Agilent CrossLab Start Up Services

Agilent Cary UV Workstation Plus 1.3 Software Site Preparation Checklist

Thank you for purchasing software from **Agilent Technologies**. CrossLab Start Up is focused on helping customers shorten the time it takes to start realizing the full value of their instrument system investment.

Correct site preparation is the key first step in ensuring that your instruments and software systems operate reliably over an extended lifetime. This document is an **information guide and checklist** prepared for you that outlines the software requirements for the system set up in your lab.

Introduction

Customer Information

- If you have questions or problems in providing anything described as part of Customer Responsibilities below, please contact your local Agilent or partner support / service organization for assistance prior to delivery. In addition, Agilent and/or its partners reserve the right to reschedule the installation dependent upon the readiness of your laboratory.

- Should your site not be ready for whatever reasons, please contact Agilent as soon as possible to re-schedule any services that have been purchased.

- Other optional services such as additional training, operational qualification (OQ) and consultation for user-specific applications may also be provided at the time of installation when ordered with the system but should be contracted separately.

Customer Responsibilities

Ensure that your site meets the following specifications before the installation date. For details, see specific sections within this checklist, including

- The **computing environment** and the necessary space is made available.

- The number and location of **electrical outlets** for your computer systems and peripherals are planned.

- Your site meets the **software, hardware, and networking specifications** described later in this document.

- Locate your **sales order information**, software authorization codes, and/or software licenses/certificates.

- Check for Hotfix, Microsoft updates, and patch compatibility appropriate for the customer's system. **Critical Note: Current Microsoft updates and Windows version must be installed in the customer provided PC before installation can begin**.

- The necessary **software media,** disks etc. are available including upgrade/update disks.

- That a suitable **backup solution** is identified for your software and **data**.

- If you are upgrading your software, ensure you take a backup of your system and data

- If Agilent is delivering **Installation and Introduction services,** users of the instrument system should be present throughout these services. Otherwise, they will miss important operational, maintenance, and safety information.

- Availability of a **system/network administrator** as needed to connect to your intranet.

- The Cary 3500 is a network device and Zeroconf (Zero Configuration Networking) is used for instrument discovery and connection. As well as being able to connect directly to the PC, it can use network infrastructure (LAN). In addition, the instrument is using DHCP by default so if necessary, an IP address can be obtained from the network DHCP server.

- The default installation is by LAN direct to the PC.

- For additional information please consult the Cary UV Workstation Plus Software Guide

- Please consult the **Special Requirements** section for other product-specific information.

Important Customer Web Links

- To access **Agilent University**, visit http://www.agilent.com/crosslab/university/ to learn about training options, which include online, classroom and onsite delivery. A training specialist can work directly with you to help determine your best options.

- To access the **Agilent Resource Center** web page, visit https://www.agilent.com/en-us/agilentresources. The following information topics are available:

    - Sample Prep and Containment

    - Chemical Standards

    - Analysis

    - Service and Support

    - Application Workflows

- The **Agilent Community** is an excellent place to get answers, collaborate with others about applications and Agilent products, and find in-depth documents and videos relevant to Agilent technologies. Visit https://community.agilent.com/welcome

- Videos about specific preparation requirements for your instrument can be found by searching the **Agilent YouTube** channel at https://www.youtube.com/user/agilent

- **Need to place a service call?** Flexible Repair Options | Agilent

Site Preparation

Software Specifications for Workstations, Clients and Servers

Special notes

- If you have purchased a system including hardware instrumentation, refer to the hardware and peripheral device Site Preparation Checklist for requirements regarding laboratory bench space requirements.

- For installations using Domain Authentication:

  - Using the Trust Relationship Between This Machine and the Domain Server option requires that users who log in must have the ability to read the Active Directory user attributes like "User-Account-Control"

  - Using the User Credential to Authenticate and Access the Domain Server requires that the user credentials are current and valid. The most suitable user type would be a service user with an annual expiry or non-expiring password.

- For upgrades, the account details (username and password) of a Control Panel administrator will be required.

- Implement a backup strategy or backup all your data prior to making any changes.

- No other instrument software can be installed.

- For upgrades from Cary UV Workstation Plus 1.1 or 1.2 the following needs to be considered:

  - It is advised to complete outstanding electronic signature workflows before upgrading.

