



Trial Edition Guide

8.2

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About This Guide

This guide provides the prerequisites and instructions for installing and using the ThingWorx Trial Edition. The guide also provides guidance for troubleshooting any issues that might happen with the installation.

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Overview

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This chapter provides an overview of the ThingWorx Trial Edition and the ThingWorx products included in the Trial Edition. Also covered are the limits of the Trial Edition and the system prerequisites required to install and run the software.

About the ThingWorx Trial Edition

The ThingWorx Trial Edition enables you to install and use the following ThingWorx products on a trial basis:

- ThingWorx Foundation
- ThingWorx Utilities
- ThingWorx Analytics
- ThingWorx Industrial Connectivity

This lets you evaluate whether ThingWorx can help your organization on your Internet of Things journey.

About ThingWorx Foundation

ThingWorx is a rapid, model-based application development platform. By employing modeling instead of coding, the content developer is able to focus on agility and application composition, rather than debugging, maintaining, and updating code. The model artifacts become a set of reusable building blocks to assemble new applications.

ThingWorx models have the following characteristics:

- Things can represent physical assets, people, organization elements (departments or production lines), and parts of a work process.
- Things can contain data, send and receive data, and perform services.
- Things may fire events.
- Things may subscribe to events from other things in your model.

After you have your model in place, you can assemble the data, services, and capabilities of the model into a Web application using drag and drop in the Mashup Builder.

For a use case, imagine a set of machines in a production line. An individual machine is a thing. The production line might also be a thing that consists of individual machines. Although it is not a requirement to include the production line as a thing in your model, it might be useful if there is important production line-level data within your application requirements. In this scenario, you would model production line data as properties within the production line thing, allowing you to effortlessly include those objects in dashboards and mashups. Additionally, you could represent a plant as a thing to use as a rollup for production data across an entire plant.

Another use case might involve assets (leased machines, equipment capable of providing remote service and diagnostics, or even distributed equipment like the power distribution equipment for an electrical utility) deployed at different

locations. You could model each entity as a thing with a location and track a number of data attributes. Then, you can plot them on a map and track status, location, and movement.

The options are numerous. Things can be as small as instrumentation where you collect data. However, people and applications can also be modeled as things. ThingWorx treats assets, people, and systems as equal collaborators in a business process and in the applications to support them.

About ThingWorx Utilities

ThingWorx Utilities offers the following features and capabilities:

- Internet of Things Capabilities for Device Management
 - Provides out-of-the-box, pre-defined capabilities that business analysts and line-of-business users can easily use without developer skills to manage and optimize the performance of connected products.
 - Includes pre-defined components that developers can readily customize and extend to build Internet of Things applications fitting the unique needs of their business.
 - Includes utilities to provision, remotely monitor, and update connected products and assets.
- Internet of Things Process Workflow – Workflows can be created to execute across multiple systems, and initiated based on alerts and triggers from connected devices. Workflows can be driven by decision support rules.
- Internet of Things Integration
 - Connects business processes and people with systems to share consistent Internet of Things information across the enterprise.
 - Provides a standard integration framework for creating and implementing pre-built and reusable connectors and can quickly integrate existing business systems with Internet of Things applications.

ThingWorx Utilities provides a consistent framework on which application developers, system integrators, and technology providers can build a rich ecosystem of unique and reusable Internet of Things applications and integrations that can be distributed through the ThingWorx Marketplace.

About ThingWorx Analytics

ThingWorx Analytics enables enterprises to find the true value in their Internet of Things data. You can use it to learn from past data, understand and predict the future, and make decisions that will enhance outcomes.

ThingWorx Analytics provides the following capabilities:

-
- Watch – Monitor edge devices and provide real-time pattern and anomaly detection on real-time data streams.
 - Predict – Provides both automated predictive modeling and operationalization for a variety of different outcomes and pattern and anomaly detection on real-time data streams.
 - Adapt – Deliver prescriptive and simulative intelligence that identifies factors that contribute to an outcome and explains how to change a predicted outcome.
 - Optimize – Automatically operationalize and maintain predictive and simulative intelligence to deliver to end-users.

About ThingWorx Industrial Connectivity

ThingWorx Industrial Connectivity connects disparate devices and applications, providing a single source of industrial automation data to the ThingWorx platform. It seamlessly connects Operations and IT through a user-friendly and high performing interface providing enhanced data visibility for real-time business intelligence across the enterprise.

ThingWorx Industrial Connectivity provides the most complete device-to-IoT-application solution. Leveraging Kepware's extensive driver portfolio, ThingWorx Industrial Connectivity enables communication with thousands of devices via proprietary and open protocols, and with software applications via OPC and IT-centric protocols. Users connect, manage, monitor, and control diverse automation devices and software applications through one intuitive user interface.

ThingWorx Industrial Connectivity offers two options for interoperability with the ThingWorx IoT Platform:

- The ThingWorx native client interface provides real-time, bi-directional industrial controls data to the ThingWorx IoT Platform via the ThingWorx AlwaysOn™ protocol. Users can quickly and easily connect ThingWorx-developed applications to ThingWorx Industrial Connectivity. ThingWorx services enable users to browse, read, write, and interact with ThingWorx Industrial Connectivity, and includes intuitive tools that simplify the modeling of industrial things.
- The IoT Gateway advanced plug-in provides real-time, read-only communication with the ThingWorx IoT Platform. Using the ThingWorx AlwaysOn protocol, the IoT Gateway's ThingWorx Agent allows users to model industrial things within the ThingWorx IoT Platform.

Trial Edition Limits

The ThingWorx Trial Edition has the following limits:

Limit	Description	Notes
5 users	Developers or runtime users of the Trial Edition	Can be any combination of users and developers
100 things	ThingWorx Composer use is restricted to 100 things	Includes things created by ThingWorx Software Content Management and workflows
10 ThingWorx Utilities workflows	Utilities feature to create business workflows to simplify runtime business processes	This is limited to 10 active workflows. Once 10 workflows are saved, you cannot add additional workflows.
10 ThingWorx Software Content Management packages	Utilities feature that allows software files to be delivered to connected devices	This is limited to 10 active packages. Once 10 packages are saved, you cannot add additional packages.
2 consecutive hours of ThingWorx Industrial Connectivity use	ThingWorx Industrial Connectivity usage	After 2 hours, you must stop and restart the application to repeat the demo period.
120 days of use	Trial period begins when the ThingWorx server is started.	You can export content to a paid ThingWorx version. We strongly recommend that you export two or more days before the 120 day limit.

Prerequisites

The ThingWorx Trial Edition requires the following hardware and software. For the most current prerequisites, refer to *ThingWorx 8.2 System Requirements* on the PTC [Reference Documents](#) site.

Operating System

The Trial Edition is supported on the following operating systems:

-
- Windows 7 64 Bit
 - Windows 8 64 Bit
 - Windows 10 Pro 64 Bit

Web Browser

The Trial Edition is supported on the following browsers:

- Internet Explorer 11 and later
- Firefox 35 and later
- Chrome 44



Note

Some components of the Trial Edition use port 80 for communication. Before installing the Trial Edition, make sure that no other application is using port 80.

Software

For Windows 7 and 8, the Trial Edition requires the Docker Toolbox version 17.03.0-ce or later be installed prior to installing ThingWorx. You can download the Docker Toolbox at <https://www.docker.com/products/docker-toolbox>.

