

# iTWO costX® 6.9 Standalone or Portable Configuration Upgrade

The instructions for downloading and upgrading iTWO costX® in a Standalone or Portable Configuration are provided below. Please note that these instructions are for upgrades from a previous version and are different to the instructions for new installations.

To get started with your upgrade of iTWO costX® in a Standalone or Portable Configuration, follow these steps:

1. Read IMPORTANT NOTES below.
2. Download the iTWO costX® installation file.
3. Install iTWO costX® on your computer.
4. Upgrade the iTWO costX® database.

These steps are explained in more detail below.

## IMPORTANT NOTES

- iTWO costX® 6.9 is the final version of iTWO costX® that will support both 32-bit and 64-bit computers. The next version of iTWO costX® will only be available in 64-bit. It is therefore recommended that customers still running iTWO costX® on 32-bit computers transition to 64-bit as soon as possible.
- Check that your license is suitable for an upgrade. Purchased licenses under maintenance can be upgraded. Licenses not under maintenance cannot be used with a different version of iTWO costX® to their original version. Contact your supplier or RIB iTWO costX support for further information.
- Ensure you are connected to the internet as the license will need to be renewed to verify the existing license can be used with the new version. License renewal occurs automatically when the new version of iTWO costX® is run for the first time.
- Depending on the version you are upgrading from, the system requirements may have changed. Ensure your computer meets the iTWO costX® client System Requirements.
- From version 6.9 onwards, iTWO costX® can load native RVT files. Please note that native RVT files require significant computer resources and can take some time to load. Load times can typically be reduced by ensuring the RVT file is in Revit 2020 format, and ensuring you have a high performance CPU and sufficient RAM (see System Requirements). It is also possible to load Revit models in iTWO costX® by exporting to other supported formats such as IFC or DWF, which generally require significantly less resources than the native RVT format.

Upgrading from version 6.8 or older:

- iTWO costX 6.9 includes an updated version of the underlying PostgreSQL database (PostgreSQL 10). The iTWO costX® installer automatically handles the database upgrade without the need for any manual steps to be performed, however this does increase the time required for the installation to complete compared to previous versions.

- Along with an updated version of the underlying database, iTWO costX 6.9 includes an updated database schema, and this has increased the disk space requirements. The database size will be larger than the previous version, however how much larger it will be varies significantly depending on the amounts of different types of data contained in the database. In testing, the size increases were between 1.1x and 1.3x larger, with the most common increase being about 1.2x larger. Please ensure you have adequate disk space before upgrading.
- After installing iTWO costX 6.9, it may take some time to complete the database upgrade if you have a lot of data in your database, particularly if you have many buildings. It is not possible to give a specific time for the upgrade as there are many factors involved, including the hardware and disk latency as well as the old version and amount of data. In testing we have found that on average hardware, with 2000 buildings in the database, it can take up to 1 hour to upgrade. Most databases will have less than 2000 buildings, but if there are more buildings in the database, this time would increase. On the other hand, with better hardware such as SSD the upgrade time would be significantly reduced. If the total upgrade time is a concern, the following suggestions may help:
  - To reduce the time the upgrade process will take, it is possible to archive buildings from the database to EXF files prior to upgrade.
  - Run a test upgrade on a similar spare computer to determine how long the upgrade will take in order to properly plan for the real upgrade.
  - For upgrades from very old versions, use a staged upgrade approach if possible, so that the upgrade to iTWO costX 6.9 is done using iTWO costX 6.8 as the starting point. This will avoid the extra time required to upgrade from an older version to 6.8.
  - To minimize any inconvenience, it is recommended that the upgrade is started after hours.
- iTWO costX export files (.EXF) files will increase in size in a similar way to the Database. Smaller EXFs will increase by a larger percentage when upgraded as a fixed amount of extra space is needed for all EXFs which is more significant for smaller EXFs. This also applies to iTWO costX backup files (.EBK), and database transfer files (.DBTF).
- iTWO costX 6.9 includes an updated underlying architecture that introduces CostX Core and CostX Auth components which run as Windows services. iTWO costX viewer also has equivalent CostX Viewer Core and CostX Viewer Auth components.

- The following additional ports are required for iTWO costX 6.9. Ensure that the ports used by the products you are installing are not occupied by other applications or blocked by any firewall or anti-virus software.

