

**VeraLab™ Guard Client
Computer Lab Management Suite
Installation Guide**

9.1 for Microsoft Windows

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VeraLab Client Installation Guide, 9.1.x for Microsoft Windows

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- Did you find any errors?
- Is the information clearly presented?
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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
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If you would like a reply, please give your name, address, telephone number, and electronic mail address.

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

Preface

This manual is your primary source of introduction, preinstallation, installation, and postinstallation information for using VeraLab Guard Client.

This preface introduces you to the VeraLab Client Installation Guide, discussing the intended audience, structure, and conventions of this document. A list of related VeraLab documents is also provided.

This preface contains these topics:

- Audience
- Organization
- Related Documentation
- Conventions

Audience

VeraLab Guard Client Installation Guide for Windows is necessary for anyone installing, configuring, or administering VeraLab Guard Client.

VeraLab Guard Client Installation Guide is intended for Computer Lab Managers, Administrators, Technicians, and other lab personnel who perform the following tasks:

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

To use this document, you need:

- Windows 7, Windows 8.1 or Windows 10/11 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 VeraLab Guard for Windows.

Chapter 2, VeraLab Installation

This chapter describes how to install and uninstall VeraLab Guard 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 computer lab personnel using VeraLab Computer Lab Management Suite. The other guides in the set are:

- VeraLab Administrator's Guide
- VeraLab User's Guide
- VeraLab Server Installation and Upgrade 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> <i><counter_name></i> page appears for that counter.

Preinstallation Requirements

This chapter guides you through the VeraLab Guard preinstallation procedures. This chapter covers the following topics:

- [System Requirements](#)
- [VeraLab Environment Setup](#)

System Requirements

Software requirements for VeraLab Client

The following table shows the supported software environment.

Requirement	Value
System Architecture	32-bit and 64-bit
Operating System	<p>VeraLab Client for Windows is supported on the following operating systems:</p> <ul style="list-style-type: none">• Windows 7, Windows 8.1, Windows 10/11• Windows Server 2008 & 2008 R2• Windows Server 2012 & 2012 R2• Windows Server 2016• Windows Server 2019• Windows Server 2022 <p>VeraLab Client for Windows is not supported on the following operating systems:</p> <ul style="list-style-type: none">• Windows Vista• Windows XP• Windows 2000• Windows Server 2003 and 2003 R2
Network Protocol	<ul style="list-style-type: none">• TCP/IP• TCP/IP with SSL

Hardware Requirements for VeraLab Client

The following hardware components are required for VeraLab Client:

- RAM: 1 GB minimum, 2GB and up recommended.
- Virtual memory: double the amount of RAM.
- Hard disk space: 10 MB minimum, 30 MB recommended.
- Processor: 800 MHz minimum, 1 GHz and up recommended.
- Video adapter: 256 color.

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 7, for example, open **System** in the control panel. 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 7, for example, open **Start ► Computer**, right-click the drive where the VeraLab software is to be installed, and choose **Properties**.

VeraLab Environment Setup

It is important to complete your lab's environment setup before you start installing client software. During client software installation and registration with VeraLab server you will be prompted to specify workstation attributes, such as model, image, which room it is assigned to. These setups are done on the VeraLab server and are specific to your organization. Once VeraLab environment is properly configured, client installation wizard will be able to pick up values from the server.

Starting with version 5.x VeraLab supports **silent** installation method on the client. Such installation is performed using pre-generated *config.ini* file. To generate *config.ini* file, login to **Administrator** (role) ► **Setup** (menu) ► **Stations** (task) ► **Client Setup** screen. After generating *config.ini*, place that file next to *veralab_client_setup.exe* file and run installation. Every client, where you run an installation using *config.ini* file, will pick up parameter values from that file.

For more information and other installation methods, read Chapter 1 of *VeraLab Administrator's Guide*.

VeraLab Client Installation

This chapter guides you through the VeraLab Guard Client installation procedures. This chapter covers the following topics:

- [Installing VeraLab Client](#)
- [Uninstalling VeraLab Components and Services](#)

Installing VeraLab Client

You can download the VeraLab software from the VeraLab Web site. This chapter describes how to install VeraLab Guard Client from hard disk.

Before You Install VeraLab Guard

Perform the following tasks before installing VeraLab Guard Client:

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 VeraLab Guard components.

Downloading VeraLab Software from the Web Site

To download the installation files:

1. Use any browser to access the software download page:
http://www.veralab.com/downloads_vl.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 VeraLab Guard Software

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

Screen	Recommended Action
Welcome to the VeraLab Guard Setup Wizard	Click Next
End-User License Agreement	Read the License Agreement and select the I accept the agreement radio button. Click Next
Select Destination Location	Select default location C:\Program Files (x86)\VeraLab Inc\VeraLab Guard or enter full path to another directory.

