License Patrol™
Administrator's Guide

9.3 for Microsoft Windows

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VeraLab Inc.

License Patrol Administrator's Guide, 9.3.x for Microsoft Windows

Contents

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Preface

This guide is your primary source of introductory, postinstallation, configuration, and administration information for using License Patrol server.

This preface introduces you to the License Patrol Administrator's Guide, discussing the intended audience, structure, and conventions of this document. A list of related License Patrol documents is also provided.

This preface contains these topics:

- Audience
- Organization
- Related Documentation
- Conventions

Audience

License Patrol Administrator's Guide for Windows is necessary for anyone installing, configuring, or administering License Patrol server.

License Patrol Administrator's Guide is intended for IT Managers, Administrators, Technicians, and other IT personnel who perform the following tasks:

- Manage multi-computer environment and personnel
- Perform system administration and setup

To use this document, you need:

Windows 10/11, Windows 2008 R2, Windows 2012, Windows 2012 R2, Windows 2016, Windows 2019, or Windows 2022 installed and tested on your computer system.

Organization

This guide contains the following chapters and appendixes:

Chapter 1, License Patrol Setup and Administration

This chapter describes how to setup and administer License Patrol system. This chapter describes how to perform concurrent management and remote control tasks.

Chapter 2, License Patrol Import

This chapter describes License Patrol Import utility and guides you through the procedures to perform data import.

Appendix A, System Settings

This appendix describes how to set and tune system settings on your License Patrol server.

Related Documentation

This guide is a part of a set for IT personnel using License Patrol tool. The other guides in the set are:

License Patrol Server Installation Guide

License Patrol Client Installation Guide

To download free release notes, installation documentation, white papers, or other collateral, please visit www.veralab.com.

Conventions

This section describes the conventions used in the text of this documentation set. We use various conventions in text to help you more quickly identify special terms. The following table describes those conventions and provides examples of their use.

Convention	Meaning	Example
Bold	Bold typeface indicates screen elements, such as elements of forms or menu items.	Select the **Available** checkbox.
Italics	Italic typeface indicates book titles or emphasis.	You *can not* make currently used workstations unavailable.
Bold Italics	Bold and Italic typeface indicates screen names and areas.	The screen changes to ***Dashboard.***
<>	Angle brackets enclose variables or optional items.	The ***Dashboard*** *<counter_name>* page appears for that counter.

1

License Patrol Setup and Administration

This chapter describes how to perform configuration of environment and maintain License Patrol. This chapter covers the following topics:

- Managing License Patrol Environment
- Managing System Settings
- Diagnostics
- Managing Software Licenses
- Viewing Current Status
- Software Tracking Reports

Managing License Patrol Environment

Typical License Patrol environment includes one or more rooms with computers, that have License Patrol client software installed and configured to communicate with the server. Since LP is a web based application, anyone who has an access to the server through a web browser and login credentials can use the system. You can create as many user accounts as necessary for your organization's environment.

License Patrol Objects

In order to setup the system for the first time, you will need to perform the following tasks:

1. Create or import rooms records

2. Create or import models, images, and workstations records

3. Create or import users

Whenever manually adding/removing objects or conducting an import, keep in mind object dependencies. Either you are working in multi- or single room environment, you have to create room(s) first or use default dummy room. If you need to maintain workstation models and software images, you must create models and images records prior to adding workstations records. All objects can be added, edited, and deleted. In order to add or edit an object you have to fill/update a form which contains object's attributes. All objects have mandatory and optional attributes. Mandatory attributes are in *red* color and *can not* be omitted. Optional attributes are in *black* color and can be omitted unless otherwise stated. Once deleted, objects 'retire', which means that all references to them are retained in the database for reporting or search purposes but they are hidden from users.

User Administration

You can either create native application accounts or integrate License Patrol with campus central LDAP/MSAD directory and provision LDAP accounts.

Every application user in License Patrol has to be assigned at least one security role. User must be active (**Active** check box must be selected) in order to be able to login into the system. You can assign the following rights to user: *Get List of Client Processes,* and *Terminate Client Processes*. These rights enable IT personnel to control and manipulate client workstations from the *Monitoring* task.

> **Note** For more information on remote control, see Viewing Current Status in this guide.

To add user:

1. Navigate to **Setup ▶ Users**.

2. In the *User Administration* page, click the **Add User** link.

3. In the *Add New User* page, fill out the form with required fields.

Note	You have to select at least one role for each user.

4. Click **Add**.

To edit User:

1. Navigate to **Setup ▶ Users**.

2. Click the **Edit** icon next to an appropriate user.

3. In the *Edit User <username>* page, update the appropriate fields.

4. Click **Update**.

To delete user:

1. Navigate to **Setup ▶ Users**.

2. Click the **Delete** icon next to user you want to delete.

Using LDAP for User Authentication

Starting with version 7.0 it became possible to authenticate License Patrol application users (Users) using LDAP.

To provision LDAP account as License Patrol User record:

1. Navigate to **Setup (role) ▶ Users**.

2. Click the **Provision LDAP Users** link on the top.

3. Fill out LDAP connection details such as LDAP Server URL, path to the user records container (Base DN), ID attribute (e.g. CN or sAMAccountName), and LDAP server lookup account DN and password. When using MSAD directory, ID attribute is not required (it is set to sAMAccountName by default), instead MSAD Domain Name must be entered.

