IGEL OS Creator for Windows (OSCW)

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)

> ⓘ 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: ≥ 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

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/workspace-edition/ **> 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

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

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-for-windows_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.

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

>> Continue with Installing the OSCW Installer.
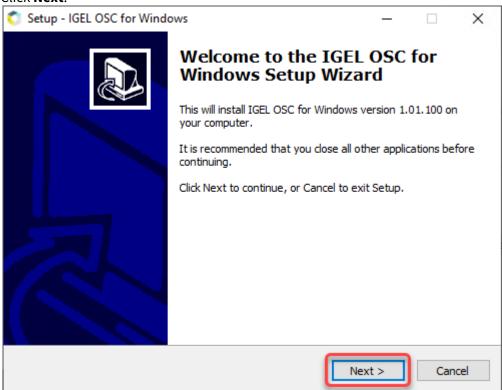
Installing the OSCW Installer

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 .

OSCW Installer Has Been Deployed from a File

1. 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**.
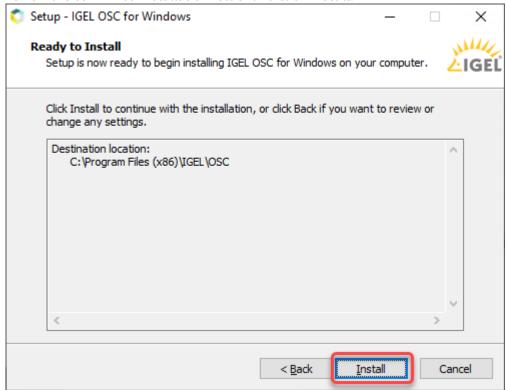
3. Review the installation folder and click **Next**.

4. Review the confirmed installation folder and click **Install**.

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
- Registering by Automatic Registration
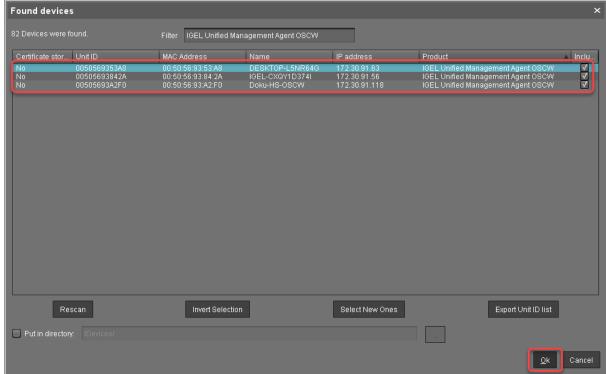
Registering by a UMS Scan

1. Open the UMS Console and click [icon] 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						✕
82 Devices were found.		Filter	IGEL Unified Management Agent OSCW			
Certificate stor...	Unit ID	MAC Address	Name	IP address	Product	▲ Inclu...
No	0050569353A8	00:50:56:93:53:A8	DESKTOP-L5NR64G	172.30.91.63	IGEL Unified Management Agent OSCW	
No	00505693842A	00:50:56:93:84:2A	IGEL-CXQY1D374I	172.30.91.56	IGEL Unified Management Agent OSCW	
No	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**.

The target machines are registered with the UMS.

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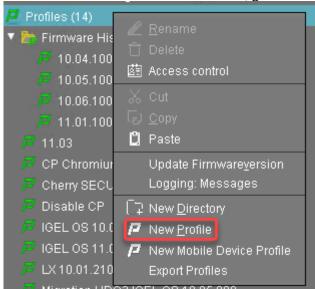
To provide the OSCW installer with the download source for the IGEL OS Creator file (ISO), we will create a profile that provides the path to that file. To assign the profile to the target machines, we will use a view that recognizes the target machines by their product ID.

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".

3. Click **Ok**.

The configuration dialog opens.

4. Click **Converter**.

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.

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**.

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

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

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

The number of matches is shown.

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

7. The target machines are shown.

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 .....**.

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.

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 from time to time.
   In the **Attribute** area, under **Firmware Description**, the current status of the OSC installation is shown.
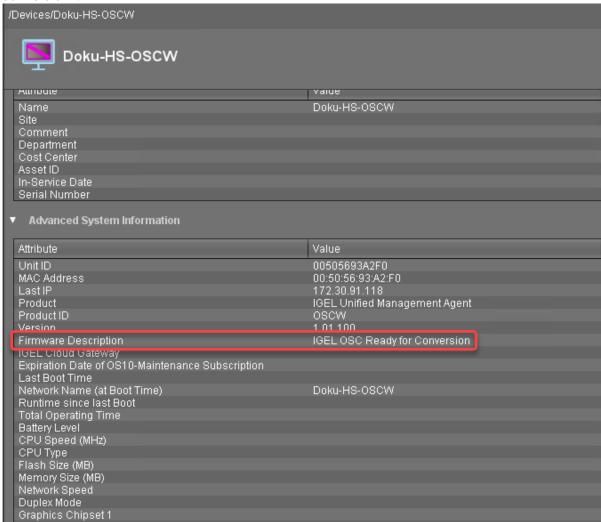
When a device is ready, the value of **Firmware Description** changes to "IGEL OSC Ready for

Conversion".

3. When **Firmware Description** reads "IGEL OSC Ready for Conversion", continue with Starting the Conversion.

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

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.
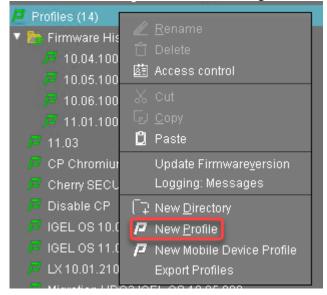
First, we create a profile for the update buddies that provides the OSCW installer with the download source for the ISO file. Then, we will assign this profile to the update buddies; the assignment of the profile triggers the update buddies to download the file. After that, we create a profile for the 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)

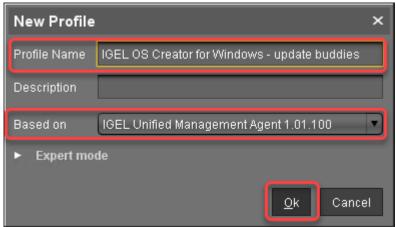### Creating a Profile for the Update Buddies

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

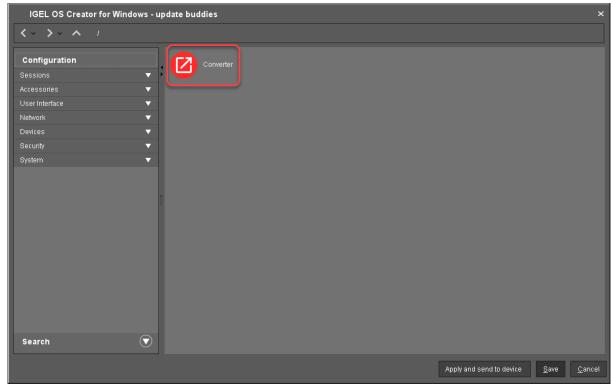2. In the **New Profile** dialog, change the settings as follows:

- **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**.

