

# dizmo

The Interface of Things



## dizmo Starter Kit Version 1.0 User Guide

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## Software Change Log

Version	Release Date	Changes
1.0r1 (build 740)	Oct 14, 2014	<ul style="list-style-type: none"> <li>Initial Release</li> </ul>
1.1r3 (build 880)	May 20, 2015	<ul style="list-style-type: none"> <li>Added dizmoSynchro</li> <li>Added sliding motion</li> <li>Added improved API 1.2</li> <li>Additional items in dizmoElements</li> <li>Added built-in Markdownreader dizmo</li> <li>Improved built-in Slideshow dizmo</li> <li>Improved built-in Store dizmo</li> </ul>
1.2r1 (build 1133)	Mar 8, 2017	<ul style="list-style-type: none"> <li>Switched from workspace to pad specific storage &amp; management of Setups</li> <li>Added merging for setups</li> <li>Added improved API 1.3</li> <li>Switched to HTTP based API</li> <li>Added multiuser feature-set</li> <li>Added embedded-system-specific feature-set</li> <li>Added HDPI rendering</li> <li>Improved dizmoLive service detection (SSDP)</li> <li>Added built-in PDF Reader</li> <li>Added cloning of dizmos</li> <li>Added dizmo help &amp; improved onboarding</li> <li>Added notification dizmo &amp; API</li> <li>Improved startup (flicker removed)</li> </ul>

## Introduction

Extensibility is a core aspect of the architecture and design of ThingWorx ecosystem. “Ready for ThingWorx” certified partners may seamlessly add new functionality and added value to their IoT solution. The dizmo Starter Kit comes in the form of a software, connector, set of dedicated set of microapps, and Quick Starter developers package to solve your IoT data visualization needs.

This Quick Start Guide provides installation instructions for the usage of dizmo as a ThingWorx-enabled solution.

### About the “dizmo for ThingWorx” Quick Start Guide

Dizmo is a Minority Report style data consumption, integration and orchestration platform that makes data decisioning more humanly intuitive at the top of your IoT technology stack.

The dizmo Quick Start Guide for ThingWorx explains how the “dizmo for ThingWorx integration” (D4TW) creates your own On Demand Dashboard directly from entities in the ThingWorx mash-up. This D4TW integration recreates the entities in the form of “dizmos”, and creates the data stream to them. Subsequently, additional dizmos, which can be found in the dizmoStore, may then complement, add and extend your ThingWorx IoT dashboard.



[dizmoStore](#)

The “dizmos” are the microapps that provide the features and functionality in the dizmo workspace (for example: “analytics” dizmos, such as the Data Lense, Chart or a Visualiser; “things” dizmos, such as the Liquid Pump; or “orchestration” dizmos, for your IoT control system, such as the Gauge or Slider). As opposed to static widgets, dizmos have next generation native functionality, such as docking, parenting, overlay, private/ publish data, self-deleting/ self-launching, logic, apps not just content, agile correlation, infinite visualization architecture, etc..).

Additional dizmos can be found in the dizmoStore and are available to complement, add and extend your ThingWorx IoT dashboard. Feel free to develop your own dizmos via our dizmoGen (SDK) environment. Details are found at the [Developers](#) section of our site.

## The processing of connecting

The process of connecting your dizmo On Demand Dashboard to ThingWorx is the following:

1. A link on the ThingWorx Marketplace dizmo listing page leads to the “dizmo for ThingWorx” webpage where you can complete dizmo user ID registration and download.
2. Following your login, the user must download the ThingWorx Connector dizmo from the dizmoStore. On opening it, the Stack Dizmo is also automatically opened offering most frequently used visual indicator and controller dizmos.



[dizmoViewer](#)

3. Process is secured by an appKey generated from ThingWorx and sent to the ThingWorx Connector dizmo. AppKey is then embedded into all ThingWorx dizmos instantiated or used thereon. You can download the service to create this appKey by clicking and saving this file to the following file to your device:

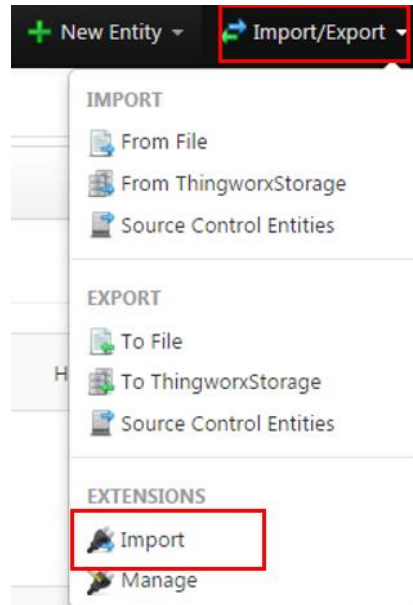


Things\_DizmoAppKeyGen.twx

From here the process becomes:

From a web browser, launch the ThingWorx Composer and log in as an administrator.

Go to **Import/Export > Import**.



Click **Choose File** and select “things\_dizmoAppKeyGen.twx” file

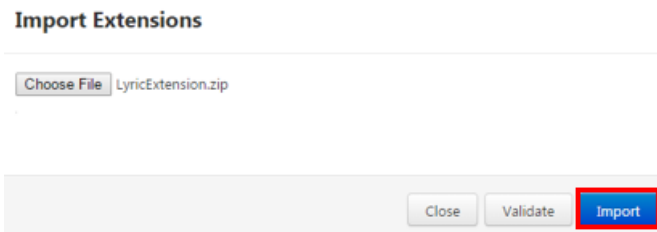
Click **Import**.

Note: If an **Import Successful** message does not display, contact your ThingWorx System Administrator.

