

Progressive DNC System Requirements

Overview

This section provides the following server hardware and configuration requirements for running Thingworx in a production environment:

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

The information in this section is specific to Progressive DNC powered by Thingworx 9.x, unless specifically noted otherwise. Other versions of the product may introduce new or changed system requirements.

PDNC powered by Thingworx Server Requirements



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

- One or more installed 1GB ethernet connection
- **Secure and reliable infrastructure**
- Secure and reliable 802.11 G/N/AC wireless infrastructure (if applicable)
- Server/SAN/RAID disk configuration – reliable and appropriate level based on performance and “Best Practice” guidelines related to Microsoft SQL
- Domain access recommended
- Client access via web browser – Latest release of Microsoft Edge (MUST be Chromium based), Chrome, Safari, or Mozilla Firefox

Hardware Sizing

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.

Hardware Sizing (continued)

Aspect	Value	Comment
Disk Space	100GB	<p>This size will accommodate the default ThingWorx web application installed in Tomcat, along with the initial ThingworxStorage (DB) directory and some initial configuration data.</p> <p> Note</p> <ul style="list-style-type: none"> • This does NOT include the space required for the OS or other prerequisite software. • An additional 100GB of space is required if ThingWorx Flow is also installed (for a total minimum of 200GB of disk space). • 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 Sales and Field Enablement to estimate space needs according to their application requirements.
Disk Speed	10000 RPM or SSD	<p>Speed is important if you are storing data on the ThingWorx Core. ThingWorx recommends the fastest disk(s) you can afford, but you should not use disks slower than 10000 RPM.</p> <p> Note</p> <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 use 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)	Notes
Windows Server 2016 & newer	

NOTES

- Only Chromium based versions of Microsoft Edge are supported.
- The software in the table below requires downloading/installing the proper OS-specific version.
- In general, you may install later minor versions of the software, but new major versions are not supported unless explicitly stated here (i.e. JDK 1.7.0.17 would be a minor version, but JDK 1.8 would be considered a major version). Thingworx may still properly run on a newer major version but will not be officially supported until tested and certified.

Required Software

Prerequisite Software	Versions Tested
Java	<ul style="list-style-type: none"> • OpenJDK - Amazon Corretto 11.0.8 • Oracle Java 11.0.8 and above (eg: 11.0.x) • Oracle Java 1.8.0_261
Tomcat (Linux)	9.0.37 (64-bit)
Tomcat (Windows)	9.0.37 (64-bit)

Database	Supported Version
Microsoft SQL Server	2016, 2017, 2019

NOTE:

- Progressive MDC (Machine Data Collection) System requirements will vary