

FAQ • 07/2015

PCS 7 V8.1 -Utilizing a Chip Card Reader in a Virtual Environment

SIMATIC PCS 7 V8.1

https://support.industry.siemens.com/cs/ww/en/view/109478004

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1 General Information

In PCS 7 in combination with SIMATIC Logon you can realize login via a chip card. In a virtual operating environment the chip card reader is connected to a USB port of the Thin Client.

This document describes how to incorporate the chip card reader into the virtual operating environment.

At the next link below you have a description of how to operate PCS 7 V8.1 in virtual operating environments.

OS Client, Batch Client, Route Control Client and Process Historian Released for Virtual Operating Environments with SIMATIC PCS 7 V8.1:

https://support.industry.siemens.com/cs/ww/en/view/93997453

The link below provides a description of how to realize login via chip card in PCS 7 with SIMATIC Logon.

https://support.industry.siemens.com/cs/ww/en/view/22014042

Validity

The document was created with PCS 7 V8.1, but can also be used for newer PCS 7 versions

2 Installation / Commissioning

Requirements

- PCS 7 V8.1 or higher
- SIMATC Logon V1.5.3
 "Service Pack 3 for SIMATIC Logon V1.5 procurable by Download"
 <u>http://support.automation.siemens.com/WW/view/en/107599703</u>
- The chip card reader is connected to a USB port of the Thin Client
- Access to the virtualized OS Client with installed SIMATIC Logon via RDP

WARNING	With access to a virtualized OS Client the existing session of the OS Client must be used, for example with the mstsc /admin command.
	In this way only one RDP session can be active and only one use logged on.
	The logged on Windows user on the OS Client must have automatic logon in Windows.
	SIMATIC Logon does not support multiple, parallel RDP connections.

Note If the user connects to a SIMATIC Logon computer by RDP, a card reader, which from the user's point of view is local and which is connected via RDP, can be utilized as logon device. This setting is configured in the "Logon Device" tab in the SIMATIC Logon Configuration dialog. SIMATIC Logon always reads the card of the currently active User Session.

2.1 Install Chip Card Reader Driver

If not already done, install the latest driver of the chip card reader on the Thin Client. This is on the Support DVD of PCS 7. Example for PCS 7 V8.1:

"DVD_PCS7.V81\Software_Support_Package\DVD_PCS7_Software_Support_and _Tools_2014_02_S79220B5799E\01_Drivers\CHIPCARD\CardMan 3121 USB"

Figure 2-1 Installation of the chip card driver

뿟 Driver Extraction		×
OMNIKEY	* Press only the 'Install' button to start extraction. * Use the 'Browse' button to select the destination folder from the foldrs tree. It can be also entered manually. * If the destination folder does not exist, it will be created automatically before extraction. NOTE : THE DRIVE FILES WILL ONLY BE EXTRACTED, BUT NOT AUTOMATICALLY INSTALLED !	*
	Destination folder C:\OMNIKEY\3x21_V1_2_6_5	
	Install	

2.2 Install SIMATC Logon V1.5.3

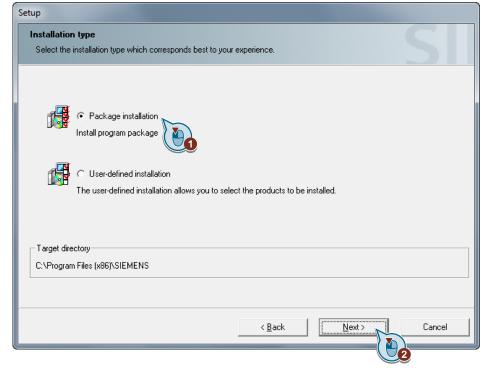
In the second step SIMATIC Logon V1.5.3 is installed on the virtualized OS Client.

Note You can skip this step if SIMATIC Logon V1.5.3 is already installed. SIMATIC Logon V1.5.3 is a component of PCS 7 from version V8.1 SP1 onwards.

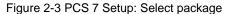
1. Open the PCS 7 Setup via "DVD_PCS7.V81 > DVD_1 > Setup".

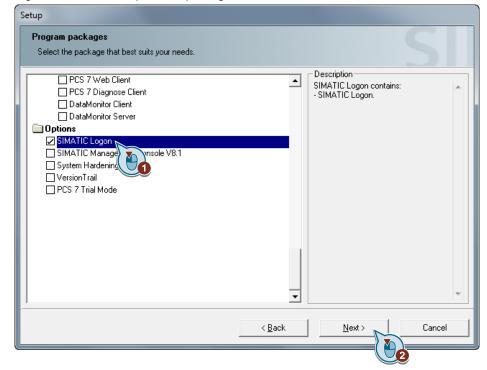
2. Select "Package installation" as the type of installation and click the "Next >" button.

