

CTC BIM Data Suite Infrastructure Notes

Components of CTC BIM Data Suite store data into your Microsoft SQL Server database. For implementations to be successful:

- CTC is unable to provide report writing services or technical support for Microsoft SQL Server. As such, **you should have your own Microsoft SQL Server Database Administrator (“DBA”) available.** *This role is typically very different from a standard IT / infrastructure role.* A person in this role must have special training and expertise with installing, configuring, tuning, reporting from and generally maintaining Microsoft SQL Server.
- **SQL Server Express is not supported.** This is primarily due to limitations imposed by Microsoft on this free version of the SQL Server database engine. While SQL Server Express will physically function with BIM Data Suite, and may be acceptable for a small trial environment, for long-term production use it is not supported.
- Microsoft SQL Server 2008 R2 or later is required.
- If using Project Activity Logger, the CTC Project Activity Server service is required, but is very lightweight and can be installed on most any application server. CTC does not recommend installing this service directly on your SQL Server computer.
- If using Project Snapshot Exporter, the CTC Project Snapshot Server service is required and should be installed on a separate, dedicated server computer. This is because it is NOT a lightweight service, and should generally be installed on its own dedicated server computer. Actual server resources needed will vary depending on the size and complexity of the snapshots being taken, as well as the number of snapshots being processed simultaneously. Disc space requirements are minimal, but a general rule of thumb is that **the dedicated Project Snapshot Server computer should have at least 32 GB of memory and 4 cores.**
- CTC does not make any hardware recommendations for the SQL Server computer(s). This is because the SQL Server computer needs for BIM Data Suite are much harder to quantify. The needs can vary dramatically based on the environment. Are there 30 Revit workstations or 300 Revit workstations? Is data being gathered about 10 different projects or 1000? Will data be kept long-term, or deleted for each project as the project is completed? Are project snapshots being recorded, or only project activity data? What else will the SQL server be used for?

Project snapshots can be very large. For project snapshot data, it is more likely that a clustered SQL server environment (using multiple SQL server computers working together) may be in order. For example one single, full (unfiltered) snapshot for a medium-sized MEP project may generate several million records.

- For both the Project Snapshot Server computer(s) and the SQL server computer(s), only your IT and SQL teams can make a judgement for hardware components after using the software for a reasonable trial period and evaluating the needs based on their environment. For the SQL server in particular, CTC recommends setting up a separate, isolated Test SQL server environment for the trial period, so as not to risk impacting any production environments. This is especially true if capturing snapshot data.
- Project Activity Server requires a license file from CTC for the server computer on which it is installed. Project Snapshot Server does not require a server license because the Project Snapshot Exporter Revit add-in itself is licensed, at the client.
- Reasonably fast and stable network connections are needed between the Revit workstations and all servers.