8
•		On Hold	8
•		Resolved	8
•	CLOSED STATUS	Closed	

### PRIORITIES

Customized priorities are another feature available under **Ticket, Priorities**. The priorities now have multiselect functionality, allowing you to create more in-depth statuses for your tickets. To create a customized priority, click Add Priority (), a blank like will appear. Type in a name for your custom priority, then select an option from the drop down. The Text option will display the text that you type in the priority field, a color will display a dot of that color when the corresponding status is selected.

#### Click Save

P	iorities • ADD PRI				
•	High	red	•	8	
•	Low	blue	•	8	
•	Medium	orang	e 🔻	8	

### Licensing

This is where you will find information about your *everything* HelpDesk license. It shows who the HelpDesk is licensed to, the edition of HelpDesk you're using (standard or enterprise), number of groups, number of licensed technicians, and expiration date. You can also browse for a new license file by clicking **Browse**, then **Load license file**.

# Administration

# Setup and Configuration for Administrators

Covering the fundamentals of administrative configuration, the following information will introduce, define and illustrate each step needed to configure *e*HD to your existing environment.

At the start, we recommend you map-out all desired configurations for *everything* HelpDesk before configuring the application. You will assign technicians, categories, category options and locations for each group. It is best to fully configure one group at a time.

### **Understanding User Roles**

Administrator - The System Administrator will have all rights and capabilities in the helpdesk. How ever, the Admin accouth does not have access to the My Tickets screen. Administrators can view thie Tickets by searching for Tickets they have created or are the contact of in the Ticket Search. The Administrator can also create a Custom Tab to view their open tickets.

Manager - The Manager role will default to the following settings in the Permission Model:

- Manage Group Settings
- Manage Scheduled Tasks
- Manage Ticket Templates
- Manage Assignments
- Manage Custom Fields
- Delete Attachments
- Schedule Appointments & Tasks
- Manage Knowledge Base
- Delete Tickets

**Technician** - The Technician role will default to the following settings in the Permission Model:

- Launch Non-Public Ticket Templates
- View All Group Tickets
- Find User Dialog
- Mass Edit Tickets
- Change Contact
- View Submitted By
- Change/View Priority
- Change/View Status
- Change/View Est. Completion Date
- Change/View Ticket Work Time
- Change Ticket's Knowledgebase Articles
- Change/View Notify Tech
- Change/View Notify User

**Member** - There is no default settings in the Permission Model for the Member Role. The Member Role is used to group Users together and then grant permissions to all Users at once.

**User** - Each person added into the helpdesk will have the User role when the account is created. The following are the default settings in the Permission Model for the User:

- Create New Tickets
- View Knowledge Base
- View Contact
- Change/View Assignment
- Change/View Location
- Change/View Group
- Change/View Category
- Change/View Category Option
- Change/View Subject
- Change/View Note
- View Created Date
- View Modified Date
- Change/View CC
- Change/View BCC
- View Parent Ticket ID
- View Ticket's Knowledgebase Articles
- View Ticket's Zen Information
- Change/View Ticket's History Comments
- Change/View Ticket's Subtickets
- View Ticket Audit
- Change/View Ticket Asset
- View Survey Results
- View Zen Asset

\*\*Permissions can be added or taken from each role using the Permission Model.

## **Understanding Groups**

Groups can be used to host various *everything* HelpDesk applications from one server. Within each group is a list of technicians, locations, categories and category options (as illustrated below).

In this figure, tickets are assigned to technicians based upon which location, category and category options are associated with that technician.



*e*HD 10.x comes standard with multi-group technology. As shown below, Groups can be departments such as Information Technology, Human Resources, or Facilities Management, allowing your organization to connect through a shared Location Pool. Groups can also be different companies or operations within your company. Each group can be completely separate and individually configurable, enabling you to run separate *everything* HelpDesk applications from one server.



Now that you have a general overview of the Ticket Assignment Logic, we can begin the step-by-step configuration of *everything* HelpDesk.

*Note:* Finish each step completely before moving on to the next. This will simplify the configuration process.

## **Getting Started**

Make sure you are logged into the *everything* HelpDesk system as an administrator. Login ID is 'admin' and password is 'admin'. This password can be changed once you are logged in.

Once you have logged in as an administrator, click on the following sequence: **Settings** - **User Accounts**. This is where you will add user, technician, and manager accounts.

Click **Import From LDAP** to add users from LDAP. This can only be selected if LDAP has been integrated. Type in the name of the user you are looking for. Click the plus sign  $\pm$  to add the user to the User Account list. (The green check box next to a users name means that user has been added. You can continue to add all users here.)

Also, you can add yourself and technicians here. Assignments and roles will be designated for users after Groups and Locations are created. You do not need to add your end users manually. If you are connected to LDAP, the users can log in to HelpDesk with their LDAP credentials. They will be directed to the end user screen and their name will be added to the user accounts list.

To add users who are not in LDAP directly to the database, click **New User**.

Screen	First Name	Login Id	Location East Office
	Last Name	Password	Groupwise Login Id
integrate with GroupWise, the user	Email	Retype password	Groupwise Password
nd password. This needs to be done by the user one time only.	Active	History Comments	

Users will also be added to this page if they log in to the system using their LDAP credentials. Until the system administrator gives them the correct rights and privileges, they will default to the user login page. (Users must have a valid email address to be imported to the system as it will be listed with their information under User Accounts.)

Once you have created accounts for your technicians and administrators you can go through the six basic setup options in configuring *everything* HelpDesk:

- 1 Groups
- 2 Locations
- 3 Technicians
- 4 Categories
- 5 Category Options
- 6 Assignments

### **Create Groups**

Click through the following sequence: **Settings - Groups** to set up groups. Click the Add Group Button to add a group. Examples of Groups include departments or schools. Each group has its own ticket pool associated with it. You can always come back and add more technicians or edit these groups later. Edit the group by clicking the Pencil Icon. Click the Red X icon to delete the group.

### **Create Locations**

The Locations setting will allow you to set up your Locations. Click on the Add Location Button 😳 to add a location. The list of Locations is a pool that you will use when setting up each group. This list should include all possible locations for all groups. The end user will choose their Location when creating a ticket. Location is the physical location where the end user is located. Examples of possible ways to set up Locations are: offices, cities, campuses, buildings or rooms.

Clicking the Pencil icon will allow you to edit a Location. Clicking the Red X Icon will delete a Location.

After you have set up your Groups and Locations, you will configure each group. Click on the following sequence: **Settings - Groups.**
Choose a group to configure by clicking the pencil in the right column.

Groups	ps			G ADD GROUP	
Name	Description	Active	Asset Tracker Type	Group Permission Model	Actions
Information Technology Old		true	EHD	New Default	28
Maintenance		true	EHD	New Default	20
Facilities		true	NONE	New Default	20
Testing Assignments		true	NONE	New Default	20
Buildings and Grounds		true	NONE	New Default	2 🛚
New IT		true	NONE	New Default	28
Test Group		true	NONE	New Default	2 83

Click **Create New** under **Group Roles** to add a technician to this group. Select a user from the list and give them Manager or Technician rights. Add all technicians and managers for this group here.

Group Roles		CREATE NEW	
User	Role	Actions	
Ticket Pool		<b>M</b>	
Thomas, Kathryn (kthomas)	Technician	3 🧐	
Miller, Leah (leah)	Manager	😣 🖤	

User	
Thomas, Derrick	×
Role	
Manager	
Save Changes	Cancel

Remember: There is always a technician account called Ticket Pool for each group. This gives you the ability to assign tickets to the Ticket Pool.

## **Create Categories**

Add categories to this group by clicking	next to Categories/Category Options
	New category
	Name
	Active
Create Category Options	Save Changes Cancel

After adding categories, click on This allows you to add Category Options as sub-categories under your Categories. These are linked to a specific Category, and they are more specific than categories.

**New Category Option** 

Hardware	
Name	
Keyboard	
Active	

## **Create Assignments**

Now you are ready to make assignments. Click on Settings - Assignments - Create New Assignment

New Assignments	
Choose Technician	
Select the Group and the T	echnician for this assignment. The Technician list will be populated after the Group is selected.
Group	
Technician	1
Assignment Type	
What type of Assignment v	vould you like to make for the selected Technician?
• Group Assignment	
O Category Assignment	2
○ Category Option Assign	ment
Location	
Select Locations for this as	signment. If left blank, the assignment will be made for all locations.
Location	
Select Some Options	3
Save Changes	

1. Choose a **Group** and a **Technician**. The Technician list will populate after the Group is selected.

2. Assignment Type:

Group Assignment: The selected Technician will appear as the assignment for each ticket entered into the group selected.

Category Assignment: The selected Technician will appear as the assignment for all categories select ed. Click in the box to select a category, multiple categories can be selected.

Category Option Assignment: The selected Technician will appear as the assignment for all category options selected, multiple category options can be selected.

3. Location: The selected Technician will appear as the assignment for each location selected, multiple loca tions can be selected.

\*\*Assignments can be made with any of the above options. If no assignments are made, all tickets will go directly to the ticket pool.

You have now completed the basic setup and configuration for the *everything* HelpDesk system. You can always go back and make changes to the settings you have created.

# Administrative Options

The username is 'admin' and password is 'admin'. The system administrator does not have access to tickets or ticket options.

Managers have Technician rights with access to the Settings and Knowledgebase Management. They don't have access to Application Configuration, Group/Location Setup, or user Management. Technicians have access to their My Tickets page. They also have access to the Knowledgebase with the ability to add articles, Asset Tracker, and Reports. They cannot access the Settings.

Users can search the Knowledgebase and see the My Tickets screen.

To change the rights and privileges of an account after a user has been added, go to the **Settings - Permission Model**. Choose the appropriate group and you will see a list of permissions. Click on their current role (Manager, etc.). You can change their role here. This can be done by role or by user.

Permission Model Edit	
Name	
New Default	Change Name
🖃 🛅 Group Permissions	
😑 🧟 Manage Group Settings	
🗁 🗁 Users	
🛨 🚞 Roles	
🖃 🧟 Manage Scheduled Tasks	
🗁 🗁 Users	
🖻 💼 Roles	
ROLE_MANAGER	
🛨 🧟 Manage Ticket Templates	
🗉 🧟 Launch Non-Public Ticket Templates	
😟 🧟 Manage Assignments	
💿 🧟 Manage Custom Fields	
💿 🧟 View All Group Tickets	
💿 🧟 Delete Attachments	
💿 🎪 Schedule Appointments & Tasks	

## Scheduler

To create a scheduled task or event, click the **Scheduler link** at the left side of the settings page. The scheduler will allow you to schedule automatic updates based on ticket status, priority, or elapsed time. You can set up an action such as send email with a ticket link, change status or change priority based on your specifications. For example, you can have a medium priority ticket with a status of Resolved automatically be changed to a Closed status if it has been 3 days since the ticket had been modified. The scheduled task would look similar to the following:

Network Priority Change					
Network Phoney Change					
Category		Category Option			
Network	•	Down	•		
Statuses		Priorities			
Select Some Options		Low ×			
1 Minutes V		Modified Date			
Change Status					
Change Priority		High	•		
Send E-Mail					

The icon next to the task shows the status of the task--whether it's turned on or off. Click the play icon **b** to start the task and stop icon **b** to stop the task.

