



ptc

experience lab

# ThingWorx Applications Work Order Utilities Installation Guide

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## Disclaimer

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# Change History

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Date	Author	Version	Description
06-September-2022	Sebastian Bergner	1.0	Initial Release

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# 1. Prerequisites

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- Access to the ThingWorx Composer and a user with administrator permissions
- ThingWorx CORE 3.2.0 or higher installed and configured
- ThingWorx COREUI 3.2.0 or higher installed and configured
- ThingWorx Connected Work Cell 2.2.0 or higher installed and configured

## 2. Enable Endpoint Processing

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The PTCSE.WorkOrderUtilities building block is leveraging the Job Order Endpoint, that is part of the Core functionality of the ThingWorx Applications. More information about all endpoints can be found in the [ThingWorx Applications help center](#).

1. Open **ThingWorx Composer** and login with an administrator account
  - o `https://<IPAddress>:<Port>/Thingworx/Composer`
2. Click the **Browse** in the left main menu and select **Timers**
3. **Search** for the Timer "**PTC.FSU.CORE.Process.ProcessQueue\_TM**"
4. Click on the name to open it and navigate to the **Properties and Alerts** tab
5. Ensure that the "**Enabled**" property value is set to true
6. Switch to the **Subscriptions** tab
7. Enable the following subscriptions:
  - o TriggerUpdateQueueConfiguration\_PRC
  - o TriggerUpdateQueueEventBased\_PRC
  - o TriggerUpdateQueueNotification\_PRC
8. Click the **Save** to save the timer and to apply your changes

### 3. Extract Folder

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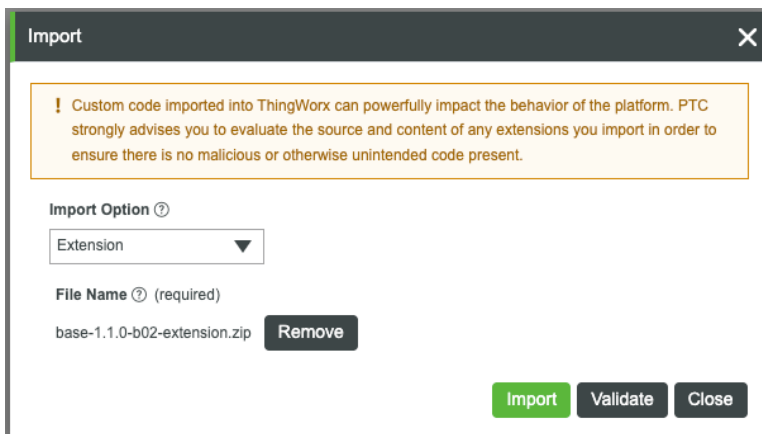
1. **Unzip** the file **PTCSE.WorkOrderUtilities\_vX.X.X\_Installation-Package.zip** (where X.X.X is the version number)
2. You should see an **PTCSE.WorkOrderUtilities** folder with the following subfolders and files:
  - o PTCSE.WorkOrderUtilities\_vX.X.X-extension.zip
  - o Dependencies

Name	Date Modified	Size	Kind
PTCSE.WorkOrderUtilities	Today at 10:41 AM	--	Folder
Dependencies	Sep 2, 2022 at 12:24 PM	--	Folder
PTCSE.WorkOrderUtili..._v0.0.1-extension.zip	Sep 2, 2022 at 1:07 PM	291 KB	ZIP archive

## 4. Import Dependencies

If you install this package on **CORE 4.0.0 or higher**, the **PTC.Base** extension might be already installed, if this is the case, skip this section and continue with the next.

1. Open **ThingWorx Composer** and login with an administrator account
  - a. `https://<IPAddress>:<Port>/Thingworx/Composer`
2. Click on **Import/Export** in the bottom left of the Composer main menu and click on **Import**
3. Make sure "**Extension**" is selected as Import Option
4. Click on **Browse** and navigate to the "**Dependencies**" folder that is part of the installation package that you extracted in section 2 of this guide
5. Select **base-X.X.X-bXX-extension.zip** (where X.X.X is the version number and bXX the build number)



**Import**

! Custom code imported into ThingWorx can powerfully impact the behavior of the platform. PTC strongly advises you to evaluate the source and content of any extensions you import in order to ensure there is no malicious or otherwise unintended code present.

