

Clarius Automation Framework Getting Started Guide

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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 Clarius, the application functions, and how to remotely use the application.

Clarius automation framework and application documents

To learn about	Use this document
How to install 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 to 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, email 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

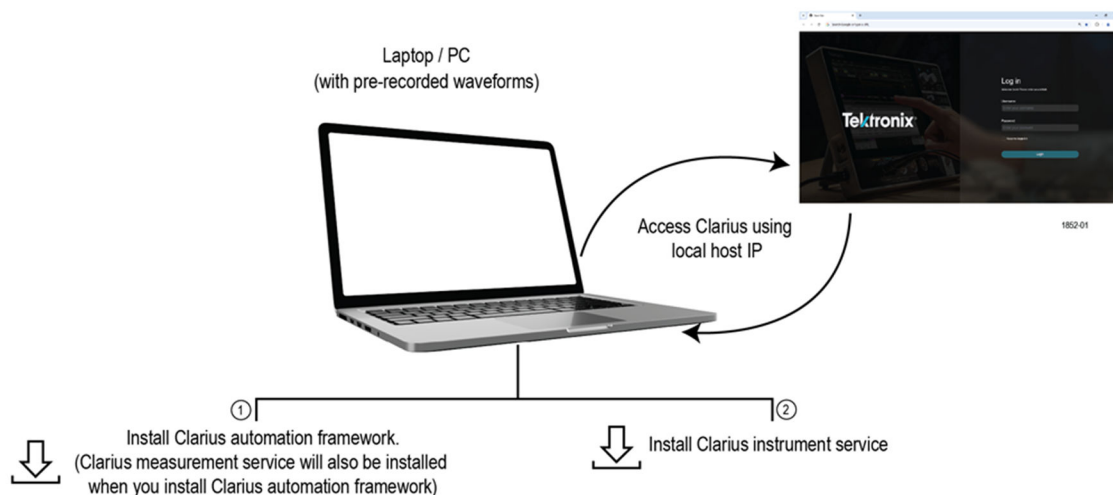
This section explains the recommended system requirements to install the Clarius automation framework and supported application(s).

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.

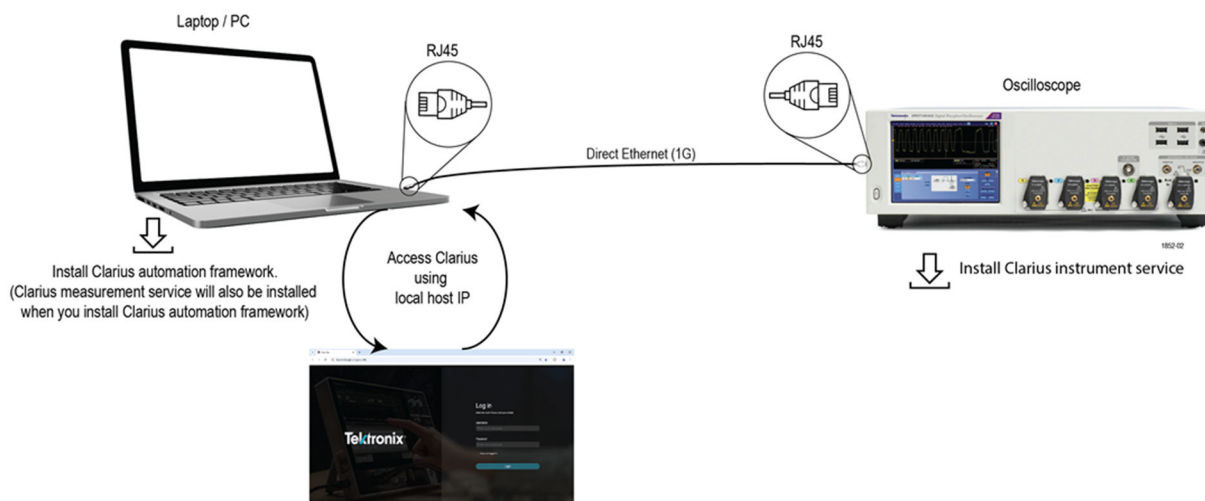
Requirement	Recommended requirements
Operating system	- Windows 10 Enterprise and Pro (version 21H1 and above) - Windows 11 Enterprise and Pro (version 21H2 and above) Language: English (United States) only
CPU cores	As recommended in application help
RAM	As recommended in application help
Virtual Memory Configuration	Refer to Dynamic memory allocation (on page 16).
Disk space	As recommended in application help
Network speed	1 Gbps
Browser	Microsoft Edge (default) or Google Chrome
Additional software	Python 3.13.x

Recommended deployment models

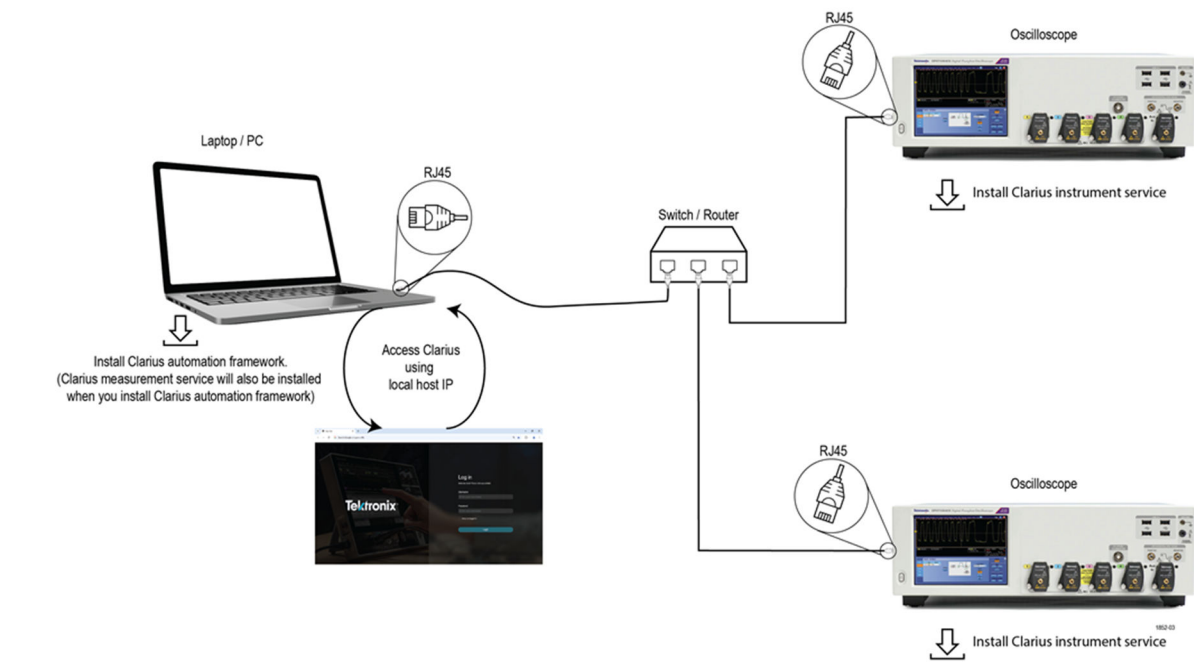
This section lists the supported deployment models for setting up the Clarius automation framework and running the tests.



Deployment model 1: Single system deployment



Deployment model 2: Peer to peer connection



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

Enable ports to install Clarius automation framework

The Clarius 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, the installation will prompt you to enter the 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

Configure power and sleep settings

Configure the sleep settings to Never in the target system where Clarius automation framework will be installed. To configure the sleep settings, follow the steps:

1. In the **Windows Start** menu, click **Settings**.
2. Type **power and sleep** into the search box and select **Power & Sleep settings**.
3. Select **Never** for **When plugged in, PC goes to sleep after**.

Dynamic memory and disk space allocation for the Clarius automation framework virtual machine

[Dynamic memory allocation](#) (on page 16)

[Disk space allocation](#) (on page 16)

Dynamic memory allocation

The minimum RAM required on the system to install the Clarius automation framework is 16 GB.

The installer calculates 50% of the total available system RAM and allows memory allocation within a defined range.

Calculation Details

- **Maximum Allocatable RAM (ram_max):** $\text{ram_max} = 50\% \text{ of total system RAM}$
- **Minimum Allowed RAM (ram_min):** $\text{ram_min} = \min(\text{ram_max}, 16 \text{ GB})$
- **Default Allocated RAM (ram_default):** $\text{ram_default} = \max(\text{ram_min}, 8 \text{ GB})$

NOTE: Important!

- The default allocated virtual machine RAM will never be less than 8 GB.
 - The installer allows allocation between 8 GB and ram_max in the virtual machine, depending on the system's available memory.
-

Example

- **Total RAM available in the target system:** 64 GB
- **50% of total RAM:** 32 GB
- **Minimum RAM required:** 16 GB
- **Default RAM allocated:** 16 GB

User can manually allocate RAM from 16 GB up to 32 GB

Virtual Memory Configuration:

Ensure that the total paging file size for all drives (currently allocated) is maintained between 0.5× and 1× the system's physical RAM. To verify this setting, navigate to **Performance Options > Advanced > Virtual Memory**.

Disk space allocation

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

Example

Total disk space available in the target system

300 GB

Minimum disk space required

20 GB

Maximum disk space required

90% of available storage

Installing the Clarius automation framework

This section provides instructions for installing the Clarius automation framework on a computer/laptop. In this document, the term **target system** refers to the computer/laptop where the Clarius automation framework and supported application(s) are installed.

Follow the steps to complete the installation:

1. [Enable Virtualization technology in BIOS](#) (on page 18)

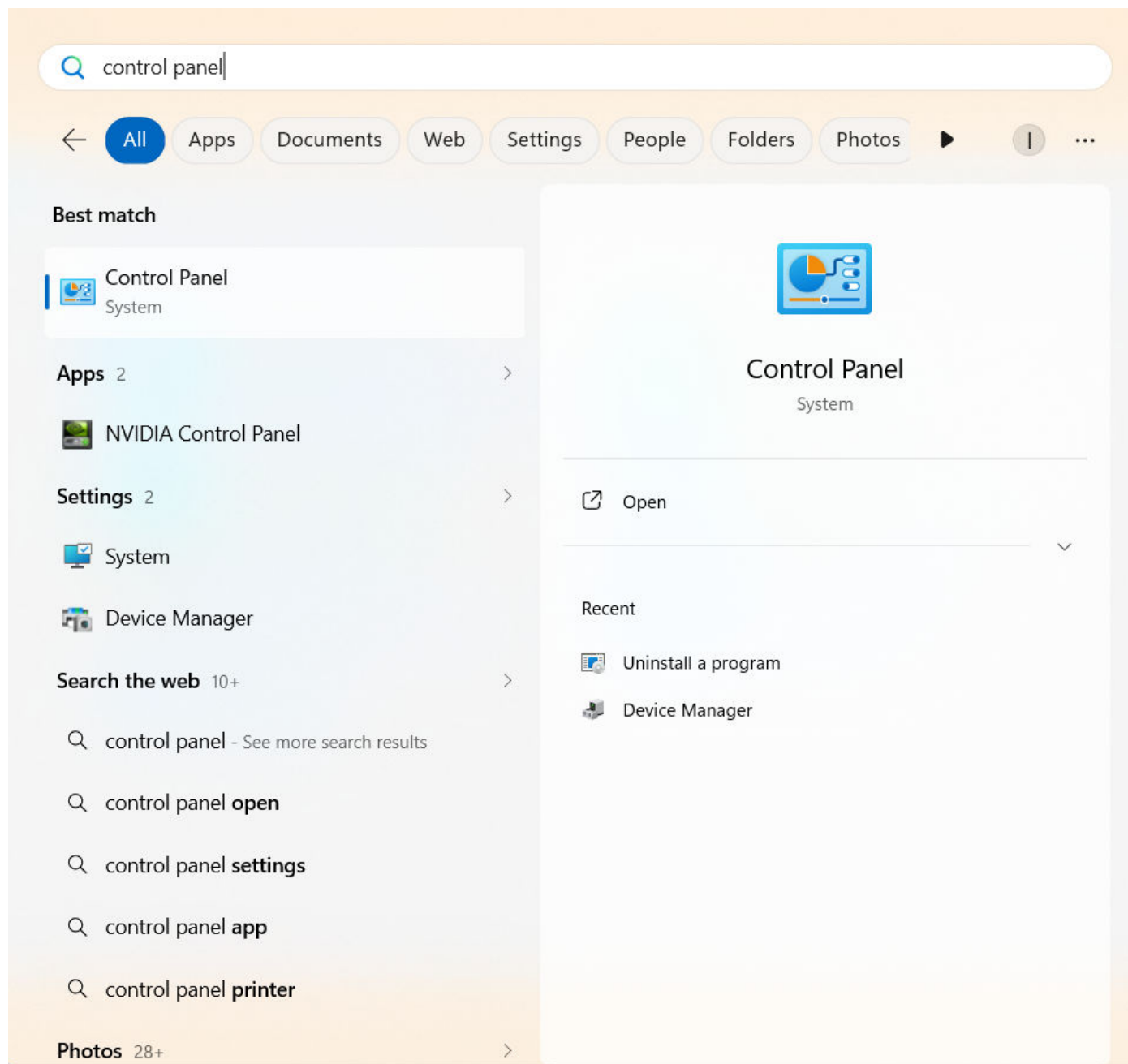
NOTE: Contact the IT team of your organization to enable the virtualization technology in your system

2. [Configure power and sleep settings](#) (on page 14)
3. [Enable ports to install Clarius automation framework](#) (on page 13)
4. [Dynamic memory and disk space allocation for the Clarius automation framework virtual machine](#) (on page 16)
5. [Enable Hyper-V in the target system](#) (on page 18)
6. [Install Clarius automation framework in the target system](#) (on page 20)
7. [Install Clarius instrument service](#) (on page 32)

Enable Hyper-V on the target system

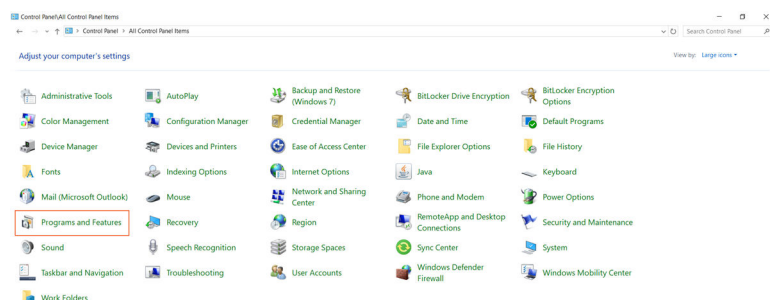
Hyper-V is a hardware virtualization tool that allows you to create and run virtual machine on your system without affecting the host operating system. To enable Hyper-V on your computer, follow these steps:

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



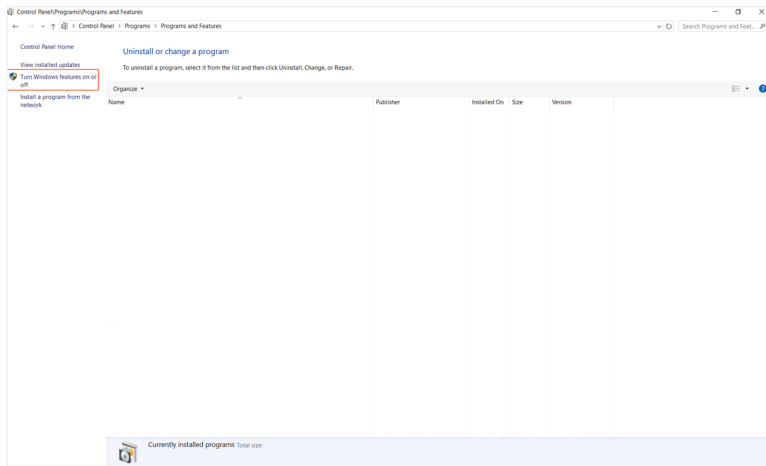
Control panel

3. Select **Control Panel > Programs and Features**.



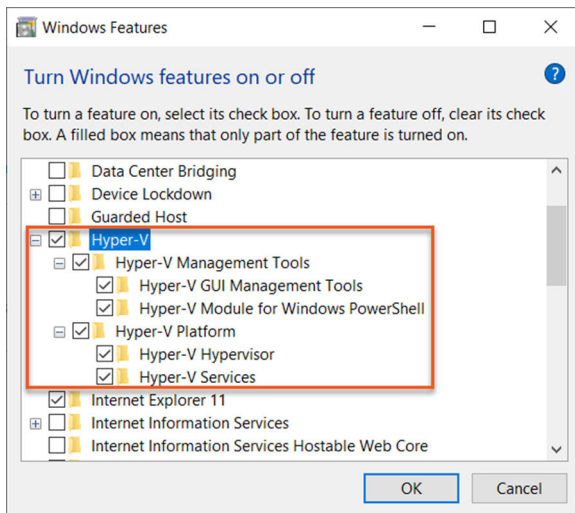
Programs and Features dialog

4. Select **Turn Windows Features on or off**.



Turn Windows features on or off dialog

5. Select **Hyper-V** and its subfeatures.



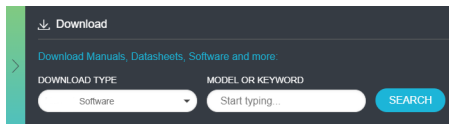
Enabling Hyper-V in the Windows Features dialog box

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

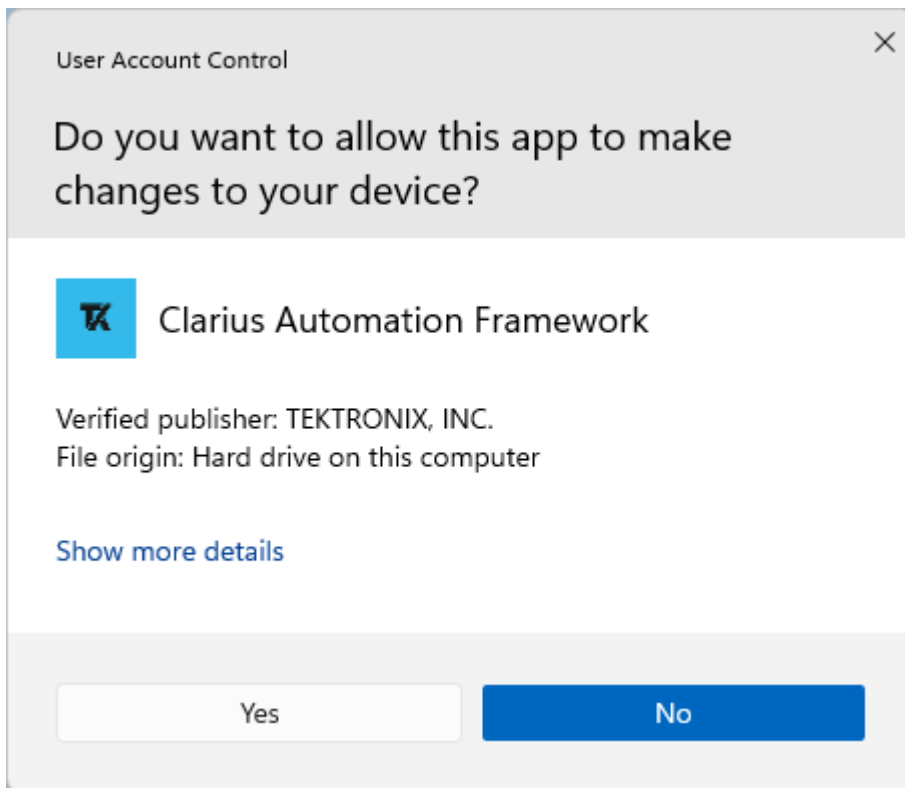
Install Clarius automation framework

To install Clarius automation framework on the target system, follow the steps:

1. Go to [tek.com](https://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**.

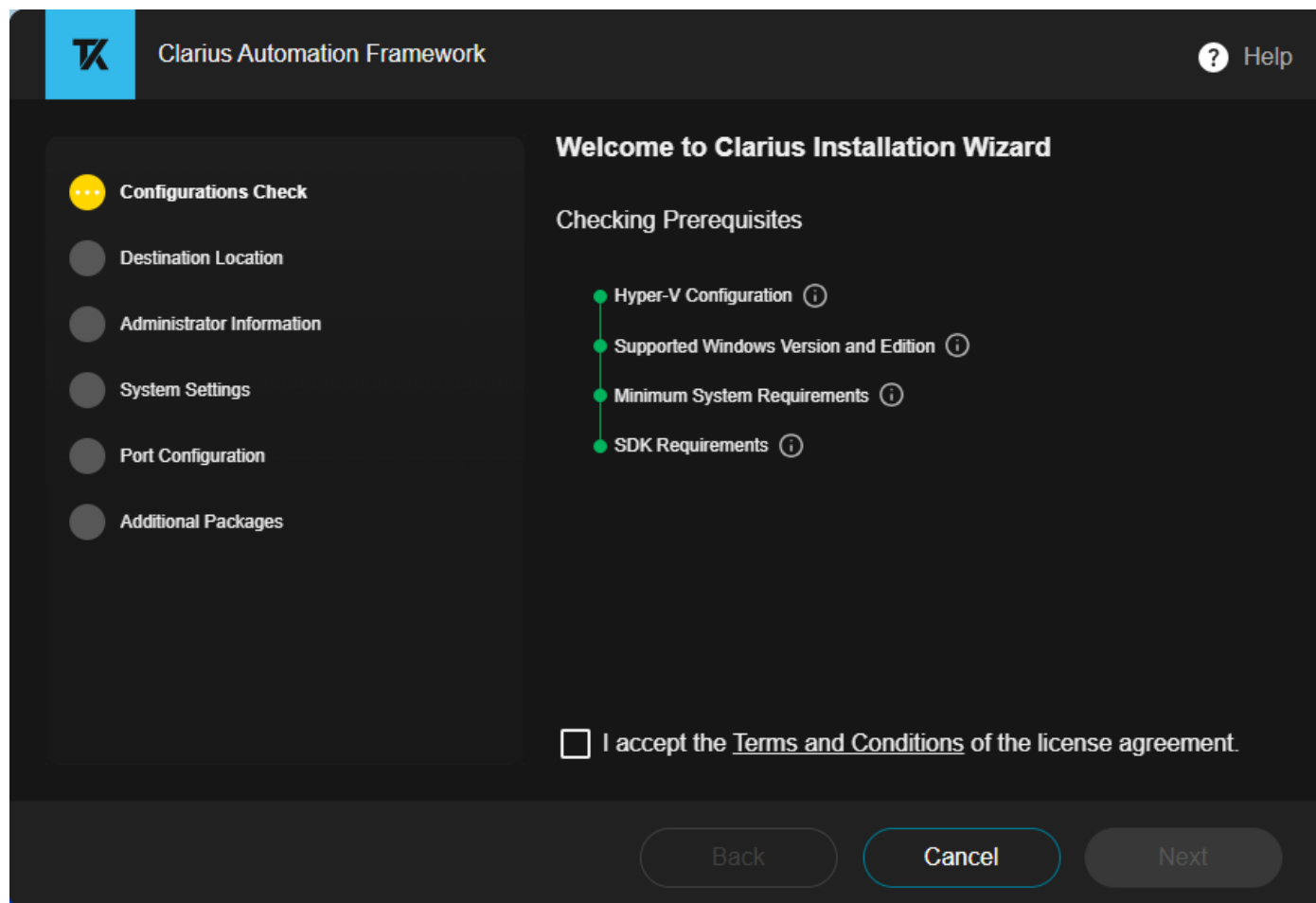


3. Select the compatible version of Clarius automation framework and follow the instructions to download the software. Copy the installer package (.zip) to the target system (A PC/Laptop/Computer where the Clarius automation framework and application will be installed) and extract the file.
 - Check the application Release Notes for version compatibility details of the Clarius automation framework and its supported application(s).
 - 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.



Clarius user account control dialog

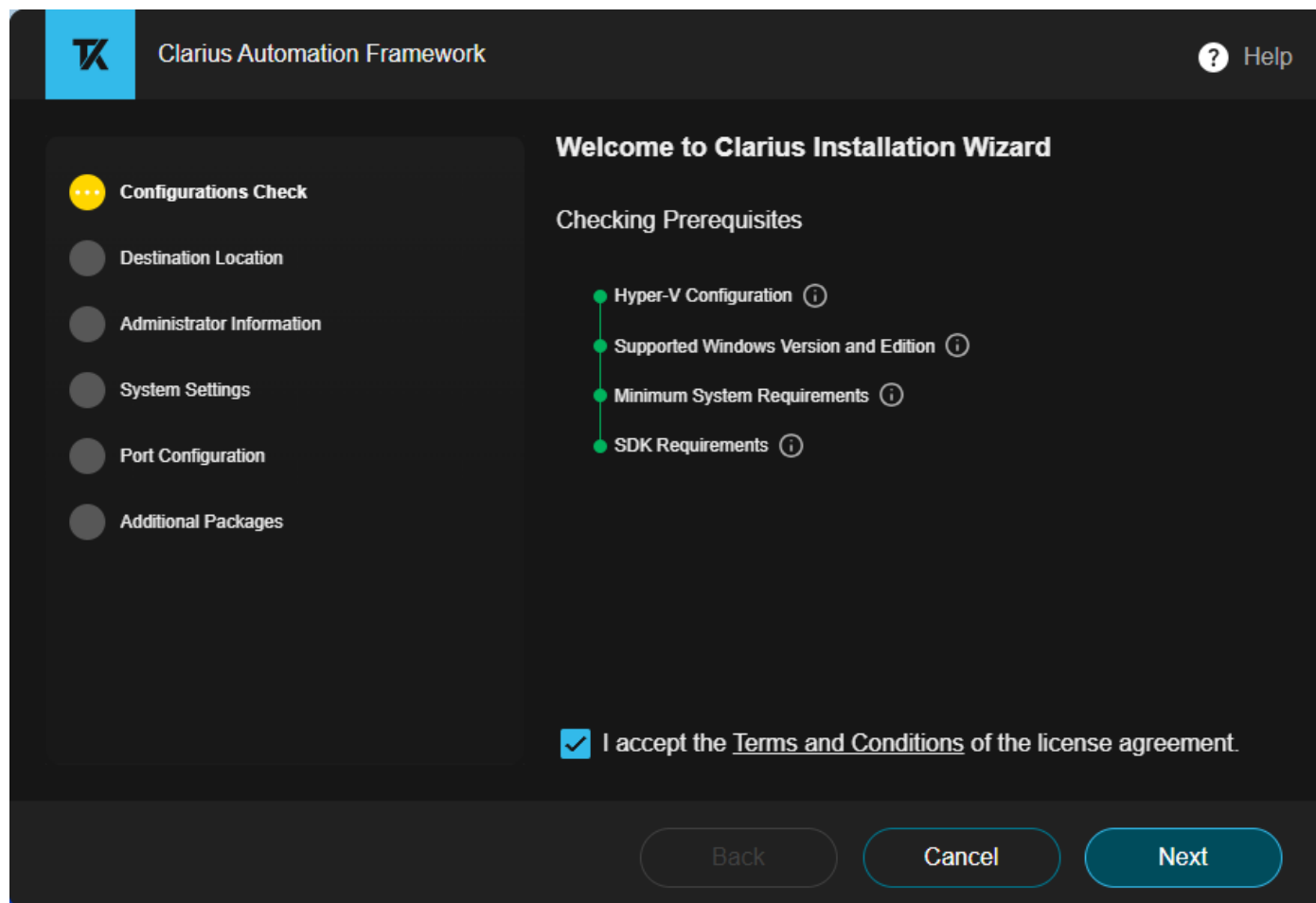
5. Wait until the prerequisites check is complete.



Clarius prerequisites progress

NOTE: The installation will not proceed if any prerequisite checks are unsuccessful.