Note	You can read more about LDAP configuration in LDAP Configuration Guide document: http://veralab.com/veralab/files/ VERALAB_LDAP_Configuration_Guide.pdf

4. Click **Test Connection** button to verify License Patrol server can connect to LDAP server on specified port using end user (User) credentials.

5. Click **Save** button to start provisioning users with License Patrol application roles and privileges same as you would do for Native accounts.

6. Click **Advanced Mode** button to configure License Patrol with multiple LDAP servers (optional).

Note   License Patrol does not support duplicate usernames. For example, if you have user record with username *jsmith* and would like to provision *jsmith* from LDAP directory, native account record must be deleted first.

Converting accounts from Native to LDAP

You can convert accounts from Native to LDAP, assuming you have already setup LDAP connectivity and records with same usernames exist in LDAP directory. See above paragraph how to enable LDAP integration. You will receive an error message if you try to convert a Native account not existing in LDAP directory.

To convert Native account into LDAP:

1. Navigate to **Setup (role) ▶ Users**.

2. Locate account record you wish to convert and click the **Convert to LDAP** icon next to Native account type. **Convert to LDAP** icon will not be displayed if LDAP integration has not been setup.

3. You will see a pop-up message prompt **Would you like to convert this native account to LDAP?** Click OK.

4. If conversion was successful, you will see a confirmation message and the account type will change to LDAP

Workstation Administration

Workstations belong to the lowest level of dependency hierarchy. Each workstation has to be assigned to a room, an image, and a model.

To add a workstation:

1. Navigate to **Setup ▶ Stations**.

2. In the *Workstation Administration* page, click the **Add Workstation** link.

3. In the *Add New Workstation* page, fill the appropriate fields.

4. Click **Add**.

To edit a workstation:

1. Navigate to **Setup ▶ Stations**.

2. Click the **Edit** icon next to the appropriate workstation.

3. In the *Edit Workstation <name>* page, update the appropriate fields.

4. Click **Update**.

> **Note** Workstation Add/Edit page allows to change Remote Control settings for individual workstations. The **Guard** and **Watch** properties are set for entire environment in the *Settings* page. License Patrol Remote Control system settings can be overridden on a room level or on a workstation level. For more information, see System Settings appendix.

> **Note** Starting with version 9.1 License Patrol supports multi-session VDI environments. RDS servers must have License Patrol client installed and thin clients must have **Thin Client** checkbox checked in Workstation properties.

To delete a workstation:

1. Navigate to **Setup ▶ Workstations**.

2. Click the **Delete** icon next to the appropriate workstation.

> **Note** You *can not* delete a workstation that is currently in use.

Model Administration

Models have to be defined prior to defining workstations. They do not depend on any other object. Model name includes manufacturer brandname, model name, and model number.

To add a model:

1. Navigate to **Setup ▶ Models**.

2. In the *Model Administration* page, click the **Add Model** link.

3. In the *Add New Model* page, fill the appropriate fields.

4. Click **Add**.

To edit a model:

1. Navigate to **Setup ▶ Models**.

2. Click the **Edit** icon next to the appropriate model.

3. In the *Edit Model <name>* page, update the appropriate fields.

4. Click **Update**.

To delete a model:

1. Navigate to **Setup ▶ Models**.

2. Click the **Delete** icon next to the appropriate model.

> **Note** You *can not* delete a model that has dependent workstations.

Room Administration

Rooms can be associated with physical rooms in your environment or they can be logical collections of workstations. It is up to an IT manager or an administrator how to compose rooms. Rooms may have dependent workstations and have to be defined prior to defining workstations.

To add a room:

1. Navigate to **Setup ▶ Rooms**.

2. In the *Room Administration* page, click the **Add Room** link.

3. In the *Add New Room* page, fill the appropriate fields.

4. Click **Add**.

To edit a room:

1. Navigate to **Setup ▶ Rooms**.

2. Click the **Edit** icon next to the appropriate room.

3. In the *Edit Room <name>* page, update the appropriate fields.

4. Click **Update**.

> **Note** Room Add/Edit page allows to change rooms' License Patrol Guard settings. The **Guard** and **Watch** properties are set for the entire environment in the ***Settings*** page. License Patrol Guard system settings can be overridden on a room level or on a workstation level. For more information, see System Settings appendix.

To delete a room:

1. Navigate to **Setup ▶ Rooms**.

2. Click the **Delete** icon next to the appropriate room.

> **Note** You *can not* delete a room that has dependent workstations.

Image Administration

Images have to be defined prior to defining workstations. Images do not depend on any other object. An *image* is a collection of software installed on a workstation. One image is usually propagated to several workstations.

To add an image:

1. Navigate to **Setup ▶ Images**.

2. In the ***Image Administration*** page, click the **Add Image** link.

3. In the ***Add New Image*** page, fill the appropriate fields.

4. Click **Add**.

To edit an image:

1. Navigate to **Setup ▶ Images**.

2. Click the **Edit** icon next to the appropriate image.

3. In the ***Edit Image <name>*** page, update the appropriate fields.

4. Click **Update**.

To delete an image:

1. Navigate to **Setup ▶ Images**.

2. Click the **Delete** icon next to the appropriate image.

Note   You *can not* delete an image that has dependent workstations.

