

# CIS mobile: Installation Guide

# **Table of contents**

1. General	2
2. Prerequisites	3
3. Installation	6
Step 1: Unzip the installation file	6
Step 2: Install the S10 Repository	
Step 3: Create a Windows user with the appropriate authorizations	8
Step 4: Create the IIS application pool "cismobile"	
Step 5: Create the IIS application "cismobile"	
Step 6: Define the IIS handler mappings for "cismobile" (ISAP-dll)	
Step 7: Import the CIS mobile function modules into your SAP	
Step 8: Run CIS mobile with your own SAP system	
Step 9: Configure SAP GUI connection and organizational data	41
Step 10: Increase Windows resources for background services	
4. Further configuration and enhancements	

Synactive GmbH Am Lenzberg 25 18546 Sassnitz Germany

Tel. +49 6897 728930 email office@synactive.com http://www.synactive.com

## 1. General

CIS mobile is installed on a Windows server as an IIS application (Microsoft Internet Information Services). The data connection to your SAP system is implemented via RFC (Remote Function Call) and SAP GUI.

The installation consists of the following main steps:

- Providing all prerequisites on the server
- Creating a CIS service user (Windows)
- Copying the files and defining the application in IIS
- Adapting CIS mobile to your needs (SAP connection , company name , etc.)

The installation guide is formulated in detail and illustrated with numerous screen-shots, so that no special IIS expertise is required.

## 2. Prerequisites

- (1) Web server: Windows Server 2008 (or above) or Windows 7
- (2) Space required on the server
  - 0.1GB of disk space
  - 2GB of additional memory for 50 simultaneously active users

(3)IIIS 7.x (or above) installed , IIS feature "ISAPI Extensions" activated

The IIS setup or subsequent configuration of IIS features can be regulated at any time without needing Windows installation files.

Entering the URL http://localhost in the Browser should display the "Welcome" screen of the IIS, or the first HTML page of an IIS default application. If the "Welcome" screen or the default application does not appear please check the IIS installation.



For the CIS installation it suffices that your web server can be reached in your own local network. In this guide we do not cover the typical external internet access topics such as domain registration, fixed IP address, routers and port forwarding, firewalls, SAP Web Dispatcher.

The IIS "ISAPI Extensions" can be configured in the Windows Server manager through "Add Role Services"

 $\rightarrow$  Web Server

→ Application Development

 $\rightarrow$  ISAPI Extensions

Server Manager			
File Action View Help			
🗢 🔿   🖄 🔜   👔			
Server Manager (W530) Roles Application Server Remote Desktop Services Web Server (IIS) Features Diagnostics Konfiguration Storage Windows Server Backup Disk Management	Web Server (IIS) Provides a reliable, ma Add Role Services Select Role Serv Confirmation Progress Results	nageable, and scalable Web application infrastructure. Fices  Select the role services to install for Web Server (IIS): Role services:  Common HTTP Features (Installed) Static Content (Installed) Static Content (Installed) Default Document (Installed) Static Content (Installed) Default Document (Installed) HTTP Errors (Installed) HTTP Redirection (Installed) HTTP Redirection (Installed) Application Development (Installed) Application Development (Installed) ASP (Installed) ASP (Installed) ASP (Installed) Server Side Includes (Installed) Server Side Includes (Installed) ASP (Installed) Server Side Includes (Installed) ASP (Installed) Server Side Includes (Installed) ASP (Instal	Des Web HTM for A exte Serv Web for c app

(4) You can use CIS mobile via https, which we recommend in production systems. This can be configured at any time after the CIS installation.

(5) SAP GUI 7.70 32-bit or above

(6) SAP GUI Scripting

The SAP profile parameter

sapgui / user\_scripting

needs to be set to TRUE.

You can control the use of SAP GUI Scripting individually for each user: Set the SAP profile parameter

sapgui / user\_scripting\_per\_user

to TRUE and add the SAP authorization "S\_SCR ", "Execute (16) for all CIS users.

For more details see

http://www.erpexecutive.com/2010/12/how-to-enable-sap-gui-scripting/

and the "SAP GUI Scripting Security Guide"

http://www.sdn.sap.com/irj/sdn/go/portal/prtroot/docs/library/uuid/3099a575-9cf4-2a10-9492-9838706b9262?overridelayout=true&49868865327964

(7) Microsoft Visual Studio 2012 or above

If you want to develop your own add-ons.

(8) .NET Framework 4.0 or above enabled

In Windows Server Manager choose Features -> Add feature and tick the .NET Framework 4.0 checkbox.

(9) Web Browser (MS Edge, Chrome, ...)

(10) CIS mobile installation file "cismobile.setup.zip" with license

Available from Synactive GmbH, email office@synactive.com

## 3. Installation

#### Step 1: Unzip the installation file

Unzip the file " cismobile.setup.zip " into an arbitrary directory, e.g. C:\cismobilesetup. The folder can be deleted after installation.

The folder with the extracted files looks as follows:

Name -	
鷆 cismobile	
퉬 SAP Transport	
뤗 s 10 setup. exe	

#### Hint:

If you downloaded the .zip file from an internet server like www.synactive.com or another source it might be necessary to make sure that windows trusts all the files in the archive.

That means you need to unblock the .zip file. To do so, right click on the file and select "properties". Then click on "unblock" as shown on the following picture:

Attributes:	Read-only Hidden Advanced
Security:	This file came from another computer and might be blocked to help protect this computer.
	OK Cancel Apply

## Step 2: Install the S10 Repository

Execute the program "s10setup.exe".

