System Requirements

Babtec 8, since version 8.4.0

Are you planning an update of BabtecQ or to modify your IT landscape? In order to ensure your BabtecQ system's continued functional capability, your hardware and software will have to fulfill certain requirements. Here you will find all the information you need about the minimum requirements.

Please note: This document contains **only** system requirements for Babtec 8. Specific system requirements for other required products like Microsoft operation systems, Microsoft SQL Server or required third party products need to be gathered from the manufacturer's documents. This also applies even when the installation routines from the correspondent manufacturers have already been provided with Babtec 8.

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1 BabtecQ

The **BabtecQ Business Server** and the **BabtecQ Client** are 64-bit applications that can only be installed on 64-bit operating systems.
By using Microsoft ClickOnce, the BabtecQ Client can be easily distributed to the client computers.

1.1 General information

1.1.1 German or English system environment for efficient support

Babtec software is developed and tested on English and German operating system environments. For comprehensive support and product assistance, we recommend the use of English or German operating system environments, as well as English SQL Server versions.

Our support is available to our customers in German and English. Support in other languages, as well as regionalized server operating systems, cannot be guaranteed, or only to a limited extent.

1.1.2 No installation on domain controllers

Domain controllers are the central instance of your IT infrastructure, on which countless systems and services depend. For security and stability reasons, we do not perform installations of Babtec services, third-party programs, database services or Windows own services on server systems that are used as domain controllers.

Please understand that our employees are not permitted to perform work on such servers.

1.1.3 No inplace upgrades of operating systems

Inplace upgrades of the operating systems are not supported, as this means that the Babtec service is no longer functional and further update steps can no longer take effect.

1.1.4 Powershell 7.6

During installation and configuration, our employees require the Microsoft tool Powershell version 7.6 (LTS). If it is not available on your system, please allow our employees to install the required version.

1.1.5 Microsoft Edge WebView2

WebView2 Runtime is required for the embedded web login and must be installed in advance on Windows server operating systems.

1.2 Hardware Requirements for Business Server

Minimum requirements[1] per installed Babtec service	▪ Current Intel Core i5 or XEON processor with 2 cores, from 2.5 GHz or comparable CPU generation e.g. AMD Ryzen 5000 or EPYC ▪ 6 GB free RAM or more ▪ 20 GB free disk space to install the software
Recommended hardware[2] per installed Babtec service	▪ Current Intel Core i7 or XEON processor with 4 cores, from 3.0 GHz or comparable CPU generation e.g. AMD Ryzen 7000 or EPYC ▪ 10 GB free RAM or more ▪ 20 GB free disk space to install the software

1.3 Hardware Requirements for Client Workstations

Minimum requirements[1]	▪ Current Intel Core i3 or XEON processor with 4 cores, from 3.0 GHz or comparable CPU generation e.g. AMD Ryzen 5000 from 3,0 GHz ▪ From 12 GB RAM ▪ 10 GB free disk space to install the software ▪ For 3D CAD models, we recommend using a graphics card that supports either DirectX 11 or OpenGL.
Recommended hardware[2]	▪ Current Intel Core i5 or XEON processor with 4 cores, from 3.0 GHz or comparable CPU generation e.g. AMD Ryzen 5000 or 7000 from 3.0 GHz ▪ From 16 GB RAM ▪ 10 GB free disk space to install the software ▪ For 3D CAD models, we recommend using a graphics card that supports either DirectX 11 or OpenGL.

[1] This is the basic configuration that enables you to run the software.
[2] In this configuration the smooth operation of the software can be guaranteed.

1.4 Operating Systems

You can use BabtecQ on computers running any of the following operating systems:

- Windows 11 (only for BabtecQ Client)
- Windows Server 2025
- Windows Server 2022
- Windows Server 2019

1.5 Databases

The following databases are currently supported by BabtecQ software[3]:

- Azure SQL
- Microsoft SQL Server 2025 (Standard and Enterprise)
- Microsoft SQL Server 2022 (Standard and Enterprise)
- Microsoft SQL Server 2019 (Standard and Enterprise)

Notes on running BabtecQ on MS SQL Server:

- For the SQL Server instance, the **server collation** must be set to “Case Insensitive” in the server properties.
- **Microsoft SQL Server Licensing:** The two BabtecQ license types, “Basic” and “Pro,” are floating licenses. According to Microsoft’s licensing terms, you need core-based licensing for your SQL Server in this case.
- **Microsoft SQL Server 2022:** For compatibility levels greater than 150, Cumulative Update CU4 must be installed.

For servers running Microsoft data bases, you can use the following system requirements as a guideline[4].

W**indows-Server running Microsoft SQL Server 2025 / 2022 / 2019:**

- Current Intel Core i7 or XEON processor with 4 cores or more, 3.4 GHz or higher or comparable CPU generation e.g. from AMD
- 8 GB RAM or more
- Operating system according to the requirements of the respective SQL Server version
- 20 GB free disk space or more

As always please consult your project manager about the exact system requirements for your individual project.

If you are running BabtecQ Server and the data base on the same machine, please note that the system requirements add up. We recommend installing on separate systems for scaling purposes.

[3] Regularly updating database services with cumulative updates and security updates is strongly recommended for reasons of security, performance, data integrity, and error correction.
[4] Please note: If you run Microsoft SQL Server Reporting Services, you will have to additionally heed Microsoft’s own system requirements for those products (see also chapter 2).

