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ThingWorx
A PTC Business



Berkshire Technology Solutions

System Requirements

Version 1.1

Thingworx Core 8.0 System Requirements

Overview

This document provides the following server hardware and configuration requirements for running the Progressive DNC product in a production environment.

- Core operating system software requirements
- Prerequisite software required by ThingWorx
- Minimum sizing requirements (for production use)

The information in this document is specific to ThingWorx Core 8.0, unless specifically noted otherwise. Other versions of the product may introduce new or changed system requirements.

ThingWorx Core Server Requirements

Hardware Sizing

The following are minimum recommendations for productions. Actual sizing will depend on the application and usage scenarios.

Aspect	Value	Comment
Memory	16 GB	Configuration will require a percent of dedicated memory to be allocated to the Java VM
CPU(s)	4 Cores	Virtualized environments may have their own terminology for specifying how many CPUs/Cores are being provided. This must be taken into account when determining if the environment meets the minimum requirements. The amount of concurrent query activity, indexing and searching, as well as the amount of internal event and/or property data-change may warrant increased CPU resources.
Disk Type	*	Server-class hardware is recommended
Disk Space	100GB	This size will accommodate the default ThingWorx web application installed in Tomcat, along with the initial ThingWorxStorage (dB) directory and some initial configuration data. NOTES: <ul style="list-style-type: none"> • This does NOT include the space required for the OS or other prerequisite software • The total disk space required for any given application depends on the amount of configuration and runtime data that will be maintained. Customers should work with Support to estimate space needs according to their application requirements.
Disk Speed	10000 RPM or SSD	Speed is important if you are sorting data on the ThingWorx Core. Thingworx recommends the fastest disk(s) you can afford, but you should not use disks slower than 10000 RPM. NOTES: <ul style="list-style-type: none"> • You may wish to consider a RAID configuration to increase disk performance • If you will be executing regular system backups, it is HIGHLY recommended to us an additional physical disk on its own controller – not simply a separate partition on the same physical disk.

Operating System

Supported OS (64-bit only)	Production	Tested
Windows Server 2012	Yes	Yes
Windows Server 2008 R2 SP1 (Not Recommended)	Yes	Yes
Red Hat Enterprise Linux (RHEL) 7 Update 1	Yes	Yes
Amazon EC2 Linux (64-bit)	Yes	Yes
Ubuntu 14.04 LTS	Yes	Yes
Other operating systems (please contact support)		

Required Software

Notes:

- The software below requires downloading/installing the proper OS-specific version.
- In general, you may install later minor versions of the software, but the new major versions are not supported unless explicitly stated here. ThingWorx may still properly run on a newer major version but will not be officially supported until tested and certified.

Prerequisite Software	Version Tested	Comments
Oracle Java SE Development Kit (JDK)	Java SE Development Kit 8, Update 92, 1.8.0_92-b14 (64-bit)	<ul style="list-style-type: none"> • ThingWorx is only supported on 64-bit operating systems • Open JDK is not currently supported
Tomcat (Linux)	<ul style="list-style-type: none"> • 8.0.44 (64-bit) • 8.5.13 (64-bit) 	<ul style="list-style-type: none"> • Installed manually as the standard package management does not typically have the latest versions available • Due to possible security vulnerabilities, a minimum version of 8.0.44 is required • ThingWorx may still properly run on a newer major version but will not be officially supported until tested and certified
Tomcat (Windows)	<ul style="list-style-type: none"> • 8.0.44 (64-bit) • 8.5.13 (64-bit) 	<ul style="list-style-type: none"> • Installed using the windows service installer. • Due to possible security vulnerabilities, a minimum version of 8.0.44 is required • ThingWorx may still properly run on a newer major version but will not be officially supported until tested and certified.

Database Options

Database	Supported Version	Comments
PostgreSQL	9.4.5 minimum	NOTE: the latest update version is supported for 9.4 (for example, 9.4.9). 9.5 is not supported at this time.
Microsoft SQL Server	2014 and later	

Progressive DNC System Requirements

Composer (Modeling IDE and Mashup Builder)

The ThingWorx composer is an HTML application that runs in a browser. The required minimum resolution for composer is 1280x800. The currently supported browsers are shown below.

OS	Browser	Version(s)	Comments
Mac/Windows	IE	11 and later	Not recommended
Windows	Edge	40.15063.0.0	
Mac/Windows	Firefox	35 and later	
Mac/Windows	Chrome	44	
Mac	Safari	6.1.6 and later	
Mobile (any)			Application not appropriately sized to fit in mobile form factor.

Mashup Runtime

OS	Browser	Version(s)	Comments
Mac/Windows	IE	11 and later	Not recommended
Windows	Edge	40.15063.0.0	
Mac/Windows	Firefox	35 and later	
Mac/Windows	Chrome	44	
Mac	Safari	6.1.6 and later	
iOS 4	Mobile Safari		