

# **Clarius Automation Framework Getting Started Guide**

Version 2.0.0

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# Preface

This guide provides information to help you do the following:

- Install Clarius automation framework
- Install application(s) in Clarius automation framework
- Install Clarius SDK
- Activate the application license
- Run measurement and instrument services
- Log in to the Clarius
- Overview of the application controls and navigation panel
- Frequently asked questions

# **Getting help and support**

### **Product documents**

Use the product documents for more information about getting started with the Clarius, the application functions, and how to remotely use the application.

Table 1: Clarius automation framework and application documents

To learn about	Use this document
How to install the Clarius	Clarius Automation Framework Getting Started Guide
How to use the application	Clarius Compliance Application Help
How to automate using the API and SDK commands	Clarius Automation Framework (API and SDK) Programming Guide

### Conventions

This application help uses the following conventions:

- The terms "Application" and "Software" refer to the Clarius compliance application.
- The term "target system" refers to the Computer/Laptop where the Clarius automation framework and application is installed.
- · The acronym "DUT" is an abbreviation for Device Under Test.
- · The term "select" refers choosing a screen item (button control or list item) using a mouse.
- A Note identifies important information.

### **Technical support**

Tektronix values your feedback on our products. To help us serve you better, please send us your suggestions, ideas, or comments on your application or oscilloscope. Contact Tektronix through mail, telephone, or website. See *Contacting Tektronix* for more information.

When you contact Tektronix Technical Support, please include the following information (be as specific as possible):

#### **General information**

- · All instrument model numbers
- Hardware options, if any
- Modules used
- · Your name, company, mailing address, phone number, FAX number
- · Please indicate if you would like to be contacted by Tektronix about your suggestions or comments.

#### **Application specific information**

- · Software version number
- Description of the problem
- · If possible, save the log file(s) and share it with the Tektronix support person to understand the problem and get it resolved.

# System requirements

This section explains the recommended system requirements to install the Clarius automation framework and the application(s).

The recommended system requirements may change for the application(s) that will be installed in the Clarius automation framework. For the recommended system requirements of an application, refer to the application help document.

Requirement	Recommended requirements
Operating system	Windows 10 Enterprise and Pro (version 21H1 and above) or Windows 11 Enterprise and Pro (version 21H1 and above)
	Language: English (United States) only
CPU cores	As recommended in application help
RAM	As recommended in application help
Disk space	As recommended in application help
Network speed	1 Gbps
Browser	Microsoft Edge (default) or Google Chrome
Additional software	Python 3.12.x

# **Recommended deployment models**

This section lists the supported deployment models for setting up Clarius automation framework and run the tests.

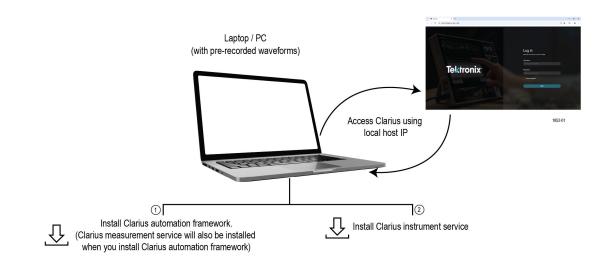


Figure 1: Deployment model 1: Single system deployment

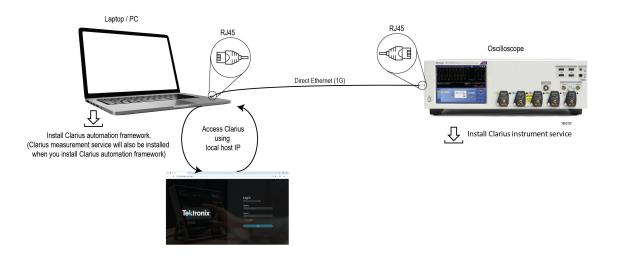


Figure 2: Deployment model 2: Peer to peer connection

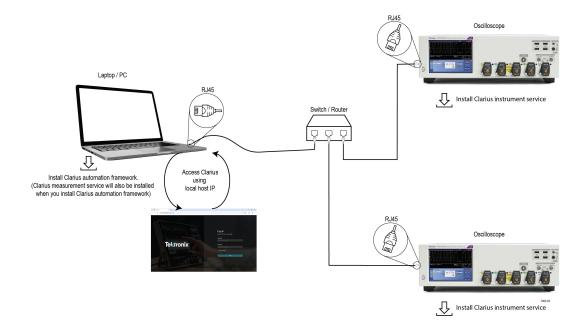


Figure 3: Deployment model 3: Private network setup via standard switch / router / hub

# Enable ports to install Clarius automation framework

The installer checks for the first available port within the range incrementally and allocates the port of the services. If no ports are available within the range, installation will prompt user to enter their custom ports.

The following table lists the services and the port ranges.

Port name	Port range
Clarius user interface	4200:4209
Event communication with instruments	5672:5679
Programming interface	8443:8449
SSL certificates download interface	8080:8089
Large objects transfer interface	9001:9009

# Dynamic memory and diskspace allocation for the Clarius automation framework virtual machine

### **Dynamic memory allocation**

The minimum RAM required to install the Clarius automation framework is 8 GB.

By default, the installer allocates 12 GB, if the 50% of available RAM is greater than 12 GB. You can also manually allocate RAM from 8 GB up to 50% of total available RAM.

#### Example

Total RAM available in the target system	64 GB
Minimum RAM required	8 GB
RAM allocated	12 GB (50% of 64 GB = 32 GB, you can choose from 8 GB to 32 GB)

∕∧ ⊾

Note: If the 50% of the total available RAM is less than 8 GB, then the installation will fail.

## **Diskspace allocation**

The maximum allocated diskspace for Clarius automation framework installation is 90% of the available diskspace.

#### Example

Total diskspace available in the target system	300 GB
Minimum diskspace required	20 GB
Maximum diskspace required	90% of available storage

# **Installing Clarius automation framework**

This section describes the instructions for installing the Clarius automation framework in a target system. Follow the steps to complete the installation.

