



# deviceTRUST 21.1

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## Welcome

September 6, 2025

The deviceTRUST® documentation provides information about the installation, setup and a product reference for deviceTRUST.

### Quick setup

To get started with deviceTRUST, choose your [Architecture](#) and then take a look at the [Getting Started](#) guide.

### More information

- [Architecture](#) describes the different deployment scenarios.
- [Getting Started](#) provides the essential steps for a successful deviceTRUST installation.
- [Download](#) provides links that can be used to download the latest deviceTRUST Software.
- [Installation](#) details some important usage scenarios, plus how to install the deviceTRUST Console, Agent and Client Extension.
- [Templates](#) details the templates which can be used to quickly implement a use case.
- [Reporting](#) contains information about analyzing and reporting contextual information of your users and devices.
- [Reference](#) provides a set of reference material describing the more advanced features of deviceTRUST.
- [Troubleshooting](#) important steps are described to help troubleshoot the deviceTRUST installation and configuration.
- [Releases](#) contains the release notes detailing new features and bug fixes within the released deviceTRUST products.

## Architecture

June 20, 2025

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- [Local Scenario](#)

- [Remote Scenario](#)
- [OS Compatibility](#)
- [Platform Compatibility](#)

## Local Scenario

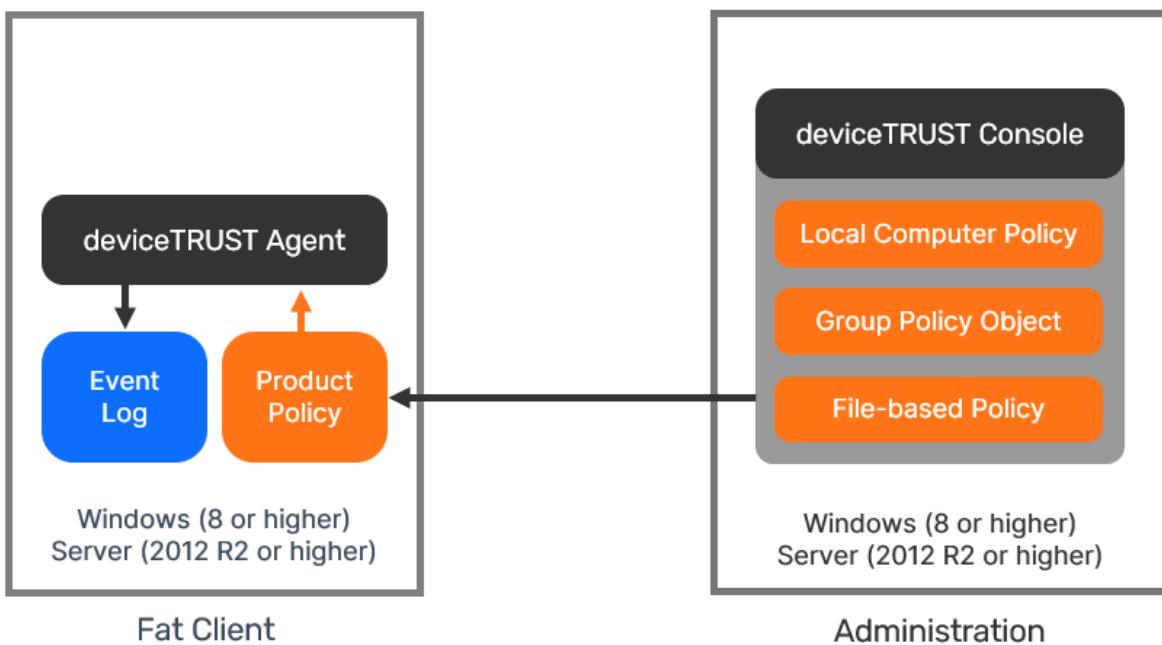
deviceTRUST requires only one main component when installing on local devices, the deviceTRUST Agent. The deviceTRUST component can be installed and configured within minutes and can be fully integrated with existing deployment processes and management tools. No additional infrastructure (e.g. a database or a web server) is required for deviceTRUST to be installed in your environment.

### deviceTRUST® Agent

This component needs to be installed on the local device. The [Property Reference](#) describes which properties of the local agent are available within the users' session.

### Architecture - Microsoft Windows local devices

The following diagram details the deviceTRUST architecture when the agent is installed on a Windows OS, with deviceTRUST making the user and device context information available within the local desktop session. Policy is made available to the deviceTRUST Agent using existing Microsoft Active Directory Group Policy Management or file-based. All operations performed by the deviceTRUST Agent are written to the Microsoft Windows Event Log.