Screen	Recommended Action
Ready to Install	Click Install . The installation may take several minutes. The rest of the steps below will be displayed only if you are not using silent installation method with config.ini file. For more information how to use config.ini file see “VeraLab Environment Setup”
VeraLab Guard Settings	<p>Type in the VeraLab Server hostname or IP address(see next section below the table). Connection Password has to be the same as specified in the Guard Settings on the VeraLab Server. The default password is ‘welcome’. You can test connection by clicking Test Connection button. For connection test to succeed the server has to be up and running, accepting connections from client network on port 8080. If the connection test is successful, you will see connection details. To verify that the server hostname can resolve on your network, open command prompt on the client and type <code>ping [yourveralabserverhost]</code>. To verify Server IP address, login to VeraLab Server and use Help & Links ► Client Setup.</p> <p>Selecting Advanced tab will open advanced settings. The default value for Client Listener Port is 8087. You can keep the default value or select a custom port. Two checkboxes control the behavior of the client in case of network outage. The default settings are recommended.</p> <p>In the Screen Unlock Password fields type in the password that will allow you to unlock a workstation locally. This will allow you to unlock a workstation temporarily bypassing access to VeraLab server or if connection to VeraLab Server is lost. Minimum password length is 8 characters.</p> <p>Click Apply Settings</p>
VeraLab Guard Settings Screen 2.	<p>On this screen you can input station details so a workstation can be automatically registered with the server. Select Station Name, Room, Image, and Model from drop-downs. See “VeraLab Environment Setup” for reference.</p> <p>Click OK.</p>

Screen	Recommended Action
VeraLab Guard Settings Screen 3	The client will perform several tests. You will see green check bullets next to succeeded tests, and red cross marks next to failed tests. You can click Back to modify settings or if you get any failures. Click Finish .
Completing the VeraLab Guard Setup Wizard	Click Finish one more time to exit the installation.

VeraLab Client Installation from Command Line

VeraLab client supports installation using command line. Below is an example of silent installation using command line parameters:

```
veralab_client_setup.exe /server=192.168.184.1 /password=welcome /unLockPassword="Welcome123" /verysilent
```

Parameters, such as /server (you can use IP or hostname), /password, /unLockPassword, type of installation (/silent or /verysilent) must be followed by a value. If a password value has spaces, it has to be used within double-quotes, if no spaces, then no quotes are required.

Note Client-server connection password by default is set to “welcome”. If you decide to use different password, please update the same in VeraLab server settings (under Tools->Settings->Guard Settings), See *Administrator’s Guide* for more details.

Note This method ignores custom config file, however, it will create a temporary config file and will feed it to the installer program.

Setting Server IP Address on the Client

Below are the examples of how to specify a Server IP address in the VeraLab Guard Settings screen if default or non-default installation of the server was performed:

- 192.168.0.1 - will automatically translate into `http://192.168.0.1:8080/veralab` (*veralab* is a default installation location on the web server)
- 192.168.0.1:8085 - will automatically translate into `http://192.168.0.1:8085/veralab` (you can specify a different web server port, if you chose a non default port during server installation)
- 192.168.0.1/my_lab - will automatically translate into `http://192.168.0.1:8080/my_lab` (if you renamed or installed several VeraLab instances on the web server)

- 192.168.0.1:8085/my_lab - will translate into http://192.168.0.1:8085/my_lab
- https://veralab.myuniversity.edu:443 - If your VeraLab server is configured only for HTTPS connections and you are using standard HTTPS port. Please note that the string has to be exactly as in the example, and include https, server hostname and port number.

Note Same rules apply when using Server hostname or FQDN instead of IP address.

Using VeraLab Guard

You can start using VeraLab Guard Client without rebooting client workstation.

Depending on the selected settings, your computer may be locked upon rebooting. To manually unlock the screen, press 'space' bar on the keyboard and enter Lock Screen Password. If the workstation was configured for 'strict' mode, the workstation will lock up again during next communication session with the server.

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

Uninstalling VeraLab Components and Services

To uninstall VeraLab Guard Client and all its components:

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

Note You can also uninstall VeraLab Guard client by going to **Start ► All Programs ► VeraLab Guard**, and select **Uninstall VeraLab Guard**.

Installing VeraLab Client with LDAP

VeraLab can be integrated with LDAP server allowing lab patrons to authenticate directly via client workstation screens. The following assumptions have been made to support LDAP in Self-Service sign on scenario. They need to be verified before you start installing LDAP version of VeraLab client.