The configuration dialog opens.

4. Click **Converter**.

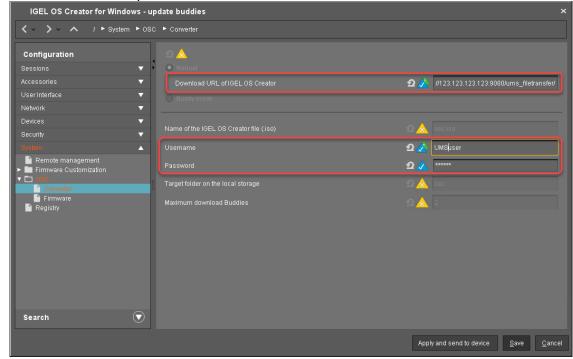You are taken to **System > OSC > Converter** where you can set all relevant parameters.

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.

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 click in the **Assigned objects** area.
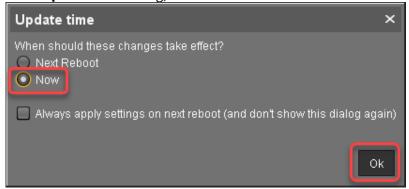
2. Select the update buddies profile, click [>] and then **Ok**.

3. In the **Update time** dialog, select **Now** and click **Ok**.
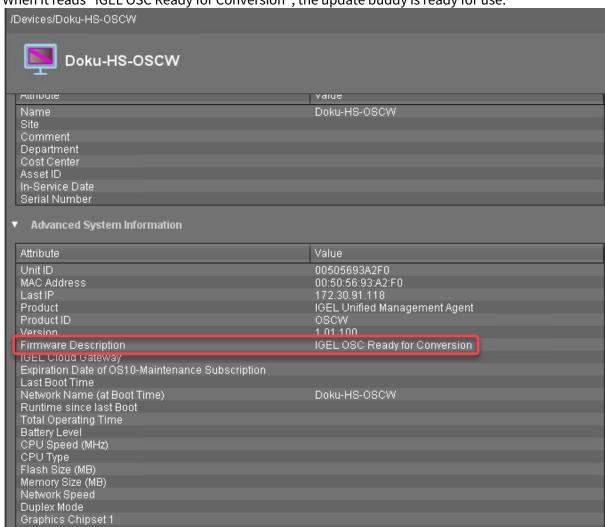
Checking If the Update Buddies Are Ready

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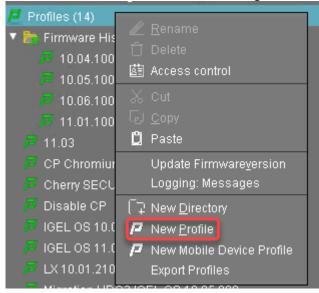
2. In the dialog, click **Refresh system information** and then ⟳ every few seconds.
   In the **Attribute** area, under **Firmware Description**, the current status of the download is shown.
   When it reads "IGEL OSC Ready for Conversion", the update buddy is ready for use.
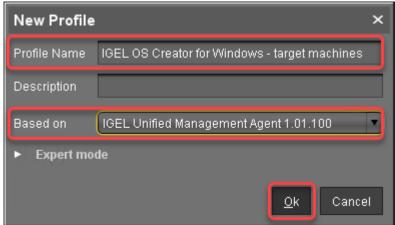
Creating a Profile for the Remaining Target Machines

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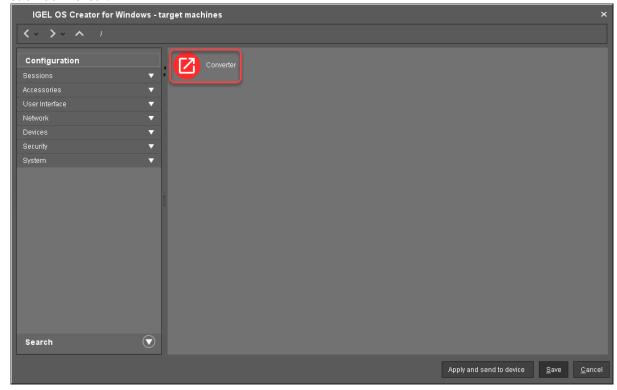

2. In the **New Profile** dialog, change the settings as follows:
    - **Profile Name**: A name for the profile, e. g. "IGEL OS Creator for Windows - target machines"
    - **Based on**: Select "IGEL Unified Management Agent 1.01.100".
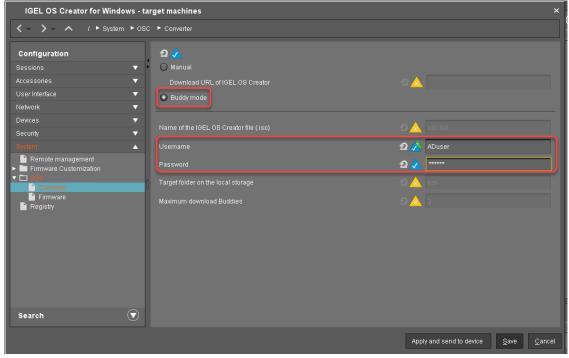3. Click **Ok**.

The configuration dialog opens.

4. Click **Converter**.

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.

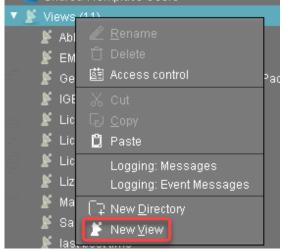- **Password**: Common password associated with the **Username**.

6. Click **Save**.

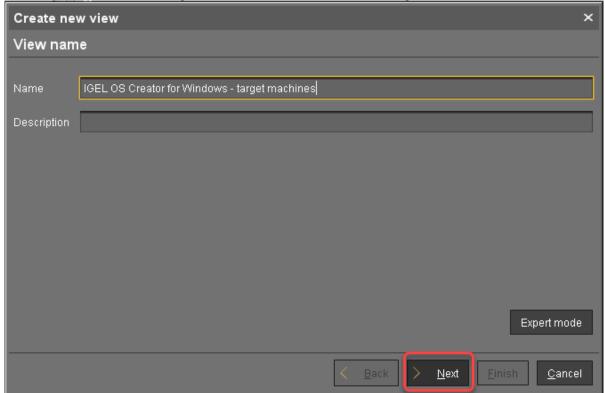## Creating a View to Select the Target Machines

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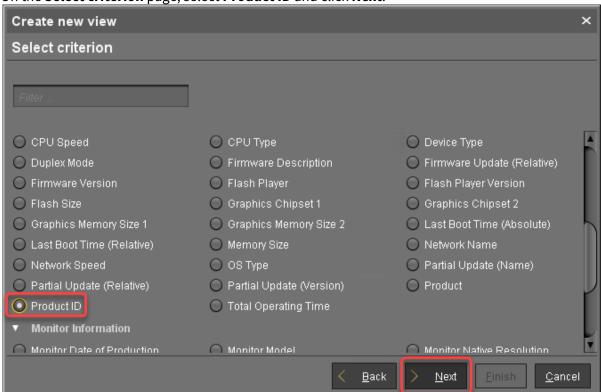
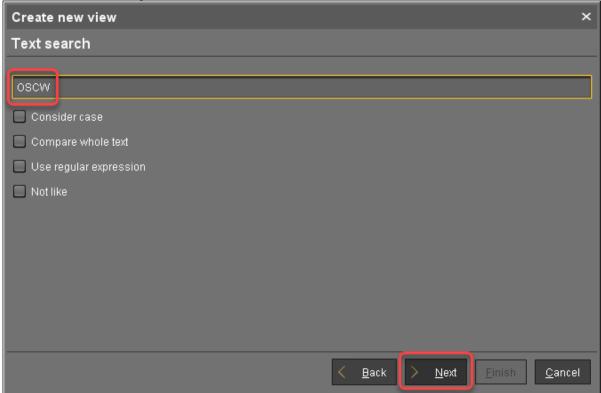2. Enter a name for the view, e. g. "IGEL OS Creator for Windows - target machines" and click **Next**.

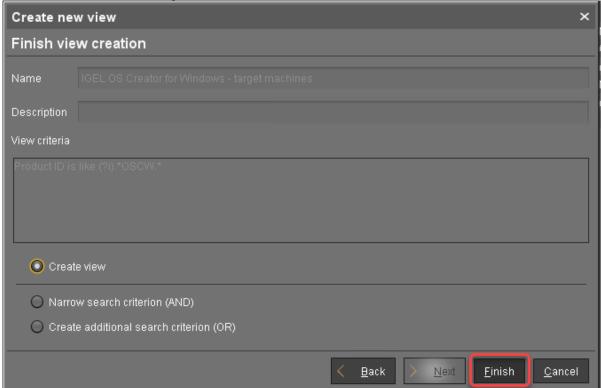3. On the **Select criterion** page, select **Product ID** and click **Next**.

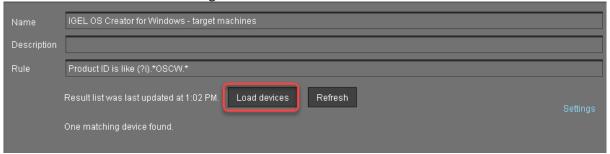4. On the **Text search** page, enter "OSCW" and click **Next**.

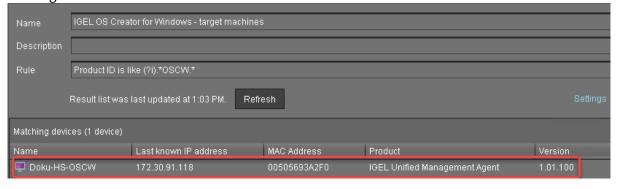5. On the **Create new view** page, click **Finish**.

The number of matches is shown.

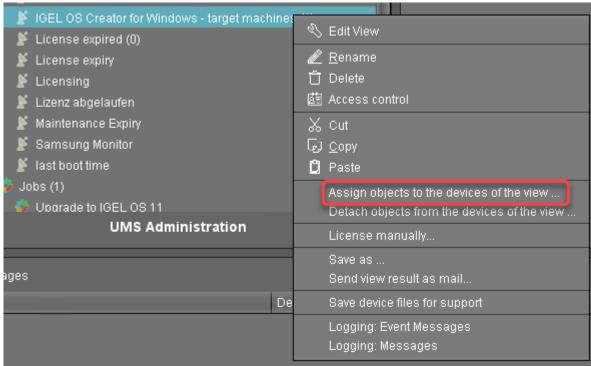6. Click **Load devices** to view the target machines.
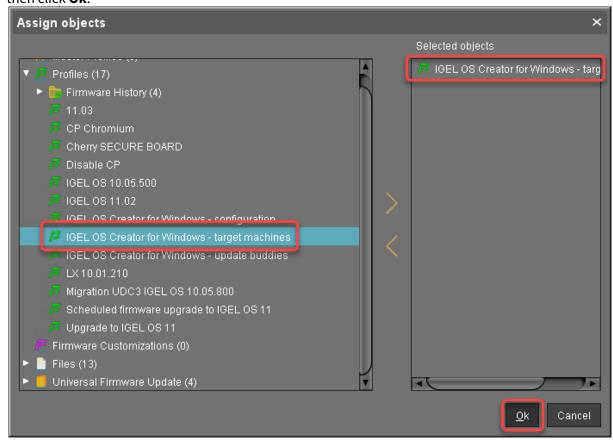

7. The target machines are shown.

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 ....**.
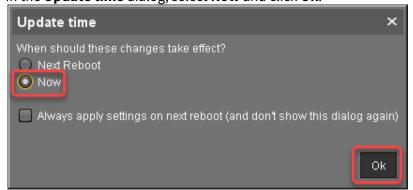
2. In the **Assign objects** dialog, select the profile for the target machines, click [>] to assign it and then click **Ok**.

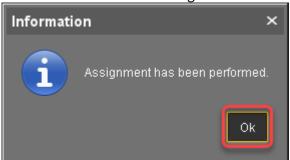
3. In the **Update time** dialog, select **Now** and click **Ok**.

4. Confirm the **Information** dialog.

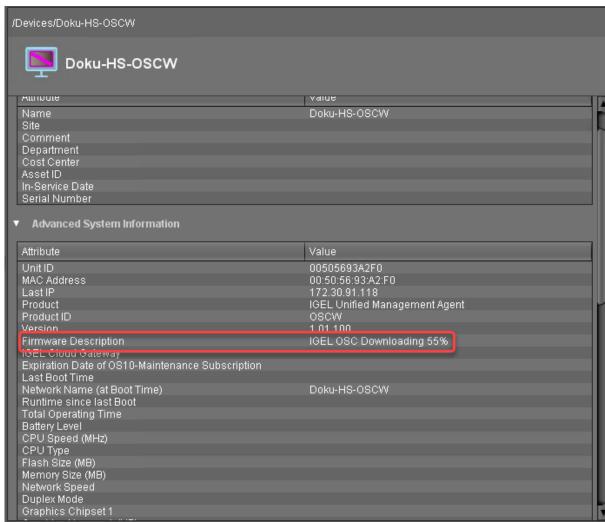The target machines download the ISO file.

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 every few seconds.
   In the **Attribute** area, under **Firmware Description**, the current status of the download is shown.
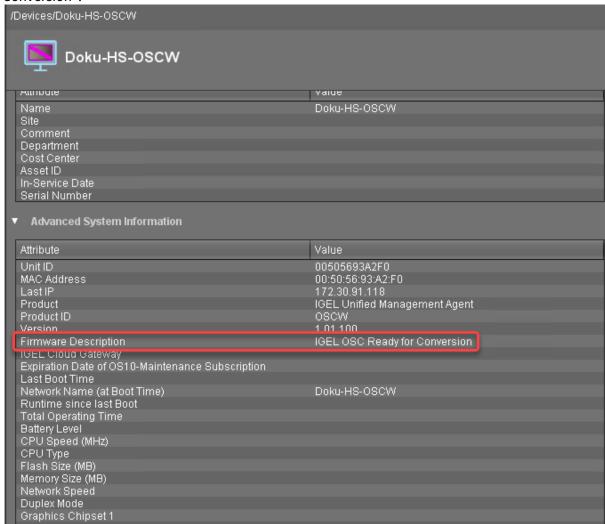
/Devices/Doku-HS-OSCW

Doku-HS-OSCW

Attribute	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 Downloading 55%
IGEL Cloud 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)	
CPU Type	
Flash Size (MB)	
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".

3. When **Firmware Description** reads "IGEL OSC Ready for Conversion", continue with Starting the Conversion.

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".
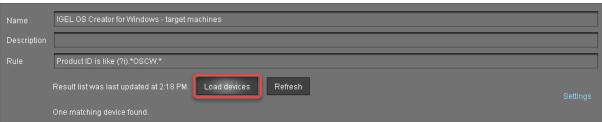
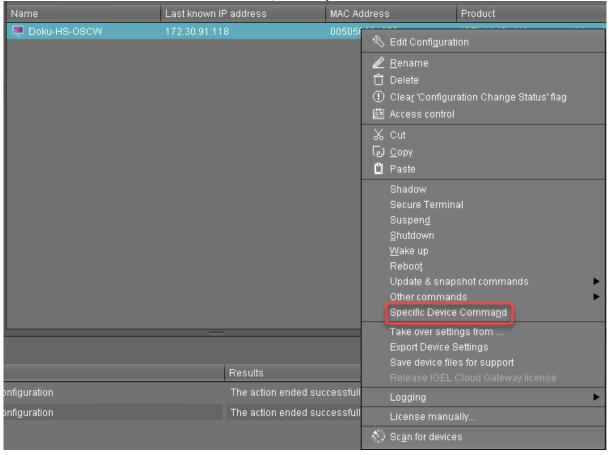## Next Step

>> Starting the Conversion

Starting the Conversion

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

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

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
2. Getting the Required Software
3. Updating the IGEL WES7/7+ Devices
4. Transferring the IGEL OS 11 Firmware to the UMS
5. Configuring the OSCW Installer
6. Starting the Conversion

Prerequisites

Network

- All machines are registered with the UMS.

Next Step

>> When all requirements are met, continue with .

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/workspace-edition/ **> 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

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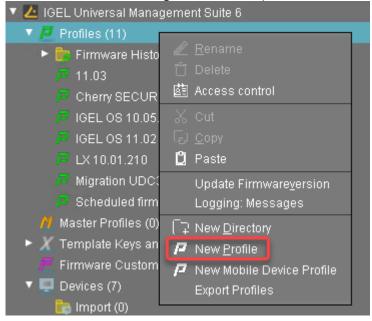
> ⚠ After the update, you can update to another firmware only via IGEL rescue shell!

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

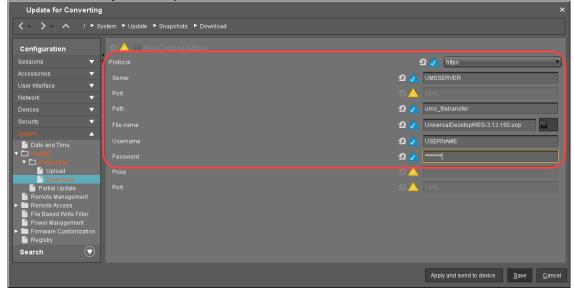1. In the UMS structure tree, go to **Profiles**, open the context menu, and select **New Profile**.

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**.

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.
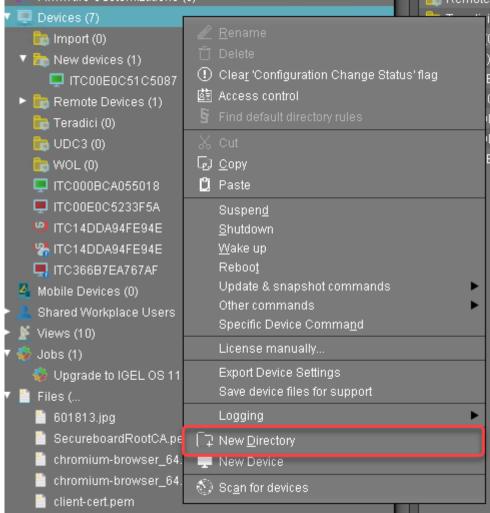   - **Password**: Enter your UMS password.

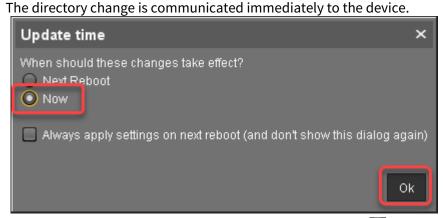5. Click **Save** to save the profile.

Starting the Update

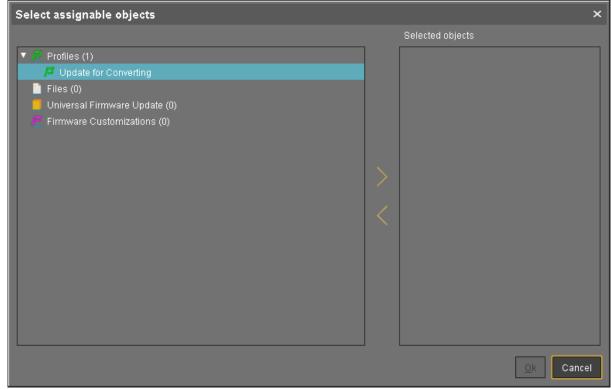1. Under **Devices**, create a directory and name it "Convert to IGEL OS 11", for instance.

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

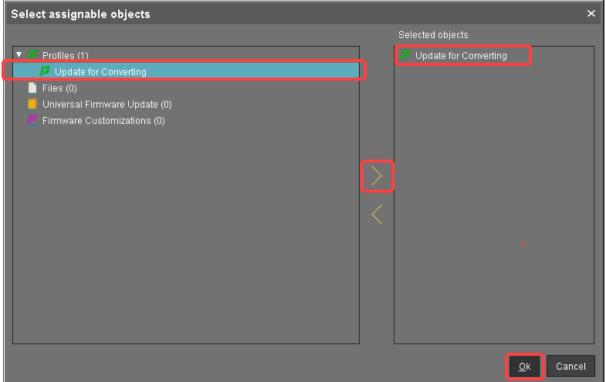3. In the **Update time** dialog, select **Now** and click **Ok**.
The directory change is communicated immediately to the device.

4. Select the directory and in the **Assigned objects** area, click ⊕.
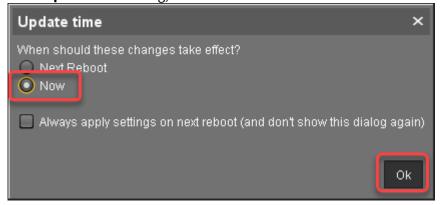
5. Assign the update profile to the directory and click **Ok**.

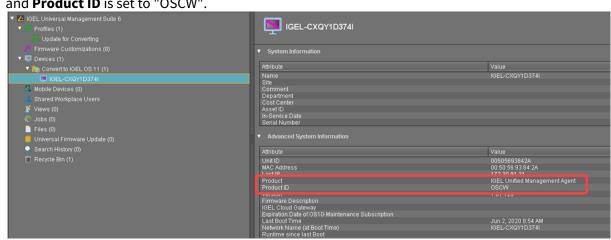6. In the **Update time** dialog, select **Now** and click **Ok**.

The changes are sent to the devices immediately.

7. 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 [icon] 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".

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

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

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.

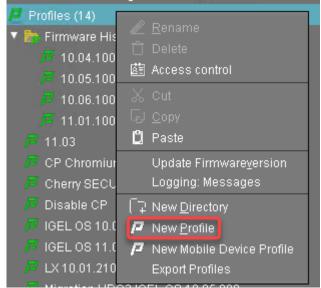## Configuring the OSCW Installer in Normal Mode

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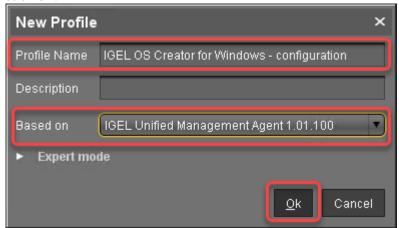- Assigning the Profile to the Target Machines(see page 59)

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".
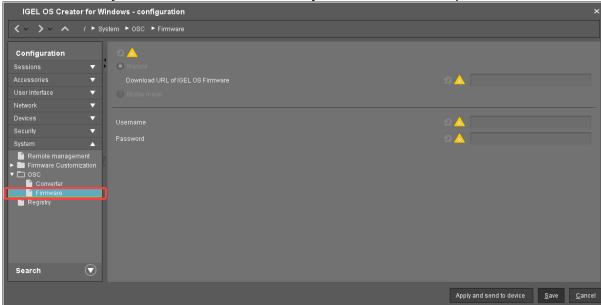
3. Click **Ok**.

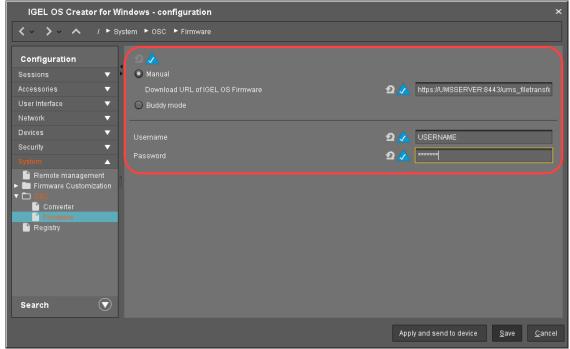The configuration dialog opens.

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

5. Change the settings as follows (click the ⚠ icon to enable the configuration; the icon will change to ✓):
   - **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.

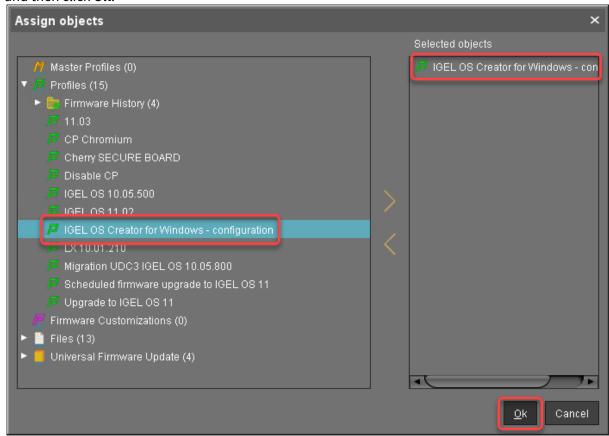- **Password**: Enter the password for the UMS user.

6. Click **Save**.

Assigning the Profile to the Target Machines

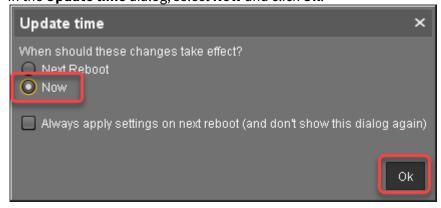1. Select the directory that contains your target machines and in the **Assigned objects** area, click ⊕ .

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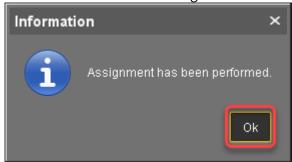

3. In the **Update time** dialog, select **Now** and click **Ok**.

4. Confirm the **Information** dialog.

Check List

✅ The conversion profile is assigned to all target machines.

Next Step

>> Starting the Conversion

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.

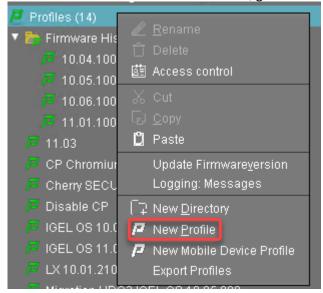The configuration comprises the following steps:

- 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".
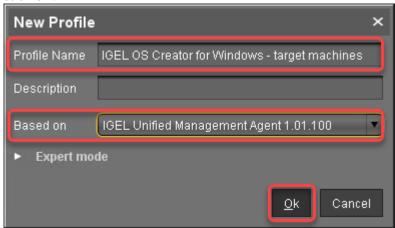
Creating a Profile for the Buddy Update Clients

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".
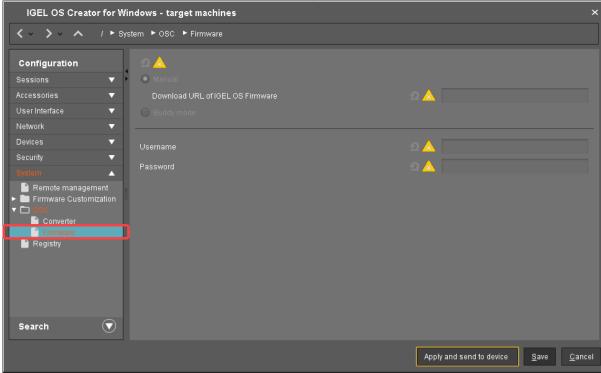
3. Click **Ok**.
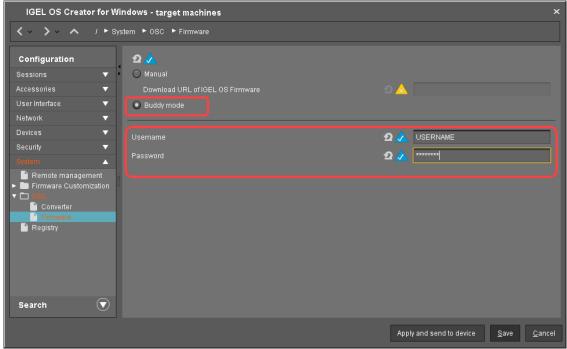

The configuration dialog opens.
4. Click **Firmware**.
You are taken to **System > OSC > Firmware** where you can set all relevant parameters.

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

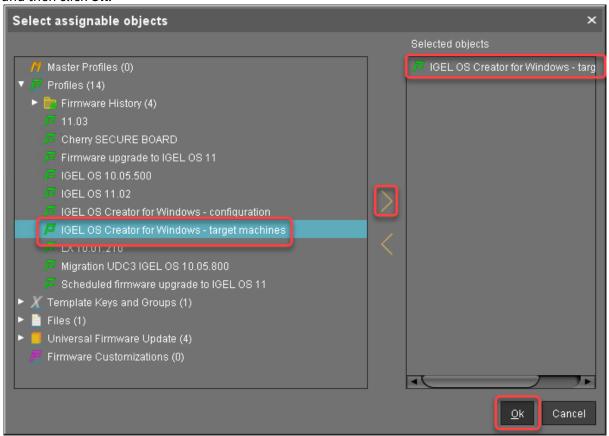- **Password**: Common password associated with the **Username**.

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 ⊕
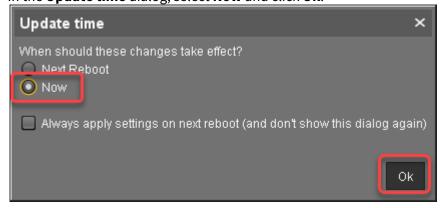   .

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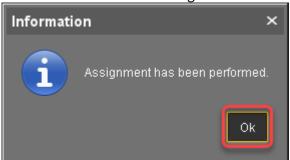

3. In the **Update time** dialog, select **Now** and click **Ok**.

4. Confirm the **Information** dialog.

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".
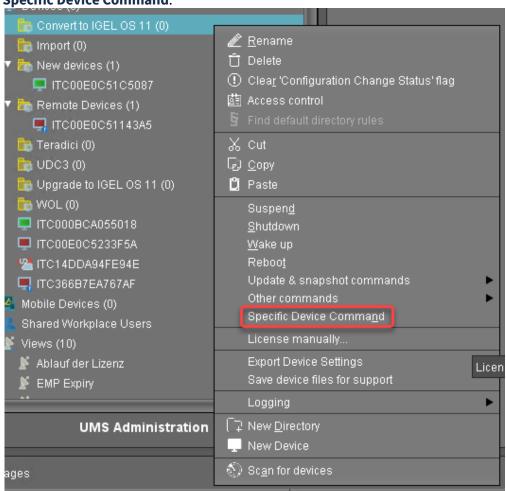
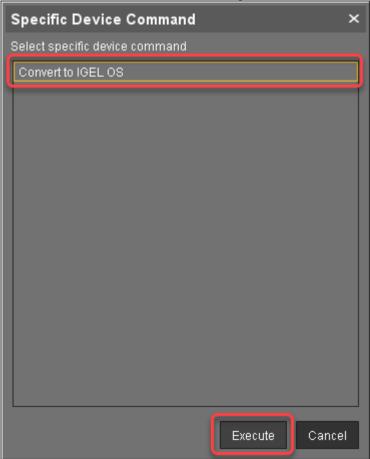## Next Step

>> Starting the Conversion

Starting the Conversion

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

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.

> ⚠ 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

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.

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

Next Step

>> Starting the Conversion by Updating the Devices

Starting the Conversion by Updating the Devices

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

> ⚠ 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.
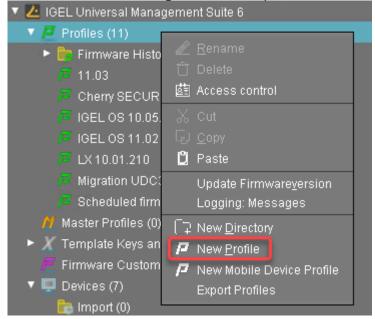
Transferring the Snapshot File to the UMS

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`
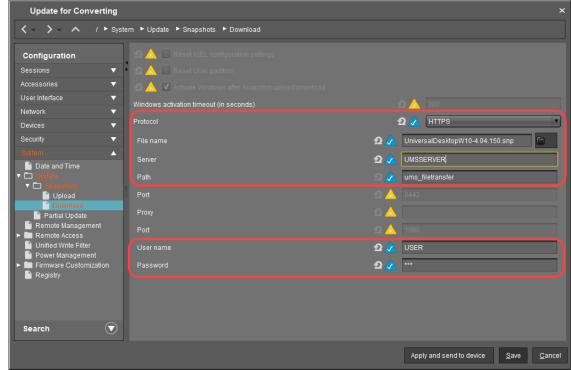
Creating an Update Profile

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.

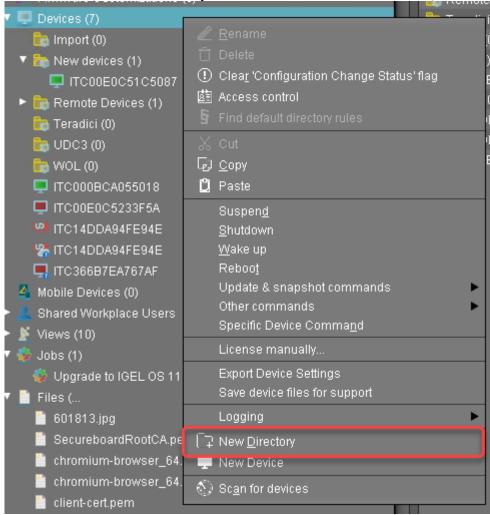5. Click **Save** to save the profile.

Starting the Update

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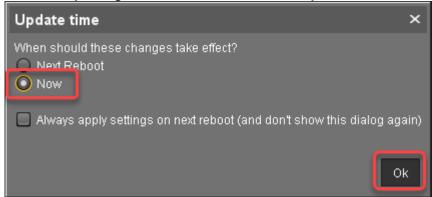

2. Put the devices that are to be updated into the new directory. You can use drag & drop.
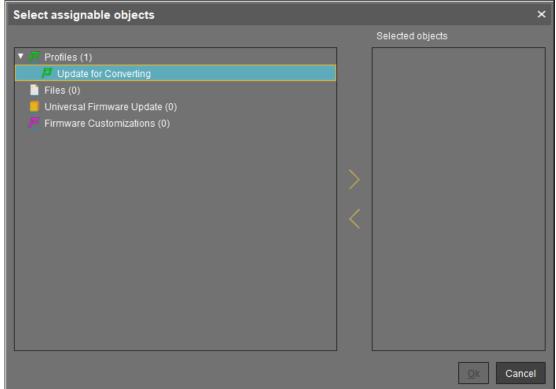
3. In the **Update time** dialog, select **Now** and click **Ok**.
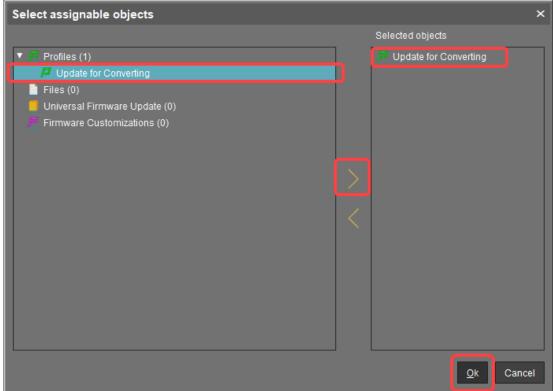The directory change is communicated immediately to the device.

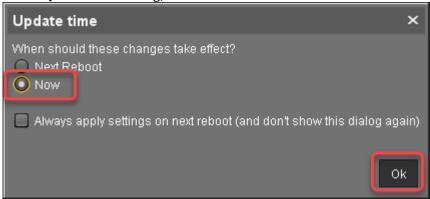4. Select the directory and in the **Assigned objects** area, click ⊕.

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.

7. 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.

8. When the update process is finished, go to one of the devices and click [icon] 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 OS SCCM Add-On

Overview

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

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

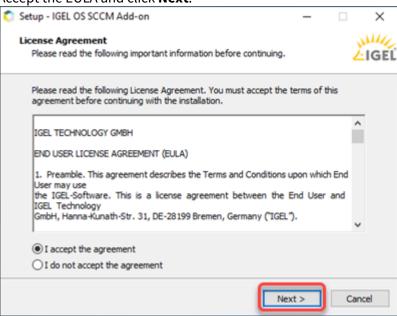https://www.youtube.com/watch?v=6nrTmW0ECyk&feature=youtu.be

Prerequisites

- Microsoft Endpoint Configuration Manager (see https://docs.microsoft.com/en-us/mem/configmgr/)

  ⓘ The solution presented here has been developed and tested with version 1902 of Microsoft Endpoint Configuration Manager. 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/infrastructure-requirements-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).
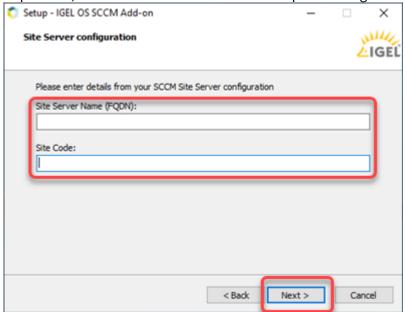
Installing the IGEL OS SCCM Add-On

1. 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.
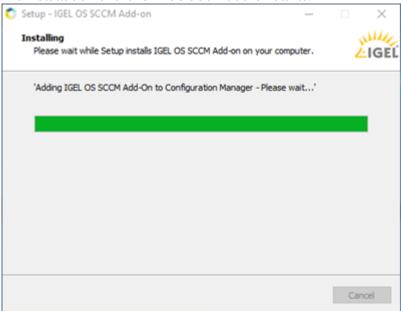3. Accept the EULA and click **Next**.

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**.
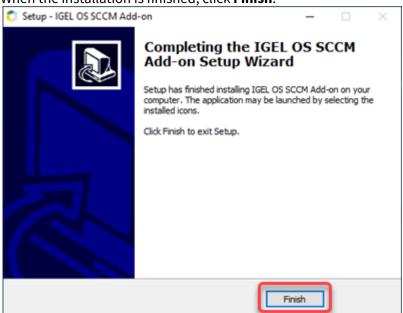
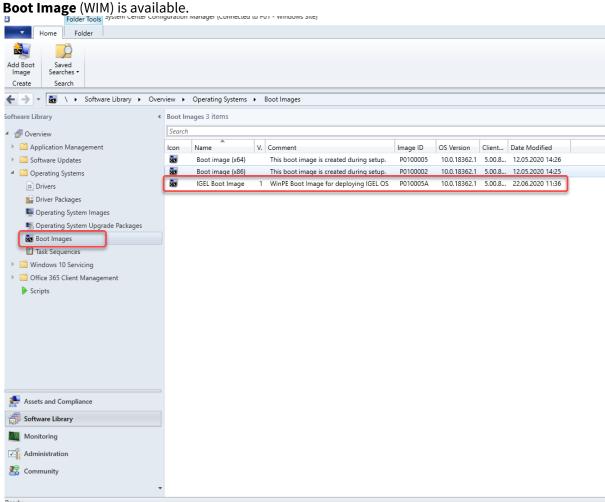The installation of the IGEL OS SCCM add-on starts.

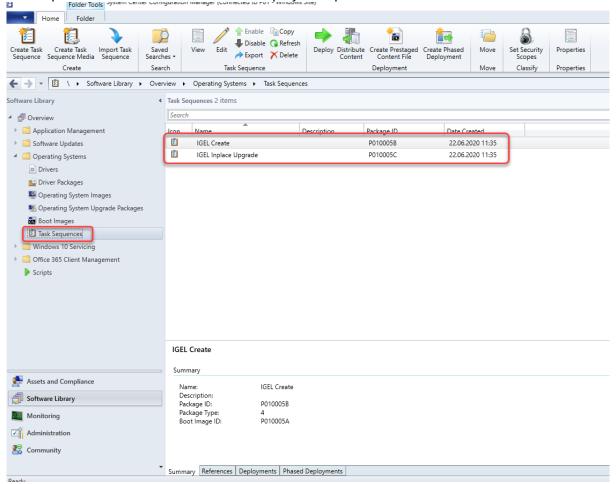5. When the installation is finished, click **Finish**.

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.

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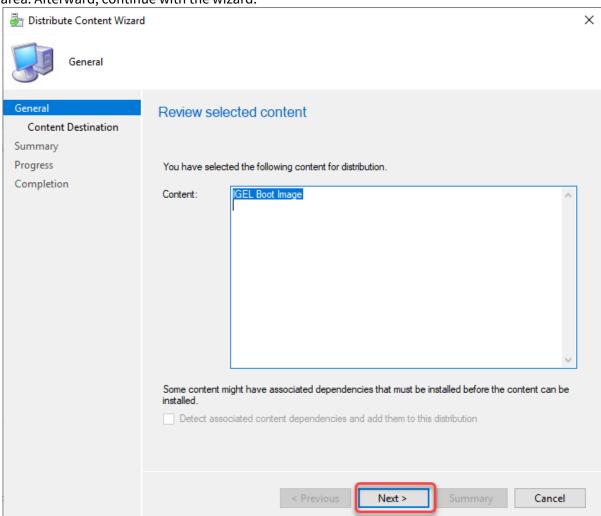
The task sequence "IGEL Create" will deploy IGEL OS to a device collection via a PXE boot environment. The task sequence will be executed after the device has booted into the IGEL OS Boot Image (WIM).

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**.

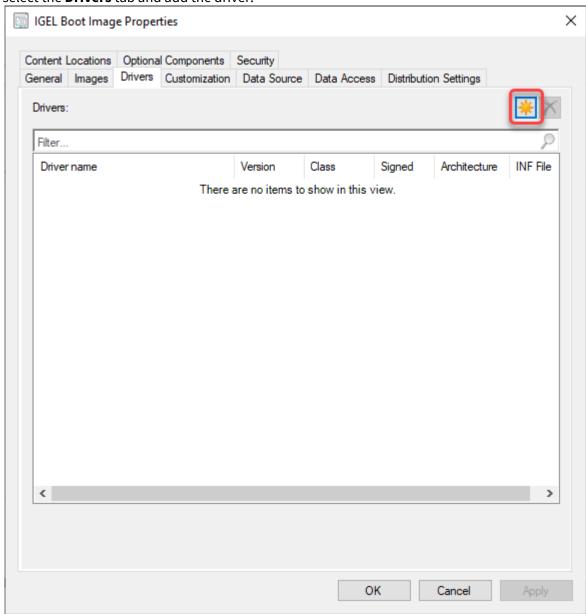3. Open the **Distribute Content Wizard** and check if "IGEL Boot Image" is shown in the **Content** area. Afterward, continue with the wizard.

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.

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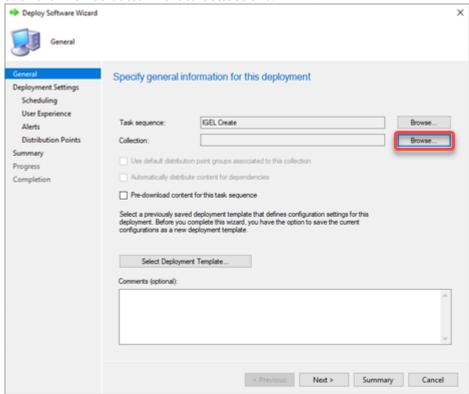
6. In the **Home** tab of the Endpoint Configuration Manager, select **Task Sequences**, open the context menu for **IGEL Create**, and select **Deploy**.
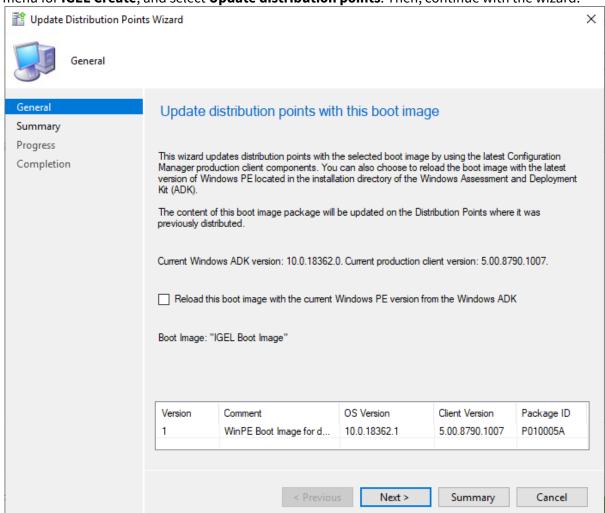The **Deploy Software Wizard** opens.

7. Click the **Browse** button next to **Collection:**.
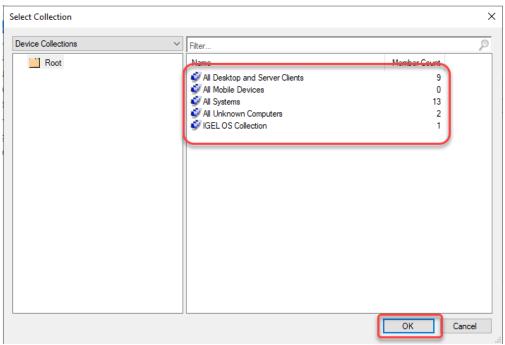
The **Select Collection** dialog opens.

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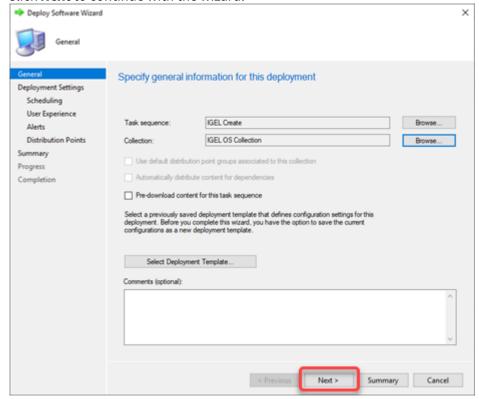
In the following example, a user-created collection named "IGEL OS Collection" has been selected:
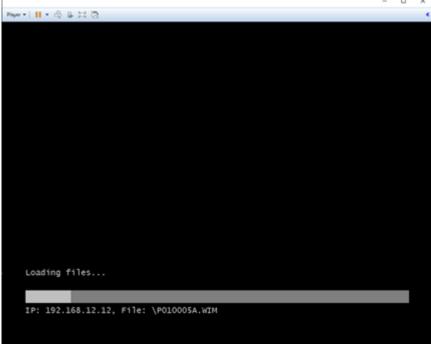
9. Click **Next** to continue with the wizard.

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

The target devices load the IGEL OS Boot Image (WIM).
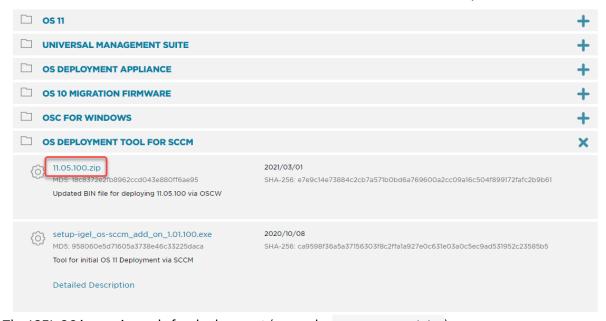
Deploying an Alternative IGEL OS Image

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.

> ⓘ 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.

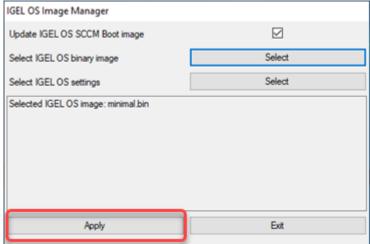|		
🗀 **OS 11**		➕
🗀 **UNIVERSAL MANAGEMENT SUITE**		➕
🗀 **OS DEPLOYMENT APPLIANCE**		➕
🗀 **OS 10 MIGRATION FIRMWARE**		➕
🗀 **OSC FOR WINDOWS**		➕
🗀 **OS DEPLOYMENT TOOL FOR SCCM**		✖
⚙ 11.05.100.zip MD5: 18c8372e2fb8962ccd043e880ff6ae95 Updated BIN file for deploying 11.05.100 via OSCW	2021/03/01 SHA-256: 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

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

The files are added to the image.