- 1. Enable Virtualization technology in BIOS<sup>1</sup>
- 2. Enable ports to install Clarius automation framework
- 3. Dynamic memory and diskspace allocation for the Clarius automation framework virtual machine on page 10
- 4. Enable Hyper-V in the target system
- 5. Install Clarius automation framework in the target system
- 6. Install Clarius instrument service

### Enable Hyper-V on the target system

Hyper-V is a hardware virtualization tool that allows you to create and run a virtual machine on your system without affecting the host operating system. To enable Hyper-V on your computer, follow these steps:

- 1. Log in to the system with an administrator account.
- 2. Type Control Panel in the search box and press Enter.

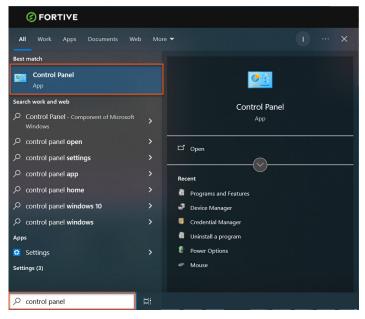


Figure 4: Control Panel

3. Select Control Panel > Programs and Features.

<sup>&</sup>lt;sup>1</sup> Contact the IT team of your organization to enable the virtualization technology in your system.

→ ✓ ↑ 🔛 > Control Panel > A	II Control Panel Items				✓ Ů Search Control Panel	۶
djust your computer's settings					View by: Large icons •	
Administrative Tools	AutoPlay	Backup and Restore (Windows 7)	RitLocker Drive Encryption	BitLocker Encryption Options		
Color Management	Configuration Manager	🧃 Credential Manager	Date and Time	Default Programs		
Device Manager	Devices and Printers	🚱 Ease of Access Center	File Explorer Options	File History		
A Fonts	lndexing Options	Internet Options	🛓 Java	Keyboard		
Mail (Microsoft Outlook)	🥏 Mouse	Network and Sharing Center	Phone and Modem	Power Options		
Programs and Features	lange Recovery	👰 Region	RemoteApp and Desktop Connections	Security and Maintenance		
Sound	Speech Recognition	😻 Storage Spaces	💿 Sync Center	🧕 System		
Taskbar and Navigation	Troubleshooting	🍇 User Accounts	Windows Defender Firewall	iii Windows Mobility Center		

Figure 5: Programs and Features dialog

#### 4. Select Turn Windows features on or off.

Control Panel\Programs\Program	s and Features			- 0
-> -> 🕆 🛱 > Control Pa	nel > Programs > Programs and Features			✓ ♥ Search Programs and Feat.
Control Panel Home View installed updates	Uninstall or change a program To uninstall a program, select it from the list and then click Uninstall	I, Change, or Repair.		
um Windows features on or ff	Organize *			- ·
install a program from the network	Name	Publisher	Installed On Size Version	
	Currently installed programs Total size:			

Figure 6: Turn Windows features on or off dialog

5. Select Hyper-V and its sub features.

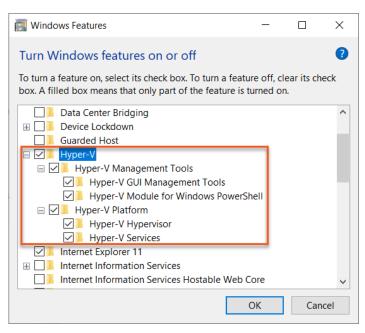


Figure 7: Enabling Hyper-V in the Windows Features dialog box

6. Select OK to install. You must restart the system when prompted.

### **Install Clarius automation framework**

To install the Clarius automation framework in the target system, follow these detailed steps.

- 1. Go to www.tek.com.
- 2. Click **Download**. In the Downloads menu, select DOWNLOAD TYPE as Software and enter the application name in the MODEL OR KEYWORD field and click **SEARCH**.

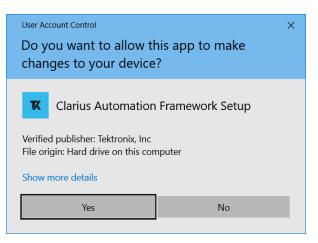


3. Select the compatible version of Clarius automation framework and follow the instructions to download the software. Copy the installer package (.zip) to the target system<sup>2</sup> and extract the file.

#### Note:

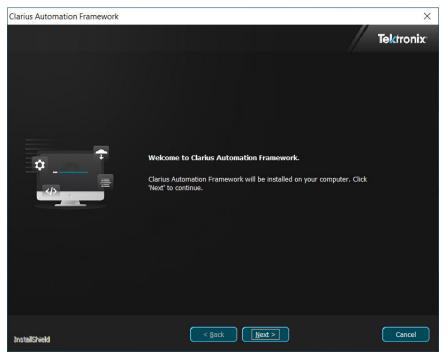
- Check the Release Notes for the version compatibility details of Clarius automation framework and application.
- To unzip the package, right-click, select Extract All and select Extract.
- 4. Double-click the Clarius installer (clarius-automation-framework-<<version>>.exe) from the extracted folder and select Yes on the User Account Control.

<sup>&</sup>lt;sup>2</sup> A PC/Laptop/Computer where the Clarius automation framework and application will be installed.



#### Figure 8: Clarius user account control dialog

5. Read the welcome instructions and select Next.





6. Read the license agreement; accept the terms of the license agreement and select **Next**. Please wait until the prerequisites progress check is complete.

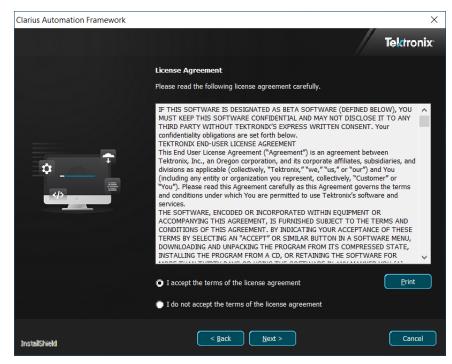


Figure 10: Clarius license agreement

7. Browse to select the install path and select Next. The default path is C:\Program Files\Tektronix\Clarius\.

You can select any local disk drive other than a network drive path for installation.