Managing System Settings

License Patrol settings are adjustable parameters that can be tuned to reflect your business requirements. System settings are grouped into several categories. This chapter gives a generic overview of the settings used in License Patrol and how to customize them. For a detailed description and value ranges, see System Settings.

Editing System Settings

We recommend reviewing System Settings appendix carefully before changing any system setting.

To edit a setting:

1. Navigate to **Setup (role) ▶ Settings.**

2. In the settings *Main Menu* page, click the appropriate settings category.

3. In the *Edit <setting_category> Settings* page, update the appropriate fields.

4. Click **Update Settings**.

Viewing System Settings

For convenience, all system settings can be displayed on one screen. The screen will display the settings in read-only mode.

To view all settings:

1. Navigate to **Setup (role) ▶ Settings.**

2. In the settings *Main Menu* page, click the **View All Settings** link. The *List of All Settings* page will be displayed.

Client Settings

Client settings control client-server behavior and policies. This is the key page for setting up communication between License Patrol Client and License Patrol Server, e.g. communication port and password. Here you can also specify client monitoring and controlling policies for site level. These can be overridden on room or workstation level. See "Managing License Patrol Environment" in this Guide.

Multi-Session Settings

Multi-session settings control application behavior in the environments where users are connecting from thin clients to multi-session terminal servers. See "License Patrol Settings" in this guide to learn more about multi-session settings.

Here you can also set default client auto-registration values, e.g. if your thin clients are located in a dedicated room and share other properties, such as Model and Image.

In the *Edit Multi-session Settings* page click on the **Thin clients auto-registration settings ▶** select **Auto-register thin clients on the server using below default value** checkbox and select desired values from the **Room**, **Model**, and **Image** drop down menus.

Reports Settings

Reports settings control reports submission and output. Changes to reports settings may affect the performance of the application, therefore, it is important to understand their meaning before editing values. You can specify maximum number of options that can be selected from multiple-option drop-down lists (**Number of Selected Options** setting). Reports can be generated to display multi-month intervals (referred as **Step** in the report forms).

For example, you can generate a report that will display three-month intervals (Jan-Mar, Apr-Jun, etc.) or six-month intervals (Jan-Jun, Jul-Dec). The **Maximum Number of Periods in Reports** setting specifies the maximum number of such intervals. The default value for **Maximum Number of Periods in Reports** settings is twelve, meaning that if you select one-month intervals, you can generate a report for entire calendar year (e.g. February 2004 - January 2005) but not more than that.

Starting with version 5.5 there is a new setting Page size for PDF printing that supports two main page sizes: Letter and A4.

Security Settings

Security settings control password protection and web session time-out.

Diagnostics

Diagnostics page is used to gather logs and system information from client workstations. License Patrol support may ask you to turn on logging on the client(s) and upload trace logs for further troubleshooting and analysis. To turn on client log generation:

1. Login as a user with **Setup role ▶ Diagnostics.**

2. Select a room from the drop-down menu.

3. Select **Start Log** from the **Action** drop-down menu.

4. Select one or more client stations using checkbox(es).

5. Click Execute button.

It may be required to refresh the *Diagnostics* page after a while to verify that log level has been changed. If log is successfully turned on, **Log Level** field value will change from *None* to *Finest*. To save client log file, click on **Get Log** icon and save the compressed file.

Diagnostics page allows retrieving of client specs (CPU speed, RAM, Disk size) directly from client workstations. To retrieve client specs, click on an "i" icon next to a selected station. Diagnostics page will also display License Patrol software version installed on clients. Starting with version 7.0, Computer Info pop-up page will also display information about video cards together with driver version as well as additional details about hard disks and hard disks firmware.

Note	Starting with version 9.1 multi-session RDS servers can show connected sessions in the pop-up window.

Managing Software Licenses

Tracking Concurrent Licenses

License Patrol allows you to control number of concurrent licenses used in computer environments. System or network administrators can install software with limited number of acquired licenses on every workstation, but only specified number of workstations will be able to run such software at the same time. You can also prevent certain applications to be launched on workstations by setting the number of licenses for those applications equal to zero. Starting with version 7.0 *Tracked Applications* page uses AJAX technology to automatically retrieve number of used applications without need to refresh this page. *In Use Licenses* pop-up window allows terminating selected program on one or more stations remotely.

To view licenses, navigate to **Track Software ▶ Tracked Applications.** On the *Add/Edit Tracked Applications* page, you can see the maximum number of licenses for each application and a number of currently used licenses.

Note	In versions lower than 6.0 in order to group more than one application under one license you could list them separated by semicolons. For example, if you need to add Adobe Creative Suite license, you can add *\Photoshop.exe;*\Dreamweaver.exe;*\Flash.exe in the **Path** field. This functionality is kept for backward compatibility, however it is recommended to use new method with multiple Application masks described below

To add a new license:

1. Navigate to **Track Software (role) ▶ Tracked Applications.**

2. In the *Add/Edit Tracked Applications* page, click the **Add Application** link.

3. In the *Add New License* page, fill out all necessary fields.

    To facilitate entering data and minimize a chance for mistake, License Patrol allows you to request the data from a client workstation, which is currently running that application or program and fill the form automatically.

    To fill the form automatically:

    ❑   In the *Add New License* page, click the **Select from Currently Running** link. The pop-up window will be displayed.