During the installation, a Docker VM is created and assigned 4 GB of RAM (4096 MB). It is suggested that you increase the amount of RAM. To do this, open the settings for your Docker VM from your virtual machine manager application (such as VirtualBox). Increase the system **Base Memory** to a minimum 8 GB, though 16 GB is recommended. If the Docker VM (DockerMachinePTC) is already running, stop it before you change the RAM settings.

For Windows 10 Pro, the Docker Community Edition for Windows version 17.03.0-ce or later must be installed. You can download Docker CE for Windows at <https://www.docker.com/docker-windows>.

You can also increase the RAM available to Docker in Windows 10. In this case, open the Docker **Advanced Settings** and increase the **Memory**.



Note

If you used a previous version of the Trial Edition, you might need to remove the old version of the Docker VM before installing this version of the Trial Edition. To do this, open the **Docker Quickstart Terminal** and enter `docker-machine rm DockerMachinePTC`.

Hardware

The Trial Edition requires up to 15 Gbytes of disk space.

A system running Windows 7 or 8 must meet the following hardware requirements to run the Trial Edition:

- Recent desktop or laptop system with a minimum of 4 CPU cores
- 8 GB internal memory minimum with 16 GB recommended

A system running Windows 10 Pro must meet the following hardware requirements to run the Trial Edition:

- Recent desktop or laptop system with a minimum of 4 CPU cores
- 10 GB internal memory minimum with 16 GB recommended

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Installing the ThingWorx Trial Edition

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This chapter describes how to install the ThingWorx Trial Edition and provides details about the installation summary.

Installation Overview

To install the ThingWorx Trial Edition you must have the `ThingWorx-Trial-Edition-version.zip` compressed archive file containing the software. Note that you must also have administrator privileges on the system where you are installing ThingWorx.

The installation requires the following steps:

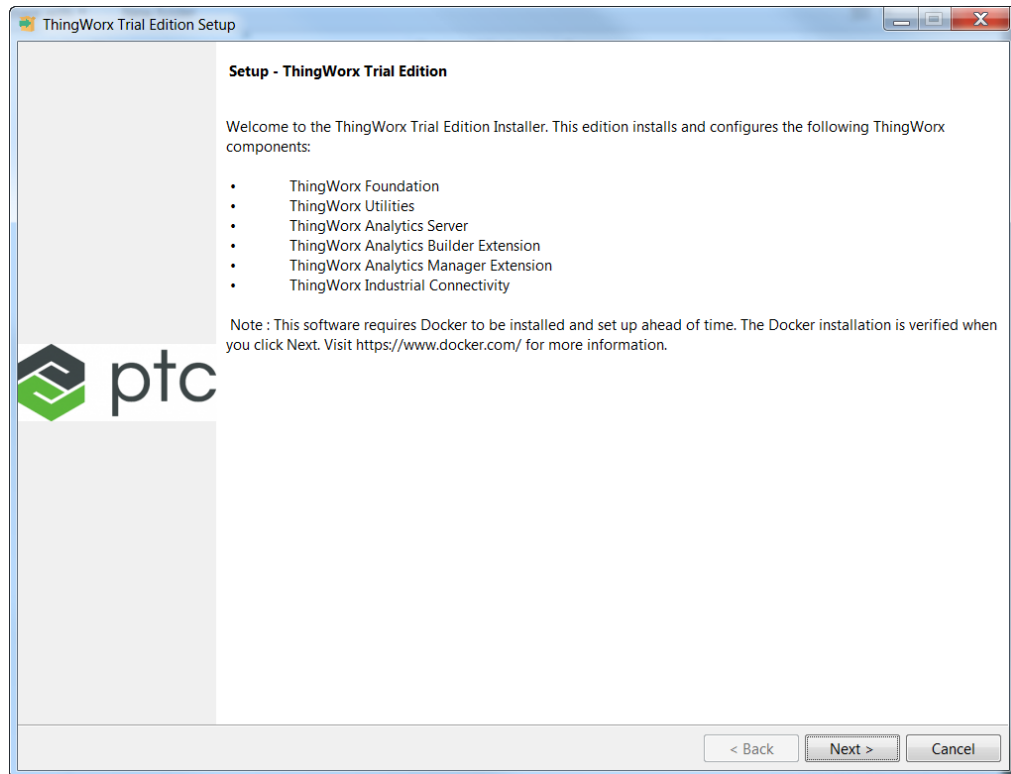
1. Make sure all of the prerequisites have been met.
2. Unzip the compressed archive file to a temporary location on your system.
3. Run the ThingWorx Trial Edition Installer and follow the installation steps.
4. Log in and start using ThingWorx.

Installation Procedure

Follow these steps to install the ThingWorx Trial Edition:

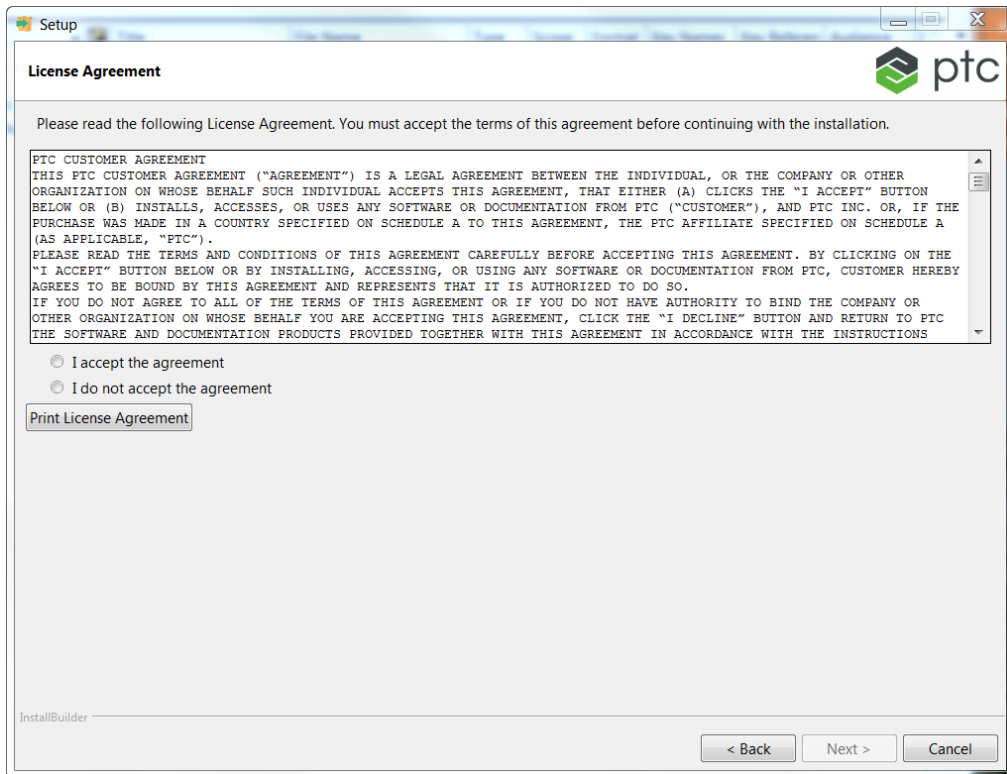
1. Extract the compressed archive file to a temporary location on your system.
2. Open the `ThingWorx Trial Edition Installer` folder in the extracted installation folder.
3. Execute the `ThingWorxTrialEdition-version-windows-installer.exe` file in the folder to start the installation.