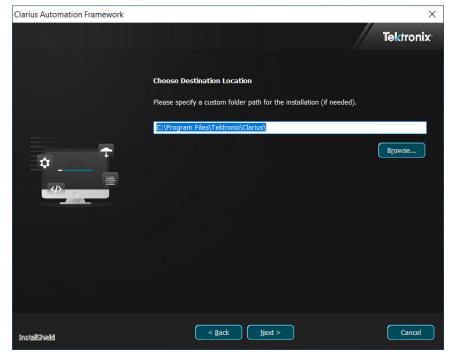


Figure 11: Clarius install path

8. Set the password for the Clarius automation framework matching the criteria and select Next.

Clarius Automation Framework		$\times$
	Tektron	ix <sup>.</sup>
	User Information	
	Username admin	
a a the second secon	Password	
kana kana kana kana kana kana kana kana	Confirm Password	
÷ ÷	Info: Password must be 8-20 characters long and must include atleast one digit, one upper case letter, one lower case letter and one special character.	
<u>ن</u> ھ	System Settings	
	Disk Storage [GB] 35 Min: 20 GB Max: 70 GB	
	RAM [GB] 12 Min: 8 GB Max: 15 GB	
en e	CPU Cores 2 Min: 2 Max: 3	
	Info: The recommended settings are based on your current system configuration. You can adjust them within the specified limits. For more details, please refer to the Clarius Automation Framework getting started	
InstallShield	Back         Next >         Cance	

Figure 12: Clarius user information

#### Note:

- For details on Disk Storage allocation, *click here*.
- For details on RAM allocation, *click here*.



• **CPU cores allocation example:** The minimum logical CPU cores required is 2 and the maximum core is calculated as 75% of total logical CPU cores. By default, a midpoint value between the minimum and maximum cores will be added in the installation wizard field. If the allocated logical CPU cores is in decimal value, then the number after the decimal point will be discarded. For example, value 3.5 will be added as 3.

For details on recommended CPU cores to install, refer System requirements section.

9. Displayed only if the ports required for installation are not available. Refer *Enable ports to install Clarius automation framework* for more information.

Clarius Automat	ion Framework				×
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					Tektronix
		D t.	See Conservations		
		Port	Configuration		
			Clarius user interface	4200	
	-		Event communication with instruments	5672	
•			Programming interface	8443	
<i>•</i>	1 A A A A A A A A A A A A A A A A A A A		SSL certificates download interface		
			Large objects transfer interface	9001	
			Large objects transier interface		
			Info: These port(s) will be used for Clarius inte please enter valid port(s) to proceed, and refer	rnal communication, r to the Getting Started	
			guide for more details.		
InstallShield			< Back Next >		Cancel
	Clarius Autom	ation Frame	work	>	:
	cianus Autom	adon name	NOIK		
	Ть	e energified p	ort is either already in use, invalid, or	anoth for the	
			onents. Please enter a valid port:	empty for the	
	- 5	SSL certificate	s download interface		
				ОК	

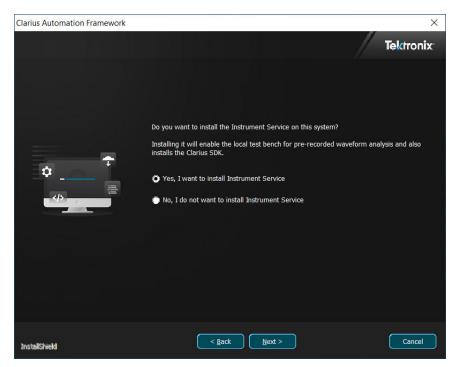
#### Figure 13: Port configuration

10. Select Yes to install the Instrument Service. This will create a local test bench(Clarius\_PC) in the target system for pre-recorded waveform analysis.

Installing instrument service will also install Clarius SDK in an isolated Python environment.



Tip: If you skip the instrument service installation, you can refer *Install Clarius instrument service* section for the installation steps.



#### Figure 14: Install instrument service

**11.** Displayed only if step <u>10</u> on page 17 is selected **No**.

Select the Clarius SDK installation option from the installer wizard and select Next.

You can install Clarius SDK in the following ways:

- Install Python in a global environment and then install SDK in that environment. If a supported Python version is detected, then select to install the SDK in that environment.
- Install Python in an isolated Python environment and install SDK in that environment.<sup>3</sup>

<sup>&</sup>lt;sup>3</sup> An isolated Python environment will have its own independent set of Python packages installed in its site directories.

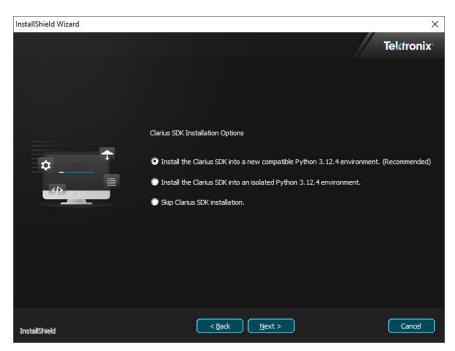


Figure 15: Clarius SDK installation options

#### Note:

- Clarius SDK requires Python version 3.12.x.
- If you skipped the SDK installation, refer to the Install Clarius SDK section to install.

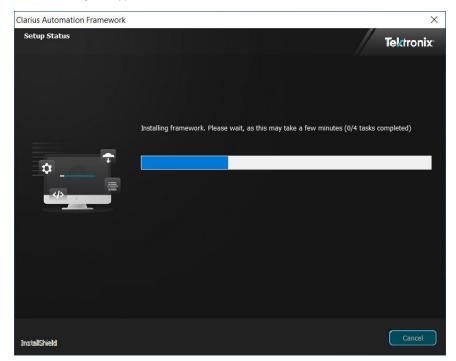


Figure 16: Installing Clarius automation framework

12. Select the Launch Clarius automation framework checkbox once the installation is complete and select **Finish** to exit setup. By default, the Clarius automation framework will be launched in the Microsoft Edge browser.

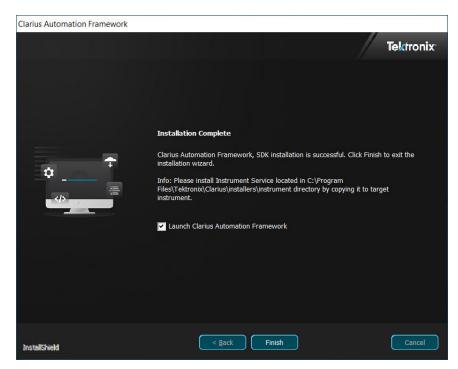


Figure 17: Launch Clarius automation framework

Note: If the installation fails, check the installation logs at (C:\ProgramData\Tektronix\Clarius\logs) for more details about the failure or contact a Tektronix field engineer for support.

