

**License Patrol™ Server
Installation Guide**

9.1 for Microsoft Windows

November 2023

License Patrol Server Installation Guide, 9.1.x for Microsoft Windows

Copyright © 2023 VeraLab Inc. All rights reserved.

The information contained in this document is subject to change without notice. If you find any problems in the documentation, please report them to us in writing. This document is not warranted to be error-free. Except as may be expressly permitted in your license agreement for these Programs, no part of these Programs may be reproduced or transmitted in any form or by any means, electronic or mechanical, for any purpose.

VeraLab programs, which include both the software and documentation, contain proprietary information. They are provided under a license agreement containing restrictions on use and disclosure and are also protected by copyright and other intellectual and industrial property laws. Reverse engineering, disassembly, or decompilation of the VeraLab programs, except to the extent required to obtain interoperability with other independently created software or as specified by law, is prohibited.

Contents

Send Us Your Comments	iii
Preface	v
Audiencevi
Organizationvi
Related Documentationvi
Conventions	vii
Preinstallation Requirements	1-1
System Requirements	1-2
Software requirements for License Patrol Server	1-2
Hardware Requirements for License Patrol Server	1-2
Verifying Hardware Requirements	1-3
Third-Party Software	1-4
Web Browser Support	1-4
Database and Application Server	1-4
License Patrol Installation	2-1
Installing License Patrol	2-2
Before You Install License Patrol	2-2
Downloading License Patrol Software from the Web Site	2-2
Installing the License Patrol Software	2-2
..... Connecting to License Patrol	2-3
Installing License Patrol on a Server with Existing PostgreSQL Database	2-5
Modifying config files	2-6
Uninstalling License Patrol Components and Services	2-8

Postinstallation Configuration	3-1
Reviewing Installed Components	3-2
Administrator Account	3-3
admin User	3-3
Client Setup	3-4
License Patrol Upgrade	4-1
Upgrading License Patrol	4-2
Before You Upgrade License Patrol	4-2
Downloading License Patrol Software from the Web Site	4-2
Upgrading License Patrol Software	4-2
Upgrading License Patrol in a Multi-Node Environment	4-3
Connecting to License Patrol	4-4

Send Us Your Comments

License Patrol Server Installation Guide

VeraLab Inc. welcomes your comments and suggestions on the quality and usefulness of this document. Your input is an important part of the information used for revision.

- Did you find any errors?
- Is the information clearly presented?
- Do you need more information? If so, where?
- Are the examples correct? Do you need more examples?
- What features did you like most?

If you find any errors or have any other suggestions for improvement, please indicate the document title and part number, and the chapter, section, and page number (if available). You can send comments to us in the following ways:

- Electronic mail: support@veralab.com
- Postal service:

VeraLab Inc.
12460 Mabury Rd
San Jose, CA 95133
USA

If you would like a reply, please give your name, address, telephone number, and (optionally) electronic mail address.

If you have problems with the software, please contact License Patrol Technical Support.

Preface

This manual is your primary source of introduction, preinstallation, installation, and postinstallation information for using License Patrol, concurrent license management tool.

This preface introduces you to the License Patrol Installation 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 Server Installation Guide for Windows is necessary for anyone installing, configuring, or administering License Patrol Server.

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

- Manage multi-computer environment facility and personnel
- Perform system installation, administration and setup

To use this document, you need:

- Windows 10/11, Windows 2008, Windows 2008 R2, Windows Server 2012 or Windows Server 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, Preinstallation Requirements

This chapter describes preinstallation requirements, third-party software, and operating system requirements for License Patrol system for Windows.

Chapter 2, License Patrol Installation

This chapter describes how to install and uninstall License Patrol system for Windows.

Chapter 3, Postinstallation Configuration

This chapter identifies postinstallation configuration tasks. Where appropriate, this chapter references other guides for procedures on performing these configuration tasks.

Related Documentation

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

- License Patrol Administrator's 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.
<i>Italics</i>	Italic typeface indicates book titles or emphasis.	You <i>can not</i> make currently used workstations unavailable.
<i>Bold Italics</i>	Bold and Italic typeface indicates screen names and areas.	The screen changes to <i>Dashboard</i> .
<>	Angle brackets enclose variables or optional items.	The <i>Dashboard</i> <counter_name> page appears for that counter.

