

Example Title:	Tree Example
Description:	This example provides a ThingWorx javascript service that creates a hierarchical set of data that can be used to populate tree widgets.
Key Concepts:	Infotables, Tree Widget, D3 Tree Widget
Latest TW Version Used:	ThingWorx 7.4.0
Extensions Required:	D3 Tree Extension
Original Tech Sales Engineer:	John Ristey
Example Revision:	1.0 First Release

Setup:

1. Download the D3 Tree extension from the ThingWorx Marketplace - <https://marketplace.thingworx.com/Items/d3-tree>

2. Import the D3 Tree extension into ThingWorx
3. Import the provided Entities.twx file

Entity Notes:

1. TreeDataServices – Thing – this is simply a Thing created from the GenericThing template. Its sole purpose is to provide an infotable result set of hierarchical data that can be displayed in a grid or tree widget. The service on this thing provides a good example of creating an infotable from a data shape in javascript and creating row objects and adding them to the infotable result.
2. TreeDataShape – this is simply the data shape that is used by the GetTreeHierarchyData service that lives on the TreeDataServices Thing.
3. TreeMashup – this is the mashup that shows how to configure the D3Tree widget and the Tree widget to display hierarchical data. The data is also shown in a grid.

Load / Run the Mashup:

1. Open the TreeMashup

This Technical Example is provided to share knowledge on specific ThingWorx topic(s). It does not necessarily represent a best practice or a supported approach.

- Click the View Mashup button
- The display should something look like:

Parent	Child	ChildDescription
No Parent	Enterprise	Enterprise
Enterprise	Site1	Wilmington Plant
Site1	Site1.Line1	Blow Molding
Site1.Line1	Site1.Line1.Asset1	Preform Staging
Site1.Line1	Site1.Line1.Asset2	Blow Molder
Site1.Line1	Site1.Line1.Asset3	Bottle Unscrambler
Site1	Site1.Line2	Filling
Site1.Line2	Site1.Line2.Asset1	Rinser
Site1.Line2	Site1.Line2.Asset2	Filler
Site1.Line2	Site1.Line2.Asset3	Capper
Site1	Site1.Line3	Packaging
Site1.Line3	Site1.Line3.Asset1	Printer Labeler
Site1.Line3	Site1.Line3.Asset2	Packer
Site1.Line3	Site1.Line3.Asset3	Palletizing
Enterprise	Site2	Mobile Plant
Site2	Site2.Line1	Blow Molding
Site2.Line1	Site2.Line1.Asset1	Preform Staging
Site2.Line1	Site2.Line1.Asset2	Blow Molder
Site2.Line1	Site2.Line1.Asset3	Bottle Unscrambler

Regular Tree

- Enterprise
 - Wilmington Plant
 - Blow Molding
 - Preform Staging
 - Blow Molder
 - Bottle Unscrambler
 - Filling
 - Rinser
 - Filler
 - Capper
 - Packaging
 - Printer Labeler
 - Packer
 - Palletizing
 - Mobile Plant
 - Blow Molding
 - Preform Staging
 - Blow Molder
 - Bottle Unscrambler
 - Filling
 - Rinser
 - Filler
 - Capper
 - Packaging
 - Printer Labeler
 - Packer
 - Palletizing

D3 Tree

- In the mashup design view, you can examine the two tree widget properties to see how the widgets were configured.