This installs the development environment "Synactive S10 Repository" which we need in order to configure CIS mobile later on, and also for the development of your own add-ons.

During the setup you may choose an arbitrary path where the setup will create a folder "s10develop". You may keep the default "C:" so that the installation creates "C:\s10develop."

#### Test after Step 2

Your desktop now contains a link to the "S10 Repository":



Clicking this link you can start the S10 Repository which will come up with an empty screen:

S10 Repository								
Project			-	Class	View	Tools	Runtime	e Help
2 Refresh view	Properties	New project	E Co	py project	Create da	ass	Event Log	Active user sesssions
		Coloring	<b>Check</b>	Save	Generate	Сору	🗎 Delete	~

You may close the S10 repository now; we will need it later on .

#### Step 3: Create a Windows user with the appropriate authorizations

All CIS mobile activities on the server will be carried out with the user "cismobileservice" that we will create now. It is not necessary that you grant general "administrator" privileges to this user.

Please observe that the Windows user "cismobileservice" is completely independent of the SAP authorization checks that are included in CIS mobile. The SAP authorizations are always checked for the SAP user that actually logs on to CIS mobile, wheras the Windows user "cismobileservice" is a single technical user for the IIS process and related tasks.

You may choose any other Windows user name, different from "cismobileservice", if there are naming conventions to be observed in your company.





We suggest you do not configure a password expiration for "cismobileservice", since this could result in a sudden stop of CIS mobile after the expiration date. If company regulations insist on a password expiration even for such service users, please schedule the prolongation in a suitable way.

To set a non-expiring password, proceed as follows:

- $\rightarrow$  Computer management
- $\rightarrow$  Local Users and Groups
- $\rightarrow$  Users
- → Right mouse click on "cismobileservice"
- $\rightarrow$  Properties



We have now completed the creation of the CIS mobile service user. Logoff from Windows and logon with this new user in order to set a couple of SAP GUI default values.

Click on

->Start ->Change user

and log on with "cismobileservice".

Start the SAP Logon and enter the data for the SAP system you want to use. Example:

☞ SAP Logon 730			
Log <u>O</u> n Variable Logon 🗋 🥖	î 🛯 🖛 🕼	¥	
Pavorites     Garage Shortcuts	Name ≜ System Description	on SID ECC	
Connections	ECC W530	ECC	
	System Entry Properties		
	Connection Network Co	ode Page	
	Choose the connection type and char if you want the system to propose a de has been entered.		
		ustom Application Server	· · ·
	System Connection Parameters		
	Description:	ECC W530	
	Application Server:	W530	
	Instance Number:	00	
	System ID:	ECC	
	SAProuter String:		

Logon to this SAP system with any user name.

Then click on "SAP GUI options", enable "Scripting" and disable the two notifications:

	٦	
2 🖪		
SAP GUI Options - ECC		
Theme: SAP S	Signature Theme	•
Carl Visual Design     Carl Interaction Design     Carl Accessibility & Scr     Carl Accessibility	n ripting	Installation Scripting is installed User Settings
<ul> <li>Scripting</li> <li>Multilingual Settin</li> <li>Local Data</li> <li>Traces</li> <li>Security</li> <li>Front End Print</li> </ul>		<ul> <li>✓ Enable scripting</li> <li>○ Notify when a script attaches to SAP GUI</li> <li>○ Notify when a script opens a connection</li> </ul>
• 🖹 System Informati	on	

Logoff from SAP, and then change the Windows session back to your normal user.

## Step 4: Create the IIS application pool "cismobile"

Start the IIS Manager, e.g. by entering "IIS" in the "Run" command line. Then click on "Application Pools":



On the right hand side, click on "Add Application Pool".

Actions 🟦 Add Application Pool... Set Application Pool Defaults... 🕜 Help Online Help ? × Add Application Pool Name: cismobile .NET Framework version: • No Managed Code Managed pipeline mode: Classic • Start application pool immediately ΟК Cancel

Choose a suitable name for the application pool e.g. "cismobile":

Choose "No Managed Code" and "Classic" pipeline mode.

All application pool settings can be changed later in cases where you have overlooked something or clicked on "OK" before completing the settings.

Act	tions
8	Add Application Pool Set Application Pool Defaults
	Application Pool Tasks
₽	Start
	Stop
2	Recycle
	Edit Application Pool
Ē	Basic Settings
	Recycling
10	Advanced Settings)
	Rename
×	Remove
	View Applications
?	Help
	Online Help

After clicking "OK" you choose the "Advanced Settings".

The next screen contains various application pool settings. We can leave the default values for most of them but a couple of settings need to be changed. These are marked in red in the next screenshot:

(General)		
.NET Framework Version	No Managed Code	
Enable 32-Bit Applications	True	
Managed Pipeline Mode	Classic	
Name	CisMobile	
Queue Length	1000	
Start Automatically	True	
CPU		
Limit	0	
Limit Action	NoAction	
Limit Interval (minutes)	5	
Processor Affinity Enabled	False	
Processor Affinity Mask	4294967295	
Process Model		
Identity	cismobileservice	
Idle Time-out (minutes)	0	
Load User Profile	True	
Maximum Worker Processes	1	
Ping Enabled	True	
Ping Maximum Response Time (seconds)	90	
Ping Period (seconds)	30	
Shutdown Time Limit (seconds)	90	
Startup Time Limit (seconds)	90	
Process Orphaning		
Enabled	False	
Executable		
Executable Parameters		
Rapid-Fail Protection		
"Service Unavailable" Response Type	HttpLevel	
Enabled	False	
Failure Interval (minutes)	5	
Maximum Failures	5	
Shutdown Executable		
Shutdown Executable Parameters		
Recycling		
Disable Overlapped Recycle	False	
Disable Recycling for Configuration Changes	False	
Generate Recycle Event Log Entry		
Private Memory Limit (KB)	0	
Regular Time Interval (minutes)	0	
Request Limit	0	
Specific Times	TimeSpan[] Array	
opeone nines	0	
Virtual Memory Limit (KB)		