## Remote Scenario

deviceTRUST consists of two main components when installing in remote environments, the deviceTRUST Agent and the deviceTRUST Client Extension. Both deviceTRUST components can be installed and configured within minutes and can be fully integrated with existing deployment processes and management tools. No additional infrastructure (e.g. a database or a web server) is required for deviceTRUST to be installed in your environment.

Solutions are provided by deviceTRUST® for both traditional and modern Operating Systems (OS). On a traditional OS such as Microsoft Windows, an extensibility framework is available that enables deviceTRUST to send user and device context within the communication channel between the clients and the Remote Desktop Services host. deviceTRUST also provides a solution for more modern OS's, such as Apple iOS, which offer no extensibility framework.

### deviceTRUST Agent

This component needs to be installed on the remoting host that delivers the remote session to the users. The following technologies are supported by deviceTRUST: Amazon WorkSpaces, Citrix Virtual Apps and Desktops™ (CVAD), Microsoft Azure Virtual Desktop (AVD), Microsoft Remote Desktop Session Host (RDSH) or VMware Horizon View.

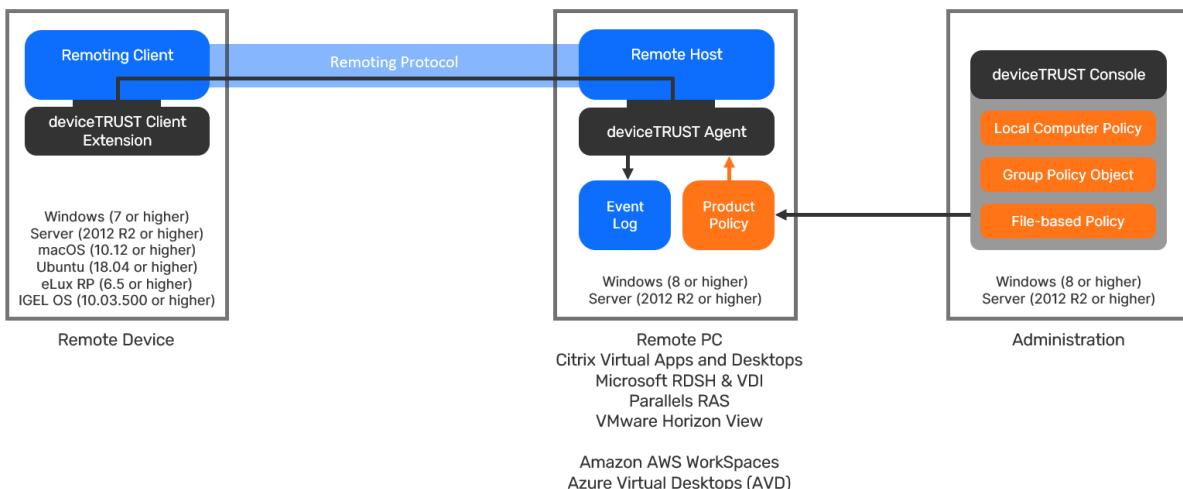
## deviceTRUST Client Extension

This component needs to be installed on the remote device which will be used to connect to the remote host delivering the published applications and desktops. It is not required to have deviceTRUST Client Extension installed onto all of your remote devices but recommended to get the full range of context information about the remote device and its user into the users' virtual session.

In the absence of the deviceTRUST Client Extension on the remote device, deviceTRUST delivers the LOCAL\_\* properties into the users' remote session. The [Property Reference](#) describes which properties of the local agent and remote device are available within the users' session.

## Architecture - Windows, macOS, Ubuntu, eLux® RP or IGEL OS device

The following diagram details the deviceTRUST architecture when the remote client is installed on a Windows, macOS, Ubuntu, eLux RP or IGEL OS device, with deviceTRUST sending the user and device context information within the communication channel offered by the remoting protocol. Policy is made available to the deviceTRUST Agent using existing Microsoft Active Directory Group Policy Management or file-based. All operations performed by the deviceTRUST Agent are written to the Microsoft Windows Event Log.