The ProgramData folder is hidden by default. Enable Show hidden files, folders, and drives to view the folder path.

13. (Optional) Launch the Clarius automation framework from the desktop.



**Note:** You can access the Clarius automation framework from the target system using the local host URL https://  $127.0.0.1:4200^4$ . To remotely access the Clarius automation framework, use the host name or IP address of the Clarius automation framework installed system.

Log in to the Clarius automation framework with the following credentials

- · Username: admin
- Password: Enter the user configured password set during installation.

<sup>&</sup>lt;sup>4</sup> The default port allocated is 4200. If this port was not available during the installation, then the first available port within the range of 4200 to 4209 will be checked incrementally and allocated.

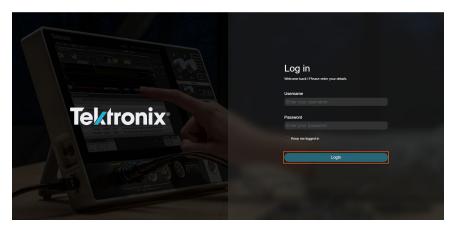


Figure 18: Clarius login page

**Note:** During installation, if port 4200 was already used, then the first available port within the range of 4200 to 4209 will be checked incrementally and allocated.

By default, no application(s) will be installed and the home screen displays no data. To install the application, refer to *Install application* on page 28.

x	Dashboard	Tests	it Manage	G> License	Reports	<b>a</b> =	vents/Logs	<b>()</b> Невр	+	🕒 Hadmin 🗸
Hi admin										🕢 Run Test
	No Notifications to	Show		No Saved Sequence	s Are Available			No Tests Are Running		
	Test Benches									
	lest dentries	→ Faller						Applications		
	No TestBenches Are Availat	ble		No Failed Tests #	Are Available			No Applications Are Availabl		

Figure 19: Clarius homepage

### Install Clarius instrument service

Clarius instrument service sends the waveforms to the Clarius measurement service<sup>5</sup> for analysis. Refer to *Network topology* diagram for more information on instrument service.

The instrument service can be installed by the following ways:

- Install instrument service in the target system or remote PC where pre-recorded waveforms are located.
- · Install instrument service in the oscilloscope to use pre-recorded waveforms or live acquisitions.

Follow these steps to install the Clarius instrument service:

- 1. Navigate to the Clarius automation framework installation path. The default path is C:\Program Files\Tektronix\Clarius\installers.
- 2. (Optional) Select and copy the Instrument folder and paste in the oscilloscope or computer.
- 3. Open Instrument folder, double-click clarius-instrument-service-<<version>>.exe and follow the steps to complete the installation.

<sup>&</sup>lt;sup>5</sup> Measurement service will be installed in the target system where Clarius automation framework is installed.

Clarius instrument service installation path:

- If Clarius instrument service is installed in a computer or oscilloscope, then the installation path is C:\Program Files\Tektronix\Clarius\installers\instrument.
- If Clarius instrument service is installed in the target system, then the installation path will be the same as that of the Clarius automation framework.



**Note:** Installing instrument service will also install Clarius SDK. If a supported Python version is detected, Clarius SDK will be installed in that environment. Otherwise, Python 3.12.x will be installed in an isolated environment and Clarius SDK will be installed in that environment.

# **Upgrade Clarius automation framework**

This section describes the instructions for upgrading Clarius automation framework.

#### Table 2: Clarius automation framework version upgrade table

Version	Upgrade Support	Upgradable version(s)
2.0.0	Yes	1.1.0

#### Prerequisite:

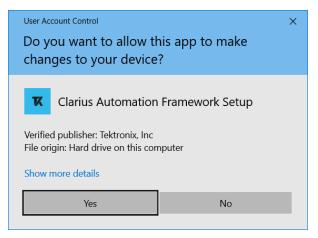
• You must have at least 30 GB of free disk storage available in Clarius virtual machine to upgrade the Clarius automation framework. You can check the available free disk storage from the admin console. Refer to *Admin Console and Monitoring* on page 39 section.

To upgrade the Clarius automation framework in the target system, follow these detailed steps.

- 1. Go to www.tek.com.
- 2. Click **Download**. In the Downloads menu, select DOWNLOAD TYPE as Software and enter the application name in the MODEL OR KEYWORD field and click **SEARCH**.



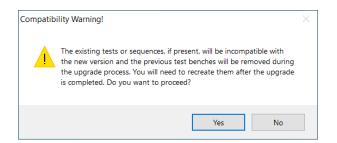
- 3. Select the compatible version of Clarius automation framework and follow the instructions to download the software. Copy the install package (.zip) to the target install system and extract the zip file.
- 4. Double-click the installer and select Yes on the User Account Control.



#### Figure 20: Clarius user account control

5. Displayed only if Clarius automation framework is already installed in the target system.

Select **Yes** to proceed with upgrade version of the Clarius.



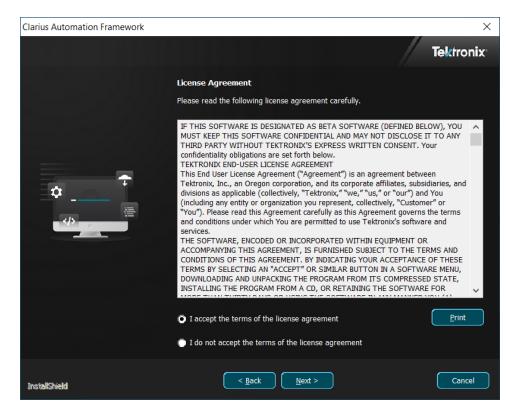
#### Figure 21: Upgrade pop-up

#### 6. Read the welcome instructions and click **Update**.

Clarius Automation Framework	×
	Tektronix
	Welcome to Clarius Automation Framework. The setup has detected 1.1.0 already installed. Click 'Update' to install version 2.0.0-
InstallShield	Update

Figure 22: Upgrade Clarius installer setup

7. Accept the terms of the license agreement and click Next. Please wait until the upgrade process is complete.



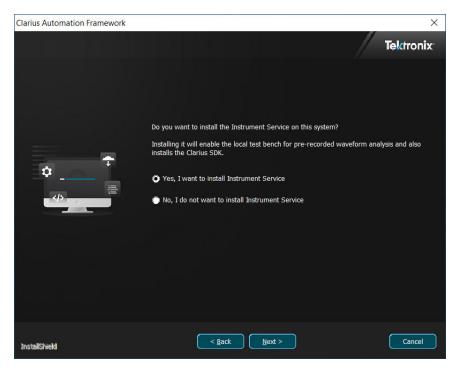
#### Figure 23: Clarius license agreement

8. Displayed only if Instrument Service is not installed in the previous version.

Select **Yes** to install the Instrument Service. This will create a local test bench in the target system for pre-recorded waveform analysis.