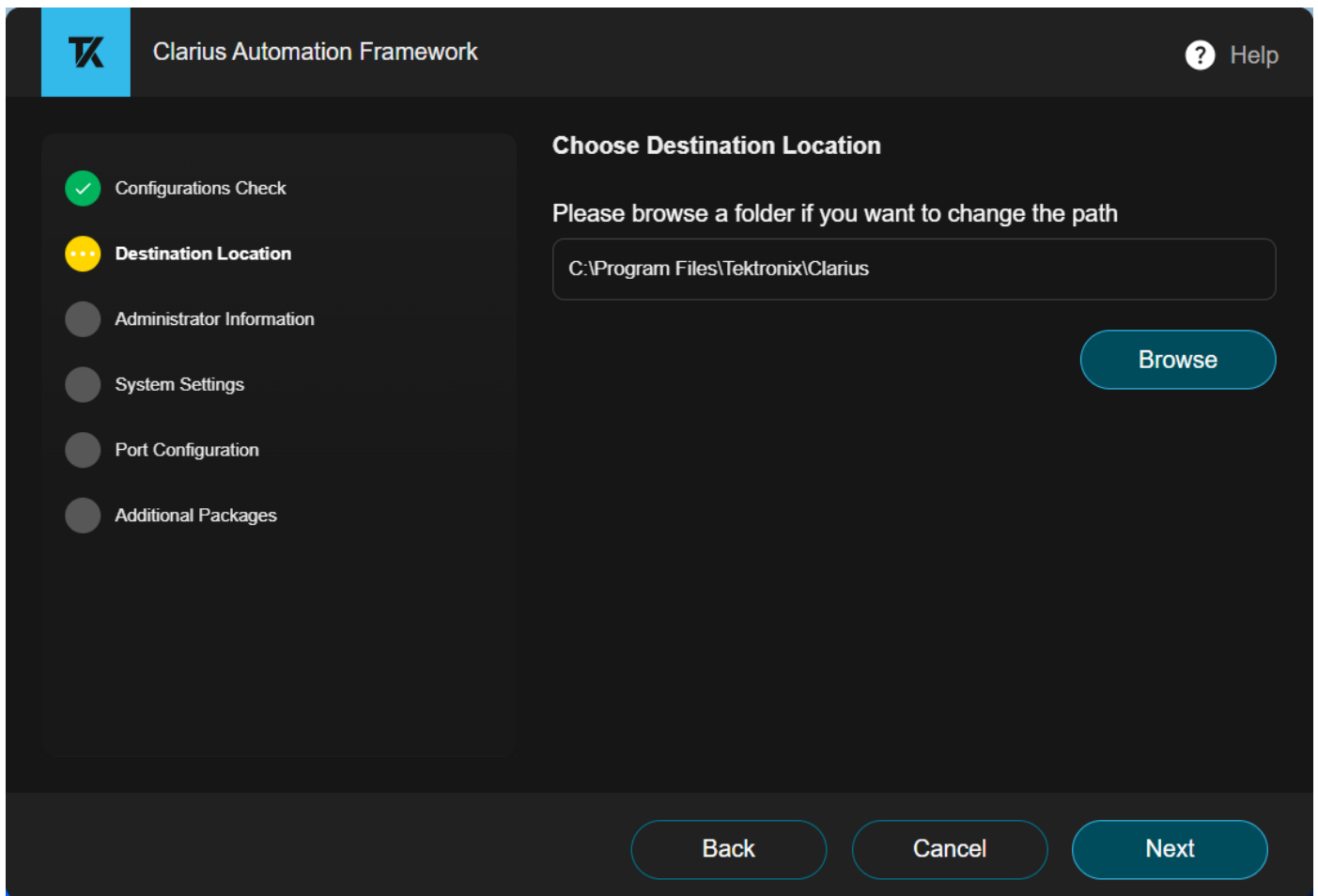
- After the successful completion of the prerequisite checks, accept the terms of the license agreement, and click **Next**.



Clarius installer setup

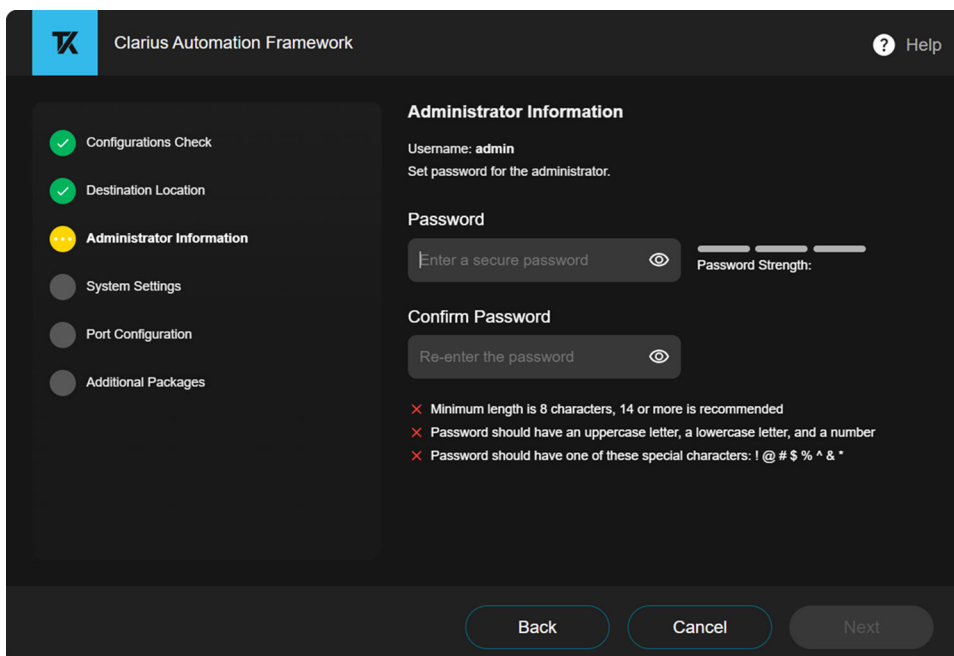
7. Click **Browse**, select the path to install, and click **Next**. The default path is C:\Program Files\Tektronix\Clarius\.

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



Clarius install path

8. Set a password for the Clarius automation framework that matches the criteria and click **Next**. This password will be used to log in to the Clarius automation framework.



Clarius password setting

9. Configure the system settings meeting the minimum system requirements for installing the Clarius automation framework, and click **Next**.

The screenshot shows the 'System Settings' window of the Clarius Automation Framework. The window has a dark theme. On the left is a sidebar with a list of settings: 'Configurations Check' (checked), 'Destination Location' (checked), 'Administrator Information' (checked), 'System Settings' (selected with a yellow circle), 'Port Configuration' (unchecked), and 'Additional Packages' (unchecked). The main area is titled 'System Settings' with a refresh icon. Below the title, it says 'Recommended system settings based on your system configuration. These can be changed later using Clarius command line utility. More information can be found in getting started guide.' There are three sections: 'Storage' with a value of 136 GB (range 20-272 GB), 'RAM' with a value of 16 GB (range 16-16 GB), and 'Logical CPU Cores' with a value of 2 (range 2-3). At the bottom are 'Back', 'Cancel', and 'Next' buttons.

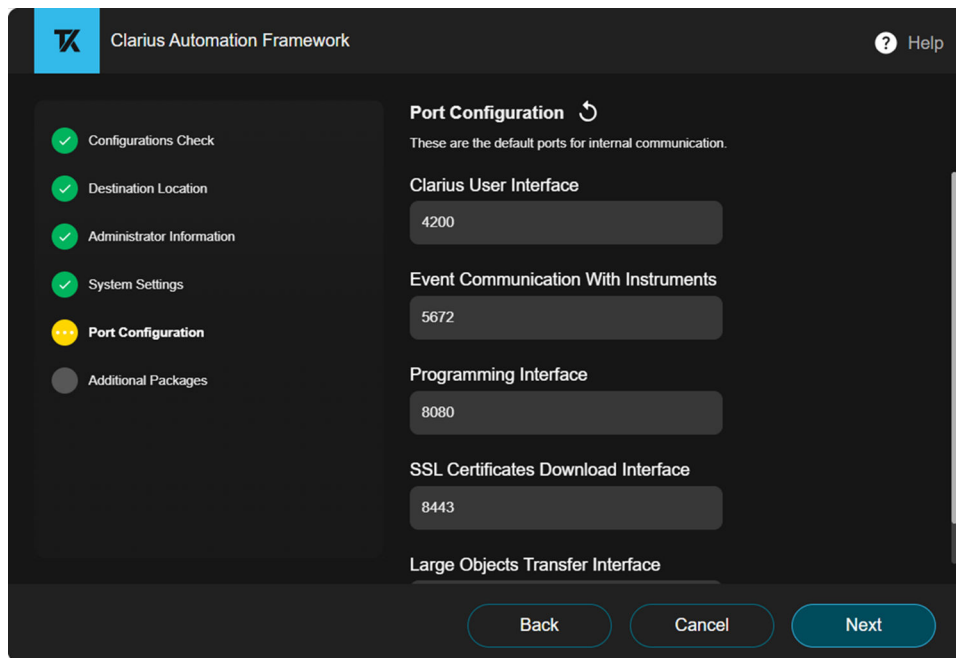
Setting	Value	Unit	Min	Max
Storage	136	GB	20 GB	272 GB
RAM	16	GB	16 GB	16 GB
Logical CPU Cores	2		2	3

Clarius system setting information

NOTE:

- For details on Disk Storage allocation, [click here](#) (on page 16).
- For details on RAM allocation, [click here](#) (on page 16).
- **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](#) (on page 10) section.

10. By default, ports are configured. Click **Next** to proceed with the installation. Refer [Enable ports to install Clarius automation framework](#) (on page 13) for more information.



Port Configuratin

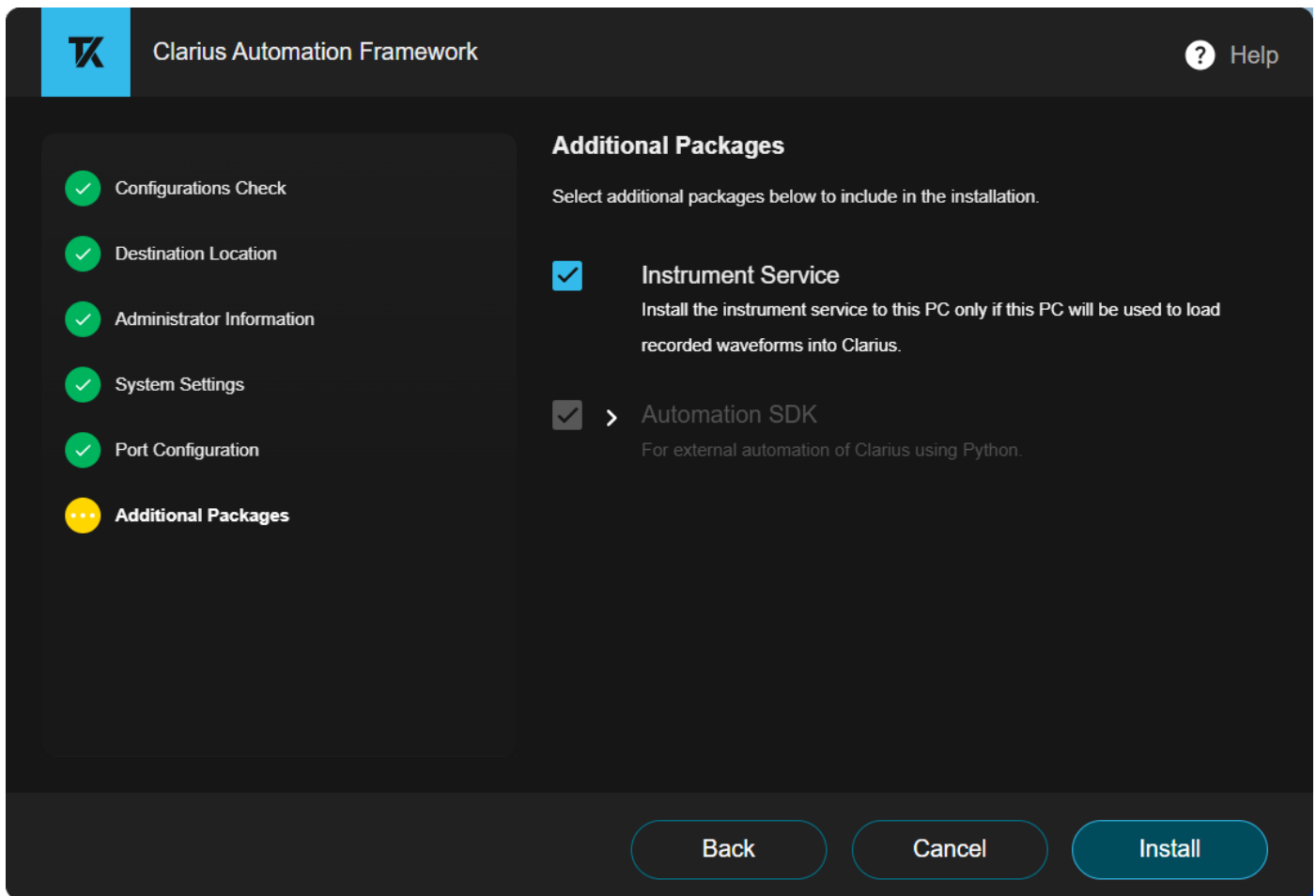
11. Installing Instrument Service and Automation SDK:

Installing Instrument Service:

Select the **Instrument Service** checkbox to install the Instrument Service. This will create a local test bench (Clarius PC) in the target system required for pre-recorded waveform analysis.

The **Automation SDK** will also be installed in an isolated Python environment when **Instrument Service** is installed.

NOTE: If you skip the instrument service installation, you can refer [Install Clarius instrument service](#) (on page 32) section for the installation steps.



Install instrument service

Installing Automation SDK:

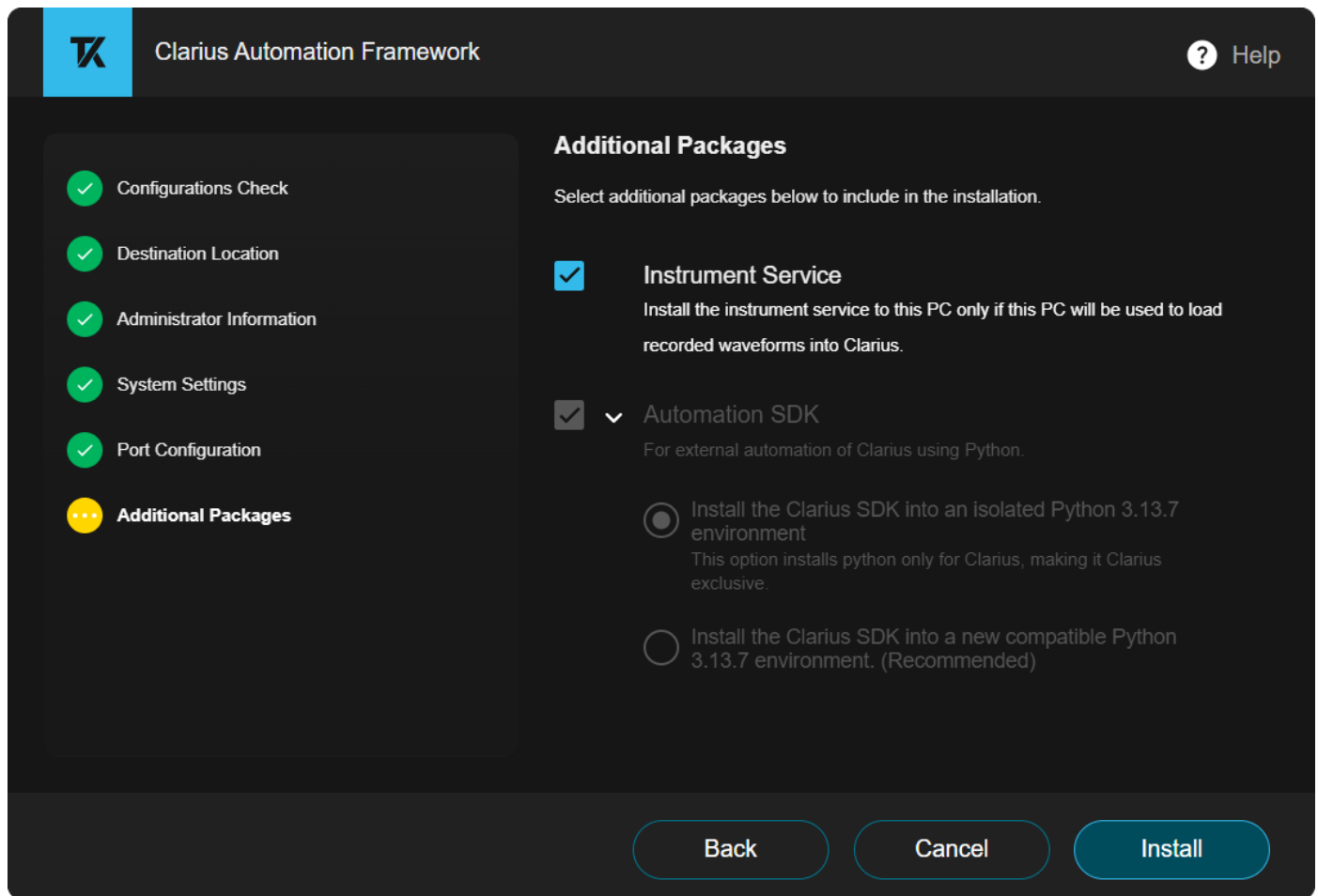
Select the **Automation SDK** checkbox to install the Clarius SDK and click **Next**.

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.

NOTE: An isolated Python environment will have its own independent set of Python packages installed in its site directories.

Select the required option and click **Next** to proceed with the installation.

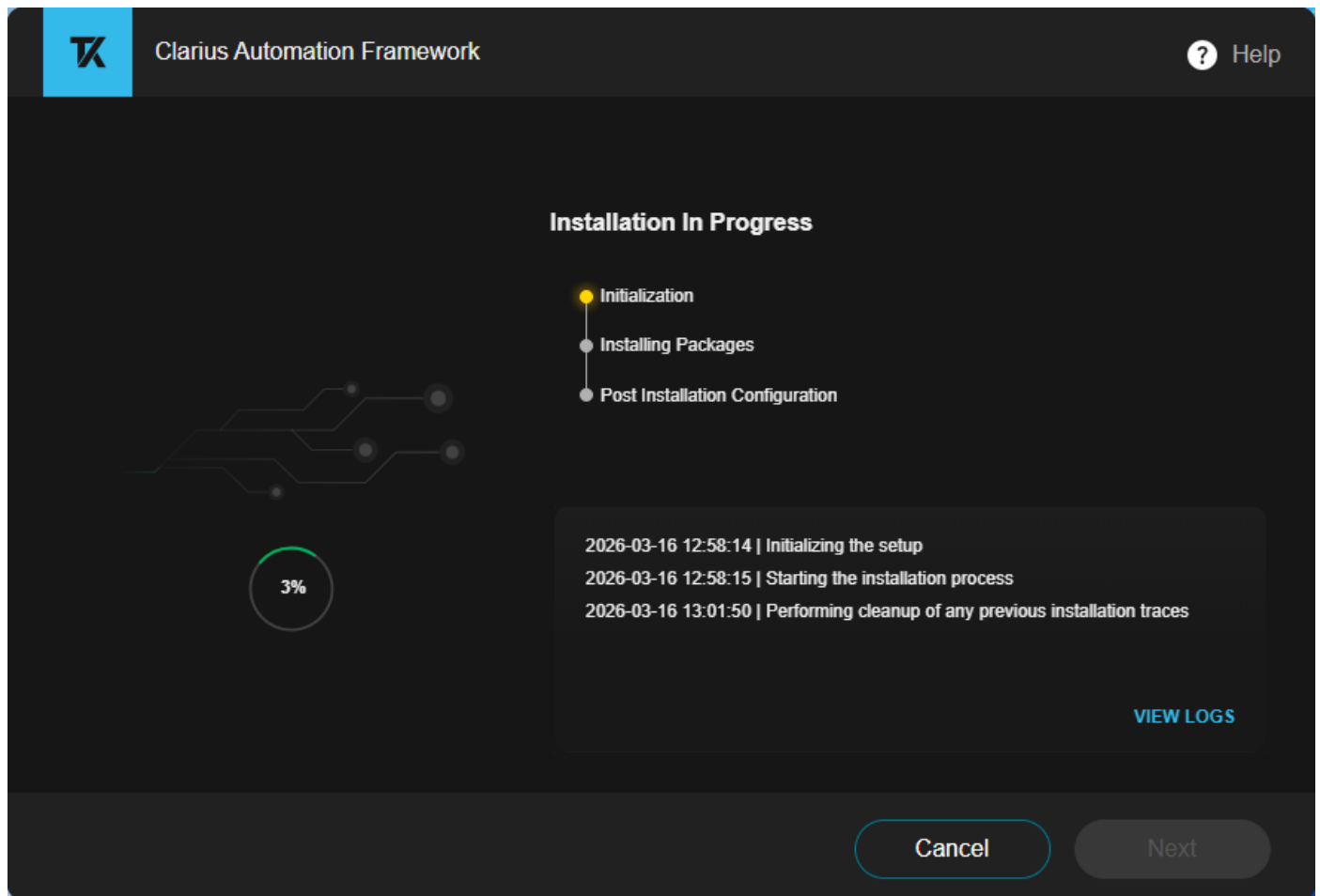


Install automation SDK

NOTE:

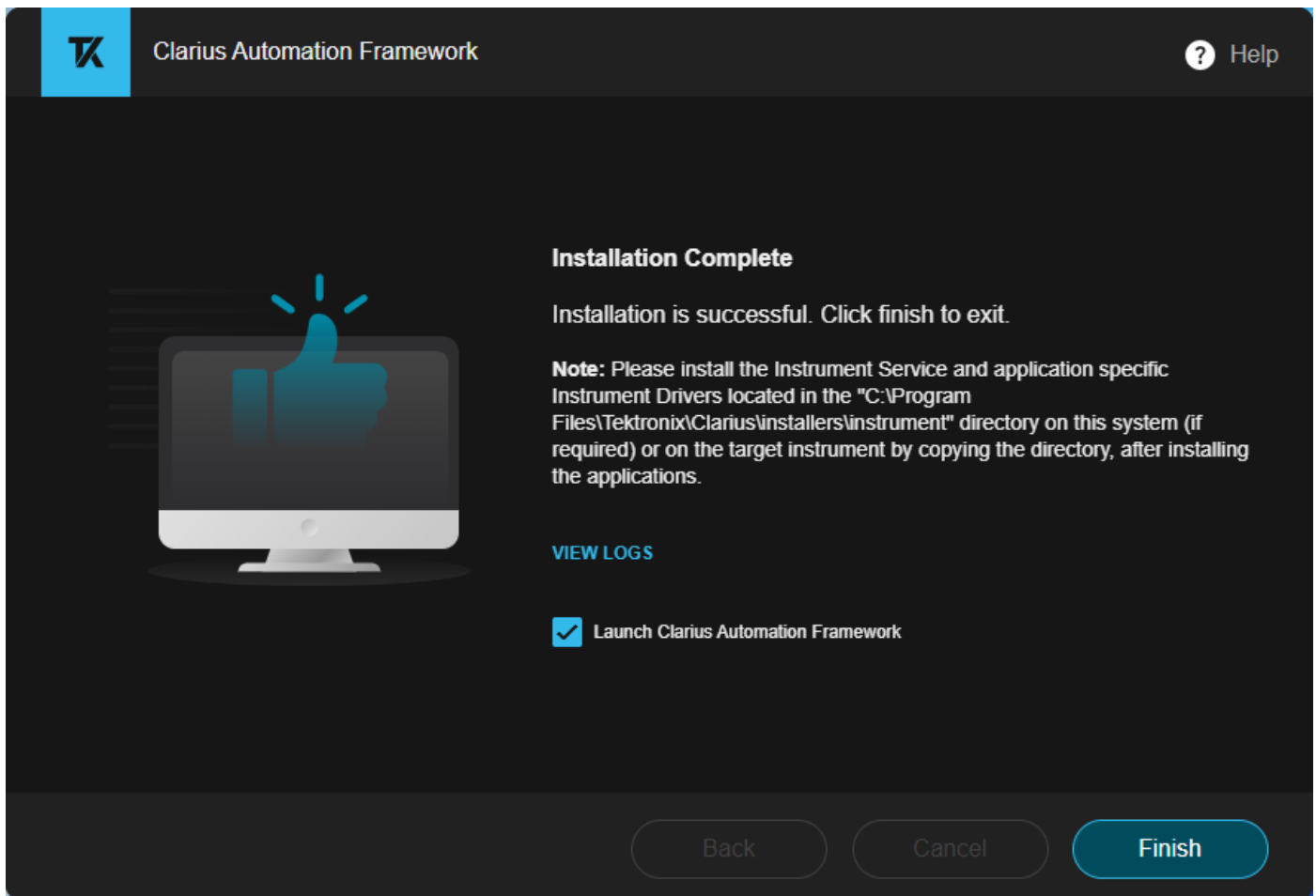
- Clarius SDK requires Python version 3.13.x.
- If you skipped the SDK installation, refer to the [Install Clarius SDK](#) (on page 61) section to install.

12. The installation begins. Please wait until the installation is complete.



Installing Clarius automation framework

13. Select **Launch Clarius** checkbox to launch the Clarius automation framework. Select **Finish** to exit setup.



Launch Clarius

NOTE:

- By default, the Clarius automation framework will be launched in the Microsoft Edge browser.
- 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.

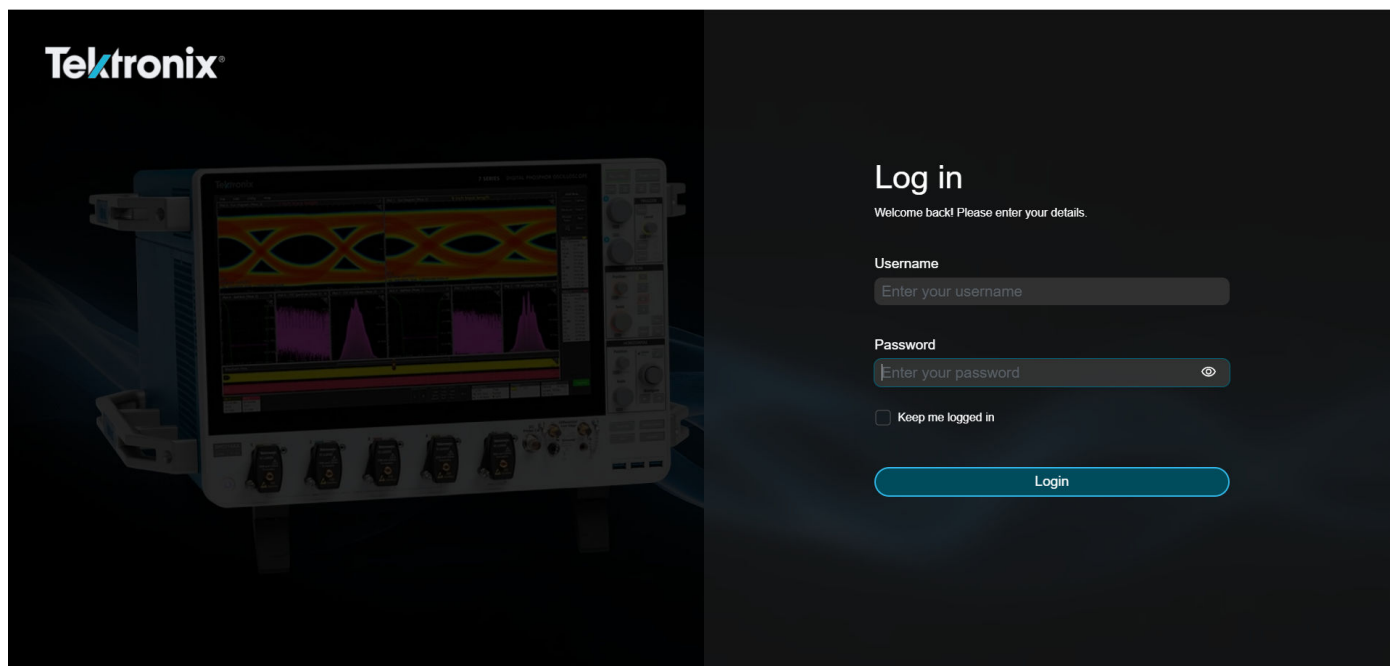
14.(Optional) Launch the Clarius automation framework from the desktop.