## Operating System Compatibility

- [Apple iOS and iPadOS](#)
- [Apple macOS](#)
- [IGEL OS](#)
- [Microsoft Windows](#)
- [Ubuntu Desktop](#)

- [Unicon eLux](#)

## **Apple iOS and iPadOS**

Compatible operating systems (deviceTRUST® Client Extension):

- Apple iOS 11.x and later
- Apple iPadOS 11.x and later

Compatible technologies:

- Citrix Virtual Apps and Desktops™
- Citrix Cloud™
- Microsoft Remote Desktop Services
- VMware Horizon View (Blast)
- VMware Horizon View (PCoIP)
- VMware Horizon View (RDP)

## **Apple macOS**

Compatible operating systems (deviceTRUST Client Extension):

- Apple macOS 10.13 and later

Compatible technologies:

- Amazon WorkSpaces (PCoIP)
- Citrix Virtual Apps™ and Desktops
- Citrix Cloud
- Microsoft Remote Desktop Services (via FreeRDP 2)
- VMware Horizon View (Blast)
- VMware Horizon View (PCoIP)
- VMware Horizon View (RDP)

## **IGEL OS**

Compatible technologies (deviceTRUST Client Extension):

- Amazon WorkSpaces (PCoIP) natively integrated in IGEL OS 11.08.200 and later - 1
- Citrix Virtual Apps and Desktops natively integrated in IGEL OS 10.03.500 and later
- Citrix Cloud natively integrated in IGEL OS 10.03.500 and later
- Microsoft Azure Virtual Desktop (AVD) natively integrated in IGEL OS 11.08.200 and later - 1

- Microsoft Remote Desktop natively integrated in IGEL OS 10.03.500 and later
- VMware Horizon View (Blast) natively integrated in IGEL OS 10.08.230 and later - 1
- VMware Horizon View (PCoIP) natively integrated in IGEL OS 10.08.230 and later - 1
- VMware Horizon View (RDP) natively integrated in IGEL OS 10.08.230 and later - 1

**Note**

Compatibility with previous IGEL OS releases is available by contacting deviceTRUST Support.

## **Microsoft Windows**

Compatible operating systems (deviceTRUST Agent and Console):

- Microsoft Windows 10 and later
- Microsoft Windows Server 2012 and later

Compatible operating systems (deviceTRUST Client Extension):

- Microsoft Windows 10 and later
- Microsoft Windows Server 2012 and later

Compatible technologies:

- Amazon WorkSpaces (PCoIP)
- Azure Virtual Desktop
- Azure Active Directory
- Citrix Virtual Apps and Desktops
- Citrix Cloud
- Microsoft Remote Desktop Services
- Parallels Remote Application Server
- VMware Horizon View (Blast)
- VMware Horizon View (PCoIP)
- VMware Horizon View (RDP)

## **Ubuntu Desktop**

Compatible operating systems (deviceTRUST Client Extension):

- Ubuntu Desktop 18.04 LTS and later

Compatible technologies:

- Amazon WorkSpaces (PCoIP)
- Citrix Virtual Apps and Desktops

- Citrix Cloud
- Microsoft Remote Desktop Services (via FreeRDP 2)
- VMware Horizon View (Blast)
- VMware Horizon View (PCoIP)
- VMware Horizon View (RDP)

## **Unicon™ eLux**

Compatible technologies (deviceTRUST Client Extension):

- Citrix Virtual Apps and Desktops natively integrated in eLux RP 6.5 and later
- Citrix Cloud natively integrated in eLux RP 6.5 and later
- Microsoft Remote Desktop natively integrated in eLux RP 6.5 and later

## **Platform Compatibility**

- [Amazon Web Services](#)
- [Citrix Systems](#)
- [Microsoft](#)
- [Parallels](#)
- [VMware](#)

## **Amazon Web Services**

Compatible technologies:

- Amazon WorkSpaces (PCoIP)

Compatible operating systems:

- Apple macOS 10.13 and later
- IGEL OS 11.08.200 or later - 1
- Microsoft Windows 10 and later
- Microsoft Windows Server 2012 and later
- Ubuntu Desktop 18.04 LTS

### **Note**

1 Compatibility with previous IGEL OS releases is available by contacting deviceTRUST® Support.

## Citrix Systems

Compatible technologies:

- Citrix Virtual Apps and Desktops™
- Citrix Cloud™

Compatible operating systems:

- Apple iOS 11.x and later
- Apple iPadOS 11.x and later
- Apple macOS 10.13 and later
- IGEL OS 10.03.500 or later
- Microsoft Windows 10 and later
- Microsoft Windows Server 2012 and later
- Ubuntu Desktop 18.04 LTS and later
- Unicon eLux RP 6.5 and later

## Microsoft

Compatible technologies:

- Microsoft Remote Desktop Services
- Azure Virtual Desktop - 1
- Azure Active Directory - 2

Compatible operating systems:

- Apple iOS 11.x and later - 1
- Apple iPadOS 11.x and later - 1
- Apple macOS 10.13 and later (via FreeRDP 2)
- IGEL OS 11.08.200 or later - 3(via RDP Session)
- Microsoft Windows 10 and later
- Microsoft Windows Server 2012 and later
- Ubuntu Desktop 18.04 LTS and later (via FreeRDP 2)

### Note

- 1 Compatibility with Azure Virtual Desktop is available on Microsoft Windows and IGEL OS only.
- 2 compatibility with Azure Active Directory provided by deviceTRUST Agent on Microsoft Windows only.