Port Number	Used by	Purpose
17015	iTWO costX standalone	The CostX Core service listens for HTTP connections on this port.
17016	iTWO costX viewer	The CostX Viewer Core service listens for HTTP connections on this port.
17025	iTWO costX standalone	The CostX Auth service listens for HTTP connections on this port.
17026	iTWO costX viewer	The CostX Viewer Auth service listens for HTTP connections on this port.

#### Upgrading from version 6.7 or older:

- Sketchup no longer supports 32-bit and therefore SKP files are now only supported in 64-bit versions of iTWO costX®. If you use a 32-bit version of Windows and need to work with SKP files, do not upgrade to iTWO costX 6.8 as these files cannot be loaded in the 32-bit iTWO costX version.
- In iTWO costX 6.8, the underlying reporting engine for Custom and Standard Reports was changed to a newer version. Thorough testing has been conducted to ensure existing reports still output in the same way as previous versions, however it is possible that in some rare cases reports may have changed slightly. After upgrade, please check your reports are displaying as desired.
- The system requirements have changed in iTWO costX 6.8. Please review the iTWO costX® client System Requirements document for full details, and take note of the following in particular:
  - Several changes to the supported versions of the Windows operating system including removal of support for some older versions, and requirement to update to the latest service pack for more recent versions. To ensure compatibility and security, it is recommended that customers upgrade to the latest Windows Service Pack and all Windows Updates are installed.
  - The required runtime libraries have changed. Microsoft Visual C++ 2015 Redistributable Update 3 64-bit runtime libraries are now required. To load CPI drawings (.CPIXML files) (supported in the 64-bit version of iTWO costX® only), Microsoft .Net Framework 4.5 is also required.

#### Upgrading from version 6.6 or older:

- iTWO costX 6.7 provides native support for cloud storage of drawing files. To use this feature, Internet access and an account with the chosen storage provider are required. Also, the local drawing cache is now always enabled in order to support file downloads from cloud storage providers. If disk space is a concern, the maximum size of the drawing cache can be reduced in iTWO costX Options.

#### Upgrading from version 6.5 or older:

- iTWO costX 6.6 supports converting a Standard Report to a Custom Report. As part of the change to support this, the underlying reporting engine for Standard Reports was changed to use the same engine as Custom Reports and it is possible that in some rare cases, reports may have changed slightly. After upgrade, please check your Standard Reports are displaying as desired.
- iTWO costX 6.6 includes additional functions in custom reports. If you have a custom report created with a prior version of iTWO costX, you may encounter an error running reports that define identifiers in the report scripts with the same name. Please refer to the iTWO costX 6.6 Release Notes for further details.
- iTWO costX 6.5 R1 fixed an issue that could cause the count value of length dimensions to be incorrectly updated after the length dimension was changed on the drawing. During the upgrade, the upgrade program will check if any old dimensions are still affected by this issue. If a Building contains affected dimensions it will be flagged as needing recalculation, and when the user opens the Building, iTWO costX will prompt whether to recalculate.

#### Upgrading from version 6.0 or older:

- As part of the change to support formulas in Dimension Groups, existing dimensions in the database need to be upgraded. For customers with significant amounts of dimension data it is likely to take a number of hours. It is recommended that the upgrade is started at the end of the day and allowed to complete overnight.
- iTWO costX now supports multiple drawing and workbook tabs. Opening multiple drawings at the same time will use more memory and depending on the size of the drawings it is possible to reach memory limitations on lower spec computers, which will impact performance. In this case it is recommended that the Max. Open Drawings setting is reduced from the default value of 4 to 1, or that more memory is added to the computer.

