FACTON
INNOVATIVE COST MANAGEMENT

FACTON EPC 15.0 CM

COST MANAGEMENT

System Architecture and IT Integration

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1. SYSTEM ARCHITECTURE

FACTON EPC Cost Management is a verified client-server solution that has been in use for years at renowned companies in the manufacturing industry. The system architecture consists of a typical 3-layer architecture, a client, application server and database server.

CLIENT PC			APPLICATION SERVER			DATABASE SERVER	
Client (User)	Client (Customer)		Business Logic	Business Entities		Business Logic	Business Entities
.NET Remoting			Data Access Logic			SQL Database	
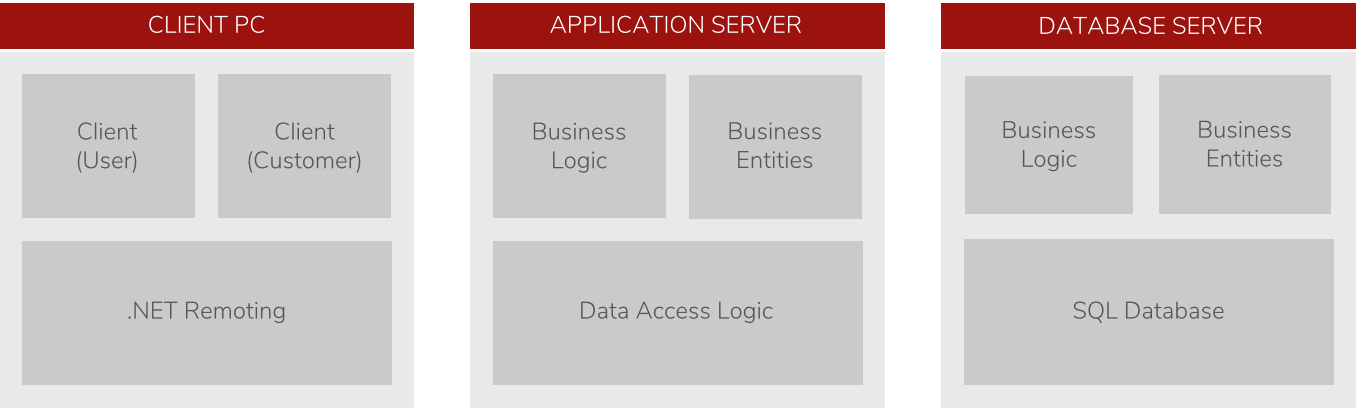
2. IT INTEGRATION

The integration into existing system environments is quick and easy. FACTON EPC Cost Management can be flexibly adapted to the individual needs of any enterprise, especially in the automotive, aerospace, mechanical engineering and electronics industry. The interfaces to Excel and ERP, CAD, PLM and PDM programs enables an easy transfer of data and product structures.

ERP	CAD
FACTON	
Excel	PDM

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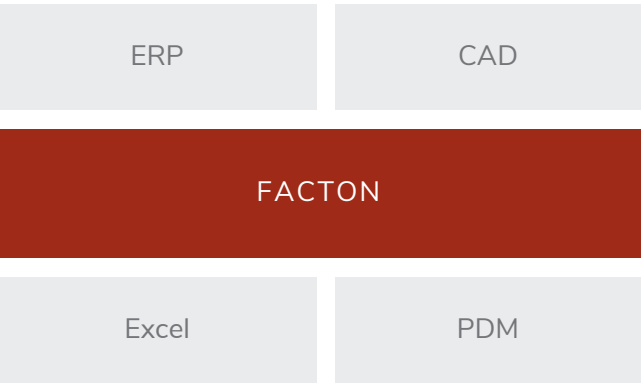
3. SYSTEM REQUIREMENTS - SERVER

3.1. HARDWARE

	UP TO 10 CONCURRENT USERS		UP TO 25 CONCURRENT USERS		MORE THAN 25 CONCURRENT USERS[3]	
	Application Server	Database server[1,2]	Application Server	Database server[2]	Application Server	Database server[2]
CPU	16 vCPU x 3GHz +	8 vCPU x 3GHz +	32 vCPU x 3GHz +	16 vCPU x 3GHz +	64 vCPU x 3GHz +	32 vCPU x 3GHz +
RAM	16 GB	16 GB	32 GB	32 GB	64 GB	64 GB
REQUIRED MEMORY						
- INSTALLATION	1 GB	According to the specifications by the database provider	1 GB	According to the specifications by the database provider	1 GB	According to the specifications by the database provider
- DATA	-	> 20 GB	-	> 20 GB	-	> 20 GB

[1] For less than 10 concurrent users, the database server can be installed on the same hardware as the FACTON application server, provided that the hardware can be scaled to meet the requirements.

[2] To ensure an optimal overall system performance it is recommended to use SSDs such as RAID systems for the database server according to the database provider's specifications.

[3] For more than 50 concurrent users, please contact FACTON for optimized hardware configuration.

3.2. OPERATING SYSTEM: APPLICATION SERVER

OPERATION SYSTEM	Windows Server 2016, 2019 and 2022
.NET FRAMEWORK	as of 4.8.0

3.3. DATABASE SERVER

FACTON supports Microsoft SQL Server 2016, 2019 and 2022, however, it is recommended to use SQL Server 2019.

4. SYSTEM REQUIREMENTS - CLIENT

4.1. HARDWARE

CPU	1 × 2,66 GHz Dual Core
RAM	4 GB, recommended: 8 GB
REQUIRED MEMORY - INSTALLATION - DATA	1 GB -

4.2. OPERATING SYSTEM

OPERATION SYSTEM	Windows 10 (as of version 22H2) and Windows 11 (x64)
.NET FRAMEWORK	as of 4.8.0

5. SYSTEM REQUIREMENTS - VIRTUAL ENVIRONMENTS

5.1. HARDWARE

CPU	1 x logical CPU per user
RAM	2 GB per user

5.2. OPERATION SYSTEM

OPERATION SYSTEM	Citrix Server

> **ℹ Note**
> FACTON does not provide support for Citrix systems.

6. SYSTEM REQUIREMENTS - NETWORK

6.1. DATABASE SERVER – APPLICATION SERVER

A 1 Gbit network connection, preferably with low latency (< 5 ms), is required for the connection between application server and database.

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6.2. APPLICATION SERVER - CLIENT PC

A 100 Mbit network connection with < 20 ms latency is required for the connection between the application server and client PC. Latency values that exceed this limit may lead to prolonged system response times. This usually applies to WAN connections.

FACTON recommends using a terminal server in such cases (e.g. Microsoft Remote Desktop Session Host, formerly known as Microsoft Terminal Server). A < 300 ms latency is required for the network connection between the terminal host and the terminal client (e.g. Citrix Server and Citrix Client).

6.3. VIRTUAL SERVER ENVIRONMENTS

FACTON supports virtual server environment, provided that the system parameters of the virtual systems match those of the physical systems.

Supported environments:

- Parallels
- Azure Virtual Desktop
- Remote Desktop
- Terminal server
- Citrix

FACTON is testing its software under ➜ Windows Azure ➜ MS Hyper-V.

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