\ppl	ication Pool Def	faults	5				? ×
	(General)						
	.NET Framework	Versio	n		v2.0		
	Enable 32-Bit App	olicatio	ons		False		
	Managed Pipeline	Mode	2		Integrated		
	Queue Length				1000		
	Start Automatical	lly			True		
	CPU						
	Limit				0		
	Limit Action				NoAction		
	Limit Interval (mir	nutes)			5		
	Processor Affinity				False		
	Processor Affinity		k		4294967295		
	Process Model						$\rightarrow$
	Identity				ApplicationPoolId	entity	<u> </u>
	Idle Time-out (mir		)		0		
	Load User Profile				False		
	Maximum Worker	Proce	esses		1		
	Ping Enabled		- ( ))		True		
	Ping Maximum Re	Anni	e Time (seconds) ication Pool Identit		00	? X	L
		лррі	ication Poor Identit	Y			
	Shutdown Time L	0	Built-in account:				
	Startup Time Lim Process Orpha		A K D K K	h .			
	Enabled		ApplicationPoolIdenti	ty	Y		
	Executable	$\bullet$	Custom account:				
	Executable Para					Set	
	Rapid-Fail Pro		1			Jet	
	"Service Unavail;						
	Enabled						
	Failure Interval (				ок	Cancel	
	Maximum Failure				<u>OK</u>	Caricer	
	Shutdown Execu Shutdown Execu					1	
	Shutdown Execu	Set (	Credentials		?×		
	Recycling	Us	er name:				
	Disable Overlapp	_	mobileservice				
	Disable Recycling	1					
Ð	Generate Recycl		ssword:				
	Private Memory I	••	•••••				
	Regular Time Int	Co	nfirm password:				
	Request Limit						
Ð	Specific Times						
F	Virtual Memory L			ОК	Cancel		

Please note: If you are on 32-Bit Windows there is no option "Enable 32-Bit Application"

We configure our new application pool to run with the "cismobileservice" user account: Click on the selection icon right hand side in row "Identity", then choose "Custom account" and enter the user name "cismobileservice" and the password.

## Step 5: Create the IIS application "cismobile"

First we need to know the pysical path of of the "Default Web Site" in IIS. In many cases this is "C:\inetpub\wwwroot" but it can be another one. Click on "Default Web Site", then right hand side on "Advanced Settings":

	Actions	
	🔬 Explore	2
		rmissions
	Edit Si	ite
	Binding	
	Basic S	-
	View A	pplications
	View Vi	irtual Directories
	Manage W	Veb Site
	2 Restar	
	Start	•
	Store Store	
	Brows	se Web Site
	Browse	e *:80 (http)
	Browse	e *:443 (https)
		e *:443 (https) ced Settings
vanced Settings		
		ced Settings
		ced Settings
∃ (General)		ced Settings ?
(General)     Application Pool		ced Settings ? DefaultAppPool
(General)     Application Pool     Bindings     ID     Name		ced Settings ?  DefaultAppPool http:*:80:,net.tcp:808:*,net.pipe:*,net.msmq:localhost,msr 1 Default Web Site
(General)     Application Pool     Bindings     ID     Name     Physical Path		ced Settings ?  DefaultAppPool http:*:80:,net.tcp:808:*,net.pipe:*,net.msmq:localhost,msr 1
<ul> <li>(General)         Application Pool         Bindings         ID         Name         Physical Path         Physical Path Credentials     </li> </ul>	Advand	ced Settings ?  DefaultAppPool http:*:80:,net.tcp:808:*,net.pipe:*,net.msmq:localhost,msr 1 Default Web Site
<ul> <li>(General)         Application Pool         Bindings         ID         Name         Physical Path         Physical Path Credentials         Physical Path Credentials Logon Type     </li> </ul>	Advand	ced Settings ?  DefaultAppPool http:*:80:,net.tcp:808:*,net.pipe:*,net.msmq:localhost,msr 1 Default Web Site
<ul> <li>(General)         Application Pool         Bindings         ID         Name         Physical Path         Physical Path Credentials         Physical Path Credentials Logon Type         Start Automatically     </li> </ul>	Advand	ced Settings ?  DefaultAppPool http:*:80:,net.tcp:808:*,net.pipe:*,net.msmq:localhost,msr 1 Default Web Site C:\inetpub\wwwroot
<ul> <li>(General)         Application Pool         Bindings         ID         Name         Physical Path         Physical Path Credentials         Physical Path Credentials Logon Type         Start Automatically         Behavior     </li> </ul>	Advand	ced Settings
Bindings ID Name Physical Path Physical Path Credentials Physical Path Credentials Logon Typ	Advand	ced Settings         ? :         DefaultAppPool         http:*:80:,net.tcp:808:*,net.pipe:*,net.msmq:localhost,msr         1         Default Web Site         C:\inetpub\wwwroot            ClearText

Copy the folder "cismobile" from the CIS mobile installation folder into the "Default Web Site" folder, e.g. into "C:\inetpub\wwwroot".