Preinstallation Requirements

This chapter guides you through the License Patrol preinstallation procedures. This chapter covers the following topics:

- [System Requirements](#)
- [Third-Party Software](#)

System Requirements

Software requirements for License Patrol Server

The following table shows the supported software environment.

Requirement	Value
System Architecture	64-bit
Operating System	License Patrol for Windows is supported on the following operating systems: <ul style="list-style-type: none">• Windows 10/11• Windows Server 2008 & 2008 R2• Windows Server 2012 & 2012 R2• Windows Server 2016• Windows Server 2019• Windows Server 2022
Network Protocol	<ul style="list-style-type: none">• TCP/IP• TCP/IP with SSL

Hardware Requirements for License Patrol Server

The following hardware components are required for License Patrol Server:

- RAM: 1GB minimum, 2GB recommended.
- Virtual memory: double the amount of RAM.
- Hard disk space: 200 MB minimum for custom installation (without database), 300 MB minimum for full installation, 500 MB recommended.
- Processor: 700 MHz minimum, 2 GHz recommended.
- Video adapter: 256 color.

Note Above minimum requirements are for environments with up to 300 client computers. Contact VeraLab support to get recommendations for environments with over 300 client computers.

Verifying Hardware Requirements

To ensure that the system meets these requirements, follow these steps:

1. Determine the physical RAM size. For a computer using Windows 10, for example, open the Windows **Start** menu, click **Settings** icon or start typing **About your PC**, and click the option to open it when it appears. In the **Device Specifications** section, your total RAM capacity is displayed next to **Installed RAM**. If the size of the physical RAM installed in the system is less than the required size, then you must install more memory before continuing.
2. Determine the amount of free disk space on the system. For a computer using Windows 10, for example, open the Windows **Start** menu, click **Settings** icon or start typing **About your PC**, and click the option to open it when it appears. In the **Storage** section, your used and free disk space is displayed.

Third-Party Software

Web Browser Support

The following Web browsers are supported for License Patrol:

- Microsoft Edge
- Google Chrome and Chromium-based browsers 110.0 or higher
- Mozilla FireFox ESR54 or higher
- Safari 16-17

Although it is not required, we recommend using the latest versions of service packs for security purposes.

Database and Application Server

We bundle Tomcat 9.0.82 as a J2EE application server and PostgreSQL 14.7 for your convenience. You have an option not to install PostgreSQL as a part of installation process. Instead you can use your own copy of PostgreSQL database server. Current version of VeraLab has been tested and certified with PostgreSQL 10 and higher.

License Patrol Installation

This chapter guides you through the License Patrol installation procedures. This chapter covers the following topics:

- [Installing License Patrol](#)
- [Installing License Patrol on a Server with Existing PostgreSQL Database](#)
- [Uninstalling License Patrol Components and Services](#)

Installing License Patrol

You can download the License Patrol software from www.veralab.com Web site. This chapter describes how to install License Patrol from hard disk.

Before You Install License Patrol

Perform the following tasks before installing License Patrol Server:

1. Review and satisfy applicable system and component requirements in Chapter 1, [“Preinstallation Requirements”](#)
2. Log on as a member of the Administrators group to the computer on which to install License Patrol components. Log on as a member of the Domain Administrators group if you are installing on a Primary Domain Controller (PDC) or a Backup Domain Controller (BDC).
3. Back up any databases that are currently installed on the node.
4. Verify ports 8080 and 8443 (for SSL) are available and no other application is using them. For example, to check if port 8080 is busy, run “telnet localhost 8080” from command prompt on the server. If you get a blank screen, something else is using that port.

Downloading License Patrol Software from the Web Site

To download the installation files:

1. Use any browser to access the software download page:
<http://www.veralab.com/veralab/downloads.jsp>
2. Select a file system with enough free space to store and expand the files. On the file system that you just selected, create a temporary directory.
3. Download the executable file to the directory that you just created.