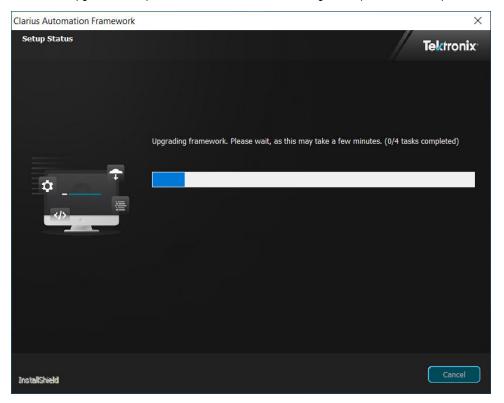
Installing instrument service will also install Clarius SDK in an isolated Python environment.

**Tip:** If you skip the instrument service installation, you can refer *Install Clarius instrument service* section for the installation steps.



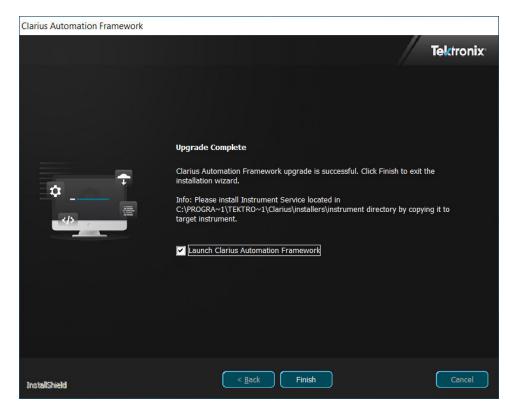
#### Figure 24: Install instrument service

**9.** The Clarius upgrade starts, please wait until the tasks and configuration process are complete.





10. The Clarius upgrade is successful. Select the Launch Clarius checkbox to launch the Clarius compliance and click Finish. By default, the application will be launched in the Edge browser.



#### Figure 26: Launch Clarius

- 11. Log in to the Clarius automation framework with the following credentials.
  - · Username: admin
  - Password: Enter the user configured password set during installation.

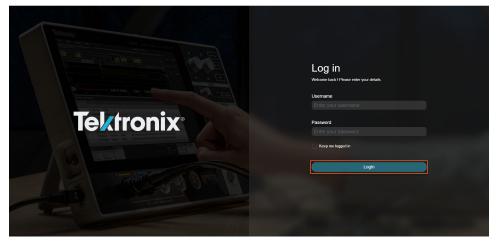


Figure 27: Clarius login page



Note: If the installation fails, please check the installation logs at

(C:ProgramData Tektronix Clarius) for more details about the failure or contact Tektronix field engineer for support.

# Installing application in Clarius automation framework

This section describes the instructions for installing a application in a target system. Follow the steps to complete the installation.

- 1. Install Clarius application
- 2. Install instrument service plug-in of

# Install application

#### Prerequisite:

Compatible version of Clarius automation framework must be installed. Check Install Clarius automation framework section for installation steps.

To install the application in the target system, follow the steps:

- 1. Go to www.tek.com.
- Click Download. In the Downloads menu, select DOWNLOAD TYPE as Software and enter the application name in the MODEL OR KEYWORD field and click SEARCH.



- 3. Select the latest version of software and follow the instructions to download. Copy the installer package to the target system<sup>6</sup>.
- 4. Double-click the installer and follow the instructions in the installation wizard to complete the installation process.

By default, the application license will not be activated in Clarius compliance and the home screen displays no data. Refer *Activate application license* on page 31 to activate the license.



Note: If the installation fails, check the installation logs (C:\ProgramData\Tektronix\Clarius\logs) for details about the failure or contact a Tektronix field engineer for support.

### Install instrument service plug-in of the application

Install the instrument service plug-in of the application in the oscilloscope or the computer, where you have installed the Clarius instrument service. To install the Clarius instrument service, *click here*.

Follow the steps to install the instrument service plug-in:

- 1. In the target system where the Clarius automation framework is installed, navigate to the installed path. The default path is C:\Program Files\Tektronix\Clarius\installers.
- 2. Select and copy the Instrument folder and paste in the oscilloscope or computer, where you have installed the Clarius instrument service.
- 3. Open the folder, double-click the clarius-compliance-< App\_Name>-instrument-service-<< version>>.exe and install the plug-in.

<sup>&</sup>lt;sup>6</sup> A PC/Laptop/Computer where the Clarius automation framework is installed.

# **Clarius SDK**

Install Clarius SDK (Software Development Kit) in the target system (where Clarius automation framework is installed) or in the oscilloscope or computer where the Clarius instrument service is installed.

Clarius SDK can be installed in the following ways:

- Install Python in the global environment and then install Clarius SDK in that environment. If a supported Python version is detected, you can select to install the Clarius SDK in that environment.
- Install Python in an isolated Python environment<sup>7</sup> and install Clarius SDK in that environment.

#### **Install Clarius SDK**

If you have skipped Clarius SDK installation during the installation of Clarius automation framework, follow the steps to install.

- 1. In the target system, where the Clarius automation framework is installed, navigate to the installed path. The default path is C:\Program Files\Tektronix\Clarius\installers\sdk.
- 2. Select and copy the sdk folder and paste it to the oscilloscope or computer.
- 3. Open sdk folder, double-click clarius-sdk-<<version>>.exe and follow the steps to complete the installation.

User Account Control X Do you want to allow this app to make changes to your device?						
Clarius-sdk-< <version Verified publisher: Tektronix, Inc File origin: Hard drive on this com Show more details</version 						
Yes	No					

Figure 28: User account control dialog

<sup>&</sup>lt;sup>7</sup> An isolated Python environment will have its own independent set of Python packages installed in its site directories.