- 4 Compatibility with previous IGEL OS releases is available by contacting deviceTRUST Support.

## Parallels

Compatible technologies:

- Parallels Remote Application Server

Compatible operating systems:

- Microsoft Windows 10 and later
- Microsoft Windows Server 2012 and later

## VMware

Compatible technologies:

- VMware Horizon View (Blast)
- VMware Horizon View (PCoIP)
- VMware Horizon View (RDP)

Compatible operating systems:

- Apple iOS 11.x and later
- Apple iPadOS 11.x and later
- Apple macOS 10.13 and later
- IGEL OS 10.08.230 or later - 1
- Microsoft Windows 10 and later
- Microsoft Windows Server 2012 and later
- Ubuntu Desktop 18.04 LTS and later

### Note

1 Compatibility with previous IGEL OS releases is available by contacting deviceTRUST Support.

## Getting Started

deviceTRUST® requires some simple but essential configuration steps to be performed to enable deviceTRUST functionality for your remoting environments or for your local devices.

## Scenario: Remote

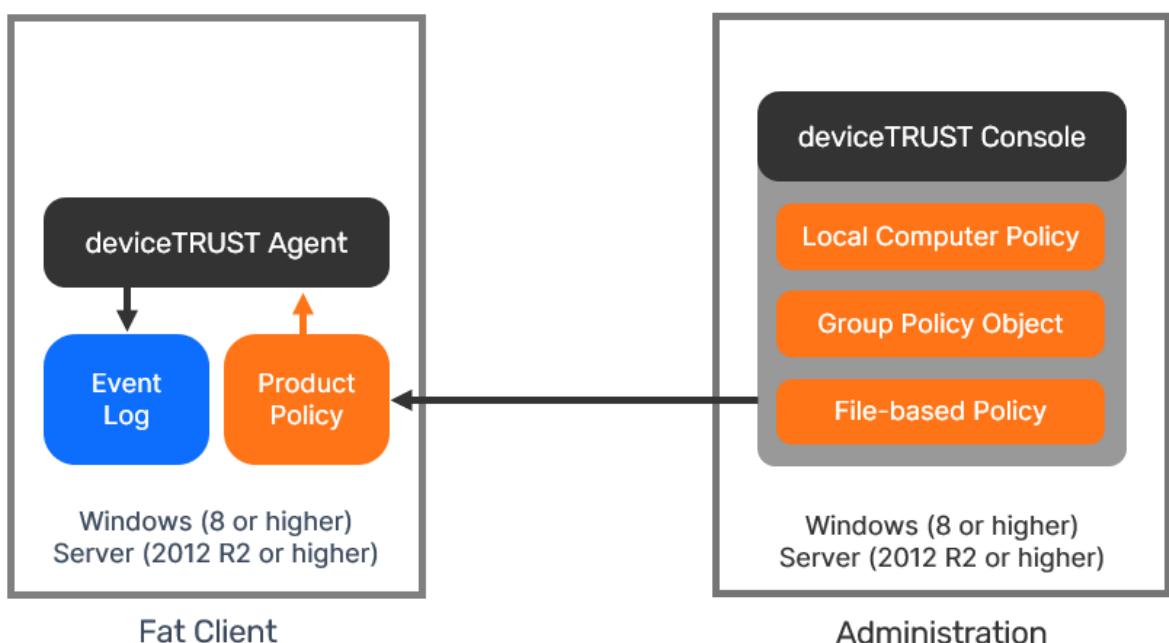
In remote scenarios, deviceTRUST transports the context information from the users remote device into the virtual session where the configuration is enforced. Please visit [Getting Started for Remote Devices](#) to begin the guide.

## Scenario: Local

In local scenarios, deviceTRUST collects context information and executes actions locally. Please visit [Getting Started for Local Devices](#) to begin the guide.

## Getting Started for Local

deviceTRUST® requires some simple but essential configuration steps to be performed to enable deviceTRUST functionality for your local devices. We will guide you step-by-step through simple deviceTRUST installation and configuration steps to enable deviceTRUST with an unauthorized USB drives use case for your local devices.