Alternatively you can use any other folder as IIS folder for CIS mobile. In this case you define the "CIS mobile" application separately, not within the "Default Web Site".

You can also choose a different application name instead of "cismobile", e.g. "cis". If you change the folder name you will need a new license from Synactive, since the license file "programs Vicense.txt" depends on the folder name.

Now our new "cismobile" folder is shown in IIS Manager:



Grant full access rights for this folder to the service user "cismobileservice", including all subfolders.

General       Sharing       Security       Previous Versions       Customize         Object name:       C:\inetpub\wwwroot\cismobile         Group or user names:       Image: CREATOR OWNER	
Group or user names:	
& SYSTEM	
Administrators (W530\Administrators)	
Users (W/530)Users)	
To change permissions, click Edit.	
OWNER	×
Full control Security	
Modify Dead & superite Object name: C:\inetpub\wwwroot\cismobile	
List folder conter	
Group or user names:	
Write	
For special permissi & SYSTEM	
click Advanced. & Administrators (W530\Administrators)	
Leam about acces: Users (W530\Users)	
Add Remove	
Permissions for cismobileservice Allow Deny	
Full control	
Modify 🗹 🗖	
Read & execute	
List folder contents	
Read	
Leam about access control and permissions	
OK Cancel Apply	

**Please observe:** The access rights are needed for the "cismobile" folder that we just have created, e.g. "C:\inetpub\wwwroot\cismobile" and not for the "cismobile" folder in the installation directory (unzipped installation files).

With a right mouse click on the "cismobile" folder we convert the folder into an IIS application. In the IIS popup you only need to specify the application pool that we created before, e.g. "cismobile" (In the screenshot the application pool name is "S10")

Start Page W530 (W530 \Administrator) Application Pools Sites Sites Default Web Site		Filt	er: SP.NET	
Add Application Site name: Default Web Site Path: /				? ×
Alias: cismobile Example: sales Physical path: C: \inetpub \wwwroot \cismobile Pass-through authentication	Application pool:			Select
Connect as Test Settings	]	ОК		Cancel

Click on "OK". You may test the settings with the "Test Settings button.

## Test after step 5

Enter the URL

http://localhost/cismobile

in a browser (IE10, Chrome,...). You obtain the CIS mobile login screen:



The login does not work yet; we first need to carry out step 6.

## Step 6: Define the IIS handler mappings for "cismobile" (ISAP-dll)

In IIS Manager click on "cismobile" and then on "Handler Mappings"::



It nay be that the "ISAPI-dll" entry in "Handler Mappings" is still in "Disabled" state:

Handler Map	-	s and managed code, th	nat handle responses fi	or specific request types.	
Group by: State	▼ Path	State	Path Type	Handler	Entry Type
Disabled	1.001	State	radripe	Harraner	Lind ( Type
CGI-exe	*.exe	Disabled	File	CgiModule	Inherited
ISAPI-dll	*.dll	Disabled	File	IsapiModule	Local
Enabled					
ASPClassic	*.asp	Enabled	File	IsapiModule	Inherited
aspq-ISAPI-4.0_32bit	*.aspq	Enabled	Unspecified	IsapiModule	Inherited
aspq-ISAPI-4.0_64bit	*.aspq	Enabled	Unspecified	IsapiModule	Inherited

In this case, right click on "ISAPI.dll" and then "Edit Feature Permissions". Tick "Read" "Script" and "Execute" and then click "OK":

Actions
Add Script Map
Add Wildcard Script Map Add Module Mapping
Edit
Rename X Remove
Edit Feature Permissions
Revert To Parent
View Ordered List
Edit Feature Permissions
Permissions:
Read
✓ Script
☑ Execute
OK Cancel

ISAP-dll is now "Enabled". Double click on this line:

Handler Mapping					
Use this feature to specify the resour Group by: State	rces, such as DLLs and m	anaged code, that h	andle responses for s	specific request types.	
Name 🔺	Path	State	Path Type	Handler	Entry Type
- nepremoungnandien detory so	aoop	Endbled	- onapeened	- Isophylociae	- Innented
HttpRemotingHandlerFactory-so	*.soap	Enabled	Unspecified	IsapiModule	Inherited
HttpRemotingHandlerFactory-so	*.soap	Enabled	Unspecified	IsapiModule	Inherited
ISAPI-dll	*.dll	Enabled	File	IsapiModule	Local

A popup screen is shown where you can enter the path of a dll. Enter the ddl "programs/smaragd.dll" in the cismobile path:

Edit Script Map	? ×
Request path:	
*.dll	
Example: *.bas, wsvc.axd	
Executable:	
C: \inetpub \www.root \cismobile \programs \smaragd.	dll
·	
Name:	
ISAPI-dll	1
Request Restrictions	
OK	Cancel

You may select the dll with the select button in order to avoid any typos.

With "Edit Feature permissions" you enable "Read" "Script" and "Execute" access:

Actions	
Add Script Map	
Add Wildcard Script Map	
Add Module Mapping	
Edit	
Rename	
🗙 Remove	
Edit Feature Permissions	
Revert To Parent	
View Ordered List	
Edit Feature Permissions	<u>? ×</u>
Permissions:	
Read	
Script	
Execute	
Execute	
ОК	Cancel
UN	Cancer



Click "OK" and then "Yes" in the next popup screen.