Import Option ?  
Extension

File Name ? (required)  
base-1.1.0-b02-extension.zip Remove

Import Validate Close

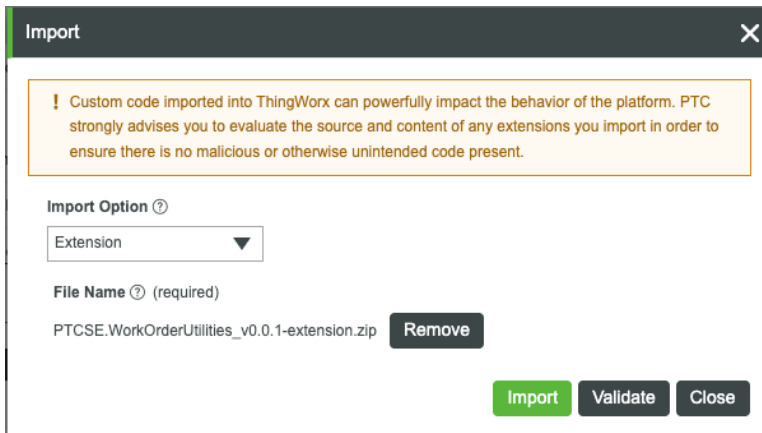
6. Click **Import**
7. Navigate to the **Manage** menu in Composer and selected **Installed Extensions**
8. **Search** for **PTC.Base** and make sure the extension was successfully imported

Installed Extension Packages

Actions	Name	Description	Package Version	Build Number	Vendor	Required ThingWorx Version	Availability in Solution Central
X	OrgUserGroup-extension	Group and Organization Extensi...	9.1.1	00	PTC	8.1.0	Not Connected
X	PagingWidget-extension	Paging Widget	9.1.1	00	PTC	8.1.0	Not Connected
X	propertytable_ExtensionPackage	propertytable Widget	2.0.0	cpm01	ThingWorx Customer Service	4.0.0	Not Connected
X	ptc-thingview-extension	Creo View WebGL Widget	1.50.2		PTC	5.1.2	Not Connected
X	PTC.Base	base	1.1.0	b02	PTC Inc.	9.3.1	Not Connected
X	PTC.ComponentManagement		1.1.0	b03		9.0.0	Not Connected
X	PTC.DBConnection	dbconnection	1.1.0		PTC Inc.	9.3.1	Not Connected
X	PTC.DefaultConfiguration	defaultconfiguration	1.1.0	b02	PTC Inc.	9.3.1	Not Connected
X	PTC.SolutionFramework		1.1.0	b03		9.0.0	Not Connected

## 5. Import Work Order Utilities Extensions

1. Click on **Import/Export** in the bottom left of the Composer main menu and click on **Import**
2. Make sure "**Extension**" is selected as Import Option
3. Click on **Browse** and navigate to the "**PTCSE.WorkOrderUtilities**" folder that you extracted in section 2 of this guide
4. Select **PTCSE.WorkOrderUtilities\_vX.X.X-extension.zip** (where X.X.X is the version number)



5. Click **Import**
6. Navigate to the **Manage** menu in Composer and selected **Installed Extensions**
7. **Search** for **PTCSE.WorkOrderUtilities** and make sure the extension was successfully imported