    ❑   In the *List of Running Applications* pop-up window, select a room and a workstation from the drop-down lists.

    ❑   Select a program by clicking the link with a name of process under the **Process** column.

    ❑   The pop-up window will close itself.

You have an option not to enforce application shutdown when maximum number is reached, but rather use software metering functionality just to record software usage. Software metering can be activated or deactivated for a particular application.

4. Click **Add**.

Note   If you leave **No. of Licenses** field blank, software metering will not be enforced. To restrict application from being launched, you can specify 0 in that field.

Starting with version 6.0 License Patrol has new functionality to support multiple application masks under the same product/application and to set license reserves across multiple rooms (or groups of users).

For example if you have two different versions of the same product running on Windows 7 and Mac OS, you can group them under the same Product Name. Another example is to group multiple applications belonging to the same suite family, e.g. Adobe CS6 comprising Photoshop, Illustrator, etc.

You can also set a room reserve or distribute license reserve across multiple rooms. Setting License Reserve enables users in a specific room to run guaranteed number of instances of the metered application. E.g. if you have 10 licenses shared across two rooms or two groups of users, when you assign a reserve to room/group A (let's say 2) this guarantees at least 2 licenses available to that room/group users at any time.

Starting with version 8.2.2 License Patrol allows skipping software metering of selected software applications in specific rooms. To add room exclusions:

1. Navigate to **Track Software (role)▶ Tracked Applications.**

2. Click **Add or Edit** icon next to the appropriate application.

3. In the *Edit <name> License* page, select the **Disable License Monitoring in rooms** checkbox.

4. Using arrow buttons make necessary selections in the Rooms section.

Application mask

Name	TextPad
Version	7.4.0
Platform	Windows ▾

☐ Distribute license reserves across rooms

☑ **Disable License Monitoring in rooms**

Excluded Rooms		Enabled Rooms	
Mac Lab	▲	PC Lab	▲
	-->		
	<--		
	▼		▼

Update   Cancel

To edit License:

1. Navigate to **Track Software ▶ Tracked Applications.**

2. Click the **Edit** icon next to the appropriate application.

3. In the *Edit <name> License* page, update the appropriate fields.

   You can update the form automatically by requesting the data from a client workstation.

   To update the form automatically:

   ❏ In the *Edit <name> License* page, click the **Select from Currently Running** link. The pop-up window will be displayed.

   ❏ In the *List of Running Applications* pop-up window, select a room and a workstation from the drop down lists.

   ❏ Select a program by clicking the link with a name of process under the **Process** column.

      ❑   The pop-up window will close itself.

4. Click **Update.**

To delete a license:

1. Navigate to **Track Software ▶ Tracked Applications.**

2. Click the **Delete** icon next to the appropriate application.
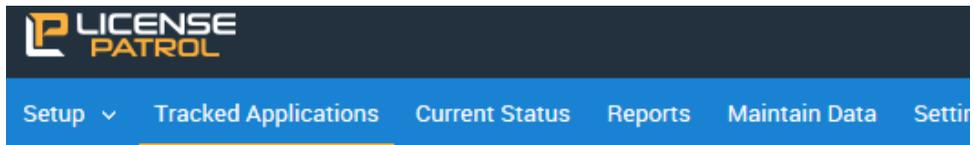
Importing Data From File

Starting from version 8.3, License Patrol features bulk license list import. If you need to maintain a long list of client software you are tracking, this new feature comes out handy. New functionality will allow you to download a Demo or a Template file, make necessary adjustments or compile a new list and import it back into License Patrol. Once uploaded, software tracking and concurrent management will start using new license attributes as per made adjustments.

To upload your data from a file:

1. Login as user with **Track Software role ▶ Tracked Applications (menu).**

2. Click the **Import Data from File** link.

Figure 1-1: *Tracked Applications page with bulk upload link.*

3. Import Data From File page offers few options. You can generate your own file by following instructions on the page, Download Demo file and use it as a reference, replacing demo data with your own or use Template File to enter all license details from scratch.

Figure 1-2: *Import Data from File*

Viewing Current Status

License Patrol Current Status page remote capabilities include the following mechanisms: *viewing and terminating client workstation processes*.

> **Note** You can use License Patrol Guard features only with client workstations that have License Patrol Guard Client installed and if the client-server connection was established. A colored **Connection** icon indicates the status of connection. If the **Connection** icon is green, the connection is established. If the icon is red, the connection *is not* established. If the icon is grey, the connection *has never been* established or License Patrol Guard Client software is not installed.

Viewing and Terminating Client Processes

To view and terminate a client process remotely:

1. Navigate to **Track Software ▶ Current Status.**

2. In the *Current Status* page, select a room, or **All**, from the **Select Room** drop-down menu. If there is only one room, this step will be skipped. The screen refreshes and displays the list of workstations.

3. Click the **Get List of All Processes** icon under the **Processes** column next to an appropriate workstation. A pop-up widow with a list of running processes will be displayed.

4. In the *Running Processes on <workstation_name>* pop-up window, select the check boxes of the processes/applications you need to terminate.

> **Note** A *Terminate Client Processes* right has to be assigned to a user, otherwise this functionality will be disabled. For more information, see User Administration.

5. Click **Terminate Selected.** The window will refresh automatically and the message will be displayed in the top part of the window. After terminating appropriate processes, close the pop-up window.