- You lab workstations are not integrated with MSAD and are not part of domain. If they are, you can use regular version of VeraLab client.
- You have central LDAP server that stores all user accounts on your campus and you have access to that server from the VeraLab server.
- You have completed VeraLab server installation and configuration and enabled LDAP settings on the server. For more information about server side LDAP setting see Administrator's Guide.

To install LDAP version of VeraLab client:

1. Download LDAP-enabled VeraLab client from the Downloads page on www.veralab.com. To verify that everything is working fine before starting a mass deployment, we recommend deploying only to a few selected client computers first. Please note that LDAP version of VeraLab client comes as a ZIP file.
2. After unzipping downloaded file on a client computer, modify *Autologon.ini* with a Notepad editor. Edit username/password values. These are Windows local account username and password values, assuming that all your client computers logon automatically with the same local account credentials. To see how to configure automatic logon on Windows 7 click [here](#).
3. Run the client Installer and register the client with VeraLab server (you will need to have VeraLab server hostname or IP address handy). For more information about installing VeraLab client see "[Installing VeraLab Client](#)" section.
4. After successful installation, logout from the client and verify you can login to the computer with LDAP credentials.

Starting with version 7.2 client can skip autologon registration step and it can also use domain account for autologon.

In order to use these options two new parameters can be used in autologon.ini file:

1. New parameter "skip_autologon_registration". It can be set to 0 or 1. By default it is set to "0", which is false, meaning that registration is enabled. If it is set to "1", then it completely disables autologon registration and all parameters will be ignored. The installer will not add account into autologon, assuming it already exists there.
2. New parameter "domain". If this parameter is missing then the computer host name is used instead and account name is interpreted as local account.

It is possible to use environment variables for username and domain values, e.g. `domain=%computername%`, however it should be used with caution.

Postinstallation Configuration

This chapter guides you through the VeraLab Client postinstallation procedures. This chapter covers the following topics:

- [Reviewing Installed Components](#)
- [Using Client Firewall](#)
- [Using Client Lockscreen Banners](#)

Reviewing Installed Components

VeraLab Guard installs and configures the following Windows Service:

- VeraLab Guard Service

This service is configured for Automatic Startup Type. To view the service and its status, go to **Start ► Control Panel ► Administrative Tools ► Services**.

VeraLab Guard Client relies either on fixed IP address or hostname. In order for VeraLab Guard to function properly, you have to ensure the following is true:

- Client IP address and hostname are entered on the VeraLab Server. To verify that the workstation exists on the server and has a correct IP address, login to the VeraLab Suite, go to **Setup ► Stations ►** Select a Room and find the workstation in the list.
- Every time client boots up, it obtains the same IP or hostname, even if you are using DHCP.

Using VeraLab Guard Manager

VeraLab Guard Manager allows you to modify client settings without reinstalling VeraLab Guard Client. To run VeraLab Guard Manager:

1. Log on as a member of the Administrators group to the computer on which you installed VeraLab Guard components.
2. Go to **Start ► All Programs ► VeraLab Guard**, and select **VeraLab Guard Manager**. Alternatively type veralab in Start (aka “Metro”) menu, if using Windows 8.1.
3. Modify settings and click **Apply Settings** button.
4. Check performed tests and click **Finish** to exit.

Using Client Firewall

By default, VeraLab client will open ports in firewalls coming standard starting with Windows XP SP2 and Windows 2003. To verify open ports on Windows 7, go to **Control Panel ► System and Security ► Windows Firewall**. Open **Advanced settings** window ► **Inbound Rules** and find **VeraLab Guard Service** in the list.

If you are using any other firewall software on the client, you will need to ‘train’ the firewall or define port exceptions in order to enable connections with VeraLab Server.

To verify that you can get screenshots and a list of processes on the client, log in to VeraLab Server, go to **Tools ► Monitoring ►** Select a **Room** from the drop-down menu ► click on the **Screenshot** or **Processes** icon. If the pop-up window displays a client’s screenshot or a list of processes, then the client’s firewall allows the connection with the server. If you get an error message, you need to refer to your firewall software manual.

Using Client Lockscreen Banners

Starting with version 5.x VeraLab allows to use client screen real estate for placing custom banners, such as campus logo, announcements, etc. Banners can be propagated to all workstation screens in a lab or on room by room basis. Banners can be static, which means one banner is displayed at all times or changing, when multiple banners rotate every 20 seconds by default. To change default banner rotation interval, log in to VeraLab Server, go to **Tools ► Settings ► Guard Settings**.

Note To read more about how to setup client lockscreen banners, see Manager tasks in *User's Guide*.
