

Learn-/Training Document

Siemens Automation Cooperates with Education (SCE) | From Version V14 SP1

TIA Portal Module 031-420 Diagnostics via Web with SIMATIC S7-1200

siemens.com/sce



Matching SCE Trainer Packages for these Learn-/Training Document

- SIMATIC S7-1200 AC/DC/RELAY (set of 6) "TIA Portal" Order no.: 6ES7214-1BE30-4AB3
- SIMATIC S7-1200 DC/DC/DC (set of 6) "TIA Portal" Order no.: 6ES7214-1AE30-4AB3
- Upgrade SIMATIC STEP 7 BASIC V14 SP1 (for S7-1200) (set of 6) "TIA Portal" Order no.: 6ES7822-0AA04-4YE5

Please note that these trainer packages are replaced with successor packages when necessary. An overview of the currently available SCE packages is provided at: <u>siemens.com/sce/tp</u>

Continued training

For regional Siemens SCE continued training, please contact your regional SCE contact siemens.com/sce/contact

Additional information regarding SCE

siemens.com/sce

Information regarding use

The SCE Learn-/Training Document for the integrated automation solution Totally Integrated Automation (TIA) was prepared for the program "Siemens Automation Cooperates with Education (SCE)" specifically for training purposes for public educational facilities and R&D institutions. Siemens AG does not guarantee the contents.

This document is to be used only for initial training on Siemens products/systems, which means it can be copied in whole or part and given to those being trained for use within the scope of their training. Circulation or copying this Learn-/Training Document and sharing its content is permitted within public training and advanced training facilities for training purposes.

Exceptions require written consent from the Siemens AG contact person: Roland Scheuerer roland.scheuerer@siemens.com.

Offenders will be held liable. All rights including translation are reserved, particularly if a patent is granted or a utility model or design is registered.

Use for industrial customer courses is explicitly not permitted. We do not consent to commercial use of the Learn-/Training Document.

We wish to thank the TU Dresden, particularly Prof. Dr.-Ing. Leon Urbas and the Michael Dziallas Engineering Corporation and all other involved persons for their support during the preparation of this Learn-/Training Document.

Table of contents

1	(Goal4							
2	F	Prerequisite4							
3	Required hardware and software5								
4	٦	Theory6							
	4.1	Diagnostics via web server6							
5	٦	Task8							
6	Planning8								
7	S	Structured step-by-step instructions9							
	7.1	Retrieve an existing project9							
	7.2	2 Configure the web server10							
	7.3	Save project and download CPU14							
	7.4 Diagnostics for the S7-1200 via the web								
	7.5	5 Checklist							
8	ļ	Additional information22							

Diagnostics via web server

1 Goal

In this module, the reader will become acquainted with the contents that can be displayed via the web server of the CPU 1214C.

This module will present the diagnostic functions in the web server that, for example, you can test with the TIA project from the SCE_EN_031-410_Basics Diagnostics with SIMATIC S7-1200 module.

The SIMATIC S7 controllers listed in Chapter 3 can be used.

2 Prerequisite

This chapter builds on the hardware configuration of the SIMATIC S7 CPU1214C DC/DC/DC. However, other hardware configurations can be used. You can use the following project for this chapter, for example:

SCE_EN_031-410_Basics_Diagnostics_S7-1200.zap14

3 Required hardware and software

- 1 Engineering station: requirements include hardware and operating system (for additional information, see Readme on the TIA Portal Installation DVDs)
- 2 SIMATIC STEP 7 Basic software in TIA Portal as of V14 SP1
- 3 SIMATIC S7-1200 controller, e.g. CPU 1214C DC/DC/DC with ANALOG OUTPUT SB1232 signal board, 1 AO – Firmware as of V4.2.1

Note: The digital inputs should be fed out to a control panel.

4 Ethernet connection between engineering station and controller



For unrestricted use in educational / R&D institutions. © Siemens AG 2018. All rights reserved. SCE_EN_031-420 Diagnostics via Webs S7-1200_R1709.docx

4 Theory

4.1 Diagnostics via web server

The web server enables monitoring and administering of the CPU by authorized users over a network.

This permits evaluation and diagnostics over long distances. Monitoring and evaluation is possible without the TIA Portal; all you need is a web browser.