NOTE:

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

15. Log in to the Clarius automation framework with the following credentials:

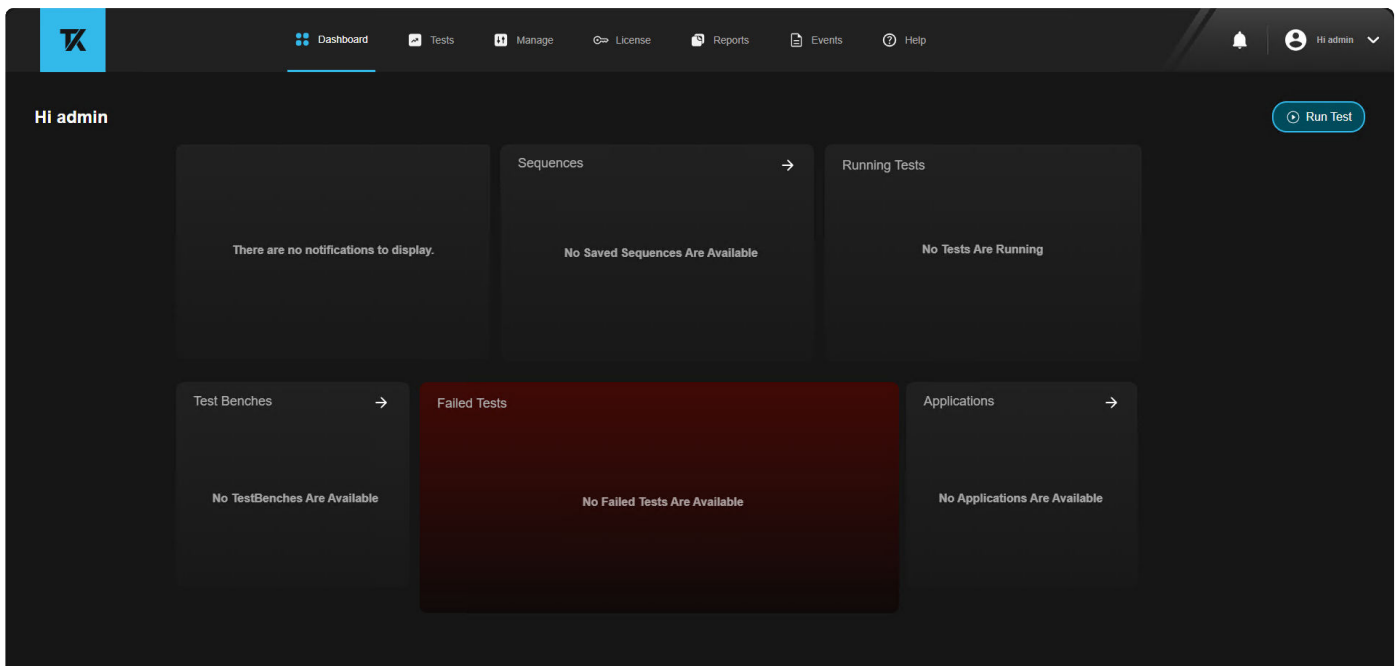
- **Username:** admin
- **Password:** Enter the user configured password set during installation.



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 will not display any data. To install the application, refer to [Install application](#) (on page 58).



Clarius homepage

Install Clarius instrument service

Clarius instrument service sends the waveforms to the Clarius measurement service for analysis. Refer to the [Network topology](#) (on page 11) diagram for more information on instrument service.

NOTE: Measurement service will be installed in the target system where Clarius automation framework is installed.

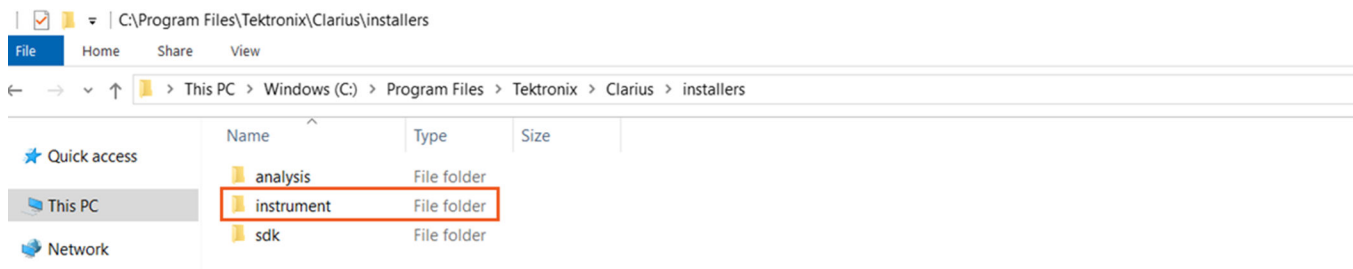
The instrument service can be installed in the following ways:

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

Follow the steps to install the Clarius instrument service on the target system:

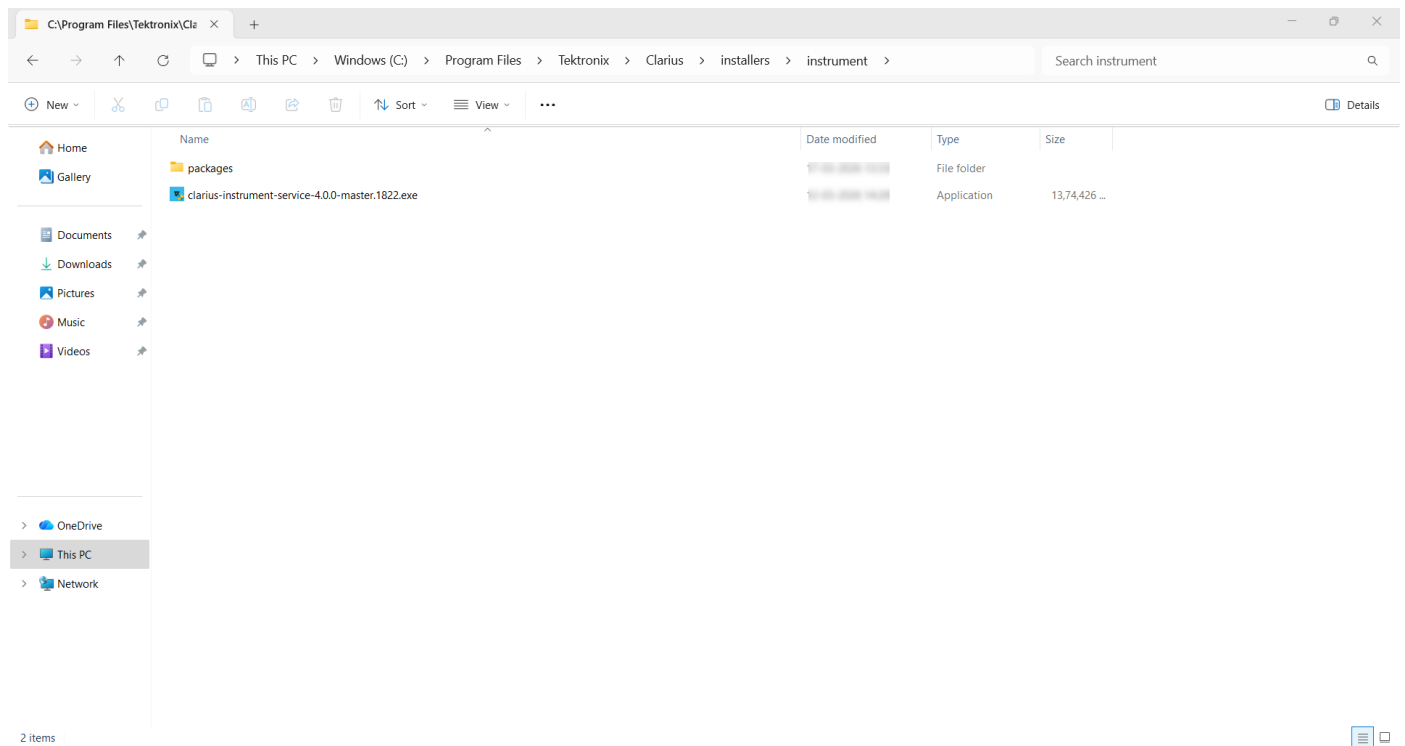
If you have skipped Clarius instrument service installation during the installation of the Clarius automation framework, follow these steps to install in the target system.

1. Navigate to the **installers** folder located in the Clarius automation framework installed path in the target system. The default path is `C:\Program Files\Tektronix\Clarius\installers`.



Instrument folder

2. Open the **Instrument folder** and follow the steps to complete the installation.

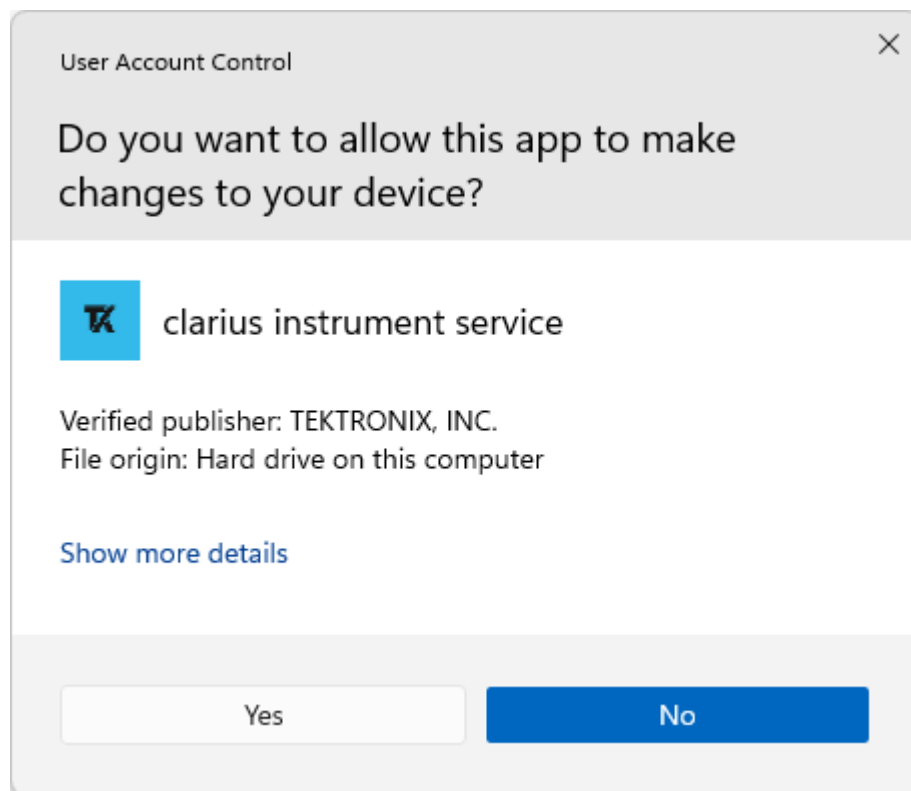


Clarius instrument service executable file in the target system

NOTE:

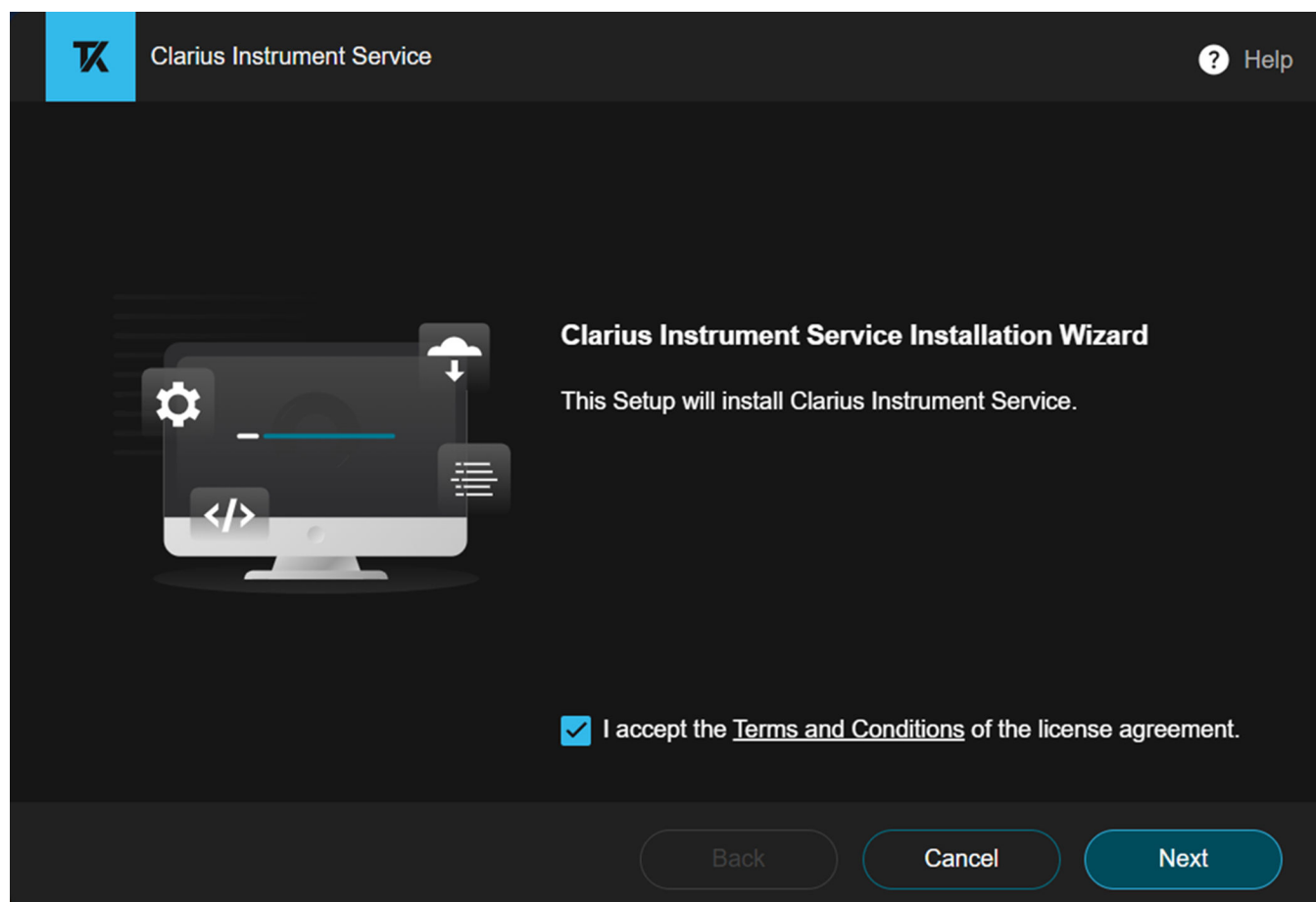
- You can install the Clarius Instrument Service on any drive, as long as the Clarius Automation Framework is already installed on the same drive.
- The instrument service folder must be copied to the target oscilloscope only after installing the required applications so that the relevant application-specific instrument service installers are available.

3. Double-click Clarius instrument service installer (**clarius-instrument-service-`<<version>>`.exe**) from the copied **Instrument folder** in the oscilloscope and click **Yes** on the User Account Control.



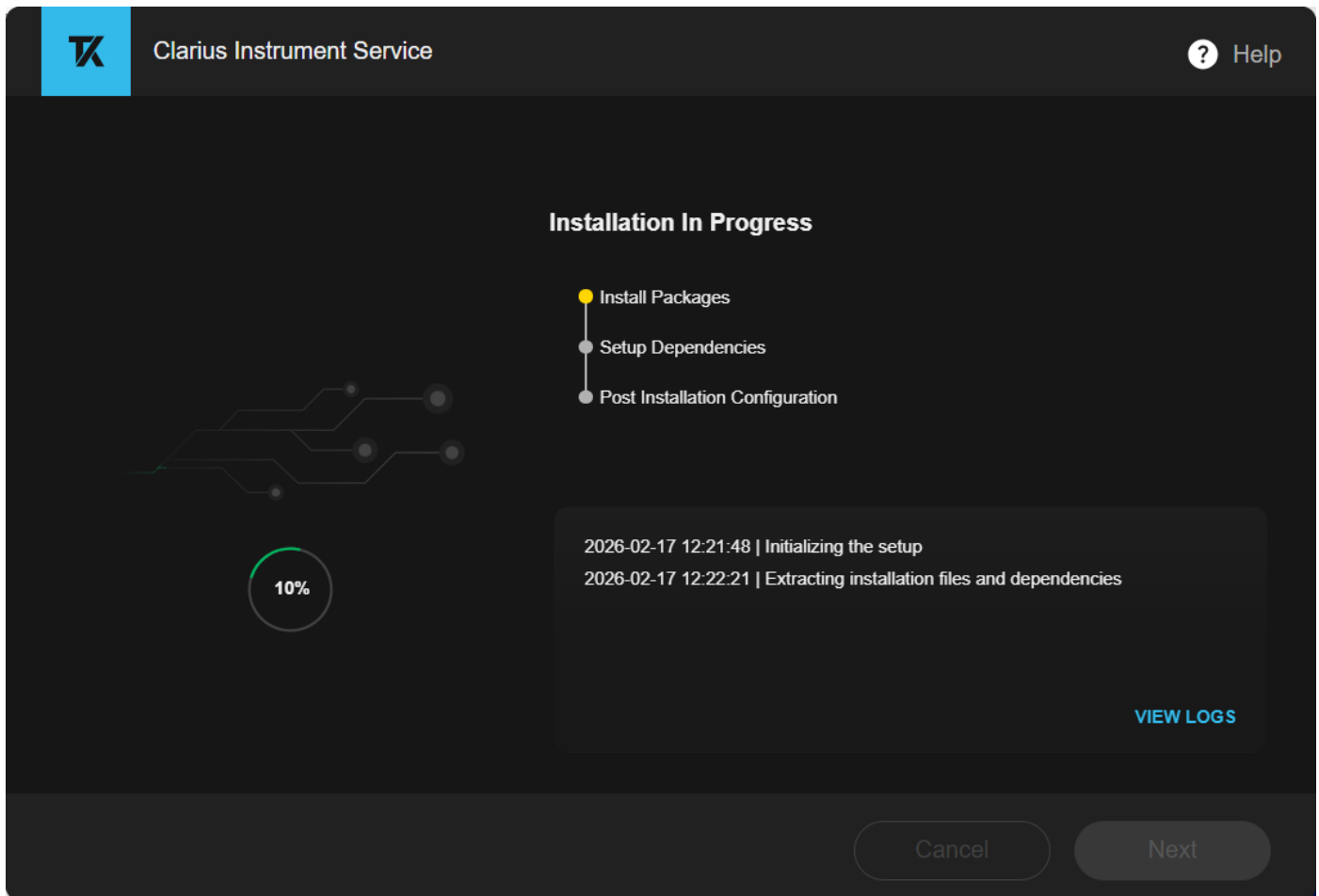
Clarius instrument service user account control dialog

4. After the successful completion of the prerequisite checks, accept the terms of the license agreement, and click **Next**.



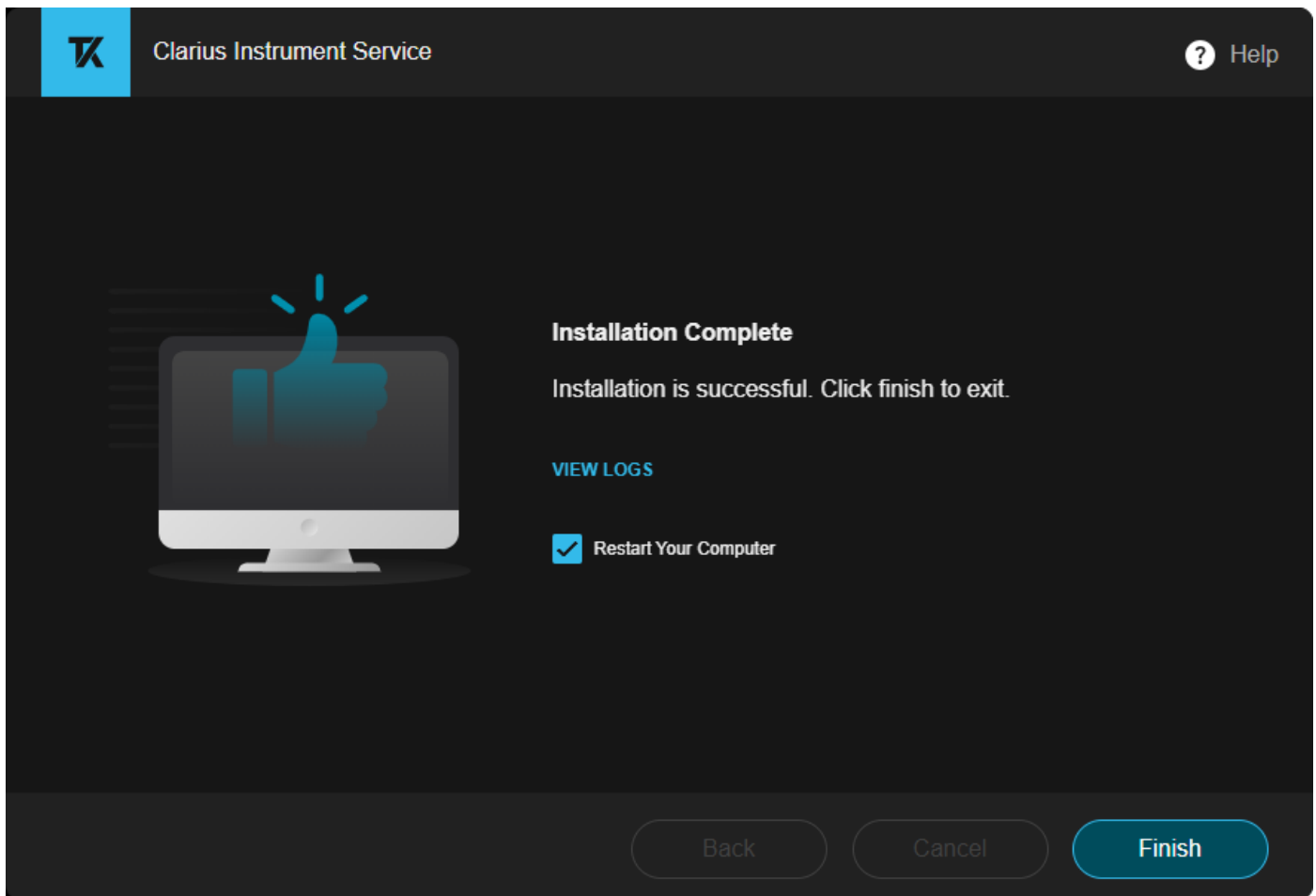
Clarius instrument service prerequisites progress

5. The Clarius instrument service installation begins. Please wait until the tasks and configuration process are complete.



Installing Clarius instrument service

6. The Clarius instrument service installation is successful. Select the **Yes** checkbox to launch the Clarius instrument service and click **Finish**.

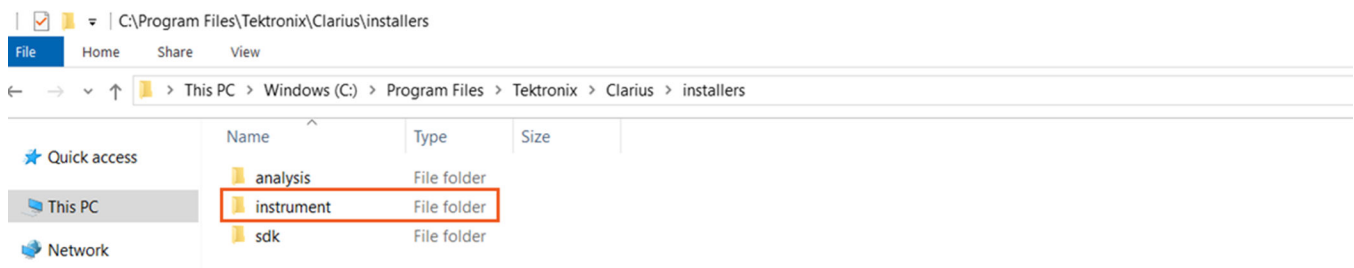


Launch Clarius instrument service

7. On successful installation of the Clarius instrument service, the **InstrumentServiceStart.bat** and **InstrumentServiceStop.bat** icons will be created on the desktop.

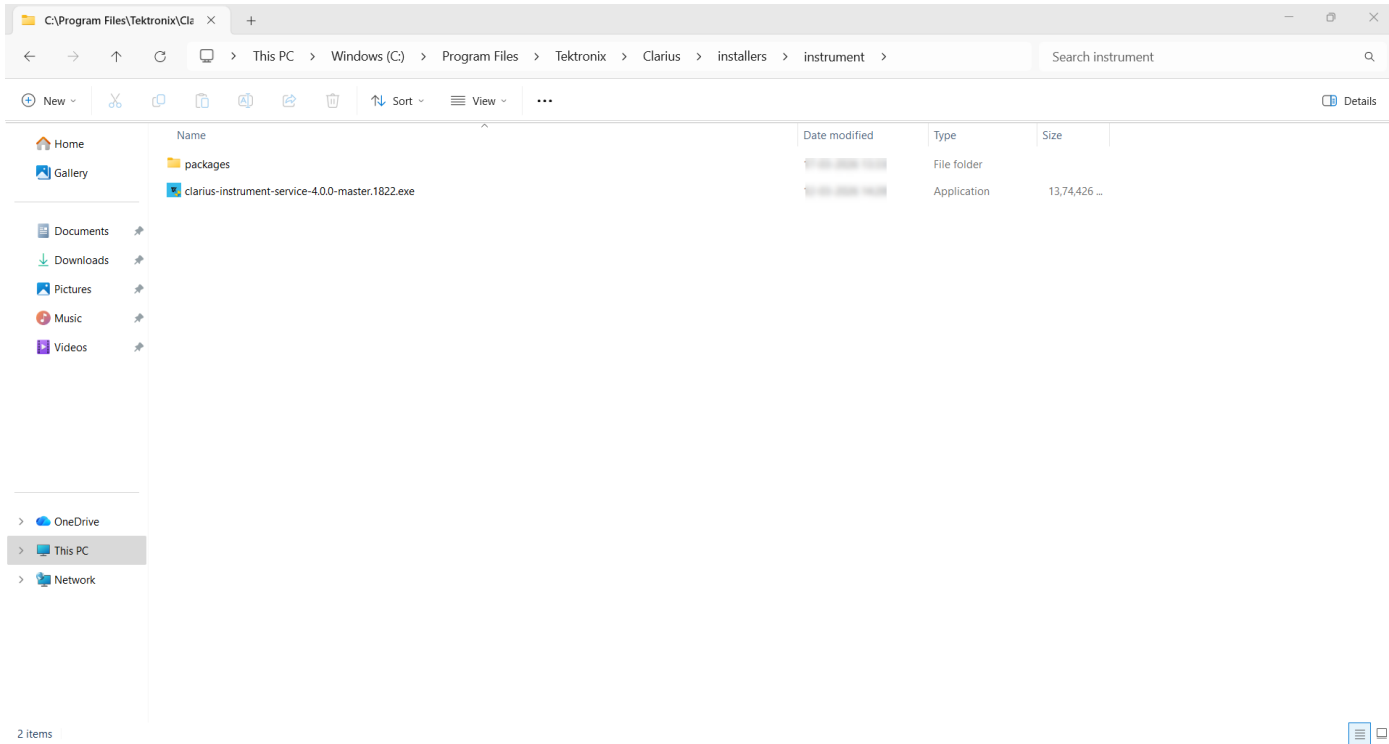
Follow the steps to install the Clarius instrument service in the oscilloscope:

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 the **Instrument folder**, copy it, and paste it into the Downloads folder or any other preferred location on the oscilloscope.