Figure 2-2 PCS 7 Setup: Select installation type



 Under "Options" you mark the "SIMATIC Logon" package and click the "Next >" button.





4. Under "Options" you mark the "SIMATIC Logon V1.5 SP2" program and click the "Next >" button.

Figure 2-4 PCS 7 Setup: Select program

Programs Programs to be installed		
 Information Server - MS Office AddIn 2014 A Information Server - BATCH Options V8.1 Options Automation License Manager V5.3 SP1 Upd1 SIMATIC Management Console V8.1 SIMATIC Management Agent V8.1 SIMATIC Logon V1.5 SP2 S7-PLCSIM V5.4 SP5 Upd1 SOFTNET-IE RNA V12 SP2 SQL Server 2008 R2 SP2 - (Information Server) (x86) SQL Server 2008 R2 SP2 - (Information Server) (x84) SQL Server 2008 R2 SP2 - (Information Server) (x64) SQL Server 2008 R2 SP2 - (Process Historian) PCS7 Trial License PCS 7 Tools V8.1 Sustem Hardening 	SIMATIC Logo	on V1.5 SP2. <u>B</u> eadme 640 MB
Help Storage space	< <u>B</u> ack <u>N</u> ex	t > Cancel

- 5. Run the installation and close the PCS 7 Setup.
- Install the Service Pack 3 for SIMATIC Logon V1.5, which is available in the following entry: <u>http://support.automation.siemens.com/WW/view/en/107599703</u>

2.3 Configure SIMATIC Logon

SIMATIC Logon is then configured as in a real environment.

In this example the OS Server "ETOS01A" is used as logon computer and "BSUser" as user.

Note The configuration of a logon computer with SIMATIC Logon is usually used in a workgroup.

Further Information

How do you realize logon via chip card in PCS 7 with SIMATIC Logon?

https://support.industry.siemens.com/cs/ww/en/view/22014042

2.3.1 Settings on the Logon Computer for SIMATIC Logon

Note If the logon computer is an OS Server or an ES, access must not be via RDP. If you have a virtualized OS Server or virtualized ES, use VNC, the vSphere Client or vSphere Web Client.

Figure 2-5 BSUsers group on the ETOS01A logon computer for SIMATIC Logon

	ties		
ieneral			
👧 BSI	Jsers		
	loou.		
Description:	BSUsers		
Members:			
BSuser			
Add	Remove Changes t are not effuser logs of	to a user's group m fective until the net	embership xt time the

2.3.2 Settings on the OS Client for SIMATIC Logon

1. Establish connection with OS Client

Connect with the virtualized OS Client via RDP using the **mstsc /admin** command, for example.

2. Select the working environment

Select "Start > All Programs > Siemens Automation > SIMATIC > SIMATIC Logon > Configure SIMATIC Logon".

Figure 2-6 Configure SIMATIC Logon: Working environment

Configure SIMATIC Logon	×
General Working environment Logon device Automatic logoff Certificate	1
Get user data from:	
O this computer or a Windows domain	
• another computer	
Name: ETOS01A	
Include only global groups of domains (safety groups) and local groups of the computer	
OK Apply Cancel Help	

3. Select the logon device

Select the chip card reader connected to the Thin Client via USB.

Figure 2-7 Configure SIMATIC Logon: Logon device

Configure SIMATIC Logon
General Working environment Logon device Automatic logoff Certificate
C Logon via keyboard
Logon via the following smart card reader: OMNIKEY AG Smart Card Reader USB 0
Do not permit alternative logon using keyboard.
C Logon via another device Do not permit alternative logon using keyboard.
Use on-screen keyboard WinCC keyboard
osk.exe
Call parameter
OK Apply Cancel Help

4. Select the chip card

Select "Start > All Programs > Siemens Automation > SIMATIC > SIMATIC Logon > Edit Smart Card".

Figure 2-8 SIMATIC Logon Service

SIMATIC Logon Service - Edit Smart Card						
Log on to:	ETOS01A					
User name:						
Password:						
Confirm new password:						
Change password	Write data to smart card					
Log on to:	ETO501A					
User name:	BSUser					
	Read data from smart card					
Exit	Help					

2.3.3 Setting up the groups in the User Administrator

- 1. Configure the "BSUsers" group in the "User Administrator".
- **Note** The group in the User Administrator must have the same name as the Windows group on the logon computer of SIMATIC Logon; in this example it is "BSUsers".
 - 2. Mark "User Administrator" and enable the "Logon with smart card" option for "BSUsers". The "SIMATIC Logon" option must be disabled here.

