



# **Comtarsia Logon Client 2016 Software Distribution**

## **Manual**

06 September 2018

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# 1. Introduction

This document describes the steps necessary for customisation and creating an automatic installation package of the Comtarsia Logon Client 2016.

To create the Microsoft Windows Installer transforms, any software capable of creating such files can be used, e.g. Microsoft Orca from the Windows SDK/MSI tools ([http://msdn.microsoft.com/en-us/library/windows/desktop/aa370557\(v=vs.85\).aspx](http://msdn.microsoft.com/en-us/library/windows/desktop/aa370557(v=vs.85).aspx)) or InstEd (<http://www.instedit.com/>).

Microsoft Windows Installer transform files contain changes which should be applied to an MSI file during installation by the Microsoft Windows Installer.



## 2. Prerequisite

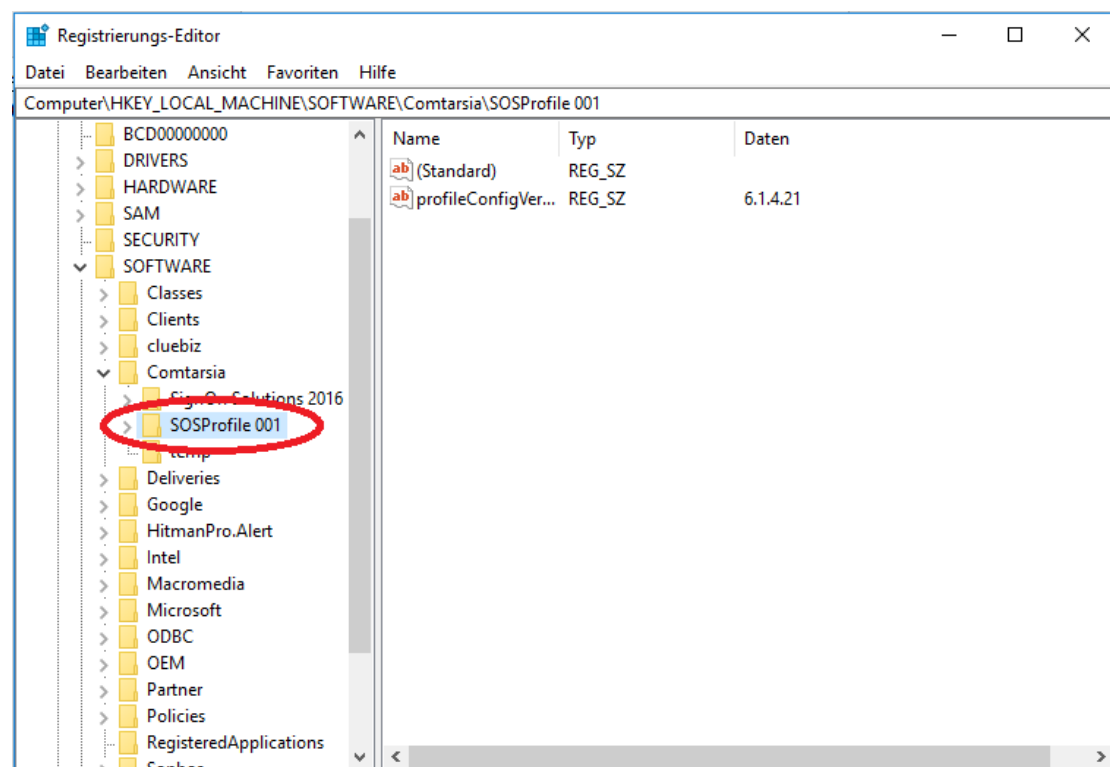
The prerequisite for this document is a fully configured and tested master system.

### 2.1 Temporary Folder

A temporary folder must be created in which all required files can be stored.  
Example: c:\sos

### 2.2 Logon Client configuration

Each Logon Client configuration profile must be exported to a reg file.  
Export:HKEY\_LOCAL\_MACHINE\SOFTWARE\Comtarsia\SOSProfile 001 ->  
LCConfig\_SOSProfile001.reg



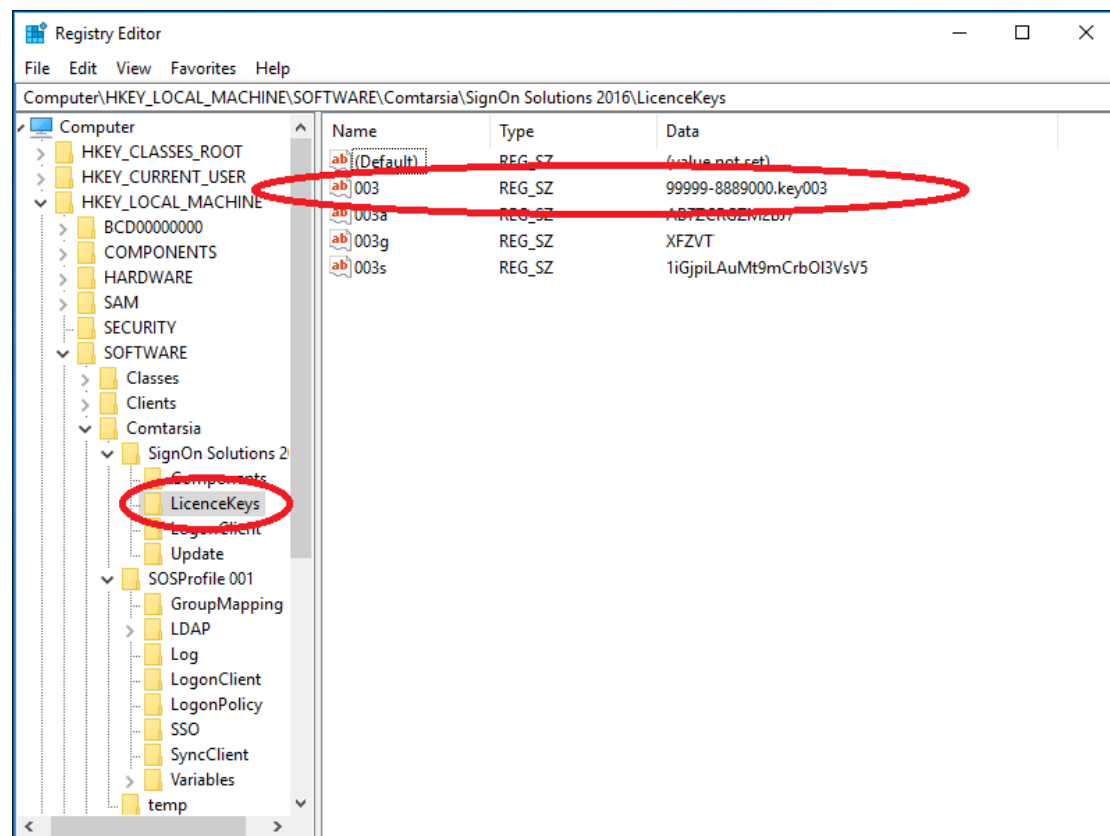
The Regfile must be stored in the temporary folder (2.1).

### 2.3 License Key

The license key configuration must be exported to a reg file.

To do this, export the Registry key  
HKEY\_LOCAL\_MACHINE\SOFTWARE\Comtarsia\SignOn Solutions  
2016\LicenceKeys:

After the export, open the registry file.



The Attribute "003" defines the license key file, which must be copied to the temporary folder (2.1).

In case an attribute "003a" exists, the value must be set to "AUTO\_ACTIVATE".

Delete all another attribute "003s" if it exists.

Example:

```
[HKEY_LOCAL_MACHINE\SOFTWARE\Comtarsia\SignOn Solutions 2016\LicenceKeys]
```

```
"003"="99999-8889000.key003"
```

```
"003a"="AUTO_ACTIVATE"
```

Save the registry in a file named "LCConfig\_LicenseKey.reg" and copy it to the temporary folder (2.1).