Figure 29: SDK installer setup

# **Activate application license**

- 1. Double-click the Clarius icon from the desktop to launch the Clarius automation framework.
- 2. Log in using the Username as admin and the user configured password that was set during the installation.
- **3.** Select the License tab and click **b** to copy the Host ID.

x		🚼 Dashboard 🥔 Tests	11 Manage C> License	Reports	Events/Logs	🕜 Неір		🔶 😫 Hi admin 🗸
Host ID	ATSW-TDJXTN5YJGW6DLI							+ Add License
Nam	е Туре	Description			nse Expiry	Maintenance Expiry	Applications	
				- 000				
					•			

Figure 30: Copy Host ID for license request

- 4. Send the copied Host ID to the Tektronix application engineer and request for license file.
- 5. In the License tab, click Add License; browse and select the license file and click Activate.

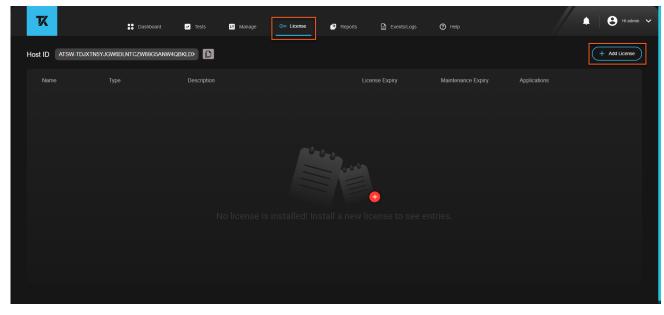


Figure 31: Add License

6. After successful activation, the application license details will be displayed in the license tab.

x	Dashboard	🔑 Tests 🛛 🚺 Mana	ge 🖙 License	🖪 Reports 📄 Event	s/Logs 🕜 Help		Hi adm
ost ID ATSW-4X2	2U6Y9MY9UDYMM9CB4F7GVBS5z	ZMFJ4					+ Add License
Name	Туре	Description		License Expiry	Maintenance Expiry	Applications	
							Uninstall

Figure 32: Installed application license in Clarius automation framework

# **Run the services**

This section lists the services to run before performing tests in the Clarius automation framework. To perform testing within the Clarius automation framework, make sure all the installations are complete and all supporting services are running for the following scenarios.

- The Clarius measurement service must be up and running in the target system.
- The *Clarius instrument service* must be up and running in the system or oscilloscope from where the analysis of the waveform will be done.

### **Run Clarius measurement service**

If the Clarius measurement service is running in the target system where Clarius automation framework is installed, you must see the Measurement service window. If it is not running then double-click the **MeasurementServiceStart.bat** icon from the desktop to run the Clarius measurement service.

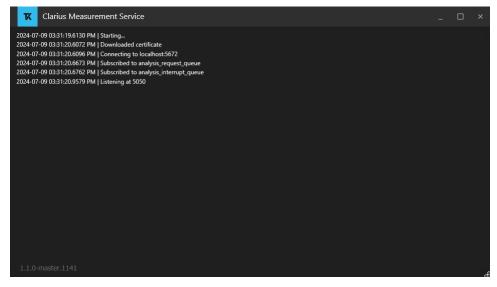


Figure 33: Clarius measurement service window

You can also run the measurement service by navigating to the installation path and double-click the **MeasurementServiceStart.bat**. The default installation path is C:\Program Files\Tektronix\Clarius\lib\analysis\service.

### **Run Clarius instrument service**

Clarius instrument service sends the waveform to the measurement service<sup>8</sup> for analysis. To check if the instrument service is running, click the **Show hidden icons** arrow in the task bar of Windows and check for Instrument Service.

If the instrument service is not running, double-click the **InstrumentServiceStart.bat** icon from the desktop and run the instrument service. This will run the instrument service and the automator.

<sup>&</sup>lt;sup>8</sup> Measurement service will be installed in the target system where Clarius automation framework is installed.

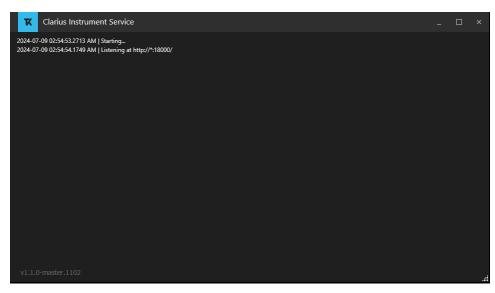


Figure 34: Clarius instrument service window

You can also run the instrument service by navigating to the installation path and double-click the InstrumentServiceStart.bat. The default installation path is C:\Program Files\Tektronix\Clarius\lib\instrument\service.

# **Application overview**

This section describes the steps to log in to the Clarius automation framework, lists of the application controls, and the list of tabs that are in the navigation panel.

### Start and log in to the application

1. Double-click the Clarius icon from desktop to launch Clarius automation framework.

 $\underline{\wedge}$ 

**Note:** You can access the Clarius automation framework from the target system using the local host URL https:// 127.0.0.1:4200. To remotely access the Clarius automation framework, use the host name or IP address of Clarius automation framework installed system.

2. Log in to the application using the credentials.

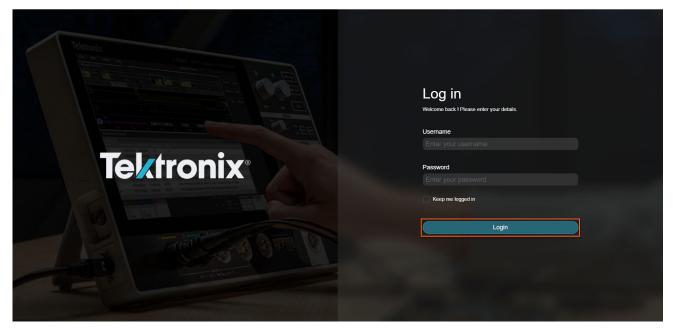


Figure 35: Clarius automation framework login page

After successful log in, you will be navigated to the home page. It displays the activated application(s), saved sequences of the application, test benches status, running tests, failed tests list, and notifications.

x	Dashboard	🛹 Te:	sts 💵	Manage (	C⇔ License 🚺	Reports 📄 E	Events/Logs	1 Help		•	😫 Hi admin 🗸
Hi admin											<ul> <li>Run Test</li> </ul>
				Sequences		$\rightarrow$	Running Te	ests			
				Sequence_01	1		Test	TestBench	Progress		
							Test_02	Mso_live	33%		
	No Notifications t	to Show									
	Test Benches	→	Failed Te	sts				Applications	→		
	Mso_live	•									
	SX_149										
	тв			,	No Failed Tests Are A	vailable					

Figure 36: Clarius automation framework home page

### **Application controls**

The Clarius automation framework uses the menus to group the related configurations, test, result, logs, and report settings. Click the respective menu to open the associated details.