Buildings and Grounds	Facilities	Information Technology Old	Maintenance	New IT	Test Group	Testing Assignments		
							ADD SCHED	ULE 🔂
Description							Action	Status
Network Priority Change	e						20	<b>)</b> .
Undated Ticket Real							10	

### Account Management

To change or edit account information for yourself, log in to *everything* HelpDesk. At the top left of the screen, click on your name. You can change or add your account information here. This information is stored in the database. Managers can change all their information here. Technicians and end users can change everything except their Group Role.

	Welcome	SYSTEM AD	MIN 🕜 Heli	Settings	Sign out		
Edit User							
First Name		Log	jin Id		Location		
Joshua		jbe	11		Buffalo Wild Wings	-	
Last Name		Ch	ange Password		Groupwise Login Id		
Bell							
Email		His	tory Comments	-	Groupwise Password	í.	
jbell@gmail.com							
Active Save Changes Ca	ncel						
Phones		Addres	ses				
	CREATE NEW						CREATE NEW
lo phones created		No address	ses created				
Group Roles							CREATE NEW
Group			Role	Backup Technician		Actions	
nformation Technology O	ld		Member	Ticket Pool		20	ť

To change or edit account information for other users, you must use the admin account. After logging in as the admin, click on the **Settings** - **User Accounts**. A list of users will display. Click on the pencil to edit that account. Click **New user** to add a new user account. Email address, Group Role, GroupWise Id and all other fields can be modified here.

## Ticket Search

The Ticket Search is designed to allow you to search for tickets with specific information that is pertinent to you. The ticket filter is accessible by managers, technicians, and end users by clicking on the link at the top of the page. Depending on their role, they can only search for certain tickets. For example, end users can only search for tickets they have created, and technicians and managers can only search for tickets in groups they are a member of. The screen automatically opens as a new filter. Here you have the ability to apply, reset, or save your search criteria.

	Choose a column 🔹
New Filter V Mark as private	Priority
	Ticket #
Choose a column to filter on 🔹 💿	Location
	Subject
	Category Option
	Assigned To
	Status
	Created Date

#### **Create a Filter**

- To name your filter type a new name in the Filter
- You have the option of making the filter private or public. Click the Mark as Private check box and the filter will only appear under your My Filters section of the Ticket Filters Page. Leave the check box blank and the filter will appear organization-wide under the Public Filters section of the Ticket Filters Page.
- The Choose a column to filter on drop down box at the top of the page is where you choose the fields you want to filter on as you create your Ticket Filter. Click on the field name for the field you would like to add to your ticket search and the search box will appear in the middle section of the Ticket Search screen.
- There are 19 Ticket Field options (Ticket Number, Subject, Contact, Created Date, etc.) by default.

- If your organization has Custom Fields, they will be available for selection at the bottom of the default list.
- Next to the name you have the option of making the filter private or public. If you chose to make the filter public (uncheck the **Mark as Private** box) it will appear group wide under the Public Filters in the drop-down box at the upper left hand side of the screen. If you chose to leave the filter private, it will only appear in your ticket search screen under My Filter in the drop-down box at the upper left hand side of the screen.
- The Created Date, Modified Date, and Estimated Completion Date Field Boxes have search criteria options for Today, This Week, This Month, On, Before, After, Range, Last X Hours, Last X Days, Last X Weeks, Last X Months, and Last X Years. Select the criteria for your search and then enter in the date selection or numerical value and the search will be performed with your desired date criteria. This Week, This Month, Last X Hours, Last X Days, Last X Weeks, Last X Months, and Last X Years. Select the criteria for your search and then enter in the date selection or numerical value and the search will be performed with your desired date criteria. This Week, This Month, Last X Hours, Last X Days, Last X Weeks, Last X Months, and Last X Years will all automatically update with the passing of time. For example, if you filter your search to show all open tickets created in the last 5 hours, this report will automatically update to be exactly 5 hours from the current time on the server. Note that tickets with future dates (such as Est. Completion Date) will not return in your results.
  - **Drop-down criteria**: click any drop-down arrow and select the option you would like to search by. Once the option you select fills the drop-down box, click the green plus sign located to the right of the item to add it to your search criteria. You can also type in the drop-down box to perform google-like searches in the drop-down options.
  - **Text Field criteria**: type in any text field among the search boxes. To add your text as criteria for your filter, click the green plus sign located at the end of the text field.
  - **System Search criteria**: click on the magnifying glass for Category or Category Option to launch a popup window that will list these search options in their hierarchical order. There will be a drop-down with two Boolean operation choices, Equals or Not Equals. By default Equals will be the Boolean operation selected in each drop-down. After choosing the Boolean Operation you desire click on the checkbox next to the Category or Category Option you would like to add to as your search criteria. Click Apply and the pop-up window will close and add the selected search criteria to the Field Box. (Note: the search method for Category and Category Option are presented in a separate pop-up window, allowing you to see the hierarchical order. In other words, you are not only able to see what Categories or Category Options are available. You are able to see what Group each Category belongs to, or see what Category a Category Option belongs to.) You can close this pop-up window at any time by clicking on the circular x icon in the top-left hand corner of the pop-up window.

- Click on the magnifying glass for ZENworks Assets to launch a pop-up window with three text fields to search for ZENwork's assets: Asset Name, Asset Type, and Operating System. Enter your desired criteria and click on the Search Button to pull up specific ZENworks Assets that can be added as your search criteria. If you want to search all assets, you can leave the search boxes blank and click the Search Button. A list of ZENworks Assets that meet search parameters will appear in the pop-up window. The Glasses Icon an be clicked on to view the ZENworks Asset Detail Page for that asset. Click on the checkbox next to the ZENworks Asset you would like to add to your search criteria, then click on the Add Selected Assets to the Search Button. The pop-up window will close and add the selected search criteria to the Field Box.
- To remove any search criteria from a Field Box click on the red delete sign located to the right of each option.
- Next, define the Column Order for your filter. The order will display from left to right when running the filter. The field at the top will be the field on the left. Click the down arrow to select a column to display.

Choose a column	· 0
Priority	*
Ticket #	ж
Location	3
Subject	ж
Category Option	ж
Assigned To	×
Status	

- You can arrange the order of the items listed in the Column Order box by drag-and-drop. You can move two or more at a time by using your shift and control keys along with the mouse. The defaults for the results are Priority, Ticket #, Location, Subject, Category Option, Assigned To, Status and Created Date.
   Once you have selected all your search criteria, select one of the following options:
  - **Save Filter**: this will save the Filter and add it to the Ticket Filter Page, where it can be managed and used for Dashboards, the My Ticket Screen, Graphical Reports, or a Ticket Search.
  - **Reset Filter**: Choosing this option will clear any fields you have added and reset the Ticket Search to the default boxes of Priority, Ticket #, Location, Subject, Category Option, Assigned To, Status and Created Date.
  - **Save As**: This will give you the option to save the filter you have created under a new name. This may be useful when modifying an existing filter. You can add or delete fields as desired and save the changes you have made with a new name. This will keep the original filter as it was before.

## Apply a Filter

The **Apply Filter** button will open a separate Search Results pop-up window with the results of the filter you created. The order in which the columns are listed will depend on the order you have chosen in the Column Order in the Ticket Search screen. The results will display in order depending on the first column chosen.

New I	Filter							
Mass	Update 👻	Export : Excel   PDF						
	Priority	Ticket #	Location	Subject	Category Option	Assigned To	Status	Created Date
٣	Low	81	District Offices	Test	Mouse	Peter Parker	Assigned Not Updated	6/10/10 2:02 PM
*	Low	78	Elementary School	This is a test to see 	Keyboard	Peter Parker	Assigned Not Updated	6/9/10 11:53 AM
٣	Low	79	District Offices	My monitor will not turn	Monitor	Ticket Pool	Assigned Not Updated	6/10/10 8:18 AM
٣	Low	76	High School	My iPod touch doesn't	Other	Wonder Woman	Resolved	6/4/10 8:39 AM
*	Low	77	District Offices	Testing iphone		Peter Parker	Assigned Not Updated	6/9/10 11:45 AM
٣	Low	74	Elementary School	How long until I can 	Health Insurance	Ticket Pool	Assigned Not Updated	6/2/10 4:13 PM
٣	Low	75	District Offices	My keyboad will not let	Keyboard	Peter Parker	Assigned Not Updated	6/2/10 4:25 PM
۲	Low	63	District Offices	Our lawn is going brown	Lawn	Mike Nielson	Closed	9/29/08 9:59 AM

In the results window you have the following options:

- Sort the tickets by the individual columns. For example, to list the ticket results by number in ascending order, click the Ticket # column header. To reverse the order, click the column headeragain.
- One or more tickets may be listed in bold. This means it is a new ticket that has not been worked on. Tickets may also have a red flag in the very first column of the ticket list indicating that the last update on the ticket was made by someone other than the logged in user.
- To view an individual Ticket, double-click the ticket you wish to open. The ticket will open in a separate window.

Once you have created and saved a filter it will be listed in your Ticket Filter page where it can be applied, edited, or deleted. For more information, see the Ticket Filters section.

## Mass Delete Tickets

To delete one or more tickets, select the tickets you wish to delete and select the Delete option from the drop-down arrow in the multi-action button in the top left-hand corner of the Search Results pop-up window.

- To select multiple consecutive tickets, select the first ticket, hold the Shift key, and select the last ticket.
- To select multiple tickets that are not listed consecutively, hold the Control key and select each ticket.
- When you choose the delete option, a pop-up box will appear asking if you are sure that you want to
  delete the selected tickets, and will list the selected tickets. If you want to delete them, click on the OK
  button. The window will close and the tickets will be deleted. If you do not want to delete them, click the
  Cancel button.

## Mass Update

From the Search Results page you have the ability to mass update the Tickets that are found. Select which tickets you would like to update by using the Shift or Control key and click the Mass Update button. A Mass Update pop-up will appear with the following options:

Work time:	
Contact:	
Assignment:	-
Priority:	-
Status:	-
Est. Compl. Date:	
Add a comment:	
Subject:	
Note	

- Work time: Format must be in 00:00:00 (hours, minutes, seconds)
- **Contact**: Select a contact from the drop-down list or use the text box as a google-like search
- Assignment: Select a contact from the drop-down list or use the text box as a google-like search
- **Priority**: Select a priority from the drop-down list or use the text box as a google-like search
- Status: Select a status from the drop-down list or use the text box as a google-like search
- Estimated Completion Date: Clicking in the text box will bring up a calendar from which you can choose a date for estimated completion of all selected tickets; format for the date must be MM/DD/YYYY
- Add a Comment to all selected tickets: Add a Subject and/or Note in the designated text field to add them to all selected tickets
- **Group as children**: Type the number of a Parent Ticket in the text field to tie all selected tickets to that ticket in a Parent/Child relationship

To select a Mass Update option, click the check box to the left of the desired option and fill in the information necessary for that option. You have the ability to update multiple pieces of information at the same time.

Once you have selected the update options and filled in the information, click the Save Changes button. A message will then appear with the following information:

- Successfully saved tickets: Here will be listed all tickets that were saved with the chosen information successfully
- Unsuccessfully saved tickets: Here will be listed any tickets that were unable to save with the information chosen in the Mass Update

For example: All selected tickets are updated with a new Assignment. All tickets are successfully updated except one. This ticket may have a Category or Category Option that cannot be worked on by the chosen Technician and, therefore, would not update properly.

If do not wish to update any tickets, click the Cancel button.