#### Upgrading from version 5.0 or older:

- In version 6.0, the underlying database has been changed to “PostgreSQL”, a highly respected, mature and reliable database which provides higher performance, and faster speeds particularly with large datasets and across the network. Therefore this is a **major database upgrade** and will take some time. For most customers with significant amounts of historical data it is likely to take a number of hours. It is recommended that the upgrade is started at the end of the day and allowed to complete overnight.
- In version 6.0, **the new PostgreSQL database may take more space on disk** after upgrade. Testing showed that the amount of required disk space varied and in some cases the space needed was reduced depending on the contents of the old database as well as how long since the old database was compacted. In the cases where it increased, the amount of space needed was up to twice as much as was needed in version 5.0. Please ensure you have adequate disk space before upgrading.
- The default database location has changed and it is no longer a single file. If you have any automated scripts to back up your iTWO costX® database, please contact RIB iTWO costX support for advice.
- The change to PostgreSQL also means that iTWO costX® now has a local database service installed (even when used as a network client). If the iTWO costX® computer has a local firewall installed, please ensure connections are not blocked from localhost on port 17005.
- From 6.0 onwards, **the iTWO costX® installer is provided as a single unified installer** which automatically installs 32-bit files on a 32-bit computer and 64-bit files on a 64-bit computer.
- The process for transferring iTWO costX® from one computer to another has been simplified. Please contact support for details prior to transferring iTWO costX® to another computer.

#### Upgrading from version 4.1 or older:

- Versions of iTWO costX® prior to 5.0 used OpenGL 1.1 for rendering the drawings to the screen. In iTWO costX® 5.0 and above, to provide better performance, OpenGL 2.0 or Direct3D 9.0c are used for hardware rendering and therefore **a video graphics card that supports OpenGL 2.0 or Direct3D 9.0c with up-to-date drivers is required**. Please ensure your graphics card and drivers are suitable before proceeding with the upgrade.

## Download the iTWO costX® installation file

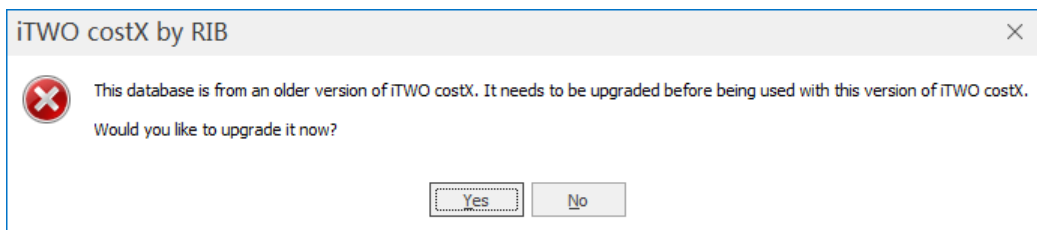
- The iTWO costX® 6.9 installer (iTWO\_costX\_6.9\_en\_install.exe) is available for download using the following link:  
<https://techweb.rib-international.com/downloads/fetch.php?download=158&lang=en>
- Your browser may ask if you want to Open, Save or Cancel. Click **Save** and choose a location such as the desktop if prompted.
- OPTIONAL:* If you are upgrading multiple computers, wait for the download to complete, then copy the installer file from the location you saved it (e.g. desktop) to a network drive so you can access it from all of your computers. Alternatively, you can copy the installer to a USB flash drive so you can take it to each computer to install.

## Install iTWO costX® on your computer

- Ensure your computer meets the iTWO costX® client System Requirements.
- Wait for the download to complete, then double-click on the installation file (iTWO\_costX\_6.9\_en\_install.exe) to start the iTWO costX® installation.
- The **Welcome Screen** will be displayed, informing you that iTWO costX® will be installed. Click Next to continue the installation and follow the prompts.
- At the end of the installation, tick the **Launch iTWO costX® 6.9** box before clicking Finish so that iTWO costX® starts automatically.

## Upgrade the iTWO costX® database

- When iTWO costX® starts, you will be prompted to upgrade the database as shown below.



- Click **Yes** to start the iTWO costX® Upgrade Utility.

The upgrade to iTWO costX 6.9 may take some time depending on the amount of data in your database and the speed of your computer, in particular the speed of your disk drive. During upgrade, the progress bar provides an estimate of the percentage complete of the current section of the upgrade. The progress bar may stay at the same % complete for periods of time, even though the upgrade is progressing. As there are a number of sections in the upgrade, the progress bar will reset to 0% several times during upgrade as the new section is started. If any upgrade errors occur, the upgrade is stopped and the errors are displayed in the upgrade log. Take a note of the error log and contact your supplier or RIB iTWO costX support for assistance.

- When the upgrade is complete, click **Continue** to start iTWO costX®.