You must have administrator privileges on the system to install the software. After you execute the installer, the **Setup** screen opens:



4. Click **Next**.

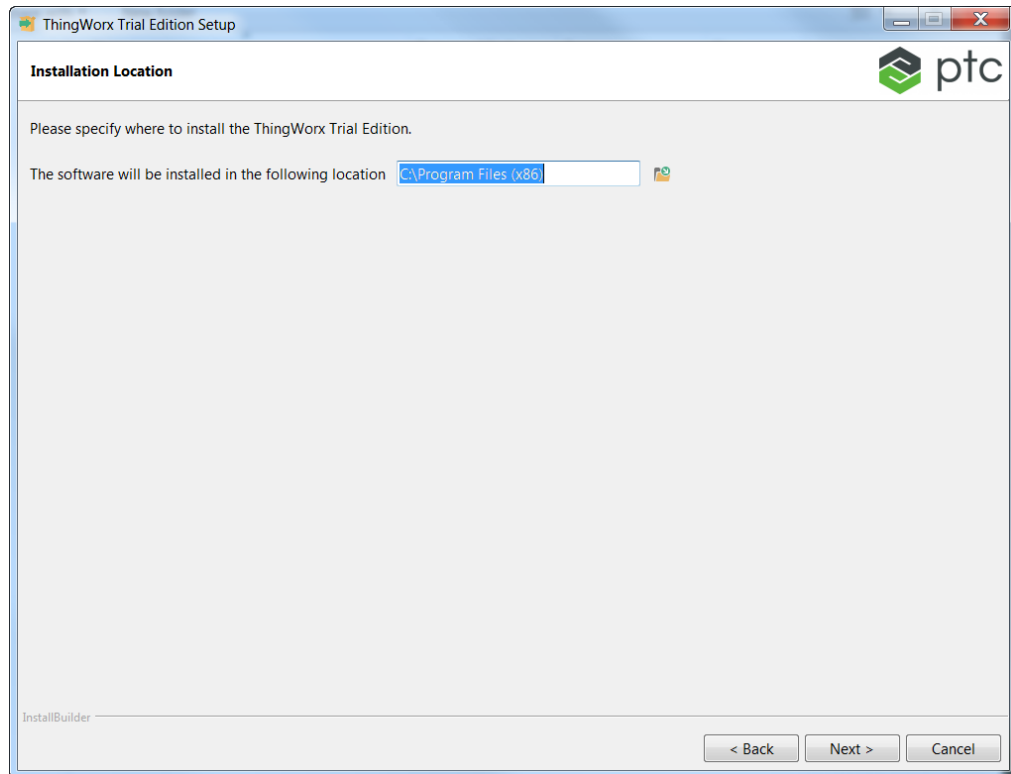
The **License Agreement** screen opens:




If desired, you can click **Print License Agreement** to open the license agreement in your default text editor where you can print it.

5. Review the license and select **I accept the agreement** if you accept it. Click **Next** to proceed with the installation.

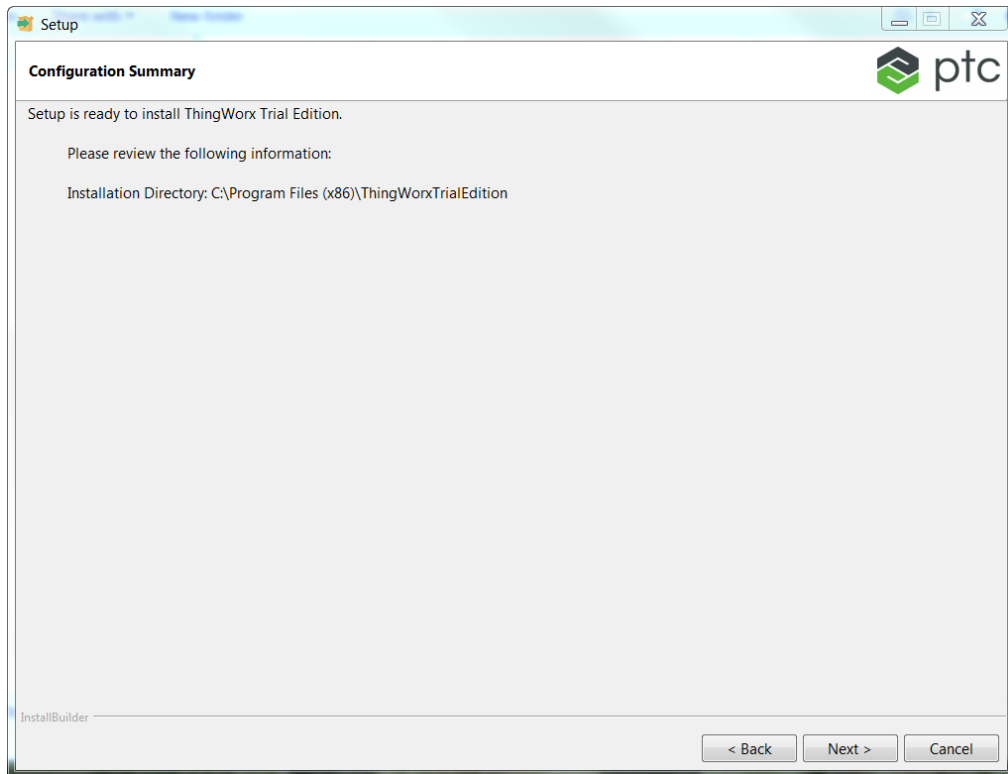
The **Installation Directory** screen opens:



6. Change the default installation directory if desired, then click **Next**.

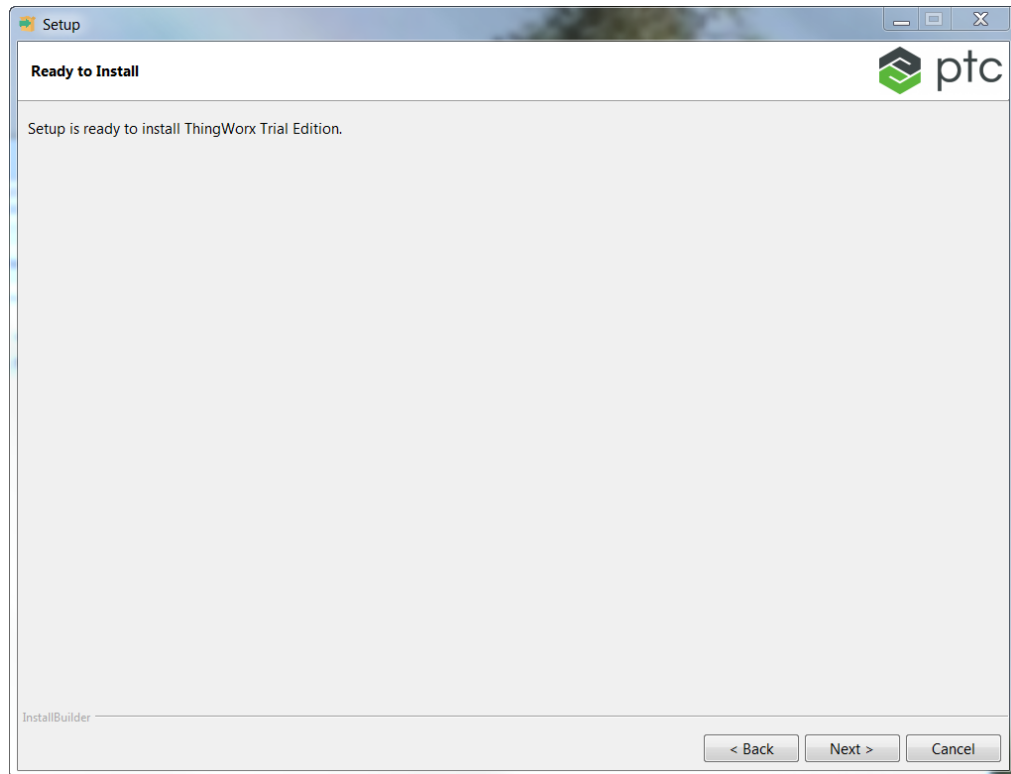
By default, the Trial Edition is installed in the C:\Program Files (x86) folder. If you want to change to a different folder, you can either enter a new path or click the  button to open the **Browse for Folder** window. This window enables you to find and select the desired folder.