Once you have created and saved a filter it will be listed in your Ticket Filter Page. Here a filter can be applied or deleted at anytime by clicking the Apply or Delete links.

To edit your saved Ticket Filter click on the Edit link and the saved Ticket Filter will open in the Ticket Search page where it can be edited, re-saved, or saved as a different.

#### **Export Tickets to Excel**

In the Search Results pop-up window there is an option to export tickets to Excel or to export them as a PDF. Click on the Excel or PDF link to Export

Mass	Update 👻 🤇	Export : Excel   PDF	>	
	Priority	Ticket #	Location	Subject
٣	Low	81	District Offices	Test
٣	Low	78	Elementary School	This is a test t
٣	Low	79	District Offices	My monitor not turn
۲	Low	76	High School	My iPod touch doesn't

#### **Ticket Filters**

The **Ticket Filters** page is a management page that lists all the **Private Filters** the logged in user has created as well as any **Public Filters** that have been created in the system. It was designed to allow for easy management of your Ticket Filters as they are used for the engine of the My Ticket Screen, Reports, and Ticket Search.

My Filters				CREATE NEW
Filter Name	Visibility		Actions	
Closed tickets	Private		1 🖉 🖉	
Kathryn's Filter	Public		k 🖉 😣	
Open tickets	Private		k 🖉 😮	
Public Filters           Filter Name		Owner		CREATE NEW
Administration Building Open Tickets		Kate Thomas		▶ <u>/</u> ⊗
Administration Building Tickets		Jerry Blue		▶ ∠ 🛛
Low Priority Tickets		Jerry Blue		▶ <u>/</u> ⊗
Tickets w Low Priority		Jerry Blue		▶ 🖉 😣

#### **My Filters**

The **My Filters** section of the page has a list of Filters that you, the logged in user, have created. These Filters are organized in rows with three columns: **Filter Name**, **Visibility**, and **Actions**.

- The Filter Name column lists the ticket filter name that was created by that user.
- The **Visibility** column lists whether a filter is **Public**, indicating the filter is a public filter and therefore visible in the **Public Filters** throughout the application, or **Private**, indicating that the filter is a private filter only visible to that user in the application.
- The **Actions** column lists three actions that can be taken for that particular Ticket Filter: **Apply**, **Edit**, and **Delete**.
  - If the **Apply** icon is clicked, that particular Ticket Filter will be run and pulled up in the **Search Results** pop-up window, for viewing and mass updating purposes.
  - If the **Edit** icon is clicked, that particular Ticket Filter will be opened in the **Ticket Search**, where it can be edit, changed, and re-saved.
  - If the Delete icon is clicked, a pop-up message will ask "Are you sure you want to delete this
    item?" If you would like to delete the Ticket Filter, click the Yes button and it will be deleted from the
    application. If you do not wish to delete the filter, click the Cancel button.

#### **Public Filters**

The **Public Filters** section of the page has a list of Filters that are public and visible to everyone throughout the application (based on the user's rights and privileges). These Filters are organized in rows with three columns: **Filter Name**, **Owner**, and **Actions**.

- The **Filter Name** column lists the ticket filter name of that particular filter in the system.
- The **Owner** column lists the name of the individual that created the Public Filter. If the System Administrator created the Filter, the Owner's Name will be listed as SYSTEM ADMIN.
- The **Actions** column lists three actions that can be taken for that particular Ticket Filter: **Apply**, **Edit**, and **Delete**.
  - If the **Apply** link is clicked, that particular Ticket Filter will be run and pulled up in the **Search Results** pop-up window for viewing and mass updating purposes.
  - If the Edit icon is clicked, that particular Ticket Filter will be opened in the Ticket Search where it can be edited, changed, and re-saved. If a Public Ticket Filter is edited and then saved, that Filter's new owner will be the last individual to edit it. It will then be listed in the Public Filters section of the Ticket Filters page for all users except the individual that edited it. For this user, it will be listed under the My Filters section of the Ticket Filters page with the Visibility listed as Public.
  - If the Delete icon is clicked, a pop-up message will ask "Are you sure you want to delete this item?" If you would like to delete the Ticket Filter, click the Yes button and it will be deleted from the application. If you do not wish to delete the filter, click the Cancel button.

#### **Create New Ticket Filter**

To create a new Ticket Filter from the Ticket Filter page, click the Filters tab, then Create New. This will take you to the **<u>Ticket Search</u>** page. For information on how to navigate the Ticket Search page please see the Ticket Search section.

## **Basic Reports**

The **Reports Page** is a management page that lists all the **My Reports**, or the private Reports the logged in user has created, as well as any **Public Reports** that have been created in the system. It was designed to allow easy management of your graphical reports and the ability to create automatic, scheduled reports. This tool is also the power behind *e*HD's Dashboard feature.

My Reports			CREATE NEW	Public Reports			CREATE NEW
Report Name	Visibility	Actions	Schedule	Report Name	Owner	Actions	Schedule
Closed Tickets	Private	■ 🖉 😣	▶ s	30 days of tickets	Jerry Blue	📼 🦯 🕴	k 😵
Open Tickets	Private	📼 🖉 😣	=	Admin Building Open Tickets	Jerry Blue	■ ∠ ⊗	k 🗤
				High Priority Tickets	Jerry Blue	■ / ⊗	<u>ک</u> او
				Public Computers - Open Tickets	Joe Smith		▶ s <sub>a</sub> .

#### **My Reports**

The **My Reports** section of the page has a list of Reports the logged in user has created. These Reports are organized in rows with four columns: **Report Name**, **Visibility**, **Actions**, and **Schedule**.

- The **Report Name** column lists the report name that was created by that user.
- The Visibility column lists whether a report is
  - **Public**, indicating the report is a public report and therefore visible in the **Public Reports** throughout the application, or
  - Private, indicating the report is private and only visible to that user in the application
- The **Actions** column lists three actions that can be taken for that particular Report: **View**, **Edit**, and **Delete**.
  - If the **View** icon is clicked, that particular Report will be run and pulled up in the **Report Results** pop-up window for viewing purposes.
  - If the **Edit** icon is clicked, that particular Report will be opened in the Report Editing screen where it can be edited, changed, and re-saved.
  - If the Delete icon is clicked, a pop-up message will ask "Are you sure you want to delete this item?" If you would like to delete the Ticket Filter, click the Yes button and it will be deleted from the application. If you do not wish to delete the filter, click the Cancel button.
  - The **Schedule** column lists the recurrence for that Report in three different ways.
    - If there is not recurrence pattern set for the Report, the column will list **Recurrence not set**.
    - If a recurrence is set and has not yet been started, a Play icon 🕑 will be shown along with a still half-

circle pattern we to the right of it. The still half-cirlce pattern shows that the recurrence pattern is not currently running. To start the set Recurrence Pattern, simply click the play icon. The half-circle icon will begin rotating, indicating the recurrence is running.

- If a recurrence pattern is set and has been started, a Stop icon 🖸 will be shown along with a rotating half-circle pattern **\*** to the right of it. The rotating half-circle pattern indicates the recurrence pattern is currently running. To stop or pause the Recurrence Pattern, click the stop icon. The rotating half-circle icon will stop indicating the recurrence is no longer running.

#### **Public Reports**

The **Public Reports** section of the page has a list of Reports that are public and visible to everyone throughout the application (based on the user's rights and privileges). These Reports are organized in rows with four columns: **Report Name**, **Owner**, **Actions**, and **Schedule**.

- The **Report Name** column lists the name of that particular report in the system.
- The **Owner** column lists the name of the individual that created the Public Report. If the System Administrator created the Report the Owner's Name will be listed as SYSTEM ADMIN.
- The Actions column lists three actions that can be taken for that particular Report: View, Edit, and Delete.
  - If the **View** icon is clicked, that particular Report will be and pulled up in the **Report Results** popup window for viewing purposes.
  - If the **Edit** icon is clicked, that particular Report will be opened in the Report Editing screen where it can be edited, changed, and re-saved. If a Public Report is edited and then saved, that Report's new owner will be the last individual that edited it. The report will be listed in the **Public Reports** section of the Reports page for all users except the individual that edited it. For this user, it will be listed under the **My Reports** section of the **Reports** page, with the **Visibility** listed as public.
  - If the Delete icon is clicked, a pop-up message will ask "Are you sure you want to delete this
    item?" If you would like to delete the Ticket Filter, click the Yes button and it will be deleted from the
    application. If you do not wish to delete the filter, click the Cancel button.
- The **Schedule** column lists the recurrence for that Report in three different ways.
  - If there is not recurrence pattern set for the Report, the column will list **Recurrence not set**.
  - If a recurrence is set and has not yet been started, a Play icon 🕑 will be shown along with a still half-

circle pattern we to the right of it. The still half-cirlce pattern shows that the recurrence pattern is not currently running. To start the set Recurrence Pattern, simply click the play icon. The half-circle icon will begin rotating, indicating the recurrence is running.

- If a recurrence pattern is set and has been started, a Stop icon 🖸 will be shown along with a rotating

half-circle pattern with the right of it. The rotating half-circle pattern indicates the recurrence pattern is currently running. To stop or pause the Recurrence Pattern, click the stop icon. The rotating half-circle icon will stop indicating the recurrence is no longer running.

#### **Create New Report**

To create a new Report from the **Reports** page click on the circular **Create New** in the top-rightcorner of the page. This will take you to the **New Report** page.

		✓ Mark As Private ✓ Show detail □ Report by date
Grouping		
Group report by Technician		Regroup drill down information by
Ordering		
Order by Alphabetically		
Format		
Report format		Show Graph Pie O Bar
] Run this report on a sche	dule	

Fill out the information on the New Report page

- **Report Name**: Give a name that will properly reflect the Report.
- Ticket Filter: Select the Ticket Filter you would like to create the Report from.
- Report by date: If you would like to Report on tickets for a certain period of time, be sure this box is checked. A drop-down will appear on the right side of the screen in the same row with the choices to Or-der by the Day, Week, Month (default), or Year. If you wish to show all tickets, leave this box unchecked.
- If the Report by date option is not selected, you have the option to run the report grouped by a specific criteria by clicking the **Group report by** drop-down and selecting one of the following options:
  - Group
  - Location
  - Category
  - Category Option
  - Technician
  - Priority
  - Status
  - ZENworks Asset
- You can then regroup the report results after you have drilled down into a grouped report by clicking on the **Regroup drill down information?** checkbox. Clicking this checkbox will load another drop-down box titled By. This drop-down has the same possible options as the **Group report by** options listed above, further defining your report.
- **Show Graph**: If you would like to show a graph of the selected ticket template, check this box. Then select whether you want the results displayed in a Pie chart or a Bar graph.
- **Report format**: Select from the drop-down menu which format you would like the report results displayed in. The following options are available for reporting:
  - **PDF**: This option will allow for the report to be emailed to a boss, saved on a computer or network, or be printed.