A menu may have one or more tabs and frames that lists the selections available in that panel. Controls in a menu can change based on the settings made in that menu or another menu.

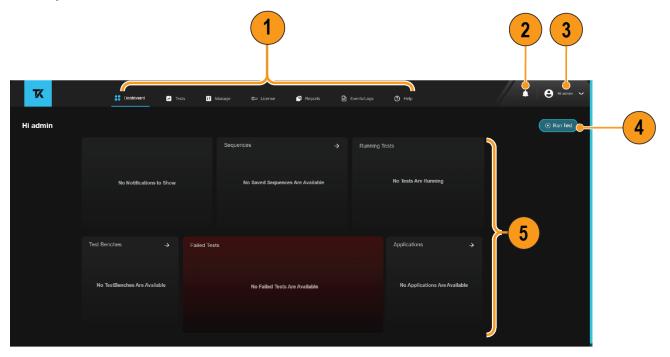


Figure 37: Application controls interface

Table 3: Application controls description

Identifier	Element	Description
1	Navigation panel	The navigation panel contains list of tabs that allows you to select the application, create and configure tests, create and configure test bench, and generate the test report.
2	Notifications	Displays alerts when an event or action occurs in the application.
3	User profile	Displays the profile information and settings details of the account. You can view the version and user license agreement details in <b>About</b> menu.
4	Run Test	Click to perform a test by entering the required test information.
5	Widgets	An element of a graphical user interface that displays information or provides a specific details to the user to interact with the application.

# **Navigation panel**

The navigation panel contains a list of tabs that allows you to select the application, create and configure tests, test bench, generate the test report, view the logs of the executed test, and the license information. Click the respective tab to open the associated panel.

X		Ē												😫 Hi admin 🗸
		:	Dashboard	2		Manage	C⇔ License	Reports	Ē		Help			
Hi admin	-	L												💿 Run Test
ni aqmin														• Ruil lest
						Sequer	ices		→	Running Te	sts			
			No Notifications	4- <b>0</b> 1			No Courd Comune				No Tests Ar	re Running		
			No Notifications	to Show			No Saved Sequence	es Are Avallable				ie Ruming		
		Test Benche	es	$\rightarrow$	Failed	d Tests					Applicatior	าร	→	
		No TestE	Benches Are Avail	able			No Failed Tests	Are Available			No Appli	ications Are Availab	le	

Figure 38: Clarius compliance navigation panel

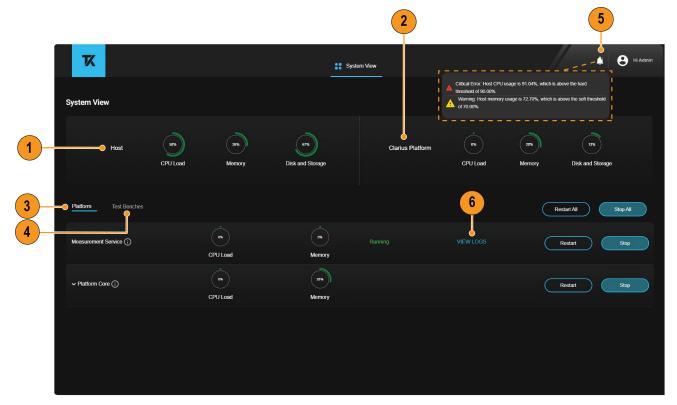
#### Table 4: Navigation panel and tabs description

Tabs	Description
Dashboard	Displays the test data and test execution summary. It includes test progress, test notifications to view the status of each test, list of active applications, sequences, and test benches.
Tests	Allows you to create, configure, and run a new test. It also analyzes and displays the details of all executed tests.
Manage	Allows you to manage the application, test bench, and sequences that are created for the test execution.
License	Allows you to add license to the application and also view the licenses that are enabled.
Reports	Allows you to generate a test report and/or export a detailed test report for an executed test(s).
Events and logs	Displays the logs and events for a test.
Help	Allows you to open Help window to browse topics and read Help files.

# **Admin Console and Monitoring**

The Monitoring and admin console provides a holistic view of the performance of the Host (Clarius installed PC) and the Clarius Platform (Virtual machine running critical services). This service allows users to monitor CPU load, memory usage, disk and storage status, ensuring optimal performance and facilitates troubleshooting.

Double-click Clarius Admin Console from the desktop to open the monitoring service.



#### Figure 39: Clarius compliance monitoring service interface

Identifier	Element	Description
1	Host	The Host (Clarius installed PC) provides the hardware resources for the Clarius platform. You can view metrics related to CPU load, memory usage, disk and storage status for the host.
2	Clarius Platform	The Clarius platform is a virtual machine created on the host, running critical services essential for system operations. Metrics for the platform include CPU load, memory usage, disk and storage status.
3	Platform	You can view the real-time status of Clarius services, which include CPU load and memory usage. The available status are Running, Not Running, and Exited.
4	Test Benches	Users can view the real-time status of the test benches, which includes CPU load and memory usage. The available status are <i>Available</i> , <i>Occupied</i> , <i>Unavailable</i> , and <i>Not Reachable</i> .

[lable continued...

Identifier	Element	Description
5	Notifications	Warnings and alerts are displayed in the notification icon and Windows system tray, providing real-time updates on the system status.
		<b>Warning Threshold:</b> An alert is triggered when the metric exceeds the set value (For example, $70\%)^9$ .
		<b>Critical Threshold:</b> A critical alert is triggered when the metric exceeds the set value (For example, 90%).
6	Logs	The logs screen displays detailed logs for each service.
		<b>Note:</b> If there is any issue with the service, save the log file and share it with the Tektronix support person for troubleshooting.

#### Test bench status scenarios

The Test Benches tab in the monitoring service allows you to view the status of the test bench.