The web server is deactivated in the delivery state of the CPU. This means that you must load a project in which the web server is activated to enable access using the web browser.

The web server offers the following security functions:

- Access via secure "https" transmission protocol
- User authorization by means of a user list
- Restriction of access from certain interfaces

You need a web browser to access the HTML pages of the CPU.

The following web browsers have been tested for communication with the CPU:

- Internet Explorer (Version 8)
- Mozilla Firefox (Version 21)
- Mobile Safari (iOS5)

					10.5	55:39 pm 1/3/201	12 UTC	✓ English
name	Moo	dule Informa	tion					
Login								C Off
	Module	e Information - S	7-1200 station_1 - CPU_1214C					
art Page	Slot	Status	Name		Order number	I address	Q address	Comment
agnostics	1	~	DI 14/DQ 10_1	Details		0	0	
agnostios	2		AI 2_1	Details		64		
agnostic Buffer	3	42	AQ 1x12BIT_1	Details	6ES7 232-4HA30-0XB0		64	
	16		HSC_1	Details		1000		
odule Information	17	_	HSC_2	Details		1004		
	18	~	HSC_3	Details		1008		
ommunication	<mark>1</mark> 9	V	HSC_4	Details		1012		
a status	20		HSC_5	Details		1016		
ig oldido	21	V	HSC_6	Details		1020		
atch tables	32	M	Pulse_1	Details			1000	
	33	V	Pulse_2	Details			1002	
nline backup	34	V	Pulse_3	Details			1004	
and fined as a set	35	_	Pulse_4	Details			1006	
ser-defined pages	X1		PROFINET interface_1	Details				
a Provincer	State	Identification						

Figure 1: Web server of the CPU 1214C DC/DC/DC with Module Information

Note: Make sure that you protect the CPU from manipulation and unauthorized access through the use of different methods (e.g., limiting network access, using firewalls).

5 Task

The following advanced diagnostic functions will be shown and tested in this chapter:

- Configuration of the web server of the CPU 1214C DC/DC/DC
- Display messages via the web server of the CPU 1214C DC/DC/DC

6 Planning

The diagnostic functions will be performed using a finished project as an example.

A project in the TIA Portal that was previously downloaded to the controller should be open for this.

In our case, after starting the TIA Portal, a previously created project will be retrieved from the archive and downloaded to the associated controller.

You can then configure the web server in the TIA Portal.

To demonstrate the display of an error in the module information, the configured signal board AQ 1x12Bit, for example, can be removed. **Caution!** The PLC should be disconnected from the supply voltage beforehand.

7 Structured step-by-step instructions

You can find instructions on how to carry out planning below. If you already have a good understanding of everything, it will be sufficient to focus on the numbered steps. Otherwise, simply follow the detailed steps in the instructions.

7.1 Retrieve an existing project

Before we begin with diagnostics via the web server, we need a project from the SCE_EN_031-410 Basics Diagnostics S7-1200 module. (e.g., SCE_EN_031-410_Basics Diagnostics_S7-1200_2.zap14)

To retrieve an existing project that has been archived, you must select the relevant archive with ® Project ® Retrieve in the project view. Confirm your selection with "Open". (® Project ® Retrieve ® Select a .zap archive ® Open)



® The next step is to select the target directory where the retrieved project will be stored. Confirm your selection with "OK". (® Target directory ® OK)

7.2 Configure the web server

To configure the web server, open the device configuration of the CPU 1214C DC/DC/DC.
 (
 CPU_1214C [CPU 1214C DC/DC/DC]

 Device configuration)



- ® Select the CPU and choose the 'Web server' menu item in the properties.
 - (® CPU_1214C ® Properties ® Web server)

TA Siemens - C:\Users\mde\Documents\Autor	matisie s Too	rung\031_200_FB-Programming_V14\031_200_FB-Programming_V14 ils Window Help		Totally Integrated	Automation
Project tran	-) ± (031 200 EB-Programming V14 CPU 1214C [CPU 1214C DC/D			PORTAL
Devices				Notwork view	Device view
	i -3-		an ropology view and		
Your Constraints You		Rack_0	2 3 4 2 3 4 100% 2 3 4 2 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4	5 6 7	
✓ Details view		General IO tags System constants Texts			
Name		Pulse generators (PTO)PWM) Startup Cycle Communication load System and clock memory Web server Multilingual support Time of day Protection & Security Configuration control Connection resources Overview of addresses W	Activate Web server on all mo Permit access only with HTTPS Finable automatic update	idules of this device	Finster

® Activate the web server on this module and confirm the security note.