## 2.4 Panel Bitmap (Optional)

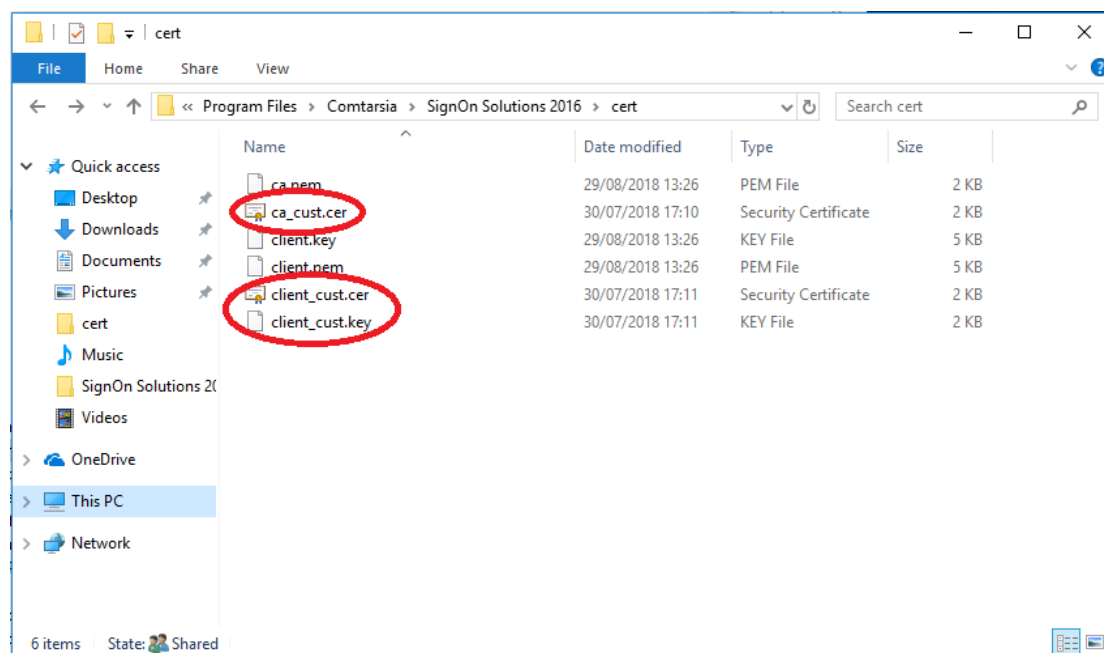
If an individual panel bitmap is defined in the profile, the Bitmap must also be copied to the temporary folder.

```
Example: [HKEY_LOCAL_MACHINE\SOFTWARE\Comtarsia\SOSProfile 001\LogonClient]
```

```
"panelBitmap"="C:\\CLC_2016_192x192.bmp"
```

## 2.5 custom SSL certificates (Optional)

If custom SSL certificates are defined in the profile, all the files must also be copied to the temporary folder.

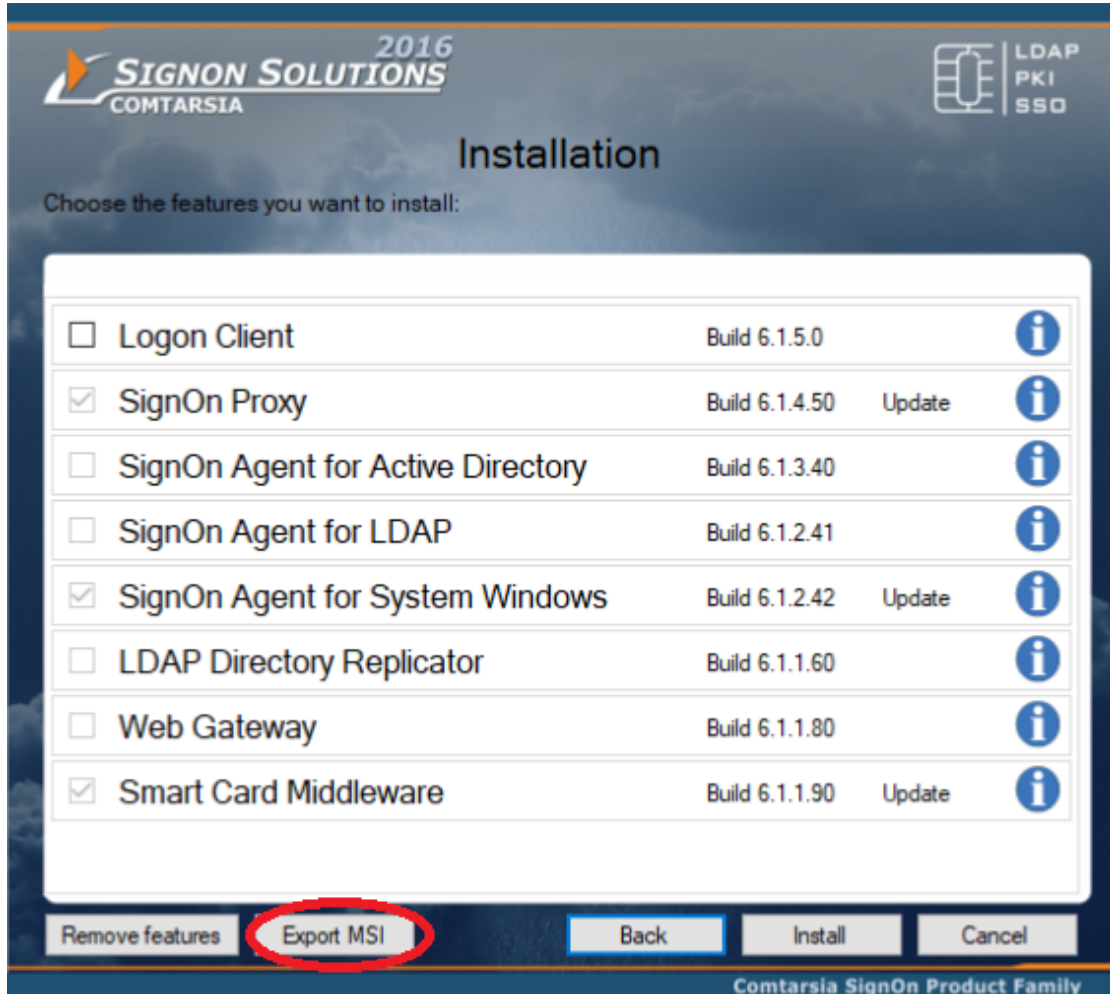


Example:

```
[HKEY_LOCAL_MACHINE\SOFTWARE\Comtarsia\SOSProfile 001\SyncClient]
"tlsCAFile"="C:\\Program Files\\Comtarsia\\SignOn Solutions
2016\\cert\\ca_cust.cer"
"tlsCertFile"="C:\\Program Files\\Comtarsia\\SignOn Solutions
2016\\cert\\client_cust.cer"
"tlsKeyFile"="C:\\Program Files\\Comtarsia\\SignOn Solutions
2016\\cert\\client_cust.key"
```

## 2.6 The Logon Client MSI Package

The Logon Client MSI packages can be extracted from the SignOn Solutions 2016 bundle installer. First, download the SignOn Solutions 2016 bundle from the Comtarsia website: <https://signon.comtarsia.com/main/en/Download>. Then execute the package. After accepting the license term, the following page is shown:



By pressing the "Export MSI" button, all the SignOn Solutions MSI files are extracted to a folder.

Name	Date modified	Type	Size
DemoKeys	04.09.2018 20:55	File folder	
Setup_lc_2016_x64.msi	29.08.2018 14:27	Windows Installer ...	11 716 KB
Setup_lc_2016_x86.msi	29.08.2018 14:27	Windows Installer ...	10 314 KB
Setup_ldr_2016_x64.msi	15.12.2017 17:55	Windows Installer ...	6 020 KB
Setup_mc_2016_x64.msi	23.08.2018 18:26	Windows Installer ...	5 452 KB
Setup_mc_2016_x86.msi	23.08.2018 18:26	Windows Installer ...	5 256 KB
Setup_scm_2016_x64.msi	20.12.2017 16:36	Windows Installer ...	8 920 KB
Setup_scm_2016_x86.msi	20.12.2017 16:35	Windows Installer ...	6 649 KB
Setup_soa_ads_2016_DefaultConfig.mst	29.08.2018 14:40	MST File	20 KB
Setup_soa_ads_2016_x64.msi	11.06.2018 10:41	Windows Installer ...	3 256 KB
Setup_soa_ldap_2016_DefaultConfig.mst	29.08.2018 14:40	MST File	20 KB
Setup_soa_ldap_2016_x64.msi	10.06.2018 21:45	Windows Installer ...	3 228 KB
Setup_soa_systemwin_2016_DefaultConf...	29.08.2018 14:40	MST File	20 KB
Setup_soa_systemwin_2016_x64.msi	10.06.2018 21:46	Windows Installer ...	3 216 KB
Setup_sop_2016_DefaultConfig.mst	29.08.2018 14:40	MST File	20 KB
Setup_sop_2016_x64.msi	06.08.2018 18:59	Windows Installer ...	5 072 KB
Setup_wg_2016_x64.msi	03.01.2018 12:03	Windows Installer ...	5 512 KB