- **HTML**: This is simply a text format.
- **Excel** spreadsheet: This will open the report in Excel and allow you to change and modify the report according to the rules and capabilities of the program.
- **CSV** file: This format will open as an Excel CSV and will show the tickets' column titles in columns and rows for modification.
- Order by: Select how you want the tickets ordered in your report. The following options are available:
  - **Alphabetically**: The results will be listed by technician in alphabetical order.
  - **Greatest # of Tickets**: The technician with the greatest number of tickets will be listed first followed by the next highest and so on.
- **Configure Scheduler for this report**: When this box is checked, a Scheduler box will apear. This is a powerful tool that will allow you to run Reports on a specific schedule without having to manually run the report every time. You can set the following to occur for your report.
  - **Recurrence Pattern**: If you would like to create a Recurrence Pattern for your Report that will automatically launch the Report, select the radio button for the option to run the Report
    - o **Daily**: Set your Report to Recur Ever (X) Day(s)
    - o **Weekly**: Set your Report to Recur Every (X) Week(s) on any certain day of the week
    - o **Monthly**: Set your Report to run on a certain day of every (X) month(s) OR the First, Second, Third, Fourth, or Fifth (Day of the Week) of every (X) month(s)
    - o **Yearly**: Set your Report to run on any certain day of a certain month OR the First, Second, Third, Fourth, or Fifth (Day of the Week) of a certain month every year

Note: Scheduled Reports will be run at 2:30 a.m. on the scheduled date.

- **Range of Recurrence**: In the **Start** text box, state when you would like your report recurrence pattern to begin. Then select whether you want it to **End After** a certain number of occurrences, **End By** a certain date, or **End Never**.
- **Email Message to be sent**: If you would like to send the report to certain people in your organization, add their email addresses in the **To** text field. Add a **Subject** and/or **Body** for your email. The report will be added to the email as an attachment.
- **Example**: You can set a report to run from the **Open IT Tickets** Ticket Filter every Monday morning and be sent to the IT Department Manager for analysis. To do this, you would
  - o Select the Open IT Tickets filter from the Ticket Filter drop-down menu
  - o Check the Configure Scheduler for this report checkbox
  - o Select the Weekly radio button under Recurrence Pattern
  - o Set it to Recur Every 1 Week and select the Monday checkbox
  - o Set the **Range of Recurrence** to **Start** the same day you set up the Scheduler and select the **End Never** radio button
  - o In the **Email Message to be sent** section, enter the IT Department Manager's email address (**To**) along with a **Subject** and/or message (**Body**)
  - o The Report will be sent in an email every Monday morning as an attachment to the email you provided.

When you have finished filling out all the desired information, click the **Save Changes** button. This will save your Report in the Reports page under your My Reports section where you have View, Edit, or Delete the report.

## **Custom Fields**

Custom fields can be added to the ticket page based on category option. These fields can be required or optional. In the Settings, click **Custom Field Setup.** 

First, click Add Custom Field. Select a Group, Location, Category or Category Option for this custom field. The custom field will display on the ticket when the above parameters are selected on the new ticket screen.

The Field Label is the name of the Custom Field you are creating. Type the name of your Custom Field in the Field Label field. Next, choose if you want this field to be a text field, text area, radio button, checkbox or drop-down. These are defined as the following:

Text field: One line of text.

Text Area: Large text area for a memo, note, etc.

Radio Button: Allows users to select only one choice.

Checkbox: Allows users to check or uncheck a box

**Drop-Down:** A list of possible choices in a drop-down list.

Field Label	Location
Field Type	Group
)rder	Category
) 🗢	Category Option
tequired?	▼

After selecting one of the options for your custom field, enter the field value name, and select if it's a required field. For radio button and drop-down, enter values in the value and display value fields. Click the green plus icon 😳 to add more display values to the list.

## Parent/Child

Tickets can be logged in a series of Parent and Child tickets. This feature enables tickets to be organized in a hierarchy. For example, if a ticket is logged concerning a virus that has spread department-wide, it is also very likely that other tickets will be logged that detail specific problems caused by that virus. All of these sub-problems stem from a single problem—the virus that has spread throughout a department. It is possible to create sub-tickets regarding the same problem by opening the existing ticket and clicking on the green plus icon under the Sub-Tickets heading. This will allow you to create a new ticket as a Child ticket to the initial problem. Once the sub-ticket is saved, it can be accessed under the Sub-Ticket section of the Parent ticket or by searching the Child ticket number.

These sub-tickets can have a different group, location, category, category option and assignment than the parent ticket. The sub-tickets display on the parent ticket and have links that open the child ticket in a new window. A parent ticket cannot be closed until all the related child tickets are closed as well. Parent-child tickets are beneficial because they allow you to track related instances from separate tickets.

When in a ticket as a Manager or a Tech, click on **New Sub-Ticket**, which is a **Green Plus Icon** under the Sub-Tickets section, to create a sub-ticket or child ticket. A new ticket screen will display with the same information as the parent ticket. The ticket information in the child ticket can be altered by simply changing the contact name or ticket information as it relates to the new child ticket.

## Asset Tracker and ZENworks

The Asset Tracker allows you to track all the Assets for your company and link them directly to tickets. Here's how to get started:

#### **Enabling Asset Tracker**

The Asset Tracker can be enabled by logging in as the System Admin and clicking on the **Settings - Groups** You can have each group have its assets tracked by either eHD's Internal Asset Tracker or ZENworks' Asset Tracker. You can configure the ZENworks asset tracker by clicking on **Settings - ZENworks 10-11 Configuration.** 

#### **ZENworks Configuration**

eHD's integration with ZENworks now allows tickets to be tied to ZEN Assets. This allows remote control of ZEN tickets, as well as improved reporting systems for those assets. Upon clicking either of the configuration links, you will be taken to the ZENworks Configuration Page.

7E Marca	ke 10, 11 Baco Univ	
ZENWO	RS 10-11 Base On.	
(e.g. http://	zen1.groupiink.net/zenworks	
(eigi nepi	// serenance/ serious/	
Enable	eHD VNC Client	
Driver		
Microso	ft SQL Server ✔	
sql1	Nume	
Databa	se Name	
ZEN10		_
User Na	ame	
zen10		
Passwo	rd	

You will be given the option to **Enable Novell ZENworks Integration**. Upon doing so, you will need to fill out the **Base URL**, indicate whether or not you wish to **Enable eHD's VNC Client**, choose the **Driver**, write the **Server Name**, write the **Database Name**, and write the **User Name**. If you have chosen to use the embedded Sybase ODBC drive, list the ODBC Data Source Name (for more info. see KB article 128). You may then test the connection, and Save the Changes you've made. You will then need to log out and log back in to apply the changes.

#### Settings

Navigate to the Asset Tracker window and click **Asset Tab**, where you will define the following options:

#### Asset Types

Click on **Asset Types**. This is where you will enter and categorize your assets by type. For example, you can categorize your assets into the following types: Laptop, Desktop, Furniture, Landline Phone, etc. To add an Asset Type, click on New Asset Type. Name is the only required field, but you have the option of adding a description. Once you have named your Asset Type, click **Save Changes**. The Asset Type is now displayed.

At the end of each row are two icons: one to edit the Asset Type and one to delete it. You are not allowed to delete an Asset Type that is being used by an Asset.

#### Statuses

Click on **Statuses**. Just like with tickets, every asset will need to have a status. Some examples of statuses are: Out of Service, In Service, On Order, etc. To add a Status, click New Status. Name is the only required field, but you have the option of adding a description. Once you have named your Status, click **Save**. The Status is now displayed.

Follow the same process for Field Groups and Custom Fields.

#### Viewing Your Assets

Navigate to the Asset Tracker window and click **Assets**, where you can use the following features to view and organize your assets.

LIST ASSet						Search	G AD	D ASSET
Asset Number	Name	Asset Location	Location (eHD)	Group (eHD)	Category (eHD)	Category Option (eHD)	Owner (eHD)	Actions
1	Workstation 1 Computer	Room 221	Administration Building	Information Technology	Computer		Kate Thomas (kate)	20
2	Central Office Printer	Office	Parker High School	Information Technology	Printer		Bonnie Brown (member	) 🟒 🕹
3	Web Server	Admin Building Server Room	Administration Building	Information Technology	Computer		Jerry Blue (manager)	28
4	3Com Desk Phone		Davis Junior High	Information Technology	Phone		Kate Thomas (kate)	/ 🛛

#### List Assets

List Assets is just like the My Tickets screen, but for Assets. You can filter and sort the Assets here just like you can do with tickets on the My Tickets screen. You can add Assets here as well by clicking on Add Asset. (See the section Add Asset for more details.)

#### Search Assets

Search Assets works the same way that the Ticket Search window. You have the same ability to create and save a filter.

Each field that is used to describe an asset can be searched from the Search Asset window. For example, each option represents one of the information fields used to describe an asset. There are text fields that require you to type in the information yourself, or there are dropdown boxes that have the information already there for you to choose. After you enter the information you want to search, click the green plus sign next to the field.

The Information entered, or selected, then appears in the lower half of the box. When you have all the criteria entered that you wish to search, click on the **Apply Filter** icon. The Asset Filter section will collapse automatically and the results will appear.

#### Add Asset

This is where you can start adding your assets. The number of tabs shown depend on what Field Groups have been added. The default tabs are: Asset Fields, Accounting Info, Associated Tickets, Software Licenses and Remote Management. Required fields are marked by an asterisk. After entering information for the asset, click **Save Changes**. The List Assets page is then shown.

#### Vendors

This section is to help keep track of the vendors associated with your assets. To add a Vendor, click New Vendor. A vendor form will appear. Fill out as much information about the vendor as you need (Name is the only required field), and click **Save Changes**. The vendor is then displayed.

You can also import a CSV file with a list of vendors by clicking the import button .

You can edit and delete saved Vendors in this window as well. (Note: You are not allowed to delete a Vendor that is being used by an Asset.)

#### Software Licenses

This section is to help keep track of your software licenses. To add a Software License, click New Software License. A software license form will appear. Fill out as much information about the vendor as you need (Product Name is the only required field), and click **Save**. The software license is then displayed. You can edit and delete saved Software Licenses in this window as well.

#### Import

Import gives you the ability to automatically fill in your assets from a CSV format. First, select a file to import. The file cannot have blank cells. It must also have columns for Asset Name, Number, and Type. Click the **Browse** button to navigate to your file. Once you have selected your file, choose the CSV type: is your file a regular CSV file or an Excel CSV file?

Also, be sure to select the **Is the first line a row of labels?** check box if the first row of the file is the labels for the columns. If you don't have a row of labels leave this unchecked. **Create New Location? Create New Group?** You will be given the opportunity to name the fields during import. You also have the options to create a new Location or Group based on fields in your CSV file.

#### Reports

Reports for assets has a list of canned reports for your use. Click on any of the canned Asset Report types and the report is displayed.

Assets by Group
 Assets by Type
 Lease Expiration Report
 Warranty Expiration Report
 Purchase Report

## Dashboards

Dashboards are designed to harness the power of your saved Reports from the **Reports** page and display them visually using eight different types of Widgets (visual dials or charts used in your Dashboard). Before you start to create your dashboard, it is imperative that you create the Report in the **Reports** page that you want to have visually represented in a Dashboard. Examples of Reports are: All Open Tickets, Tickets by Location, or All Today's Modified Tickets Grouped by Category and Regrouped by Priority. For help creating Ticket Filters please see the Working with Ticket Filters in Ticket Search or Reports Section of the help files. Dashboards are sold at an additional cost and must be turned on or off from your License File.

#### Admin Settings Console

In the Admin Settings Console, there is a bar called **Dashboard Management**. When clicked, it expands to reveal the **Dashboard** Link. This link will redirect you to the Dashboard Management Page.