CPU_1214C [CPU 1214	DC/DC/DC]		Properties	🗓 Info 👔 🗓 Diagno	ostics
General IO tags	System constants	Texts			
 General PROFINET interface [X1] General Ethernet addresses 	Web server				
Time synchronization Operating mode Advanced options Web server access			Activate Web server	on all modules of this device	
Hardware identifier DI 14/DQ 10 AI 2 AQ1 signal board High speed counters (HS: Pulse generators (PTO/PW Startup Cycle	c) M) Use	Ver Security not Activating the external acces	e Web server reduces protecti s to functions and data on th	on from unauthorized internal iis CPU.	or
Communication load System and clock memor Web server Multilingual support Time of day Protection & Security Configuration control Connection resources	y	····	-Ad	OK Id new user>	

Iceave the check mark for 'Enable automatic update', and select the security settings of the 'Everybody' user. Enable this user to carry out all possible actions and accept your settings.

CPU_1214C [CPU 1214C]		The user is authorized to	p% ▼ <u></u> ₹
CPU 1214C [CPU 1214C DC/D	C/DC1	read tags	1 Info (1) Diagnostics
		write tags	
General 10 tags Sy	stem cons		
 General 	Webs	read tag status	^
 PROFINET interface [X1] 	Web 5	write tag status	
General	Gener	acknowledge alarms	
Ethernet addresses	Gener	🖌 open user-defined web pages	
Time synchronization		write in user-defined web names	
Operating mode			n all modules of this device
Advanced options		read files	
Web server access		write/delete files	th HTTPS
Hardware identifier		change operating mode	
DI 14/DQ 10	Autom	🛃 flash LEDs	
AI 2		perform a firmware update	
AQ1 signal board		Change surtem parameters	
High speed counters (HSC)			late
Pulse generators (PTO/PWM)		change application parameters	5
Startup	1	create a backup of the PLC	
Cycle	Usern	📝 restore the PLC by a backup file	
Communication load	-	perform changes as F-Admin	
System and clock memory			
Web server			
Multilingual support		Minimum 💌	 Everyone
Time of day			<add new="" user=""></add>
Protection & Security			
Configuration control			
Connection resources			
Quenieu of addresses			

Notes: You can also create multiple users here with different authorizations. These users then require a password.

 R As a result of these authorizations, the 'Everybody' user is now automatically assigned the access level 'Administrative'.

Access level		Password	Name	
Administrative	-		Everyone	
			<add new="" user=""></add>	

In the 'Watch tables' menu item, the 'Watch table_Cylinder' can now be entered in the web server.

(® Watch table_C	ylinder 🛽 树
------------------	-------------

CPU_1214C [CF	PU 1214C D	C/DC	/DC]					Properti	ies	1 Info	i	Diagnostics	
General	IO tags	Syst	tem cor	stants	Texts								
General		~											
▼ PROFINET interfa	ace [X1]		Watch	tables _									C
General													
Ethernet add	dresses			Access			Name						
Time synchro	onization			Read		-	Watch tal	ole cylinder					
Operating m	ode					Ww	atch table	cvlinder					
Advanced op	otions					E Fo	orce table	ar Anna Anna Anna					
Web server a	iccess					UUA -							
Hardware ide	entifier												
DI 14/DQ 10									-				
AI 2													
AQ1 signal boa	rd												
High speed cou	inters (HSC)	=											
Pulse generator	rs (PTO/PWM)	100											
Startup									-				
Cycle													
Communication	n load												
System and clo	ck memory												
✓ Web server													
General						1.11			-				
Automatic u	pdate					1	Add new	✓	×				
User manag	ement												
Watch tables													
User-defined	pages												
Entry page													
Overview of	interfaces												

® The access here is read/write access. (® Read/Write)

Access		Name	
Read/Write	-	Watch table_cylinder	
Read		<add new="" table="" watch=""></add>	
Read/Write			

- ® User-defined web pages will not be created here. We must enable PROFINET interface_1 for access to the web server