Software Tracking Reports

License Patrol provides a number of software tracking capabilities and reports on the tracked software usage. Software Tracking feature is automatically enabled provided that you have both server and client sides running on version 2.4 or higher. To start tracking software, you need to follow steps from the "Tracking Concurrent Licenses" section and setting the maximum number of licenses equal or above total number of connected clients.

Starting with version 5.x, License Patrol stores price per seat and license cost information. It is further used in "Software Compliance" report to calculate license deficit and surplus.

Software Usage History

To view software usage history:

1. Navigate to **Track Software ▶ Reports.**

2. Click the **Software Usage History** link.

3. In the *Software Usage History* page, select a specific application from the **Product** drop-down list or select **All** (default). Specify other optional search criteria.

4. Click **Search** button.

Aggregate Software Tracking Report

To view Aggregate Software Tracking report:

1. Navigate to **Track Software ▶ Reports.**

2. Click the **Aggregate Software Tracking Report** link.

3. In the *Aggregate Software Tracking Report* page, specify a date range and select a room from the Room drop-down menu. Leaving date fields blank will run the report for all recorded data up to yesterday's date.

4. Click **Submit**.

Figure 1-1: *Aggregate Report*
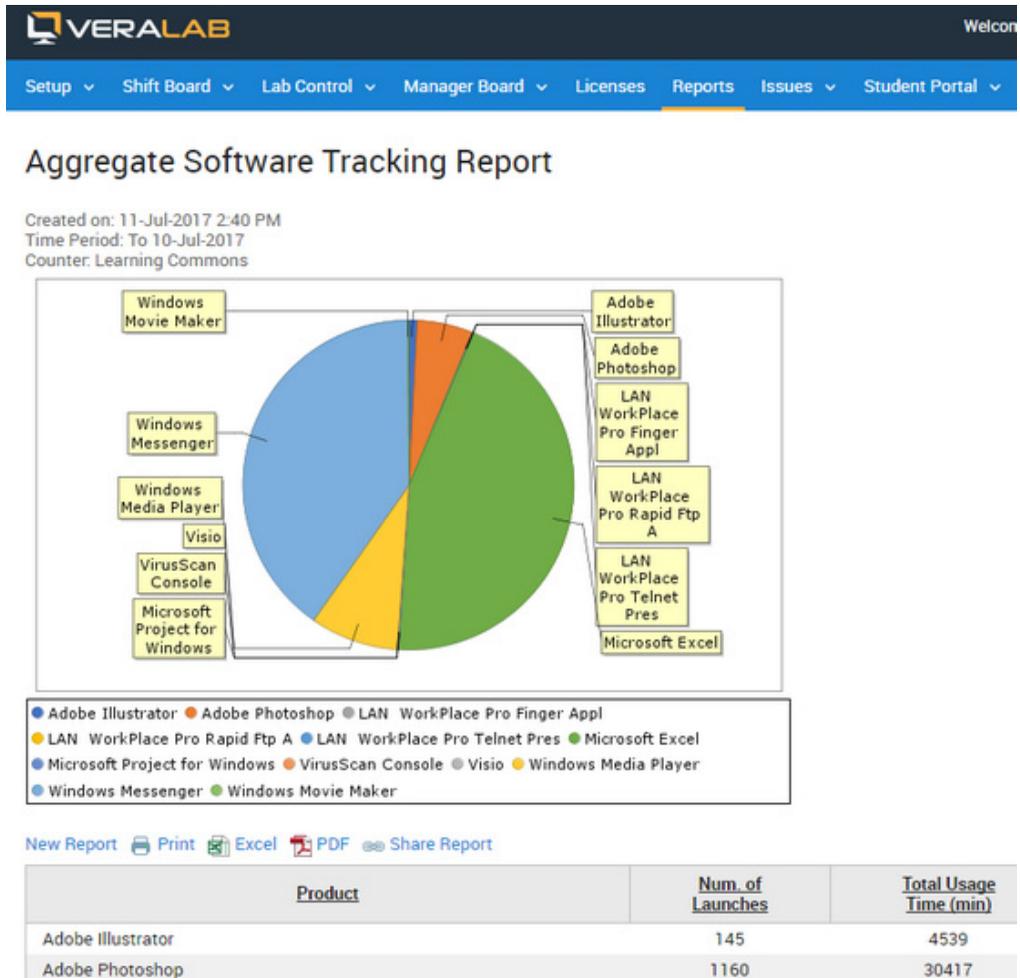
Application Usage by Users

To view Application Usage by users report:

1. Navigate to **Track Software ▶ Reports.**

2. Click the **Application Usage by Users** link.

3. In the *Application Usage by Users* page, select a product, a date range and a room from the **Room** multiple choice menu. Leaving date fields blank will run the report for all recorded data up to previous day.