Dashboards	S NEW DASHBOARD
Dashboard Name	Action
Daily View	Sec. 19 10 10 10 10 10 10 10 10 10 10 10 10 10
Hourly View	🛸 🖉 🐻 😣

#### Dashboard Detail Page

If you are creating a new Dashboard, the Dashboard Detail Page will pull up with a text field for your Dashboard's name. Enter a name for your Dashboard then click the **Save Changes** button. This will save the Dashboard's name and allow you to add Widgets (the visual dials or charts used in your Dashboard) to your Dashboard. Clicking the Cancel button will take you back to the Dashboard Management Page. If you click the **Edit Icon** to pull up a select Dashboard from the Dashboard Management Page, the Dashboard Detail Page pulls up with a list of the individual Widgets being used in that dashboard. You have the ability to edit the dashboard's name as well as add, edit, or delete widgets in that Dashboard. The Widgets are displayed in rows with column headers titled: **Widget Name**, **Widget Row** and **Column Location** (which gives you the row and column location for that widget in the dashboard), **Column Span** and **Row Span** (which tells you how many rows and columns that widgets spans in the dashboards grid), and **Action** (which has icons to edit and delete the widget). When the **Edit Icon** is clicked, it will direct you to the Widget Creation Page, where you can edit that Widget in the dashboard. If the **Delete Icon** is clicked, it will bring up a prompt to confirm the deletion of that widget. At the bottom-right of the page is a **Save Changes** button, which will save the dashboard and take you back to the Dashboard Management Page. If you click the **Cancel** button, you will be taken back to the Dashboard Management Page.

#### Dashboard Management Page

The Dashboard Management Page is populated with the list of all the Dashboards that have been created in the system. If no Dashboards are listed and you would like to create one, click the circular **Green Plus Icon** in the top-left corner of the Dashboard Management Page and you will be taken to the Dashboard Detail Page. If Dashboards are listed in the Dashboard Management Page you will see, to the right of each dashboard, under **Action**, are four icons. In order, they are **Launch**, **Edit**, **Copy**, and **Delete**. Clicking the **Launch Icon** will start the download of a Java swing applet that opens up in a separate, resizable window for your dashboard viewing. Clicking the **Edit Icon** will take you to the Dashboard Detail Page, allowing you to edit and resave your dashboard. Clicking the **Copy Icon** will add a copy of that Dashboard to the Dashboard Management Page, allowing you to launch, edit, copy, or delete the copied Dashboard. When clicked, the **Delete Icon** will bring up a prompt to confirm the deletion of that dashboard.

In the top-right corner of the page is the **Add New Widget Icon**. Clicking this icon will take you to the Widget Creation Page where widgets can be created, saved, or edited.

#### Widget Creation Page

If you are creating a new Widget the Widget Creation Page will pull up giving you the ability to name and create your Widget. After giving your selected widget a name, you must then select a report from the **Re-port** drop-down list. Next, enter in the Widget's location in the Dashboard by **Row** and by **Column**. If you are making a Dashboard with only one widget then put 1 and 1 in the **Row** and **Column** boxes. If you are creating a Dashboard with four Widgets you will enter each Widget's location to be 4 different cells of a table. Row 1 Column 1, Row 1 Column 2, Row 2 Column 1, and Row 2 Column 2.

The next step in creating your Widget is to select the **Widget Type** you want to use to display your selected Ticket Filter's information. Hovering over the thumbnails of the different **Widget Types** will bring up a stored snap-shot of what that Widget looks like. Note that some charts may be grayed-out if they are not compatible with the Ticket Filter you have selected. Ticket Filters that are created to return simple ticket counts, like All Open Tickets, can only be displayed using the **Dial**, **Horizontal Arc Dial**, **Vertical Arc Dial**, or the **Thermometer**. Ticket Filters that are created using the **Group Report By** option in the **Create a graphical report** of the **Ticket Search**, like All Open Tickets Grouped by Location, can be displayed using the **Bar Chart** and the **Pie Chart** Widgets. Ticket Filters that are created using the **Group Report By** option and the **Regroup drill down information by** in the **Create a graphical report** of the **Ticket Search**, like Today's Modified Tickets Grouped by Category and Regrouped by Priority, can be displayed using the **Stacked Bar Chart** and the Multiple **Pie Charts** Widgets.



After the **Widget Type** has been selected, the particular type will have a given set of **Thresholds** that need to be selected. These will appear under the **Thresholds** portion of the page after the **Widget Type** has been selected. The threshold **Minimum Value** and **Maximum Value** must be

entered, as well as the sub-parameters, depending on the **Widget Type**. The **Dial** Widget has green, yellow, and red section of the dial that can have different thresholds. Example: Green can indicate an okay range for open tickets set for 0 – 25; yellow can indicate a warning level that open tickets are filling up in the system set for 25 – 40; red can indicate a critical level set for 40 – 60. The **Thermometer** has the same green, yellow, and red levels; however it also has a critical level that can be set at whatever level is needed. These are the Thresholds that need to be set depending on your company's needs and procedures. Once the **Thresholds** are set, you can then click the **Save Changes** button to close the Widget Creation Page, adding that widget to the Dashboard Detail Page. The Cancel button will close the Widget Creation Page and return you to the Dashboard Detail Page without saving the Widget.

#### Launching your Dashboard

To launch the Dashboard click on the Dashboard Icon in the header's fisheye. This will pull up the Dashboard Management Page, with a list of all your system's Dashboards. In each Dashboard's row is a pair of glasses icon. Click on this icon to launch that particular Dashboard. The application will automatically start to download the Java swing applet. Once it is downloaded, click the **Run** button and the Dashboard will open up in a separate, resizable window that will update live every 20 – 40 seconds. This window can be maximized on a 60 inch screen or on a personal desktop. It is important to note that an end user will be able to launch Dashboards as well; however they will only be able to see the Tickets in that Dashboard that they are the Contact for or those they have submitted. It is all based on the same rights and privileges as the **Ticket Search**.

## Ticket Templates

Ticket Templates were designed to help implement your business processes, routine tasks, and requests directly in the application. You can create the template once and then manually launch the Ticket at any time. You can also set the Ticket Template to be launched on a specific day, week, month or year using the Recurrence functionality under the **Recurrence Tab**. You can create a Ticket Template with multiple Ticket layers (Child Tickets) that can be launched automatically based on predefined Workflow. This gives you the ability to have the next Ticket or Tickets in the Template launch when the previous Ticket or Tickets have their status changed to the predefined status. This can be done in the **Workflow Tab**.

Human Resources	Information Technology	Maintenance Public Computers	Transportation	
🔁 New Ticket Ter	nplate			
Name	Str	ucture	Action	Schedule
New Hire	13	Child Tickets	۵ 🖉 😒	Recurrence not se

#### Ticket Template Management Page

The **Ticket Template Management Page** is populated with all your system's Groups represented by Tabs. Each Group Tab is populated with a list of all the Ticket Templates created for that Group. You can click on each Tab to see the different Ticket Templates for each Group. If no Ticket Templates are listed and you would like to create one, click on **New Ticket Template** in the top-left corner of the **Ticket Template Management Page** and you will be taken to the **Ticket Template Detail Page**. If Ticket Templates are listed in the **Ticket Template Management Page** you will see, to the right of each Ticket Template, under **Action**, are four icons. In order, they are **Launch**, **Edit**, **Copy**, and **Delete**. Clicking the **Launch Icon** will redirect you to the **Pre-Iaunch Page** where you can change any information in the Ticket Template's Tickets before launching them. Clicking the **Edit Icon** will take you to the **Ticket Template Detail Page**, allowing you to edit and resave your Ticket Template and it's Recurrence Pattern or Workflow. Clicking the **Copy Icon** will add a copy of that Ticket Template to the **Ticket Template Management Page**, allowing you to launch, edit, copy, or delete the copied Ticket Template. When clicked, the **Delete Icon** will bring up a prompt to confirm the deletion of that Ticket Template.

Also to the right of each Ticket Template, under **Schedule**, is a **Play and Pause Icon** that will appear if a Recurrence Pattern is saved for that Ticket Template. To Play the Recurrence Pattern, click on the **Play and Pause Icon** and a **Circular in Motion Icon** will start playing. To Pause the

Recurrence Pattern, click on **Play and Pause Icon** again. The **Circular in Motion Icon** will stop playing and your Recurrence Pattern will be paused. If that Ticket Template has no Recurrence Pattern set, under **Schedule** it will say **Recurrence not set**.

#### Ticket Template Detail Page

If you are creating a new Ticket Template, the **Ticket Template Detail Page** will pull up with a text field for your Ticket Template's name. Enter a name for your Ticket Template and decide if you want your Ticket Template to be **Private** (only the **Admin, Managers, and Technicians** will be able to launch it), or if you want to make it **Public** (**End Users** will be able to launch it). The **Mark as Private** checkbox will be checked by default, but may be unchecked to make the Ticket Template **Public**. You then need to click the **Save Icon**, which is the blue floppy disc icon. Once you click the **Save Icon**, three Tabs will appear in the top left-hand side of the screen: **Tickets, Recurrence**, and **Work Flow Tab**.

#### Tickets Tab

The Tickets Tab will be selected by default and the screen will be split into two sides. In the left-hand side of the screen there will be the start of a Tree-Diagram, or the hierarchical flow of the Ticket Template. To add a top tier Ticket to the Tree, right-click on **Templates** in the Tree-Diagram. This will reveal a menu with the options to **Add a New Template**. Clicking this option will pull up a pop-up window that asks you to name your Template. Give the Template a name and click the **Save Changes** Button. If you want to exit the pop-up without saving changes, click on the X in the right-hand corner of the window. Clicking the Save Changes Button will close the pop-up window and add the Ticket name in the Tree-Diagram. Clicking on the Ticket name in the Tree-Diagram will populate the right-hand side of the screen with a blank Ticket. This blank Ticket can be filled out so, when it is launched, all the information entered and saved will be in the Ticket. The flow of the Ticket Template works the same way as filling out a normal Ticket. You can enter the Contact and Location and everything else like normal. If you want Custom Fields on the Ticket, they will appear based on the Category Option you select. If you want to tie an Asset to the Ticket you can. You can also add attachments to the Ticket in the Template or any detailed instructions that are necessary. When you are done filling out the information for that Ticket, click the **Save Template** Button at the bottom of the screen. The next step in filling out the Ticket Template is to decide the different steps you want in your Ticket Template. If you want to add another Ticket to the Template, and make it the same level as your first, rightclick on the head Template in the Tree-Diagram and click on Add a New Template. If you would like to add a Sub-Ticket to one of your Tickets in the Ticket Template, right-click on the Ticket and a menu will appear with an option to Add a New Template. Clicking on this will add a new Ticket beneath the previous Template, making it a Sub-Ticket. Also in the menu are to other options: Rename This Template and Delete This Template. Clicking on Rename This Template will pull up the Template Name box, allowing you to change the name. Clicking on **Delete This Template** will pull up a Confirmation box asking you if you are sure you want to delete the template. If you want to delete the Ticket click **Ok** and the box will close. The Ticket will be deleted from the Template. If you click **Cancel**, the box will close and nothing will take place. This is the process you follow to create a Ticket Template.

An example of a Ticket Template is that of a New Hire Process. The first Ticket could be Setup Workstation with information necessary to setup the new hire's workstation: desktop computer, laptop, cell phone, etc.