Instrument folder

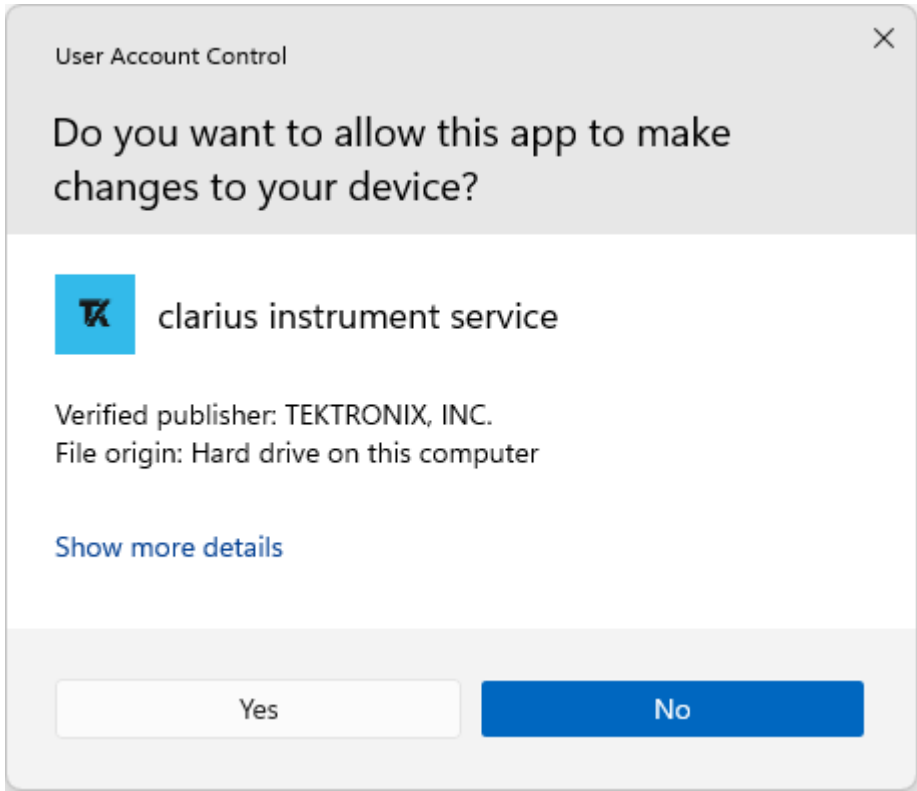
3. Open the **Instrument folder** and follow the steps to complete the installation.



Clarius instrument service executable file in the oscilloscope

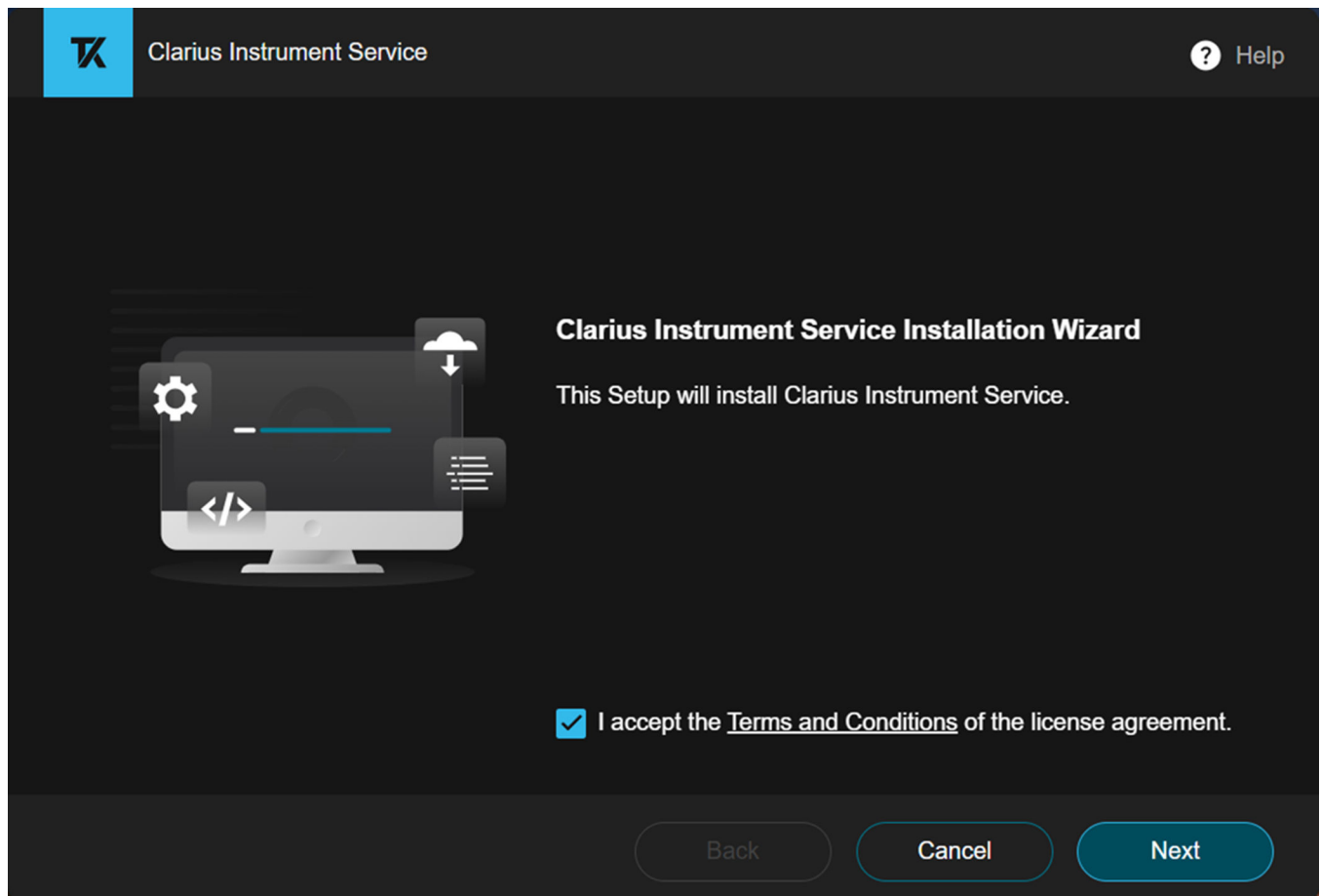
NOTE: By default, the Clarius Instrument Service installs to the **C:** drive on the oscilloscope.

4. Double-click Clarius instrument service installer (**clarius-instrument-service-<<version>>.exe**) from the copied **Instrument folder** in the oscilloscope and click **Yes** on the User Account Control.



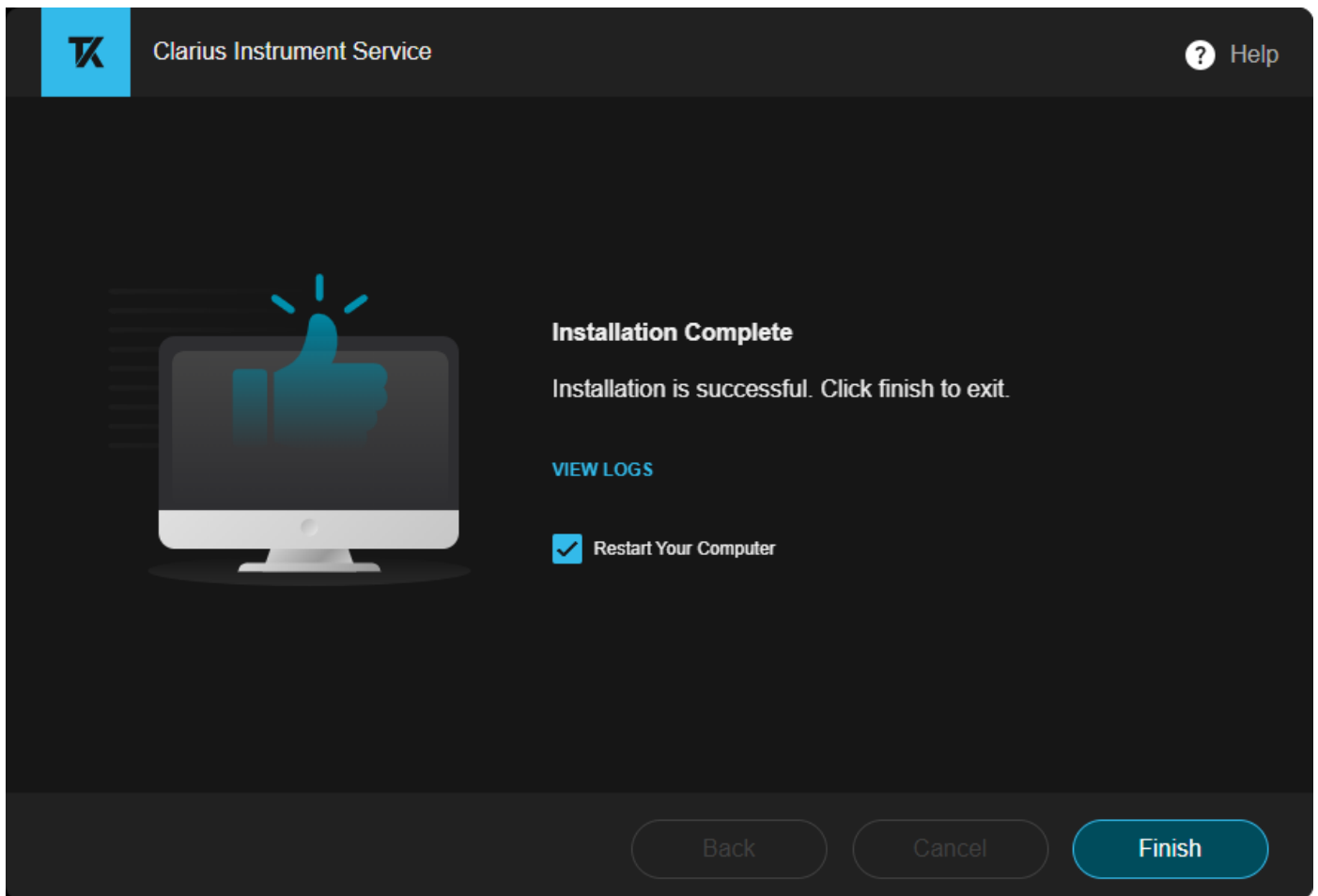
Clarius instrument service user account control dialog

5. After the successful completion of the prerequisite checks, accept the terms of the license agreement, and click **Next**.



Clarius instrument service prerequisites progress

6. The Clarius instrument service installation is successful. Select the **Yes** checkbox to launch the Clarius instrument service and click **Finish**.



Launch Clarius instrument service

7. On successful installation of the Clarius instrument service, the **InstrumentServiceStart.bat** and **InstrumentServiceStop.bat** icons will be created on the desktop.

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 3.13.x will be installed in an isolated environment and Clarius SDK will be installed in that environment.

NOTE: If the Clarius Instrument Service is uninstalled, the application-specific Instrument Service must be reinstalled. The installer for the application-specific Instrument Service is available at the Clarius installation path: `/clarius/installer/{application_specific}`

Upgrading Clarius automation framework

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

- 1. [Upgrade Clarius automation framework](#) (on page 40)
- 2. [Upgrade Clarius instrument service](#) (on page 50)

Upgrade Clarius automation framework

This section provides instructions for upgrading Clarius automation framework.

Clarius automation framework version upgrade table

Version	Upgrade Support	Upgradeable version(s)
4.0.0	Yes	▪ 3.1.0 ▪ 3.0.0

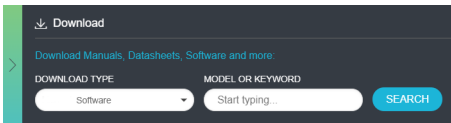
Prerequisite:

- 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 71).

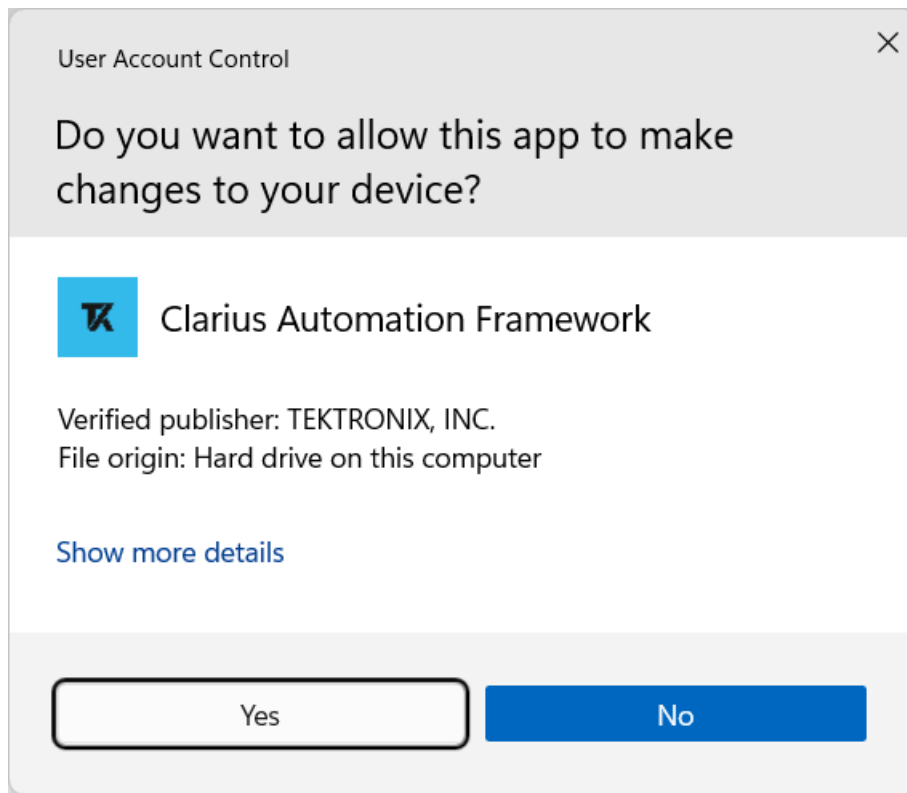
NOTE: Ensure that the PC does not shut down or restart during the upgrade process. If the PC is restarted or shut down, the upgrade will fail, and the Clarius automation framework will not roll back to the previous version.

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

- 1. Go to [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**.

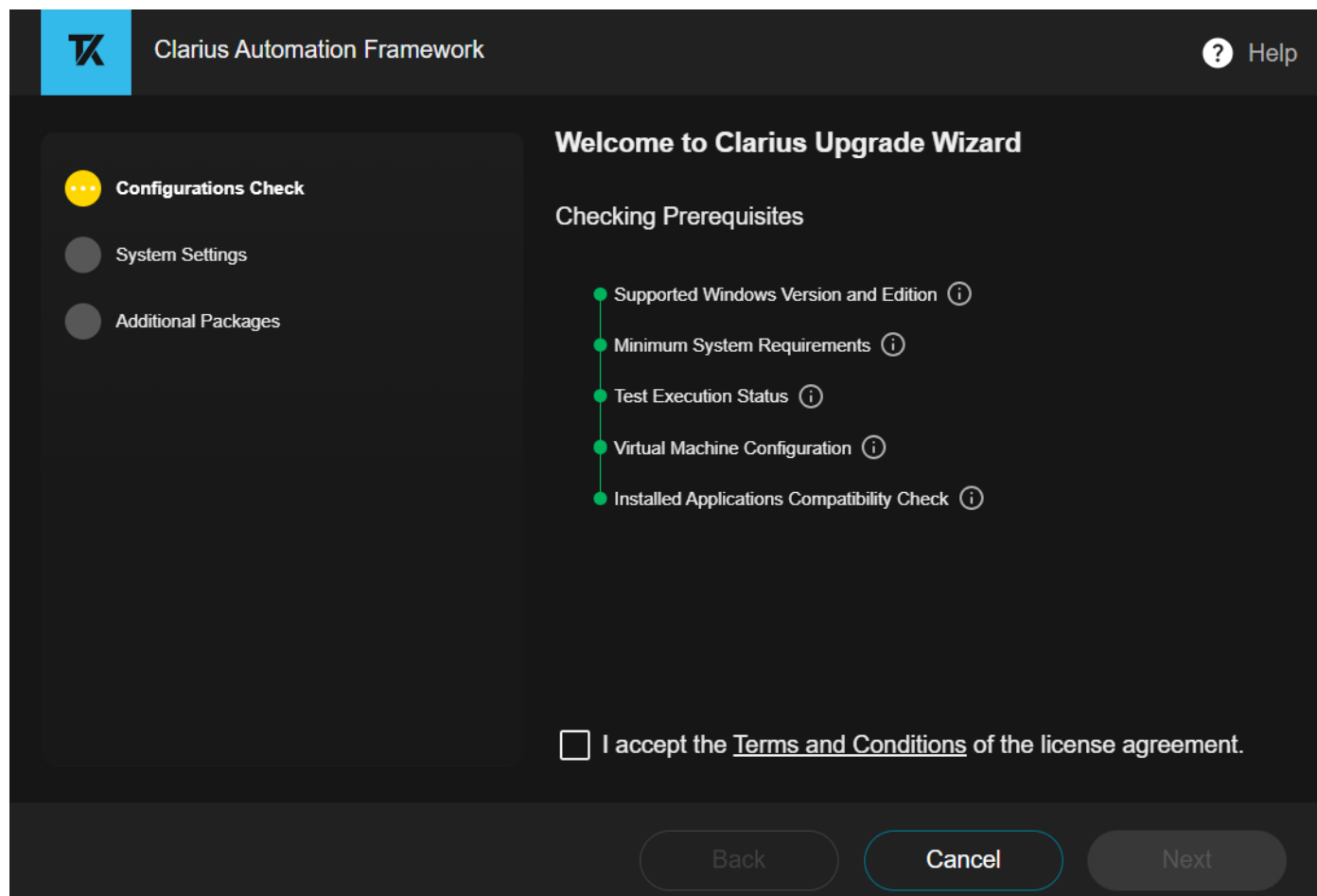


- 3. Select the compatible version of Clarius automation framework and follow the instructions to download the software. Copy the install package (.zip) to the target install system and extract the zip file.
- 4. Double-click the installer and click **Yes** on the User Account Control.



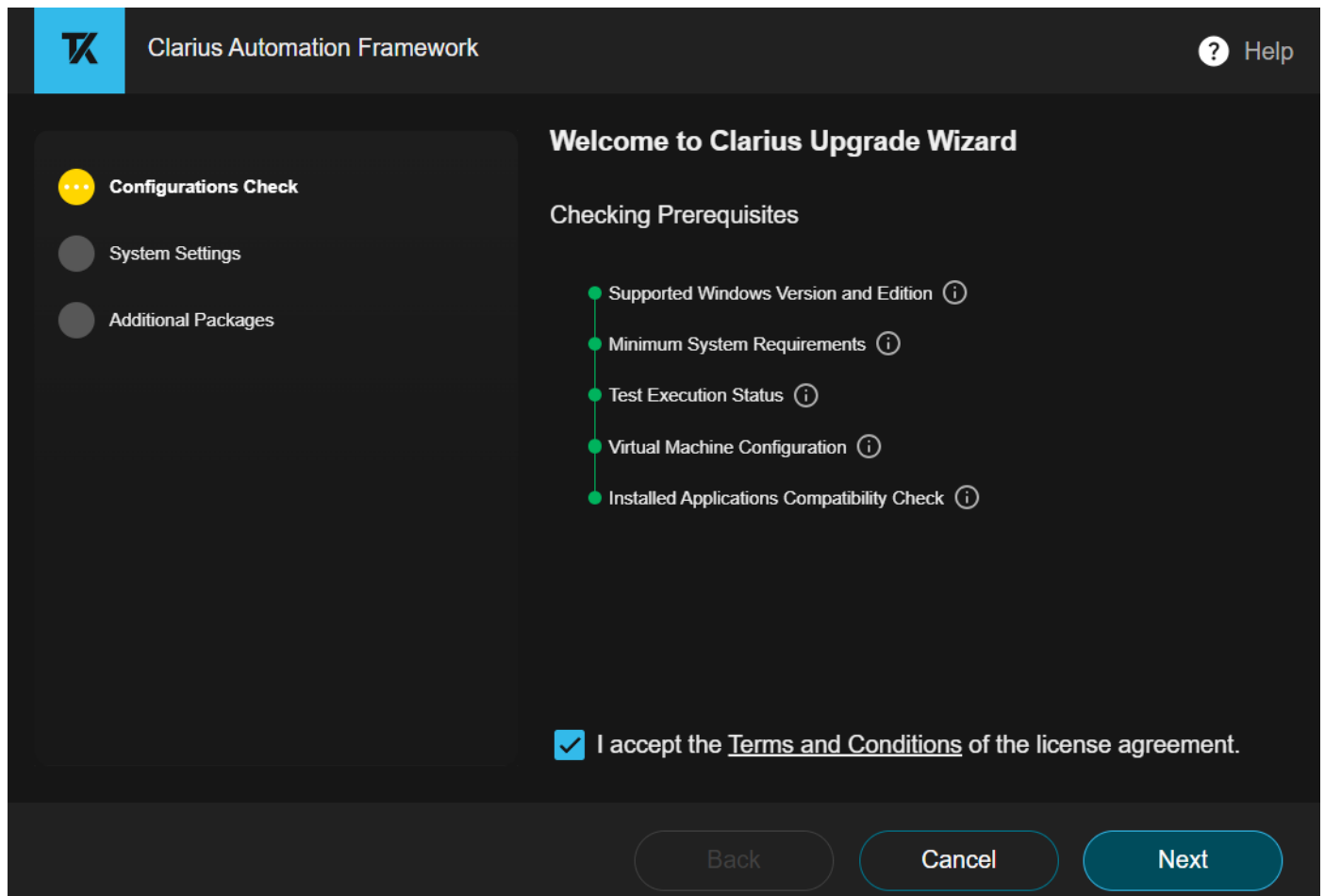
Clarius user account control

5. Wait until the prerequisites check is complete.



Upgrade Clarius prerequisites progress

6. After the successful completion of the prerequisite checks, accept the terms of the license agreement, and click **Next**.



Clarius installer setup

7. Configure the system settings meeting the minimum system requirements for installing the Clarius automation framework, and click **Next**.

The screenshot shows the 'System Settings' window of the Clarius Automation Framework. The window has a dark theme. On the left, there is a sidebar with three items: 'Configurations Check' (with a green checkmark icon), 'System Settings' (with a yellow circle icon and three dots), and 'Additional Packages' (with a grey circle icon). The main area is titled 'System Settings' with a refresh icon. Below the title, there is a text block: 'Recommended system settings based on your system configuration. These can be changed later using Clarius command line utility. More information can be found in getting started guide.' There are three settings sections: 'Storage' with a value of 157 GB and a maximum of 382 GB; 'RAM' with a value of 16 GB, a minimum of 16 GB, and a maximum of 16 GB; and 'Logical CPU Cores' with a value of 2, a minimum of 2, and a maximum of 3. At the bottom, there are three buttons: 'Back', 'Cancel', and 'Next'.

Clarius Automation Framework

System Settings

Recommended system settings based on your system configuration. These can be changed later using Clarius command line utility. More information can be found in getting started guide.

Storage

157 GB Max: 382 GB

RAM

16 GB Min: 16 GB Max: 16 GB

Logical CPU Cores

2 Min: 2 Max: 3

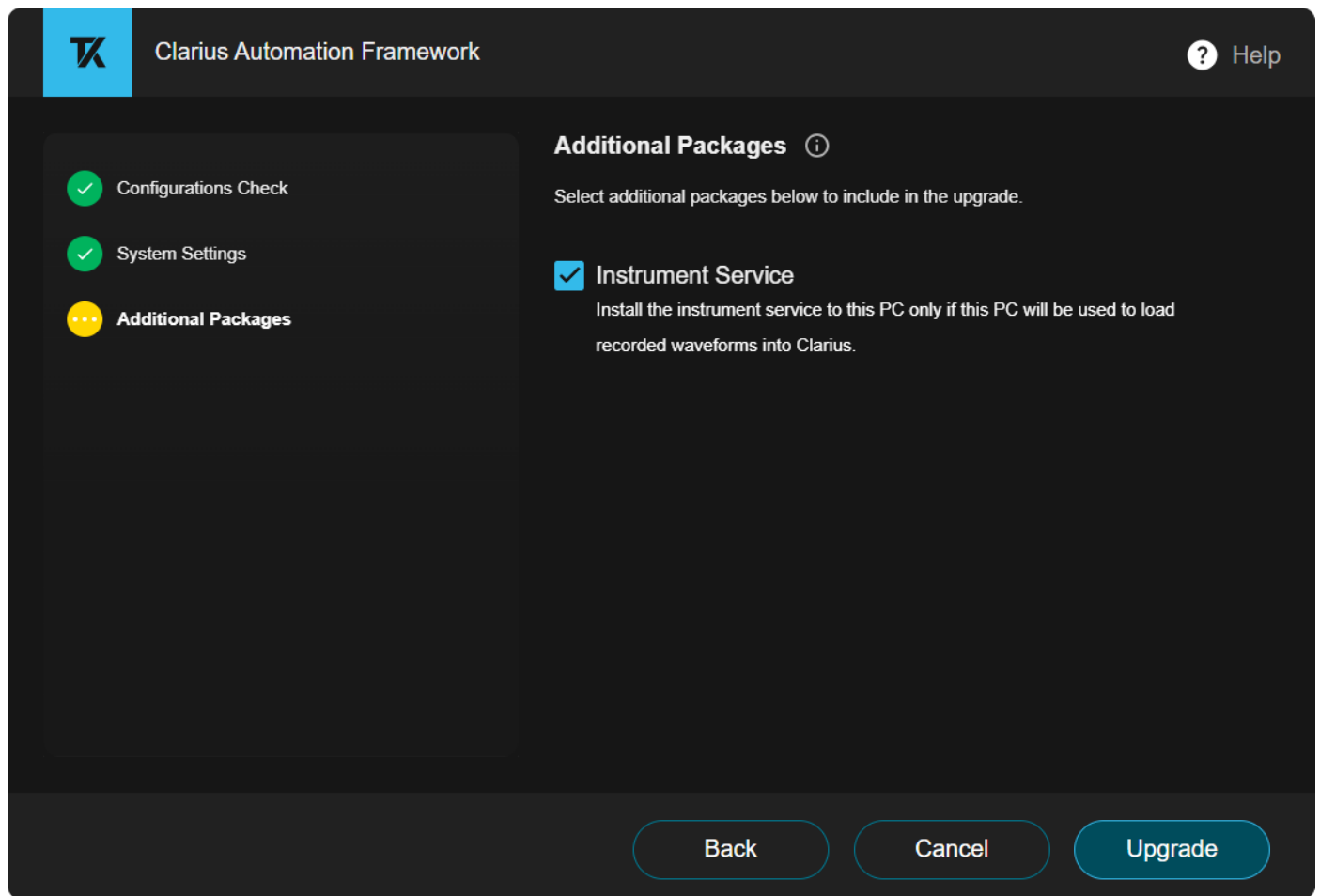
Back Cancel Next

Clarius user information

8. Select the **Instrument Service** checkbox to upgrade the Instrument Service. This will create a local test bench (Clarius PC) in the target system required for pre-recorded waveform analysis.