After you click **Next**, the **Configuration Summary** screen opens:



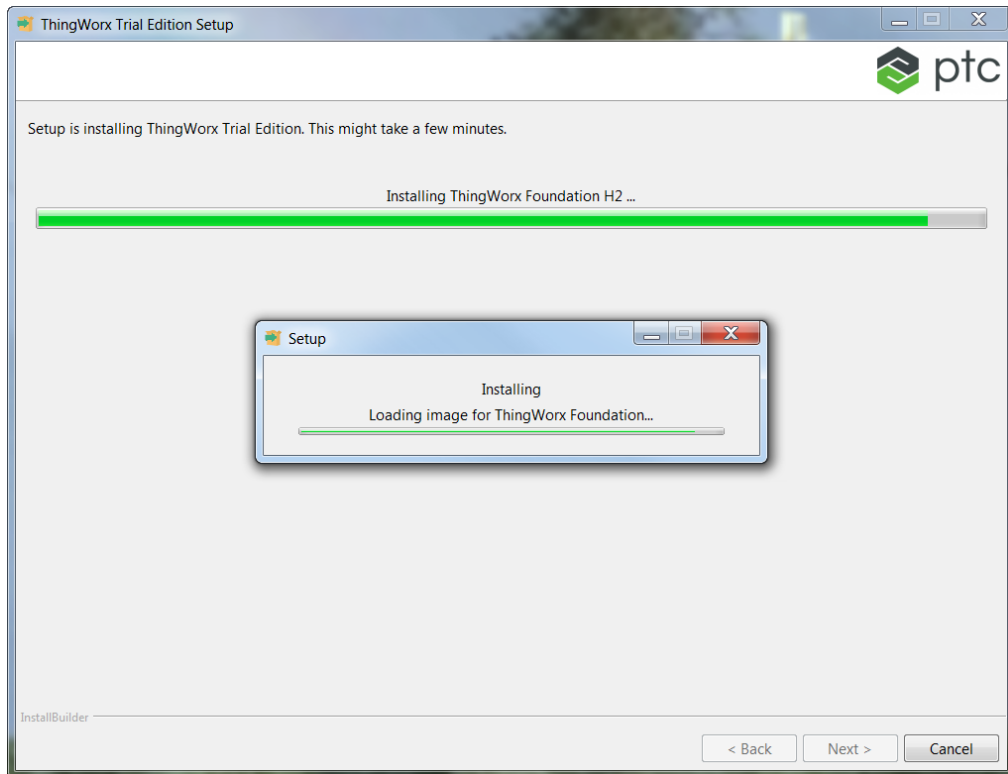
7. Review the installation configuration information to ensure it is correct, then click **Next**.

The **Ready to Install** screen opens:

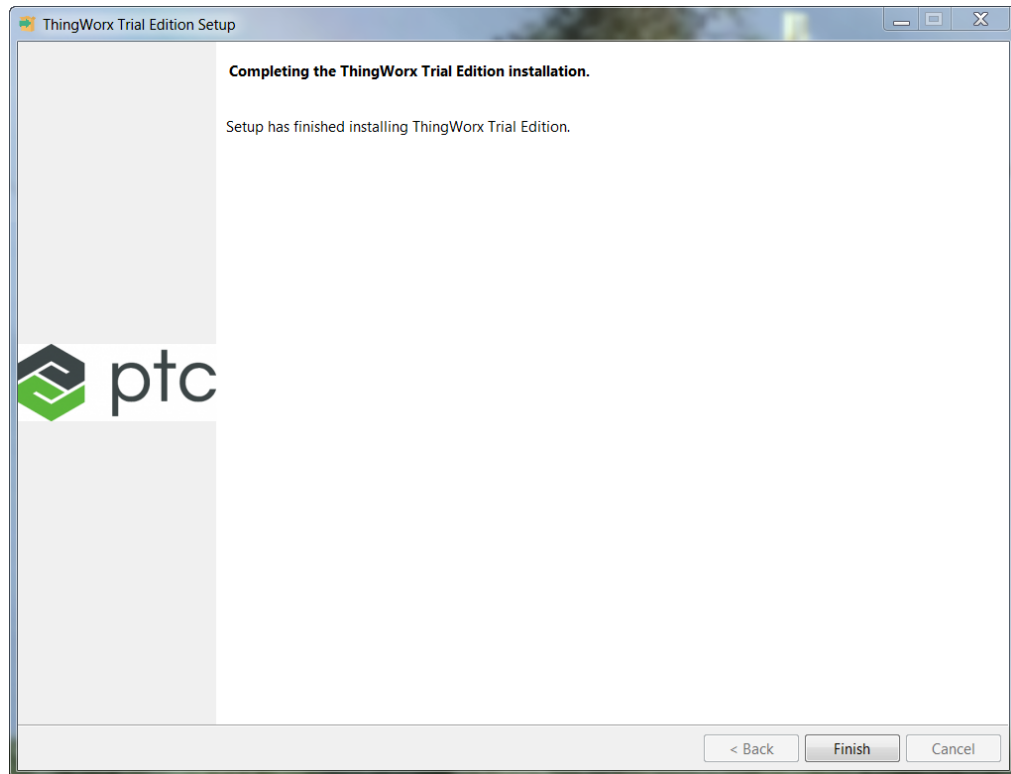


8. Click **Next** to begin the installation.

Note that this step takes some time. The installer displays a number of screens such as the following for the various ThingWorx components it is installing:



When the Installation is complete, the **Completing the ThingWorx Trial Edition installation** screen appears:



9. Click **Finish** to complete the installation.

When you complete the installation, the **Installation Summary** window opens when the installer closes. The summary contains information you need to log in to ThingWorx and to verify the installation. The summary is also saved as a file in the installation directory.