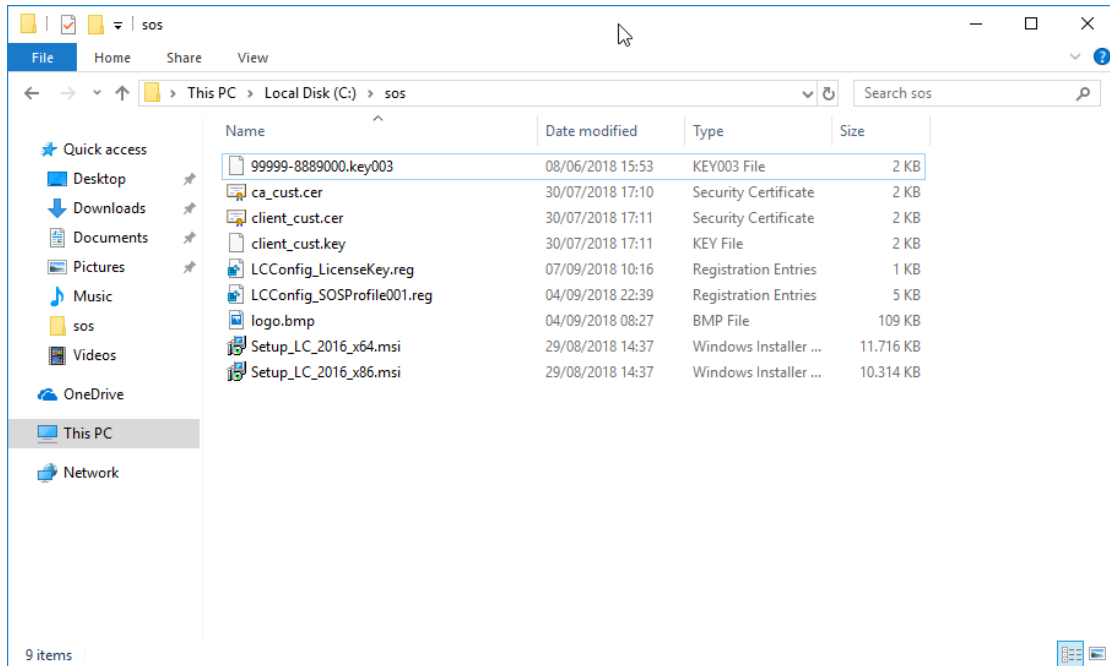
The files Setup\_lc\_2016\_x64.msi and Setup\_lc\_2016\_x86.msi are the Logon Client MSI packages. Copy them to the temporary folder (2.1).



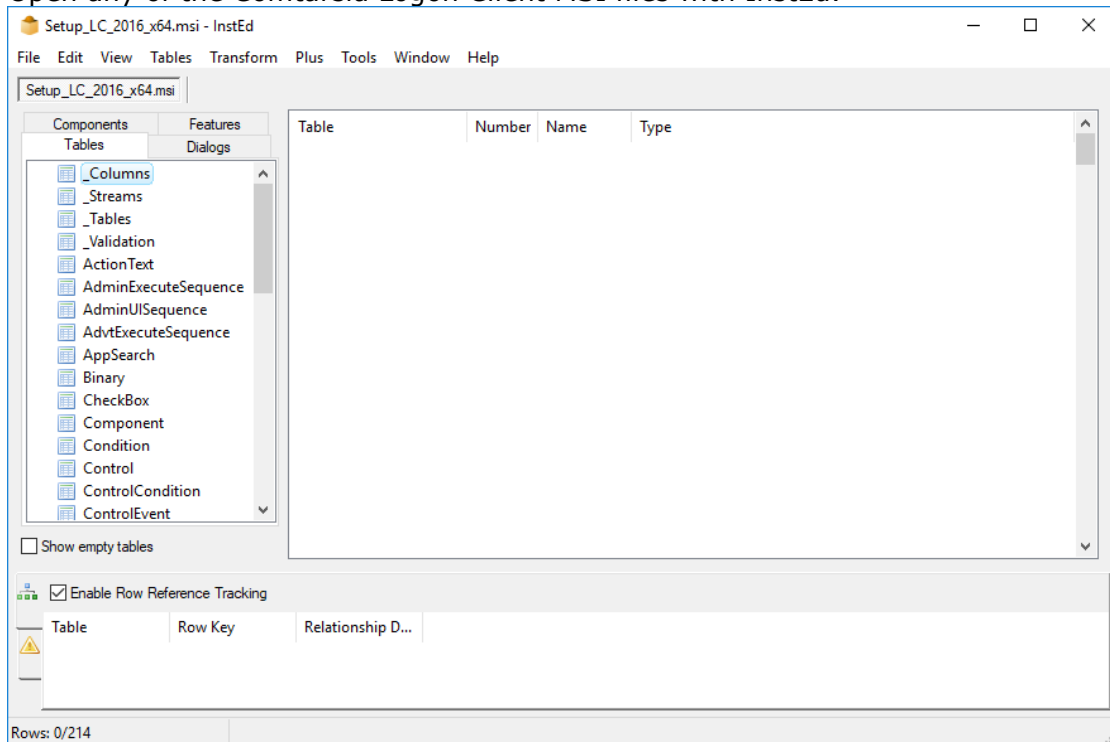


### 3. Create the MSI Transform

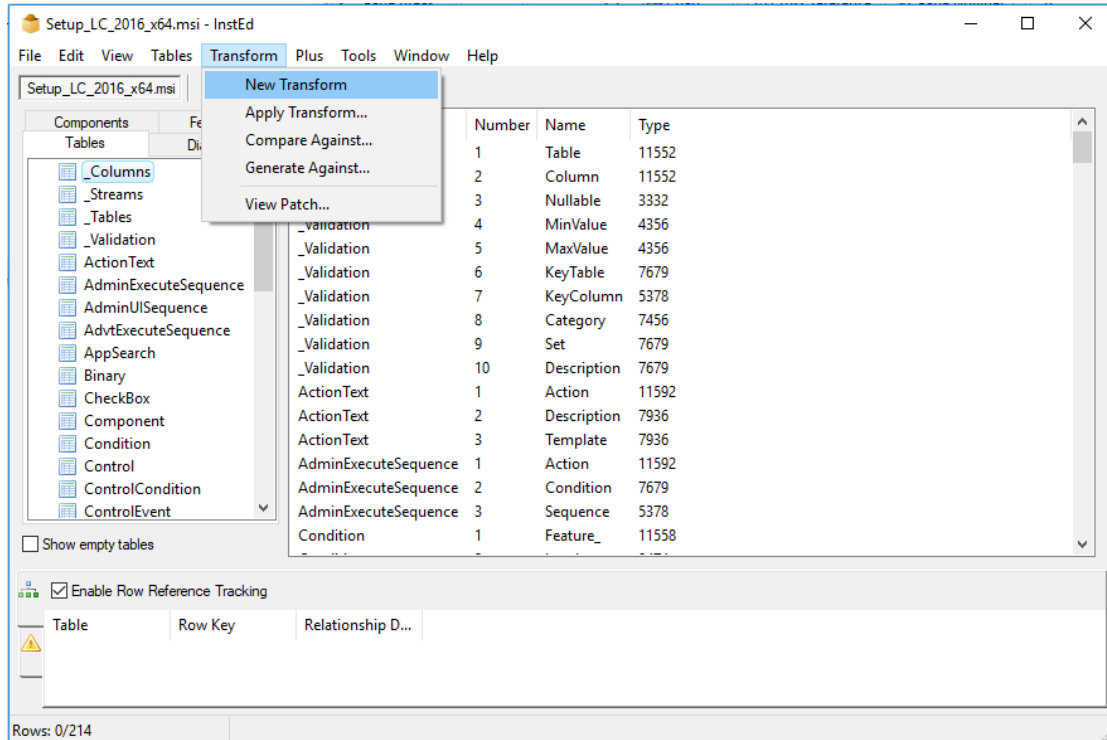
The temporary directory (2.1) created before should now contains all necessary files.



Open any of the Comtarsia Logon Client MSI files with InstEd.

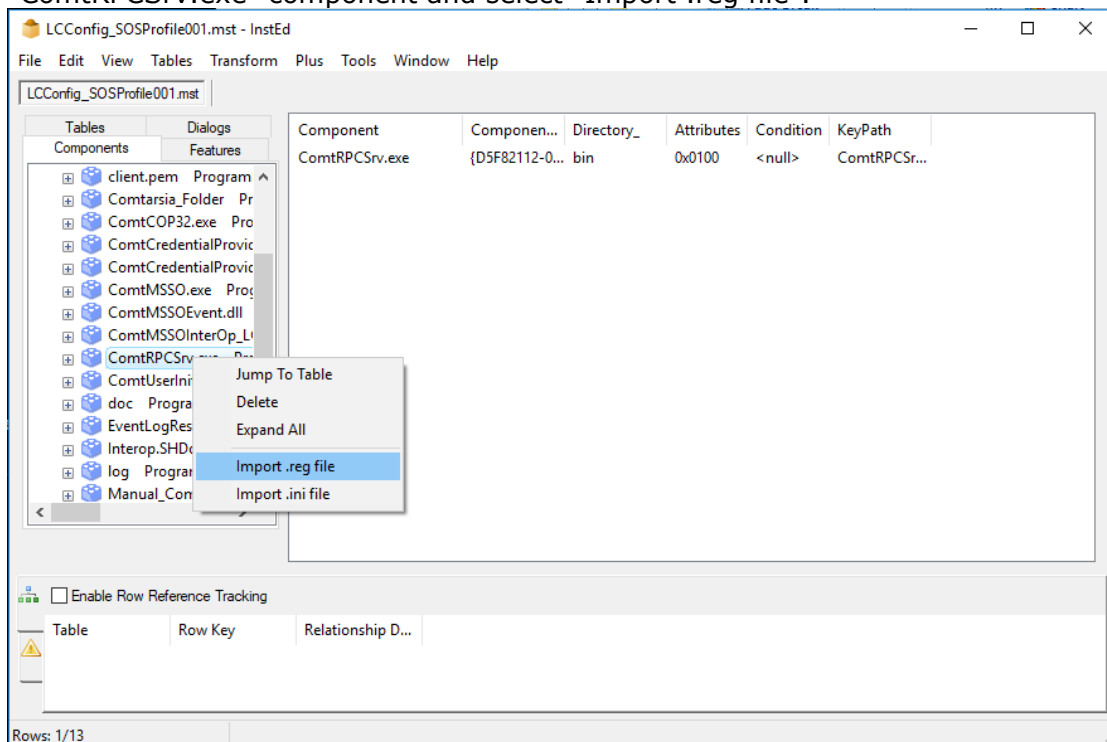


Select "Transform > New Transform" to create a new ".mst"-file.