Installing the License Patrol Software

Run the downloaded executable file and install the software, as follows:

Screen	Recommended Action
Welcome to the License Patrol Setup Wizard	Click Next

Screen	Recommended Action
License Agreement	Read the License Agreement and select the I accept the agreement radio button. Click Next
Select Destination Location	You can accept the default value (recommended) or select a different directory. Click Next
Select Components	Select Full Installation or Custom Installation from the drop-down list. Click the PostgreSQL Server 9.6 checkbox to select or deselect the database component. If you already have PostgreSQL database installed, do not select PostgreSQL component, see details in next chapter how to install LP in with existing database. Click Next
Select Start Menu Folder	Accept the default value (recommended) or type in a custom name. Click Next
Ready to Install	Review the information displayed, then click Install . The installation may take several minutes.
Completing the License Patrol Setup Wizard	Select the components you wish to start automatically upon completion. Click Finish

Connecting to License Patrol

To start using License Patrol, open a browser and go to License Patrol login page:

[http://\[HOST_NAME\]:8080/server](http://[HOST_NAME]:8080/server)

or

[https://\[HOST_NAME\]:8443/server](https://[HOST_NAME]:8443/server)

Note When using self-signed certificate in SSL mode, you may see a warning page “Certificate Error: Navigation Blocked”. Click “Continue to this website (not recommended).” to continue to login page. To avoid SSL error message, you will need to purchase a certificate from SSL Authority or use a non-secure HTTP connection
`http://[HOST_NAME]:8080/server`.

The default username and password are:

- username: admin
- password: password

Note For more information, refer to *Administrator's Guide*.

Installing License Patrol on a Server with Existing PostgreSQL Database

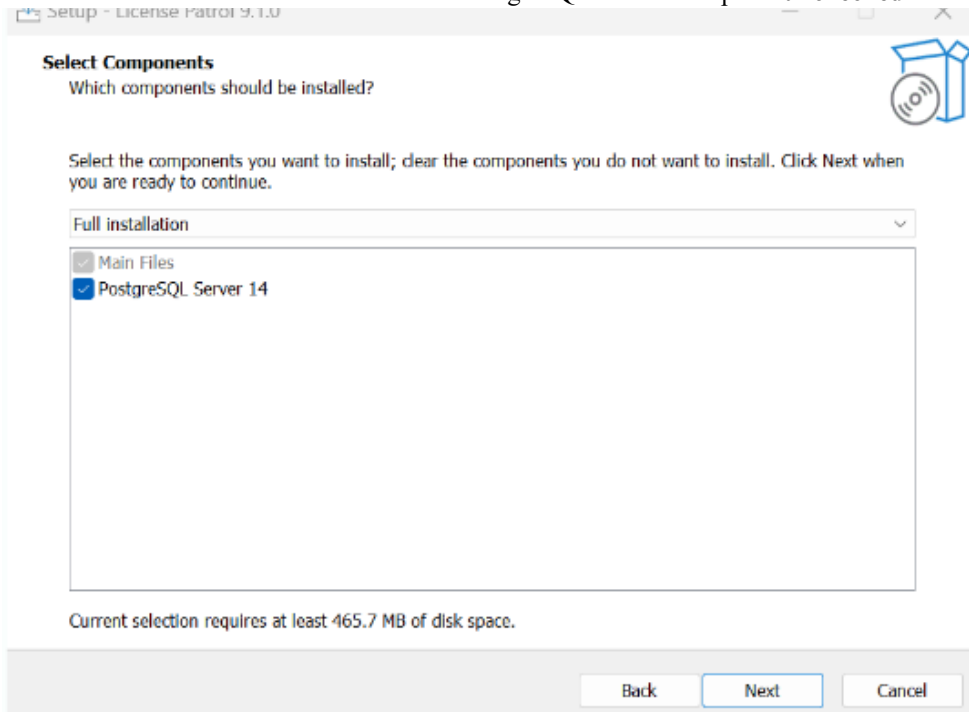
When installing VeraLab application in a multi-node environment or in a single-node environment with pre-installed PostgreSQL database, additional manual setups are required. Please review the following prerequisites are met before running installation:

Note Below steps have been certified for PostgreSQL versions 10 and higher.