10. When you are finished viewing the installation summary, click **OK** to close the window.

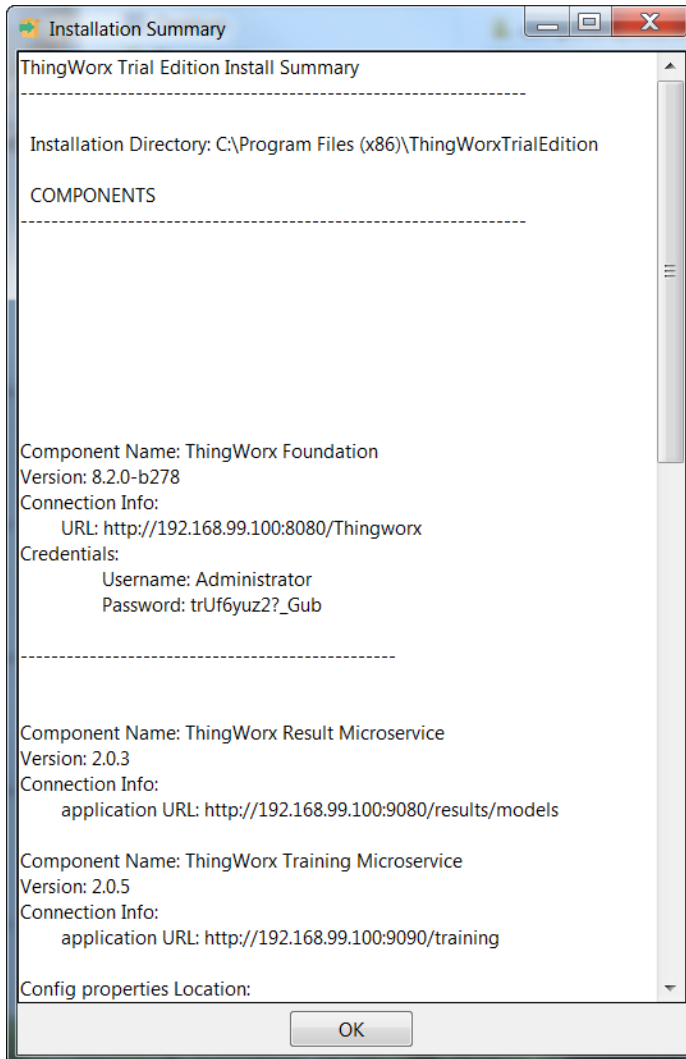
Your web browser opens asking for the ThingWorx user name and password.

11. Log in to ThingWorx using the credentials from this part of the **Installation Summary**:

```
Component Name: ThingWorx Foundation
Version: 8.2.0-b278
Connection Info:
    URL: http://192.168.99.100:8080/Thingworx
Credentials:
    Username: Administrator
    Password: trUf6yuz2?_Gub
```

The Installation Summary

The **Installation Summary** window opens when you finish the ThingWorx Trial Edition installation:



The summary provides the following information:

- The installation directory for the Trial Edition
- A list of the installed ThingWorx components
- Details about each component, such as the following:
 - Component name
 - Installed version
 - URL to connect to a component
 - Credentials required to connect to a component

- Things created for a component

The installation summary is also saved as a file at *install_directory\install_summary.txt*. so you can refer to it later.

You need information from the summary, such as the required credentials and URL to open an installed ThingWorx component and to verify the installation. Following is an example installation summary:

ThingWorx Trial Edition Install Summary

Installation Directory: C:\Program Files (x86)\ThingWorxTrialEdition

COMPONENTS

Component Name: ThingWorx Foundation
Version: 8.2.0-b278
Connection Info:
 URL: http://192.168.99.100:8080/Thingworx
Credentials:
Username: Administrator
Password: trUf6yuz2?_Gub

Component Name: ThingWorx Result Microservice
Version: 2.0.3
Connection Info:
 application URL: http://192.168.99.100:9080/results/models

Component Name: ThingWorx Training Microservice
Version: 2.0.5
Connection Info:
 application URL: http://192.168.99.100:9090/training

Config properties Location:
D:\Users\username\twx-analytics\anomalydetection\result-standalone.properties
D:\Users\username\twx-analytics\anomalydetection\training-standalone.properties

Component Name: ThingWorx Analytics Server

Version: 8.2.0-r2

Config properties Location:

D:\Users\username\twx-analytics\config\system-environment-variables.properties

D:\Users\username\twx-analytics\edge-config\analytics-server.properties

THINGS CREATED:

Analytics Gateway : MACHINE-AnalyticsServer
ResultsThing : MACHINE-AnalyticsServer-ResultsThing
ValidationThing : MACHINE-AnalyticsServer-ValidationThing
TrainingThing : MACHINE-AnalyticsServer-TrainingThing
DataThing : MACHINE-AnalyticsServer-DataThing
ProfilingThing : MACHINE-AnalyticsServer-ProfilingThing
ClusteringThing : MACHINE-AnalyticsServer-ClusteringThing
SignalsThing : MACHINE-AnalyticsServer-SignalsThing
PredictionThing : MACHINE-AnalyticsServer-PredictionThing
PrescriptiveThing : MACHINE-AnalyticsServer-PrescriptiveThing

Component Name: TWX Utilities

Component Name: ThingWorx Analytics Extensions
Successfully imported into ThingWorx Foundation

Component Name: ThingWorx Industrial Connectivity

-----End of Summary-----

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Using the ThingWorx Trial Edition

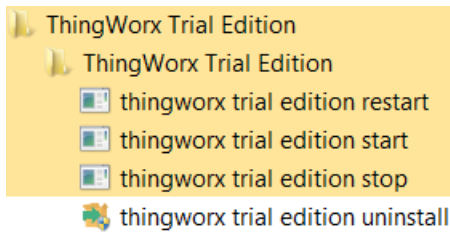
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This chapter describes how to use the ThingWorx Trial Edition and provides details about using the ThingWorx components included in the Trial Edition.

The Windows Options

The ThingWorx Trial Edition runs in its own Docker container. You can use choices from the Windows program list to stop, start, and restart the Trial Edition.

For example, in Windows 7 open **ThingWorx Trial Edition** in the Windows list of all programs and the following choices are displayed:



The following options are available:

- **thingworx trial edition restart** – Stops and restarts the Trial Edition

Note

If you are using the ThingWorx Analytics ThingPredictor functionality, see [Restarting the Prediction Microservice on page 37](#).

- **thingworx trial edition start** – Starts the Trial Edition, if it is not already running
- **thingworx trial edition stop** – Stops the Trial Edition
- **thingworx trial edition uninstall** – Invokes the uninstall process for the Trial Edition

See [Uninstalling the ThingWorx Trial Edition on page 39](#) for more information about uninstalling the Trial Edition.

Similar choices are available in Windows 8 and 10.

Using the ThingWorx Components

Once you have installed the ThingWorx Trial Edition, you can use any of the included ThingWorx components within the limits set by the Trial Edition. See below for how you can get started using each component.

Using ThingWorx Foundation

When you finish installing the Trial Edition, you are prompted to log in to ThingWorx from your web browser.

The information needed to connect to ThingWorx Foundation is in this part of the **Installation Summary**:

```
Component Name: ThingWorx Foundation
Version: 8.2.0-b278
Connection Info:
    URL: http://192.168.99.100:8080/Thingworx
Credentials:
    Username: Administrator
    Password: trUf6yuz2?_Gub
```

The first time you log in, ThingWorx displays the **Accept License** window. Click the **I accept** button on the **Accept License** window to continue. **ThingWorx Composer** opens ready for you to start working.