4. Click **Submit**.

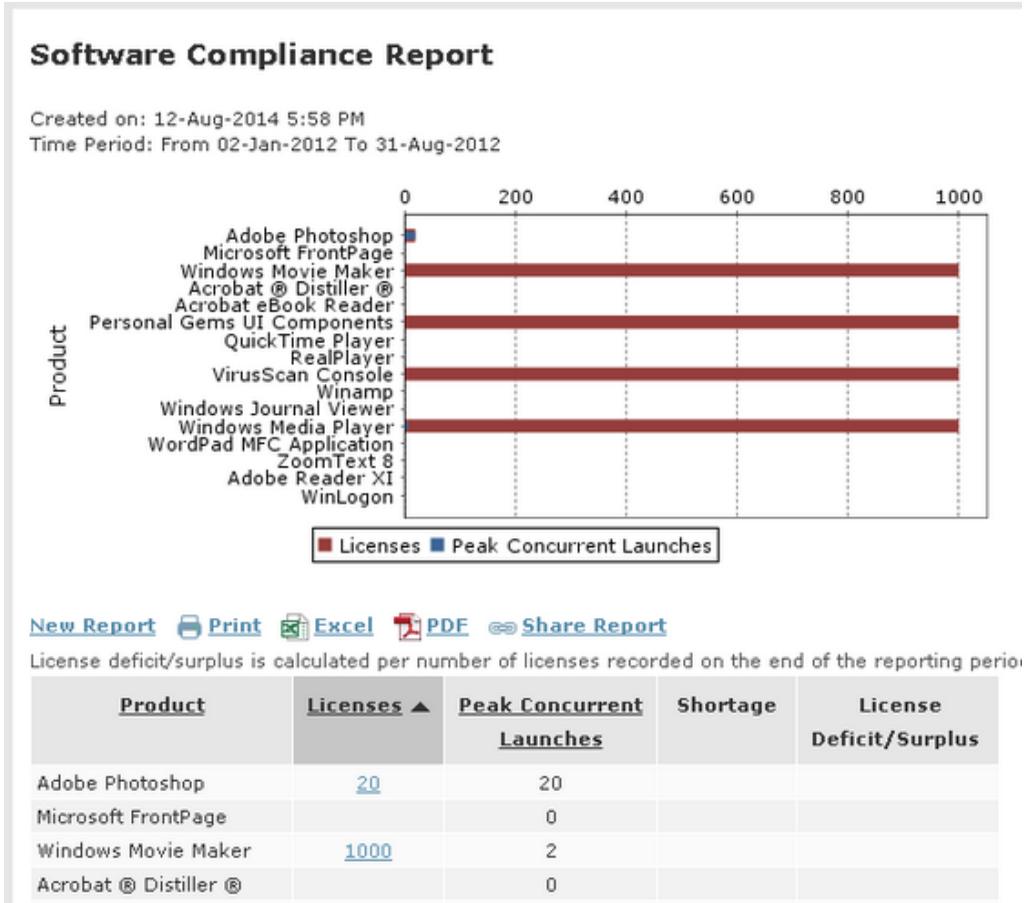## Software Compliance

To view Software Compliance report:

1. Navigate to **Track Software ▶ Reports.**

2. Click the **Software Compliance** link.

3. In the *Software Compliance* page, select a date range. Leaving date fields blank will run the report for all recorded data up to previous day.

4. Click **Submit**.

Figure 1-2: *Software Compliance Report*

Software Compliance Report

Created on: 12-Aug-2014 5:58 PM
Time Period: From 02-Jan-2012 To 31-Aug-2012

New Report · Print · Excel · PDF · Share Report

License deficit/surplus is calculated per number of licenses recorded on the end of the reporting perio

Product	Licenses ▲	Peak Concurrent Launches	Shortage	License Deficit/Surplus
Adobe Photoshop	20	20		
Microsoft FrontPage		0		
Windows Movie Maker	1000	2		
Acrobat ® Distiller ®		0		

To view a history of license quantity changes, click on the Licenses figure next to an application product.

Software Usage by Day

To view Software Usage by Day report:

1. Navigate to **Track Software ▶ Reports.**

2. Click the **Software Usage by Day** link.

3. In the *Software Usage by Day* page, select a product and a date range. Leaving date fields blank will run the report for all recorded data up to previous day.

4. Click **Submit**.

2

Maintain Data

This chapter describes License Patrol data maintenance controls and guides you through the procedures to perform data import and data purge. This chapter covers the following topics:

- Preparing for Import
- Performing Import
- Import Troubleshooting
- Data Purge
- Purge Stale Clients

Preparing for Import

Import utility is designed to facilitate loading of bulk data into the system. Starting from version 2.4.5, import can be used either for initial setup or for incremental data loads. All further administration should be performed manually (see License Patrol Administration chapter for how-to information). All existing data will not be overwritten.

License Patrol Import utility uses Microsoft Excel format for the source data file. The template and sample Excel worksheets are included in the distributive version of the product.

Creating Excel File

It is highly recommended to use the License Patrol template file and populate it with your production environment data. Import utility can use spreadsheet files created or edited in MS Excel versions 97-2010.

Note	License Patrol does not support *.xlsx format. If you are using MS Excel 2007 or higher, save file as *.xls before running Import.

Downloading Excel Template File

To download a provided Excel template file:

1. Navigate to **Setup ▶ Maintain Data ▶ Import**.

2. In the **Bulk Import** page, click the **Template File** link.

3. In the *File Download* pop-up window, click **Save** and choose a location on your local system.

4. Click **Save**.

Editing Excel Template File

The provided template file contains no data. The Excel file consists of five worksheets: *Users, Images, Models, Rooms, Stations*. Each worksheet is a table, consisting of header cells and data cells.

Note	*Do not* modify worksheet names or header cell names.

Header cells in red color represent columns that are mandatory and must not be empty. To see additional comments or hints, select the appropriate header or data cell. You will see a yellow text box with comments where available. Comments text box will display detailed description and acceptable range of values.

After filling in your custom data, save the Excel file. You can save the file with a different name.

Using Excel Demo File

You can use the provided demo file to test the import utility. You can use the demo file as a sample for creating your own custom data file.

Downloading Excel Demo File

To download a provided Excel template file:

1. Navigate to **Setup ▶ Maintain Data ▶ Import**.

2. In the **Bulk Import** page, click the **Demo File** link.

3. In the *File Download* pop-up window, click **Save** and choose a location on your local system.

4. Click **Save**.

> **Note**   *Do not* modify worksheet names or header cell names.

Performing Import

Import procedure is irreversible. Prior to import, make sure you backed up all necessary data in the database.

To perform an import:

1. Navigate to **Setup ▶ Maintain Data ▶ Import**.

2. In the *Bulk Import* page, click **Continue**.

3. In the *File Upload* page click **Browse** and locate a MS Excel file (*.xls) on your local system.

4. Click **Submit**.

   If import was successful, the page will refresh and a green confirmation message 'Import completed successfully!' will be displayed.

Note	If an error message is displayed, see Import Troubleshooting in this chapter for more information and troubleshooting techniques.

Import Troubleshooting

The provided import template file contains hints and internal validation mechanism to ensure data integrity. If import utility identifies integrity violations, it will display error messages and roll back the import transaction. The table below lists possible error messages and actions needed to correct errors.

Error Message	Description	Action
Internal Server Error	Internal License Patrol error.	Contact Technical Support
Error reading Excel workbook	Indicates a problem with file format.	Review the file format and MS Excel version.
Sheet *'<name>'* **line** *<N>*: **Error adding record**	Displays worksheet name that contains a non-valid record.	Review the record and verify that all values are within the specified range.
Sheet *'<name>'* **line** *<N>*: *<Image, Model, Room, Counter, Workstation>* **name should be unique**	Displays worksheet name and record that contains duplicate object name.	Review the record and verify that there are no duplicates in the **name** column.
Sheet *'<name>'*: **Error reading the header: column** *'<name>'* **is missing**	Displays the worksheet name and the missing column name. Indicates the column that was deleted or renamed.	Review the template file and correct the worksheet that contains missing column.
Sheet *'<name>'* **line** *<N>*: **Integrity constrain error,** *<Image, Model, Room>* **with name** *'<name>'* **does not exist**	Indicates an attempt to add an orphan object.	Review the import file and make sure all objects have corresponding parents. See Object Hierarchy in Administrator's Guide.
Sheet *'<name>'* **line** *<N>*: *'<column_name>'* **name can not be empty**	Displays the worksheet name and the column that contains empty data cell.	Review the template file and correct the worksheet that contains missing data.
Sheet *'<name>'* **line** *<N>*: **Password must be at least** *<N>* **characters**	Indicates an attempt to add user with a password, which length is less than minimum required.	Navigate to **Administrator ▶ Settings.** Click on **Security Settings** link and review the value for **Password minimum length (char) field**.
Sheet *'<name>'* **line** *<N>*: **Duplicate Roles**	User can not have duplicate roles.	Review the Users worksheet and correct roles assigned to users.

Error Message	Description	Action
Sheet *'<name>'* **line** *<N>***: Id Field can not be empty**	Indicates to add a record with an empty ID field.	Review the template file for records with empty ID column.

Data Purge

Starting with version 5.x License Patrol supports data purge activities. There are two types available: **Purge Historical Data** and **Purge Configuration Data**. Purging historical records may be required for large environment that do not need to store data longer than certain number of years. Purging data also helps to maintain smaller size of the database which in turn improves application and reporting performance. Purging configuration data is designed to help with environment cleanup if you decide to start from fresh or need to do this on regular basis.

Warning   Purging data is non-reversible operation. All purged records are physically deleted from the database.

To perform historical data purge:

1.   Navigate to **Setup ▶ Maintain Data ▶ Purge Historical Data**.

2.   Select a date prior to which all data must be purged.

3.   Select a checkbox next to desired log category(ies) to be purged, e.g. **Software Usage**.

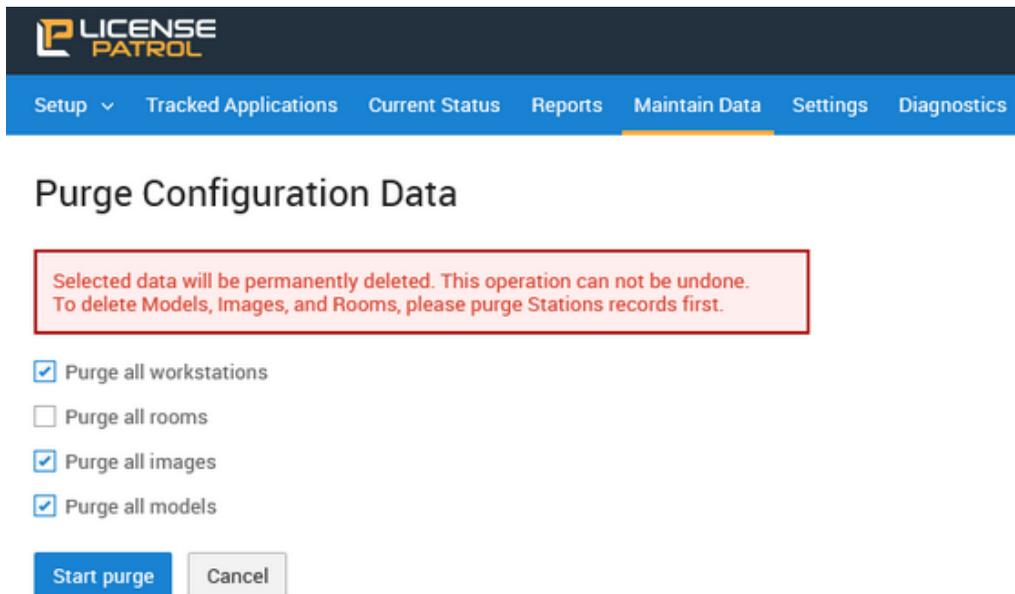4.   Click on the **Purge** button.