  - Author information from (migrated) imported files will be lost and the importing user will be flagged as the author.

  - The Cary UV Revoke privilege has been moved to Shared Services and that all roles that previously included the Cary UV Revoke privilege will need to be reconfigured to include the Shared Services Revoke privilege (e-Signature Revoke).

  - Signature settings will need to be reapplied after upgrading

  - Changing these settings is not part of the installation/upgrade service.

- Cary UV Workstation Plus is not compatible with the following Agilent software:

  - OpenLab Basic Server

  - OpenLab Server

  - OpenLab ECM XT

  - OpenLab ECM v3.X

Software Specification Description	Supported	Comments
Operating system name, version	Windows 10 Professional Windows 10 Enterprise	64-bit only Versions: 1909
O/S .NET and other add-ons	NET 4.7.x/4.8 Advanced Services .NET 3.5.x SP1	Installed by the System Preparation Tool if required.
Language settings/compatibility	English Simplified Chinese Japanese	The English version is validated on Microsoft Windows English language operating systems. Localized versions are supported on localized language versions of Microsoft Windows using the following fonts: Desktop applications: English: Calibri Chinese: Microsoft YaHei UI Japanese: Meiryo UI Web applications: English: Noto Sans Simplified Chinese: Noto Sans CJK SC Japanese: Noto Sans CJK JP
Account settings/privileges	Full Local Administrator privileges	Required for installation, configuration and upgrading
Web Browser	Internet Explorer 11 or higher Google Chrome Microsoft Edge	Desktop versions. Enable Javascript for the best user experience when accessing Help and Learning Center
Java Runtime Environment (JRE)	OpenJDK Platform 11	Used for DR and CM where applicable. Installed with Cary Workstation; 11.0.2
JavaScript	Must be enabled/allowed	For Help and Learning Center access
PDF Reader	Adobe Acrobat Reader DC	Required to view manuals and documentation

Software Specification Description	Supported	Comments
PostgreSQL	Only the version installed with UV Workstation Plus is supported	Data is stored in a database.
Antivirus software	Symantec Endpoint Protection	
Power Saving	None - disable sleep or power saving modes. If enabled, this may result in data loss or unstable instrument control.	Any PC power saving functions for hardware such as hard disks, monitor, LAN etc. should be disabled.
Network Connection	An active network connection is required during installation of UV Workstation Plus	An active connection can mean a connection to the Cary 3500 or a LAN.
Local Account settings/privileges	Local administrator required for installation and configuration	
Domain Account Settings/Privileges	Domain user with local administrator privilege required for installation and configuration	

Computer Hardware Specifications for Workstations, Clients and Servers

Special notes

- Cary UV systems are evaluated under Agilent's ISO9001 procedures using Cary UV Workstation Plus software and a desktop computer. We strongly recommend a computer configuration that matches the system used during evaluations.

Hardware Specification Description	Minimum	Recommended (if applicable)	Comments
Processor type and speed	Intel® i5, i7, or Xeon E3 or equivalent 3.0 GHz or greater 4 Core	PC: HP z2G5 or equivalent	Recommended PC: HP z2G5 or equivalent
Memory	16Gb		
Internal storage/devices/media	500Gb 7200 RPM SATA hard drive		or equivalent solid-state drive recommended
Graphics resolution	1600 x 900	1920 x 1080 recommended	
Pointing devices	Computer Mouse		
USB Port	USB 2.0		Required for installation

Networking Specifications

Special notes

- Cary UV systems use network infrastructure in order to communicate between the PC and instrument. This communication is based on standard TCP/IP protocols and requires no configuration.

- Cary 3500 connects via a LAN interface and is therefore possible to attach to a network. There are many network scenarios, and although the Cary 3500 will work in most, a direct connection to a PC is the most common arrangement. In this case, only one network interface is required on the controlling PC. The use of an additional network interface such as a network interface card (NIC) is required to connect to a data or intranet network. Alternatively, if a second network interface is not available then a network switch may be used.

When using LAN communications to connect PCs to an instrument, use one of these methods:

- Connect via an isolated switch using standard CAT-5 network cabling.

- LAN communication hardware should be 100/1000 Mbps (or higher) speed capable.

- LAN communication must be on the same subnet as instruments and preferably on the same segment.