This Ticket would be sent to a Technician in the I.T. department, although the application allows for Ticket Templates to be sent to different departments in the organization, allowing you to truly implement you business processes. The next Ticket can be Setup Software with information necessary to setup the user email client and any internet rights and so forth that the new hire would have. The next Ticket would be Train on Policies followed by the last Ticket, Manager's Final Approval.

If you are editing a Ticket Template's information, you can simply walk-through the Tree-Diagram on the left-hand side of the screen and add, delete, or rename Tickets in the Template. You can also click on each Ticket to pull up the Ticket in the right-hand side of the screen and edit any of the Ticket's information. Just make sure you save any changes to each Ticket by clicking on the **Save Template** button at the bottom of the Ticket. When you are done editing the Template details, click on the **Save Icon** (a blue floppy disc) in the **Ticket Template Detail Page** header.

#### Recurrence Tab

If you would like to create a Recurrence Pattern for your Ticket Template that will automatically launch the Ticket Template, click on the **Recurrence Tab**. Clicking on the **Recurrence Tab** will fill the screen with the Recurrence Pattern options. You can set a **Recurrence Pattern** as a **Daily, Weekly, Monthly**, or **Yearly** occurrence, by clicking on the Radio Button next to the **Daily, Weekly**, **Monthly**, or **Yearly** options. Clicking on the **Daily** Radio Button will allow you to select the Ticket Template to recur every 1, 2, or 30 days. It will allow you to go as high as 365 Days. Clicking on the **Weekly** Radio Button will allow you to select the Ticket Template to recur every 1, 2, 15, or as high as 365 weeks, on any day or days of the week. The days of the week can be selected by checking the checkboxes next to the day or days of the weeks you would like the Ticket Template to be automatically launched on. Clicking on the **Monthly** Radio Button allows you to automatically launch the Ticket Template in one of two ways. You can launch the Ticket Template on Day 1, 2, up to the 31<sup>st</sup> of every 1, 2, or 50<sup>th</sup> month. This can be done by clicking the Radio Button next to this option. You can also launch the Ticket Template on the First – Fifth, Sunday – Saturday of every 1, 2, or 50<sup>th</sup> month. This can be done by clicking the Radio Button next to this option. Clicking on the **Yearly** Radio Button allows you to automatically launch the Ticket Template in one of two ways. You can launch the Ticket Template on day 1 – 31 of months January – December by clicking the Radio Button next to this option. You can also launch the Ticket Template on the First – Fifth, Sunday – Saturday of the months January – December by clicking the Radio Button next to this option. Note that Ticket Templates on a Recurrence Pattern will be launched at 2:01 a.m. on the selected date

<ul> <li>Daily</li> <li>Weekly</li> <li>Monthly</li> <li>Yearly</li> </ul>	Recur Every: 1	<b>\$</b> Day(s)		
Range of Re Start: 6/14	currence	▼ ○ End After:	÷	occurrences

You can set the **Range of Recurrence** for your Ticket Template's **Recurrence Pattern** to start on any date you want by clicking on the **Start** field and pulling up the Date Picker Calendar. You can have the range end in one of three ways: It can end after 1-999 occurrences, which can be selected by clicking on the **End After** Radio Button; it can end after a selected date by clicking on the **End by** Radio button and picking a date

from the Date Picker Calendar; or it can end never, by clicking on the **End Never** Radio Button. When you are done setting your **Recurrence Pattern** and **Range of Recurrence** that the application will run on to automatically launch the Ticket Template, you can save it by clicking on the **Save Changes** button. At any time, you can navigate away from the page and your changes will not be saved. An example of this is to set your Preventive Maintenance Ticket Templates for each building on a Recurrence Pattern that will automatically launch the Ticket Template on the First day of January every year, starting with January 1, 2010 and ending never.

If you are editing a Ticket Template's Recurrence Pattern, you can click on the tab and make any changes you would like. You can save your changes by clicking on the **Save Changes** button. If you don't want to save any of your changes, simply navigate away from the page.

#### Workflow Tab

If you would like to add a Workflow to your Ticket Template that will automate your process, click the Work Flow Tab. Clicking the Work Flow Tab will populate the left-hand side of the screen with all the Tickets in the Ticket Template. The right-hand side of the screen will have a page containing an **Enable Workflow** Checkbox and Steps 1 and 2. When tickets are placed in Steps 1 and 2 the will be launched when the Ticket Template is manually launched or when it is run on a scheduled date from the Recurrence Pattern. If you would like to enable the Workflow you create for your Ticket Template, check the checkbox by clicking on it. You can disable the Workflow for a Ticket Template at any time without having to erase it simply by unchecking the checkbox. Once you have enabled Workflow, each Ticket from the left-hand side of the screen can be clicked and dragged over into a Step on the right-hand side of the screen. By default there are only two Steps on the screen. To add another step, click on the **Green Plus Sign** icon 😳. This will add **Step 3** to your workflow. You can have as many Steps as you would like. You can also delete your Steps by clicking on the Red Circle with a White X. Multiple Steps in your Workflow will cause a Step Completed Status Dropdown to appear underneath all but the last **Step**. After you have dragged the Tickets from your Ticket Template that you want to be part of the first step, choose which Step Completed Status you would like all the Tickets in **Step 1** to be changed to. The Tickets in **Step 2** will be automatically launched when the Status in Step 1 is completed. In the Step Completed Status dropdown there will be all the default statuses of a Ticket as well as Custom Statuses that you can create in the system. To choose as Status simply click on it in the dropdown.

Ticket Templates	✓ Enable Workflow
	These Tickets will be launched when the Ticket Template is submitted or when it is run off of a scheduled date from the Recurrence Pattern.
	Step 1
	Set Up Workstation
	Step Completed Status : Resolved
	Step 2
	Phone Computer
	Step Completed Status : Resolved
	Step 3
	Software Setup

Next drag over all the Tickets that you would like to have launched in **Step 2**. Continue to add as many Steps to your Workflow pattern as needed. The Tickets can be dragged back and forth from the right-hand and

left-hand sides of the screen. You can multi-select how many Tickets you can drag at a time by using the Shift and Control Keys on your keyboard. When you are done creating your workflow for the Tickets in your Ticket Template, click the **Save Changes** button at the bottom of the page.

An example of a workflow pattern can be that of a New Hire. The first step in the New Hire process, Setup Workstation, can be launched in the first Step. When that Ticket's Status is changed to Resolved it will launch the Setup Software Ticket in Step 2. When the Setup Software Ticket is changed to Resolved it will launch the Train on Policies Ticket. When the Train on Policies Ticket is changed to Resolved it will launch the last Step, which is Manager Approval. You could also have the Setup Software Ticket and the Train on Policies Ticket launched at the same time in Step 2. This is the power and capability of Workflow.

You can edit the Workflow of any Ticket Template by clicking on the **Workflow Tab** and editing which Tickets are launched in which steps. You can alsoadd or delete steps from the process. Once you have finished making your edits, click the **Save Changes** button. If you don't want to save any of your changes, simply navigate away from the page.

Once you have created, or edited, your Ticket Template and added any desired Recurrence Pattern and Workflow, save the whole Ticket Template in the **Ticket Template Detail Page** by clicking on **Save Changes** in the **Ticket Template Detail Page** header.

#### Launching a Ticket Template

Ticket Templates will be automatically launched from the application if they have a Recurrence Pattern created saved. However, Ticket Templates can also be manually launched in two ways. The first way to manually launch a Ticket Template is to click the **Ticket Template** button on the top, left-hand side of the **My Ticket Screen**. Clicking on the arrow on the **Ticket Template** button will reveal all the groups that Ticket Templates created for them. If you hover over a Group in the dropdown, it will reveal the Ticket Templates that have been created for that Group. Clicking on the Ticket Template you desire to launch will pull up that Ticket Template in the **Ticket Template Launch Page**. The second way to manually launch a Ticket Template is to click on the **Ticket Template Icon** in the **Fisheye** header. Clicking this icon will pull up the **Ticket Template Management Page** which will list all the Groups in the system and all their Ticket Templates. For each Ticket Template, under **Action**, there is a **Launch Icon**. When clicked, the icon will open that Ticket Template in the **Ticket Template Loon** in the **Fisheye** header, they will be able add, edit, copy, and delete Ticket Templates as well as launch them. Technicians will only be able to launch Ticket Templates form this page. End User will only be able to see and launch Ticket Templates that have been marked **Public**.

Once the Ticket Template has been opened in the **Ticket Template Launch Page**, the head Ticket in the Template will be opened on the right-hand side of the screen with the Tree-Diagram on the left-hand side of the screen. If the contact information was blank on the Template, it will auto-populate with the information of the person logged in. Technicians and Managers can change this information; however, Users cannot. This page is where you can navigate through the Tickets in the Ticket Template and make any changes to the Template that are desired, including adding comments, new contacts, or tying assets. (Note that you will not have access to **Recurrence Tab** or the **Workflow Tab** in the **Ticket Template Launch Page**.) Be sure to save all the changes to each Ticket before you navigate to another Ticket in the Template. In the head Ticket of the Template you will see an **Apply to all Icon** next to the **Contact** field.

This allows you to apply the change in the Contact name to all the Tickets in the Ticket Template. To do this, change the head Ticket Template's Contact and click the **Apply to all Icon**. When you are done making changes to the Ticket Template, click the **Launch Icon** in the top left-hand corner of the screen. Clicking on the **Launch Icon** will launch the Ticket Template and give you a visible confirmation that the Template was launched sucessfully. Note that the launch will only be successful as long as all of the fields that are required to submit a Ticket are filled out in every Ticket of the Template. If you decide not to launch the Ticket Template, click on the **Abort Icon**. Clicking on the **Abort Icon** will pull up a **Confirmation** box asking you if you really want to abort the launch. If you want to abort the launch click the **Ok** button, and you will be taken back to the **Ticket Template Management Page**. If you don't want to abort the launch click the **Cancel** button. It is important to note that all Tickets in the **Ticket Template Launch Page** will become rogue Tickets if they are not launched or aborted from the **Ticket Template Launch Page**. These rogue Tickets will only take up space in your Database. They will not affect any reporting or show up in the system.

#### Ticket Template Icons

If a Ticket is part of a Ticket Template, a **Ticket Template Icon** will appear on the left-hand side of each Ticket Row in the **My Ticket Screen** and **Results Section** of the **Ticket Search**. If you hover over this icon, a tool tip will appear stating that this Ticket **Has Ticket Template**. If a Ticket is a Parent Ticket, a **Form Down Icon** appears, with a tool tip indicating this Ticket **Has Sub-Tickets.** If a Ticket is a Child Ticket, a **Form Up Icon** appears, with a tool tip indicating this Ticket **Has a Parent Ticket**.

# Support Services

## Logging a Ticket

Continuing in our commitment to provide you with the support tools you need most, we will now review the best way for you to contact our Customer Support Team. Technicians can be contacted by logging a support ticket at the following location:

http://support.grouplink.net

You should now see the GroupLink Customer Support login screen. In order to log a support ticket, you will need to create a user account. At the top right of the screen you should see the **New user? Register Here** link. If the New User link does not appear because your organization uses LDAP integration, use the credentials provided by your System Administrator.

	everything HelpDesk			
<i>Note:</i> If LDAP is disabled, the <b>New</b> <b>User? Register Here</b> and <b>Forgot</b> <b>Password</b> links are displayed.	Login Id Password Language	English (United States)		
	Search knowledgebase	Forgot your password?	New user? Register Here	

To register for a user account, enter the following information and click **Register**.