1. PostgreSQL software is installed either on the same server that is running License Patrol application or a separate server box (if using multi-node architecture). It is not required to configure database. By default, License Patrol application is using database named “license_patrol”. If you prefer to create database manually, we recommend giving it “license_patrol” name.
2. Connectivity from License Patrol server to PostgreSQL server is open. Please make sure that there is no Firewall or ACL rule blocking access to PostgreSQL database. By default, PostgreSQL is using TCP port 5432.
3. Create License Patrol user account in the existing instance of PostgreSQL. That user will own the database objects required for License Patrol product to function. When License patrol is installed in distributed environment with a database configured on another server, veralab user (the owner of veralab database) must have permissions for external connection by editing pg_hba.conf file. See PostgreSQL reference for details: <http://www.postgresql.org/docs/current/static/auth-pg-hba-conf.html>. To create database user for License Patrol, run below command from PostgreSQL prompt.

```
create user veralab with createdb password 'veralab';
```

4. Install License Patrol application by running downloaded license_patrol_client_setup.exe. Select Custom installation method with PostgreSQL Server 14 option **unchecked**.



Modifying config files

In order to complete License Patrol configuration with pre-installed PostgreSQL database please do the following:

1. Update C:\LicensePatrol\tomcat\webapps\server\WEB-INF\sql\postgresql\settings.bat. Sample file looks like this:

```
echo off
set DB_HOST=127.0.0.1
set DB_PORT=5432
set DB_NAME=license_patrol
set DB_USER=veralab
set DB_USER_PASSWORD=veralab

set DB_SUPERUSER=postgres
set DB_SUPERUSER_PASSWORD=root

set POSTGRES_PATH=..\..\..\..\make\win_files\pgsql_x64\bin
```

```
if exist "%POSTGRES_PATH%\psql.exe" goto notPostgres
set POSTGRES_PATH=..\..\..\..\..\..\..\pgsql\bin
:notPostgres
```

```
set PGPASSWORD=%DB_USER_PASSWORD%
set PGOPTIONS=--client-min-messages=warning
```

Update DB_USER, DB_USER_PASSWORD, DB_NAME, DB_HOST, DB_PORT parameter values according to your configured PostgreSQL database environment. We recommend keeping DB_USER and DB_NAME values default.

DB_SUPERUSER and DB_SUPERUSER_PASSWORD parameters values can be changed if you have another superuser configured in your database or use default values. these parameters are used in two cases:

- a) During database uninstallation to disable all users connections.
 - b) Enable citext module. The citext module provides a case-insensitive character string type, citext.
2. Update C:\LicensePatrol\tomcat\webapps\server\WEB-INF\db.properties file. Sample file looks like this:

```
torque.dsfactory.maindb.connection.url = jdbc:postgresql://
127.0.0.1:5432/license_patrol
torque.dsfactory.maindb.connection.user = veralab
torque.dsfactory.maindb.connection.password = veralab
```

If PostgreSQL database is installed on a separate box, please update 127.0.0.1 and 5432 values in the first string to reflect real values of DB host and port. Update veralab user and set password with same values as the db owner of license_patrol database on your PostgreSQL server.

After updating and saving above files run below commands:

```
cd C:\LicensePatrol\tomcat\webapps\server\WEB-INF\sql\postgresql\
```

create-pgsql-db.bat - (Optional step. If database has not been created yet, this script will create license_patrol database).

app-data-init.bat - (Required script. The script will initialize all metadata).

Now License Patrol application is configured. You can start VeraLab Tomcat Service and proceed to the login page.

Uninstalling License Patrol Components and Services

To uninstall License Patrol software and all its components:

1. Log on as a member of the Administrators group to the computer on which you installed License Patrol Server components.
2. Go to **Start ► Control Panel ► Add or Remove Programs**, and select **License Patrol**.
3. Click **Remove**.

Note PostgreSQL database and the installation directory (default is C:\LicensePatrol) do not get removed automatically upon completion. It is safe to remove it manually. If you are uninstalling and re-installing License Patrol as a single-box installation from scratch it is recommended to remove C:\LicensePatrol directory before next fresh installation. Upgrades should be performed on top of existing installation, no uninstallation or other manual steps are required.

Postinstallation Configuration

This chapter guides you through the License Patrol postinstallation procedures. This chapter covers the following topics:

- [Reviewing Installed Components](#)
- [Administrator Account](#)
- [Client Setup](#)

Reviewing Installed Components

License Patrol installs and configures the following Windows Services:

- VeraLab Apache Tomcat
- PostgreSQL

These services are configured for Automatic Startup Type.