#### Test after Step 6

Enter the URL

http://localhost/cismobile

in your browser. The CIS mobile login screen is shown. Enter any user name and click on "login". CIS mobile is started and you can execute a couple of test steps in the application. The data connection is still to the Synactive SAP system on s10mobile.com, since we have not yet configured the connection to your own SAP system. This will be done in the following steps.

	ndows Internet Expl		11				
🕑 🔻 🥔 http://	localhost/cis/	P ★ ② CIS (overview)	v) ×				☆ ☆
Edit View Fav	orites Tools Help			nyang di ang kang ang kang ang ang kang bang bang bang bang bang bang bang b		NGRUNARALASI DALAM	
		Customer No 2000				MyCom	<u>pany</u>
Č Custom		Activities Offers	Orders Products	Account Repo	orts PDFs	Logoff	
000 arbor Gmb	н	2222-2009-2017-2020-2027-2007-2007-2007-2007-2007		Dieselstrass 40235 Düsse Germany		0211-9986-0 0211-9987-0	
ales Office: 1000	Office Frankfurt						
Contacts		Function	Phone	Email			
Berggrün	Annette	Sekretärin Einkauf	021199860	annette.berggruen(	@carbor.de		
Kirchhoff	Heinz	Leiter Einkauf	021199860267	heinz.kirchhoff@ca	rbor.de		
Lehmann	Christian	Vorstand		christian.lehmann@	)carbor.de		
Pins	Daniel		02119986100	daniel.pins@carbor	r.de		
Schmielau	Bernhard	Leiter QS	02119986511	bernhard.schmielau	u@carbor.de	2	
Wilson	Beth	CFO					
dd contact							
Year			2012	2013			
Net value of in	coming orders	20,730.4	I0 EUR	112,222.36			
Net sales			I0 EUR	0.00			
Open net valu			4-EUR	94,972.50			
Net value of in Net value of cr			10 EUR 10 EUR	0.00			
Net value of cr		0.0	4	3			
No.of returns i			0	0			
Credit Limit			Commitment				
Credit Limit		200,000.00 EUR	Receivables		0.00		
Usage Level		46,298.31 EUR	Special Liabi		0.00		
Delta	- 0/	153,701.69 EUR	Open Delive		45,490.66		
Consumption i	n %	23	Open Sales	Jrder Val	807.65	EUR	

In Windows task manager you can see two new processes, "smaragddisp.exe" and "smaragdwork.exe", that run under the user account "cismobileservice":

Windows Task Manager		
le Options View Help		
Applications Processes Services Performance Netwo	rking Users	1
Image Name 🔺	PID	User Name
Skype.exe *32	1232	Administrator
smaragddisp.exe *32	13516	cismobileservice
smaragdwork.exe *32	15104	cismobileservice
smss.exe	324	SYSTEM
SMSvcHost.exe	2632	LOCAL SERVICE
SMSvcHost.exe	3908	NETWORK SERVICE
snmp.exe	3076	SYSTEM
soffice.bin *32	7700	Administrator

## Step 7: Import the CIS mobile function modules into your SAP

CIS mobile uses the following ABAP function modules:

- /GUIXT/SELECT\_INTERFACE
- /GUIXT/CIS\_INTERFACE
- /GUIXT/CISADDON\_INTERFACE

We use the namespace /GUIXT<sup>"</sup> since it is reserved for Synactive GmbH extensions in the SAP system.

Use the SAP transport system to import the ABAP functions. The import will also add the a "Repair license"

#### 00662488550777447853

for the namespace /GUIXT/ so that you are able to change the functions. This will be necessary for the add-on function module /GUIXT/CISADDON\_INTERFACE if you want to implement your own add-ons.

You will probably import the functions into a development system so that a further transport to Q and P systems is made possible.

All SAP transport data are contained in the installation file, subfolder "SAP Transport". The correction number is "ECCK900..." e.g. "ECK900040".

Copy the SAP Transport files into the central SAP transport folder TRANSDIR:

#### UNIX

TRANSDIR=/usr/sap/trans/

#### Windows

If you use a central transport server with ALIAS SAPTRANSHOST, this is

TRANSDIR=\\\$(SAPTRANSHOST)\sapmnt\trans\

#### otherwise it is

TRANSDIR=\\<Transporthost>\sapmnt\trans

Copy the transport files in /cofiles/ und /data/ into the corresponding subfolders of the /trans/ directory (one file in each subfolder).

Then logon to your SAP development system and call up transaction STMS:



Instead of "ECC" the system name of your development system will be shown here.

Press F5 or click the "Import overview" button left hand side in the toolbar.

#### Page 31

<u>I</u> mport (	Queue <u>E</u> dit <u>G</u> oto Extr <u>a</u> s En <u>v</u> ironment System <u>H</u> elp		
8	- 4 🔲   🛠 😧 😫 💾 🕌 🗳 🏠 🗘 🏗 🖉 🦉 📲		
Impor	t Overview: Domain DOMAIN_ECC		
<b>)</b> 🏭 K	e   🖻 🏭 📓   🛃 📔		
b Mumber			
name:	r of import queues: 1	21.10.20.	13 21:06:55
Queue	Description	Requests	13 21:06:55 Status

Doubleclick on your system. Then in the menu

- $\rightarrow$  Extras
- $\rightarrow$  Other Requests
- $\rightarrow \text{Add}$

and select the CIS mobile transport request:



Transport object list:

🖙 Request/T <u>a</u> sk j	<u>E</u> dit <u>G</u> oto	Utilities( <u>M</u> )	S <u>v</u> stem	Help
Ø [	• [	🗏   😋 🙆	😧   📮	0000
Display Obje	ct List			
68° 📑				
			S mobile	Installation

Continue with Cltrl+F11 or button "Import Transport Request":

🕞 Import Transport Request	×
Transport Request       ECCK900016       CIS mobile Installation         Target System       ECC       Synactive Entwicklunssystem         Target Client       Targ.Client=Source Client         Date       Execution       Options	
Start Date       Immediate       At Start Time       Planned Start       Image: Start After       Image: Start After	
	×

The source client is client 800. All transported objects are client independent.