For more information about using ThingWorx Foundation, refer to the ThingWorx help center on the PTC support site's [help center](#) page. You can also find PDF documents about ThingWorx Foundation on the support site's [Reference Documents](#) page.

Using ThingWorx Utilities

For more information about using ThingWorx Utilities, refer to the ThingWorx Utilities help center on the PTC support site's [help center](#) page. You can also find PDF documents about ThingWorx Utilities on the support site's [Reference Documents](#) page.

Using ThingWorx Analytics

The information for ThingWorx Analytics Server is in this part of the **Installation Summary**:

```
Component Name: ThingWorx Analytics Server
Version: 8.2.0-r2

Config properties Location:
D:\Users\username\twx-analytics\config\system-environment-variables.properties
D:\Users\username\twx-analytics\edge-config\analytics-server.properties
```

THINGS CREATED:

```
Analytics Gateway      : MACHINE-AnalyticsServer
ResultsThing           : MACHINE-AnalyticsServer-ResultsThing
ValidationThing        : MACHINE-AnalyticsServer-ValidationThing
TrainingThing          : MACHINE-AnalyticsServer-TrainingThing
DataThing              : MACHINE-AnalyticsServer-DataThing
ProfilingThing         : MACHINE-AnalyticsServer-ProfilingThing
ClusteringThing        : MACHINE-AnalyticsServer-ClusteringThing
SignalsThing           : MACHINE-AnalyticsServer-SignalsThing
```


```
PredictionThing      : MACHINE-AnalyticsServer-PredictionThing
PrescriptiveThing    : MACHINE-AnalyticsServer-PrescriptiveThing
```

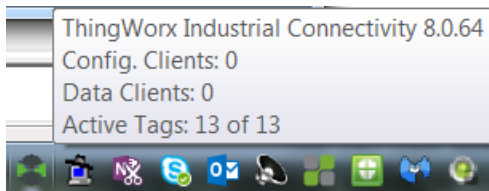
You can find the created things in **ThingWorx Composer**. The ThingWorx Analytics extensions are installed as part of the Trial Edition installation process.

For more information about using ThingWorx Analytics, refer to the ThingWorx Analytics help center on the PTC support site's [help center](#) page. You can also find PDF documents about ThingWorx Analytics on the support site's [Reference Documents](#) page.

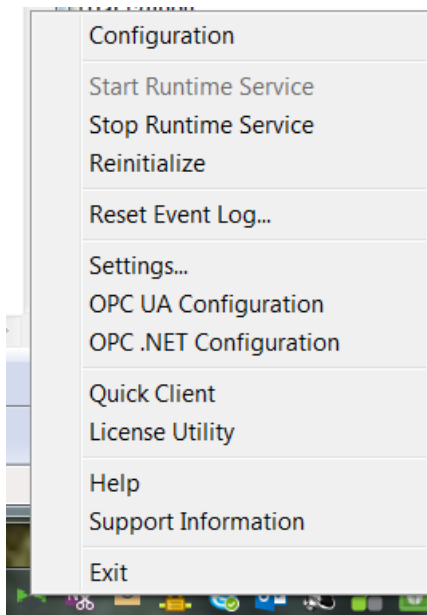
Using ThingWorx Industrial Connectivity

When ThingWorx Industrial Connectivity is installed, the associated server

administration icon  appears on your system's taskbar. You can hover over the icon to see the current status of the application:



You can right-click on the icon to see the administration options:



For more information about using ThingWorx Industrial Connectivity, refer to the ThingWorx Industrial Connectivity help center on the PTC support site's [help center](#) page.

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Troubleshooting

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This chapter describes how to troubleshoot issues that might occur during the installation process.

The Installation Logs

During the installation, the installer writes logs to the ThingWorx Trial Edition installation directory with details about the installation process. If you have any issues during the installation, you can consult these logs to see if any errors are recorded there.

The following logs are available:

- `install.log` – Covers the entire installation process
- `twxFoundationH2Docker-install.log` – Covers the installation of the ThingWorx Foundation
- `twxUtilitiesDocker-install.log` – Covers the installation of the ThingWorx Utilities
- `analytics_extensions_install.log` – Covers the installation of the ThingWorx Analytics extensions
- `AnomalyDetectionServices-install.log` – Covers the installation of the ThingWorx Anomaly Detection Services
- `ThingWorx Industrial Connectivity 8.log` – Covers the ThingWorx Industrial Connectivity component
- `Thingworx Industrial Connectivity-install.log` – Covers the installation of the ThingWorx Industrial Connectivity component
- `bootstrap.log` – Covers the ThingWorx Industrial Connectivity component

Verifying the ThingWorx Components

If you have an issues during the installation of the ThingWorx Trial Edition, you can verify that the following components installed correctly:

- ThingWorx Foundation
- ThingWorx Analytics Server
- ThingWorx Industrial Connectivity

Note that information you need to verify these components is in the **Installation Summary** that opens at the end of the installation. See [The Installation Summary on page 22](#) for more information about the summary.

Verifying ThingWorx Foundation

To verify ThingWorx Foundation you must verify you can connect to ThingWorx. Note that you might have performed this verification at the end of the installation.

The information needed to perform this check is in this part of the **Installation Summary**:

Component Name: ThingWorx Foundation
Version: 8.2.0-b278
Connection Info:
 URL: http://192.168.99.100:8080/Thingworx
Credentials:
Username: Administrator
Password: trUf6yuz2?_Gub

Follow these steps to verify you can connect to ThingWorx:

1. Enter the URL from the installation summary into a web browser. For example, `http://192.168.99.100:8080/Thingworx`.
2. Enter the user name and password from the installation summary.
If this is the first time you have logged in, ThingWorx displays the **Accept License** window.
3. If necessary, click the **I accept** button on the **Accept License** window.
4. Verify that **ThingWorx Composer** opens.

Verifying ThingWorx Analytics Server

To verify ThingWorx Analytics Server, you must confirm that the things for this component are present in **ThingWorx Composer**. The information needed to perform this step is in this part of the **Installation Summary**:

THINGS CREATED:

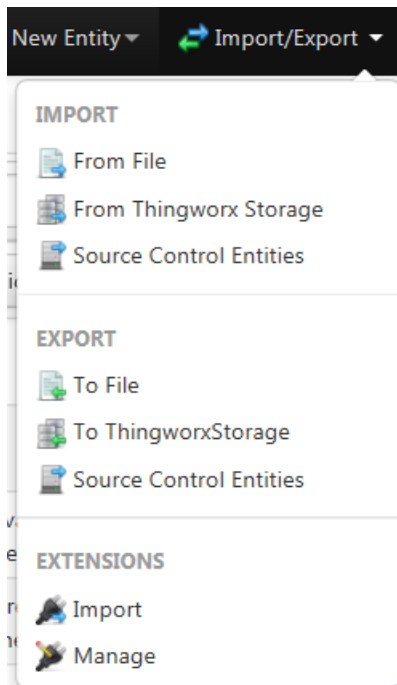
Analytics Gateway	: MACHINE-AnalyticsServer
ResultsThing	: MACHINE-AnalyticsServer-ResultsThing
ValidationThing	: MACHINE-AnalyticsServer-ValidationThing
TrainingThing	: MACHINE-AnalyticsServer-TrainingThing
DataThing	: MACHINE-AnalyticsServer-DataThing
ProfilingThing	: MACHINE-AnalyticsServer-ProfilingThing
ClusteringThing	: MACHINE-AnalyticsServer-ClusteringThing
SignalsThing	: MACHINE-AnalyticsServer-SignalsThing
PredictionThing	: MACHINE-AnalyticsServer-PredictionThing
PrescriptiveThing	: MACHINE-AnalyticsServer-PrescriptiveThing

Check the list of **Things** in **ThingWorx Composer** to verify that the things in the summary are present.