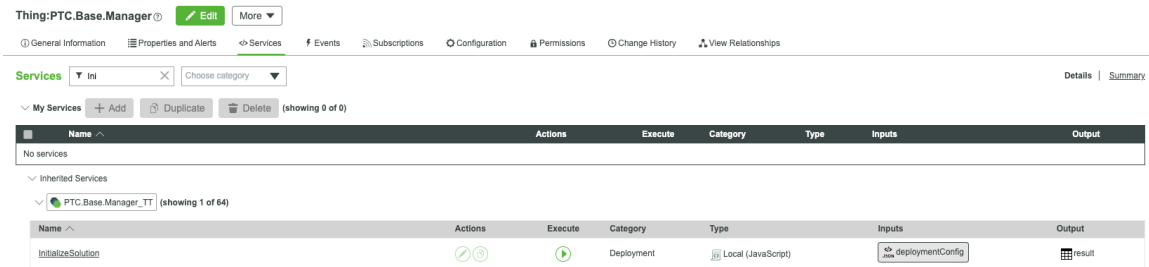
Installed Extension Packages

Actions	Name	Description	Package Version	Build Number	Vendor	Required ThingWorx Version	Availability in Solution Central
X	MathEvaluator_Extension		1.0.4		PTC	8.5.7	Not Connected
X	MmfgCommon_Extension	MmfgCommon Entities Extension	4.0.1		PTC Inc.	8.5.7	Not Connected
X	MmfgCommonUI_Extension	MmfgCommon UI Entities Exten...	4.0.1		PTC Inc.	8.5.7	Not Connected
X	PTC.Base	base	1.1.0	b02	PTC Inc.	9.3.1	Not Connected
X	PTC.Common.Apache.Library	Apache libraries commonly use...	1.0.0		PTC Inc.	8.5.7	Not Connected
X	PTC.DBConnection	dbconnection	1.1.0	b02	PTC Inc.	9.3.1	Not Connected
X	PTCSE.WorkOrderUtilities		0.0.1	b01	PTC Solution Experience Team	9.3.1	Not Connected
X	RTKPI_Extension	RealTime KPIs Entities Extension	2.0.1		PTC Inc.	8.5.7	Not Connected
X	ThresholdIndicator	Shows a current value as a thre...	1.1.1		PTC Inc. - Factory Services Unit	8.5.7	Not Connected
X	TWAppsSetup_BuildingBlock_E...	TWAppsSetup BuildingBlock en...	1.0.0		PTC Inc.	9.3.1	Not Connected



## 6. Deploy Work Order Utilities Building Block

1. Navigate to the **Browse** menu in Composer and select **Things**
2. **Search** for the Thing “**PTC.Base.Manager**”
3. Click on the name to open it and navigate to the **Services** tab
4. **Search** for the Service “**InitializeSolution**”



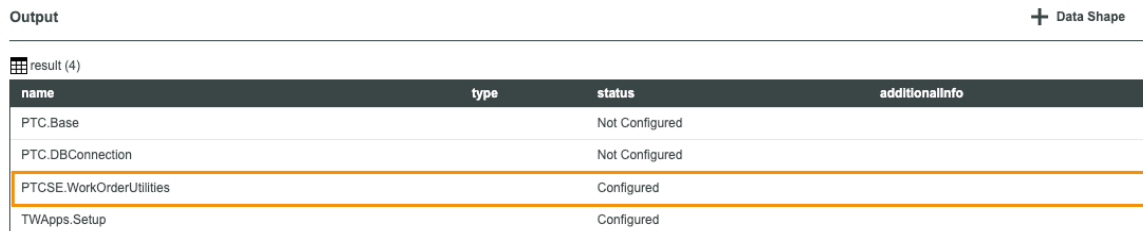
The screenshot shows the PTC Composer interface for the 'PTC.Base.Manager' thing. The 'Services' tab is active, displaying a search bar with 'ini' entered. Below the search bar, there are buttons for '+ Add', 'Duplicate', and 'Delete'. A table lists services, with 'InitializeSolution' highlighted under the 'Inherited Services' section. The table columns are Name, Actions, Execute, Category, Type, Inputs, and Output.

5. Click the **Execute Service** button
6. Enter an empty JSON object into the “**deploymentConfig**” input parameter



The screenshot shows the 'deploymentConfig' input parameter editor. The editor is titled 'deploymentConfig' and has a 'JSON' label. The input field contains an empty JSON object: {}.

7. Click on **Execute**
8. Wait until you see a result from the service
9. Make sure that **PTCSE.WorkOrderUtilities** got successfully **configured**



The screenshot shows the 'Output' section of the PTC Composer interface. The output is displayed as a table with the following data:

name	type	status	additionalInfo
PTC.Base		Not Configured	
PTC.DBConnection		Not Configured	
PTCSE.WorkOrderUtilities		Configured	
TWApps.Setup		Configured	