The SAP transport system will now check the component version in source and target system. If they are different, it displays an error message.

Since all CIS mobile objects are independent of SAP components, we avoid the error message by ticking the checkbox

(X) Ignore non-matching component versions

if available. For details see

http://help.sap.com/saphelp\_nw70ehp2/helpdata/en/5c/d21880fe3c11d2b461006094b9ea 64/content.htm

Press "Enter" to start the transport.

After completion a transport protocol is shown. Example:

	▾ ◁ 🗏   ໕ 🙆 🚷   🗅 🖬 🖧   ୩	TU TO TO (1) 🗮 💆   🚷 📑	
Overview of Tran	isport Logs		
1   🗟 🗞   🖻 🎦			
splay restricted to	target system ECC		
_			
🕇 Log Overview for E	CCK900026 (GERD)		
Log Overview for E	Synactive CIS mobile Inter	rface	
ECCK900026	Synactive CIS mobile Inter	rface	
		rface	
ECCK900026	Synactive CIS mobile Inter		(0) Successfully Completed
ECCK900026	System ECC		<ol> <li>Successfully Completed</li> <li>Successfully Completed</li> </ol>
ECCK900026	System ECC Checks at Operating System Level	16.05.2013 21:39:09	

## Test after step 7

The three CIS mobile ABAP function modules can be displayed in transaction SE37:

? Eunction Module	Edit <u>G</u> oto Utilities( <u>M</u> ) En <u>v</u> ironment System <u>H</u> e
Ø	
Function Bui	lder: Initial Screen
å ¥  ় ₩	🛅 🛍 🙌 Reassign
Function Module	/GUIXT*
🗞 Display	Change Create
🕞 Repository Info S	ystem: Function Modules Find (3 Hits)
Function group	Function group short text
Function Module	· ·
/GUIXT/CISM	
/GUIXT/CISADDON	INTERFACE
/GUIXT/CIS_INTE	
In transaction SE03 you can display the namespace /GUIXT/ with the imported repair license. Click on Administration  $\rightarrow$  Display/Change Namespace and select /GUIXT/:

🔄 <u>T</u> able View <u>E</u> dit	t <u>G</u> oto <u>S</u> election Utilities( <u>M</u> ) S <u>v</u> stem <u>H</u> elp
0	▼ 4 🔲   🛠 🚱 😫   🖴 🛗 🖧   🏝 🍄 🖓 💭   🗑 📲
Display View	"Repository Namespaces": Details
ال ک 🖉 🕲	
Namespace	/GUIXT/
Namespace role	P
Develop.License	
Repair License	00662488550777447853
SSCR Popup	
SAP Standard	
Gen. Objs Only	
Last Changed By	GERD
Date	26.04.2013
Short Text	
Owner	

If the namespace role is "P" (Producer), please change it to "C" (Recipient) and save the namespace attributes.

### Step 8: Run CIS mobile with your own SAP system

Start the S10 Repository and enter the CIS mobile path in IIS as project directory. Click on "Properties" and tick the checkbox "Logon user in SAP system".

Save 🕜 Back	
Application Database SAP System	
Choose logon method	
S10 user catalog	programs\usercatalog.txt
Call logon method in class	user
☑ Logon user in SAP system	

"Save" the attributes.

With this option the user that logs on to CIS mobile will automatically be logged on to the SAP system. Without the option CIS mobile is in demo mode and always uses the SAP user "s10connect".

In demo mode you may enter any CIS mobile user name and password, but with the option activated, valid SAP user credentials need to be entered.

Next click on "SAP System" and enter the RFC connection data for your own SAP system and the client you want to deal with.

You may use any of the variants "Example 1" to "Example 3" in order to define the access to your SAP system. In some cases a saprouter string is needed, e.g. MSHOST=/H/host1/H/host2/H/host3. Please see the SAP documentation for details.

In this screen user and password do not need to be specified unless you want to run CIS mobile in demo mode. For demo mode, the given user will be logged on and the corresponding user profile defines the SAP authorizations for data access. A "dialog" user is required since CIS mobile uses a SAP GUI connection for certain functions, e.g. order entry.

📕 Save 🚯	Back
Application Data	ase SAP System
RFC Connection String	
ASHOST=w530 SYSNR=	0
	SYSNR=0 Application server and system numberapplication server and system num D=ERP Name in saplogon R3NAME=ERP GROUP=PUBLIC Message Servers, dsystem name and logon group
Example 2 SAPLOGON_I	D=ERP Name in saplogon
Example 2 SAPLOGON_I Example 3 MSHOST=L1 Client	D=ERP Name in saplogon R3NAME=ERP GROUP=PUBLIC Message Servers, dsystem name and logon group 800
Example 2 SAPLOGON_I Example 3 MSHOST=L1 Client	D=ERP Name in saplogon R3NAME=ERP GROUP=PUBLIC Message Servers, dsystem name and logon group 800
Example 2 SAPLOGON_I Example 3 MSHOST=L1 Client RFC user for general system	D=ERP Name in saplogon R3NAME=ERP GROUP=PUBLIC Message Servers, dsystem name and logon group 800 em functions:
Example 2 SAPLOGON_I Example 3 MSHOST=L1 Client RFC user for general syste RFC user	D=ERP Name in saplogon R3NAME=ERP GROUP=PUBLIC Message Servers, dsystem name and logon group 800 em functions: s10connect

# Test after step 8

Enter the URL

http://localhost/cismobile

in your browser and login with the following data:.