	CON EV	erything IeinDesk	
First Name		стросы	
Last Name			
Email			
Login Id			
Password			
Re-Type Password			

Once you have created a User Account you will be able to login at the main support page. (Your username is the **login ID** that you registered the account to.) Once you log in, you will see a support ticket screen like the following:

Jwned I	oy me 11 V	My Closed Tickets	2 💴
	Priority	Ticket #	Location
٣	۲	134	Parker High School
	•	158	Parker High School
	•	159	Parker High School
	0	160	Parker High School
	۲	161	Parker High School
۲	•	166	Parker High School
٣		133	Parker High School
*		164	Parker High School
٣	۲	162	Parker High School
*		163	Parker High School

This screen will show all the tickets you have submitted. You are able to create new tickets, search the knowledgebase and update and modify existing tickets from this screen. Click New Ticket to open the Create New Ticket screen

ncket screen.	New licket						
Create New Ticket screen	* Group Information Technology	•					
Create New Ticket Screen	Submitted by SYSTEM ADMIN						
	🛃 Save Changes						
	- Contact Information						
Select a Location, Group, Category and a Category Op- tion from the drop-down list.	* Contact Phone Location	ADMIN, SYSTEM (admin) (None) Administration Building	• @	Email Address	(None) (None)		~
option, it will appear auto-	• Ticket Info	▼ Ticket Info					
matically. Enter a subject (required field) and add comments in the note field about the problem or question you have. You can attach a file to the entire ticket or to an individual note (note attach- ments). Click <b>Save Changes</b> to submit the ticket.	* Category		•	* Priority	Low	•	
	* Category Option * Assignment		•	<ul> <li>Status</li> <li>Est. Compl. Date</li> </ul>	Assigned Not Updated	*	
				Asset	[		
	- Description						
	* Subject						
	Note						]
	▼ Attachments						
					Browse		
	+ History Comments						
	No comments						

A ticket can only be submitted after selecting an option from the drop-down lists.

All tickets are responded to within 24 hours. Each time your ticket is updated, you will receive an email informing you of its progress.

To view or edit your ticket, you must first log in to the HelpDesk system. Once you have logged in, you will see the above My Tickets screen page with tabs for all of your tickets.

The **Owned by me** tab shows your existing ticket(s). To view and modify a ticket, click on the ticket you wish to edit. You can also add files and update your ticket from here.

• After submitting the ticket, you will receive an email notification similar to the following:

*From:* <support@grouplink.net> *Sent:* Tuesday, May 1, 2007 4:05 PM *To:* useremail@msn.com *Subject:* Ticket #4778: Assigned to Haley Sampson

Your ticket for: Help Desk: hd Other has been assigned to Joe Johnson for processing.

View your ticket (This will be a clickable link in the application.)

You can view your ticket by clicking on the **View your ticket** link. You will then be prompted to log in to the HelpDesk system.

Your *everything* HelpDesk ticket correspondence will be entirely through email so be sure to add support@grouplink.net to your safe email list. Whenever your ticket is updated by a technician, the status or priority is changed, an attachment added, or an appointment scheduled, an email notification will be sent informing you of the change and allowing you to respond or update your ticket. The email will be similar to the following:

From: <support@grouplink.net>
Sent: Thursday, May 3, 2007 8:19 AM
To: useremail@msn.com
Subject: Ticket #4778: Update to Your Help Desk Ticket - Please respond through HelpDesk system
Body: Your hd Other ticket has been modified.
Status changed from Assigned - Not Updated to Awaiting Response.
Comments:
I would like to set up a time for me to call you later today so we can discuss this issue further. We may have to remote in to figure out what's going on. Let me know what time works best for you and I will call you then.

GroupLink Customer Support

View your ticket (This will be a clickable link in the application.)

• After the ticket status has been changed to completed by the assigned technician, you will receive an email similar to the following:

From: <support@grouplink.net>
Sent: Friday, May 18, 2007 3:19 PM
To: superwoman\_200@msn.com
Subject: Ticket #4778: Update to Your Help Desk Ticket - Please respond through HelpDesk system
Body: Your hd Other ticket has been modified.
Status changed from Awaiting Response to Completed.

#### Comments:

The status of this ticket has been changed to closed. If you're still experiencing problems or you have any more questions regarding this ticket, please issue a new HelpDesk ticket or contact GroupLink Customer Support. Thank you for using the GroupLink Support System. Kyle Charlesworth GroupLink Customer Support

View your ticket (This will be a clickable link in the application.)

## Knowledgebase

The knowledgebase is a source for technicians as well as end users to search for information about problems they may be experiencing. Knowledgebase articles give users and technicians more specific information, enabling them to solve problems quickly and easily. Knowledgebase articles can be written by technicians and managers. They can be viewed by technicians, managers and end users. Articles can also be written specifically just for end users or just for technicians or both. Articles are written specific to a group and can also be public or private so only technicians can see them. Managers, Technicians and the Administrator have access to manage the knowledgebase.

To search the knowledgebase, go to the login page for HelpDesk (http://support.grouplink.net/grouplink/ helpdesk). Search the GroupLink knowledgebase to find answers to your most commonly asked questions.

Login to HelpDesk using your login Id and password. If you're a new user, create a new account by clicking on **New user? Register Here**. After logging in, click on **Knowledgebase** tab at the top of the page.

Select a Group from the drop-down list to search in. End users can search on all groups, and technicians can only search on groups they are a part of. Enter search criteria and select if you want to search in the subject, body, or subject and body. The search field is fully text searchable, so you can just type in a keyword or keywords to search on. A list of search results will display below. The counter shows how many times this article has been viewed. View the article by clicking on it.

Search knowledgebase Group All V Search	in Subject	Search article
Printer Jam Article #3 Short description: Printer is Jammed and Light is Flashing		Viewed: 20 Grou
Paychecks, Pay Period, and Direct Deposit Article #7 Short description: What is the pay cycle? How and when do I get paid?		Viewed: 15
How to Use the Time Clock Article #12 Short description: If you're having issues using the time clock, first try the steps below.		Viewed: 15

Managers and technicians have the ability to view, edit, and email articles, create new articles, and make the article private or public, to reset the counter, or to remove the article. End users can view the article and email it to others.

Edit article   New article	Make private   Reset view counter	Remove this article
Email Whole Page 💌 To:		Send
To manage the Knowledgebase, login as a manager and click **Settings - Knowledgebase** article. You can view, edit and remove knowledgebase articles from here. Click **New Article** to create a new knowledgebase article. Check the box if you want this article to be private (for technicians only). Choose a group for this article. Enter a subject, a short description and a resolution or body for the article. Attach files if needed, then click **Save & View** to save the article and view it.

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## Smart Devices

*everything* HelpDesk is accessible via PDAs for technicians and managers only. End user accounts and the system admin account are not accessible from PDAs.

Technicians have the ability to manage and work on tickets from their PDAs. The eHelpDesk can be accessed the same way you access it through your computer's web browser. Simply point your browser to **http://**<*servername*>/**ehelpdesk.** You will be directed to the HelpDesk login page and, upon authentication, you will have access to the My Tickets page in the PDA compatibility mode (as shown below).

From the My tickets screen, you can change the group you are viewing tickets for and view the group ticket pool from the drop down lists. Tickets can then be viewed by clicking on the ticket number and comments can be submitted from within the ticket. Creating a ticket is as simple as doing it on a desktop computer. You can click the **Create Ticket** link and fill in the appropriate fields. When managing tickets from your PDA, you can also sort by columns that are displayed by clicking on the link in the column headings.

GroupLink recommends using one of the supported PDAs to access eHelpDesk. The PDAs supported by HelpDesk are:

- Android Mobile Devices (v 1.1 or higher)
- Blackberry Bold (v4.6)
- Blackberry Curve (v4.6)
- iPhone (v3.0)
- iPod Touch (v3.0)
- Windows Mobile (v5.2)

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## iPhone/Android Interface

The iPhone and Android are now both supported PDA device for the eHD application. Using the interface, Techs, Managers, and Administrators can create and manage their tickets directly from their phone.

### Logging In

To log in to the iPhone eHD application, simply open a web browser and point it to the eHD IP address.



Enter the username and password information exactly as you would on your computer and touch Login. You will be taken directly to the eHD iPhone/Android version of the My Tickets screen where all tabs you have created will be listed. To view the Tickets for a particular tab, simply touch the desired tab. To access the My Tickets screen from any other page, press the home icon in the top left corner.

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## **Sorting Tickets**

At the very top you can choose to sort the tickets by

- Priority
- Id
- Contact
- Created Date
- Modified Date
- Location

## **Accessing Tickets**

To view an individual Ticket, simply touch the ticket you would like to view. The ticket will be pulled up and can be viewed by scrolling through the different sections.



- The top section lists the Ticket #, who submitted the ticket, the created date and when it was last modified.
- The Contact Information section lists the name and contact information for the user who is the contact for the ticket. Directly from this section, you have the ability to send an email to or call the contact for the ticket.
- The Ticket Info section lists, in order,

- Priority
- Status
- Est. Compl. Date
- Location
- Group
- Category
- Category Option
- Assignment
- **Subject**: To scroll through an entire Subject, touch the Subject to enter edit mode, touch and hold in the text box until the magnifying bubble appears and move your finger slowly to the right or left.
- **Note**: To scroll through an entire Note, use two fingers and drag the note upward to view the lower end.

Below this information is the Save Changes button. When you have made any desired changes to the ticket, press this button and the changes will be saved.

The History Comments button is at the bottom of the page. To view the History Comments, press the button and you will be directed to a separate page for the History Comments. From this page, press the Add comment button to pull up a list of the following History Comment template options:

- Add comment: This option will pull up a new blank History Comment which you can fill out, choose to notify the Technician and/or user, and save.
- **Received a phone call**: This will automatically fill the Subject line with the Date and Time and show that a phone call was received about the Ticket.
- **Placed a phone call**: When a phone call is placed about the Ticket, this option will automatically fill the Subject of the History Comment with the date and time the phone call was placed.
- Schedule an appointment: This selection will open an appointment for the contact of the ticket.
  - Add people in your organization to the appointment as well as CC or BC anyone in the organiza tion.
  - Enter the Place where the appointment will be held.
  - Select a Start Date from the scrolling calendar that pulls up with this option.
  - Select the Start Time for the appointment.
  - Select the Duration for however long you need the appointment to last.
  - Mark the calendars of the people involved with the appointment as Free, Tentative, Busy, or Out of Office.
  - Add a Subject and/or Note as desired.
  - You can choose whether or not to notify the Technician and/or User of the Ticket.

When you have filled out the information, press the Save Changes button to post the appointment.

- **Schedule a task**: This screen is similar to the screen of the Schedule an Appointment option. Fill out the fields in the screen and push the Save Changes button at the bottom to post the task.
- **Cancel**: Selecting the Cancel button will cancel the Add History Comment action.