To view services and their status, go to **Start ► Control Panel ► Administrative Tools ► Services**.

By default, VeraLab Apache Tomcat Service is configured to listen on TCP ports 8080 and 8443. If for any reason the default License Patrol port is already used by some other software on your system you can change the port in the following file:

`%LicensePatrol_INSTALL_DIRECTORY%\tomcat\conf\server.xml`

Locate the following lines and change the port number, e.g.:

```
<Service name="Catalina">  
  <Connector port="8443" />
```

Note For more information, refer to *The Apache Jakarta Tomcat 7* manuals.

Administrator Account

admin User

License Patrol provides a predefined user, *admin*, that has privileges for performing all of the tasks in a License Patrol system, including setting up the system and creating other users. This user has an access to other roles in License Patrol application by default. You can modify admin's default settings by logging in to the web application, go to **Users** ► click **Edit** icon next to admin user. However, it is recommended to create new users and assign them required roles and rights. You can not delete yourself. In order to delete a user with Administrator role, you will need to login as a different administrative user.

The default password for the admin user is 'password'. We recommend changing the password for the admin user immediately after install. You can also delete or deactivate this account, once you create your custom License Patrol Administrator users.

Changing the Password for the admin User in License Patrol

To change the password for the admin user:

4. Log into *License Patrol* as the admin user.
5. Navigate to **Setup ► Users**. (Users task is the default landing page for Setup role).
6. Click Edit icon next to the user.
7. In the *Edit Employee Admin* page, type in the new password for **Password** and **Repeat Password** fields.
8. Click **Update**.

Note For more information, refer to *Administrator's Guide*.

Client Setup

Starting with version 5.x License Patrol comes with several options to deploy and setup License Patrol client in multi-station environment. Review them carefully before selecting the one that fits your strategy best. Starting with version 6.0 License Patrol comes with functionality allowing to deploy new versions of client remotely by pushing new client software from LP server to the clients. This applies only to deployments with both client and server upgraded to 6.0. In other words, if you have License Patrol server upgraded to 6.0, but your clients are still on 5.5, you cannot deploy new version to the clients. Clients use “pull” method to download new version of setup files from the server and this functionality is only present on clients with version 6.0 or higher.

Before running License Patrol client installation in production environment visit **Setup ► Stations ► Client Setup** page.

There are three ways to install and setup License Patrol clients:

- using License Patrol Wizard (manual installation)
- using Configuration file (silent installation)
- using server to client push (starting with version 6.0)

Client Setup page helps in generating Config file that can be used during silent installations. After generating Config file, save it under the same folder as License Patrol Client setup (exe) file. Client Installer will pick up parameters from the Config file. Optionally you can select to auto-register workstations on the server. If auto registration is not selected, you will need to either import stations using **Maintain Data** task under **Setup** role before deploying License Patrol client or, if client deployment is already done, using an interface to add workstations showing in the **Unregistered Stations** list. You can install License Patrol client on a sample station and replicate the image to the rest of the room or lab using Ghost or similar methods. Here are deployment path options for versions prior to 6.0:

1. Setup required **Room, Model, and Image** tasks on the server ► **Generate Config** file with **Auto-register** option selected ► Deploy License Patrol clients.
2. Setup your environment using **Maintain Data** task under **Setup ► Generate Config** file without **Auto-register** option selected ► Deploy License Patrol clients.
3. Setup required **Room, Model, and Image** tasks on the server ► **Generate Config** file without **Auto-register** option selected ► Deploy License Patrol clients ► Use **Unregistered Stations** list under **Setup ► Stations** to add all detected client workstations to corresponding rooms/models/images.
4. Setup required **Room, Model, and Image** tasks on the server ► Deploy License Patrol clients manually ► if no Config file used, License Patrol Client Setup will prompt you to specify room/model/image, server IP, and communication password.