Verifying that the ThingWorx Analytics Extensions Are Installed

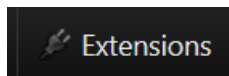
Follow these steps to verify that the ThingWorx Analytics extensions are installed:

1. In **ThingWorx Composer**, click the **Import/Export** button at the top of the window and select **Manage** under the **EXTENSIONS** section:



The **ThingWorxMonitor** opens.

2. Click on the **Extensions** button:



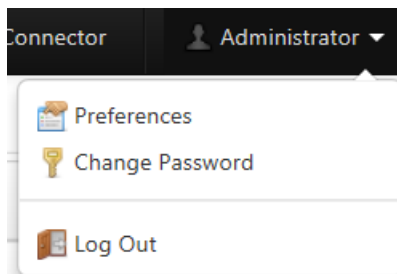
3. Verify that the Analytics extensions are installed.

For example, **ThingWorx_Analytics_Builder_Extension** and **ThingWorx_Analytics_Console_Extension** should be present.

Verifying ThingWorx Industrial Connectivity

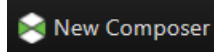
Follow these steps to verify ThingWorx Industrial Connectivity:

1. In the top right-hand corner, click on the **User Menu** and select the **Preferences** option:

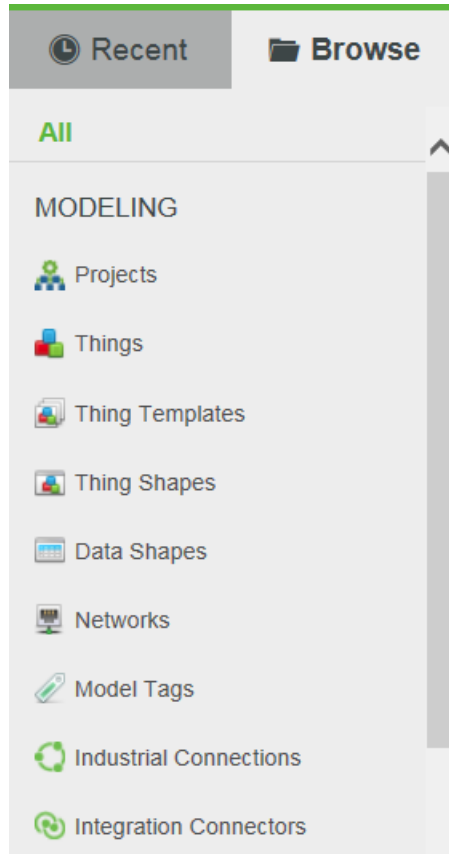


2. Click the check box for **Turn on New Composer Features**.
3. Click **Done**.

A New Composer link is added to the menu bar at the top of the Composer window:



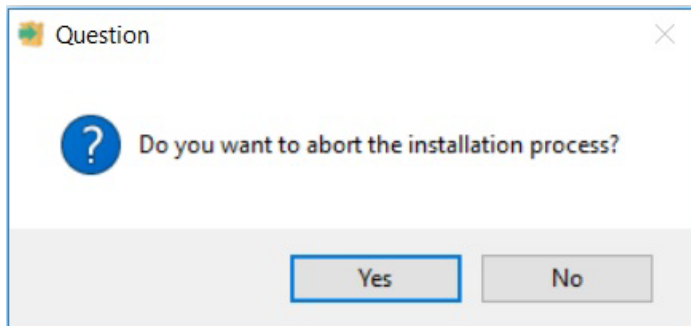
4. Click the **New Composer** link to open a new tab for the New Composer view.
5. Click on the **Browse** tab in the New Composer view:



6. Click **Industrial Connections**.
7. Verify that the **KEPServerEX** thing is present.

Handling a Canceled or Failed Installation

You can cancel the ThingWorx Trial Edition installation process at any point by clicking the **Cancel** button on one of the installation screens. In this case, the installer displays the following prompt asking for confirmation you want to cancel the process:



Click **Yes** to cancel the installation process.

In most cases, the installer is able to roll back a canceled or failed installation. It removes the installed components, but leaves behind the installation directory containing the log files in case you need to investigate why the installation failed.

If the installer is unable to completely roll back a failed or canceled installation, you can follow these general steps to ensure the ThingWorx Trial Edition is completely removed from your system before attempting another installation:

1. Save the log files from the installation directory to another location.
2. If the `thingworx_trial_edition_uninstall.exe` executable is available in the installation directory, execute it.
3. Delete the installation directory.
4. Delete the `twx-analytics` directory from your home directory.

In addition, follow the steps below for your operating system.

Handling a Canceled or Failed Installation on Windows 7 or 8

Follow these additional steps on the Windows 7 and 8 platform to handle a failed or canceled installation:

1. Open Windows PowerShell as an administrator.
2. Enter the follow commands in this order:
 - a. `docker-machine ls`
Note the state of `DockerMachinePTC`.
 - b. If `DockerMachinePTC` is in a `Timeout`, `Stopped`, or `Error` state, enter `docker-machine rm -f DockerMachinePTC`.
 - c. If `DockerMachinePTC` is in a `Running` state, enter the following commands:
`docker-machine stop DockerMachinePTC`
`docker-machine rm -f DockerMachinePTC`

If you are unable to follow these steps due to errors from the Oracle VirtualBox's VBoxManage application, stop the VBoxManage process in Windows Task Manager and repeat the steps.

Handling a Canceled or Failed Installation on Windows 10

Follow these additional steps on the Windows 10 platform to handle a failed or canceled installation:

1. Open Windows PowerShell as an administrator.
2. Enter the follow commands in this order:

- a. `docker ps -a -f "label=TWX"`

Note whether the command produces any output.

- b. If the command produces output, enter the following commands:

```
docker ps -a -q -f "label=TWX" | foreach-object {docker stop $PSItem.toString()}

docker ps -a -q -f "label=TWX" | foreach-object {$i =
docker inspect $PSItem.toString() --format=
'{{.Config.Image}}'; docker rmi -f $i}

docker ps -a -q -f "label=TWX" | foreach-object
{docker rm -f $PSItem.toString() }
```

What to Do Before Trying a New Installation

Before you try a new installation, it is suggested you do the following things:

- Make sure there is enough memory and disk space on your system.
- For Windows 10 systems, do the following things:
 - Add the installation drive you want use for the installation (for example, C:) as a shared drive in the Docker settings.
 - Enter this command in Windows PowerShell as an administrator to remove exited Docker containers:

```
docker ps -aq -f "status=exited" | foreach-object
{docker rm -f $PSItem.toString() }
```
 - Enter this command in Windows PowerShell as an administrator to remove dangling Docker images and reclaim the space:

```
foreach-object {$i = docker images -q -f "dangling=
true"; docker rmi -f $i}
```
- For Windows 7 and 8 systems, do the following things:

- Enter this command in Windows PowerShell as an administrator to get a list of existing Docker machines:

```
docker-machine ls
```

- If any machines are listed, enter this command to remove any unused machines:

```
docker-machine rm -f machine name
```

Handling a Changed IP Address

When you stop and restart the ThingWorx Trial Edition, it is possible that Docker will assign a different IP address to the software. For example, Docker might assign the address 192.168.99.100 at installation. However when restarting the Trial Edition, Docker might assign it 192.168.99.101 instead. If this happens, ThingWorx Analytics and ThingWorx Industrial Connectivity will not be able to communicate with ThingWorx Foundation.

