

# CostX Server System Requirements

**NOTE:** CostX Client system requirements differ and are covered in a separate document.

## Supported Operating Systems

### Windows Versions

- Windows 10 2022 Update (v22H2)
- Windows 11
- Windows Server 2016
- Windows Server 2019
- Windows server 2022

### NOTES:

- CostX Server is a 64-bit (x64) application and therefore requires a 64-bit version of the Windows operating system.
- To ensure compatibility and security, it is highly recommended that customers upgrade to the latest Windows Service Pack and all Windows Updates are installed.
- As Microsoft will end support for Windows 10 in October 2025, CostX Server 7.3 will be the last version that supports it. It is recommended that customers still using Windows 10 transition to Windows 11 as soon as possible.

## Recommended Hardware

**NOTE:** Using a dedicated server for CostX Server is highly recommended. Performance issues are likely to occur if other resource intensive programs or services are running on the server.

### Processors

Concurrent Users	Recommended performance equivalent to or faster than	Minimum required performance equivalent to or faster than
1-6	1 x Quad Core 2 GHz processor	
7-15	2 x Quad Core 2.2 GHz processors	1 x Quad Core 2.2 GHz processor
16-50	4 x Quad Core 2.2 GHz processors	2 x Quad Core 2.2 GHz processors
51-100	4 x Quad Core 2.7 GHz processors	2 x Quad Core 2.7 GHz processors
100+	Please contact RIB CostX support for advice	

**TIP:** An example of a quad-core processor that meets our requirements is Intel Xeon E5-2637 v2. Use a benchmarking website such as [http://www.cpubenchmark.net/cpu\\_list.php](http://www.cpubenchmark.net/cpu_list.php) to compare your CPU speed to this processor and find out whether your processors meet our requirements.

**IMPORTANT NOTE:** The table above is intended to provide general guidance only and actual performance requirements may vary depending on many factors. The following conditions increase the load on the processor. If any of these apply in your environment then it is strongly recommended that more processing resources are provided:

- Importing dimensions and exported views from Revit or other BIM models.
- Adding many dimensions/dimension groups in bulk.
- Importing, exporting and merging large amounts of data.

## RAM Capacity

- Recommended RAM capacity:
  - For 1-20 Users, 16GB or greater
  - For 21-50 Users, 32GB or greater
  - For 51-120 Users, 48GB or greater
  - For 121-200 Users, 64GB or greater
- Minimum RAM capacity is 8 GB.

The following conditions increase the memory size requirement on the server:

- Having many concurrent users connecting to CostX Server.
- Importing/exporting/merging data from EXF files.
- Allowing the database to grow to a large size.

Note that other programs and the Windows Server operating system also use RAM and allowances should be made for their requirements. A dedicated server only used for CostX Server is recommended.

## Storage

### Capacity

- Available hard disk capacity of 50 GB or greater is recommended.

The following conditions increase the disk capacity requirement on the server:

- Adding many drawings to the building.
- Adding many dimension groups to the building.
- Creating many dimensions.
- Adding many workbooks to the building.
- Storing many projects in the database (archiving to EXF is recommended).

### Performance

- Performance the equivalent of a typical NVMe SSD drive or faster is recommended.
- Performance the equivalent of a typical SATA III 10000 RPM drive or faster is required.

#### **TIPS:**

1. Try to ensure the hard disk is as fast as possible with low disk latency (e.g. a fast SSD) to facilitate faster database access. This will have a significant impact on the speed of most actions.
2. Using an SSD drive for the CostX Server database also increases the number of concurrent disk I/O operations that can be executed simultaneously which can significantly improve performance.

## RAID and File System

- RAID 5 and RAID 6 are not recommended for use with CostX Server databases due to poor performance characteristics in comparison to other RAID levels. RAID 0 or RAID 10 are preferred.
- CostX Server requires the NTFS file system.

## **Network and Internet**

LAN and WAN connections are supported between CostX® and CostX Server.

### Latency

- A low latency network connection is required.
- Wired LAN connections perform better than WAN or wireless LAN connections due to lower latency and are therefore recommended.
- WAN connections must have low latency for adequate performance.

### Bandwidth

- Network bandwidth of 1 GB or greater is highly recommended.
- Lower bandwidths such as 100 MB are also supported. For adequate performance, ensure the network has sufficient capacity to avoid saturation.
- It is recommended to reserve bandwidth for CostX usage on ports 17001, 17002, 17012 & 17022.

The following conditions increase the bandwidth requirements:

- Having many concurrent users on CostX Server working on shared projects.
- Creating workbooks with large sheets (data in many rows and columns)
- Loading very large drawings which are located on the network or in cloud storage.
- Importing and exporting large amounts of data across the network.

### DNS

TLS encryption of network communications requires that CostX Server is configured with a real DNS hostname and that hostname is entered in the Server field of the CostX login prompt, rather than the server's IP address.

### **NOTES:**

1. The network protocol must be TCP/IP.
2. An internet connection is required in order to activate the licenses online, and to connect to cloud storage providers.
3. To successfully activate your license, please ensure your firewall does not block HTTP and HTTPS connections on ports 80 and 443 to [techweb.rib-international.com](http://techweb.rib-international.com).
4. Ensure your firewall allows inbound client connections on ports 17001, 17002, 17012 & 17022.

## **UPS (Uninterruptible power supply)**

It is highly recommended that the server running CostX Server has a UPS system installed between the computer and the main power source. A good UPS protects the server from power failures, brownouts, power surges and other power disturbances. If any of these power problems occur and there is no UPS, data could be lost or corrupted.

## Installation Prerequisites

### Administrator

The person installing CostX Server must have administrative privileges (be able to log on as an administrator) on the computer to which CostX Server will be installed.

### Runtime Libraries

Microsoft Visual C++ 2015-2022 Redistributable 64-bit runtime libraries are required and can be downloaded from here:

[https://aka.ms/vs/17/release/vc\\_redist.x64.exe](https://aka.ms/vs/17/release/vc_redist.x64.exe)

Microsoft Edge WebView2 Runtime is required for the sign-in system of CostX Server to work. It is recommended to install WebView2 as an administrator using the **Evergreen Bootstrapper** installer, which can be downloaded from here:

<https://go.microsoft.com/fwlink/p/?LinkId=2124703>

### Serial Number

You must have one or more valid Serial Numbers in order to successfully activate CostX Server. In the case of upgrades, if licenses are a rental or a purchase under maintenance, re-activation is not required, and the existing serial numbers are automatically detected.

### Date and Time Settings

Check the date, time and time zone are set correctly on the server to ensure that the software expiration date (if applicable) is set correctly.

**NOTE:** All clients and servers including the licensing server must be within a 2 hour time zone range.