# **MES Server PC Documentation**



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## 1 List of installed Software

Software	Version	Purpose
Siemens TIA-Portal	18 Update 3	Programming software for Siemens PLCs
Siemens WinCC Advanced	18 Update 3	Programming software for Siemens HMIs
		Note: Siemens V19 licenses are backward compatible to V18
Siemens S7 PCT-Tool	3.5 SP3 Update 3	IO-Link modules configuration tool
Siemens PRONETA	3.6	Commissioning and diagnostics tool for PROFINET
FactoryViews	1.7.0	Factory management software suite: MES4, Webshop, Energy, AR, Node-RED Update from beta to release version (big fixes, signatures of exe-files)
CIROS	7.3.3	Simulation software - Digital twin - Digital shadow
Machine Learning	2024 Q2	Machine Learning IIoT Kit Image (Standalone) Update: Added class edit mode and interfaces
Festo Field Device Tool (FFT)	2.10.5.198	Configuration tool for Festo controller - change network settings - backup/ restore image files
CODESYS	3.5 SP16 Patch 4	Programming software for Festo PLCs
CODESYS Target Support Package CPX-E	3.5.16.139	Target Support Package for Festo PLC
CODESYS Security Agent	1.3.0.0	Configure and control security-related issues in CODESYS
TURCK PACTware	6.1.0.15	Configuration tool for fieldbus modules
TURCK Service Tool	3.3.0.0	Assigning IP addresses to Turck devices
DTM for IODD Configurator	3.14.0	DTM IO-Link Devices
DTM for fieldbus I/O systems	1.0.3007	DTM for BL20, BL67, TBEN, FEN20 and BLcompact
Wireshark	4.2.3	Ethernet communication monitoring software
NMAP	7.94	Network scanner
HeidiSQL portable	12.6	Administration tool for MariaDB/ MySQL databases
hMailServer	5.6.8	E-mail server
Thunderbird portable	115.8.0	E-mail client
Hercules SETUP utility	3.2.8	TCP/IP client server terminal
UaExpert	1.7.1	OPC UA client

This table is not exhaustive and lists the most relevant software tools.

### 2 Services

### 2.1 FactoryViews

#### 2.1.1 Services

FactoryViews will start automatically on start up. A Control Panel indicates that FactoryViews is running. Following services are started:

- NodeServer
- MES4Core
- Apache
- MySQL
- MongoDB
- Node-RED WebShop (port: 18803)
- Node-RED AR (port: 18804)
- Node-RED Energy (port: 18806)
- Node-RED Stations (port: 18812)
- Node-RED User (port: 18890)



Figure 1 FactoryViews services overview

To start the application again, run "C:\Factory Didactic\FactoryViews\FactoryViews - ControlPanel.exe"

#### 2.1.2 Control Panel

Status of the services can be monitored from control panel. Blue tick ♥ indicates that the service is running. Each service can be started and stopped with button. Status of each service is shown on the status field in control panel.

FactoryViews - Control Panel v1.7.	0						-	
Open Startpage							FES	STO
✓ NodeServer	Stop	🗸 Mon	goDB	Stop	<b>O</b> 1	NodeRed - WebSho	op s	Stop
✓ Mes4Core	Stop	🗸 Apad	che	Stop	<b>I</b>	NodeRed - AR	2	Stop
		< MyS	QL	Stop	<b>I</b>	NodeRed - Energy	2	Stop
					<b>I</b>	NodeRed - Stations	5 5	Stop
					<b>I</b>	NodeRed - User	5	Stop
NodeRed - AR	NodeRe	ed - Energy	NodeRed -	Stations	NodeRed - U	ser	Version	5
MongoDB	Apache	MySQL	NodeSe	rver	Mes4Core	NodeRed -	WebSho	р
Starting								

Figure 2 FactoryViews control panel

#### 2.2 MariaDB Database

MariaDB Databases can be viewed with HeidiSQL.exe.

🐵 Session manager		?	×
🔍 Filter		🖋 Settings 🖌 Advanced 🔢 Statistics	
Session name $\land$	Host	Network type: Network type:	$\sim$
🛹 Festo	127.0	Library: libmariadb.dll	$\sim$
		Hostname / IP: 127.0.0.1	
		Prompt for credentials	
		Use Windows authentication	
		User: FestoWriteUser	
		Password:	
		Port: 3306	
		Compressed client/server protocol	_
		Databases: Separated by semicolon	•
		Comment:	$\sim$
<	>		$\sim$
Save Save	😣 Delete	Open Cancel More	▼

Figure 3 HeidiSQL session manager

Username: FestoWriteUser Password: Festo4.0

## 3 Project files

### 3.1 Drives

### 3.1.1 C drive for Windows and software

## 3.1.2 D drive for project files and documents

— Data (D:)	× +			-		×
$\leftarrow  \rightarrow  \uparrow  C$	$\square$ > This PC > Data (D:) >		Search Data (D:)			Q
⊕ New ~ 🐰 [□	Î ▲ ▲ ▲ ▲ ▲ ▲ ▲ ▲ ▲ ▲ ▲ ▲ ▲ ▲ ▲ ▲ ▲ ▲ ▲	$\equiv$ View $\cdot$			📑 Def	tails
	Name	Date modified	Туре	Size		
🛄 Desktop	✤ CP_Documentation	4/4/2023 11:19 AM	File folder			
🞍 Downloads	🖈 📔 CP-System	9/27/2023 3:37 PM	File folder			
Documents	🖈 🚺 Install	5/10/2024 12:59 PM	File folder			
📒 Backup	★ ISC_BIND_9	4/13/2023 2:34 PM	File folder			
ProjectFiles	*					
📒 Portable	*					
📒 FestoDidactic	ا جر					
👻 🛄 This PC						
> 🏪 OS (C:)						
4 items					[	≣□