You can check the IP address assigned to the Trial Edition by opening Windows PowerShell as an administrator and entering the command `docker-machine ip DockerMachinePTC`. If the output to the command shows an IP address other than the one assigned at installation (found in the installation summary URLs), follow the steps in the sections below to modify the configured IP address.

Changing the IP Address for ThingWorx Analytics

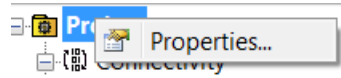
Follow these steps to change the IP address for ThingWorx Analytics:

1. Stop the ThingWorx Trial Edition.
2. Open the `Users_Directory\twx-analytics\config\system-environment-variables.properties` file in a text editor.
3. Change the value of the `thingworx.hostname` property to the new IP address and save the file.
4. Open the `Users_Directory\twx-analytics\edge-config\analytics-server.properties` file in a text editor.
5. Change the value of the `thingworx.hostname` property to the new IP address and save the file.
6. Start the ThingWorx Trial Edition.

Changing the IP Address for ThingWorx Industrial Connectivity

Follow these steps to change the IP address for ThingWorx Industrial Connectivity:

1. Open ThingWorx Industrial Connectivity.
2. Right-click on **Project** and select **Properties**:



The **Property Editor** opens.

3. In the **Property Editor**, click **ThingWorx**.

The ThingWorx properties open.

4. Change the value of the **Host** property to the new IP address:

Connection Settings	
Host	192.168.99.100

5. Click **OK** to close the **Property Editor**.
6. Select **File ► Exit** to close ThingWorx Industrial Connectivity.

If ThingWorx Analytics and ThingWorx Industrial Connectivity are still not able to communicate with ThingWorx Foundation, check the Docker IP address again and repeat these steps if necessary.

Restarting the Prediction Microservice

When you restart the ThingWorx Trial Edition, each component is stopped and then restarted, including the ThingWorx Foundation and each microservice of the ThingWorx Analytics Server. However, ThingWorx Foundation takes longer to fully restart than the microservices. If you are using the ThingWorx Analytics ThingPredictor functionality, you might see a problem when the Prediction microservice restarts and tries to communicate with ThingWorx Foundation. A manual step is required.

Select the appropriate section below based on your operating system.

In a Windows Environment

1. Open the Windows PowerShell (or a Command Prompt window) as an administrator.
2. Execute one of the following commands, depending on your version of Windows:
 - Windows 7: `docker-machine ssh DockerMachinePTC docker restart predictionms`
 - Windows 10: `docker restart predictionms`

In a Linux Environment

1. Open a Terminal window as root.
2. Execute the command: `docker restart predictionms`

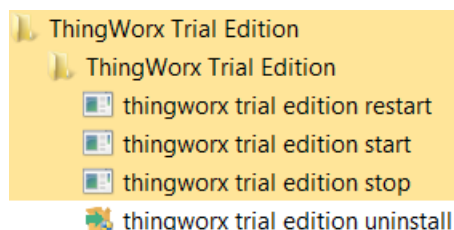
The Prediction microservice restarts and connects to ThingWorx Foundation.

Uninstalling the ThingWorx Trial Edition

Follow these steps if you want to uninstall the Trial Edition:

1. In the Windows program list, find the **ThingWorx Trial Edition** and open it.

For example, in Windows 7 when you open **ThingWorx Trial Edition** in the Windows list of all programs, the following choices are displayed:



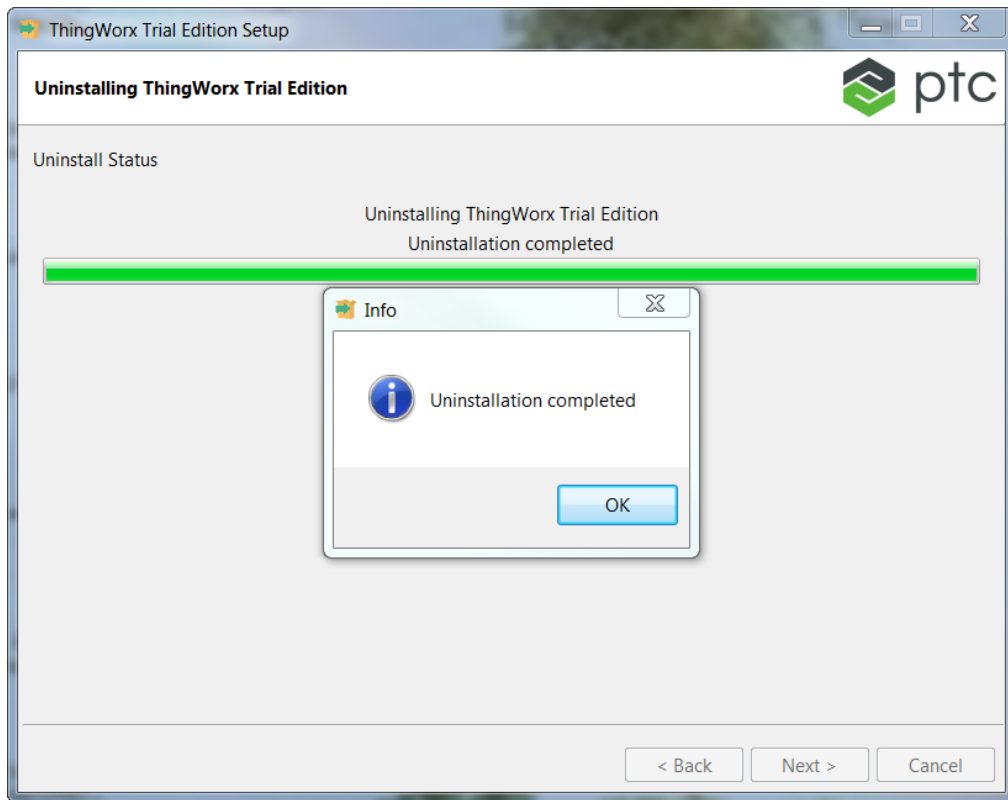
You can also uninstall the Trial Edition by executing the `thingworx_trial_edition_uninstall.exe` file in the installation directory.

2. Click **thingworx trial edition uninstall**.

The **Question** window opens asking you to confirm you want to uninstall the ThingWorx Trial Edition.

3. Click **Yes**.

The **Uninstalling ThingWorx Trial Edition** screen opens. When the uninstall is complete, the **Info** window opens.



4. Click **OK** to close the window.

The ThingWorx Trial Edition is now uninstalled from your system.