To perform remote client deployments on versions starting with 6.0 use the following steps:

1. Download new client binaries for PC or/and Mac and save them on the server under LicensePatrol_Home\tomcat\webapps\server\update, e.g. C:\LicensePatrol\tomcat\webapps\server\update.
2. Login to License Patrol Web Application as a user with **Setup** role and go to **Setup ► Diagnostics**. Click on **Remote Client Update** link.
3. Select desired version of the client executable from PC or Mac client table.
4. Select **Update all compatible stations** or **Select stations on the next step** option on the same page and click **Continue** button.
5. If you chose an option to update a subset of stations (**Select stations on the next step** option), on the next page select a room from the drop down and select stations. Click **Update** button and next page will be displayed showing the list of stations you selected. In order to add more stations to that selection, click on **Return to Station Selection** button.
6. Click on **Start Update** button to launch background process that will update clients with new version.

Although in many cases client and server versions do not need to match, we recommend using the same version of client and server. To download the latest version of License Patrol client please visit the **Downloads** page on www.veralab.com.

License Patrol Upgrade

This chapter guides you through the License Patrol upgrade procedures. This chapter covers the following topics:

- [Upgrading License Patrol](#)

Upgrading License Patrol

You can download the License Patrol software from the VeraLab Web site.

Warning This chapter describes how to upgrade License Patrol from a previous version starting with 2.3 and higher. We strongly recommend to contact VeraLab Support if you have any customizations on top of vanilla version.

Before You Upgrade License Patrol

Perform the following tasks before upgrading License Patrol Server:

1. Review and satisfy applicable system and component requirements in Chapter 1, “[Preinstallation Requirements](#)”
2. Log on as a member of the Administrators group to the computer on which to upgrade License Patrol components. Log on as a member of the Domain Administrators group if you are installing on a Primary Domain Controller (PDC) or a Backup Domain Controller (BDC).
3. Perform full system backup.

Downloading License Patrol Software from the Web Site

To download the latest installation files:

1. Use any browser to access the software download page:
<http://www.veralab.com/veralab/downloads.jsp>
2. Select a file system with enough free space to store and expand the files. On the file system that you just selected, create a temporary directory.
3. Download the executable file to the directory that you just created.

Upgrading License Patrol Software

Run the downloaded executable file and follow the steps below:

Screen	Recommended Action
Welcome to the License Patrol Server Setup Wizard	Click Next

Screen	Recommended Action
License Agreement	Read the License Agreement and select the I accept the agreement radio button. Click Next
Select Upgrade Operation	Select Upgrade License Patrol Server to upgrade from a previous release. Upgrade program will perform a backup of your previous installation, install new application files and database, import old database, and perform upgrade to current release. Select Remove and Install option if you are ready to wipe out your previous installation and perform fresh install. Previous setups will not be transferred or upgraded. Select Stop and Exit to quit. Click Next
Select Destination Location	You can accept the default value (recommended) or select a different directory. Click Next
Select Start Menu Folder	Accept the default value (recommended) or type in a custom name. Click Next
Ready to Install	Review the information displayed, then click Install . The installation may take several minutes.
Completing the License Patrol Setup Wizard	Select the components you wish to start automatically upon completion. Click Finish

Upgrading License Patrol in a Multi-Node Environment

If you are running License Patrol in a multi-node environment where database is installed on a separate box or if you installed current version of License Patrol on a server with pre-existing database, the following steps must be executed:

1. Download latest version of License Patrol server (license_patrol_server_setup.exe).
2. Stop VeraLab Tomcat Service and backup C:\LicensePatrol.
3. Uninstall your current License Patrol version. This step will not affect your database.

4. Install latest fresh version of License Patrol. Do not select any options on the last screen
Completing the License Patrol Setup Wizard.
5. Update config files as described in “Modifying config files” on page 6 or copy old config files from backup location (Step 2).
6. Execute the following script:

```
cd C:\LicensePatrol\tomcat\webapps\server\WEB-INF\sql\postgresql\  
upgrade_db.bat
```

Connecting to License Patrol

After upgrade, by default a new browser window will open a Start Page. Please wait a couple of minutes for Windows Services to initialize. Once all services are started you will see a new icon with letters “LP” in the system tray.

To start using License Patrol web application, open a browser and go to License Patrol login page:

<http://127.0.0.1:8080/server>

The default username and password are:

- username: admin
- password: password

Note For more information, refer to *Administrator’s Guide*.