User: Your SAP user name Password: Your SAP password Ticket: cismobiletrialversion2013

The ticket is predefined for testing purposes. You can change it later on via the ticket administration in CIS mobile.

Click the login button. The CIS mobile system connects to your SAP system. You can enter a valid customer number and the customer address will be displayed.

A few configuration data are needed in order to use the main CIS functions such as displaying contacts, visits, orders, reports.

## Step 9: Configure SAP GUI connection and organizational data

CIS (customer search) - Windows Interne	et Explorer	
COC V Mtp://localhost/cis/	▶ 🄄 🔄 CIS (customer search	n) ×
File Edit View Favorites Tools Help		
1	Customer No 2000	
Customers Overview	Activities Offers O	Vrders Products Account
My clients		
performance		
া Show on map		
+ Search		
Last viewed		
FR-2200	T-L69B01	1032
IDES FRance 92064 Paris la défense	David Percival GmbH 12345 Düsseldorf	Institut fuer Umweltforschung 81669 München
Frankreich	Deutschland	Deutschland
Frankreich	Deutschland	Deutschland

Click the "Settings" icon in CIS mobile:

Then [+] Administration and the "Configuration" button:

Ba	ckgrou	nd naviga	tion		
Fab	ric				<b>~</b>
± T	echnic	al inform	nation	1	
<u> </u>	dminis	tration			
Configu	ration	Active Use	ers	Login Tic	kets

	Customer No 200				
Customers Overview A	activities Offers	Orders	Products	Account	Repo
Save					
Save					
- SAP GUI application	2				
	/H/localhost/S	/3200			
<ul> <li>SAP GUI application</li> <li>Connection</li> <li>User (only needed for demo system Client</li> </ul>	n with anonymous lo	gin)			
SAP GUI application     Connection User (only needed for demo system	n with anonymous lo	gin)			

Open the SAP GUI options and enter the SAP GUI connection string to you system.

Since SAP GUI does not use the same connection string format as RFC, it is necessary to define the connection here in addition to the RFC connection in S10 repository.

It is important that the RFC connection and the SAP GUI connection address the same SAP system.

The company name and address is needed during PDF generation, the company logo is shown in the upper right corner in CIS mobile, and the login screen image can be defined as well:

Save	
SAP GUI application	
Company address	
Name of the company	Synactive GmbH
Street, No.	Hermann-Löns-Strasse 27
Postcode	66125
City	Saarbrücken
Country	Deutschland
Phone	+49 6897 728930
Fax	+49 6897 728926
Homepage	www.synactive.de
Company logo Dimension: About 260x50, image format: PNG	
	Browse
Remove	
Image on logonsite (format .png)	
	Browse

Upload

Remove

You may default values for a couple of organizational data such as Sales Area. CIS mobile reads the user parameters of the logged in user and replaces the default values with the user parameters, if set.

Organizational data	
VKO (sales organization)	1000
VTW (distribution channel)	10
SPA (division)	00
BUK (company code)	1000
KKB (credit control area)	1000
MABER (Dunning)	01
Generated ABAP report to display all terms of parameter names for: Customer, sales organization, distribution channel	/1SDBF12L/RV14AK28,P_3,P_1,P_2
VIS own information structure S001	S001
Order type for availability check	ТА

The pricing conditions are read by CIS mobile using a standard ABAP report. Since the name of the ABAP report and its parameters are generated by SAP depending on the system configuration, you need to specify the program name and parameter names.

Use the SAP transaction V/LD to display the name of the ABAP report:

<u>E</u> dit	<u>G</u> oto	System	<u>H</u> elp		
	• 4		<u>ତ</u> 🚷	🗳	H
cing	Repor	t			
28	/1SDBF1	.2L/RV14AI	<28		
	cing	✓ ✓ ✓	✓ 4 ■ C	▼ 4 🔲 I & 🐼 &	✓ ④ ● ○ ② ⊗ □ □

The parameter names for customer number, sales organization and distribution channel need to be entered as well. In the example above these are P\_3,P\_1,P\_2. In your system it could be P\_2,P\_1,P\_3, for example. Look into the ABAP source code or press F1 on the selection fields of the ABAP report in order to obtain the correct names:

Er Program	Edit Goto Utilities(M) Environment System Help
ABAP E	ditor: Display Report /1SDBF12L/RV14AK28
⇐ ⇒   2	🖉 🕄 🖻 🎯   🍻 👬 🕮 🛶   品 🧮 💷 🚹   🍘 🧟 Pattern   💣 💣 Insert 🛛 🖻
Report	/1SDBF12L/RV14AK28 Active
	<pre>I * select options L * Page header SELECT-OPTIONS P 1 FOR KOMG-VKORG</pre>
	MEMORY ID VKO. SELECT-OPTIONS P_2 FOR KOMG-VTWEG MEMORY ID VTW.
362 363 364	SELECT-OPTIONS P_3 FOR KOMG-KUNNR MEMORY ID KUN MATCHCODE OBJECT DEBI.
365	

With "T**ext types for contacts**" you define the SAP text types that are to be maintained via CIS mobile, depending on the contact type.