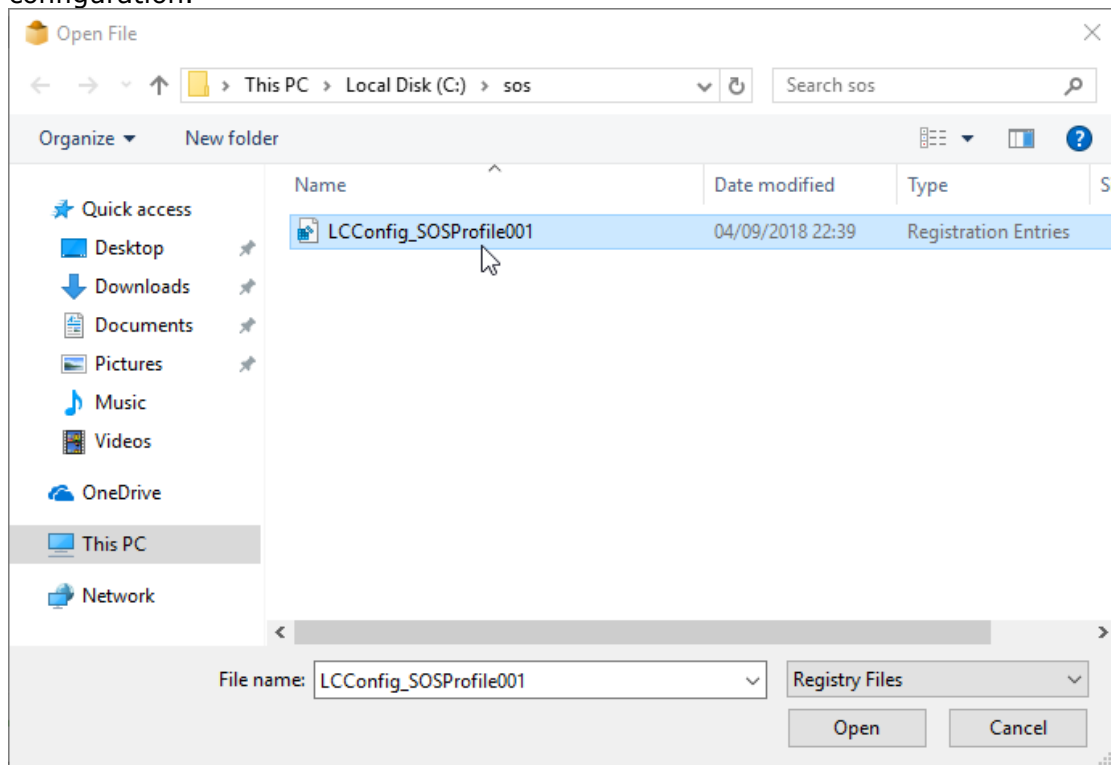


Choose an appropriate file name for the new transform (e.g. "LCConfig\_SOSProfile001.mst").

Switch to the "Components" view on the left side, then right-click onto the "ComtRPCsrv.exe" component and select "Import .reg file".



Select the registry file that contains a tested Comtarsia Logon Client configuration.



Do the same again for the registry file "LCConfig\_LicenseKey.reg" which contains the license key configuration.

This will assign all the values of the selected registry files to the selected component. The added registry settings can be reviewed in the "Registry" table.

LCConfig\_SOSProfile001.mst - InstEd

File Edit View Tables Transform Plus Tools Window Help

LCConfig\_SOSProfile001.mst\*

Components Features  
Tables Dialogs

- File
- Icon
- InstallExecuteSequence
- InstallUISequence
- LaunchCondition
- Media
- MsiFileHash
- Property
- RadioButton
- Registry
- RegLocator
- RemoveFile
- SecureObjects
- ServiceConfig
- ServiceControl
- ServiceInstall

Show empty tables

Enable Row Reference Tracking

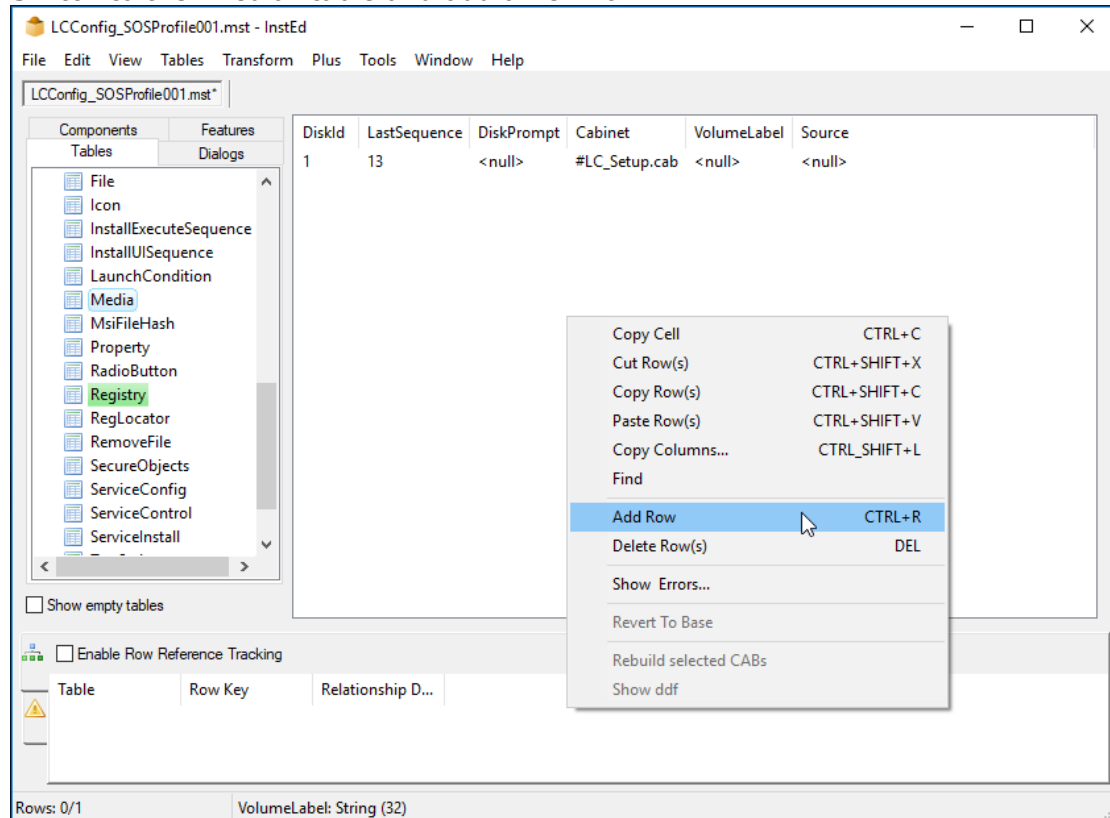
Registry	Root	Key	Name	Value	Component_
ComtRPCSrv.exe...	2	SOFTWARE\Comt...	<null>	<null>	ComtRPCSrv.exe
ComtRPCSrv.exe...	2	SOFTWARE\Comt...	profileConfigVersi	6.1.5.21	ComtRPCSrv.exe
ComtRPCSrv.exe...	2	SOFTWARE\Comt...	admin	##Administrators	ComtRPCSrv.exe
ComtRPCSrv.exe...	2	SOFTWARE\Comt...	+	<null>	ComtRPCSrv.exe
ComtRPCSrv.exe...	2	SOFTWARE\Comt...	logLevel	#5	ComtRPCSrv.exe
ComtRPCSrv.exe...	2	SOFTWARE\Comt...	logMask	#2706528	ComtRPCSrv.exe
ComtRPCSrv.exe...	2	SOFTWARE\Comt...	enableProxyLogon	#1	ComtRPCSrv.exe
ComtRPCSrv.exe...	2	SOFTWARE\Comt...	logonPanelTileDis...	User	ComtRPCSrv.exe
ComtRPCSrv.exe...	2	SOFTWARE\Comt...	displaySyncBox	#0	ComtRPCSrv.exe
ComtRPCSrv.exe...	2	SOFTWARE\Comt...	panelBitmap	C:\Program Files\...	ComtRPCSrv.exe
ComtRPCSrv.exe...	2	SOFTWARE\Comt...	logonAllowGroups	<null>	ComtRPCSrv.exe
ComtRPCSrv.exe...	2	SOFTWARE\Comt...	EnableCOP	#1	ComtRPCSrv.exe
ComtRPCSrv.exe...	2	SOFTWARE\Comt...	enableSSO	#1	ComtRPCSrv.exe
ComtRPCSrv.exe...	2	SOFTWARE\Comt...	syncProxy1	192.168.2.182	ComtRPCSrv.exe
ComtRPCSrv.exe...	2	SOFTWARE\Comt...	tlsCAFile	C:\Program Files\...	ComtRPCSrv.exe
ComtRPCSrv.exe...	2	SOFTWARE\Comt...	tlsCertFile	C:\Program Files\...	ComtRPCSrv.exe
ComtRPCSrv.exe...	2	SOFTWARE\Comt...	tlsKeyFile	C:\Program Files\...	ComtRPCSrv.exe
ComtRPCSrv.exe...	2	SOFTWARE\Comt...	trustOptionsClient	#0	ComtRPCSrv.exe

Table Row Key Relationship D...

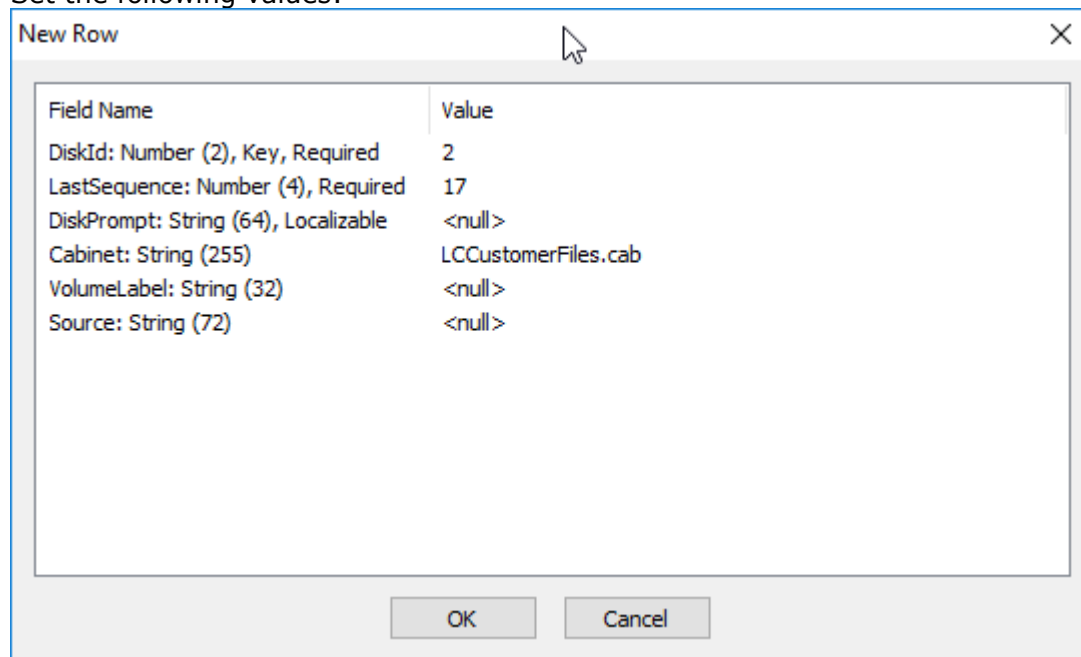
Rows: 0/39



Switch to the "Media" table and add a new row:



Set the following values:



The "LastSequence" number is unique and starts at the "LastSequence" number from the previous cab-file. In this example, 4 files will be added, one license key and 3 certificates. Since the previous "LastSequence" number is 13, it has to be set to 17.

Change to the "Directory" table and add a new row with these values:

Field Name	Value
Directory: String (72), Key, Required	key
Directory_Parent: String (72)	INSTALLDIR
DefaultDir: String (255), Required, Localizable	key

Afterwards, the "Directory" tables looks like this:

Directory	Directory_Parent	DefaultDir	target_path	source_path
Comtarsia	ProgramFiles64Folder	tufd72ee Comtarsia	ProgramFiles64Fold...	PlatformProgramFiles
ComtarsiaFolder	ProgramMenuFolder	j-7oddys Comtarsia	ProgramMenuFolde...	Comtarsia
INSTALLDIR	Comtarsia	zye9nzd SignOn So...	ProgramFiles64Fold...	PlatformProgramFiles
ProgramFiles64Folder	TARGETDIR	thrrunqy PlatformPr...	ProgramFiles64Folder	PlatformProgramFiles
ProgramMenuFolder	TARGETDIR	.	ProgramMenuFolder	<null>
TARGETDIR	<null>	SourceDir	TARGETDIR	<null>
bin	INSTALLDIR	bin	ProgramFiles64Fold...	PlatformProgramFiles
cert	INSTALLDIR	cert	ProgramFiles64Fold...	PlatformProgramFiles
doc	INSTALLDIR	doc	ProgramFiles64Fold...	PlatformProgramFiles
log	INSTALLDIR	log	ProgramFiles64Fold...	PlatformProgramFiles
msso	INSTALLDIR	msso	ProgramFiles64Fold...	PlatformProgramFiles
msso_bin	msso	bin	ProgramFiles64Fold...	PlatformProgramFiles
msso_log	msso	log	ProgramFiles64Fold...	PlatformProgramFiles
msso_scripts	msso	scripts	ProgramFiles64Fold...	PlatformProgramFiles
key	INSTALLDIR	key	ProgramFiles64Fold...	PlatformProgramFiles

Change to the "Component" table and add a new row:

New Row

Field Name	Value
Component: String (72), Key, Required	LicenseKey
ComponentId: String (38)	{06D49284-7717-48C7-9BA4-A98DBBB3DAC6}
Directory_: String (72), Required	key
Attributes: Number (2), Required	0x0000
Condition: String (255)	<null>
KeyPath: String (72)	99999-8889000.key003

OK Cancel

The "ComponentId" can be automatically created by clicking into the field and then pressing the little asterisk button to the right.

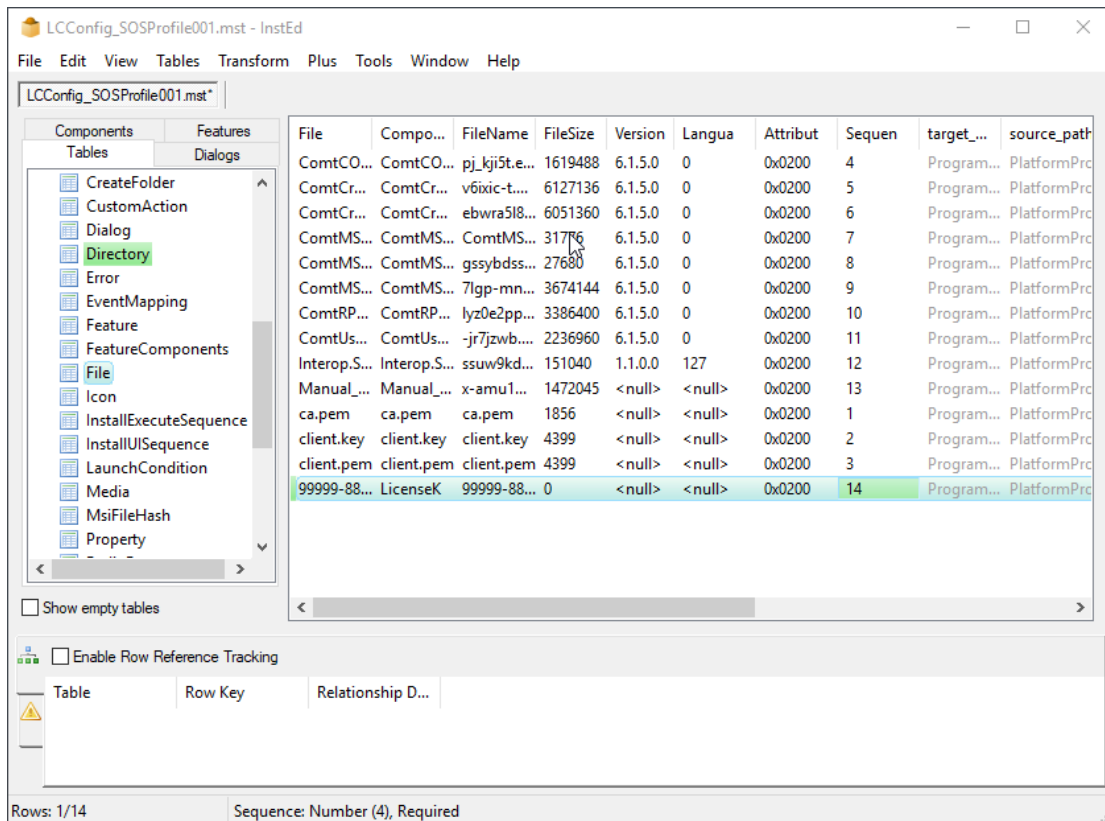
Change to the "File" table and add a new row:

New Row

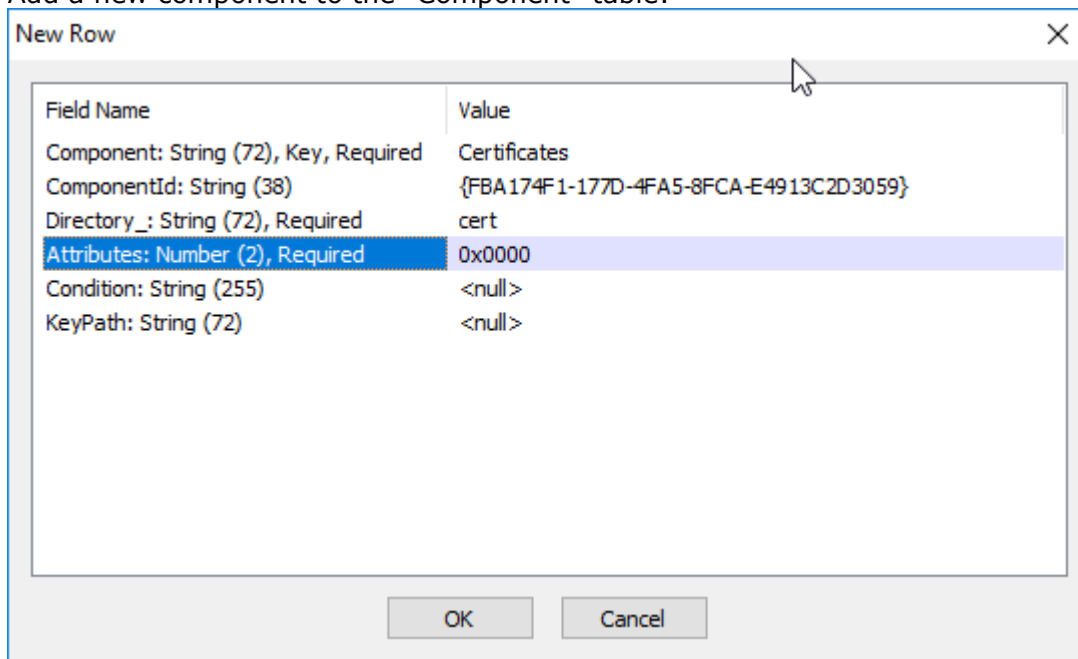
Field Name	Value
File: String (72), Key, Required	99999-8889000.key003
Component_: String (72), Required	<null>
FileName: String (255), Required, Localizable	99999-8889000.key003
FileSize: Number (4), Required	0
Version: String (72)	<null>
Language: String (20)	<null>
Attributes: Number (2)	0x0200
Sequence: Number (4), Required	14

OK Cancel

Afterwards, the "File" table look like this:



Now the certificates are added:  
Add a new component to the "Component" table:



Now the "Component" table look like this:



LCConfig\_SOSProfile001.mst - InstEd

File Edit View Tables Transform Plus Tools Window Help

LCConfig\_SOSProfile001.mst\*

Compon	Compon...	Directory_	Attributes	Condition	KeyPath	target_pa	source_path
ComtUser...	{8AD95EE...	bin	0x0100	<null>	ComtUser...	ProgramFi...	PlatformPro
Comtarsia...	{E62E75A5...	Comtarsia...	0x0104	<null>	reg14EC85...	Program...	Comtarsia\C
EventLog...	{C6296704...	INSTALLDIR	0x0104	<null>	regA61335...	ProgramFi...	PlatformPro
Interop.S...	{6A8F4119...	mso_bin	0x0100	<null>	Interop.S...	ProgramFi...	PlatformPro
Manual_C...	{C25AB6B...	doc	0x0100	<null>	Manual_C...	ProgramFi...	PlatformPro
bin	{0A835B35...	bin	0x0100	<null>	<null>	ProgramFi...	PlatformPro
ca.pem	{6F598BD2...	cert	0x0100	<null>	ca.pem	ProgramFi...	PlatformPro
cert	{C7438751...	cert	0x0100	<null>	<null>	ProgramFi...	PlatformPro
client.key	{60FD026E...	cert	0x0100	<null>	client.key	ProgramFi...	PlatformPro
client.pem	{A1268AE...	cert	0x0100	<null>	client.pem	ProgramFi...	PlatformPro
doc	{D4FFF084...	doc	0x0100	<null>	<null>	ProgramFi...	PlatformPro
log	{45FE8FD9...	log	0x0100	<null>	<null>	ProgramFi...	PlatformPro
mso_log	{D78E05A...	mso_log	0x0100	<null>	<null>	ProgramFi...	PlatformPro
mso_scri	{4FB84EBB...	mso_scri	0x0100	<null>	<null>	ProgramFi...	PlatformPro
LicenseKey	{8E44E37F...	key	0x0000	<null>	99999-888...	ProgramFi...	PlatformPro
Certificates	{FBA174F1...	cert	0x0000	<null>	<null>	ProgramFi...	PlatformPro

Rows: 1/23      Component: String (72), Key, Required

Switch to the "File" table, and add three rows for the three certificate files:

New Row

Field Name	Value
File: String (72), Key, Required	ca_cust.cer
Component_: String (72), Required	Certificates
FileName: String (255), Required, Localizable	ca_cust.cer
FileSize: Number (4), Required	0
Version: String (72)	<null>
Language: String (20)	<null>
Attributes: Number (2)	0x0200
Sequence: Number (4), Required	15

OK      Cancel

New Row

Field Name	Value
File: String (72), Key, Required	client_cust.cer
Component_: String (72), Required	<null>
FileName: String (255), Required, Localizable	client_cust.cer
FileSize: Number (4), Required	0
Version: String (72)	<null>
Language: String (20)	<null>
Attributes: Number (2)	0x0200
Sequence: Number (4), Required	16

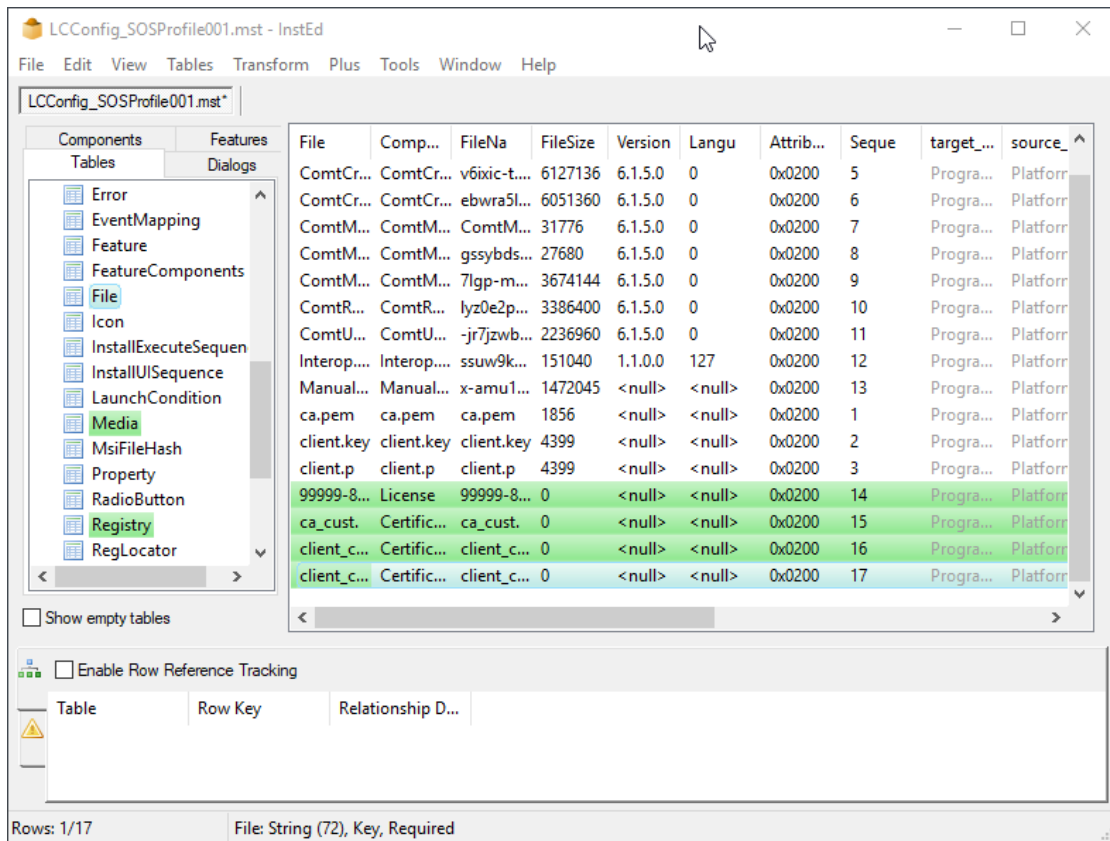
OK Cancel

New Row

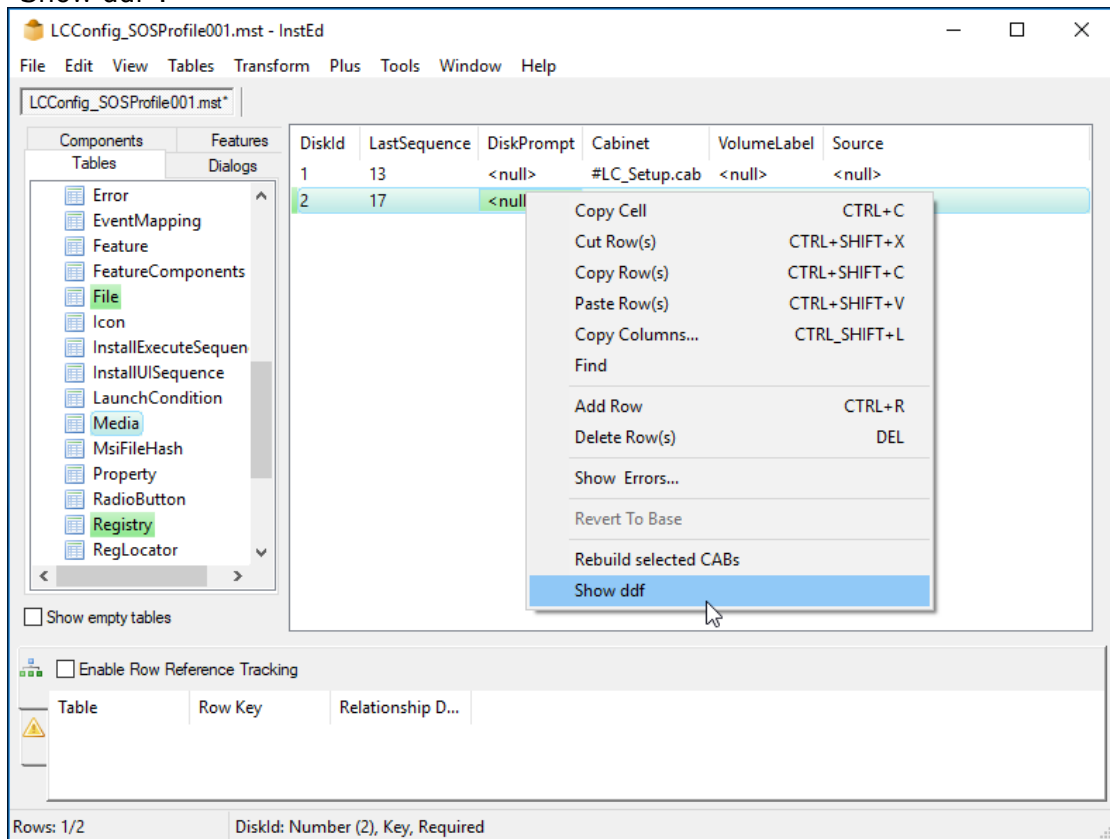
Field Name	Value
File: String (72), Key, Required	client_cust.key
Component_: String (72), Required	<null>
FileName: String (255), Required, Localizable	client_cust.key
FileSize: Number (4), Required	0
Version: String (72)	<null>
Language: String (20)	<null>
Attributes: Number (2)	0x0200
Sequence: Number (4), Required	17

OK Cancel

Afterwards, the "File" table looks like this:

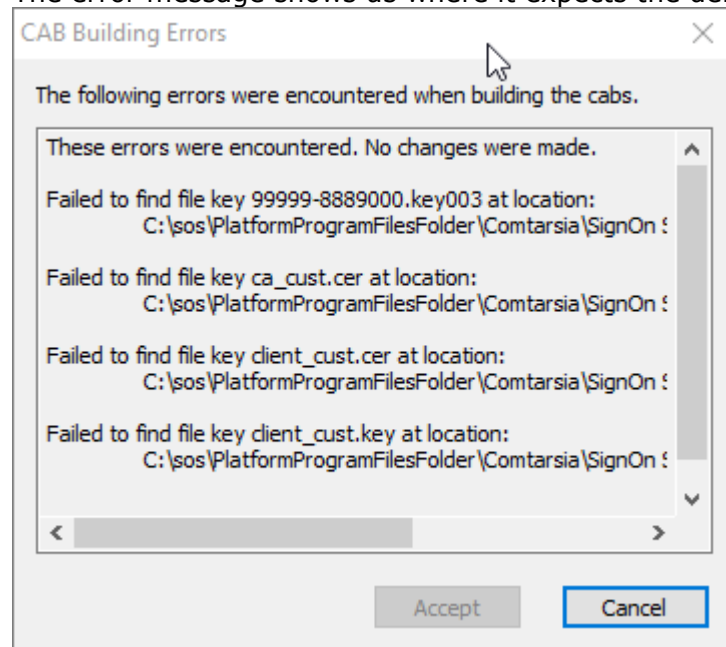


Go to the "Media" table, select the previously added row, right-click and select "Show ddf":



This will show the definitions used to build the cab-file. These definitions are automatically generated based on the "Sequence"-numbers, the defined files and the "LastSequence"-numbers of the cab file definition. Since the files we defined don't exist in the appropriate directories yet, this will give the following error.

The error message shows us where it expects the defined files:



The license key will be expected in:

C:\sos\PlatformProgramFilesFolder\Comtarsia\SignOn Solutions 2016\key\99999-8889000.key003

The certificates should be here:

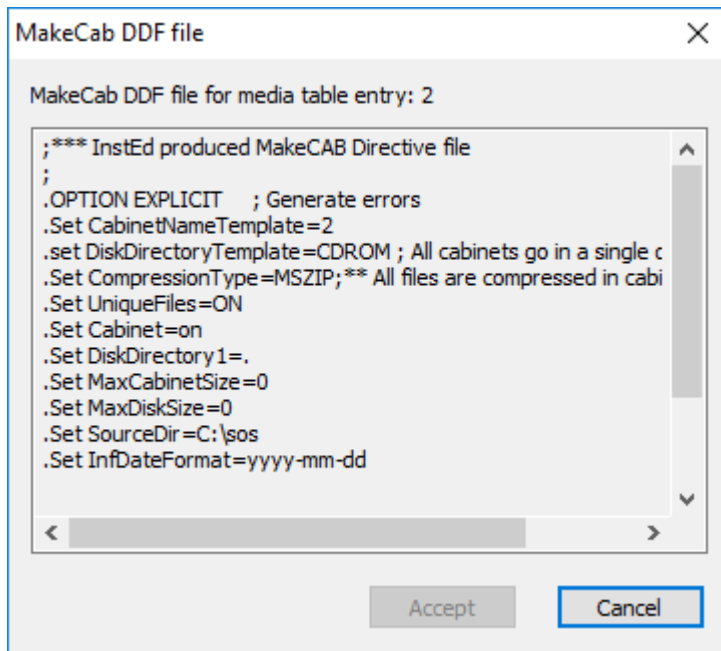
C:\sos\PlatformProgramFilesFolder\Comtarsia\SignOn Solutions 2016\cert\ca\_cust.cer

C:\sos\PlatformProgramFilesFolder\Comtarsia\SignOn Solutions 2016\cert\client\_cust.cer

C:\sos\PlatformProgramFilesFolder\Comtarsia\SignOn Solutions 2016\cert\client\_cust.key

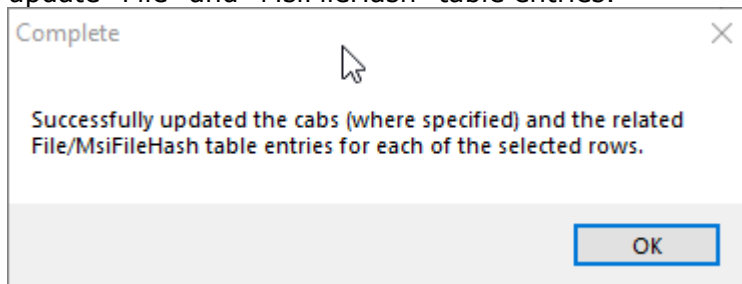
Create these directories and copy the appropriate files to them.

When you select "Show ddf" again, no more error is shown:



Right-click onto the cab-file row again, then click on "Rebuild selected CABs".

This will create a new cab-file in the working directory (LCCustomerFiles.cab) and update "File" and "MsiFileHash" table entries.



Switch to the "FeatureComponents" table and add two new rows. Enter the following values to bind the newly created components to the LC feature:

New Row

Field Name	Value
Feature_: String (38), Key, Required	LC
Component_: String (72), Key, Required	LicenseKey

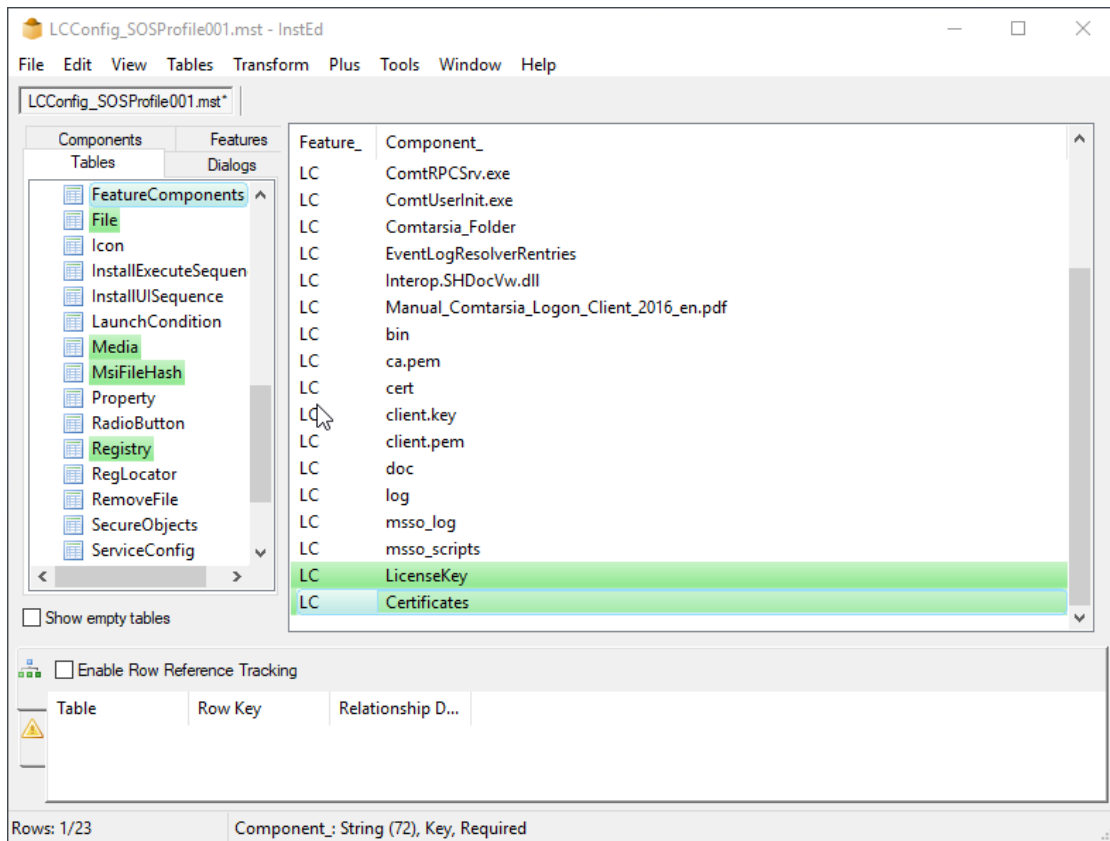
OK Cancel

New Row

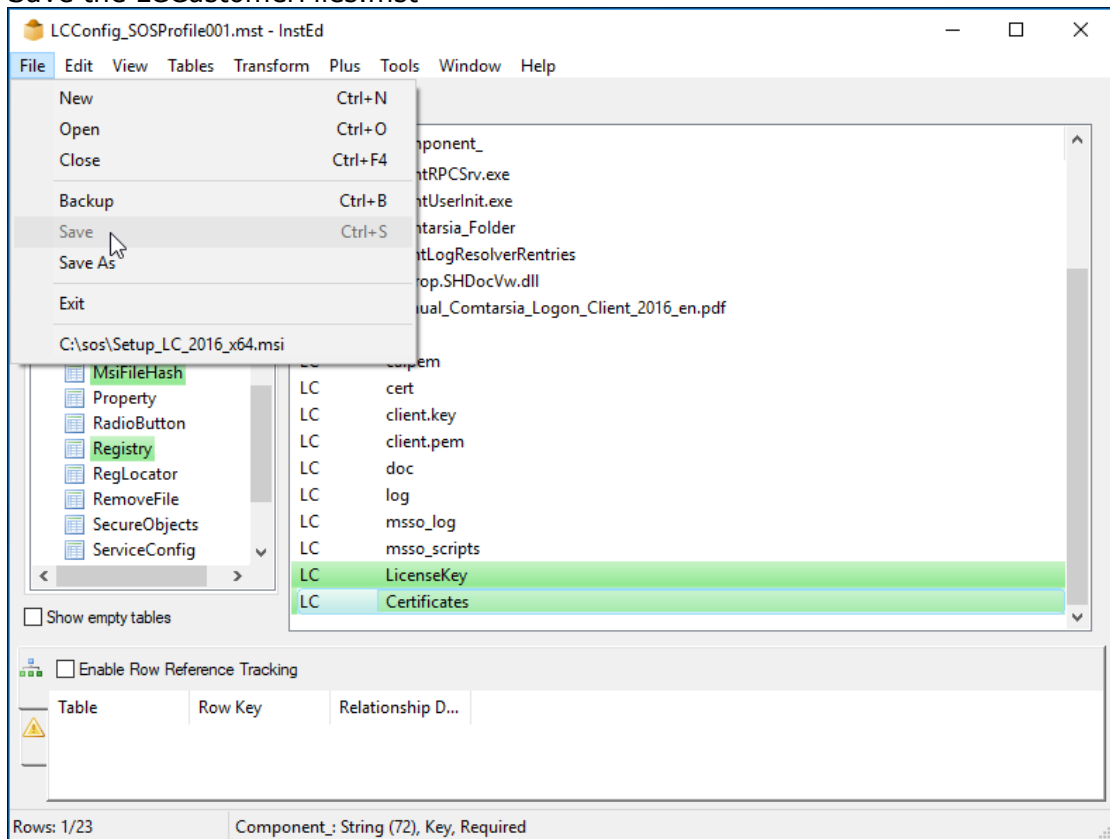
Field Name	Value
Feature_: String (38), Key, Required	LC
Component_: String (72), Key, Required	Certificates

OK Cancel

The resulting "FeatureComponents" table:



### Save the LCCustomerFiles.mst



Accept the upcoming dialog with "OK".

**Transform Properties**

Error Suppression

Ignore the following errors when applying this transform:

Add Existing Row       Add Existing Table

Delete Missing Row       Delete Missing Table

Modify Missing Row       Change Code Page

Validation

Database must meet these criteria before applying this transform:

Same Language       Database Product Version:

Same Product      Major.Minor.Upgrade (#.#.#) ▾

Same Upgrade Code      = transform ▾

OK      Cancel





## 4. Manual installation with MSIEEXEC

It is possible to install the Comtarsia Logon Client 2016 MSI together with the prepared MSI transform via the command line.

The install transform (mst) should contain all customer specific files (licence key, certificates, customized images) and registry values needed for the Comtarsia Logon Client.

To install/update/uninstall the packages manually, the "msiexec" command is used.

For a first test of the newly created mst file you can omit the "/q" parameter, to see exactly what happens.

The following parameters will be used:

**/i** "path to msi"

Installs the specified MSI file.

**/l\*v** c:\linstall.log

Enables verbose logging of the MSI installation and appends the output to the file specified.

**/q**

Enables silent installation without user input.

**TRANSFORMS**="transform1.mst;transform2.mst"

Specifies a list of transforms to be applied to the MSI file during installation. The list of files is separated by semicolons.

**REINSTALL**=ALL **REINSTALLMODE**=vamus

Tells msiexec to reinstall (update) the product

**/x** "path to msi"

Uninstalls the specified MSI file.

**/norestart**

This parameter can be optionally added to prevent the installer from automatically restarting the computer.

A detailed description of all msiexec command line parameters can be found here:

[http://technet.microsoft.com/en-us/library/cc759262\(v=ws.10\).aspx](http://technet.microsoft.com/en-us/library/cc759262(v=ws.10).aspx)

### Initial install:

```
msiexec /i Setup_lc_2016_x64.msi /q /l*v linstall.log  
TRANSFORMS="LCConfig.mst"
```

### Update:

```
msiexec /i Setup_lc_2016_x64.msi /q /l*v linstall.log  
TRANSFORMS="LCConfig.mst" REINSTALL=ALL REINSTALLMODE=vamus
```

### Uninstall:

```
msiexec /x Setup_lc_2016_x64.msi
```

