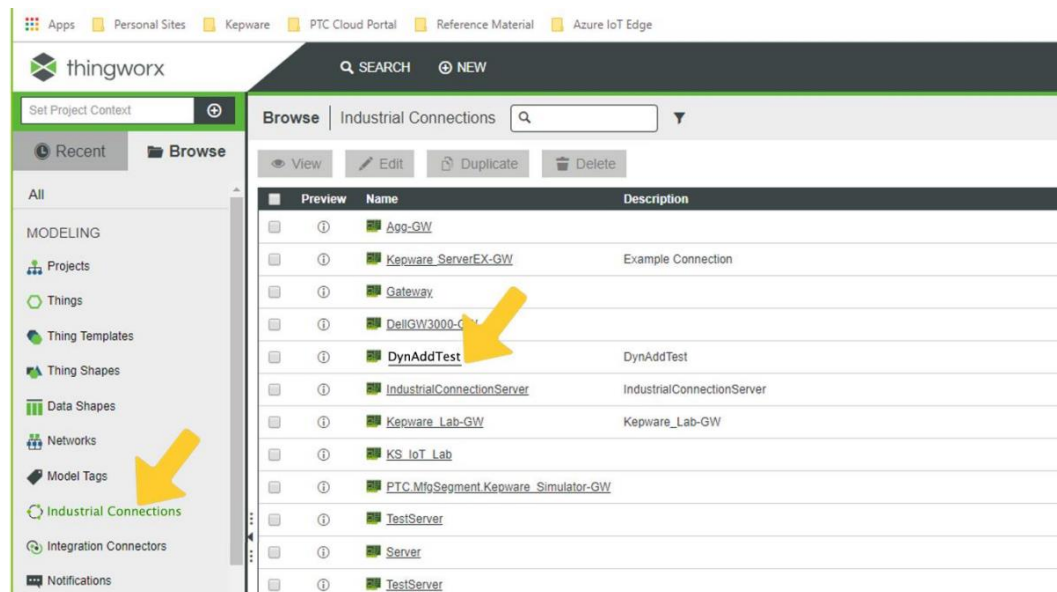


# Technical Note

## Using Dynamic Tags with Kepware Servers and ThingWorx

This document provides instructions for using ThingWorx Composer to reference dynamic tags within a connected industrial gateway from a Kepware Server instance.

1. Follow the instructions in the [ThingWorx Composer Help Center — Industrial Connections Example](#) to connect ThingWorx to Kepware Server through the ThingWorx native interface.
2. Verify the gateway shows up in the Industrial Connections area of the Composer.
3. Verify the new Kepware industrial gateway object is saved to make the gateway available for dynamic tag data transfer (*DynAddTest* in image below).



4. Create a new Remote Thing and assign it Implemented Shape IndustrialThingShape.

Apps Personal Sites Kepware PTC Cloud Portal Reference Material Azure IoT Edge

thingworx

Set Project Context

Thing: New Thing -1

To Do Save Cancel More Edit in Composer

General Information Properties and Alerts Services Events Subscriptions

General Information

No image available

Name (required)

DynAddressTest

Change

Description

Project

Search Projects

Tags

Search Model Tags

Base Thing Template (required)

Remote Thing

Implemented Shapes

Search Thing Shapes

IndustrialThingShape

Value Stream

Search Value Streams

Active

5. Within the new Remote Thing's properties, assign the Industrial Thing property a value that is the name of the Industrial Gateway added in step 1. This associates the new Remote Thing with the industrial gateway and supports referencing tags from the connected server.
6. After selecting the Industrial Thing in the menu pane on the right, click the checkmark in the upper right for the property to be associated.
7. Click the green **Save** button to apply the changes to the new Remote Thing.

Set Project Context

Industrial Thing: DynAddressTest

To Do Save Cancel More Edit in Composer

General Information Properties and Alerts Services Events Subscriptions Change History

Properties Alerts

My Properties Add Duplicate Delete Manage Bindings Refresh

Name	Actions	Source	Default Value	Value	Alerts	Category	Additional Info
No properties							
Inherited Properties							
Remote Thing							
Name	Actions	Source	Default Value	Value	Alerts	Category	Additional Info
isConnected					0	ConnectionStatus	
lastConnection			1969-12-31 19:00:00	1969-12-31 19:00:00	0	ConnectionStatus	
IndustrialThingShape							
Name	Actions	Source	Default Value	Value	Alerts	Category	Additional Info
IndustrialThingShape				Set Value	0	Properties	IndustrialGateway

