



Developer Trial Edition

Version 1.0



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About ThingWorx

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 Model Overview

- 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.

ThingWorx Use Case Examples

Imagine a set of machines in a production line. An individual machine is a thing. The production line may 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 may 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.

ThingWorx Developer Trial Edition Specifics

The ThingWorx Developer Edition includes ThingWorx Foundation and ThingWorx Utilities.

This evaluation version has the following limits:

Limit	Description	Notes
5 users	Developers or runtime users of the developer 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.
120 days of use	Trial period begins when the ThingWorx server is started in Apache Tomcat.	You can export content to a paid ThingWorx version. We strongly recommend that you export two or more days before the 120-day limit. See the Exporting from the ThingWorx Developer Trial Edition section of this guide.

Support for the ThingWorx Developer Edition is provided through the [ThingWorx Developer Zone](#).

Deploying the ThingWorx Developer Trial Edition

To deploy an on premise installation of the ThingWorx Developer Trial Edition, see the [Installing ThingWorx](#) guide at support.ptc.com under Reference Documents. This guide contains operating system-specific instructions and information.

For a cloud-based (or hosted) installation from the Developer Zone, see the included instructions on starting your ThingWorx Developer Trial Edition.

Logging into ThingWorx

To launch ThingWorx, go to `/Thingworx/Composer` in a Web browser.

The login screen appears. Use a strong password.

The following login information is for the Administrator user only:

- Login Name: *Administrator*
- Password: *admin*

Importing Extensions

Extensions are zip archives that contain the files for the extension and a metadata file. To install the contents of an extension into ThingWorx, the extension zip file must be imported. Follow the steps below to import an extension into ThingWorx.

Best Practice:

To import multiple extensions at the same time, package all the extension zip files into the same zip folder and follow the steps below to import.

1. In Composer, choose **Import/Export ► EXTENSIONS ► Import**.
The **Import Extensions** screen appears.
2. Choose the extension file to import.
3. Click **Validate**.
Validation results are displayed.

4. Click **Import**.

Installation results are displayed.

Using the *dependsOn* attribute of the *ExtensionPackage* element, you can specify comma-separated name-version pairs for extensions. The format is *name:major release number.minor release number.patch number* (for example, `ExtensionA:1.0.0`) and is used in dependency checking.

Caution:

When importing a newer version of an extension, you must delete the old version and restart Apache Tomcat before importing the new version to ensure that data from the in-memory database is deleted.

1. In Composer, choose **Import/Export ► EXTENSIONS ► Manage**.

The list of installed extensions appears.

2. Select the extension with an old version.

3. Click **Delete Extension**.

4. Click **Yes**.

5. Open Apache Tomcat.

6. Click **Stop**.

Wait for Tomcat to stop running.

7. Click **Start** to restart Tomcat.

8. Click **OK**.

9. Open Composer and choose **Import/Export ► EXTENSIONS ► Import** to import the new version using the steps in the section above.

Exporting from the ThingWorx Developer Trial Edition

Two or more days prior to the 120-day limit, you should save and export your work to a paid ThingWorx version or the latest version of the ThingWorx Developer Trial Edition.

There are multiple options for importing and exporting data and entities in ThingWorx. (Note that extensions can only be imported.)

For smaller imports and exports, you can use the **Import From File** and **Export To File** options since they allow you to import or export specific files. For larger imports and exports, you can use the **Import From ThingworxStorage** and **Export to ThingworxStorage** options. They allow you to import or export all entities and data asynchronously from or to the `ThingworxStorage/exports` folder.

For more information on all import and export options available in ThingWorx, see the table below.

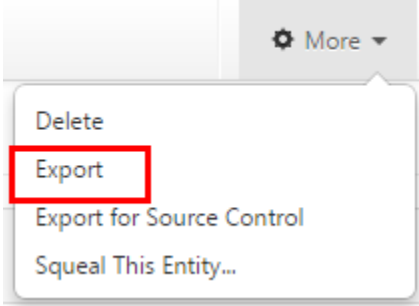
Note: While the **Import/Export** menu is only visible to administrator users, data and entities can be imported and exported manually by non-administrators. See the *Manually Exporting and Importing* help topic in the [ThingWorx Help Center](#).