Click **Yes** to refresh Composer after importing the file.

Confirm that the file has been imported properly. Check the Application Log for potential problems.

4. ThingWorx Connector dizmo then collects all accessible data from the ThingWorx Server and lists all corresponding “things” as clickable options. These “things” are then one-click selected and instantiated in the dizmoViewer as “dizmos” with all of the added functionality, front-end computational capabilities and data interactivity associated with “dizmo – Interface of Things” On Demand Dashboards.



Note:

# Configuration and Usage

## Configuration

Once the dizmoID is created, dizmoViewer launched and the ThingWorx Connector dizmo located, it will be possible to connect to the ThingWorx Server by entering in your ThingWorx User Name Password and Server URL into the settings side of ThingWorx Connector Dizmo. This will connect you to the ThingWorx Server and data stream.

### DEFINITIONS –

#### Connector dizmo

The Connector Dizmo will then collect all accessible data automatically via a RESTful API out of ThingWorx and list all corresponding “things” as clickable options. These “things” are then one-click selected and instantiated in the dizmoViewer as “dizmos” with all of the added functionality, front-end computational capabilities and data interactivity associated with “dizmo – Interface of Things” On Demand Dashboards.

#### Thing dizmos

The Thing dizmo is a generic dizmo which allows to bring any of the entities in the ThingWorx mash-up into dizmo’s digital workspace. It aims to correspond, in as much as is possible with any of the selected “things” in the ThingWorx composer (Liquid Pump > Liquid dizmo etc), of which it will then represent the digital twin. Menu fields on the rear side of these dizmos, dynamically, in an automated “On Demand” way according to the property data available.

#### Stack dizmo

Top ten most used widgets (Slider, Gauge, Chart etc) are “stacked” in the Stack dizmo for faster location and one-click instantiation. These may also be found in the Creator dizmo (“+” button at foot of screen). Additional widgets and visualisations may be found in the dizmoStore. [Stack dizmo demo](#)

#### “On Demand Dashboards”

“On Demand Dashboards” may be created which enable the visualization of a whole machine park, production line or industrial infrastructure, or simply the monitoring of the usage of one particular machine or specific sensor. These Dashboards (“Setups”) may then be shared\*, live or asynchronously, with another analyst in a non-hardcoded, On Demand way for improved collaboration and data decisioning. (\*Role-based dependencies admin rights are required).

#### Returning user

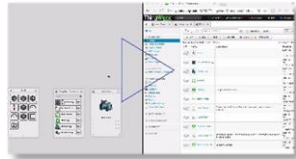
Please note: the analyst or a developer coming back to his/her dizmo-ThingWorx enabled application simply clicks on the icon on the desktop and the connection, the proliferation and layout will persist from the previous session.

## Usage

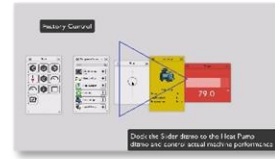
Dizmo is a Minority Report style data consumption, integration and orchestration platform that makes data decisioning more humanly intuitive at the top of your IoT technology stack. Our user-definable, disruptive, multi-purpose digital workspace transforms the way we interact with data, apps and connected “Things”, for better:

- Data Consumption: On Demand Dashboards and heightened data interactivity for better data decisioning and the autonomous creation of insight. Better actionability of your IoT data.
- Data integration: bring heterogeneous data from multiple silo’ed systems, onto your unified workspace; any data interacting with any data in your IoT control system.
- Orchestration: more humanly intuitive orchestration of your smart home, smart factory, smart city or any Industrie 4.0 control environment.

### [ThingWorx - dizmo data integration](#)



### [On Demand Dashboards for Industrie 4.0](#)



## Compatibility

dizmoViewer was tested for compatibility with the ThingWorx Platform version(s) and Operating System(s):

ThingWorx Platform Version	ThingWorx 7.1.0
dizmo Version	1.2.1.
OS	<b>Mac OS X 10.7.</b> and later, <b>Windows 8</b> and later, <b>Linux</b> (Debian and Ubuntu); <b>Android</b> , iOS via dizmoNet*

## Known Issues

While we’re working to constantly resolve, solve and enhance dizmoViewer, we’re aware that sometimes with software issues arise. Here’s a list of the known issues and workarounds:

- In the unlikely event that the dizmoViewer displays only a grey/ white window at the start, it may require to disable OpenGL in the GlobalSetting.xml. Please contact [support@dizmo.com](mailto:support@dizmo.com) for swift resolution.

- The rendering quality of images can sometimes be suboptimal depending on the size of the source image and the zoom level. Via selecting “Reset image size” in the Slides dizmo menu, the image can be resized/ zoomed to the desired size.
- In some cases, when one dizmo is still moving while you are already moving a second dizmo, it may be that the former dizmo moves under the underlying Pad instead of on top of it.
- While a video is playing, it is not yet possible to grab and move the progress bar to move forward or back in the video. You can work around this by directly clicking on the position of the bar you wish to jump to.

### Additional Information

We want you to get the best out of dizmo’s software. While we continue working hard to enhance it, we have put together a few lists to speed up your progress with dizmoViewer.

- [Known Issues, Workarounds and Recommendations](#)
- [Description of the available dizmos in your dizmoStore](#)
- [Information about usage of dizmoLive if you’re a Windows user](#)

Please note: we are updating the dizmos regularly. In order to use the latest versions of all your dizmos, please make sure you regularly go to the dizmoStore, click on the “...” box, then click on “My purchased dizmos”, log in, and select “Update all”.

## Document Revision History

Revision Date	Version	Description of Change
July 28, 2017	1.0	Description of dizmo Quick Start Guide, updating Usage, Configuration, Compatibility and Known Limitations sections.