Test bench status	Description
Available	If both instrument service and instrument service agent (ClariusISAgent) are running, but no test is executed on the test bench.
	If instrument service is running and instrument service agent (ClariusISAgent) is down; Technical difficulties to Restart or Stop the service.
Occupied	If instrument service and instrument service agent (ClariusISAgent) are running, and a test is being executed on the test bench.
Unavailable	If instrument service is down and instrument service agent (ClariusISAgent) is running; Use Start to bring up the setup.
Not Reachable	If both instrument service and instrument service agent (ClariusISAgent) are not reachable.

The following table explains the scenarios for using the test bench to perform a test.

#### Note:

• You can check the status of instrument service agent (ClariusISAgent) from the **Services** window. Click **Start** > **Run** and then type services.msc to launch the Services window.



- Clarius Monitoring and Admin console is only accessible from the target system where the Clarius automation framework is installed.
- File Store Create Buckets service operates as an internal start-up service and will cease its operations post-initialization. It is not essential for the ongoing test procedures, and its absence will not affect the test runs or their outcomes.

<sup>&</sup>lt;sup>9</sup> If the alert is from hard disk, delete old test data from Tests > List of Tests to free up the hard disk space.

# **Frequently asked questions**

This section lists the frequently asked questions with the possible solutions.

### **Basics**

1. What is the supported Operating System for Clarius software installations?

Refer to the system requirements section.

- 2. What is the recommended system configuration required to install Clarius software ? Check the system requirements section.
- 3. Can I install Clarius automation framework with the Run as Administrator option? Yes
- 4. Enabling virtualization technology from BIOS.

Contact the IT team of your organization to enable the virtualization technology in your system.

5. Where can I find the installation logs of Clarius automation framework?

The default path of Clarius installation logs is C:\ProgramData\Tektronix\Clarius\logs\.

6. Where can I find the Clarius compliance application installer logs?

The Clarius compliance application installer logs path is Clarius C:\ProgramData\Tektronix\Clarius\logs\.

7. What happens if we try to install the same version of the Clarius installer?

Re-installation is not allowed. The installer will prompt you to uninstall the existing version.

8. What happens to the already deployed application licenses while uninstalling the Clarius automation framework?

The installed licenses will be deleted during the Clarius uninstallation process.

Close all running services and all opened files of Clarius before you proceed with the uninstallation. Uninstalling the Clarius automation framework will also uninstall all the identified Clarius compliance application(s) along with the respective instrument service plug-ins, measurement service, and instrument service.

9. How do I uninstall Clarius automation framework from the target system?

Go to Control Panel > Add or remove program and uninstall Clarius automation framework.

Close all running services and all opened files of Clarius before you proceed with the uninstallation. Uninstalling the Clarius automation framework will also uninstall all the identified Clarius compliance application(s) along with the respective instrument service plug-ins, measurement service, and instrument service.

10. How to uninstall Clarius instrument service from the oscilloscope?

Go to Control Panel > Add or remove program and uninstall Clarius instrument service.

Close all services and all opened files from the install folder before proceeding with the uninstallation.

#### 11. What is the log in credential for Clarius virtual machine using SSH client (putty)?

Use the below credentials to log in to the Clarius compliance virtual machine.

Default user: admin

Password: Enter the password that was set during the installation to log in to the UI.



Note: SSH can be done only in system where Clarius automation framework is installed.

# **During installation**

1. Can I choose a network drive (other than internal drives) for installation?

No. Installation is supported in internal drives only.

2. Can we select a drive other than C: for Clarius installation?

Yes, you can select any local disk drive other than the network drive. The recommended drive for installing Clarius compliance is C:.

3. Can we select a drive other than C: for installing Clarius instrument service?

No. The Clarius instrument service can be installed only in C: drive.

The installation path for Clarius instrument service is:

- If Clarius instrument service is installed in a computer or oscilloscope, then the installation path is C:\Program Files\Tektronix\Clarius.
- If Clarius instrument service is installed in the target system, then the installation path will be same as of Clarius automation framework.
- 4. Can I run the Clarius installer from the .zip file without unzipping it?

No. You must use Windows unzip only to extract the package.

5. How to troubleshoot windows update issue while installing Clarius automation framework.

Windows updates often cause the default switch in Hyper-V to become unreliable, leading to new instances failing to launch or existing ones timing out. This issue persists even after rebooting. To fix it, remove the default switch with the following command:

- Get-HNSNetwork | ? Name -Like "Default Switch" | Remove-HNSNetwork
- restart-computer

### **Post installation**

1. What if I forgot the Clarius UI login password. How to reset it?

To reset the admin password, go to command prompt > clarius resetpwd -p "new password"

- 2. How to launch Clarius automation framework?
  - · Double-click the Clarius shortcut icon present on Desktop.
  - You can also open the web browser and type https://127.0.0.1:4200 in the address bar.
- 3. What to do if the Clarius is not launched after installation is complete?

Check if the Clarius is installed successfully. Go through the installation logs for more details.

Contact Tektronix field engineer for further queries.

4. Where can I find the user information in the Clarius automation framework?

Check the user profile on the top right corner of the Clarius automation framework.

5. Clarius throws an error as instrument service is not running although all the services are up and running.

Restart the system and check if the problem is resolved. If not, try restarting VM from Hyper-V and check. If the issue is still not resolved, contact a Tektronix field engineer for support.

6. If instrument service is not reachable from PC where Clarius automation framework is installed.

C:\ProgramData\Tektronix\Clarius\instrument\_service\conf\ as per your IT policies.

7. What happens if multiple browsers are present in the target system where Clarius is installed?

By default, Clarius will be launched on the Microsoft Edge browser. Only Chrome and Microsoft Edge browsers are supported.

8. How to get the Host ID from the user interface of the Clarius automation framework?

Check Activate application license section for steps to copy the Host ID and activating the license.

9. What to do if the application does not appear in the list of applications in the Clarius user interface?

Go through the installation logs for more details about the failure or contact Tektronix field engineer for support.

10. What to do when you click Login in Clarius automation framework, it does not navigate to the home page and no error message is displayed?

If the Login to Clarius automation framework is not successful and you do not see any error message or redirection, please follow these steps:

- a. Check if cookies are enabled in your browser.
- **b.** Make sure the setting to allow sites to save and read cookie data is selected.

Check the browser settings to enable cookies and to allow sites to save and read cookie data.