Note: The information in streams, value streams, data tables, blogs, and wikis (row entries, blog posts, wiki pages) is considered data.

Export Options

Option	Description	Format	Additional Information
To File— Entities	<ul style="list-style-type: none"> Can synchronously export entities from specified entity collections (Application Keys, Dashboards, Mashups, Media Entities, etc.), with model tags, or by date (determined by the “last modified date” time stamp on the file). If a repository is not specified, entities are exported locally. 	Binary and XML	If a file repository is not specified, a folder named <code>FileRepository</code> will automatically be created at the following location: <code>ThingworxStorage\repository\FileRepository</code>
To File— Data	<ul style="list-style-type: none"> Can synchronously export data from specified collections (Blogs, Data Tables, Streams, Value Streams, or Wikis), with model tags, or by date (determined by the data’s recorded timestamp). 	Binary	If a repository is not specified, a folder named <code>FileRepository</code> will be automatically created at the following location: <code>ThingworxStorage\repository\FileRepository</code>
To File— Single Entity	Can export a single entity to a selected local destination (synchronous).	Binary or XML	If a repository is not specified, the entity is downloaded locally.
To File— Single Data	Can export single data to a selected local destination (synchronous).	Binary	

Option	Description	Format	Additional Information
To Thingworx Storage	Exports all entities and data (optional) asynchronously to the server (in the ThingworxStorage/exports folder).	Binary	<ul style="list-style-type: none"> • There is no size limit when exporting to the ThingworxStorage folder. • The export is broken into folders by date, entity/data type, and data type name. For example, C:\ThingworxStorage\exports\20150625140545\Blogs\AcmeVendingEquipmentBlog\data-0.twx • The size of the exported files can be configured in the Export Import Subsystem. • An accompanying checksum (chk) file is added for each data and entity file.
Source Control Entities	Exports ThingWorx entities by collection, model tags, start and end dates. The specified entities can be directed to a FileRepository or SourceControlRepository thing. When entities are exported, a file structure is created at the destination that resembles the way a source control system manages its artifacts. If you want to move or copy exported files to another location, you can export the file structure as a zip file.	XML	<ul style="list-style-type: none"> • The following options are available when specifying the export of the entities: <ul style="list-style-type: none"> ○ Collections— Application Keys, Dashboards, Data Shapes, Data Tags, Directory Services, Extension Packages, Groups, Localization Tables, Subsystems, Logs, Mashups, Media Entities, Menus, Logs, Model Tags, Networks, Organizations, Persistence Providers, Resources, Script Function Libraries, State Definitions, Style Definitions, Thing Packages, Things, Thing Shapes, Thing Templates, Users. ○ Model Tags—use the magic picker to export by model tags. ○ Start Date—use the start date to limit the content of exported entities based on the timestamp recorded with your entities. Start date exports entities time-stamped after the start date. ○ End Date—use the end date to limit the content of exported entities based on the timestamp as recorded with your data entries. End date exports entities time-stamped before the specified end date. If the end date is blank, the current date and time is used. ○ Repository—specify a repository for the export. ○ Path—specify the location of the export. ○ Zip File—Places the exported entities into a zip folder in the specified location. A filename must be provided.

Option	Description	Format	Additional Information
Export from the More menu		XML	 A screenshot of a software interface showing a 'More' menu. The menu is open, displaying several options: 'Delete', 'Export', 'Export for Source Control', and 'Squel This Entity...'. The 'Export' option is highlighted with a red rectangular box. The 'More' menu is triggered by a gear icon and the word 'More' with a downward arrow.

If you don't export by the 120-day limit, you can import the ThingworxStorage folder into a paid version of ThingWorx.

For more information about exporting and importing into a paid version of ThingWorx, see the *Getting Started with ThingWorx* chapter of the [ThingWorx Help Center](#).