1.6 Requirements for BabtecQ Server

For the installation and licensing of BabtecQ it is necessary that the following addresses are accessible from the server via the Internet:

- https://setup.babtec.de
- https://lizenz6.babtec.de

When using the BabtecQube, the address https://api.babtecqube.com must be accessible.

1.7 Requirements for BabtecQ Go

BabtecQ Go can be used with the following browsers[5]:

- Microsoft Edge
- Google Chrome
- Firefox
- Safari (only for iOS and iPadOS)

1.8 Full-Text Search in Document Control (Babtec.DOK)

The “Full-Text and Semantic Extractions for Search” feature must be installed on the SQL Server instance in order to use full-text search in the ‘Documents’ and “My Documents” modules.

In German SQL Server installations, this feature is called „Volltext- und semantische Extraktion für die Suche“.

1.9 Requirements for the Quorix AI Assistant

The various features of the Quorix AI Assistant utilize AI technologies from the Microsoft Azure Cloud. This requires that the address https://apim-prod-babtecquorix.azure-api.net is accessible.

1.10 Authentication via Entra ID

If you intend to use Microsoft Entra ID for user authentication, BabtecQ must be registered and configured in Microsoft Entra ID. To do this, you must specify various custom URLs that must be accessible for successful authentication via Entra ID:

- Entra ID Azure URL
- Fallback URL
- SignOut URL

[5] All software publishers recommend keeping the browsers always up to date.

1.11 Requirements for Audit Trail (Babtec.AT)

The system wide Audit Trail requires the use of Microsoft SQL Server (not Azure SQL) for BabtecQ, with separate databases - one for the BabtecQ production system and one for the Audit Trail data. The methods to log changes in Audit Trail are certified by Microsoft.
These methods are included in the Enterprise Edition and the Standard Edition.

1.12 Microsoft ClickOnce

For the distribution of software you can use Microsoft ClickOnce. For ClickOnce the use of Microsoft Edge[6] is recommended.

1.13 Sending e-mails

In order to send e-mails from within your BabtecQ system, you will need a MAPI capable e-mail system.

If certificates containing certificate revocation lists are used for email encryption, you must ensure that these certificate revocation lists can be retrieved. Otherwise, BabtecQ will be unable to send emails for security reasons.

1.14 Babtec.Q.Agent

The Q.Agent is a service that runs on the BabtecQ Business Server. In order to send e-mail, a SMTP capable e-mail server is required.

Authentication via certificate is required to send emails using the Exchange Online Graph API.

1.15 Babtec.Q.Analyzer

To run the Q.Analyzer, you will need the following components:

- Reporting Services as a part of Microsoft SQL Server 2019 or SQL Server 2022 with integrated Web Server
- Microsoft SQL Server 2019, SQL Server 2022
- Microsoft Edge[7]
- SMTP e-mail server (optional for subscription functionalities)

[6] Microsoft recommends keeping the browser versions always up to date.
[7] Problems with the configuration may not be excluded. The reports can be used.

2 BabtecQ in other server environments

The multitude of combination and configuration possibilities for hardware and software enable you to use the BabtecQ Client in additional server environments. The prerequisites for operating BabtecQ described in the first chapter still apply here, e.g. with regard to the permitted operating systems.

The use of the BabtecQ Server on Citrix Servers or Microsoft Remote Desktop Services can lead to interference because of competing access requests and therefore is not advisable.

For the requirements of remote desktop servers for your individual application, please contact your provider of the corresponding technology.

2.1 BabtecQ in Microsoft Remote Desktop environments

- The BabtecQ Client is qualified to run in Remote Desktop Services environments.
- The BabtecQ Server is **not** approved for operation in a Remote Desktop Services environment.

Please note:

BabtecQ is **not** distributed to the clients by Application Streaming.

Note for connecting video cameras:

Most common cameras are connected with USB to PCs. The USB streaming mode is used to display the live video feed in BabtecQ, which is not supported by existing Remote Desktop Services solutions. Hence this function cannot be used in BabtecQ.

Note for connecting multiplexers (measuring equipment interfaces):

If multiplexers (Steinwald, Bobe, Mitutoyo, etc.) are used, they are as a rule connected to the respective workstations with USB or RS232. There can be problems with the connection to the multiplexer, respectively the adoption of measured values, if the multiplexer is used at a workstation with software that is run on the PC through a Remote Desktop Services installation. The reason for this is the emulation of the respective client interface in the Remote Desktop session, since it can increase the latency of the RS232 or USB connection.

2.2 BabtecQ in Citrix environments

- The BabtecQ Client is qualified to run in Citrix environments.
- The BabtecQ Server is **not** approved for operation in Citrix environments.

Please note the system requirements from Citrix.

Note for connecting video cameras:
Please note 2.1 BabtecQ in Microsoft Remote Desktop environments.

Note for connecting multiplexers (measuring equipment interfaces):
Please note 2.1 BabtecQ in Microsoft Remote Desktop environments.

2.3 BabtecQ in virtualized environments (e.g. Microsoft Hyper-V and VMware)

The BabtecQ Client and the BabtecQ Server are suitable for operation in virtualized environments.

Note for dynamic allocation of resources:

The specified minimum requirements within 1.2 Hardware Requirements for Business Server must be assigned as locked to the virtual machine. Further resources can be allocated by dynamic-parameters. Generally, we recommend the static allocation of random access memory. Dynamization always involves the risk of performance losses.