Figure 2-9 User Administrator on the OS Client

👖 User Administrator - WinCC Configuration Studio							
👬 Group Find	,	•	👔 Properties - User Administrator >>				
Group name	Logon with smart card Type	of 🔺	Selection				
1 Administrator-G	n 📃 None		Object type User Administrator				
2 BSUsers	None None		Object name User Administrator				
3 QWERT	None None		SIMATIC Logon				
4 💥			SIMATIC Logon				
5			🖻 Tag Logon				
6			Computer name				
7			Tag name <tag name=""></tag>				
9			Low limit 0				
		-1	High limit 1				
	Group num Find Group name Group name 1 Administrator-G BSUsers 3 QWERT G 4 % G 6 7 8	Group Find Group name Administrator-Gr BSUsers QWERT X S 6 7	Group Find P • Group name Logon with smart card Type of 1 Administrator-Gr None 2 BSUsers None 3 QWERT None 4 X 2 6 7 8				

3. Enable the "SIMATIC Logon" option.

Figure 2-10 User Administrator on the OS Client: SIMATIC Logon

User Administrator «	-	Group Find		ب م		💡 Properties - User Administrator	>>
🖃 📲 User Administrator			Logon with smart card	Type of -		Selection	
🗄 🚻 Administrator-Group	1	Administrator-Gr		None		Object type User Administrator	
BSUsers	2	BSUsers	V	None		Object name User Administrator	
WERT	3	OWERT		None	E	SIMATIC Logon	
III Surger	4	*				SIMATIC Logon	
	5				E	🗆 Tag Logon	
	6					Computer name	
	7					Tag name <t< td=""><td></td></t<>	
	0					Low limit 0	
	8					High limit 1	

4. Configure the required authorizations for the "BSUsers" group.

ile <u>E</u> dit <u>V</u> iew <u>H</u> elp									
Jser Administrator «	-	Author Find		۶) -	0	Propertie	s - Authorization	»
👔 User Administrator		Function	Enable	Overview	-		Selection		1
🗄 🍰 Administrator-Group	1	User administration					Object type	Authorization	
BSUsers	2	Authorization for area	V	7		Obje	Object name	User administration	
	3	System change				Ξ	General		
	4	Monitoring	V	V			Owner	BSUsers	
	5	Process controlling	V	V		ID Fu En	Owner type	Group	
	6	Higher process controllin	V	7				1	
	7	Report system	V	V			Function	User administration	
	8	Activate remote			Enable				
	9	Configure remote				Ξ	Authorizatio	DN	
	10	Web Access - monitoring					Overview		
		Highest process controllin		7			Dryer		
		Advanced operation 1		100			Tankfarm		
		Advanced operation 2		(m)	-1		Reactor Filter		
	and the second			Louid	- 1		1 Inclas		

Figure 2-11 User Administrator on the OS Client: Authorizations

2.4 Logon with Chip Card in OS Runtime

Requirements

- The chip card reader is connected via USB to the Thin Client.
- The chip card driver is installed on the Thin Client.
- SIMATC Logon has been configured.
- For this example the "BSUsers" group and the "BSUser" user have been configured on the logon computer for SIMATIC Logon.
- For this example the "BSUsers" has been configured in the "User Administrator" for SIMATIC Logon and chip card.
- Runtime is enabled on the OS Client.

Procedure

Connect with the virtualized OS client via RDP from the Thin Client using the **mstsc /admin** command, for example.

The next dialog shows the Runtime screen of the virtualized OS Client with the "BSUser" user logged on via the chip card. The "SIMATIC Logon Service" dialog is also shown, which shows the user read out of the chip card.

	🖽 C	4/8/2015 11:35:51 AM
Reactor	Į Į	
Buffer	Ū.	PCS 7
	Û.	
	L	BSUser
	SIMATIC Logon Service	- Edit Smart Card
nixer Press	Log on to:	ETO501A
-1 -1	User name:	
50	Password:	
MIT	Confirm new password:	
	Change password	Write data to smart card
B 2		
L	Log on to:	ETOS01A
	User name:	BSUser
74 74 74		Read data from smart card
а	Exit	Help

Figure 2-12 Runtime with user logged on via smart card