We will perform the following steps:

- [Step 1: Download the deviceTRUST setup binaries](#)
- [Step 2: Install the deviceTRUST Agent](#)
- [Step 3: Install the deviceTRUST Console](#)
- [Step 4: Enter your deviceTRUST License](#)

- [Step 5: Enable the Unauthorized USB Drive use case](#)
- [Step 6: Test the Unauthorized USB Device use case](#)

### **Step 1: Download the deviceTRUST setup binaries**

The latest deviceTRUST software can be found on our [Download](#) page and your personalized license can be found within your product license certificate.

### **Step 2: Install the deviceTRUST Agent**

Start the installation of the deviceTRUST Agent on your local device. Follow the steps in the section [Installing the Agent](#) to complete the installation.

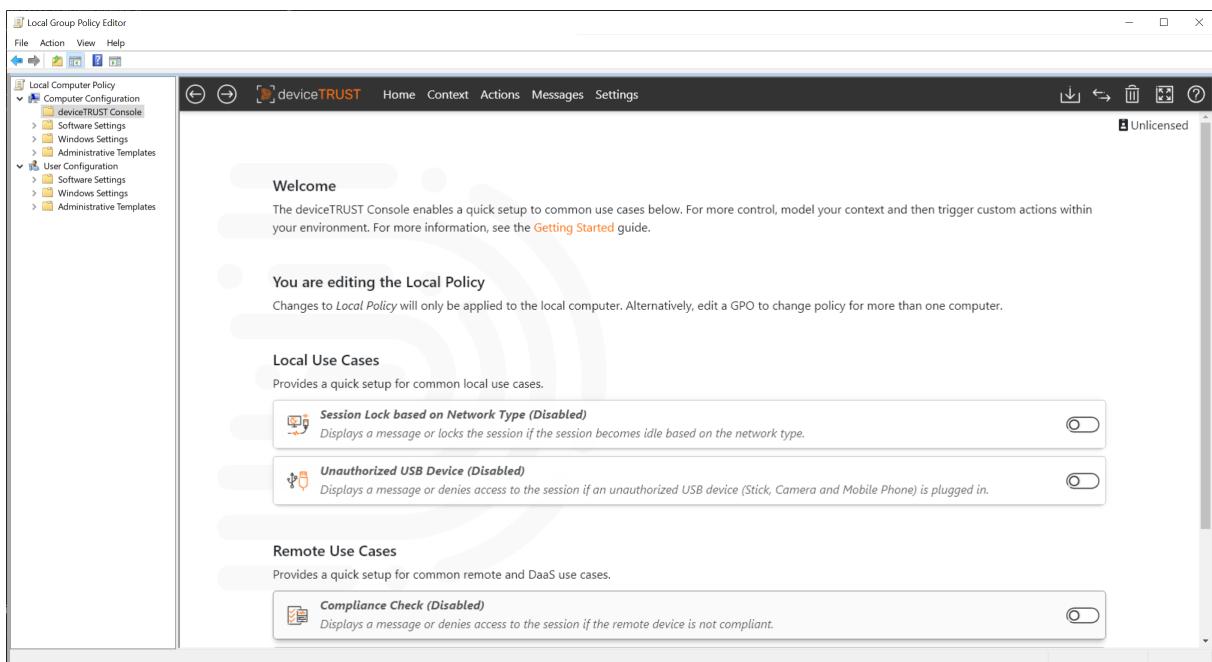
### **Step 3: Install the deviceTRUST Console**

To configure and to apply contextual security policies to the deviceTRUST Agent you need to use the deviceTRUST Console. The deviceTRUST Console supports various ways to provide the contextual security policies to the deviceTRUST Agent. Those options are using the Local Policy Editor, a Group Policy Object (GPO) or file-based.

Within the Getting Started Guide, for simplicity, we use the Local Policy Editor to quickly and efficiently create, edit, and use contextual security policies. Follow the steps in the section [Installing the Console](#) to complete the installation.

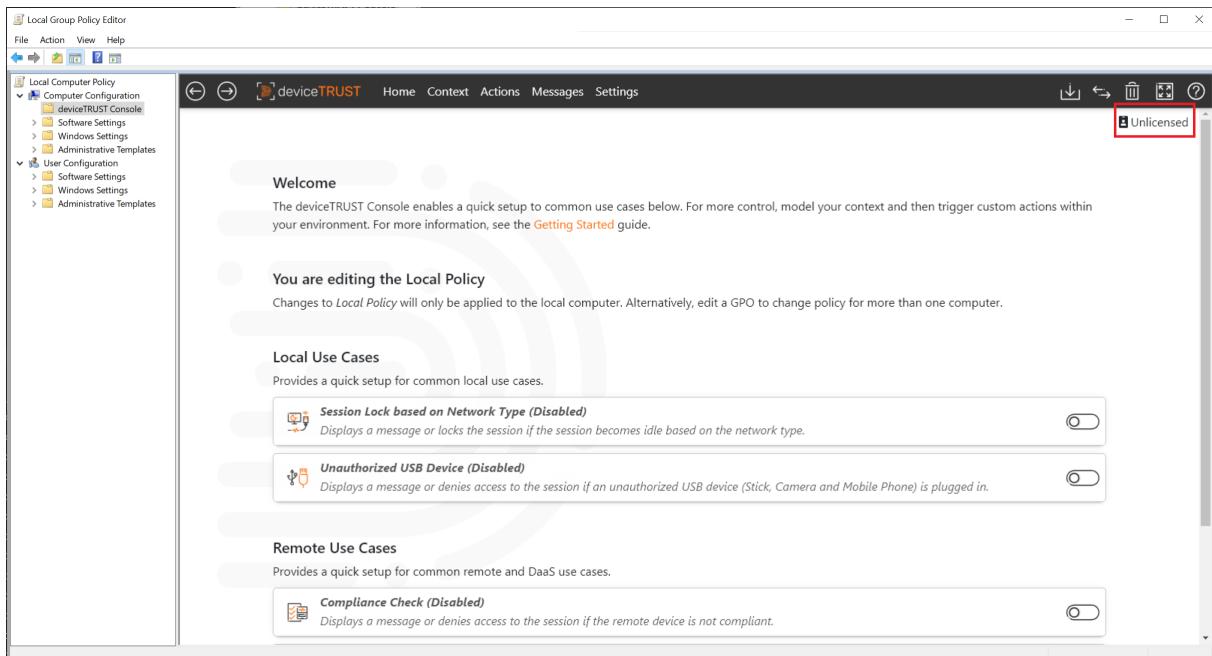
The deviceTRUST Console includes a node within the Local Policy Editor `COMPUTER CONFIGURATION \DEVICETRUST CONSOLE` which can be used to model the context of a user, and then act on changes to that context by triggering custom actions within your environment.

## deviceTRUST 21.1



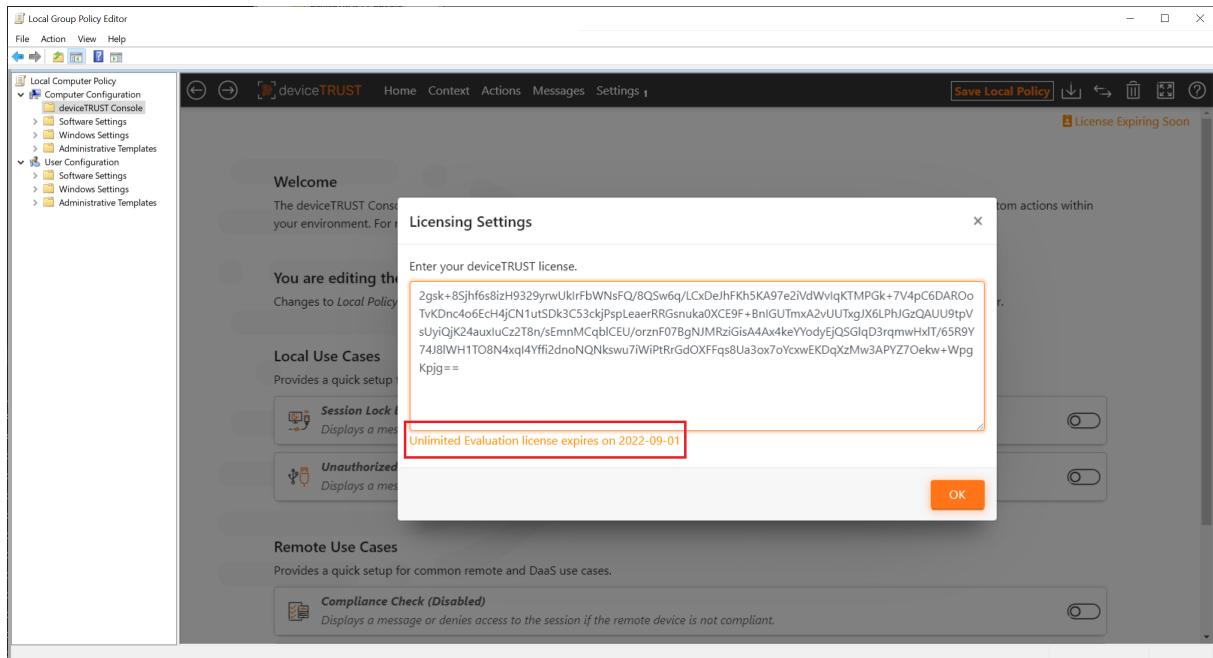
### Step 4: Enter your deviceTRUST License

To add the license into the deviceTRUST contextual security policy open the Local Policy Editor and navigate to **DEVICETRUST CONSOLE** and click on the **UNLICENSED** link on the homepage.