CPU_1214C [CPU 1214C D	C/DC	/DC]	Reperties	🗓 Info 🔒	& Diagnostics	
General IO tags	Syst	em constants Texts				
General	~	User-defined pages				^
▼ PROFINET interface [X1]						
General		UT # disesters	1			
Ethernet addresses		HIML directory:			***	
Time synchronization		Default HTML page:	index.htm		***	
Operating mode		Application name:				
Advanced options		Status:				
Web server access			Constants blas		Delete bleeks	
Hardware identifier			Generate bloc	KS	Delete blocks	
DI 14/DQ 10						
Al 2		 Advanced 				
AQ1 signal board						
High speed counters (HSC)	=	Files with dynamic content:	.htm:.html			
Pulse generators (PTO/PWM)		White DD asserbars	222			
Startup	-	web DB number:	333			
Cycle		Fragment DB start number:	334	Q		
Communication load	-					
System and clock memory		Entry page				
 Web server 						
General		Coloct ontrino col	latro page			
Automatic update		Select entry page:	intro page			
User management						
Watch tables		Overview of interfaces				
 User-defined pages 						
Advanced		Device	terface	Enabled web se	rver access	
Entry page		CPU 1214C F	ROFINET interface 1			
Overview of interfaces			le Rechte	ckines Ausschneide		

7.3 Save project and download CPU

- It is a save your project, click the save project button in the menu. The complete controller with the modified configuration settings in the hardware configuration, as described in the previous modules, can be downloaded.
- 🙀 Siemens C:\Users\mde\Documents\Automatisierung\031_200_FB-Programming_V14\031_200_FB-Programming_V14 Project Edit View Insert Online Options Tools Window Help 📑 🎦 🔒 Save project 🚢 🐰 🤹 🗊 🗙 ත 🛨 (주 🚖 📲 🛄 🛄 🌆 🖉 🕼 Oonline 🖉 Goonline Totally Integrated Automation PORTAL 🗄? 🖪 🖪 🗶 -□ 031_200_I Download to device /14 CPU_1214C [CPU 1214C Project tree Devices 🛃 Topology view 🛔 Network view 🚺 Device view Hardware catalog 🔐 CPU_1214C [CPU 1214C] 💌 📰 🔣 🚮 🖽 🛄 🍳 🛨 所 **^** 031_200_FB-Programming_V14 1 Add new device B Devices & networks CPU_1214C [CPU 1214C DC/DC/DC] Device configuration Do Online tools 101 Program blocks
 Technology objects 103 102 9 Rack_0 External source files PLC tags C PLC data types Watch and force tables Tasks Online backups Karaces
 Traces
 Device proxy data Program info ř > 100% -D Local modules **Properties** 🗓 Info 追 🗓 Diagnostics Libr ✓ Details view General IO tags System constants Texts Module Communication load Web server System and clock memory Web server Name General General Device configuration ^ Automatic update Online & diagnostics Activate Web server on all modules of this device User management Program blocks Watch tables Permit access only with HTTPS Technology objects User-defined pages External source files Advanced Automatic update PLC tags Entry page Overview of interfaces Watch and force tables Multilingual support Enable automatic update Online backups Time of da Portal view CPU_1214C 🗸 The project 031_200_FB-Prog
- (® 🖶 Save project ® 🛄)

7.4 Diagnostics for the S7-1200 via the web

In order to access the web server of the CPU 1214C DC/DC/DC, we open any web browser on a PC that is connected to the CPU via TCP/IP.



® There we enter the IP address of the CPU 1214C DC/DC/DC. (® 192.168.0.1)



® On the displayed web page, we first select the language and then click 'ENTER'.
 (® English ® ENTER)



® On the 'Home Page' we see general information about the PLC and its status.