## **Create a New Ticket**

To create a new Ticket using the iPhone press the Create New Ticket icon 🚾 next to the home icon in the top left corner of the screen. The new Ticket will display on the screen with the following information:

- **Ticket #**: It will be listed as New Ticket.
- **Submitted by**: The information here will belong to the logged in user.
- **Created**: This will list the created date.
- Modified: Because this is a new ticket, the Modified date will be the same as the Created date.
- **Contact Information**: The Contact Information listed in this section will belong to the logged in user. This can be changed by touching the down arrow at the end of the row and selecting a new Contact from the list.
- Ticket Info:
  - **Priority**: To change the Priority of the Ticket, touch the down arrow at the end of the Priority row and select a new Priority.
  - **Status**: To change the Status of the Ticket, touch the down arrow at the end of the Status row and select a new Status.
  - **Est. Compl. Date**: This field will auto-fill with the current date. To change the date, touch the over arrow at the end of the row and a scrolling calendar will appear. Select the desired Year, Month, and Day and touch the Done button.
  - **Location**: Touch the down arrow at the end of the row, select your Location from the list that appears, and touch the Done button.
  - **Group**: Select the Group that is relevant to your Ticket and touch the Done button.
  - **Category**: Select the Category that is relevant to your Ticket and touch the Done button.
  - **Category Option**: Select the Category Option that is relevant to your Ticket and touch the Done button.
  - **Assignment**: Select the Assignment that is relevant to your Ticket and touch the Done button.
  - **Custom Fields**: Fill in any other Custom Fields set by your organization and touch the Done button.
  - **Subject**: Enter a Subject as you would in a Ticket on your computer and touch the Done button.
  - **Note**: Enter a Note as you would in a Ticket on your computer and touch the Done button.

Once all of this information is filled out, touch the Save Changes button. A Save successful message will appear at the top of the screen and your new Ticket will appear under the Owned by me section of eHD both on your iPhone/Android and your computer.

## Sign Out

To sign out of the application, press the **Sign Out** button in the top right corner of the screen.



## **User Authentication Process**



# Appendix 2

# Installation Notes for Linux catalina.sh file

<ul> <li>#</li></ul>
<ul> <li># Start/Stop Script for the CATALINA Server</li> <li># Environment Variable Perquisites</li> <li># CATALINA_HOME May point at your Catalina "build" directory.</li> <li># CATALINA_BASE (Optional) Base directory for resolving dynamic portions</li> <li># of a Catalina installation. If not present, resolves to</li> <li># the same directory that CATALINA_HOME points to.</li> <li># CATALINA_OPTS (Optional) Java runtime options used when the "start",</li> <li># "stop", or "run" command is executed.</li> <li># CATALINA_TMPDIR (Optional) Directory path location of temporary directory</li> <li># the JVM should use (iava.io.tmpdir). Defaults to</li> </ul>
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<ul> <li># CATALINA_OPTS (Optional) Java runtime options used when the "start",</li> <li># "stop", or "run" command is executed.</li> <li>#</li> <li># CATALINA_TMPDIR (Optional) Directory path location of temporary directory</li> <li># the JVM should use (iava.io.tmpdir). Defaults to</li> </ul>
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<ul> <li># CATALINA_TMPDIR (Optional) Directory path location of temporary directory</li> <li>the JVM should use (iava.io.tmpdir). Defaults to</li> </ul>
# the JVM should use (java.jo.tmpdir). Defaults to
# \$CATALINA_BASE/temp.
#
# JAVA_HOME Must point at your Java Development Kit installation.
#
# JAVA_OPTS (Optional) Java runtime options used when the "start",
# "stop", or "run" command is executed.
#
# JPDA_TRANSPORT (Optional) JPDA transport used when the "jpda start"
# command is executed. The default is "dt_socket".
#
# JPDA_ADDRESS (Optional) Java runtime options used when the "jpda start"
# command is executed. The default is 8000. ## JSSE_HOME (Optional) May point at your Java Secure Sockets Extension
# (JSSE) installation, whose JAR files will be added to the
# system class path used to start lomcat.
#
# CATALINA_PID (Optional) Path of the file which should contains the pid
# of catalina startup Java process, when start (fork) is used
# # \$Id: catalina sh y 1 13 2 2 2004/11/17 20:06:34 yeavs Evn \$
#
" JAVA HOME=/usr/iava/idk1.5.0 15

JAVA\_OPTS='-Xms128m -Xmx512m -XX:PermSize=128m -XX:MaxPermSize=512m -Djava.awt.headless=true'

# Appendix 3

## *How to set the JAVA\_HOME variables:*

HelpDesk runs best on the JDK version of Java 1.5/5.0. The HelpDesk installer will not run on the JRE version of Java. It is also compatible with Java JDK 1.6, but if you are running on 1.6, you will not be able to integrate with GroupWise (create tasks, appointments, and busy searches from within a ticket).

Version 1.5 is the version that has been tested and will work best with HelpDesk. If you're running on Netware, the 1.4 JDK version of Java is also compatible with HelpDesk. Java and Tomcat versions 1.6 have not been tested and, therefore, we recommend using Java 1.5/5.0 and Tomcat versions 5.0 or 5.5. We recommend that you run on the latest update of Java JDK 1.5/5.0 (as of 10/29/2007, it's update 13). This can be downloaded from the following location: http://java.sun.com/javase/downloads/index\_jdk5.jsp.

The following Knowledgebase article will explain how to change the JAVA\_HOME variable in Windows and Linux environments. This will set the correct variable for your JAVA\_HOME and will help prevent many Java-related problems:

### For Windows:

To check which java version tomcat is looking at, go to the tomcat manager (http://<yourservername>:8080/ manager/html), scroll to the bottom, and check the JVM version. Follow these instructions to change the JAVA\_HOME variable:

- 1. Right-click on **My Computer** and select **Properties**.
- 2. Click on the **Advanced** tab and then **System Variables**.
- 3. Select the JAVA\_HOME variable from the list and click **Edit**. If you don't see it in the list, click **New**. Under variable name, type: JAVA\_HOME. Under the variable value, type the location of the JDK version of java (usually located here: C:\ProgramFiles\Java\jdk1.5.0\_14). Click **OK**.

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Variable name:	JAVA_HOME
Variable value:	C:\Program Files\Java\jdk1.5.0_14
ystem variables	
ystem variables Variable CLASSPATH ComSpec EP NO HOST C.	Value
Variable Variable CLASSPATH ComSpec FP_NO_HOST_C JAVA_HOME JAWA_OPTS	Value Value Value Value C:\Program Files\Java\jre1.6.0_02\lib C:\WINDOW5\system32\cmd.exe NO C:\Program Files\Java\jdk1.5.0_14 OPT5="Xms512m -Xmv1024m -XX:Max
ystem variables Variable CLASSPATH ComSpec FP_NO_HOST_C JAVA_HOME JAVA_OPTS	Value       Value       .;C:\Program Files\Java\jre1.6.0_02\lib       C:\WINDOW5\system32\cmd.exe       . NO       C:\Program Files\Java\jdk1.5.0_14       OPTS="-Xms512m -Xmx1024m -XX:Max       New     Edit       Delete

- 4. Next, run the tomcat5w.exe by double clicking it located in the tomcat root (C:\Program Files\Apache Software Foundation\Tomcat 5.5\bin.
- 5. Click on the Java tab and then click the ellipses next to the location for the Java Virtual Machine.
- 6. Drill down to the jdk version of java, usually located here: C:\Program Files\Java\jdk1.5.0\_12\jre\bin\ client\jvm.dll. Click **OK**.

ieneral Log On Logging Java Startup Shutdown Use default Java Virtual Machine: C:\Program Files\Java\jdk1.5.0_12\jre\bin\client\jvm.dll Java Classpath: C:\Program Files\Apache Software Foundation\Tomcat 5.5\bin\bootstrap Java Options:
Use default Java Virtual Machine: C:\Program Files\Java\jdk1.5.0_12\jre\bin\client\jvm.dll Java Classpath: C:\Program Files\Apache Software Foundation\Tomcat 5.5\bin\bootstrap Java Options: Destalize home. C:\Program Files\Apache Software Foundation\Tomcat 5.5\bin\bootstrap
Java Virtual Machine: C:\Program Files\Java\jdk1.5.0_12\jre\bin\client\jvm.dll Java Classpath: C:\Program Files\Apache Software Foundation\Tomcat 5.5\bin\bootstrap Java Options: Destring former Files\Apache Software Foundation\Tomcat 5.5\bin\bootstrap
C:\Program Files\Java\jdk1.5.0_12\jre\bin\client\jvm.dll Java Classpath: C:\Program Files\Apache Software Foundation\Tomcat 5.5\bin\bootstrap Java Options: Deateline heres C:\Program Files\Apache Software Foundation\Tomcat 5.5\bin\bootstrap
Java Classpath: C:\Program Files\Apache Software Foundation\Tomcat 5.5\bin\bootstrap Java Options: Destring home C:\Program Files\Apache Software Foundation\Tom.
C:\Program Files\Apache Software Foundation\Tomcat 5.5\bin\bootstrap Java Options:
Java Options:
Destaling Laws CilDurates Electronic Collinson Estadables Tax
-Detationa.hose=C:\Program Files\Apache Software Foundation\Tom -Detationa.hose=C:\Program Files\Apache Software Foundation\Tom -Djava.io.tmpdir=C:\Program Files\Apache Software Foundation\Tom -Djava.io.tmpdir=C:\Program Files\Apache Software Foundation\Tom
Initial memory pool: MB
Maximum memory pool: MB
Thread stack size: KB
OK Cancel Apply

7. Restart tomcat.

### For Linux:

- 1. Open the **catalina.sh** file located in the tomcat root (usually /usr/share/tomcat5/bin/) directory.
- 2. Edit the file with the location of your JAVA\_HOME variable at the bottom of the commented section. Here is an example of an edited catalina.sh file:

#!/bin/sh
#
# Start/Stop Script for the CATALINA Server
# Environment Variable Prequisites
# CATALINA_HOME May point at your Catalina "build" directory.
# CATALINA_BASE (Optional) Base directory for resolving dynamic portions
# of a Catalina installation. If not present, resolves to
# the same directory that CATALINA_HOME points to.
# CATALINA_OPTS (Optional) Java runtime options used when the "start",
# "stop", or "run" command is executed.
# CATALINA_TMPDIR (Optional) Directory path location of temporary directory
# the JVM should use (java.io.tmpdir). Defaults to
#\$CATALINA_BASE/temp.
# JAVA_HOME Must point at your Java Development Kit installation.
# JAVA_OPTS (Optional) Java runtime options used when the "start",
# "stop", or "run" command is executed.
# JPDA_TRANSPORT (Optional) JPDA transport used when the "jpda start"
# command is executed. The default is "dt_socket".
# JPDA_ADDRESS (Optional) Java runtime options used when the "jpda start" # command is executed.
# (JSSE) installation, whose JAR files will be added to the
# system class path used to start Tomcat.
# CATALINA_PID (Optional) Path of the file which should contains the pid
# of catalina startup java process, when start (fork) is used
#\$ld: catalina.sh,v1.13.2.2 2004/11/17 20:06:34 yoavs Exp \$
#
JAVA_HOME=/usr/java/jdk1.5.0_13

3. Restart tomcat

## Appendix 4

GroupLink Product LICENSE AGREEMENT 20070919

Before proceeding with the installation of this software, you must accept the terms of the following license agreement. Indicate your acceptance or rejection of this agreement by clicking on the appropriate button below. If you click on a button denoting or connoting "I accept," installation will continue. If you click on a button denoting or connoting "I reject," installation will abort. If you do not agree with these terms, you should not use the software and promptly return it in accordance with the terms of your agreement, if applicable.

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