Network Specification Description	Minimum	Comments
Network type, bandwidth, speed, protocol, etc.	Integrated Intel I217LM PCIe GbE Controller 100 MB/1 GB LAN	Required for instrument control
Additional network card requirements	Intel Ethernet I210-T1 GbE NIC (E0X95AA) 100 MB/1 GB	A second LAN card for lab intranet connection (if required)
LAN configuration for instrument connection (LAN#1 or LAN#2)	Internet Protocol (TCP/IPv4)	Automatically obtain IP address and DNS server address

Firewalls, Antivirus Software and Networks

Special Notes

- Do not apply group policies or a security customized operating system installation before the installation of Cary UV Workstation Plus and any settings applied may interfere with the installation of Cary UV Workstation Plus.

- There are firewall ports that must be opened for the Cary UV Workstation Plus software to install and operate successfully. These firewall ports to allow communication between the system components of UV Workstation Plus. These apply to workstations as well as to Client/Server systems.

- The Cary UV Workstation Plus installer will automatically open the required ports on an enabled Windows firewall during installation configuration.

- If third-party firewall or antivirus software is used, then it is preferable to have these not installed, disabled or uninstalled before proceeding with the installation. Once installed, the ports must be opened. Alternatively, the ports can be opened before installation proceeds.

- Opening ports on third party firewall or antivirus software is not part of the installation so ensure this is done before the arrival of the Agilent engineer or preferably disable or remove these.

Firewall Ports

Name	Port (range)	Protocol
OLSS Storage Client (OpenLab Automation Service)	2886	TCP
Control Panel (Used for collecting diagnostics logs)	3424	TCP
DNS Server.	53	TCP/UDP
DHCP or BootP.	67, 68	TCP/UDP
OpenLab Server website and REST APIs.	80	TCP
OpenLab Server secure website & Secure REST APIs. Needed only if HTTPS is used.	443	TCP
OLSS Licensing API (OpenLab Licensing (Flexera) Server)	6570	TCP
OLSS Client API (OpenLab Shared Services WCF APIs)	6577	TCP
OLSS Client API, Control Panel (Legacy Shared Services REST API Legacy Licensing support service REST API)	6624	HTTP
Control Panel (Shared Services REST API Licensing Support service REST API)	6625	HTTP

Name	Port (range)	Protocol
Control Panel (Licensing Support service WCF API)	8084	TCP
Control Panel (OpenLab Licensing view-only web UI (Flexera). Default is 8090. If 8090 is in use,Flexera web UI is automatically moved to another port in the 8085-8099 range).	8085-8099	TCP
Control Panel (OpenLab Licensing (Flexera) Server)	27000-27009	TCP
Control Panel (Shared Services REST API)	52088	HTTPS
OLCF Data Collection API, DataCollection Agent (Data Collection Service, 6328 used as fallback only if https is not available).	6328, 52088	HTTP/HTTPS
Cary UV Workstation (Cary UV Data Service REST API).	52088	HTTPS
Cary UV Workstation (Instrument Connection) Allow mDNS.	8765	TCP

Special Requirements

- For further details on supported hardware, software, instruments, and firmware requirements please refer to the Agilent Cary UV Workstation and Workstation Plus Requirements and Supported Instruments (System Requirements) which can be found on the installation media or by contacting your local Agilent representative.

- If upgrading from Cary UV Workstation Plus version 1.1 or 1.2 to a later version, you will need to:

    - Update roles in the Control Panel to that previously included the Cary UV Revoke privilege and include the Shared Services Revoke privilege instead

    - Finish any outstanding electronic signature workflows before upgrading

    - Signature settings will need to be reapplied after upgrading (refer to the Control Panel Help and Learning for more information.

- If you intend to use your system in an environment subject to data security regulations, ensure the following settings related to time synchronization:

    - Your network must have a time synchronization service to make sure that all systems are using a consistent and valid time.

    - To ensure that users cannot change the time, users must not operate using an administrator account.

Service Engineer Review (Optional)

If the Service Engineer completed a review of the Site Preparation requirements with the customer, the Service Engineer should complete the following Comments section.

Service Engineer Comments

If there are any specific points that should be noted as part of performing the site preparation review or other items of interest for the customer, please write in this box.

Site Preparation Verification

Service Request Number:

Date of Review:

Service Engineer Name:

Customer Name:

Service Engineer Signature:

Customer Signature:

Total number of pages in this document: