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IGEL OS Creator for Windows (OSCW)

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The IGEL OS Creator for Windows (OSCW) is able to convert Windows machines to IGEL OS 11, provided that they fulfill the hardware requirements (see page 4).

Choose the instructions according to your needs:

- IGEL OS Creator for Windows (OSCW) on Windows 7/10 Workstations (see page 3)
- IGEL OS Creator for Windows (OSCW) on IGEL Windows Embedded 7/7+ (see page 46)
- IGEL OS Creator for Windows (OSCW) on IGEL Windows 10 IoT (see page 69)
- IGEL OS SCCM Add-On (see page 78)
- (i) On modern computers such as secured-core PCs (see e.g. https://www.microsoft.com/en-us/windows/ business/devices?col=secured-core-pcs), there may be a BIOS setting related to Secure Boot that allows the use of Microsoft's 3rd party UEFI Secure Boot Certificate. The usual description of such a BIOS setting is "Allow Microsoft 3rd Party UEFI CA". This setting must be set to enabled, as IGEL uses the 3rd party certificate to support UEFI Secure Boot. If UEFI Secure Boot is enabled, but "Allow Microsoft 3rd Party UEFI CA" is not enabled, you may be unable to boot IGEL OS Creator or UD Pocket. Similarly, if the setting "Allow Microsoft 3rd Party UEFI CA" is disabled after a previous installation of IGEL OS, IGEL OS will fail to boot. For how to enable the setting, see Secured-Core PCs: Microsoft 3rd-Party UEFI Certificate for Secure Boot.



IGEL OS Creator for Windows (OSCW) on Windows 7/10 Workstations

Introduction

The IGEL OS Creator (OSC) for Windows is able to convert any Windows 10 or Windows 7 machine to IGEL OS 11, provided that it fulfills the hardware requirements (see page 4).

Read all the following chapters and follow the instructions in the order given.

- Prerequisites (see page 4)
- Getting the Required Software (see page 5)
- Transferring the IGEL OSC File to the UMS (see page 6)
- Deploying the OSCW Installer on the Target Machines (see page 7)
- Installing the OSCW Installer (see page 8)
- Registering the Target Machines to the UMS (see page 11)
- Configuring the OSCW Installer (see page 14)
- Starting the Conversion (see page 44)

Video

A video is available to illustrate the procedure.

Part I

Sorry, the widget is not supported in this export. But you can reach it using the following URL:

https://www.youtube.com/watch?v=NGA0FNLBid0&feature=youtu.be

Part II

Sorry, the widget is not supported in this export. But you can reach it using the following URL:

https://www.youtube.com/watch?v=uXDdQ6aGrZs&feature=youtu.be



Prerequisites

Hardware

- Memory: \geq 4 GB RAM
- Storage: ≥ 3 GB free storage to store the ISO file containing IGEL OS Creator
- For supported hardware, see Devices Supported by IGEL OS 11.

Software

The following software must be present on the target machines:

- Windows 10 or Windows 7
- Microsoft Hotfix KB3140245 (Windows 7 x86/x64)

Network

- All machines are in a network that can be reached by the UMS.
- For buddy mode: All machines must be joined to a Microsoft Active Directory (AD) and be accessible by the same AD user with reading permissions.

Next Step

>> When all requirements are met, continue with Getting the Required Software (see page 5).



Getting the Required Software

The following software must be downloaded resp. installed:

IGEL Universal Management Suite (UMS) 6.04.120 or Higher

- 1. Download UMS 6.04.120 or higher from https://www.igel.com/software-downloads/workspaceedition/ > Universal Management Suite.
- 2. Update your UMS to version 6.04.120 or later resp. install UMS 6.04.120. For update instructions, see Updating UMS; for installation instructions, see Installation.

OSCW Files

- 1. Download OSC for Windows 1.01.100 or higher (EXE or MSI installer)
 - EXE file: https://www.igel.com/software-downloads/workspace-edition/ > OSC for Windows > setup-igel-osc-for-windows_1.01.100.exe
 - MSI file: https://www.igel.com/software-downloads/workspace-edition/ > OSC for Windows > setup-igel-osc-for-windows_1.01.100.msi
- 2. Download IGEL OS 11.03.560 or higher (ISO): https://www.igel.com/software-downloads/ workspace-edition/ > OSC for Windows > OSC_11.03.560.zip

Check List

- ✓ The UMS is updated to version 6.04.120 or higher.
- OSC for Windows 1.01.100 or higher is available.
- ✔ IGEL OS 11.03.560 or higher (ISO file) is available.

Next Step

>> Transferring the IGEL OS Creator File to the UMS (see page 6)



Transferring the IGEL OSC File to the UMS

In this step, we will transfer the IGEL OS firmware file (ISO) to the UMS so that the UMS can deploy it to the target machines.

- ▲ Do not register the file as a file object. This might lead to various issues, particularly in ICG and HA environments.
- 1. Get access to the file system of the machine on which your UMS Server is running.
- 2. Copy osc.iso to <UMS Installation

directory>\rmguiserver\webapps\ums_filetransfer

Next Step

>> Deploying the OSCW Installer on the Target Machines (see page 7)



Deploying the OSCW Installer on the Target Machines

In this step, we will deploy the OSCW installer on the target machines.

Deploy the installer on all devices that are to be converted. The following methods are available for deployment:

- SCCM (System Center Configuration Manager): Use the MSI installer (setup-igel-osc-forwindows_1.01.100.msi) and deploy it just like any software. The OSCW installer is installed silently.
- Group policy: Use the MSI installer (setup-igel-osc-for-windows_1.01.100.msi) and deploy it just like any software. The OSCW installer is installed silently.
- File-based methods: Use the EXE file (setup-igel-osc-for-windows_1.01.100.exe). You can use file sources such as:
 - USB memory stick
 - Network drive
 - DVD

Check List

The OSCW installer is deployed on all target machines. When SCCM or group policy was used, the installation has been executed silently.

Next Step

If the OSCW installer has been deployed via SCCM or group policy and has been installed silently:

>> Continue with Registering the Target Machines to the UMS (see page 11).

If the OSCW installer has been deployed via a file-based method:

>> Continue with Installing the OSCW Installer (see page 8).



Installing the OSCW Installer

In this step, we will install the OSCW installer on the target machines. The method depends on how the OSCW installer has been deployed on the target machines.

OSCW Installer Has Been Deployed via SCCM or Group Policy

If you have used SCCM or group policy to deploy the OSCW installer, the installation has been executed silently; continue with Registering the Target Machines to the UMS (see page 11).

OSCW Installer Has Been Deployed from a File

- On the target machine, double-click setup-igel-osc-for-windows_1.01.100.exe and confirm the Windows UAC (user account control). The OSCW installer is digitally signed by "IGEL Technology GmbH". The setup wizard opens.
- 2. Click Next.





3. Review the installation folder and click Next.
Setup - IGEL OSC for Windows — X
Destination Location
The program will be installed on the system partition
Setup will install IGEL OSC for Windows into the following folder.
C: \Program Files (x86)\IGEL\OSC
Setup Files (x86)\IGEL\OSC
C: \Program Files (x86)\IGEL\OSC
Cancel

4. Review the confirmed installation folder and click Install.

💿 Setup - IGEL OSC for Windows	—	×
Ready to Install Setup is now ready to begin installing IGEL OSC for Windows on yo	ur computer	LIGEL
Click Install to continue with the installation, or click Back if you war change any settings.	nt to review	or
Destination location: C:\Program Files (x86)\IGEL\OSC		^
<		>
< <u>B</u> ack	stall	Cancel

IGEL OSC for Windows is installed on the target machine.

5. The installer window is closed.

Check List

• The OSCW installer is installed on each target machine.

Next Step

>> Registering the Target Machines to the UMS (see page 11)



Registering the Target Machines to the UMS

In this step, we will register all target machines to the UMS. This is necessary because the conversion to IGEL OS will be triggered by the UMS.

Two registration methods are available: a scan by the UMS and automatic registration.

- Registering by a UMS Scan (see page 11)
- Registering by Automatic Registration (see page 13)

Registering by a UMS Scan

- 1. Open the UMS Console and click where to scan for devices.
- 2. Select the scope in which the devices are located; for details, see Scanning the Network for Devices and Registering Devices on the IGEL UMS.
- 3. Click **Scan**.

The dialog Found devices opens.

4. In the **Filter** field, enter "IGEL Unified Management Agent OSCW".

Found devices							×	ĸ		
	32 Devices were fo		Filter	IGEL Unified Mana	agement Agent OSCW					
	Certificate stor	Unit ID	MAC A	ddress	Name	IP address	Product		Inclu	
	No	0050569353A8	00:50:	56:93:53:A8	DESKTOP-L5NR64G	172.30.91.63	IGEL Unified Management Agent OSCW			
		00505693842A	00:50:	56:93:84:2A	IGEL-CXQY1D374I	172.30.91.56	IGEL Unified Management Agent OSCW			
		00505693A2F0	00:50:	56:93:A2:F0	Doku-HS-OSCW	172.30.91.118	IGEL Unified Management Agent OSCW			



5. Select all target machines and click **Ok**.

F	ound device	s						×
	32 Devices were 1		Filter IGEL Unified I	Management Agent OSCW				
I	Certificate stor	Unit ID	MAC Address	Name	IP address	Product		▲ Inclu
	No No No	0050569353A8 00505693842A 00505693A2F0	00:50:56:93:53:A8 00:50:56:93:84:2A 00:50:56:93:A2:F0	DESKTOP-L5NR64G IGEL-CXQY1D374I Doku-HS-OSCW	172.30.91.63 172.30.91.56 172.30.91.118	IGEL Unified Manag IGEL Unified Manag IGEL Unified Manag	ement Agent OSCW ement Agent OSCW ement Agent OSCW	Ş
l					_			
	Re	scan	Invert Selec	tion	Select New Ones		Export Unit ID list	
(Put in director						_	
							<u>o</u> k	Cancel

The target machines are registered with the UMS.



6. In the **Result** dialog, click **Ok**.

Result		×
Unit ID	Name	Result
00505693A2F0	Doku-HS-OSCW	Ok

Registering by Automatic Registration

For this method, a DNS entry or DHCP option must be set.

Follow the instructions in Registering Devices Automatically on the IGEL UMS.

Check List

✓ All target machines are registered with the UMS.

Next Step

>> Configuring the Installer (see page 14)

Configuring the OSCW Installer

In this step, we will provide the OSCW installer with the download source for the ISO file that contains the IGEL OS Creator.

Two methods are available:

- Configuring the OSCW Installer in Normal Mode (see page 15): Each target machine downloads the ISO file from the server (UMS) individually. This increases the amount of outgoing traffic from the UMS.
- Configuring the OSCW Installer in Buddy Mode (see page 27): This method is recommended if the connection bandwidth of the download source is limited; it ensures a more balanced use of network bandwidth during the distribution of the ISO file to the target machines. First, a group of target machines downloads the ISO file. Then, these machines serve as the download source ("update buddies") for the remaining target machines. As a requirement, all devices must be joined to a Microsoft Active Directory (AD) and be accessible by the same AD user with reading permissions.



Configuring the OSCW Installer in Normal Mode

To provide the OSCW installer with the download source for the IGEL OS Creator file (ISO), we will create a profile that provides the path to that file. To assign the profile to the target machines, we will use a view that recognizes the target machines by their product ID.

The configuration comprises the following steps:

- Creating a Profile (see page 15)
- Creating a View to Select All Target Machines (see page 17)
- Assigning the Profile to the Target Machines (see page 22)
- Monitoring the Process (see page 24)

Creating a Profile

1. In the structure tree of the UMS Console, go to **Profiles** and open **New Profile** in the context menu.



- 2. In the New Profile dialog, change the settings as follows:
 - Profile Name: A name for the profile, e. g. "IGEL OS Creator for Windows configuration"
 - Based on: Select "IGEL Unified Management Agent 1.01.100".

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3. Click **Ok**.



The configuration dialog opens.

4. Click Converter.

IGEL OS Creator for Windows - configuration ×					
Configuration Sessions ▼ Accessories ▼ User Interface ▼ Network ▼ Devices ▼ Security ▼ System ▼	Converter				
Search 🔍					
		Apply and send to device	<u>S</u> ave	<u>C</u> ancel	

You are taken to **System > OSC > Converter** where you can set all relevant parameters.

- 5. Change the settings as follows (click the 📩 icon to enable the configuration; the icon will change to 🔽):
 - Download URL of IGEL OS Creator: Enter https://[IP address of your UMS Server]:8443/ums_filetransfer /or http://[IP address of your UMS Server]:9080/ums_filetransfer /



Example: https://192.168.178.100:8443/ums_filetransfer/ or http://

192.168.178.100:9080/ums_filetransfer/

- Username: Enter the username for the UMS.
- **Password**: Enter the password for the UMS user.

IGEL OS Creator for Windows - update buddies ×							
	n ►osc	► Converter					
Configuration		ହ 📐					
Sessions	•	Manual					
Accessories	▼	Download URL of IGEL OS Creator	2	🍐 #123.123.123.123:908	30/ums_file1	ransfer/	
User Interface	▼	Buddy mode					
Network	▼						
Devices	▼	Name of the IGEL OS Creator file (iso)	n	ner iso			
Security	•						
System	A		ይ 🖌	峇 UMSuser			
 Remote management Firmware Customization 			24	<u>******</u>			
Converter	0		Ω_	📐 osc			
Firmware			2	2			
regiony							
Search	$\overline{\mathbf{\nabla}}$						
			,	pply and send to device	<u>S</u> ave	<u>C</u> ancel	

6. Click Save.

Creating a View to Select All Target Machines

The target machines must be selected in order to assign the profile to them. For the selection, a view will be used.

1. In the structure tree of the UMS Console, go to **Views** and select **New View** in the context menu.





2. Enter a name for the view, e. g. "IGEL OS Creator for Windows - target machines" and click **Next**.

Create ne	w view ×
View nam	ne
Name	IGEL OS Creator for Windows - target machines
Description	
	Expert mode
	<u>Seck</u> <u>Einish</u> <u>Cancel</u>



Create new view			×
Select criterion			
Filter			
CPU Speed	🔿 CPU Туре	O Device Type	
🔿 Duplex Mode	 Firmware Description 	🔘 Firmware Update (Relative)	
 Firmware Version 	🔿 Flash Player	Flash Player Version	
🔿 Flash Size	🔿 Graphics Chipset 1	🔘 Graphics Chipset 2	
 Graphics Memory Size 1 	🔘 Graphics Memory Size 2	🔘 Last Boot Time (Absolute)	
🔿 Last Boot Time (Relative)	🔿 Memory Size	🔘 Network Name	
 Network Speed 	🔿 ОЅ Туре	🔵 Partial Update (Name)	
 Partial Update (Relative) 	🔿 Partial Update (Version)	O Product	V
Product ID	🔿 Total Operating Time		
 Monitor Information 			
Monitor Date of Production	O Monitor Model	Monitor Native Resolution	
	< <u>B</u> ack	<u>N</u> ext <u>Einish</u> <u>C</u> ance	I

3. On the **Select criterion** page, select **Product ID** and click **Next**.



4. On the **Text search** page, enter "OSCW" and click **Next**.

Create new view	×
Text search	
oscw	
Consider case	
Compare whole text	
Use regular expression	
Not like	
<u> Back</u> <u>N</u> ext <u>Finish</u> <u>Can</u>	el



5. On the **Create new view** page, click **Finish**.

Create ne	Create new view ×					
Finish vie	Finish view creation					
Name	IGEL OS Creator for Windows - target machines					
Description						
View criteria						
Product ID is	like (?i).*OSCW.* e view					
🔿 Narro	w search criterion (AND)					
🔿 Creat	e additional search criterion (OR)					
	<u> Back</u> <u>Pinish</u> <u>Cancel</u>					

The number of matches is shown.

6. Click **Load devices** to view the target machines.

Name	IGEL OS Creator for Windows - target machines	
Description		
Rule	Product ID is like (?i).*OSCW.*	
	Result list was last updated at 1:02 PM. Load devices Refresh	
	One matching device found.	

7. The target machines are shown.

Name	IGEL OS Creator for Windows - target machines							
Description								
Rule	Product ID is like (?i).*OSCW.*							
	Result list was last updated at 1:03 PM. Refresh Settings							
Matching devic	Matching devices (1 device)							
Name		Last known IP address	MAC Address	Product	Version			
📮 Doku-HS-I	OSCW	172.30.91.118	00505693A2F0	IGEL Unified Management Agent	1.01.100			



Assigning the Profile to the Target Machines

1. Select the view you have created beforehand and select **Assign objects to the devices of the view**.

IGEL US Creator for windows - target machine	🔍 Edit View	
📡 License expired (0)		
📕 License expiry	🖉 <u>R</u> ename	
ጅ Licensing	🗂 Delete	
🎽 Lizenz abgelaufen	鹵 Access control	
🎽 Maintenance Expiry	从 Cut	
🎽 Samsung Monitor	ြာ <u>C</u> opy	
🎽 last boot time	🖞 Paste	
🖢 Jobs (1)	Assian objects to the devices of the view	
🔹 Updrade to IGEL OS 11	Detach objects from the devices of the view	
UMS Administration		
	License manually	
	Save as	
ages	Send view result as mail	
D	e Save device files for support	
	Logging: Event Messages	
	Logging: Messages	



2. In the **Assign objects** dialog, select the profile you have created beforehand, click **W** to assign it and then click Ok.



3. In the **Update time** dialog, select **Now** and click **Ok**.





4. Confirm the Information dialog.



The target machines download the ISO file. This may take a few minutes.

Monitoring the Process

- 1. In the structure tree of the UMS, open the context menu of one of the target machines and select **Other commands > Refresh system information**.
- 2. In the dialog, click **Refresh system information** and then **Solution** from time to time. In the **Attribute** area, under **Firmware Description**, the current status of the OSC installation is shown.



/Devices/Doku-HS-OSCW	
Doku-HS-OSCW	
Amnore	value
Name Site Comment	Doku-HS-OSCW
Department Cost Center	
In-Service Date Serial Number	
Advanced System Information	Value
Unit ID	00505693A2F0
MAC Address	UU:50:56:93:AZ:FU
Broduct	I 172.30.91.110
Product ID	
Version	1 01 100
Firmware Description	IGEL OSC Downloading 55%
IGEL Cloud Galeway	
Expiration Date of OS10-Maintenance Subscription	
Last Boot Time	
Network Name (at Boot Time)	Doku-HS-OSCW
Runtime since last Boot	
Total Operating Time	
Battery Level	
CPU Type	
Elash Size (MR)	
Memory Size (MB)	
Network Speed	
Duplex Mode	
Graphics Chipset 1	

When a device is ready, the value of **Firmware Description** changes to "IGEL OSC Ready for



Conversion".	
/Devices/Doku-HS-OSCW	
Doku-HS-OSCW	
Autoute	value
Name	Doku-HS-OSCW
Site	
Comment	
Department	
Cost Center	
Asset ID	
In-Service Date	
Serial Number	
 Advanced System Information 	
Attributo	Value
	005050000050
Unit ID Mil C. Address	UU5U5b93A2FU
MAC AUDRESS	UU.00.00.93.AZ.FU
Droduct	IGEL Unified Management Agent
Product ID	
Version	
Firmware Description	IGEL OSC Ready for Conversion
IGEL CIOUR GATEWAY	
Expiration Date of OS10-Maintenance Subscription	
Last Boot Time	
Network Name (at Boot Time)	Doku-HS-OSCW
Runtime since last Boot	
Total Operating Time	
Battery Level	
CPU Speed (MHz)	
СРО Туре	
Flash Size (MB)	
Memory Size (MB)	
Network Speed	
Duplex mode	
Graphics Chipset 1	

3. When **Firmware Description** reads "IGEL OSC Ready for Conversion", continue with Starting the Conversion (see page 44).

Check List

✓ The conversion profile is assigned to all target machines.

✓ All target machines have downloaded the IGEL OS 11 Creator (ISO), which is indicated by the **Firmware Description** "IGEL OS Ready for Conversion".

Next Step

>> Starting the Conversion (see page 44)

Configuring the OSCW Installer in Buddy Mode

The target machines that are designated as update buddies download the ISO file containing the IGEL OS firmware from the UMS. When they have downloaded the file, the remaining target machines download it from the update buddies.

Make sure that all devices are joined to a Microsoft Active Directory and are accessible by the same AD user with reading permissions.

First, we create a profile for the update buddies that provides the OSCW installer with the download source for the ISO file. Then, we will assign this profile to the update buddies; the assignment of the profile triggers the update buddies to download the file. After that, we create a profile for the remaining target machines which configures them to use the update buddies. When the update buddies have downloaded the file, we can assign the profile to the remaining target machines. On assignment, each target machine selects an update buddy automatically and starts downloading the file from it.

The configuration comprises the following steps:

- Creating a Profile for the Update Buddies (see page 27)
- Assigning the Profile to the Update Buddies (see page 29)
- Checking if the Update Buddies are ready (see page 30)
- Creating a Profile for the Remaining Target Machines (see page 32)
- Creating a View to Select the Target Machines (see page 34)
- Assigning the Profile to the Target Machines (see page 39)
- Monitoring the Process (see page 41)

Creating a Profile for the Update Buddies

1. In the structure tree of the UMS Console, go to **Profiles** and open **New Profile** in the context menu.



2. In the **New Profile** dialog, change the settings as follows:



- Profile Name: A name for the profile, e. g. "IGEL OS Creator for Windows update buddies"
- Based on: Select "IGEL Unified Management Agent 1.01.100".
- 3. Click **Ok**.

New Profile	×
Profile Name	IGEL OS Creator for Windows - update buddies
Description	
Based on	IGEL Unified Management Agent 1.01.100
 Expert mo 	de <u>O</u> k Cancel

The configuration dialog opens.

4. Click **Converter**.

IGEL OS Creator for Windows -	update buddies		×
Configuration Sessions ¥ Accessories ¥ User Interface ¥	Converter		
Network V			
Devices V			
Security 🔻			
Search 🔍			
		Apply and send to device Sa	ve <u>C</u> ancel

You are taken to **System > OSC > Converter** where you can set all relevant parameters.

- 5. Change the settings as follows (click the 📩 icon to enable the configuration; the icon will change to 🔽):
 - Download URL of IGEL OS Creator: Enter https://[IP address of your UMS Server]:8443/ums_filetransfer/ or http://[IP address of your UMS

Server]:9080/ums_filetransfer/

Example: https://192.168.178.100:8443/ums_filetransfer/ or http://

192.168.178.100:9080/ums_filetransfer/

- Username: Enter the username for the UMS.
- **Password**: Enter the password for the UMS user.

IGEL OS Creator for Windows - update buddies				
<	em ► OSC	► Converter		
Configuration		۵ 🛦		
	v 1	Manual		
	- • I	Download URL of IGEL OS Creator	ይ 🖉	//123.123.123.123:9080/ums_filetransfer/
User Interface		O Buddy mode		
Network				
Devices		Name of the IGEL OS Creator file (.iso)		
Security				
dystem			2 🔼	UMSuser
Remote management Firmware Customization			ຊ 🏑	******
060		Target folder on the local storage	2 🙏	030
Converter Firmware				
Registry		Maximum download Buddies		
Search				
			Арр	ly and send to device <u>S</u> ave <u>C</u> ar

6. Click Save.

Assigning the Profile to the Update Buddies

1. In the structure tree of the UMS console, select the machines that will serve as update buddies and





- and then **Ok**. 2. Select the update buddies profile, click Select assignable objects × Selected objects Δ IGEL OS Creator for Windows - upd 🗖 Cherry SECURE BOARD 🔎 Disable CP 💆 IGEL OS 10.05.500 /7 IGEL OS 11.02 IGEL OS Creator for Windows - confiduration LX 10.01.210 Migration UDC3 IGEL OS 10.05.800 🗖 Scheduled firmware upgrade to IGEL OS 11. Upgrade to IGEL OS 11 Files (13) <u>0</u>k Cancel
- 3. In the Update time dialog, select Now and click Ok.



Checking If the Update Buddies Are Ready

Perform the following check for each update buddy:

1. In the structure tree of the UMS, open the context menu of the update buddy and select **Other commands > Refresh system information**.



In the dialog, click Refresh system information and then every few seconds.
 In the Attribute area, under Firmware Description, the current status of the download is shown.
 When it reads "IGEL OSC Ready for Conversion", the update buddy is ready for use.

mentitieady for conversion, the update buddy is ready for use.			
/Devices/Doku-HS-OSCW			
Doku	-HS-OSCW		
Ашнице		Value	
Nomo			
Cito		DUKU-H3-03C00	
Comment			
Denartment			
Cost Center			
Asset ID			
In-Service Date			
Serial Number			
 Advanced Sys 	tem Information		
Attribute		Value	
Unit ID		00505693A2F0	
MAC Address		00:50:56:93:A2:F0	
Last IP		172.30.91.118	
Product		IGEL Unified Management Agent	
Product ID		OSCW	
Eirmuere Deeeri	ntion	1 III 1 IIII	
Firmware Descri	plion	IGEL OSC Ready for Conversion	
Evniration Date of	way of OS10-Maintenance Subscription		
Last Root Time			
Network Name (at Boot Time)	Doku-HS-OSCW	
Runtime since la	ast Boot		
Total Operating 1	Time		
Battery Level			
CPU Speed (MH	Z)		
CPU Type			
Flash Size (MB)			
Memory Size (ME	<u></u>		
Network Speed			
Duplex Mode	.+ 1		
Graphics Chipse	<u>-</u> .		

Creating a Profile for the Remaining Target Machines

1. In the structure tree of the UMS Console, go to **Profiles** and open **New Profile** in the context menu.



- 2. In the **New Profile** dialog, change the settings as follows:
 - Profile Name: A name for the profile, e. g. "IGEL OS Creator for Windows target machines"
 - Based on: Select "IGEL Unified Management Agent 1.01.100".
- 3. Click **Ok**.



The configuration dialog opens.



4. Click Converter.

IGEL OS Creator for Windows - t	target machines	×
∢ ∽ → ∼ − <i>i</i>		
Configuration Sessions Accessories User Interface Network Devices Security System	Converter	
Search 💽		
	Apply and send to device Save Cance	el

You are taken to **System > OSC > Converter** where you can set all relevant parameters.

- 5. Change the settings as follows (click the 📩 icon to enable the configuration; the icon will change to 🚺):
 - Select Buddy Mode.
 - **Username**: Common username in Microsoft Active Directory for all target machines, including the update buddies.



IGEL OS Creator for Windows - target machines		
✓ ✓ ✓ ✓ ✓ / ► System	► OSC ► Converter	
Configuration	ຊ 🕢	
	V Manual	
Accessories	Download URL of IGEL OS Creator	ව 📐
User Interface	Buddy mode	
Network	·	
Devices	Name of the IGEL OS Creator file (.iso)	🖸 📐 osc.iso
Security		
Remote management		ADuser
Firmware Customization	Password	ລ 🖍 🚥
Converter	Target folder on the local storage	D 📐 asc
Firmware	Maximum download Buddies	0 🛦 2
Registry		
Search		
		Anniv and send to device Save Cal

• **Password**: Common password associated with the **Username**.

6. Click Save.

Creating a View to Select the Target Machines

The target machines must be selected in order to assign the profile to them. For the selection, a view will be used.

1. In the structure tree of the UMS Console, go to **Views** and select **New View** in the context menu.





2. Enter a name for the view, e. g. "IGEL OS Creator for Windows - target machines" and click **Next**.

Create ne	w view ×
View nam	ne
Name	IGEL OS Creator for Windows - target machines
Description	
	Expert mode
	<u> Back</u> <u>N</u> ext <u>Finish</u> <u>Cancel</u>



Create new view		×
Select criterion		
Filter		
CPU Speed	CPU Туре	O Device Type
🔿 Duplex Mode	 Firmware Description 	🔵 Firmware Update (Relative)
 Firmware Version 	🔿 Flash Player	O Flash Player Version
🔿 Flash Size	🔿 Graphics Chipset 1	◯ Graphics Chipset 2
O Graphics Memory Size 1	🔘 Graphics Memory Size 2	🔿 Last Boot Time (Absolute)
🔿 Last Boot Time (Relative)	🔿 Memory Size	Network Name
 Network Speed 	🔿 ОЅ Туре	🔵 Partial Update (Name)
O Partial Update (Relative)	 Partial Update (Version) 	🔾 Product
Product ID	🔵 Total Operating Time	
 Monitor Information 		
Monitor Date of Production	🔿 Monitor Model	🛆 Monitor Native Resolution
	< <u>B</u> ack	<u>N</u> ext <u>Finish</u> <u>Cancel</u>

3. On the **Select criterion** page, select **Product ID** and click **Next**.


4. On the **Text search** page, enter "OSCW" and click **Next**.

Create new view		×
Text search		
		_
Loscw		
Consider case		
Compare whole text		
🔲 Use regular expression		
Not like		
	<u>Back</u> <u>N</u> ext <u>Finish</u> <u>C</u> an	cel



5. On the **Create new view** page, click **Finish**.

Create nev	w view ×
Finish vie	w creation
Name	IGEL OS Creator for Windows - target machines
Description	
View criteria	
Product ID is	like (?i).*OSCW.* e view
🔿 Narro	w search criterion (AND)
🔿 Creat	e additional search criterion (OR)
	<u> Back</u> <u>Finish</u> <u>Cancel</u>

The number of matches is shown.

6. Click Load devices to view the target machines.

Name	IGEL OS Creator for Windows - target machines	
Description		
Rule	Product ID is like (?i).*OSCW.*	
	Result list was last updated at 1:02 PM. Load devices Refresh	
	One matching device found.	

7. The target machines are shown.

Name	IGEL OS Creator for Windows - target machines				
Description					
Rule	Product ID is li	ke (?i).*0SCW.*			
	Result list was last updated at 1:03 PM. Refresh Settings				
Matching devic	ces (1 device)				
Name		Last known IP address	MAC Address	Product	Version
📮 Doku-HS-I	OSCW	172.30.91.118	00505693A2F0	IGEL Unified Management Agent	1.01.100



Assigning the Profile to the Target Machines

1. Select the view you have created beforehand and select **Assign objects to the devices of the view**.

P IGEL US Creator for windows - target machines	
S Edit View	
E License expired (0)	
🞽 License expiry 🥒 🧟 🖉 🖉	
🞽 Licensing	
Lizenz abgelaufen 菌 Access control	
🖌 Maintenance Expiry 🛛 🐰 Cut	
📓 Samsung Monitor 🕞 Copy	
📕 last boot time 📋 Paste	
Jobs (1) Assign objects to the devices of the view	
Detach objects from the devices of the view.	
UMS Administration	
License manually	
Save as	
ages Send view result as mail	
De Save device files for support	
Logging: Event Messages	
Logging: Messages	

2. In the **Assign objects** dialog, select the profile for the target machines, click dialog, select the profile for target machines, select the profile for target machines, click dialog, select the profile for target machines, click dialog, select the profile for target machines, select the profile for target machines, select the profile for target machines, select machine



3. In the **Update time** dialog, select **Now** and click **Ok**.





4. Confirm the Information dialog.



The target machines download the ISO file.

Monitoring the Process

- 1. In the structure tree of the UMS, open the context menu of one of the target machines and select **Other commands > Refresh system information**.
- 2. In the dialog, click **Refresh system information** and then we every few seconds. In the **Attribute** area, under **Firmware Description**, the current status of the download is shown.



Value	5
Doku-HS-OSCW	
Value	
00505693A2F0 00:50:56:93:A2:F0 172.30.91.118 IGEL Unified Management Agent OSCW 1 01 100	
IGEL OSC Downloading 55%	
Doku-HS-OSCW	
	Value Doku-HS-OSCW Value 00505693A2F0 00505693A2F0 00:50:56:93:A2:F0 172:30.91.118 IGEL Unified Management Agent OSCW 1.01.100 IGEL OSC Downloading 55%

When a device is ready, the value of **Firmware Description** changes to "IGEL OSC Ready for



Conversion".	
/Devices/Doku-HS-OSCW	
Doku-HS-OSCW	
Ampute	value
Name	Doku-HS-OSCW
Site	
Comment	
Department	
Cost Center	
Asset ID	
In-Service Date	
Serial Number	
 Advanced System Information 	
Attribute	Value
Unit ID	00505693A2F0
MAC Address	00:50:56:93:A2:F0
Last IP	172.30.91.118
Product	IGEL Unified Management Agent
Product ID	OSCW
Version	1 01 100
Firmware Description	IGEL OSC Ready for Conversion
IGEL Cloud Gateway	
Expiration Date of OSTO-Maintenance Subscription	
Lasi Buui Time Natwork Name (at Boot Time)	
Runtime cince last Boot	
Total Operating Time	
Ratterv Level	
CPU Speed (MHz)	
Flash Size (MB)	
Memory Size (MB)	
Network Speed	
Duplex Mode	
Graphics Chipset 1	

3. When **Firmware Description** reads "IGEL OSC Ready for Conversion", continue with Starting the Conversion (see page 44).

Check List

• The conversion profile is assigned to all target machines.

✔ All target machines have downloaded the OSCW ISO file, which is indicated by the **Firmware Description** "IGEL OS Ready for Conversion".

Next Step

>> Starting the Conversion (see page 44)

Starting the Conversion

1. In the UMS structure tree, select the view you have created for selecting the target machines, and click **Load devices**.

Name	IGEL OS Creator for Windows - target machines	
Description		
	Product ID is like (?i).*OSCW.*	
	Result list was last updated at 2:18 PM. Load devices Refresh	
	One matching device found.	

2. Select all machines and in the context menu, select Specific Device Command.

Name	Last known IP address	MAC Addr	ess	Product
Doku-HS-OSCW	172.30.91.118	00505	冬 Edit Configurat	ion ration Change Status' flag
			Shadow Secure Termin Suspen <u>d</u> Shutdown <u>W</u> ake up Reboot Update & snap Other commar Specific Device	al Ishot commands Ids 2 Comma <u>n</u> d
	Results		Take over setti Export Device S Save device file Release IGEL	ngs from Settings es for support Cloud Gateway license
onfiguration	The action ended su	ccessfull	Logging	•
onfiguration	The action ended su	ccessfull	License manu	ally 95



Specific	Device C	ommand		×
Select spe	cific device c	ommand		
Convert to	IGEL OS			
			Execute	Cancel

3. In the **Specific Device Command** dialog, select **Convert to IGEL OS** and click **Execute**.

On the devices, a dialog is displayed. When the dialog is confirmed, the conversion starts immediately. If the dialog is not confirmed, the conversion starts after 20 seconds. When the conversion is complete, the **Product** information in the UMS is changed to "IGEL OS 11".



IGEL OS Creator for Windows (OSCW) on IGEL Windows Embedded 7/7+

The IGEL OS Creator (OSC) for Windows is able to convert any device that is running IGEL Windows Embedded 7/7+ to IGEL OS 11. The IGEL OS Creator (OSC) for Windows is integrated into version 3.13.150 of IGEL Windows Embedded 7 and into version 3.14.110 of IGEL Windows Embedded 7+.

Read all the following chapters and follow the instructions in the order given.

- 1. Prerequisites (see page 47)
- 2. Getting the Required Software (see page 48)
- 3. Updating the IGEL WES7/7+ Devices (see page 49)
- 4. Transferring the IGEL OS 11 Firmware to the UMS (see page 55)
- 5. Configuring the OSCW Installer (see page 56)
- 6. Starting the Conversion (see page 67)



Prerequisites

Network

• All machines are registered with the UMS.

Next Step

>> When all requirements are met, continue with Getting the Required Software (see page 48).



Getting the Required Software

The following software must be downloaded resp. installed:

IGEL Universal Management Suite (UMS) 6.04.120 or Higher

- 1. Download UMS 6.04.120 or higher from https://www.igel.com/software-downloads/workspaceedition/ > Universal Management Suite.
- 2. Update your UMS to version 6.04.120 or later. For update instructions, see Updating UMS.

IGEL OS 11

Download IGEL OS 11.03.500 or higher from https://www.igel.com/software-downloads/workspace-edition/ > OS 11 > FIRMWARE UPDATES.

IGEL WES 7/7+

- For IGEL WES 7 devices, download version 3.13.150.
- ▶ For IGEL WES 7+ devices, download version 3.14.110_W7+.

Check List

- The UMS is updated to version 6.04.120 or higher.
- The required firmware versions for IGEL WES7/7+ devices are available.
- The firmware files for IGEL OS 11.03.500 or higher are available.

Next Step

>> Updating the IGEL WES7/7+ Devices (see page 49)



Updating the IGEL WES7/7+ Devices

In this step, we will update the devices to the IGEL WES 7/7+ version that is capable of converting the device to IGEL OS 11.

For IGEL WES 7 devices, you use UniversalDesktopWES-3.13.150.snp; for IGEL WES 7+ devices, you use UniversalDesktopWES7+-3.14.110.snp as the snapshot file. If you have both device types, perform the steps described below for each device type separately.

After the update, you can update to another firmware only via IGEL rescue shell!

Transferring the Snapshot File to the UMS

The snapshot file must be placed in the file system of the UMS Server.

- 1. Get access to the file system of the machine on which your UMS Server is running.
- 2. Unzip the snapshot file to <UMS Installation

directory>\rmguiserver\webapps\ums_filetransfer

Creating an Update Profile

1. In the UMS structure tree, go to **Profiles**, open the context menu, and select **New Profile**.



- 2. Enter the following data:
 - Profile Name: Name for the profile, e. g. "Update for Converting".
 - **Description**: Optional description for the profile.



• **Based on**: Firmware version for the profile; select the current firmware of your devices.

3. Click **Ok**.

New Profile		×
Profile Name	Update for Converting	
Description		
Based on	IGEL Universal Desktop ES 3.13.140	2
 Expert mo 	de	
	<u>O</u> k Cancel	

- 4. Go to **System > Update > Snapshots > Download** and change the settings as follows:
 - Protocol: Select "https".
 - Server: Enter the IP address or hostname of the UMS.
 - Path: Enter "ums_filetransfer".
 - File name: Enter the file name of the snapshot file.
 - Username: Enter your UMS user name.
 - **Password**: Enter your UMS password.

Configuration Configuration Description	
Configuration	
	-
Sessions 🔻 Protocol 🧟 🌶 Intes	
Accessorias 🗸 Server 🛛 🗘 UMSSERVER	
User Interface V Port	
Network	
Devices V Path 22 J uns_nietranster	
Security File name 2 🥢 Universal Desktop/VES-3.13.150 sr	ip 🗋 🛛
organi Username 20 🎝 USERNAME	
Password 2	
Distribution Prove	
Partial Update Port 22 & 1000	
File Based Write Filter	
Power Management Pow	
Registry	
Search 🕥	
Apply and send to device §	ave <u>C</u> ancel

5. Click **Save** to save the profile.



Starting the Update

1. Under **Devices**, create a directory and name it "Convert to IGEL OS 11", for instance.



2. Put the devices that are to be updated into the new directory. You can use drag & drop.



3. In the **Update time** dialog, select **Now** and click **Ok**.

The directory change is communicated immediately to the device.



4. Select the directory and in the **Assigned objects** area, click 🕀.



- Select assignable objects Selected objects

 Profiles (1)

 Files (0)
 Universal Firmware Update (0)
 Firmware Customizations (0)

 Cancel
- 5. Assign the update profile to the directory and click **Ok**.

6. In the **Update time** dialog, select **Now** and click **Ok**.



The changes are sent to the devices immediately.

- Go to the directory that contains the devices that are to be updated, open the context menu, and select Update & snapshot commands > Update. The update process is started.
- 8. When the update process is finished, go to one of the devices and click **v** to refresh the screen. In the **Advanced System Information** area, **Product** is set to "IGEL Unified Management Agent",



and **Product ID** is set to "OSCW".

Ze IGEL Universal Management Suite 6 Value Profiles (1) Profiles (1) Update for Converting		
Firmware Customizations (0)	 System Information 	
V 🖳 Devices (1)	Attribute	Value
Convert to IGEL OS 11 (1)	Aunoute	Value
IGEL-CXQY1D374I	Name	IGEL-CXQY1D374I
Mobile Devices (0)	Comment	
Charad Wadmisse Lieses	Department	
Shared workplace Osers	Cost Center	
Views (0)	Asset ID	
	Serial Number	
Files (0)	Ocha Number	
Universal Firmware Update (0)	 Advanced System Information 	
Search History (0)	Attribute	Value
📋 Recycle Bin (1)	Unit ID	00505693842A
	MAC Address	00:50:56:93:84:2A
	Destud	ICCL Unified Management Egent
	Product ID	OSCIM
	Yorajuli	1.01.120
	Firmware Description	
	IGEL Cloud Gateway	
	Expiration Date of OS10-Maintenance Subscription	lup 2, 2020 9:64 AM
	Network Name (at Boot Time)	IGEL-CX0Y1D374
	Runtime since last Boot	

Check List

✓ The devices are updated to version 3.13.150 (WES 7) or 3.14.110 (WES 7+).

Next Step

>> Transferring the IGEL OS 11 Firmware to the UMS (see page 55)



Transferring the IGEL OS 11 Firmware to the UMS

In this step, we will transfer the IGEL OS 11 firmware files to the UMS so that the target machines can fetch it from there.

- 1. Get access to the file system of the machine on which your UMS Server is running.
- 2. Unzip the firmware files to <UMS Installation
 directory>\rmguiserver\webapps\ums_filetransfer

Check List

✓ The IGEL OS firmware files are located in the /ums_filetransfer/ directory of the UMS.

Next Step

>> Configuring the OSCW Installer (see page 56)

Configuring the OSCW Installer

In this step, we will provide the OSCW installer with the download source for the IGEL OS firmware.

Two methods are available:

- Configuring the OSCW Installer in Normal Mode (see page 57): Each target machine downloads the firmware files from the UMS individually. This increases the amount of outgoing traffic from the UMS.
- Configuring the OSCW Installer in Buddy Mode (see page 62): This method is recommended if the connection bandwidth of the download source is limited; it ensures a more balanced use of network bandwidth during the distribution of the firmware files to the target machines. First, a group of target machines is converted to IGEL OS 11. Then, these machines are configured to serve as buddy update servers for the remaining target machines.



Configuring the OSCW Installer in Normal Mode

To provide the OSCW installer with the download source for the IGEL OS firmware files, we will create a profile that provides the path to those files.

The configuration comprises the following steps:

- Creating a Profile (see page 57)
- Assigning the Profile to the Target Machines (see page 59)

Creating a Profile

1. In the structure tree of the UMS Console, go to **Profiles** and open **New Profile** in the context menu.



- 2. In the New Profile dialog, change the settings as follows:
 - Profile Name: A name for the profile, e. g. "IGEL OS Creator for Windows configuration"
 - **Based on**: Select "IGEL Unified Management Agent 1.xx.xxx", e. g. "IGEL Unified Management Agent 1.01.100".



3. Click **Ok**.



The configuration dialog opens.

4. Click Firmware.

You are taken to **System > OSC > Firmware** where you can set all relevant parameters.

IGEL OS Creator for Windows - configuration ×		
<->- /·	► System ► OSC ► Firmware	
Configuration	2 🛦	
Sessions 🔹	/ Def Manual	
Accessories 🔹 🔻	Download URL of IGEL OS Firmware	ے ا
User Interface 🔹 🤊		
Network	/	
Devices 🔻		2 🛦
Security 🔻	Password	
System		-
 Firmware Customization OSC Converter 		
Firmware		
Registry		
Search 💽		
		Apply and send to device Save Cancel

- 5. Change the settings as follows (click the kinetic icon to enable the configuration; the icon will change to kinetic icon will change to kinetic icon will kinetic icon will
 - Download URL of IGEL OS Firmware: Enter https://[IP address of your UMS Server]:8443/ums_filetransfer /or http://[IP address of your UMS Server]:9080/ums_filetransfer /
 Example: https://192.168.178.100:8443/ums_filetransfer/ or http://

```
192.168.178.100:9080/ums_filetransfer/
```

• **Username**: Enter the username for the UMS.



• **Password**: Enter the password for the UMS user.

< ·	/ ► Syst	em ► OSC ► Firmware		
Configuration Sessions	•	2 📩Manual		
Accessories Jser Interface	•	Download URL of IGEL OS Firmware	2 🏑 https://UMSSERVI	ER:8443/ums_filetransfi
Network	•			
Devices	•		2 🏡 USERNAME	
Security System		Password	ຊ 🏡 🚥	
Certain Remote managem Firmware Customi Concerning Converter Firmware Registry	nent Ization			
Search	$\overline{\mathbf{v}}$			

6. Click Save.

•

Assigning the Profile to the Target Machines

1. Select the directory that contains your target machines and in the **Assigned objects** area, click 💽

IGÉ

2. In the **Assign objects** dialog, select the profile you have created beforehand, click 🜌 to assign it and then click Ok.



3. In the **Update time** dialog, select **Now** and click **Ok**.



4. Confirm the Information dialog.



Check List

• The conversion profile is assigned to all target machines.

Next Step

>> Starting the Conversion (see page 67)



Configuring the OSCW Installer in Buddy Mode

When buddy update is used, one or more machines convert to IGEL OS first and then serve as buddy update servers.

The configuration comprises the following steps:

- Setting up the Buddy Update Servers (see page 62)
- Creating a Profile for the Buddy Update Clients (see page 62)
- Assigning the Profile to the Target Machines (see page 64)

Setting Up the Buddy Update Servers

- 1. Convert the machines that are to be used as buddy update servers as described under Configuring the OSCW Installer in Normal Mode (see page 57) and Starting the Conversion (see page 67).
- 2. Configure the converted machines as buddy update servers as described under Configuring the Buddy Update Server, "Basic Configuration".

Creating a Profile for the Buddy Update Clients

1. In the structure tree of the UMS Console, go to **Profiles** and open **New Profile** in the context menu.



- 2. In the **New Profile** dialog, change the settings as follows:
 - Profile Name: A name for the profile, e. g. "IGEL OS Creator for Windows target machines"
 - **Based on**: Select "IGEL Unified Management Agent 1.xx.xxx", e. g. "IGEL Unified Management Agent 1.01.100".

IGÈĽ

3. Click **Ok**.



The configuration dialog opens.

4. Click Firmware.

You are taken to **System > OSC > Firmware** where you can set all relevant parameters.

IGEL OS Creator for Windows - target machines ×			
< -> - ∧ / ► sy	rstem ► OSC ► Firmware		
Configuration	ය 📐		
Sessions 🗸 🔻	Manual		
Accessories 🗸 🔻	Download URL of IGEL OS Firmware	2 📐	
User Interface 🛛 🔻 🔻			
Network 🔻			
Devices 🔻	Username	2 🙏	
Security 🔻	Password	2	
System 🛆			
Remote management Eirmware Customization			
▼ □ 08C			
Converter			
Registry			
Search 💽			
		Apply and send to device <u>S</u> ave	<u>C</u> ancel

- 5. Change the settings as follows (click the kinetic icon to enable the configuration; the icon will change to kinetic icon will icon will kinetic icon will
 - Select Buddy mode.
 - **Username**: Username that is configured on the buddy update servers.



	3ystem ► OSC ► Firmware		
Configuration	2 🙏		
Accessories 🗸 🔻	Download URL of IGEL OS Firmware	2 🛦	
User Interface 🔹 🔻	Buddy mode		
Devices 🔻		2 🅢 USERNAME	
Security	Password	ວ 🕢 🚥	
Remote management Firmware Customization Outc Oncoverter Firmware Registry			

• **Password**: Common password associated with the **Username**.

6. Click Save.

.

Assigning the Profile to the Buddy Update Clients

1. Select the directory that contains your target machines and in the **Assigned objects** area, click 💽

IGÈĽ

2. In the **Assign objects** dialog, select the profile you have created beforehand, click **V** to assign it and then click **Ok**.



3. In the **Update time** dialog, select **Now** and click **Ok**.





4. Confirm the Information dialog.



The target machines download the firmware files. This may take a few minutes.

Check List

The conversion profile is assigned to all target machines.

✔ All target machines have found a buddy update server, which is indicated by the **Firmware Description** "IGEL OSC Ready for Conversion".

Next Step

>> Starting the Conversion (see page 67)

Starting the Conversion

1. Select the directory that contains your target machines, open the context menu, and select **Specific Device Command**.

- Dougoo (0)	
Convert to IGEL OS 11 (0)	<u> </u>
 Remote Devices (1) Remote Devices (1) ITC00E0C51143A5 	① Clea <u>r</u> 'Configuration Change Status' flag 菌 Access control 了 Find default directory rules
💼 Teradici (0) 💼 UDC3 (0) 💼 Upgrade to IGEL OS 11 (0)	み Cut GJ <u>C</u> opy Ů Paste
WOL (0) UTC000BCA055018 UTC00E0C5233F5A ITC14DDA94FE94E UTC366B7EA767AF Mobile Devices (0) Shared Workplace Users	Suspen <u>d</u> <u>S</u> hutdown <u>W</u> ake up Reboo <u>t</u> Update & snapshot commands Other commands Specific Device Comma <u>n</u> d
 Views (10) Ablauf der Lizenz EMP Expiry 	License manually Export Device Settings Save device files for support
UMS Administration	[☐ New <u>D</u> irectory New Device
ages	🚯 Sc <u>a</u> n for devices



Specific De	vice Commar	ıd		×
Select specific	device command	ł		
Convert to IGE	LOS			
			Execute	Cancel

2. In the **Specific Device Command** dialog, select **Convert to IGEL OS** and click **Execute**.

On the devices, a dialog is displayed. When the dialog is confirmed, the conversion starts immediately. If the dialog is not confirmed, the conversion starts after 20 seconds. When the conversion is complete, the **Product** information in the UMS is changed to "IGEL OS 11".



IGEL OS Creator for Windows (OSCW) on IGEL Windows 10 IoT

The IGEL OS Creator (OSC) for Windows is able to convert any device that is running IGEL Windows 10 IoT to IGEL OS 11. The IGEL OS Creator (OSC) for Windows is integrated into version 4.04.150 of IGEL Windows 10 IoT.

A The devices will be converted to IGEL OS 11 automatically when the update is executed. The devices cannot be converted back to IGEL Windows 10 IoT.

Read all the following chapters and follow the instructions in the order given.

- 1. Prerequisites (see page 70)
- 2. Getting the Required Software (see page 71)
- 3. Starting the Conversion by Updating the Devices (see page 72)



Prerequisites

Network

• All machines are registered with the UMS.

Next Step

>> When all requirements are met, continue with Getting the Required Software (see page 71).



Getting the Required Software

The following software must be downloaded resp. installed:

IGEL Universal Management Suite (UMS)

Ensure that you have UMS version 6.04 or higher. For update instructions, see Updating UMS.

IGEL Windows 10 IoT

Download version 10-4.04.150 from https://www.igel.com/software-downloads/workspace-edition/ > OSC for Windows > UniversalDesktopW10-4.04.150.zip.

Check List

The UMS is available in the correct version.

V The required firmware version for IGEL Windows IoT devices is available.

Next Step

>> Starting the Conversion by Updating the Devices (see page 72)



Starting the Conversion by Updating the Devices

In this step, we will update the devices, which includes the conversion to IGEL OS 11.

A The devices will be converted to IGEL OS 11 automatically when the update is executed. The devices cannot be converted back to IGEL Windows 10 IoT.

Transferring the Snapshot File to the UMS

The snapshot file must be placed in the file system of the UMS Server.

- 1. Get access to the file system of the machine on which your UMS Server is running.
- 2. Unzip the snapshot file to <UMS Installation

directory>\rmguiserver\webapps\ums_filetransfer

Creating an Update Profile

1. In the UMS structure tree, go to **Profiles**, open the context menu, and select **New Profile**.



- 2. Enter the following data:
 - Profile Name: Name for the profile, e. g. "Update for Converting".
 - **Description**: Optional description for the profile.
 - Based on: Firmware version for the profile; select the current firmware of your devices.
- 3. Click **Ok**.
- 4. Go to **System > Update > Snapshots > Download** and change the settings as follows:
 - Select "https" as the **Protocol**.


- File name: Enter the file name of the snapshot file.
- Server: Enter the IP address or hostname of the UMS.
- Path: Enter "ums_filetransfer".
- Username: Enter the user name under which you have access to the UMS.
- Password: Enter the password under which you have access to the UMS.



5. Click **Save** to save the profile.



Starting the Update

1. Under **Devices**, create a directory and name it "Convert to IGEL OS 11", for instance.



2. Put the devices that are to be updated into the new directory. You can use drag & drop.



3. In the **Update time** dialog, select **Now** and click **Ok**.

The directory change is communicated immediately to the device.



4. Select the directory and in the **Assigned objects** area, click 🕒.



- 5. Assign the update profile to the directory and click **Ok**.

6. In the **Update time** dialog, select **Now** and click **Ok**.



The changes are sent to the devices immediately.

 Go to the directory that contains the devices that are to be updated and select Update & snapshot commands > Download Firmware Snapshot.
 The update and conversion process is started.

The update and conversion process is started.

8. When the update process is finished, go to one of the devices and click **D** to refresh the screen. In the **Advanced System Information** area, **Product** is set to "IGEL OS 11", and **Product ID** is set



according to the device.

 IGEL Universal Management Suite Profiles (1) Update for Converting 	ITC0050569300FC	
Firmware Customizations (0)	Serial Number	
 Devices (1) The Convert to IGEL OS 11 (1) 	 Advanced System Information 	
ITC0050569300FC	Attribute	Value
🐴 Mobile Devices (0)	Unit ID MAC Address	0050569300FC 00:50:56:93:00:FC
💄 Shared Workplace Users 👘	Lastin	102.100.12.100
🖹 Views (0)	Product Product ID	IGEL OS 11 UC1-I X No valid license
🍪 Jobs (0)	Version	11.03.560.01
Files (0)	Firmware Description	
Universal Firmware Update (0)	Expiration Date of OS10-Maintenance Sub	
Search History (0)	Last Boot Time	170005056030050
📋 Recycle Bin (0)	Runtime since last Boot	00:01:23

IGEL OS SCCM Add-On

The IGEL OS SCCM add-on facilitates deploying IGEL OS via Microsoft SCCM. The package contains a minimized IGEL OS image that will be booted initially. If the target devices have enough RAM, a full-featured IGEL OS can be used as an alternative; see Deploying an Alternative IGEL OS Image (see page 88).

With the installation of the package, a customized Windows PE image and a task sequence for deploying IGEL OS are created, and the IGEL OS Image Manager is installed.

Short Video Summary

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Sorry, the widget is not supported in this export. But you can reach it using the following URL:

https://www.youtube.com/watch?v=6nrTmW0ECyk&feature=youtu.be

Prerequisites

- Microsoft Endpoint Configuration Manager (see https://docs.microsoft.com/en-us/mem/ configmgr/)
 - (i) The solution presented here has been developed and tested with the current version of Microsoft Endpoint Configuration Manager (status 01/2024). For details on the versioning of Microsoft Endpoint Configuration Manager, see https://docs.microsoft.com/en-us/mem/configmgr/core/plan-design/changes/whats-new-incremental-versions.
- Configured PXE environment for OS deployment; all target devices must be in a network where they are available either from the main site server or a distribution point. (For further information, see https://docs.microsoft.com/en-us/mem/configmgr/osd/plan-design/infrastructurerequirements-for-operating-system-deployment)
- All target devices have a minimum of 2 GB RAM.
- On the host on which Microsoft Endpoint Configuration Manager is running, Microsoft Power Shell Script execution must be allowed, at least for signed scripts (the Powershell scripts that come with the IGEL OS SCCM add-on are signed by IGEL).

Installing the IGEL OS SCCM Add-On

Go to https://www.igel.com/software-downloads/workspace-edition/ > OS DEPLOYMENT TOOL
 FOR SCCM and download the executable file (setup-igel_os-

sccm_add_on_[version].exe) to the host on which Microsoft Endpoint Configuration
Manager is running.

2. Start the executable file.

C S	etup - IGEL OS SCCM Add-on 🛛 🗌	\times
U	icense Agreement	WILL.
	Please read the following important information before continuing.	LIGEL
	Please read the following License Agreement. You must accept the terms of this agreement before continuing with the installation.	
	IGEL TECHNOLOGY GMBH	^
	END USER LICENSE AGREEMENT (EULA)	
	1. Preamble. This agreement describes the Terms and Conditions upon which End	
	the IGEL-Software. This is a license agreement between the End User and	
	GmbH, Hanna-Kunath-Str. 31, DE-28199 Bremen, Germany ("IGEL").	~
	I accept the agreement	
	○ I do not accept the agreement	

4. On the **Site Server configuration** page, review the field **Site Server Name (FQDN)**, which should be prefilled, and enter the **Site Code** of this Endpoint Configuration Manager site. Then, click **Next**.

🔇 Setup - IGEL OS SCCM Add-on	-	
Site Server configuration		LIGEL
Please enter details from your SCCM Site Server configu	ration	
Site Server Name (FQDN): Site Code:		
< Back	Next >	Cancel



5. When the installation is finished, click **Finish**.

Setup - IGEL OS SCCM Add-	on — 🗆 🗡
	Completing the IGEL OS SCCM Add-on Setup Wizard Setup has finished installing IGEL OS SCCM Add-on on your computer. The application may be launched by selecting the installed icons. Click Finish to exit Setup.
	Finish

Verifying the Installation

1. In the **Home** tab of the Endpoint Configuration Manager, go to **Boot Images** and check if the **IGEL Boot Image** (WIM) is available.





2. Go to **Task Sequences** and check if **IGEL Create** and **IGEL Inplace Upgrade** are available. These task sequences will drive and control the deployment process.

Home Folder	
Create Task Sequence Sequence Media Create Create	ved vred vred vres - karch Task Sequence
← → ▼ 図 \ ► Software Library ► O	erview Operating Systems Task Sequences
Software Library	Task Sequences 2 items
▲	Search
Application Management	Iron Name Description Package ID Date Created
Software Updates	🖾 IGEL Create P010005B 22.06.2020 11:35
 Operating Systems 	IGEL Inplace Upgrade P010005C 22.06.2020 11:35
# Drivers	
E Driver Packages	
Operating System Images	
S Operating System Upgrade Packages	
Task Sequences	
Windows 10 Servicing	
Office 365 Client Management	
Scripts	
	ICEL Create
••••••••••••••••••••••••••••••••••••••	Summary
Assets and Compliance	Name: IGEL Create
河 Software Library	Package ID: P010005B
Monitoring	Package Type: 4 Boot Image ID: P010005A
Administration	
Scommunity	
	Cumuna Referencer Danloumente Dhared Danloumente
Parada.	

Provisioning IGEL OS via a PXE Boot Environment

The task sequence "IGEL Create" will deploy IGEL OS to a device collection via a PXE boot environment. The task sequence will be executed after the device has booted into the IGEL OS Boot Image (WIM).

To deploy the PXE boot environment:

- 1. Check if you need to define your own custom device collection to allocate your target devices or if you can use one of the preconfigured collections.
- 2. In the **Home** tab of the Endpoint Configuration Manager, select **Boot Images**, open the context menu for **IGEL Boot Image**, and select **Distribute content**.

3. Open the **Distribute Content Wizard** and check if "IGEL Boot Image" is shown in the **Content** area. Afterward, continue with the wizard.

蹖 Distribute Content Wizard	d	×
General		
General Content Destination Summary Progress Completion	Review selected content You have selected the following content for distribution. Content: <pre></pre>	
	< Previous Next > Summary Cancel	

4. If your device requires a specific network driver: In the **Home** tab of the Endpoint Configuration Manager, select **Boot Images**, open the context menu for **IGEL Boot Image**, and select **Properties**. Then,

select the Drivers tab and add the driver.	
---	--

ontent Locations	Optiona	Components	Security				
eneral Images	Drivers	Customization	Data Source	Data Access	Distributio	on Settings	
Drivers:			1				
Filter							P
Driver name			Version	Class	Signed	Architecture	INF File
		Therea	are no items to	show in this v	iew.		
<							>
<							>

5. In the **Home** tab of the Endpoint Configuration Manager, select **Task Sequences**, open the context menu for **IGEL Create**, and select **Update distribution points**. Then, continue with the wizard.

🏥 Update Distribution Point	s Wizard				×
General					
General Summary Progress Completion	Update d This wizard up Manager produ- version of Win Kit (ADK). The content of previously distr Current Windo	istribution points with dates distribution points with th action client components. You dows PE located in the install is this boot image package will ibuted. ws ADK version: 10.0.18362.0 s boot image with the current for GEL Boot Image"	h this boot image can also choose to rel ation directory of the W be updated on the Dist D. Current production cl Windows PE version fro	Je by using the latest C oad the boot image v indows Assessment a ribution Points where ient version: 5.00.87 om the Windows AD	onfiguration vith the latest and Deployment • it was 90.1007.
	Version 1	Comment WinPE Boot Image for d	OS Version 10.0.18362.1	Client Version 5.00.8790.1007	Package ID P010005A
		< Previou	s Next >	Summary	Cancel

 In the Home tab of the Endpoint Configuration Manager, select Task Sequences, open the context menu for IGEL Create, and select Deploy. The Deploy Software Wizard opens.

7. Click the **Browse** button next to **Collection:**.

Deploy Software Wizard				×
General				
General Deployment Settings Scheduling User Experience	Specify general i	nformation for this dep	loyment	
Alerts	Task sequence:	IGEL Create		Browse
Distribution Points	Collection:			Browse
Summary Progress Completion	Use defauit distribut Automatically distribut Pre-download cont Select a previously san deployment. Before you configurations as a neu Select Deploym Comments (optional):	tion point groups associated to the bute content for dependencies tent for this task sequence red deployment template that defin w deployment template	es collection nes configuration settings for this the option to save the current	Nary Cancel

The **Select Collection** dialog opens.

8. From the list of collections, select the collection that contains your target devices and click **OK**.

If you want to deploy IGEL OS to all new devices on the network and any existing third-party devices running IoT, use the pre-existing collection "All Unknown Computers".



Select Collection		×
Device Collections	Filter Nome All Desktop and Server Clients All Mobile Devices All Mobile Devices All Systems All Unknown Computers IGEL OS Collection	Mombor Count 9 0 13 2 1
		OK Cancel

In the following example, a user-created collection named "IGEL OS Collection" has been selected: 9. Click **Next** to continue with the wizard.

Second Deployment Settings Scheduling User Experience Aera Distribution Points Summay Progress Completion Det default databution point groups associated to this collection Detrobution Points Summay Progress Completion Detabution Points Sete default databution point groups associated to this collection Detrobution Points Sete databution point groups associated to this collection Detrobution Points Sete databution point groups associated to this collection Detrobution Points Sete databution point groups associated to this collection Detrobution Points Sete databution point groups associated to this collection Detrobution Points Sete databution point groups associated to this collection Detrobution Points Sete databution point groups associated to this collection Detrobution Points Sete databution point groups associated to this collection Detrobution Points Sete databution point groups associated to this collection Detrobution Points Sete databution point groups associated to this collection Detrobution Points Sete databution point groups associated to this collection Detrobution Points Sete databution point groups associated to this collection Detrobution Points <t< th=""><th>Deploy Software Wizard</th><th></th><th></th><th>×</th></t<>	Deploy Software Wizard			×
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User Experience Alerts Task sequence: ISEL Create Browse Distribution Points Calection: KGEL OS Collection Browse Summary Use default distribution point groups associated to this collection Browse Progress Automatically distribute content for dependencies Browse Completion Pre-download content for this task sequence Select a previously saved deployment template that defines configuration settings for this deployment. Before you complete this wizad, you have the option to save the current configurations as a new deployment template Select Deployment Template Comments (optional): Comments (optional):	Scheduling			
Alerts Task sequence: IGEL Create Browse Distribution Points Collection: IGEL OS Collection Browse Summary Progress Completion Browse Completion Automatically distribute content for dependencies Browse Select a previously saved deployment template that defines configuration settings for this deployment. Before you complete this wized, you have the option to save the current configurations as a new deployment template Select Deployment Template Comments (optional):	User Experience			
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Progress Use default distribution point groups associated to this collection Completion Automatically distribute content for dependencies Pre-download content for this task sequence Select a previously saved deployment template that defines configuration settings for this configurations as a new deployment template. Select Deployment Template Select Deployment Template Comments (optional): 	Summary			
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Select a previously saved deployment template that defines configuration settings for this deployment. Before you complete this wizard, you have the option to save the current configurations as a new deployment template Select Deployment Template Comments (optional):		Pre-download cont	ent for this task sequence	
Select a previously saved deployment template that defines configuration settings for this deployment. Before you complete this wizard, you have the option to save the current configurations as a new deployment Template Select Deployment Template Comments (optional):				
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Select Deployment Template Comments (optional):				
Comments (optional):		Select Deploym	nent Template	
		Connects for the other		
		Comments (optional):		
				^
				Y
< Previous Next > Summary Cancel			< Previous Next > Summary	Cancel

All target devices receive the PXE boot request that triggers them to boot the IGEL OS Boot Image (WIM).



Deploying an Alternative IGEL OS Image

As an alternative to the minimized IGEL OS image that comes with the IGEL OS SCCM add-on, you can deploy a full-featured IGEL OS image. The current main version is available from igel.com. Optionally, you can add pre-configured settings and certificates to the image.

- (i) The RAM size of the target device must be equal to or greater than the storage size required by the IGEL OS image plus the initial size of the IGEL OS Boot Image (WIM), which is between 300 and 400 MB. For deploying an alternative IGEL OS Image, at least 4 GB RAM is needed.
- 1. Open a web browser, go to https://www.igel.com/software-downloads/workspace-edition/ > OS DEPLYOMENT TOOL FOR SCCM, download the current IGEL OS file, and unzip it.

C os 11		+
UNIVERSAL MANAGEMENT SUITE		+
OS DEPLOYMENT APPLIANCE		+
OS 10 MIGRATION FIRMWARE		+
		+
OS DEPLOYMENT TOOL FOR SCCM		×
(11.05.100.zip) MD5: 18c8372e2fb8962ccd043e880ff6ae95 Updated BIN file for deploying 11.05.100 via OSCW	2021/03/01 SHA-256: e7e9c14e73884c2cb7a571b0bd6a769600a2cc09a16c504f899172fafc2b9b61	
Setup-igel_os-sccm_add_on_1.01.100.exe MD5: 958060e5d71605a3738e46c33225daca Tool for initial OS 11 Deployment via SCCM Detailed Description	2020/10/08 SHA-256: ca9598f36a5a37156303f8c2ffa1a927e0c631e03a0c5ec9ad531952c23585b5	

The IGEL OS image is ready for deployment (example: 11.05.100.bin).

- 2. Start the IGEL OS Image Manager by clicking on the desktop icon.
- 3. Click Select next to Select IGEL OS binary image and choose your image file.
- 4. If you want to add settings or certificates, click **Select** next to **Select IGEL OS settings** and choose the relevant files. You can add the following files:
 - setup.ini : The settings for IGEL OS; these are the settings that can be configured via IGEL Setup, the UMS configuration dialog, or a UMS profile.
 - Certificate files

IGEL OS Image Manager		
Update IGEL OS SCCM Boot image		
Select IGEL OS binary image	Select	
Select IGEL OS settings	Select	
Selected IGEL OS image: minimal.bin		
Apply	Ext	

5. When you have chosen your files, click **Apply**.

The files are added to the image.

IGEL OS Image Manager	
Update IGEL OS SCCM Boot image	
Select IGEL OS binary image	Select
Select IGEL OS settings	Select
Selected IGEL OS imana: minimal bin Please Wait	
Apply	Exit