Figure 4 D-drive

### 3.2 Additional software locations

- 3.2.1 hMail C:\Program Files (x86)\hMailServer\Bin\hMailAdmin.exe
- 3.2.2 Thunderbird –C:\Portable\Thunderbird\ThunderbirdPortable.exe
- 3.2.3 Wireshark C:\Program Files\Wireshark\Wireshark.exe"
- 3.2.4 UaExpert C:\Program Files\ UnifiedAutomation\UaExpert\bin\uaexpert.exe



localhost] 🚯 hMailServer Administrator - [localhost]			– 🗆 X
File Help	Accounts		
Status Domains C Docal C Docal C Docal C Distribution lists C Distribution lists C Distribution lists C Distribution lists C Distribution lists C Distribution lists C Distribution lists Rules Settings C Distribution lists C Distribution lists	Name customer@festo.systems webshop@festo.systems	Enabled Yes Yes	Add Edit Remove
	Help		Save
			Exit

### 3.3 How to add account to hMailServer in hMailServer Administrator

Figure 5 Add

🚯 hMailServer Administrator - [localhost]		_	
File Help			
Welcome   Status   Domains   cplocal   Accounts   Support@cplocal   Aliases   Customer@festo.systems   Aliases   Accounts   Customer@festo.systems   Aliases   Aliases   Accounts   Customer@festo.systems   Aliases   Vitities	Rules	Active Direct	ory Advi
Help			Save
			Exit

Figure 6 Configure

🌗 hMailServer Administrator - [localhost]		—	
File Help			
File       Help         Welcome       Status         Domains       Operation         Image: Complexity of the status       Image: Complexity of the status         Image: Complexity of the status       Image: Complexity of the status         Image: Complexity of the status       Image: Complexity of the status         Image: Complexity of the status       Image: Complexity of the status         Image: Complexity of the status       Image: Complexity of the status         Image: Complexity of the status       Image: Complexity of the status         Image: Complexity of the status       Image: Complexity of the status         Image: Complexity of the status       Image: Complexity of the status         Image: Complexity of the status       Image: Complexity of the status         Image: Complexity of the status       Image: Complexity of the status         Image: Complexity of the status       Image: Complexity of the status         Image: Complexity of the status       Image: Complexity of the status         Image: Complexity of the status       Image: Complexity of the status         Image: Complexity of the status       Image: Complexity of the status         Image: Complexity of the status       Image: Complexity of the status         Image: Complexity of the status       Image: Complexity of the status         Image: Complexity	test@festo.systems         General       Auto-reply       Forwarding       Signature       External accounts       Rules         Address       Image: Colspan="2">test       Image: Colspan="2">Image: Colspan="2">Image: Colspan="2">Colspan="2"       Colspan="2">Colspan="2">Colspan="2"       Colspan="2">Colspan="2"         Colspan="2">Colspan="2">Colspan="2"       Colspan="2"       Colspan="2" </th <th>Active Directory</th> <th>/ Advi · ·</th>	Active Directory	/ Advi · ·
Aiases Distribution lists Rules E K Settings D Thilties	User  Last logon time 8/1/2024 1:28:19 PM C Enabled		5 m
	нер		Save
			Exit

Figure 7 Save

## 3.4 D:\PortableApplications – portable software tools

Portable	×	+		_	
$\leftarrow \rightarrow \land \Box$		> This PC > OS (C:) > Portable >	Search P	ortable	۹
🕀 New - 🐰 🗘	[]	▲ ▲ ▲ ▲ ▲ ▲ ▲ ▲ ▲ ▲ ▲ ▲ ▲ ▲ ▲ ▲ ▲ ▲ ▲			🔲 Details
A Home	1	Name	Date modified	Туре	Size
Callery		HeidiSQL_12.6_64_Portable	7/5/2024 1:13 AM	File folder	
>  OneDrive		Proneta_3_7_0_0	5/10/2024 9:56 AM	File folder	
		🚞 SinecPni-V1.0.0	4/13/2023 9:41 AM	File folder	
Desktop		늘 Thunderbird	5/10/2024 10:38 AM	File folder	
▲ Downloads	*	😵 hercules_3-2-8.exe	5/8/2024 3:20 PM	Application	1,275 KB
Documents	*				
📒 Backup	*				
📒 ProjectFiles	*				
늘 Portable	*				
FestoDidactic	*				
5 items					

Figure 8 Portable software

## 4 Password list

Application	User	Password
MES-PC	Festo	Festo4.0
FactoryViews – MES4	admin	Festo4.0
	user	Festo4.0
hMail server		Festo4.0
Node-RED User	admin	Festo4.0
Webshop	admin	Festo4.0
Webshop	customer@festo.systems	Festo4.0
NodeRed	admin	Festo4.0
MariaDB	root	Festo4.0