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

9.3 for macOS

March 2025

VERALAB™

VeraLab Client Installation Guide, 9.3 for macOS.

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

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Preface

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

This preface introduces you to the VeraLab Mac 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 Mac OS is necessary for anyone installing, configuring, or administering VeraLab Guard Client.

VeraLab Guard Mac 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:

- macOS 10.13 High Sierra or higher 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 macOS.

Chapter 2, VeraLab Installation

This chapter describes how to install and uninstall VeraLab Guard Client for macOS.

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 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.

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Preinstallation Requirements

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

- System Requirements

System Requirements

Software Requirements for VeraLab Mac Client

The following table shows the supported software environment.

Requirement	Value
System Architecture	x86-64 for Intel macs or ARM64 (aarch64) for ARM-based macs
Operating System	VeraLab Client for macOS is supported on the following operating systems: • Apple macOS version 10.13 (High Sierra) or higher.
Network Protocol	• TCP/IP • TCP/IP with SSL

Hardware Requirements for VeraLab Mac Client

The following hardware components are required for VeraLab Mac Client:

- RAM: 2 GB minimum, 4 GB recommended.
- Virtual memory: double the amount of RAM.
- Hard disk space: 200 MB minimum, 500 MB recommended.
- Processor: Intel, macOS-compatible processor or higher.
- Display: 1024 x 768 or higher-resolution monitor displaying thousands of colors.
- Mouse or compatible pointing device.

Verifying Hardware Requirements

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

1. Determine the physical RAM size. To determine the total amount of installed RAM that is functional on your macOS system:

    a) Go to the Blue Apple menu in the upper left corner of your screen.

    b) Select the first item, **About This Mac**.

2. Determine the amount of free disk space on the system. To check how much free space is available on your startup disk:

a) In **Finder™**, select your startup disk's icon. For most users, this is Macintosh HD.

b) Press the *Command-I* keyboard combination.

c) The ***Get Info*** window for the startup disk will open, showing the Capacity, Available (free space), and space Used.

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VeraLab Mac Client Installation

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

- Installing VeraLab Mac Client
- Uninstalling VeraLab Components and Services

Installing VeraLab Mac Client

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

Downloading VeraLab Software from the Web Site

To download the installation files:

1. Use any browser to access the software download page: https://www.veralab.com/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. You can also download to a desktop.

3. Download the image file (DMG) to the desktop or a directory that you just created.

4. Mount the disk image into the machine by double-clicking the file.

Installing VeraLab Guard Client Software

Once VeraLabGuard.dmg file has been downloaded and mounted, perform the steps in below order:

1. In the open Installer window double-click on the **Install VeraLab Guard**.

2. Click **Continue** in the *Introduction* screen.

3. Review Software License Agreement and click **Continue** button. Click **Agree** button to accept license terms.

4. Current version supports only standard installation type with all defaults. Click **Install** button to continue with the installation.

5. Enter username and password for the account with Administrator's privileges.

6. Once installation of files is completed you will see *VeraLab Guard Settings* window. Enter VeraLab **Server hostname or IP Address**, **Connection Password**, and **Screen Lock Password**. Screen Lock password allows to bypass client authentication (Lock Screen) if connection to the server is lost and client screen has been locked out.

> **Note**   In Catalina and higher versions a new prompt will be displayed to allow Screen Recording.

7. Click **Test Connection** to verify you can connect to VeraLab server successfully.

8. Click **Apply Settings** to finish. You can click on **Daemon** icon to verify that client process has been started successfully.

9. Close VeraLab Guard manager window.

Installing VeraLab Guard Client Package Silently

Once VeraLabGuard.dmg file has been downloaded and mounted, extract Install VeraLab Guard.pkg and save it in a directory of your choice. Perform the steps in below order:

1. Create a script file in the same directory, e.g. `vl_script.sh` (see sample script below). Save it and make it executable, e.g. `chmod +x vl_script.sh`.

2. Execute it `sudo ./vl_script.sh` and propagate to other Macs in the lab.

```
#!/bin/bash
mkdir -p /Library/Application\ Support/VeraLab
rm -f /Library/Application\ Support/VeraLab/config.plist
/usr/libexec/plistbuddy -c 'Add serverip string "192.168.1.2"' /Library/
Application\ Support/VeraLab/config.plist
/usr/libexec/plistbuddy -c 'Add serverpassword string "welcome"' /
Library/Application\ Support/VeraLab/config.plist
/usr/libexec/plistbuddy -c 'Add unlockpassword string "password"' /
Library/Application\ Support/VeraLab/config.plist
installer -pkg  "Install VeraLab Guard.pkg" -target
```

Using VeraLab Guard

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 Mac Client and all its components:

1. Log on as a member of the Administrators group to the computer on which you installed VeraLab Guard Mac Client components.

2. Run the following: sudo "/Library/Application Support/VeraLab/uninstall.sh".

3. Alternatively you can mount Client Setup file and run uninstall from there using **Uninstall VeraLab Guard** option.

Note   If you are re-installing client and getting an error message saying *"A newer version of this software already exists on this disk"*, try using the following command:
`sudo pkgutil --forget com.veralab.macguard.pkg`

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Postinstallation Configuration

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

- Reviewing Installed Components
- Using VeraLab Guard Manager
- Using Client Firewall
- Using Client Lockscreen Banners

Reviewing Installed Components

VeraLab Guard Mac Client installs and configures the following macOS Daemons:

- VeralabDaemon
- VeralabAgent

This daemon process is configured for Automatic Startup Type.

In order for VeraLab Guard to function properly, you have to ensure the following is true:

- When using environment with static IP addresses, client IP addresses must be 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 host name or IP. Default behavior is set to recognize clients using their host names. Optionally you can change this setting to use client IP addresses.

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 Mac Client components. You can run installer without Admin rights, but you will be asked for credentials in the end of installation.

2. Go to the **Applications** directory and run **VeraLab Guard**.

3. Modify settings and click **Apply Settings**.

4. Close the **VeralabGuard** window to exit.

Using Client Firewall

If you are using a 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 may want 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 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*.