(® Home Page)

SIEMENS

SIEMENS	S7-1200 station_1 / CPU_1214C			
		10:4	44:48 pm 1/3/2012 UTC	\checkmark English \checkmark
Usemame Login	S7-1200 station_1			<mark>C Off</mark> 🛢
 Start Page Diagnostics Diagnostic Buffer Module Information Communication Tag status Watch tables Online backup User-defined pages File Browser 	SIEMENS SIMATIC S7-1200 CPU 1214C DC/DC/DC	General: Project Name: TIA Portal: Station name: Module name: Module type: Status: Operating Mode: Status: CPU operator panel:	031_200_FB-Programming_V1 V14 S7-1200 station_1 CPU_1214C CPU 1214C DCDCDC RUN ✓ OK RUN STOP LED flashes	4
Introduction				

Bernold B

S7-1200 station_1 / CPU_1214C

		10:47:34 pm 1/3/2012 UTC 💛 English 🗸
Usemame	Diagnostics	
Login		
▶ Start Page	Identification Program protection Memory	
► Diagnostics	Order Identification:	
	Plant designation:	
 Diagnostic Buffer 	Location identifier:	
▶ Module Information	Serial number: S C-F3SH7589	
Communication	Order number:	
▶ Tag status	Hardware: 6ES7 214-1AG40-0XB0	
 Watch tables 	Version:	
	Hardware: 2	
 Online backup 	Firmware: V04.02.01	
 User-defined pages 		
 File Browser 		
► Introduction		

Inder 'Diagnostics Buffer' we see descriptive information for all events in the CPU. Event information is recorded in a circular buffer. The most recent alarm is displayed in the top line.
 (Imagnostics Buffer)

					10:48:48 pm 1/3/2012 UTC 💙 English 🗸	
semame Login	Diagno: Diagno:	ostic Buffer stic buffer entries	1-25 🗸		<i>ि</i> भी डे	
	Number	Time	Date	Status	Event	
Start Page	1	10:40:39 pm	1/3/2012	Incoming event	Follow-on operating mode change - CPU changes from STARTUP to RUN mode	
	2	10:40:39 pm	1/3/2012	Incoming event	Communication initiated request: WARM RESTART - CPU changes from STOP to STARTU	
Diagnostics	3	10:40:39 pm	1/3/2012	Incoming event	New startup information - Current CPU operating mode: STOP	
Dissussetia Duffer	4	10:40:37 pm	1/3/2012	Incoming event	New startup information - Current CPU operating mode: STOP	
Diagnostic Buller	5 10:40:35 pm 1/3/2012 Incoming event New startup information - Current CPU operating mode: STOP					
Module Information	6 10:40:33 pm 1/3/2012 Incoming event New startup information - Current CPU operating mode: STOP					
	7	10:40:31 pm	1/3/2012	Incoming event	Follow-on operating mode change - CPU changes from STOP to STOP mode	
Communication	8	10:40:30 pm	1/3/2012	Incoming event	New startup information - Current CPU operating mode: STOP	
	9	10:40:29 pm	1/3/2012	Incoming event	New startup information - Current CPU operating mode: STOP	
Tag status	10	10:40:29 pm	1/3/2012	Incoming event	Communication initiated request: STOP - CPU changes from RUN to STOP mode	
Match toblas	11	08:47:58 pm	1/3/2012	Outgoing event	Force job active: - Current CPU operating mode: RUN	
watch tables	12	08:43:50 pm	1/3/2012	Incoming event	Force job active: - Current CPU operating mode: RUN	
Online backup	13	08:47:58 pm	1/3/2012	Outgoing event	Force job active: - Current CPU operating mode: RUN	
	14	08:43:50 pm	1/3/2012	Incoming event	Force job active: - Current CPU operating mode: RUN	
User-defined pages	15	08:23:00 nm	1/3/2012	Incoming event	Follow-on operating mode change - CPU changes from STARTUP to RUN mode	
	Details	:1			Event ID: 16# 02:400	
Introduction	CPU info: Power-on Pending s - No start	Follow-on operat mode set: WARN tartup inhibit(s): up inhibit set	ing mode cha I RESTART t	inge o RUN (if CPU was	in RUN before power off)	
	CPU chai	nges from START	UP to RUN r	node		
	HW_ID=	52				
	Incoming	event				

® The status of the individual modules of our SIMATIC S7-1200 is displayed with additional details in the 'Module Information' view.