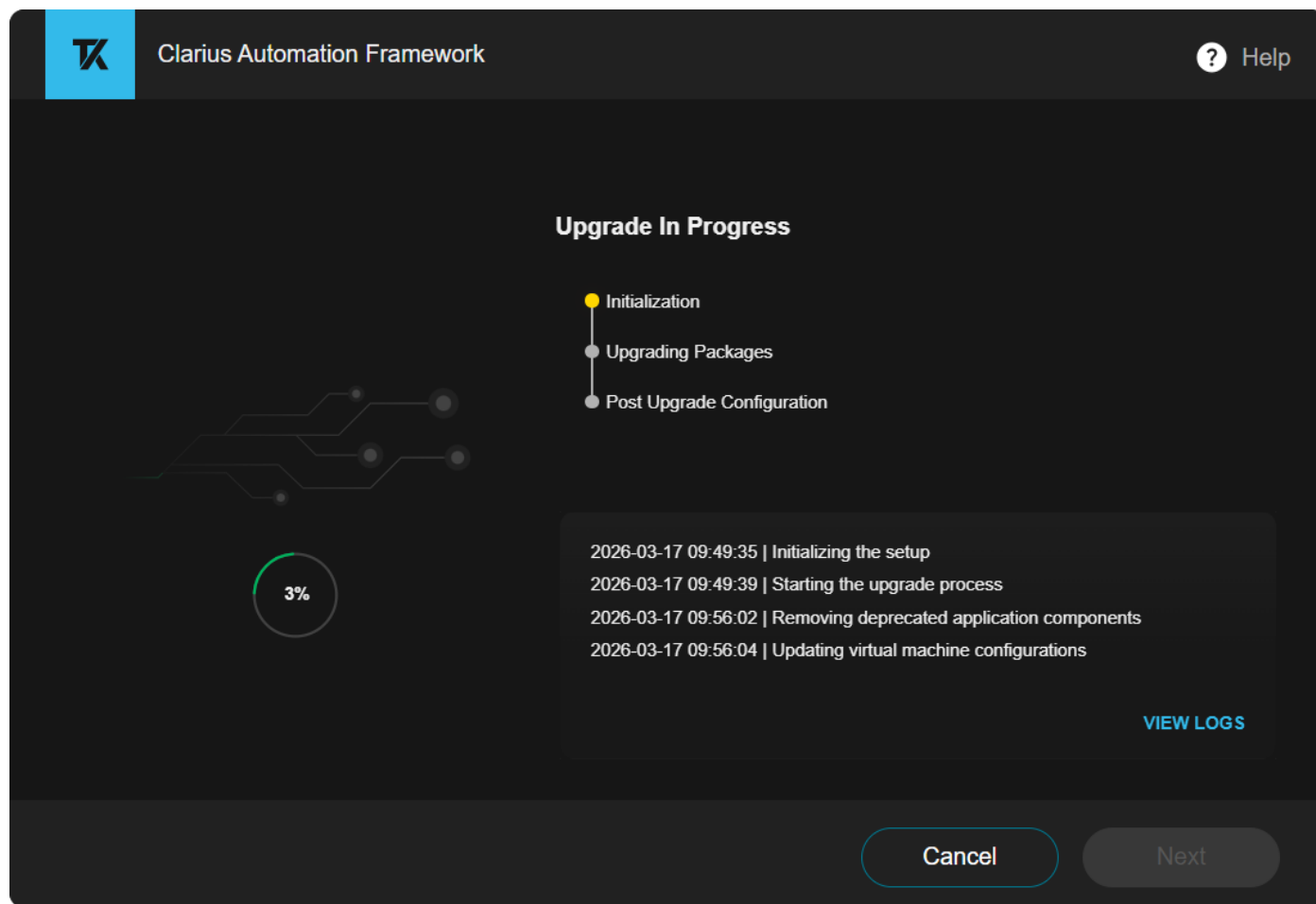
The **Automation SDK** will also be installed in an isolated Python environment when Instrument Service is installed.

NOTE: If you skip the instrument service installation, you can refer [Upgrade Clarius instrument service](#) (on page 50) section for the installation steps.



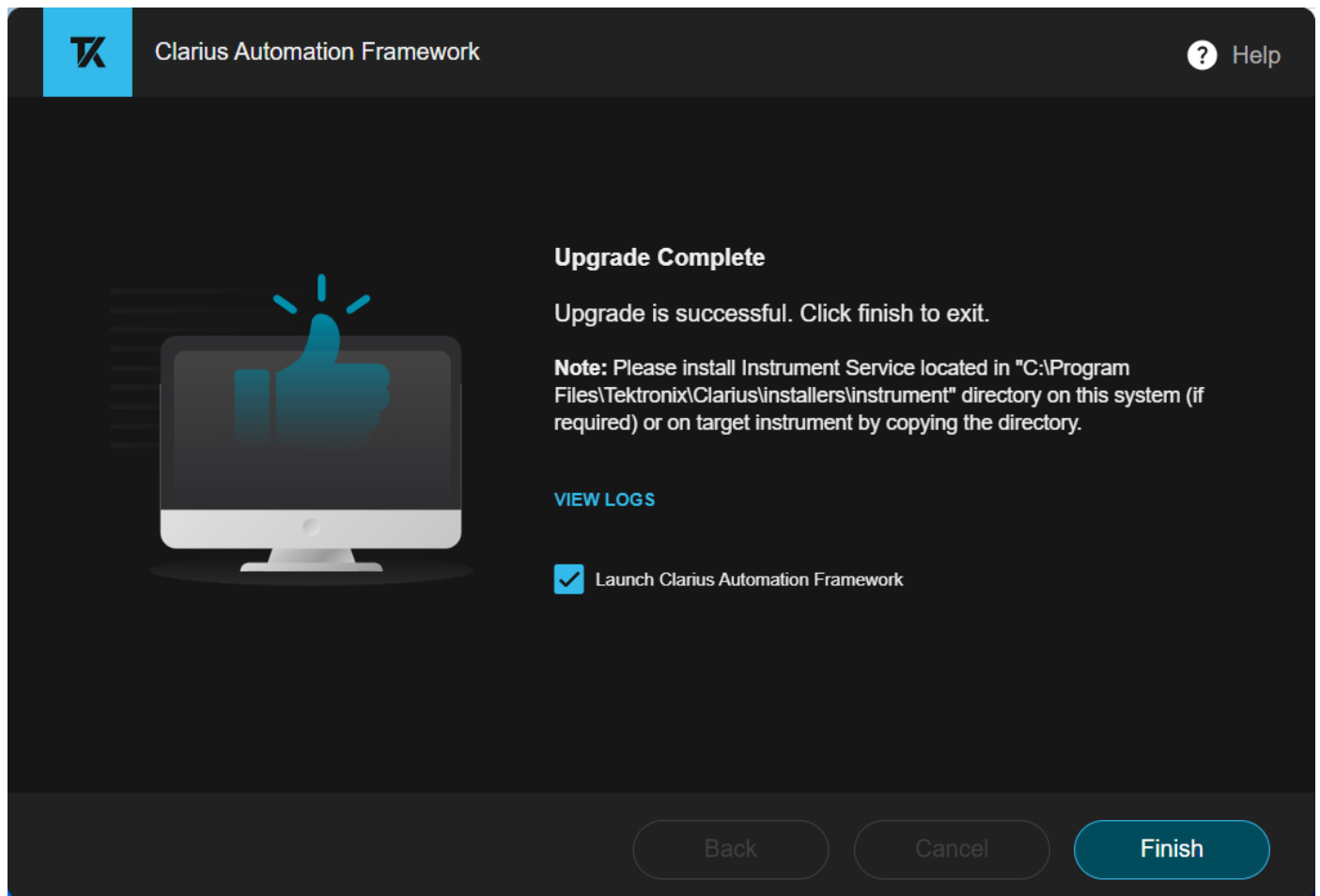
Upgrade instrument service

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



Upgrade Clarius

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 Microsoft Edge browser.

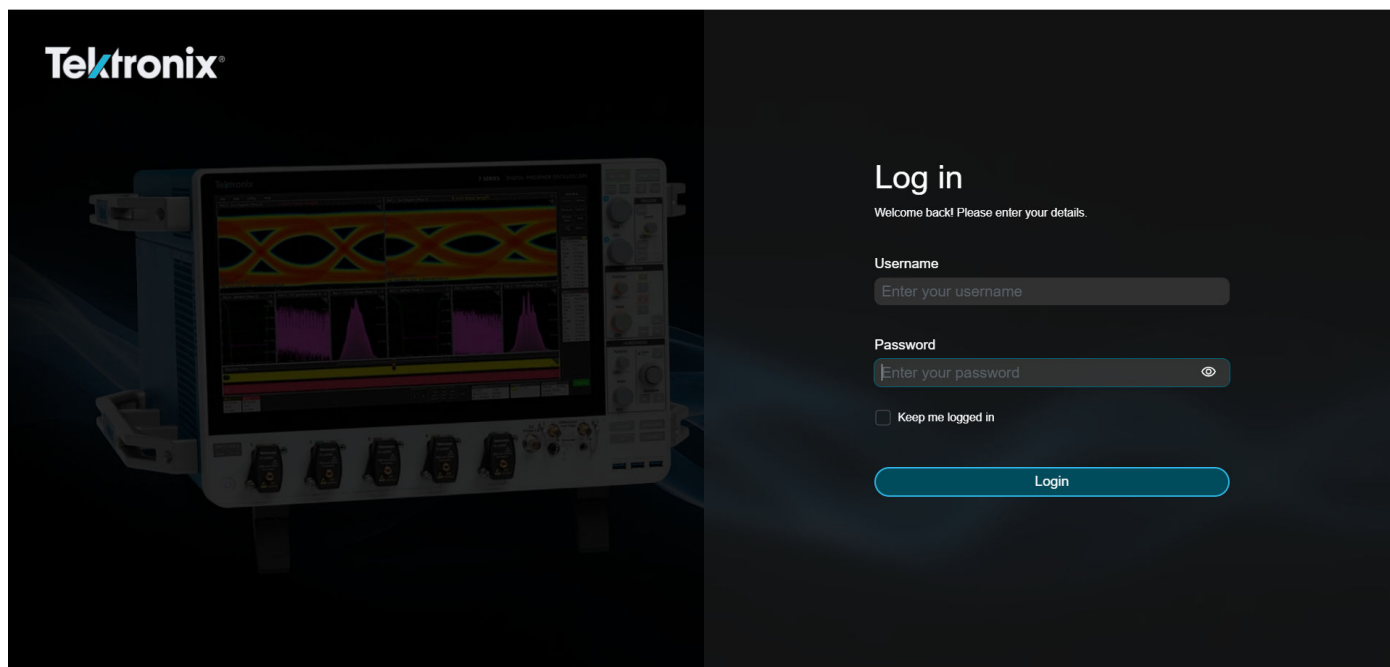


Launch Clarius

NOTE: Clear browser cache before launching the Upgrade Clarius automation framework UI.

11. Log in to the Clarius automation framework with the following credentials.

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



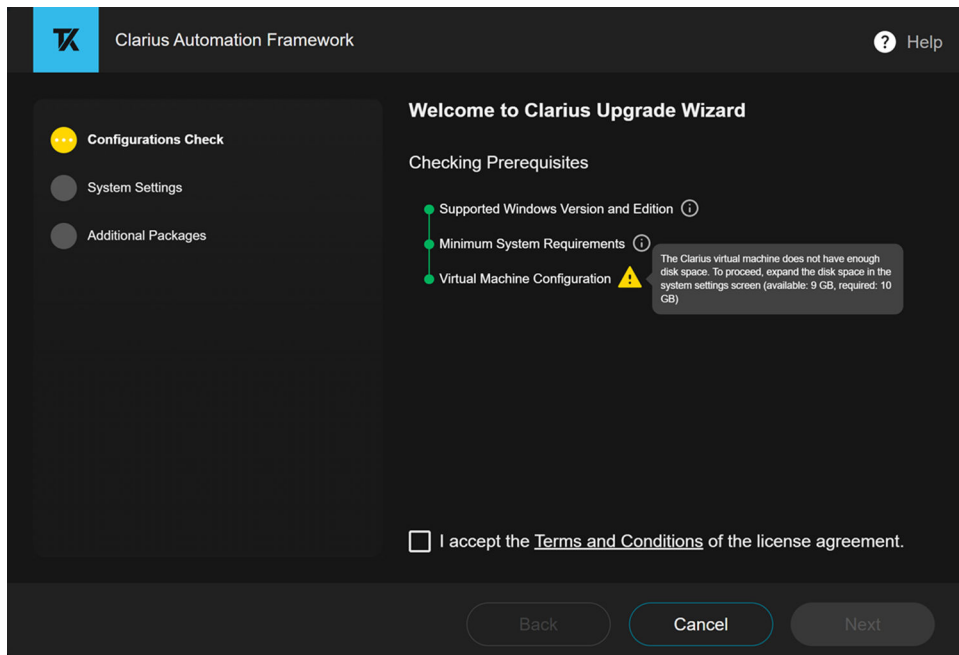
Clarius login page

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

Clarius Automation Framework Upgrade Failure – Insufficient Disk Storage

If the upgrade aborts due to insufficient disk storage in the Clarius virtual machine, you can expand the storage:

- **Use the installer interface:** Open the installer, navigate to **System Settings**, and increase the allocated disk space.
- **Use the command prompt:** Run the below commands to expand the disk storage.



System Settings ↻

Recommended system settings based on your system configuration. These can be changed later using Clarius command line utility. More information can be found in getting started guide.

Storage ⓘ

52 GB Max: 143 GB

⚠ Not enough VM disk space for upgrade. Set storage ≥ 58 GB.

RAM ⓘ

16 GB Min: 16 GB Max: 16 GB

Logical CPU Cores ⓘ

2 Min: 2 Max: 3

Back Cancel Next

Clarius upgrade failed

1. Launch command prompt as **Administrator**:
 - a. Click **Start** and type Command Prompt or CMD.
 - b. Right-click on **Command Prompt** in the search results.
 - c. Select **Run as administrator**
2. To view system information, run the command `clarius --systemInfo view` or `clarius -y view`.
3. To expand Clarius storage, run the command :

```
clarius --systemInfo manage --storage <value> clarius -y manage -s <value>
```

Example: `clarius --systemInfo manage --storage 125`

NOTE:

- By default, the Clarius virtual machine will stop during storage configuration and will start automatically once the storage space is successfully expanded.
- Once Clarius virtual machine storage is expanded, it cannot be shrunk.
- The storage value must be in GB and should be less than the available storage shown as `clarius --systemInfo view`.

After successfully expanding Clarius virtual machine storage, proceed the Upgrade Clarius automation framework steps.

Upgrade Clarius instrument service

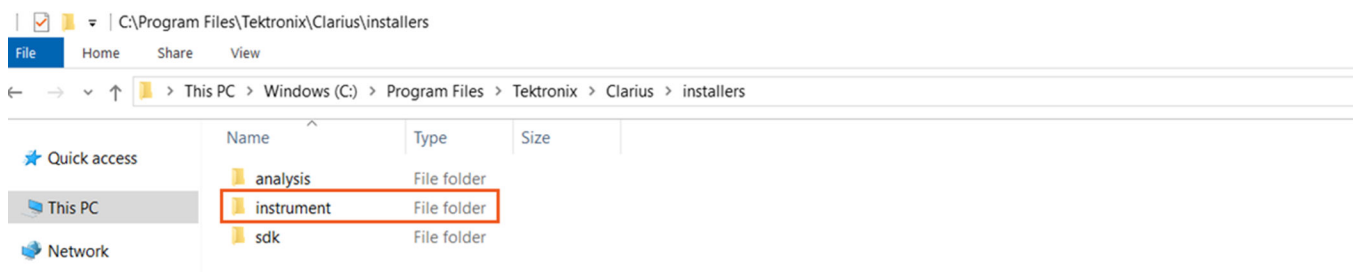
This section provides instructions for upgrading the Clarius instrument service.

Clarius instrument service version upgrade table

Version	Upgrade Support	Upgradable version(s)
4.0.0	Yes	3.1.0 3.0.0

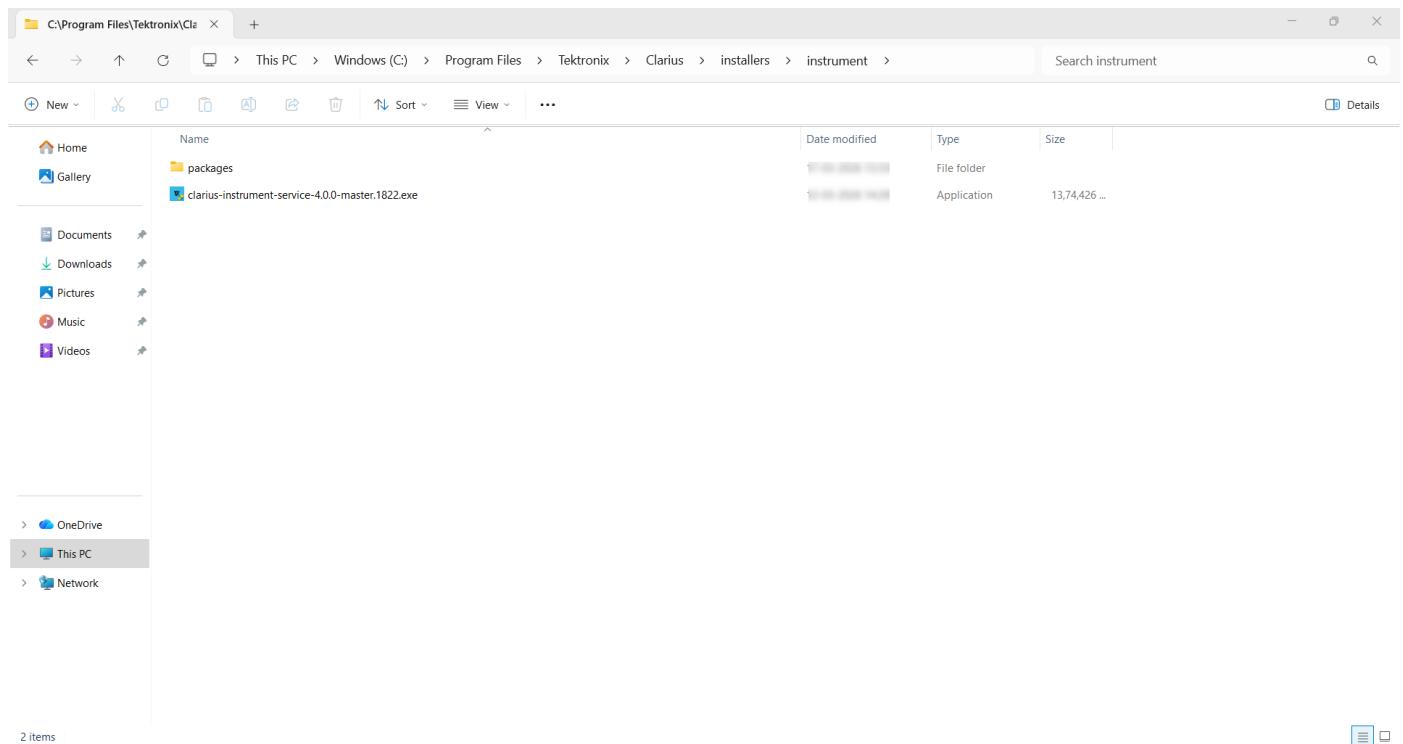
If you have skipped Clarius instrument service upgrade during the Clarius automation framework upgrade, follow these steps to complete the instrument service upgrade on the target system.

1. Navigate to the **installers** folder located in the Clarius automation framework installed path in the target system. The default path is C:\Program Files\Tektronix\Clarius\installers.



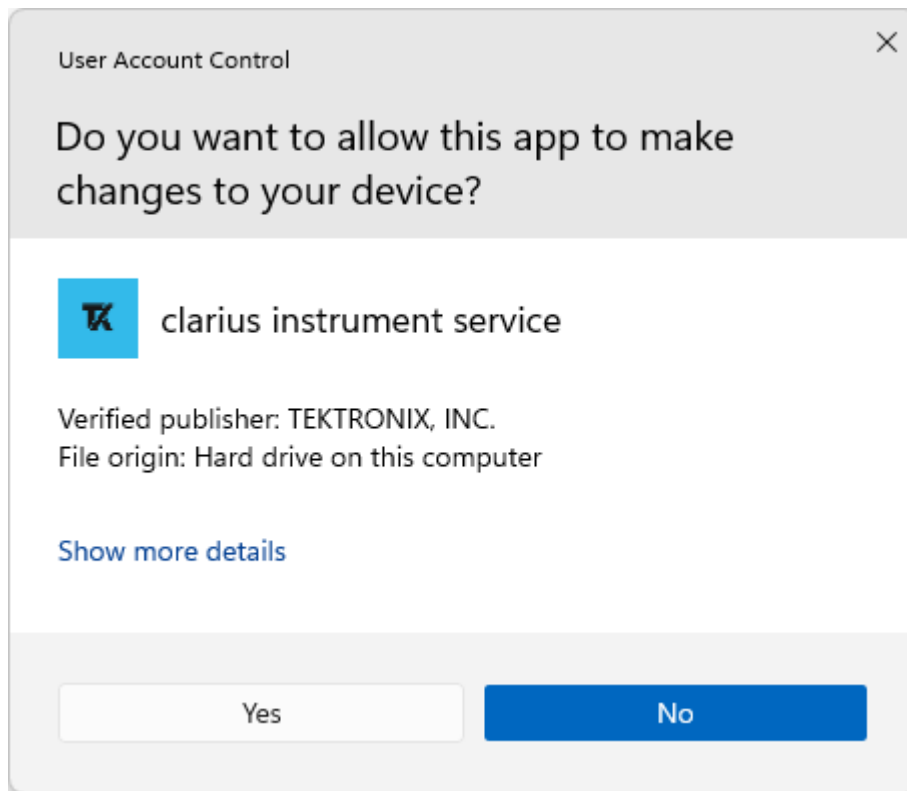
Instrument folder

2. Open the **Instrument** folder, double-click **clarius-instrument-service-**<<version>>**.exe**, and follow the steps to complete the installation.



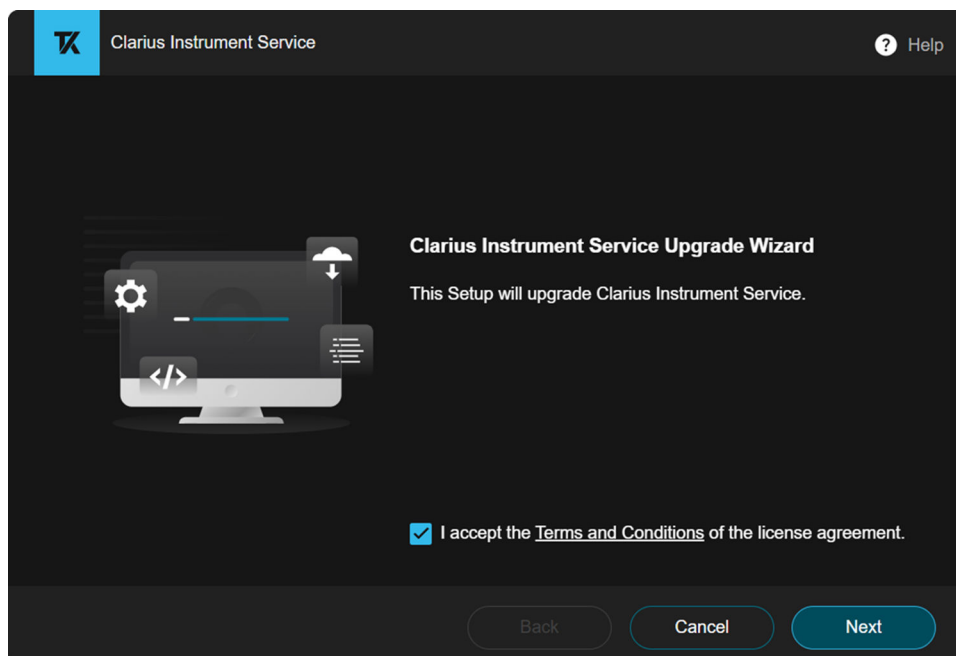
Clarius instrument service executable file in the target system

3. Double-click Clarius instrument service installer (**clarius-instrument-service-**<<version>>**.exe**) from the copied **Instrument** folder in the oscilloscope and click **Yes** on the User Account Control.



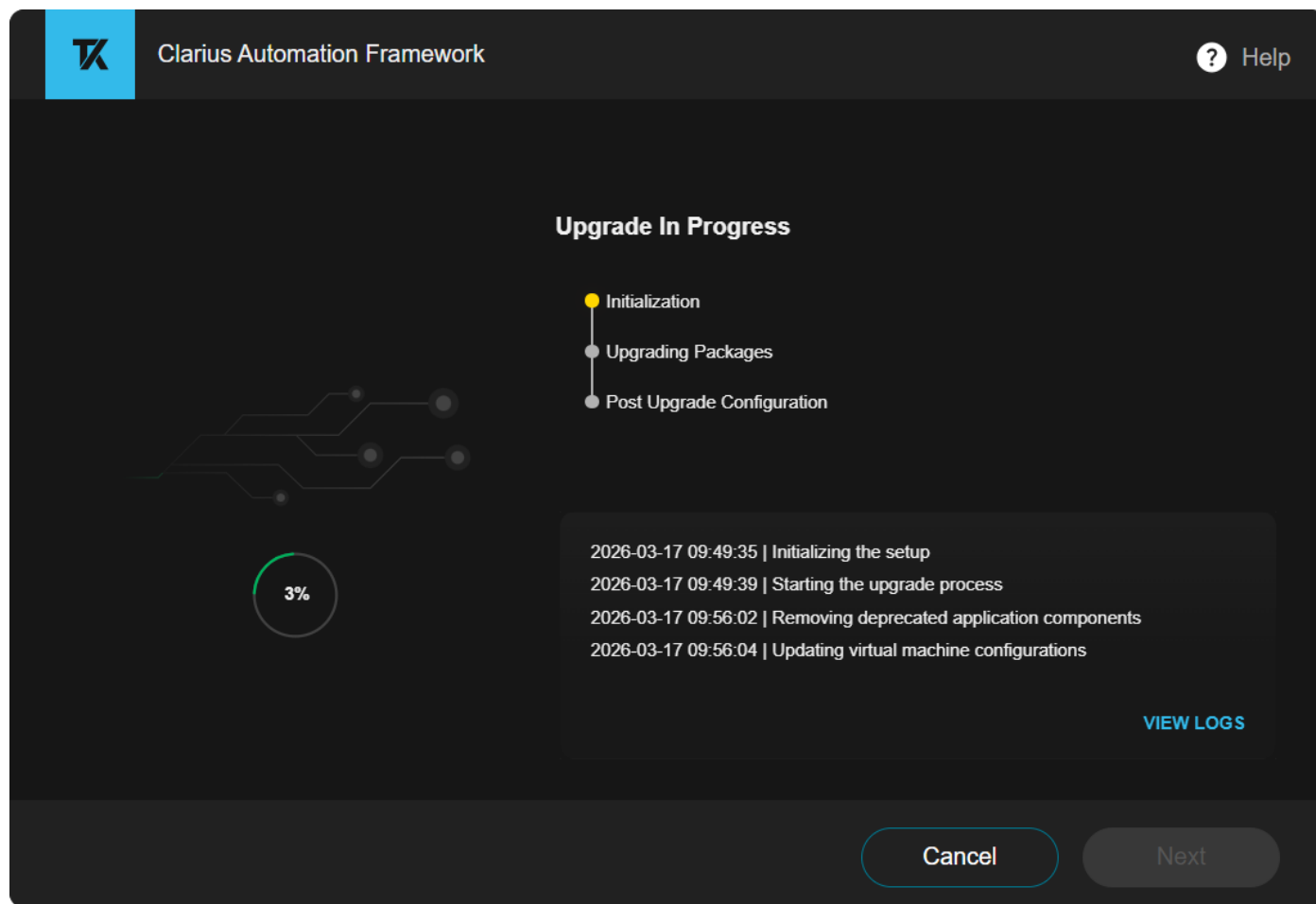
Clarius instrument service user account control dialog

4. After the successful completion of the prerequisite checks, accept the terms of the license agreement, and click **Next**.