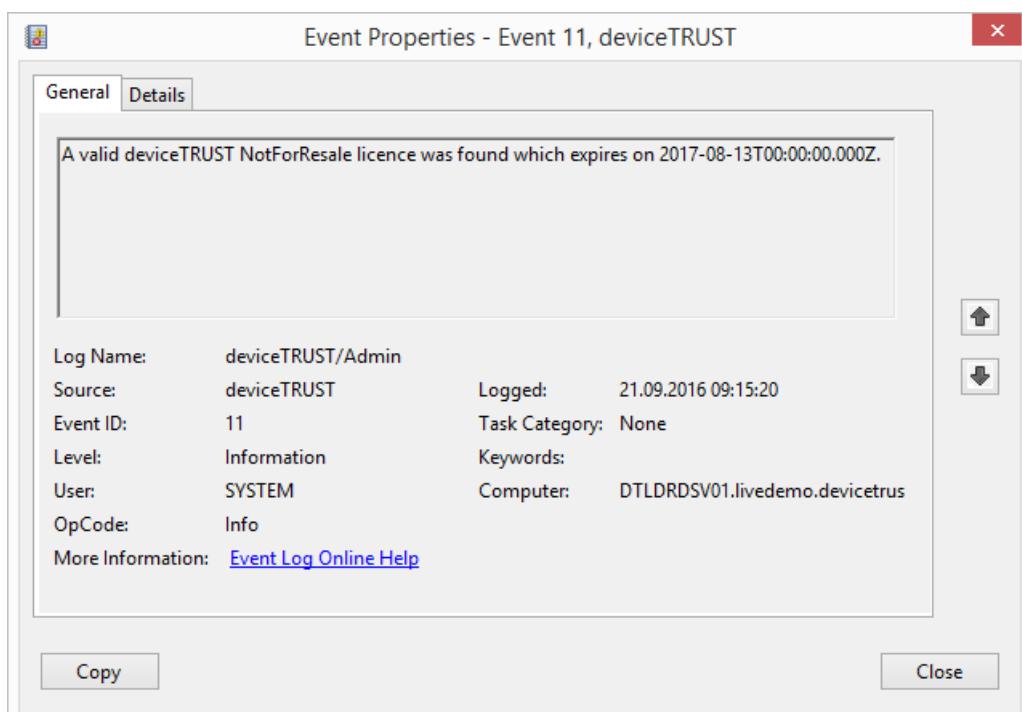


Enter your deviceTRUST license and make sure it is valid. Close the license editor with **OK** and click on **SAVE TO LOCAL COMPUTER POLICY** in the top right toolbar.