Save	
+ SAP GUI application	
🛨 Company address	
🛨 Company logo	
🛨 Organizational data	
Text types for contacts	
Each contact in the format: TIDxxxx, TIDyyyy, TIDzzzz 0001:TID0001,TID0002 0002:TID0001,TID0002 2000:TID0001,TID0002,TID0006	^

All possible contact types can be found in SAP customizing table TVKKT:

🖋 🗞 🤇 : ayed Fie	TVKKT	of 4 Fixed	<b>t Entries</b> Table	11	K 🔎   🍘 📭 List Width 025
🖋 🗞 🤇 : ayed Fie	TVKKT	Check T	able		List Width 025
: ayed Fig	TVKKT elds: 4	of 4 Fixed		[3]	List Width 025
ayed Fie	elds: 4	of 4 Fixed	Columns:	[3]	List Width 025
ayed Fie	elds: 4	of 4 Fixed	Columns:	[3]	List Width 025
			Columns:	<mark>_ 3</mark> _	List Width 025
			1		
NDT SPRA	AS KTAAR	VTEXT			
0 2	0001	Seles cell			
0 E					
		_			
0 15					
		_			
0 E					
		-			
0 E		-			
		-			
	D E D E D E D E D E	E     0002       E     0003       E     0101       E     0102       E     0103       E     0103       E     0104       E     0111       E     0112       E     0112       E     0112       E     0112       E     1001	E         0002         Telephone call           E         0003         Sales letter           E         0101         Direct Mailing           E         0102         Collect.Gen.Sls Acts           E         0103         Mailing w/t Fol.Act.           E         0104         Internet mailing           E         0111         Batch Recall           E         0112         Recall Follow-Up Act           E         0112         Direct Mailing	E       0002       Telephone call         E       0003       Sales letter         E       0101       Direct Mailing         E       0102       Collect.Gen.Sls Acts         E       0103       Mailing w/t Fol.Act.         E       0104       Internet mailing         E       0111       Batch Recall         E       0112       Recall Follow-Up Act         E       1001       Direct Mailing	E       0002       Telephone call         E       0003       Sales letter         E       0101       Direct Mailing         E       0102       Collect.Gen.Sls Acts         E       0103       Mailing w/t Fol.Act.         E       0104       Internet mailing         E       0111       Batch Recall         E       0112       Recall Follow-Up Act         E       1001       Direct Mailing

The text types are in table TTXIT, objekc "KNVK":

Ø [		- ⊲	
Data	Browser: T	able TI	TXIT Select Entries 9
6o 🕄	A 🗑 🗟 🕏	🕄 🚹 (	Check Table
	TTXIT	of 4	Fixed Columns: [3] List Width 0250
TSpraye	id ficids. 4	01 4	
TDSPR	RAS TDOBJECT	TDID	TDTEXT
	KNVK	0001	Partner note
E	KINAK		Tarance mode
E E	KNVK	0002	Directions
E E E			
E E E	KNVK	0002	Directions
E E E E	KNVK KNVK	0002 0003	Directions Decision-making powers
E E E E E	KNVK KNVK KNVK	0002 0003 0004	Directions Decision-making powers Sales call note
E E E E E E	KNVK KNVK KNVK KNVK	0002 0003 0004 0005	Directions Decision-making powers Sales call note Competitor
E E E E E E E E E	KNVK KNVK KNVK KNVK KNVK	0002 0003 0004 0005 0006	Directions Decision-making powers Sales call note Competitor Advertising funds

Finally, define the users that you want to be allowed to change the CIS configuration, entering one or more user names as "CIS administrators". If you don't do this all users will be allowed to change the configuration.

Spezielle Benutzer

CIS-Administratoren

cmeyer,rfederer

(Beispiel: admin1, admin2, etc.)

If you have inadvertently locked yourself out from the CIS administration, e.g. by a typo in the administrator list, you can edit the text file cismobile/config/config.ini on the server directly (line "Administrators").

### **Step 10:** Increase Windows resources for background services

The IIS service runs in the so-called "non-interactive desktop". Since CIS mobile uses SAP GUI functions that require a certain amount of Windows resources (window handles etc.), the default amount of such resources is not sufficient for a large number of simultaneous CIS mobile sessions. To be more precise,: the standard Windows settings for the non-interactive desktop does not allow more than 7 simultaneous CIS mobile sessions if they use SAP GUI based functions.

It is not difficult to increase these resources, but since direct registry changes are required you need to be careful not to change other entries.

With "regedit" you open

[HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\Control\Session Manager\SubSystems]

This key contains a string variable "Windows" which is rather long. Change the third number in

SharedSection=1024,20480,796 (maybe the figures are slightly different in your system).

Into

SharedSection=1024,20480, 20480

which means that you assign the same amount of resources to the non-interactive desktop as for the interactive desktop. The value 20480 (around 20MB) is sufficient for around 200 parallel CIS mobile sessions.

For details see

http://support.microsoft.com/kb/947246/en-us

or

http://www.techarp.com/showarticle.aspx?artno=238&pgno=1

 $\rightarrow$  It is necessary to restart the server for the change to become active.

### 4. Further configuration and enhancements

You can configure and enhance your CIS mobile application in many ways. Please refer to the documentation in www.synactive.com for details.

We recommend that you start with the following chapters:

- Configuring product images
- Defining "My customers"
- Configuring the ticket system
- Creating your own reports