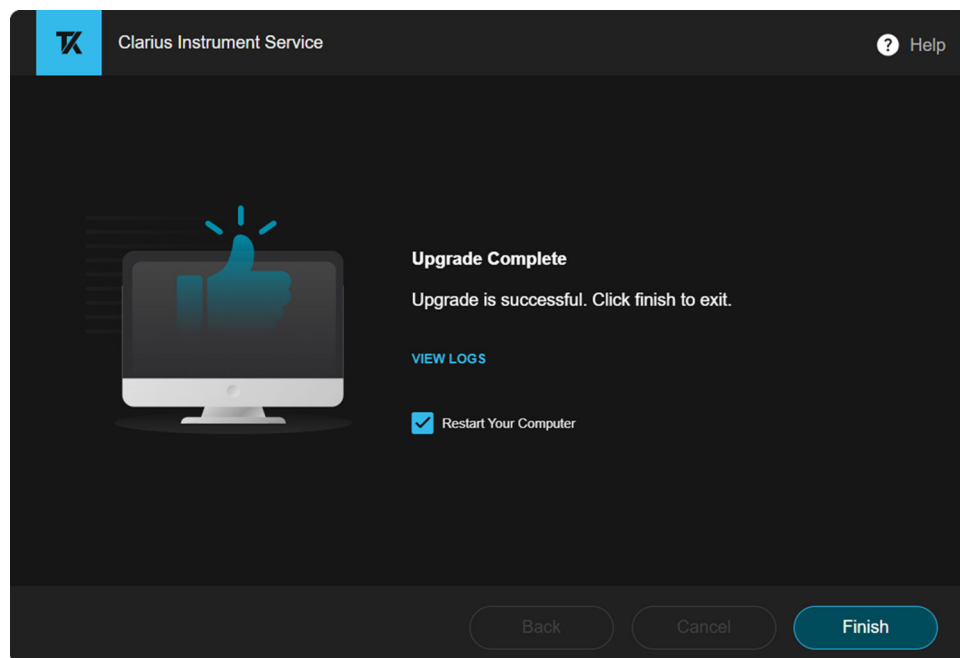
Clarius instrument service prerequisites progress

5. The Clarius instrument service upgrade starts. Please wait until the tasks and configuration process are complete.



Upgrading Clarius instrument service

6. The Clarius instrument service upgrade is successful. Select the **Yes** checkbox to launch the Clarius instrument service and click **Finish**.

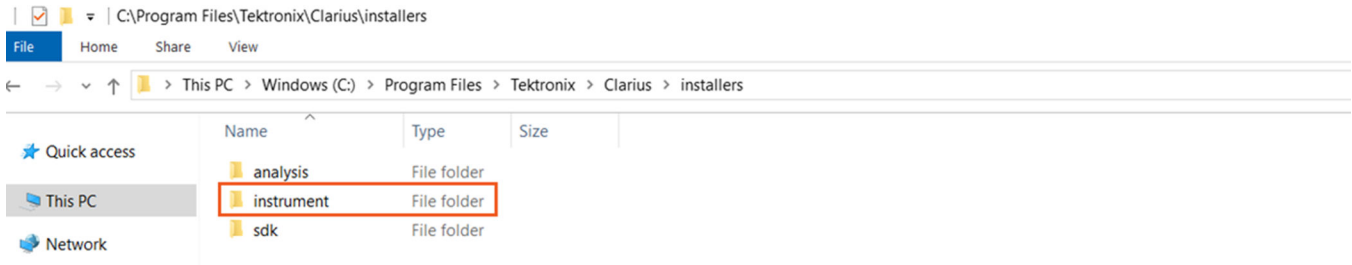


Launch Clarius instrument service

On successful upgrade of the Clarius instrument service, the **InstrumentServiceStart.bat** and **InstrumentServiceStop.bat** icons will be created on the desktop.

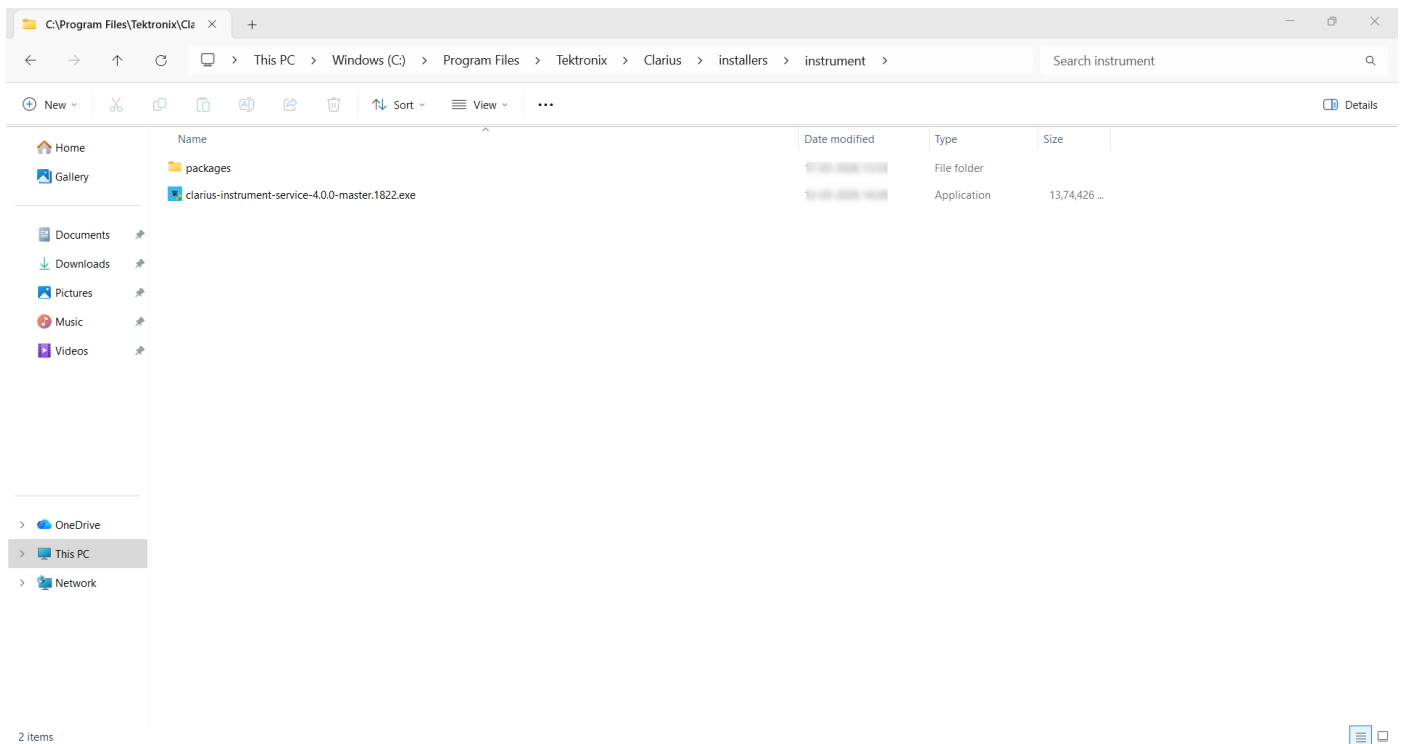
To upgrade the Clarius instrument service in the oscilloscope, follow these steps.

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.



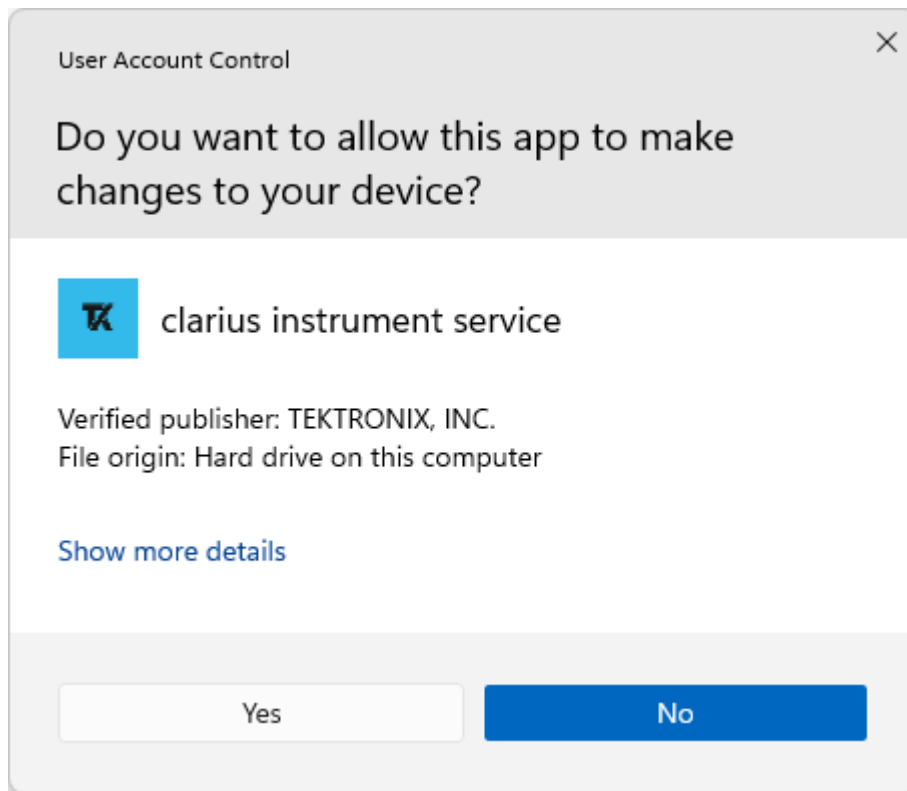
Instrument folder

2. Select the **Instrument folder**, copy it, and paste it into the Downloads folder or any other preferred location on the oscilloscope.



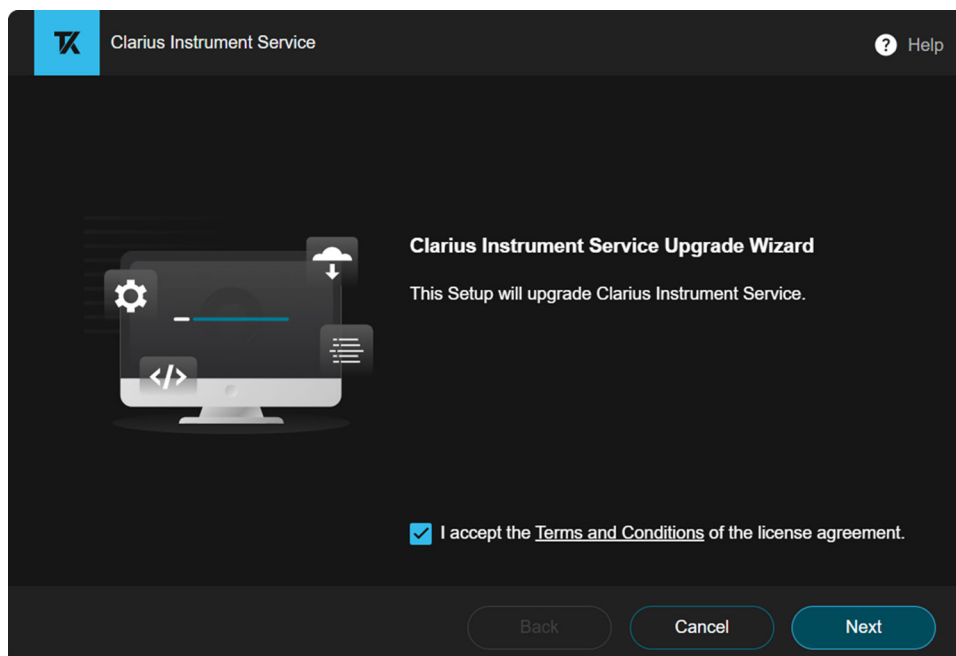
Clarius instrument service executable file in the oscilloscope

3. Double-click Clarius instrument service installer (**clarius-instrument-service-<<version>>.exe**) from the copied **Instrument folder** in the oscilloscope and click **Yes** on the User Account Control.



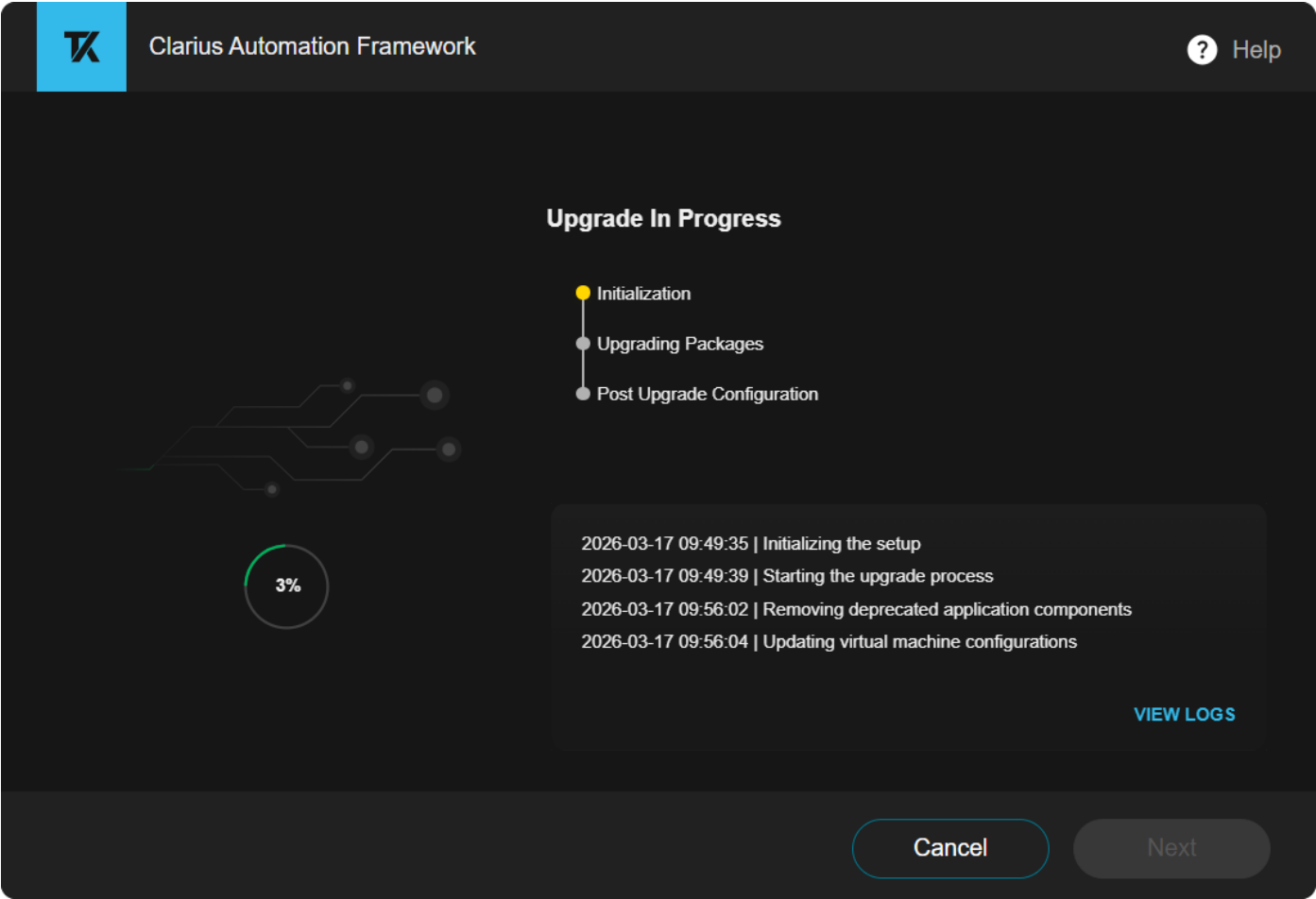
Clarius instrument service user account control dialog

4. After the successful completion of the prerequisite checks, accept the terms of the license agreement, and click **Next**.



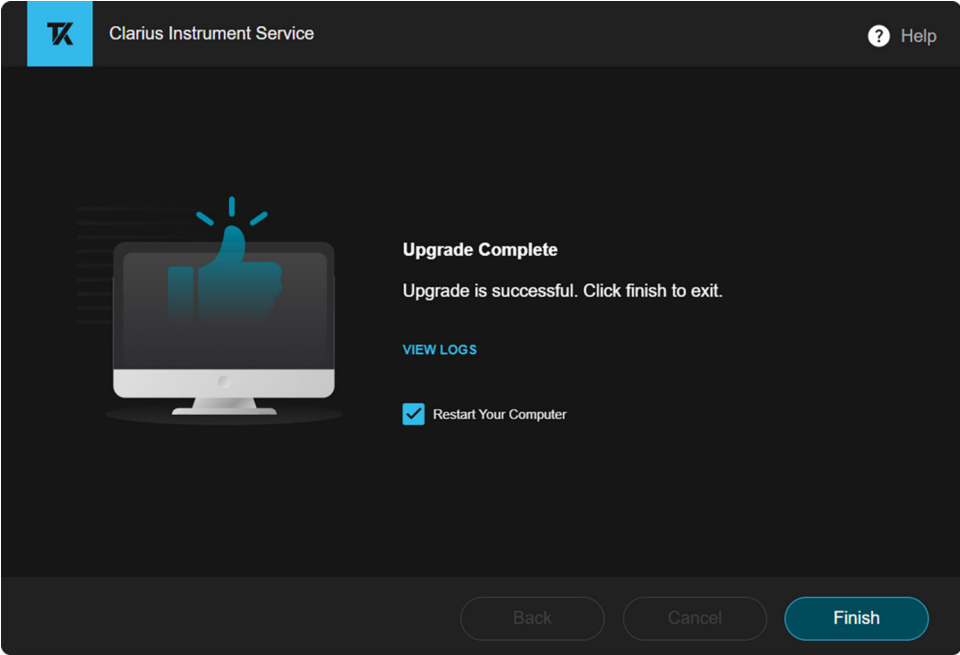
Clarius instrument service prerequisites progress

5. The Clarius instrument service upgrade starts. Please wait until the tasks and configuration process are complete.



Upgrading Clarius instrument service

6. The Clarius instrument service upgrade is successful. Select the **Yes** checkbox to launch the Clarius instrument service and click **Finish**.



Launch Clarius instrument service

On successful upgrade of the Clarius instrument service, the **InstrumentServiceStart.bat** and **InstrumentServiceStop.bat** icons will be created on the desktop.

Installing application in the Clarius automation framework

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

1. [Install Clarius application](#) (on page 58)
2. [Install instrument service plug-in of application](#) (on page 58)

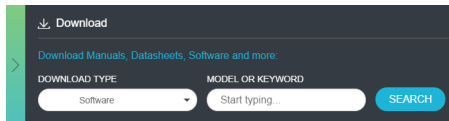
Install application

Prerequisite:

A compatible version of Clarius automation framework must be installed. Check the [Install Clarius automation framework](#) (on page 20) section for installation steps.

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

1. Go to 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 latest version of software and follow the instructions to download. Copy the installer package to the target system.

NOTE: Target system is a PC/Laptop/Computer where the Clarius automation framework is installed.

4. Double-click the installer and follow the instructions in the installation wizard to complete the installation process.
By default, the Clarius Compliance does not activate the application license and the home screen displays no data. Refer to [Activate application license](#) (on page 63) 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, where you have installed the Clarius instrument service. To install the Clarius instrument service, [click here](#) (on page 32).

Follow these 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, where you have installed the Clarius instrument service.
3. Open the folder, double-click the **clarius-compliance-<<appname>>-instrument-service-<<version>>.exe** and install the plug-in.

Upgrading application in Clarius automation framework

This section provides instructions for upgrading the latest version of the application in a target system. Follow these steps to complete the installation.

1. [Upgrade Clarius application](#) (on page 59)
2. [Upgrade instrument service plug-in of application](#) (on page 59)

Upgrade application

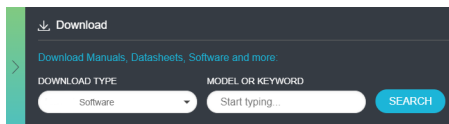
This section provides instructions for upgrading the application.

Prerequisite:

A compatible version of Clarius automation framework must be installed. Check the [Install Clarius automation framework](#) (on page 20) section for installation steps.

To upgrade the application in the target system, follow these steps:

1. Go to 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 latest version of software and follow the instructions to download. Copy the installer package to the target system.

NOTE: The target system is a PC/Laptop/Computer where the Clarius automation framework is installed.

4. Double-click the installer and follow the instructions in the installation wizard to complete the installation process.

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.
 - If the upgrade fails, the Clarius application automatically rolls back to the previous installed version.
-

Upgrade instrument service plug-in of the application

Upgrade the instrument service plug-in of the application in the oscilloscope, where you have installed the Clarius instrument service. To install the Clarius instrument service, [click here](#) (on page 32).

Follow these steps to upgrade 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, where you have installed the Clarius instrument service.
3. Open the copied **Instrument folder** in the oscilloscope, double-click **clarius-compliance-<<appname>>-instrument-service-<<version>>.exe** and upgrade the plug-in.

Clarius SDK

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

Clarius SDK can be installed in the following ways:

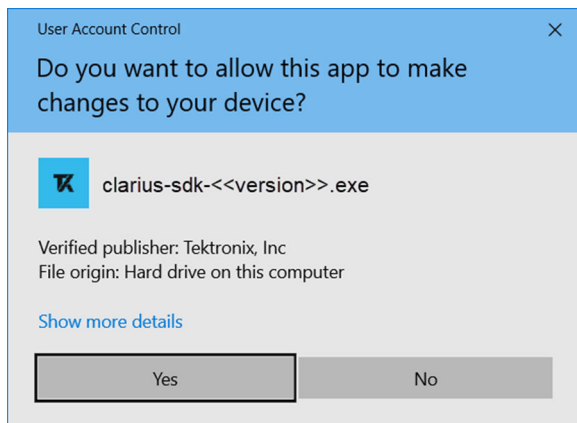
- Install Python in the global environment and then install Clarius SDK in that environment. If a supported Python version is detected, you can select to install the Clarius SDK in that environment.
- Install Python in an isolated Python environment and install Clarius SDK in that environment.

NOTE: An isolated Python environment will have its own independent set of Python packages installed in its site directories.

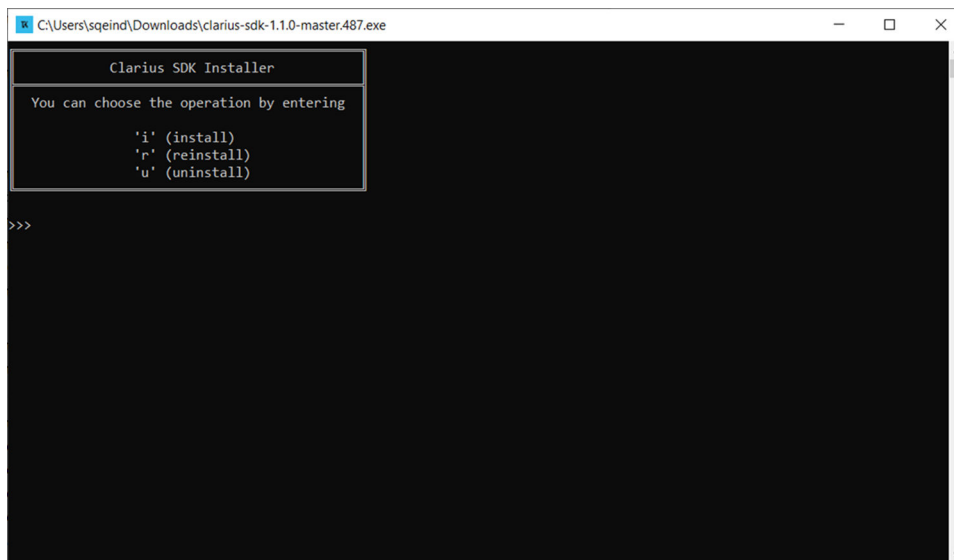
Install Clarius SDK

If you have skipped Clarius SDK installation during the installation of Clarius automation framework, follow these 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.
3. Open the sdk folder, double-click **clarius-sdk-`<<version>>`.exe** and follow these steps to complete the installation.



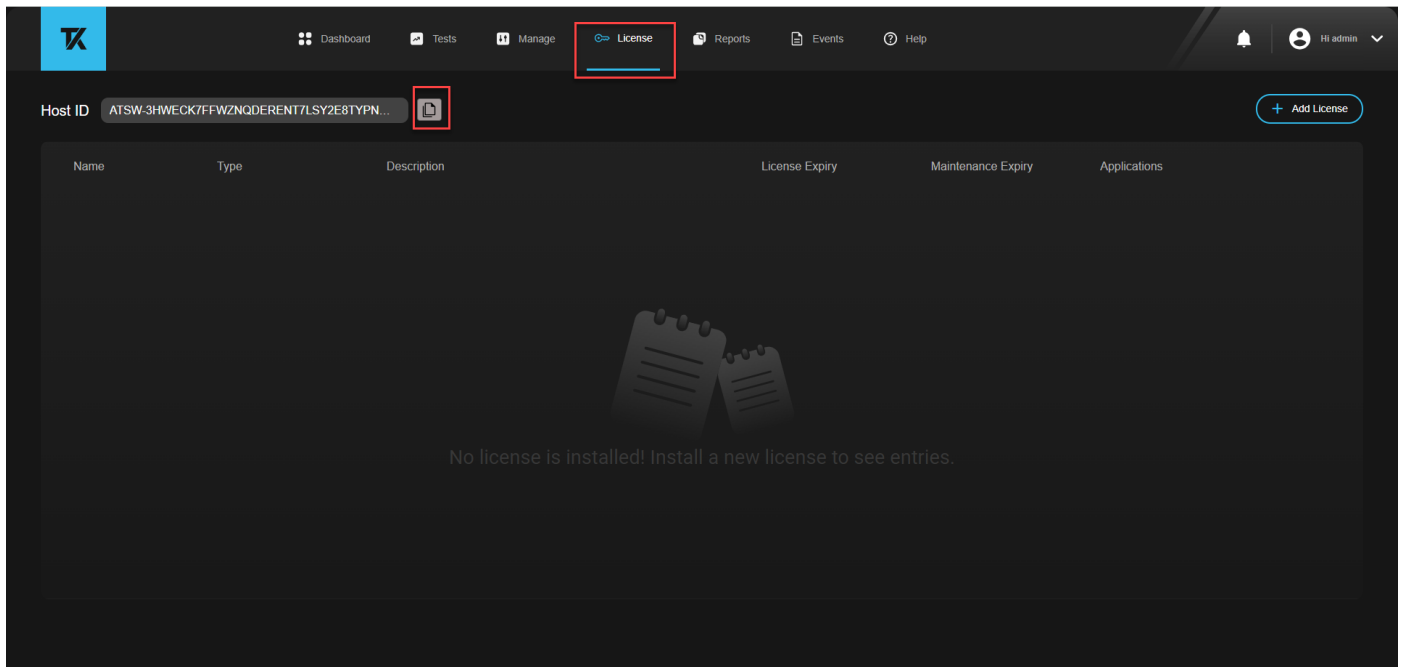
User account control dialog



SDK installer setup

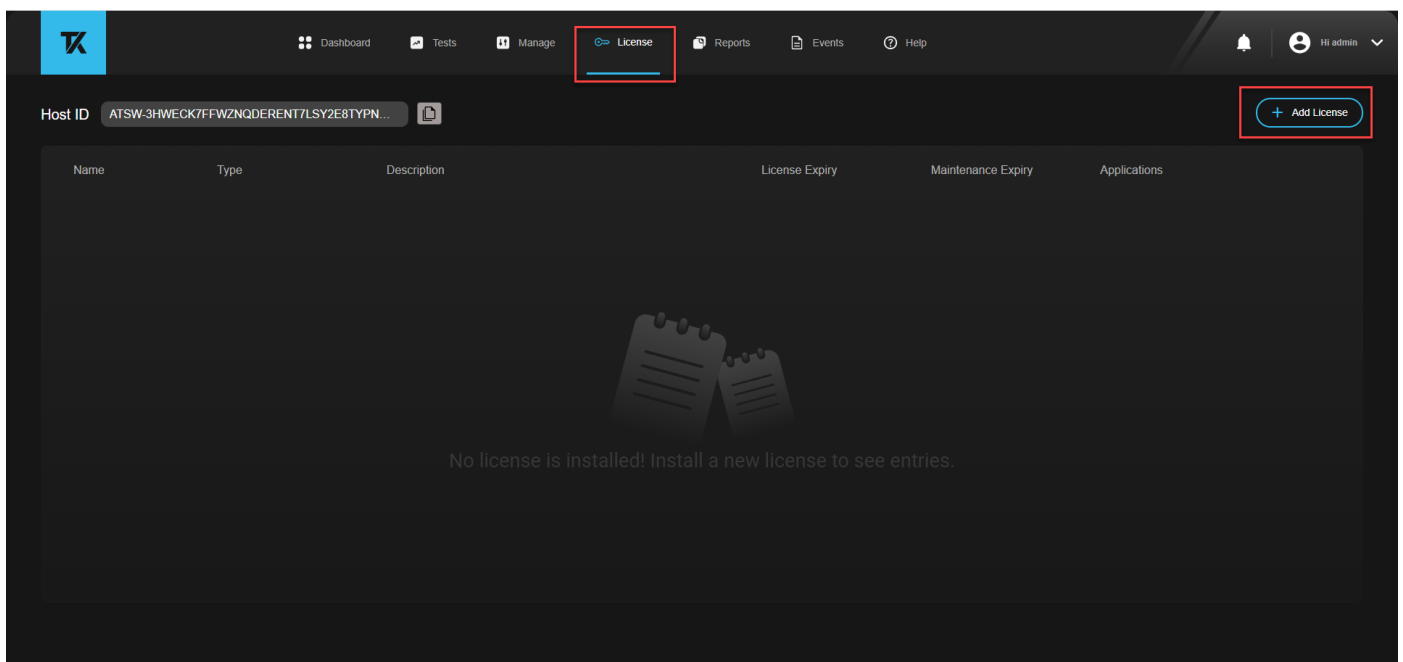
Activate application license

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  to copy the **Host ID**.