Figure 2-1: *Purge Historical Data*

To perform configuration data purge:

1. Navigate to **Setup ▶ Maintain Data ▶ Purge Configuration Data**.

2. Select a checkbox next to desired setup category(ies) to be purged, e.g. **Purge All Workstations**.

3. Click on the **Start purge** button.

Figure 2-2: *Purge Configuration Data*

Purge Stale Clients

Purge Stale Clients page allows you to identify client workstations that have been stale or disconnected from License Patrol server for N number of days. These could be decommissioned computers that have never been cleaned up from the License Patrol application.

To perform stale clients purge:

1. Navigate to **Setup ▶ Maintain Data ▶ Purge Stale Clients**.

2. Enter number of days threshold in the **Days** field.

3. Click on **Apply Filter** button.

4. Next page will display the list of stations that meet above criteria and their **Last Connected** date. If you wish to exclude any stations from the list, mark those stations and click on **Exclude Selected** button. they will be removed from the list.

5. Click **Start Purge** button to complete this operation.

Note   Purge Stale Clients task is using actual last connection timestamp received from clients, the data of last connection is stored in the ws_last_connection_time table.

A

System Settings

This chapter explains how to tune License Patrol settings. This chapter covers the following topics:

■   License Patrol Settings

License Patrol Settings

License Patrol settings are adjustable parameters that can be tuned to reflect your business requirements. System settings are grouped into several categories, see Managing System Settings for the categories overview. This appendix lists all the settings in the alphabetical order. Review the table below carefully before making any change to default values.

Setting	Default Value	Range of Values	Description
Allow Terminate Applications	true	true/false	Allows to shutdown client applications remotely.
Allow Terminate System Processes	false	true/false	Allows to shutdown client system processes remotely.
Allow View Applications	true	true/false	Allows to view launched client applications remotely.
Associate metered applications with	Thin Client	Thin client/RDS	By default, user sessions will be associated with thin clients where these session are initiated. Changing this setting to RDS will map sessions to RDS server location. This will be reflected in reports respectively.
Enable auto-add of terminal clients to Unregistered Stations list (true/false)	false	true/false	When enabled, new terminal sessions will automatically appear in the list of Unregistered stations and can be assigned to respective rooms from there

Setting	Default Value	Range of Values	Description
Enable pagination on the top when number of rows exceed (records)	blank (disabled)	1-300	By default, reports with small number of output records will display pagination on the bottom of the page only. Additional pagination on the top can be enabled using this setting. Leave blank if you want to disable pagination on the top of tables.
Enforce unique MAC address restriction	true	true/false	This setting should be set to true if your Recognize workstations by is set to MAC address. If you have to maintain duplicate stations in the environment, you can set it to false to allow for multiple stations with same MAC address.
I am Alive Interval (seconds)	30	5-32000	Interval of time between sending signals to server.
Maximum Number of Selected Options	7	3-30	Limits the number of options, which can be selected at the same time from a drop-down list. Specifying less options may improve system performance when generating reports.

Setting	Default Value	Range of Values	Description
Maximum Number of Time Periods in Reports	12	1-12	Limits the number of time periods which can be displayed in reports. A period is a specified time frame (in months) divided by the specified step. For example, if the system is set to allow 2 periods, and, when running a report, if a step is set to 2 months, then only 4 months can be specified for the report.
Maximum rows in Excel output file	20000	up to 65000	Limits the number of records in the Excel output file in reports.
Network Outage Timeout (seconds)	100	5-32000	Interval of time before client decides that there is a network outage.
Number of Records Displayed per Page	25	3-300	Defines number of records displayed per page if a search, report, etc., return multiple records.
Page size for PDF printing	Letter	Letter/A4	Defines page size when exporting reports into PDF format.
Password minimum length (char)	8	Any	Specifies minimum number of characters required for users passwords.
Permit Launch of Metered Applications on Network Outage	false	true/false	Permits using licensed/ metered software during network outage.

Setting	Default Value	Range of Values	Description
Recognize client workstation by	Host Name	Host Name/IP Address	Client-server communication will be established and maintained based on selected value.
Server Connect Password	welcome	alphanumeric string	The password that is used to establish client-server connection. This password is prompted for during License Patrol client installation.
Use Websockets (true/false)	false	true/false	Please contact support@veralab.com before enabling it.
Web Session Timeout (minutes)	30	numeric value	Specifies time limit for a logged in License Patrol web application user which has been inactive for a period of time.

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