Set value of property

Dyn

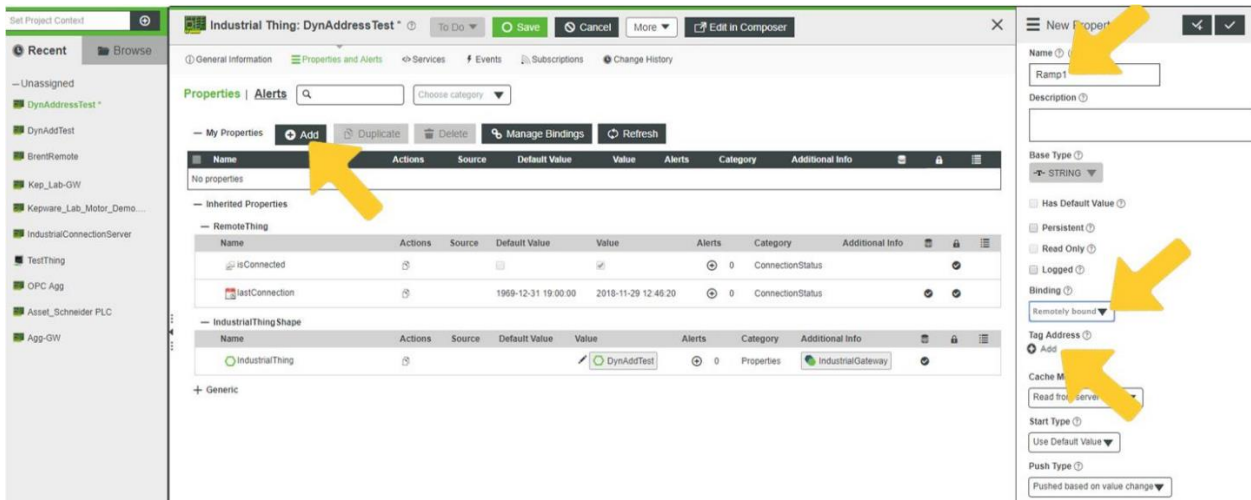
Advanced Search

Add Thing

DynAddressTest

8. Add a new property to the Remote Thing.
9. Assign its binding as **Remotely Bound**.

10. Click the **Add** button under the Tag Address field to begin associating the property with the dynamic tag address.



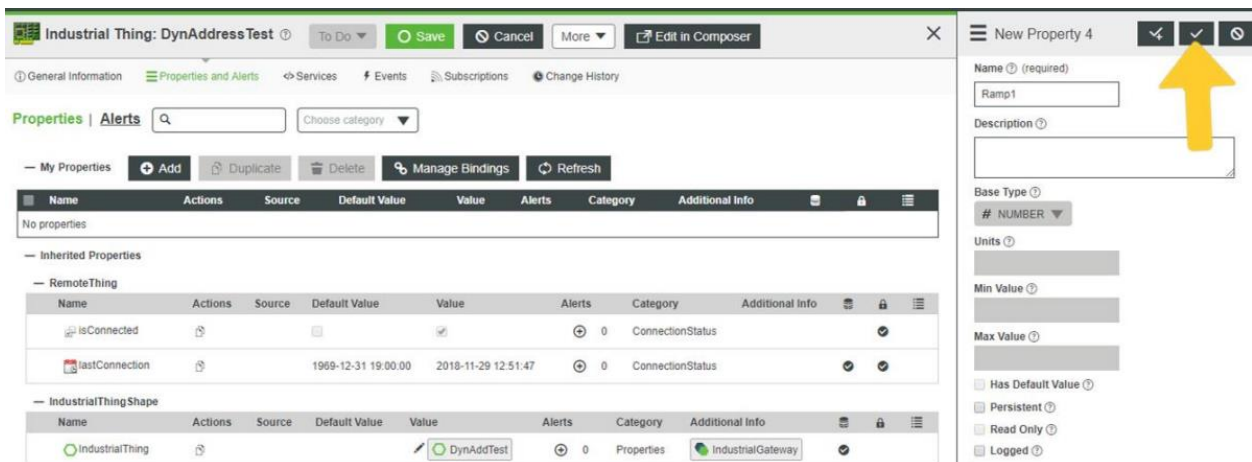
11. In the Choose Tags dialog box, select **Dynamic Tag**.

12. Enter the selected dynamic tag address.

13. Click **Done**.



14. Click the checkmark in the upper right to finish the property addition.



15. Click the green **Save** button to commit the changes to the Remote Thing.

16. Click the **Refresh** button to see new incoming values from the dynamic tag.

The screenshot shows the PTC Industrial Thing DynAddressTest interface. The left sidebar lists recent items: Inassigned, DynAddressTest, DynAddTest, Remote, PactivTest2, Kepware\_Lab\_Motor\_Demo..., IndustrialConnectionServer, Test1, OPC Agg, Asset\_Schneider PLC, Agg-GW, and TestThing. The main panel is titled "Industrial Thing: DynAddressTest" and has tabs for General Information, Properties and Alerts, Services, Events, and Change History. The "Properties and Alerts" tab is active, showing a search bar and a "Choose category" dropdown. Below this are buttons for "Add", "Duplicate", "Delete", "Manage Bindings", and "Refresh". The "Alerts" section displays a table with columns: Name, Actions, Source, Default Value, Value, Alerts, Category, and Additional Info. The table contains one row for "# Range1" with source "channel1.device1.r1" and value "329". Below this is the "Inherited Properties" section, which includes "RemoteThing" and "IndustrialThing Shape". The "RemoteThing" section has a table with columns: Name, Actions, Source, Default Value, Value, Alerts, Category, and Additional Info. It contains two rows: "isConnected" with value "true" and "lastConnection" with value "2018-11-29 12:53:19". The "IndustrialThing Shape" section has a table with columns: Name, Actions, Source, Default Value, Value, Alerts, Category, and Additional Info. It contains one row: "IndustrialThing" with value "DynAddTest". Yellow arrows point to the "Save" button, the "Refresh" button, and the "Value" column in the "RemoteThing" table.

Name	Actions	Source	Default Value	Value	Alerts	Category	Additional Info
# Range1		channel1.device1.r1		329			

Name	Actions	Source	Default Value	Value	Alerts	Category	Additional Info
isConnected				true	0	ConnectionStatus	
lastConnection			1999-12-31 19:00:00	2018-11-29 12:53:19	0	ConnectionStatus	

Name	Actions	Source	Default Value	Value	Alerts	Category	Additional Info
IndustrialThing				DynAddTest	0	Properties	IndustrialGateway