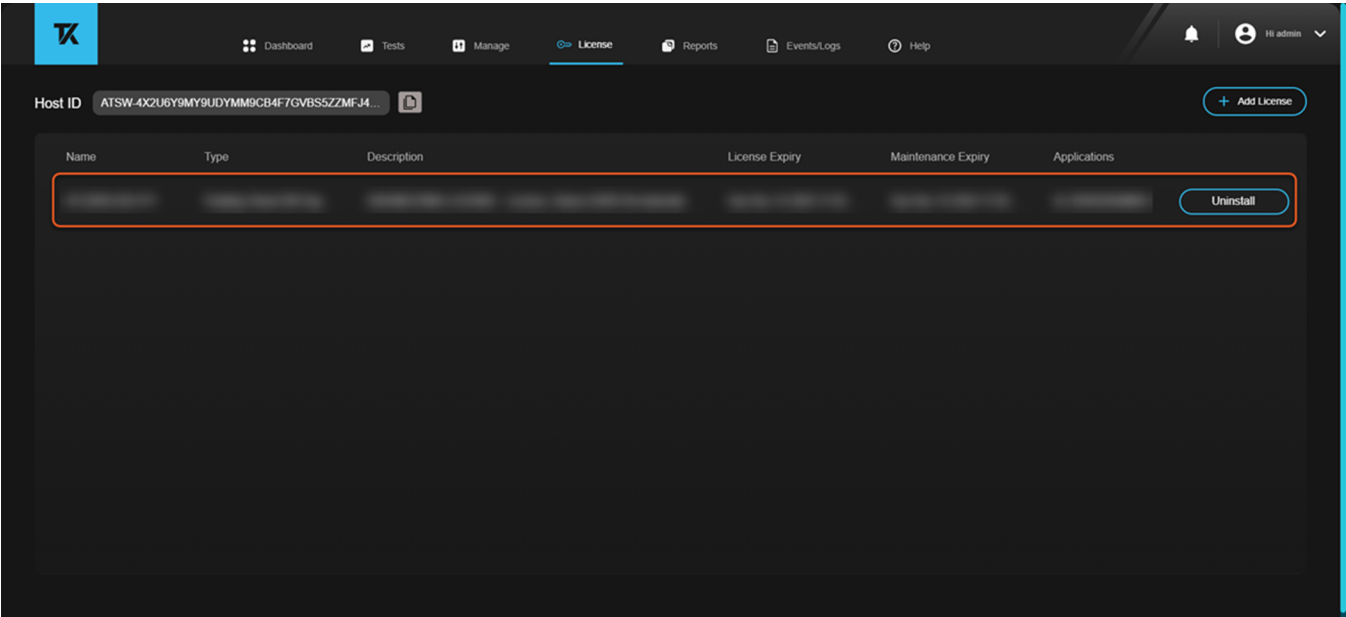
Copy Host ID for license request

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**.



Add License

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



Installed application license in Clarius automation framework

Run the services

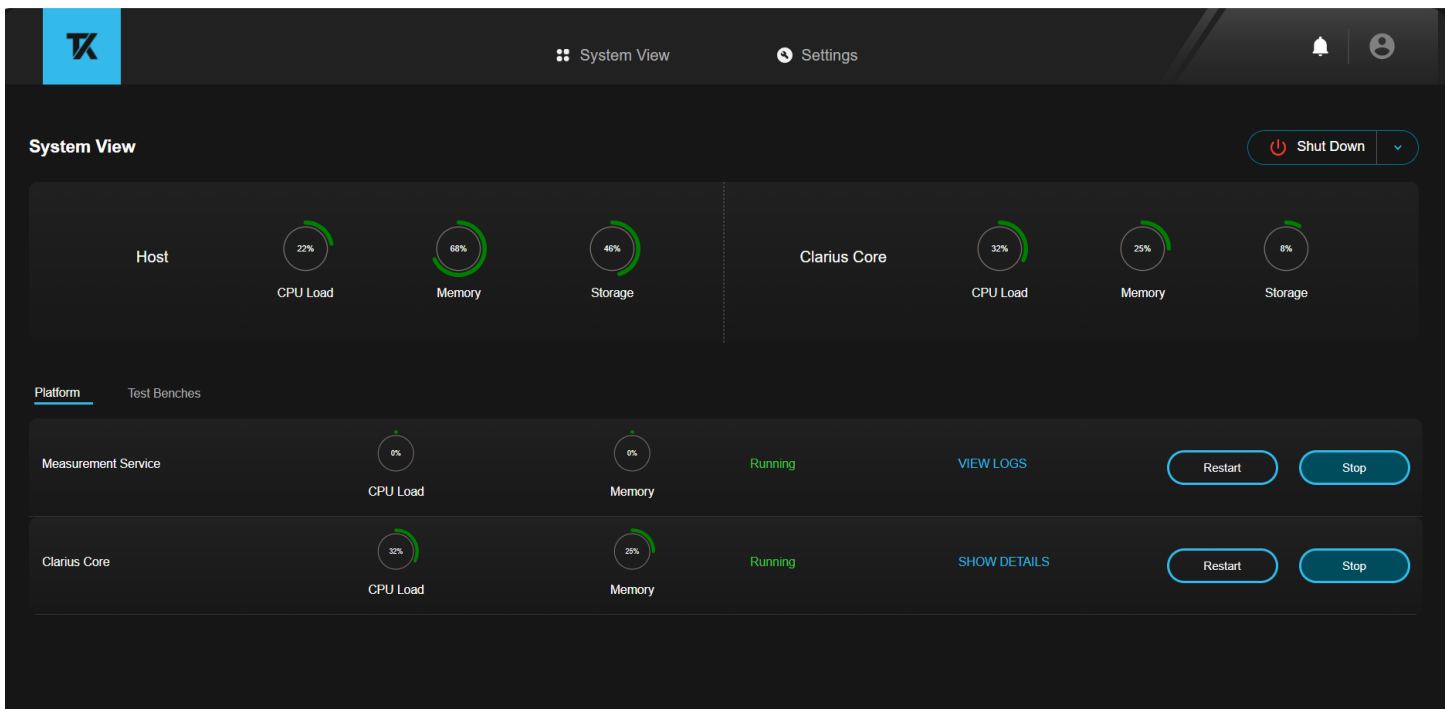
This section lists the services to run before performing tests in the Clarius automation framework. To perform testing within the Clarius automation framework, make sure all the installations are complete and all supporting services are running for the following scenarios.

- The [Clarius measurement service](#) (on page 65) must be up and running in the target system.
- The [Clarius instrument service](#) (on page 65) 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 on the target system where Clarius automation framework is installed, you must see the Measurement service running status in [Admin Console](#) (on page 71).

If it is not running, restart the **Measurement Service** from the **Admin Console**.



Clarius measurement service in Admin Console

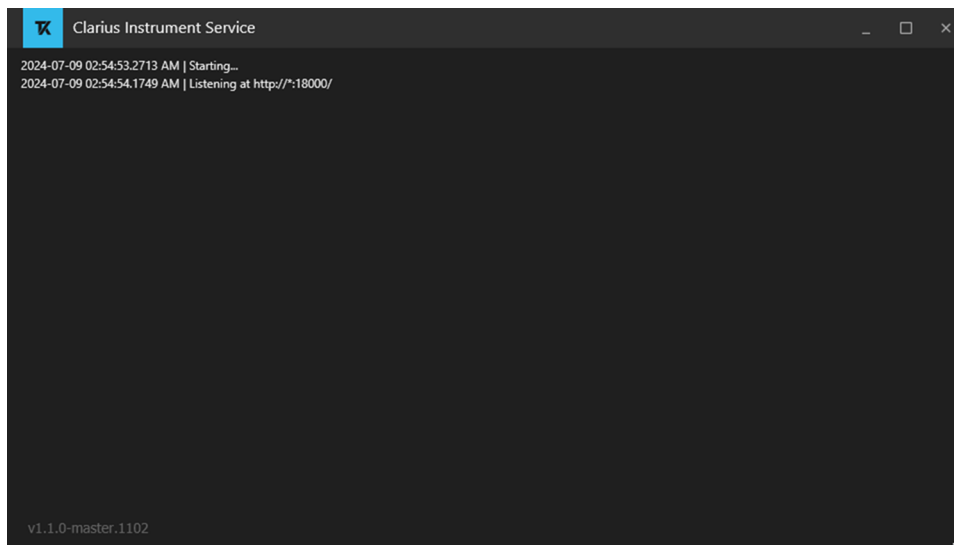
You can also start, stop, check the status, and view the logs of the Measurement Service in the **Admin Console**.

Run Clarius instrument service

Clarius instrument service sends the waveform to the measurement service 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.

NOTE: Measurement service will be installed in the target system where Clarius automation framework is installed.

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.



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 provides 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](#) (on page 67)

[Application controls](#) (on page 68)

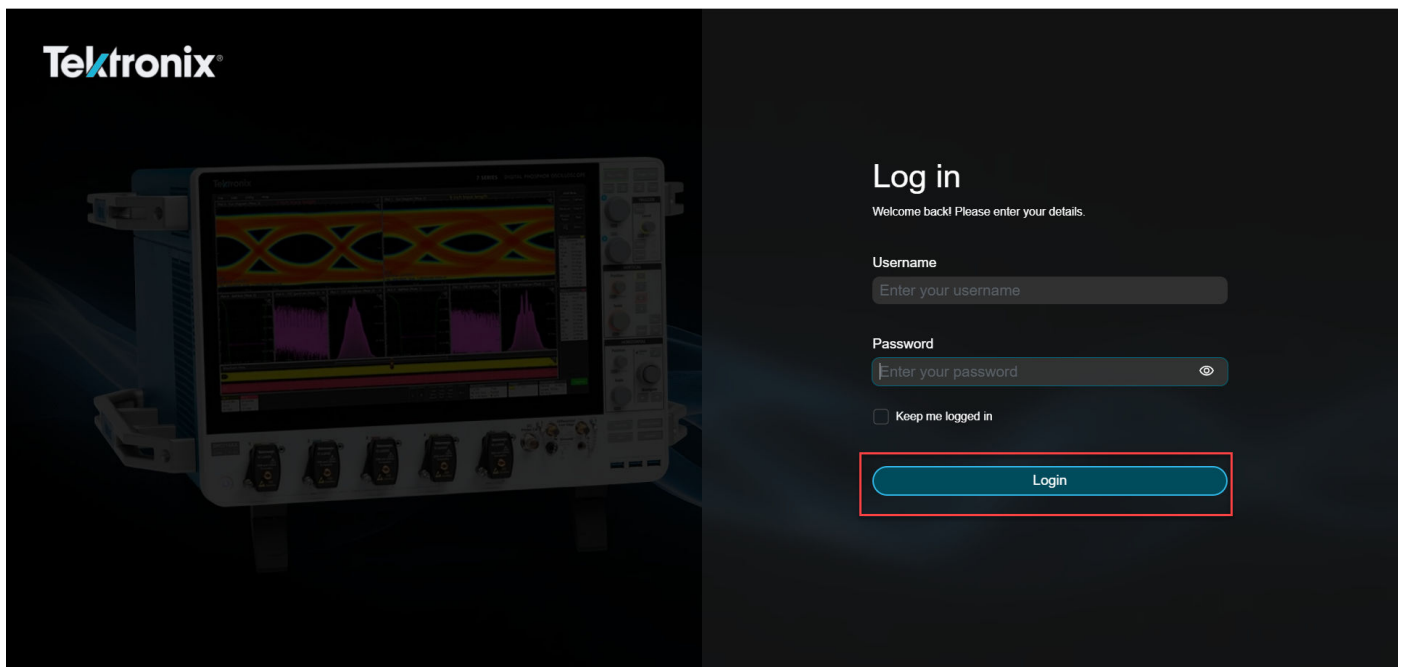
[Navigation panel](#) (on page 69)

Start and log in to the application

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

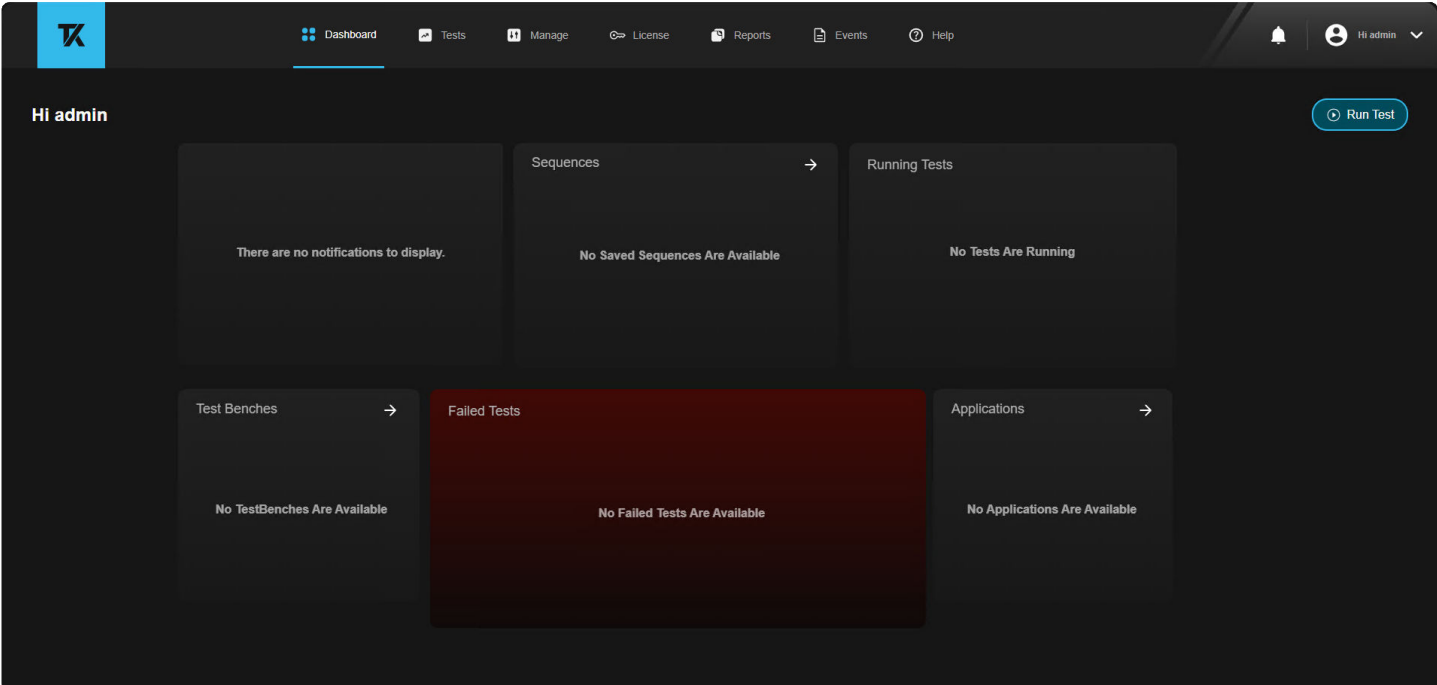
NOTE: You can access the Clarius automation framework from the target system using the local host URL `https://127.0.0.1:4200`. To remotely access the Clarius automation framework, use the host name or IP address of Clarius automation framework installed system.

2. Log in to the application using the credentials.



Clarius automation framework login page

After successful login, 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.

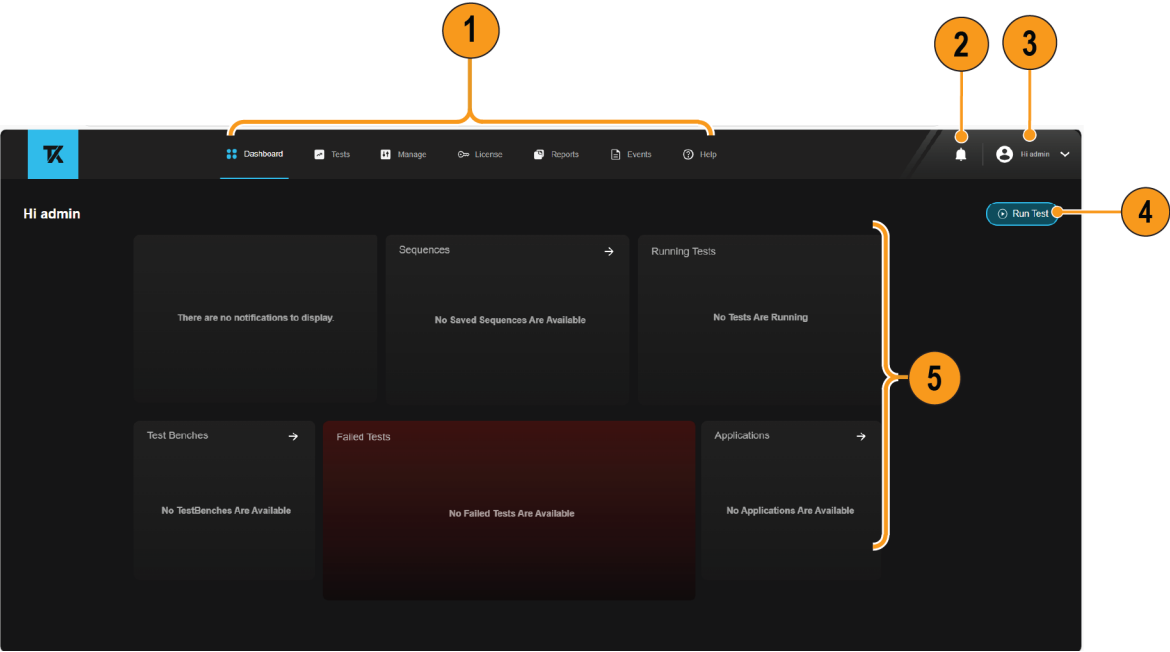


Clarius automation framework home page

Application controls

The Clarius automation framework uses the menus to group the related configurations, test, result, events, 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.



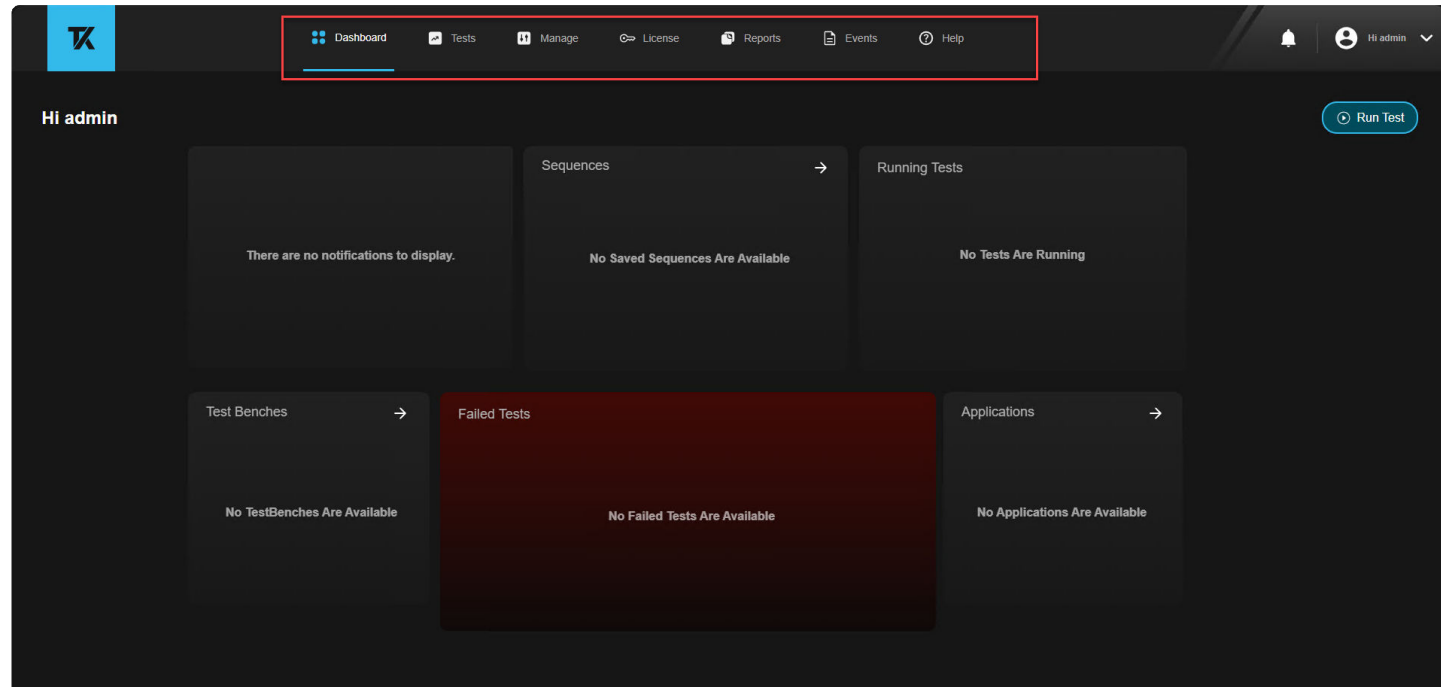
Application controls interface

Application controls description

Identifier	Element	Description
1	Navigation panel	The navigation panel provides a list of tabs for selecting applications, creating and configuring tests and test benches, and generating test reports.
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 the About menu.
4	Run Test	Click to perform a test by entering the required test information.
5	Widgets	A widget is a graphical user interface (GUI) element that displays information or provides details to help users interact with the application.

Navigation panel

The navigation panel contains a list of tabs that allow you to select the applications, create and configure tests, test benches, generate test reports, view logs of executed tests, and check license information. Click the respective tab to open its associated panel.



Clarius compliance navigation panel

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.

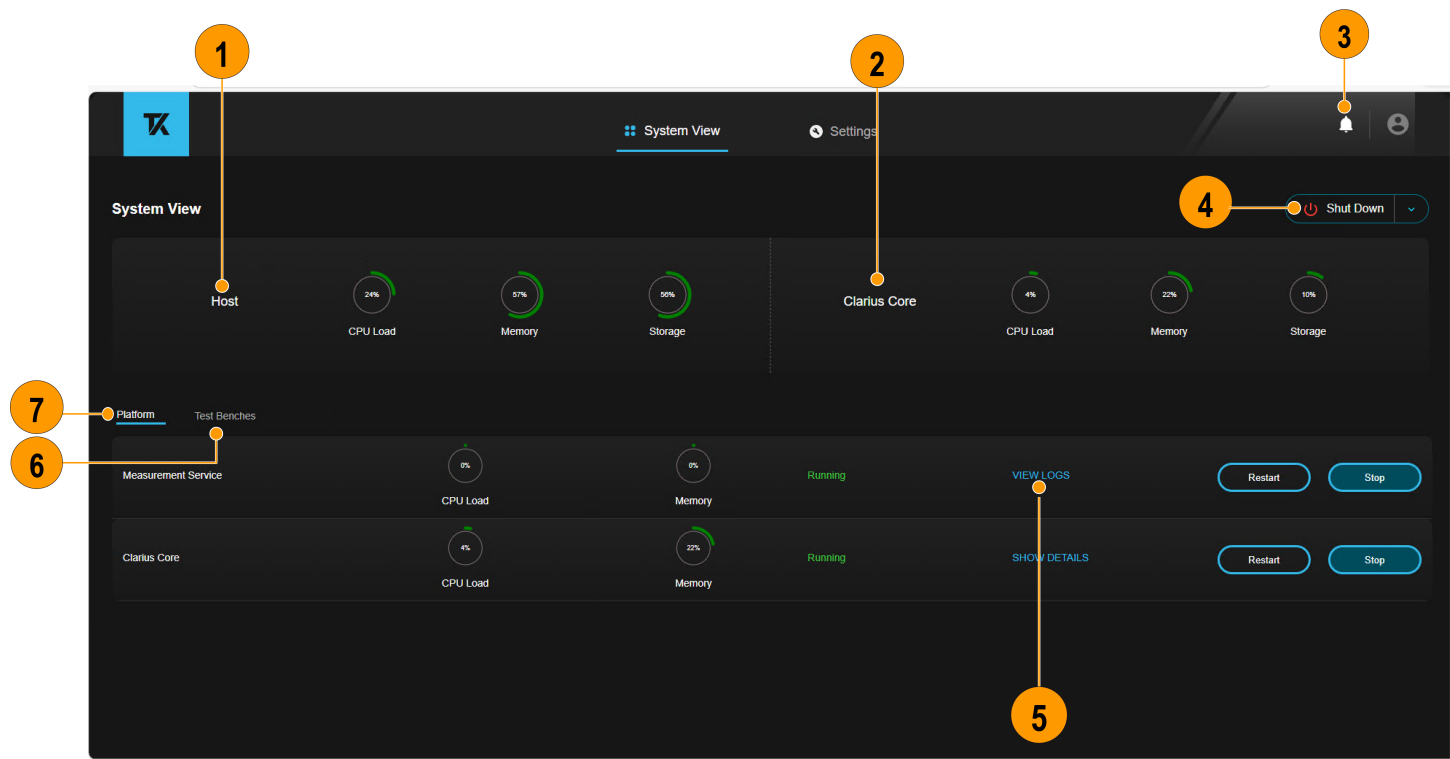
Tabs	Description
Manage	Allows you to manage the application, test bench, and sequences that are created for the test execution.
License	Allows you to add license to the application and also view the licenses that are enabled.
Reports	Allows you to generate a test report and/or export a detailed test report for an executed test(s).
Events	Displays the events for an executed test.
Help	Allows you to open the Help window to browse and read Help topics.

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 you 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.

System View



Clarius compliance monitoring service interface

Components of monitoring service

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.