(® Module Information)

S7-1200 station_1 / CPU_1214C

SIEMENS

Usemame	Mo	dule Informa	ition	-		10:55:39 pm 1/3/2012	UTC	✓ English ✓
Login								💭 Off 🚐
	Module	Information - S	67-1200 station_1 - CPU_1214C					
 Start Page 	Slot	Status	Name		Order number	I address	Q address	Comment
	1		DI 14/DQ 10_1	<u>Details</u>		0	0	
P Diagnostics	2		AI 2_1	Details		64		
Diagnostic Buffer	3	43	AQ 1x12BIT_1	Details	6ES7 232-4HA30-0XB0		64	
5	16		HSC_1	Details		1000		
Module Information	17	~	HSC_2	Details		1004		
	18	~	HSC_3	Details		1008		
 Communication 	19	~	HSC_4	Details		1012		
- Tag status	20	~	HSC_5	Details		1016		
r Tay status	21	~	HSC_6	Details		1020		
Watch tables	32	~	Pulse_1	Details			1000	
	33	~	Pulse_2	Details			1002	
 Online backup 	34	~	Pulse_3	Details			1004	
 User-defined pages 	35	~	Pulse_4	Details			1006	
	X1	~	PROFINET interface_1	Details				
File Browser	State	Identification						
	-							
	Erro	r: Hardware com	ponent removed or missing					
Introduction	HW	_ID= 269						

For unrestricted use in educational / R&D institutions. © Siemens AG 2018. All rights reserved. SCE_EN_031-420 Diagnostics via Webs S7-1200_R1709.docx

- Details about communications settings are displayed under 'Communication'. R
 - (® Communication)

CIEMENIC

SIEMENS	S7-1200 stati	on_1/0	CPU_1214	С					
						10:58:50 pm	1/3/2012	UTC	\sim English \sim
Usemame	Communicati	ion							
Login									😋 <u>Off</u> 📇
▶ Start Page	Parameter Statis	tics Cor	nnection resou	urces Connection st	atus				
▶ Diagnostics	PROFINET Inte	erface [X1]	1						
► Diagnostic Buffer	Network co	onnectior	1:						
▶ Module Information	MA	AC address	s: 28-63-36-88	3-FF-DA					
		Name	e: cpuxb1214c	:77d5					
Communication									
▶ Tag status	IP p	parameter	r:						
. Tag status	I	IP Address	s: 192.168.0.1						
 Watch tables 	Su	ibnet mask	255.255.255	5.0					
	Del	fault route	r: 0.0.0.0						
 Online backup 		IP settings	s: IP address s	set in project					
▸ User-defined pages	Physical p	properties							
▶ File Browser	Port number Li	nk status	Settings	Mode	Connection medium				
	X1 P1 OI	К	Automatically	100 MBit/s full-duplex	Copper cable				

® Values of the individual tags can be displayed and changed under 'Tag Status'.

(® Tag Status)

SIEMENS

					11:06:27 pm 1/3/2012	UTC	✓ English ✓
Usemame Login	Tag status						<mark>2</mark> 0ff 着
	Enter the address of a tag	here which you want to monitor/m	odify				
 Start Page 	Address	Display Format	Monito	r Value	Modify Value		9
• Diagnostics	q0.3	BOOL	🗸 🔳 true	9	I.		Go
 Diagnostics 	New variable		\sim		truo		
Diagnostic Buffer	DI				uue		
	Reliesh						Арріу
 Module Information 							
▸ Communication							
▶ Tag status							
 Watch tables 							
► Online backup							
User-defined pages							
▶ File Browser							

S7-1200 station_1 / CPU_1214C

In Watch tables' that are linked with the web server, such as the 'Watch table_cylinder', can also be displayed. (In Watch tables In Watch tables Watch table_cylinder)

SIEMENS	S7-1200 stat	ion_1 / CPU_1214	с				
					11:08:48 p	om 1/3/2012 UTC	\sim English \sim
Username	Watch tables	•					
Login	Watch table_cylin	der 🗸					😂 Off 🛓
	Name	Address	Display Format		Monitor Value	Modify Value	🔗 Comment
 Start Page 	"-B1"	%10.5	BOOL	\sim	🔳 true		Go
Diagnostics	"-B2"	%10.6	BOOL	\sim	false		Go
	"-M2"	%Q0.3	BOOL	\sim	🔲 false		Go
 Diagnostic Buffer 	Refresh						Apply
 Module Information 							
Communication							
► rag status							
• Watch tables							
 Online backup 							
 User-defined pages 							
File Browser							

- Inder "Online backup" you can create a backup of the project in the PLC and restore this
 - backup later. (
 ® Online backup
 ® Create online backup
 ® Restore selected online backup)

	SIEMENS	S7-1200 station	1/0	PU_1214C
--	---------	-----------------	-----	----------

		11:10:19 pm 1/3/2012	UTC	✓ English ✓
Usemame Login	Online backup			
 Start Page Diagnostics 	Backup PLC: Create online backup			
Diagnostic Buffer Module Information	Restore PLC:			
Communication		Durchsuchen		
▶ Tag status	Restore selected online backup			
 Watch tables 	Status:			
Online backup				
 User-defined pages 				
▶ File Browser				

Individually created pages for the visualization and also for operator control of processes would be seen under 'User-defined pages'. (® User-defined pages)

SIEMENS	S7-1200 station_1 / CPU_1214C
	11:10:56 pm 1/3/2012 UTC 🗸 English 🗸
Username	User-defined pages
Login	🖉 🗹 🛓
▶ Start Page	The page is not available
Diagnostics	
Diagnostic Buffer	
Module Information	
Communication	
▶ Tag status	
 Watch tables 	
 Online backup 	
User-defined pages	
▶ File Browser	

® Data can be stored directly on the memory card in the CPU or loaded from there using the 'File Browser'. (® File Browser)

SIEMENS	S7-1200 station_1 / CPU_1214C							
					11:12:02 pm	1/3/2012 UT	c ~	English \vee
Usemame	File Browser							
Login								😂 Off 🎩
▶ Start Page	S7-1200 station_1							
	Name	Size	Changed	Delete	Rename			
Diagnostics	DataLogs		12:00:00 am 1/1/2012					
Diagnostic Buffer	Recipes		12:00:00 am 1/1/2012					
Module Information	Directory operations:							
▶ Communication								
▶ Tag status								
 Watch tables 								
▸ Online backup								
User-defined pages								
File Browser								

7.5 Checklist

No.	Description	Completed
1	Project 031-410_Basics Diagnostics_S7-1200 successfully retrieved.	
2	Web server for the CPU 1214C from project 031-410_Basics Diagnostics_S7-1200 successfully configured.	
3	CPU 1214C from project 031-410_Basics Diagnostics_S7-1200 successfully downloaded.	
4	Voltage supply switched off.	
5	Signal board AQ 1x12Bit removed.	
6	Voltage supply switched on again.	
7	Web server of the CPU 1214C opened in one of the approved web browsers.	
8	Display checked for missing signal board AQ 1x12Bit in the Module Information menu item of the web server.	

8 Additional information

More information for further practice and consolidation is available as orientation, for example: Getting Started, videos, tutorials, apps, manuals, programming guidelines and trial software/ firmware, under the following link:

www.siemens.com/sce/s7-1200

Preview "Additional information"

- Getting Started, Videos, Tutorials, Apps, Manuals, Trial-SW/Firmware
 - ↗ TIA Portal Videos
 - TIA Portal Tutorial Center
 - > Getting Started
 - ↗ Programming Guideline
 - Easy Entry in SIMATIC S7-1200
 - > Download Trial Software/Firmware
 - ↗ Technical Documentation SIMATIC Controller
 - ↗ Industry Online Support App
 - TIA Portal, SIMATIC S7-1200/1500 Overview
 - ↗ TIA Portal Website
 - ↗ SIMATIC S7-1200 Website
 - ↗ SIMATIC S7-1500 Website

Further Information

Siemens Automation Cooperates with Education siemens.com/sce

SCE Learn-/Training Documents siemens.com/sce/documents

SCE Trainer Packages siemens.com/sce/tp

SCE Contact Partners siemens.com/sce/contact

Digital Enterprise siemens.com/digital-enterprise

Industrie 4.0 siemens.com/future-of-manufacturing

Totally Integrated Automation (TIA) siemens.com/tia

TIA Portal siemens.com/tia-portal

SIMATIC Controller siemens.com/controller

SIMATIC Technical Documentation siemens.com/simatic-docu

Industry Online Support support.industry.siemens.com

Product catalogue and online ordering system Industry Mall **mall.industry.siemens.com**

Siemens AG Digital Factory P.O. Box 4848 90026 Nuremberg Germany

Subject to change and errors © Siemens AG 2018

siemens.com/sce