Identifier	Element	Description
3	Notifications	Warnings and alerts are displayed in the notification icon and Windows system tray, providing real-time updates on the system status. A red alert icon will be displayed next to the notification message for Memory, Storage and CPU if the threshold exceeds 90%. A yellow warning icon will be displayed next to the notification message for Memory, Storage and CPU if the threshold exceeds 70%.
4	Shut Down	The Shut Down button allows you to shut down the Clarius core and measurement services ensuring that no processes are interrupted abruptly. Click  button to access the Restart option, which stops and reloads all Clarius services without performing a full shutdown.
5	Logs	The logs screen displays detailed logs for each service. NOTE: If there is any issue with the service, save the log file and share it with the Tektronix support person for troubleshooting.
6	Test Benches	Users can view the real-time status of the test benches, which includes CPU load and memory usage. The available status are Available, Occupied, Unavailable, and Not Reachable.
7	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.

Test bench status scenarios

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

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

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.

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.
-

[Settings](#) (on page 74)

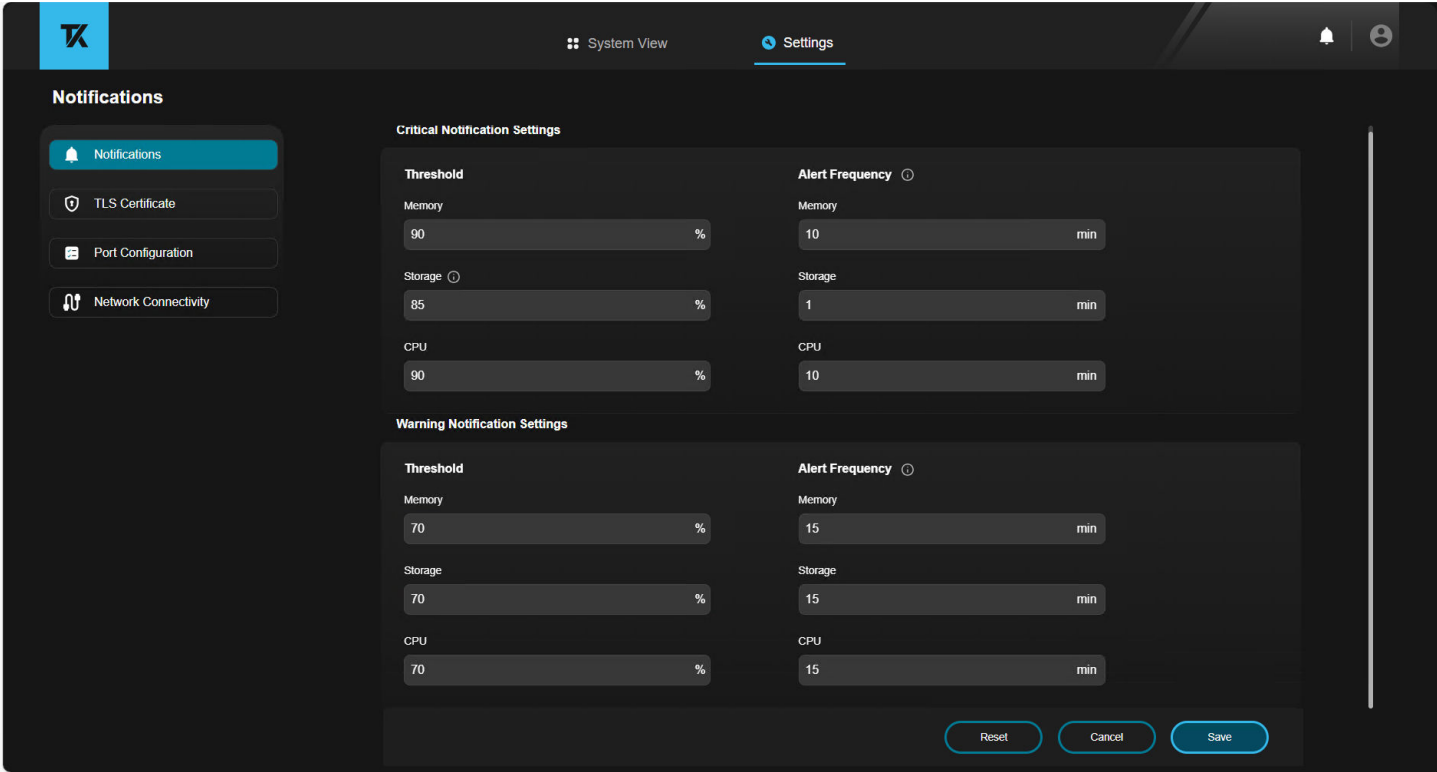
[TLS/SSL Certificate](#) (on page 75)

[Port Configuration](#) (on page 76)

[Network Connectivity](#) (on page 78)

Section 1 Settings

The settings tab allows you to view the list of warnings and alerts in the notifications pane and the details of the TLS certificate.



Settings tab: Notifications

You can configure the values for Critical and Warning notifications, and click **Save** to apply the changes.

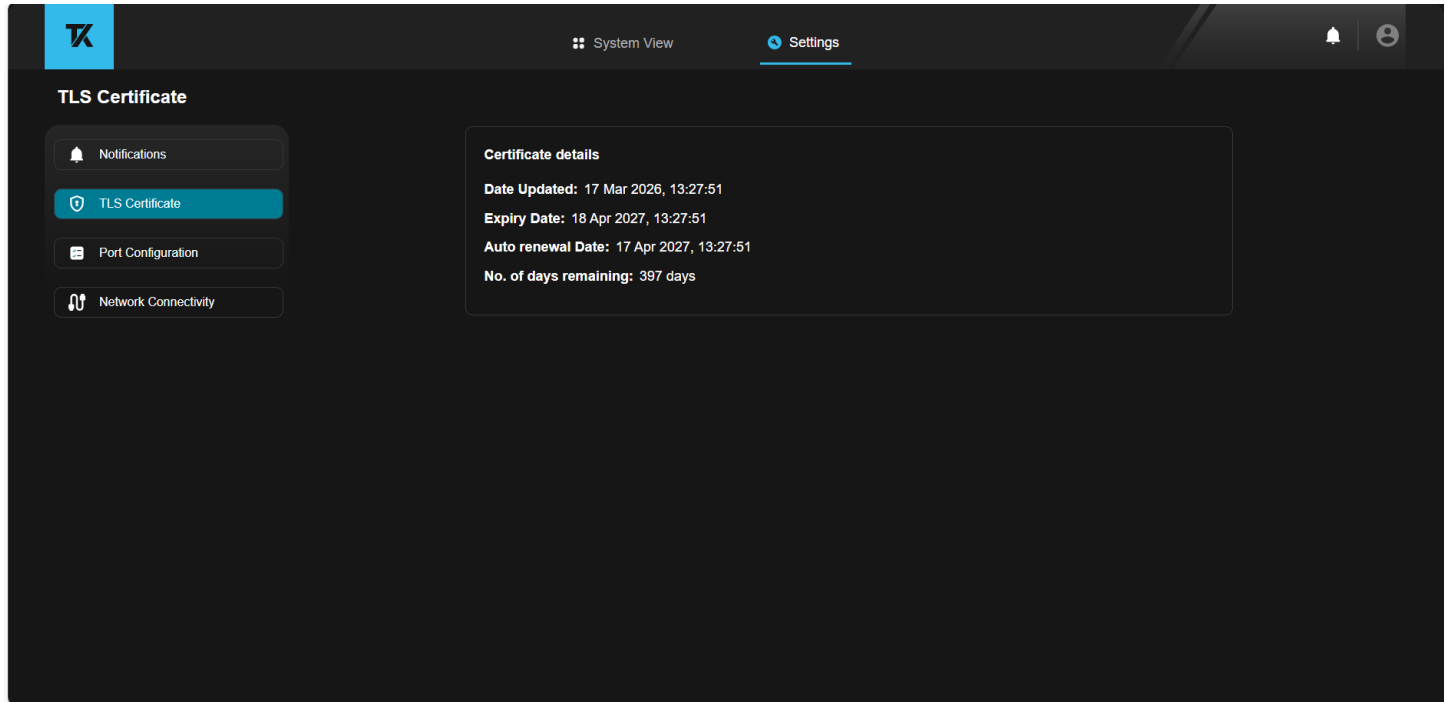
Warning Threshold: An alert is triggered when the metric exceeds the set value (For example, 70%).

NOTE: If the alert is from hard disk, delete old test data from Tests > List of Tests to free up the hard disk space.

Critical Threshold: A critical alert is triggered when the metric exceeds the set value (For example, 90%).

Section 2 TLS/SSL Certificate

Transport Layer Security (TLS) encrypts information sent over network, ensuring **privacy** between a **client** and a **server** or **load balancer**. This section describes the steps to renew the TLS certificate of an admin (default user account) and view the status of the certificate. A default user is the user account that is created during the installation.



Settings tab: TLS certificate

The TLS certificate can be viewed from the **Admin Console** or by running the command `clarius --sslCert -d` or `clarius -x -d` in the command prompt as Administrator.

To renew the TLS certificate, follow these steps:

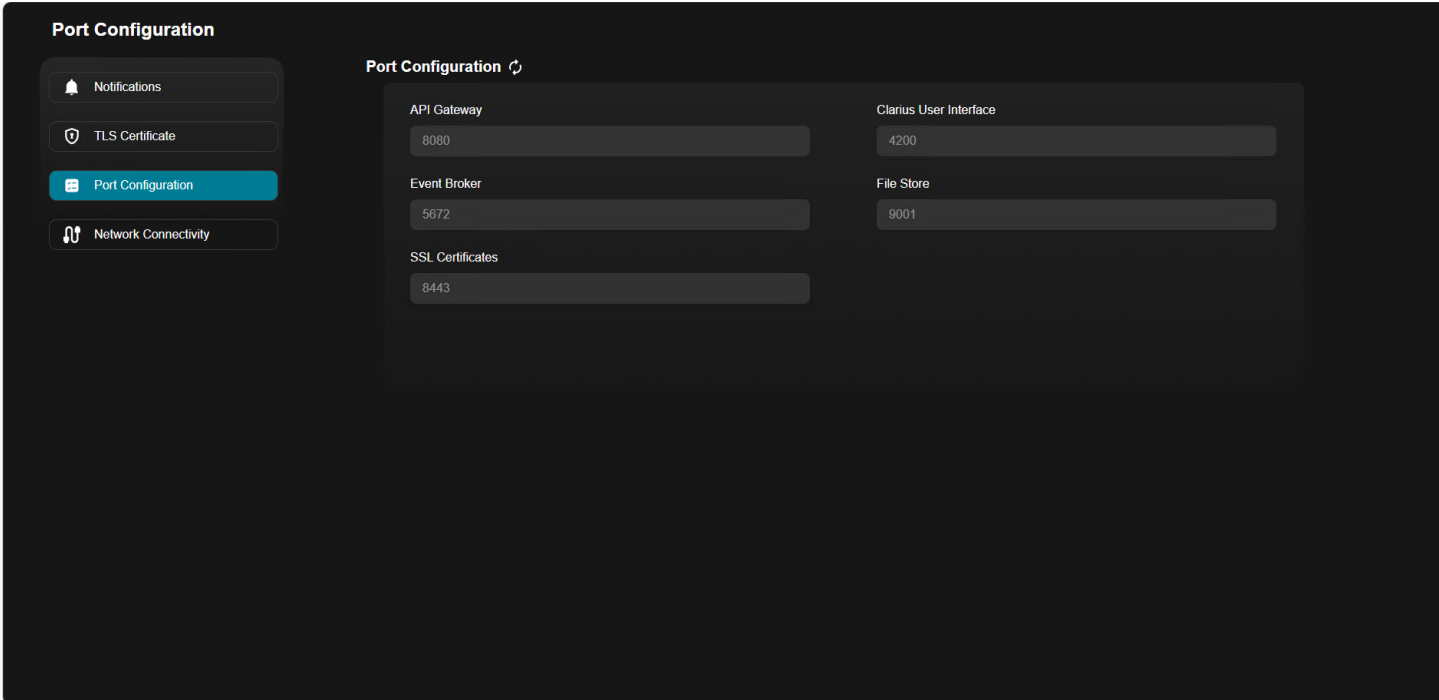
1. Launch command prompt as **Administrator**:
 - a. Click **Start** and type Command Prompt or CMD.
 - b. Right-click on **Command Prompt** in the search results.
 - c. Select **Run as administrator**
2. Run the command `clarius --sslCert -r` or `clarius -x -r`.
3. Close the **Clarius** tab in the browser, clear the cookies/cache, and restart the browser once the certificate is renewed successfully.

NOTE:

- Stop all running tests and close the browser before renewing the certificate.
 - If any services fail, you can restart the failed services from the **Admin** console
-

Section 3 Port Configuration

The Port Configuration page displays the list of ports used by various Clarius services. These ports must remain available for proper communication between the Admin Console, API services, file management services, and the Clarius user interface. This page allows users to view the configured port numbers for each service and verify whether their environment is correctly set up.

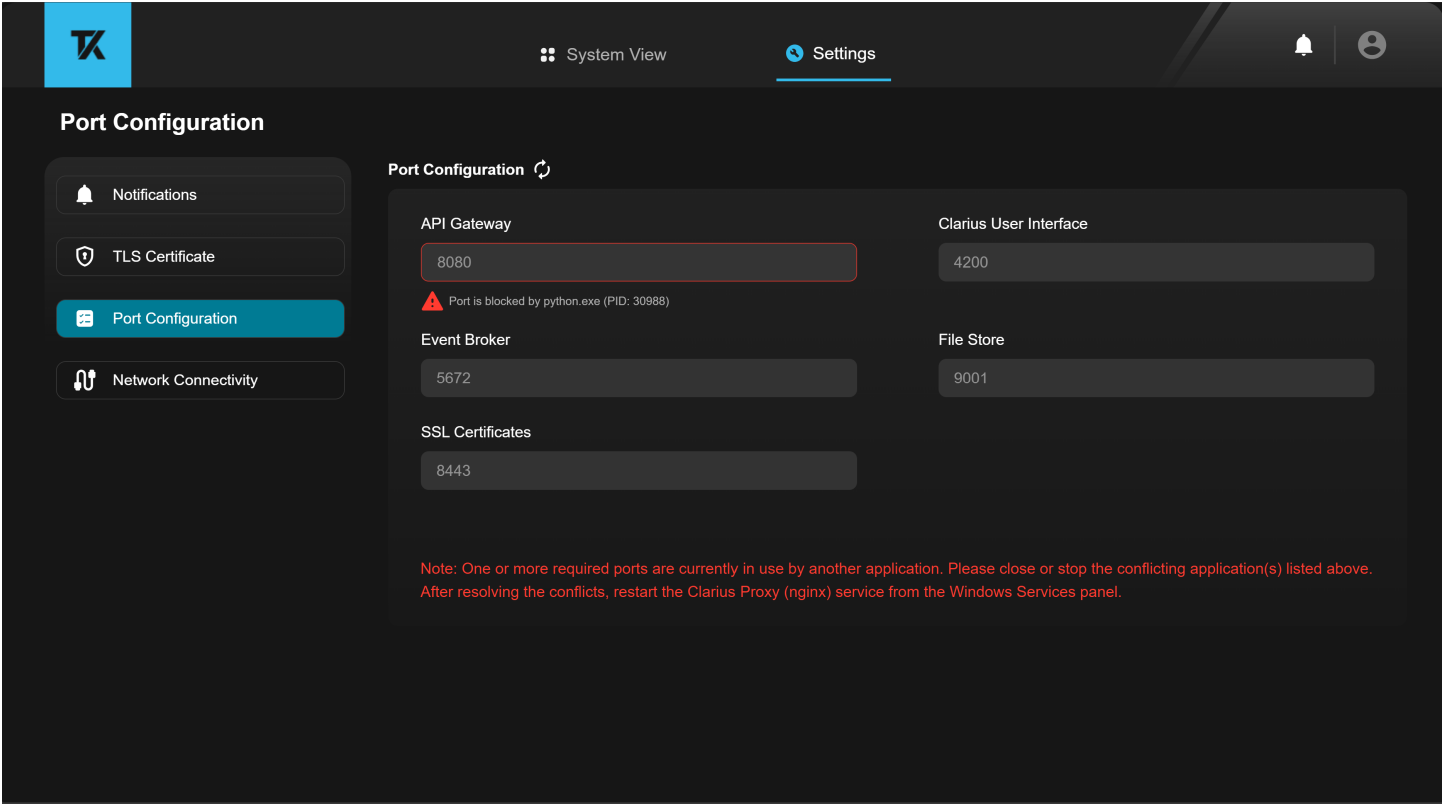


Port configuration

Port Conflict Monitoring

Requirement	Description
API Gateway (8080)	Handles API requests from the Clarius application and other integrated services.
Event Broker (5672)	Manages event communication and message routing between internal Clarius components.
Clarius User Interface (4200)	Hosts the front-end UI for the Clarius application.
File Store (9001)	Used for file-related operations such as waveform storage, retrieval, and internal file access.
SSL Certificates (8443)	Handles secure HTTPS communication for certificate-enabled interactions.

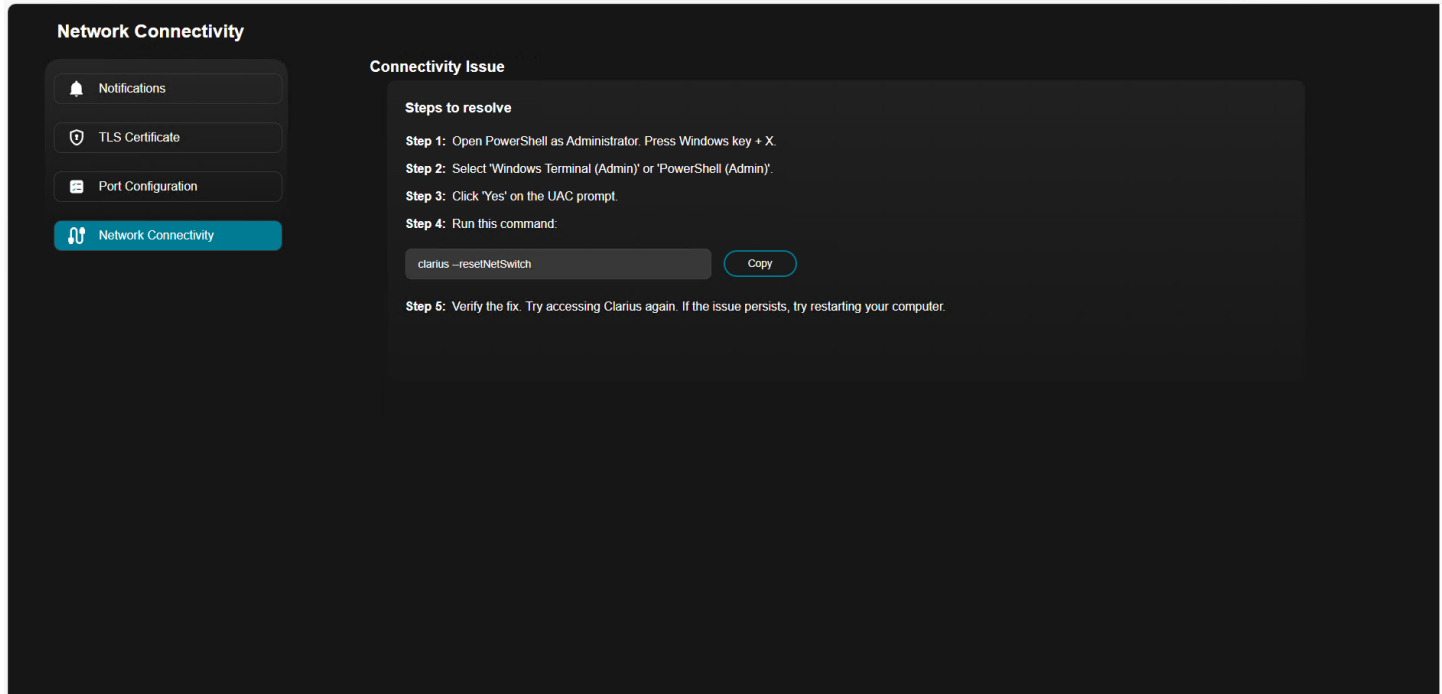
If API Gateway port(8080) is blocked, a warning appears with details of the process using the port as shown in the below figure.



Error: Port Configuration

Section 4 Network Connectivity

The Network Connectivity page provides guided steps to resolve connectivity issues between the Clarius application and the Hyper-V virtual machine. When a connectivity issue is detected, the page displays the required PowerShell command along with step-by-step instructions to restore network access.



Network connectivity

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](#) (on page 10) section.

2. **What is the recommended system configuration required to install Clarius software ?**

Check the [system requirements](#) (on page 10) section.

3. **Can I install Clarius automation framework with the Run as Administrator option?**

Yes. If a non-administrator user starts the installation, the installer automatically prompts for **Administrator** account credentials and then proceeds with the installation.

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: (on page 78) 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 I run the Clarius installer from the .zip file without unzipping it?

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

4. 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`

5. How do I check if a port is available for installing the Clarius automation framework?

In the powershell, run the command `Get-NetTCPConnection -State Listen | Where-Object { $_.LocalPort -eq <PortNumber> }`.

If the port is in use, the command will display a list showing the processes using it. If there is no output, it means the port is not currently in use.

Example: `Get-NetTCPConnection -State Listen | Where-Object { $_.LocalPort -eq 8080 }`

Post installation

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

To reset the **admin** password, launch **command prompt**→ **clarius --resetPwd -p "new password" or clarius --resetPwd --password "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.

NOTE: 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

3. How can I view and increase the allocated disk space, memory, and CPU after installation?

- Launch command prompt as **Administrator**:
 - Click **Start** and type Command Prompt or CMD.
 - Right-click on **Command Prompt** in the search results.
 - Select **Run as administrator**
- To view the system information, run the command
clarius --systemInfo view
clarius -y view
- To expand storage, memory and CPU, run following commands:

- Storage:

clarius --systemInfo manage --storage <value>

clarius -y manage -s <value>

Example: clarius --systemInfo manage --storage 23

- Memory:

clarius --systemInfo manage --core <value>

clarius -y manage -c <value>

Example: clarius --systemInfo manage --core 14

- CPU:

clarius --systemInfo manage --memory <value>

clarius -y manage -m <value>

Example: clarius --systemInfo manage --memory 12

4. 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](#) (on page 78) for more details.

Contact Tektronix field engineer for further queries.

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

After logging in to the Clarius UI, you can find the user information by clicking the user profile icon located at the top right corner of the Clarius automation framework interface.

6. 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.

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

Check if port 18000 is available. If not, you can change the port value in appsettings.json located at **C:\ProgramData\Tektronix\Clarius\instrument_service\conf** as per your IT policies.

8. 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.

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

Check [Activate application license](#) (on page 63) section for steps to copy the Host ID and activating the license.

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

Go through the [installation logs](#) (on page 78) for more details about the failure or contact Tektronix field engineer for support.

11. 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:

1. Check if cookies are enabled in your browser.
2. 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.

12. What if an error message is displayed as "One or more Instrument Service files were not found" when launching the Clarius Instrument Service?

Reinstall the Clarius Instrument Service, refer to [Install instrument service](#) (on page 32).

13. Clarius throws an error as Clarius instrument service is occupied even though test is not running.

Save the Clarius instrument service logs and then restart the IS and check if the problem is resolved. If the issue is still not resolved, contact a Tektronix field engineer for support.

Troubleshooting installation issues

Checklist to validate if the Clarius automation framework is installed correctly

It is recommended to check the installation prerequisites are met before you start installing the Clarius automation framework.

- Check whether the target system meets the minimum system requirements of Clarius automation framework.
- Check if the Clarius installed system and the oscilloscope are connected to the LAN and the connectivity exists between the devices.
- Check if the Hyper-V and virtualization is enabled in the BIOS.
- Check if any anti-virus or security software is installed in the target system. It may block or fail the Clarius automation framework installation.
- Check if all the default ports required by Clarius automation framework is enabled and available for use in the target system. Ports that must be enabled are 9001/5672/8080/4200/8443/18000/18002/5060.

Advanced troubleshooting guide

1. Which ports must be enabled in the target system where Clarius automation framework will be installed?

Check [Enable ports to install Clarius automation framework](#) (on page 13) section.

2. **What if the Clarius automation framework installation fails with the message in the logs as 'Waiting for IP address'?**

- Launch **Task manager** and kill the process Clarius automation framework.
- Launch Powershell in administrator mode and run the following commands:
 1. **Get-HNSNetwork | ? Name -Like "Default Switch" | Remove-HNSNetwork**
 2. **restart-computer**

3. **Unable to launch the Clarius automation framework after successful installation.**

Launch the Clarius admin console and restart all the services.

You can also restart all the services by accessing the virtual machine and execute the command **clarius restart**.

4. **How do I launch the Clarius admin console (Monitoring and Admin Console)?**

Double-click Clarius Admin Console from desktop.

5. **How do I log in to Clarius virtual machine from the target system where Clarius automation framework is installed?**

[PuTTY](#) is a free terminal emulator and file transfer application used to connect to remote servers via SSH, Telnet, and SCP.

Use PuTTY to log in to virtual machine:

1. Launch PuTTY.
2. Enter the user name as **admin** and the password of admin (default user account).

Use Hyper-V console to log in to virtual machine:

1. Launch the **Hyper-V manager** from start menu.
2. Double-click on the Clarius **virtual machine** to launch the console.
3. Enter the user name as **admin** and the password of admin (default user account).

6. **How to find the IP address of the Clarius virtual machine?**

1. Launch the **Hyper-V manager** from start menu.
2. Double-click the Clarius **virtual machine** to launch the console.
3. The console displays the IP address of the virtual machine.

NOTE: You can also access the vmdetails.json file from the install path to get the IP address of the virtual machine. The default path is **C:\Program Files\Tektronix\Clarius\.meta**

7. **What if the Clarius virtual machine is not assigned with an IP Address?**

Open the **Hyper-V manager** and restart Clarius virtual machine.

If the Clarius virtual machine does not assign the IP address, then restart the computer.

8. **How to check the configuration of virtual machine?**

1. Launch the **Hyper-V manager** from start menu.
2. Select the virtual machine, right-click and select **Settings** to check the configuration.

9. **What if Clarius virtual machine is not created even after installing Clarius automation framework?**

Restart the PC and try again.

10. **How to restart Clarius services?**

You can access the Clarius admin console and restart all the services.

You can also restart the services by accessing the virtual machine. The command to restart Clarius services are:

1. To restart all services execute **clarius restart**.
2. To restart a particular service, execute **clarius restart "service name"**.

11. What if I am not able to login to the Clarius automation framework, after restarting the system?

Restart all the services and try again.

12. What if the Clarius virtual machine IP is changed or Clarius network service is in paused state or unable to log in to Clarius automation framework?

- a. Check if the IP address of the Clarius virtual machine is changed.
 1. If yes, then check if network service status is in a paused state, then navigate to the Clarius installation path and execute **IPaddress.ps1**. The default path is C:\Program Files\Tektronix\Clarius\bin\scripts.
- b. Restart all the services.
- c. Double-click **Clarius** from the desktop to launch the Clarius automation framework.

13. What if an error message is displayed as Clarius automation framework is not installed, when you try to install a Clarius application.

1. Check if the Clarius is installed on the PC by navigating to **Control Panel → Add or remove program** and able to access Clarius UI from the Clarius desktop shortcut.
2. If not installed, install the compatible Clarius automation framework and proceed with Clarius application installation.

14. Clarius automation framework registry entries path.

Open registry editor and navigate to **HKEY_LOCAL_MACHINE\SOFTWARE\Tektronix\Clarius**.

15. How can I access Clarius virtual machine from a remote target system?

Currently you cannot log into the virtual machine of the target system from remote target system.

16. Unable to uninstall the Clarius from target system?

Check uninstallation log and take the necessary steps as per the displayed error message.

Generic docker commands (To run in virtual machine)

Use the following docker commands to troubleshoot the service issue.

Service	Command
To view the resources	docker services: docker stats
List all running services	Containers: docker ps
List all running and exiting services	Containers: docker ps -a
Restart service	Container: docker restart <Container ID/ Container Name>
Stop service	Container: docker stop <Container ID/ Container Name>
Start service	Container: docker start <Container ID/ Container Name>
To get logs of container	docker container logs: docker logs <container-id>