## deviceTRUST 21.1

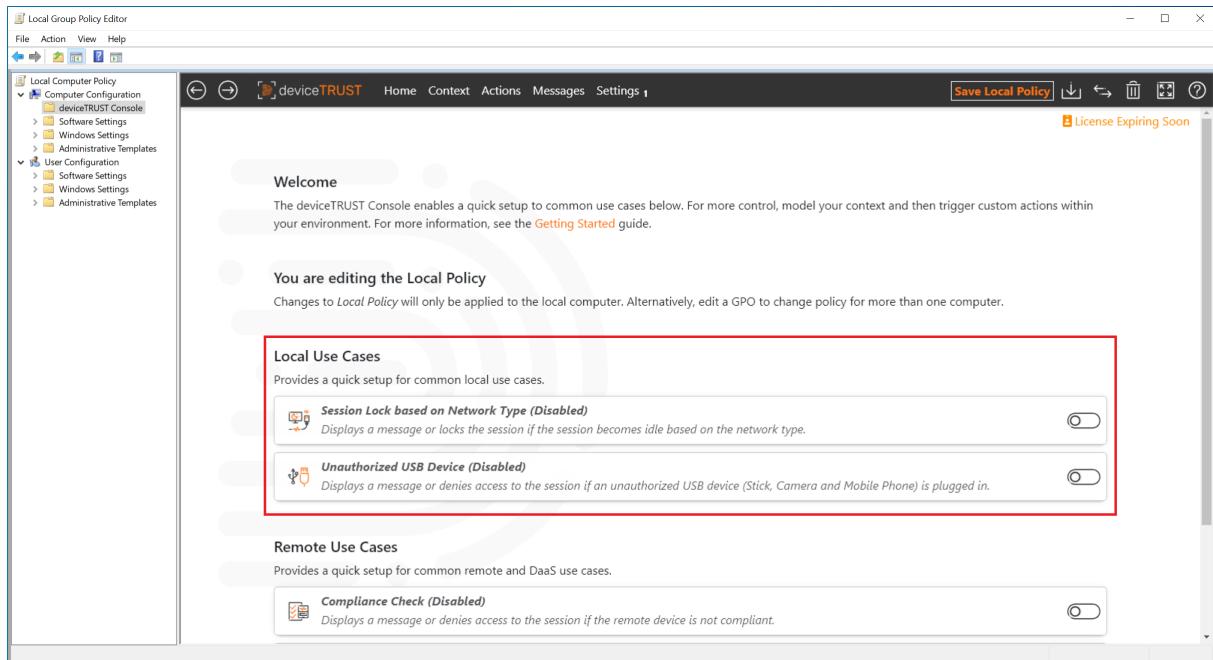


deviceTRUST is now enabled and will work for all users except local administrators connecting to that remoting or DaaS host system with deviceTRUST Agent installed. To check if you have added a valid deviceTRUST license, open the Windows Event Log and navigate to **APPLICATION AND SERVICE LOGS\DEVICETRUST\ADMIN** and check for the existence of event ID 11 which states that your deviceTRUST license is valid.

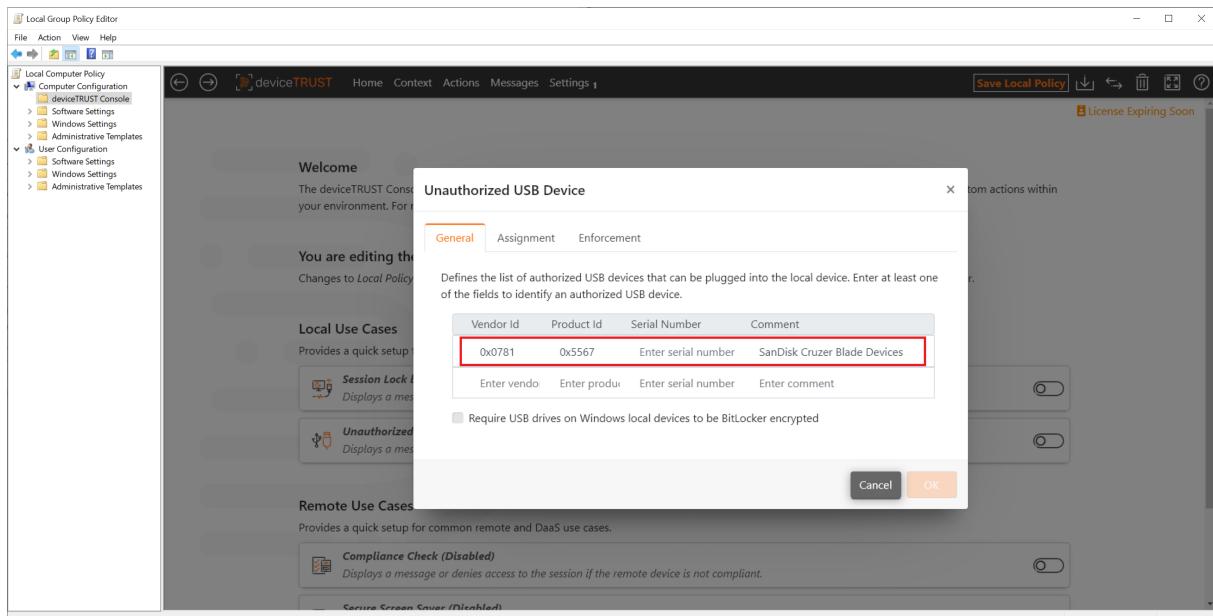


## Step 5: Enable the Unauthorized USB Drive use case

We will use the deviceTRUST Console to create a contextual security policy that makes access to the session dependent on whether the USB device being used has been authorized. The deviceTRUST Console includes a set of use cases which can be used to quickly implement a use case. Launch the deviceTRUST Console and navigate to **LOCAL USE CASES** on the homepage.



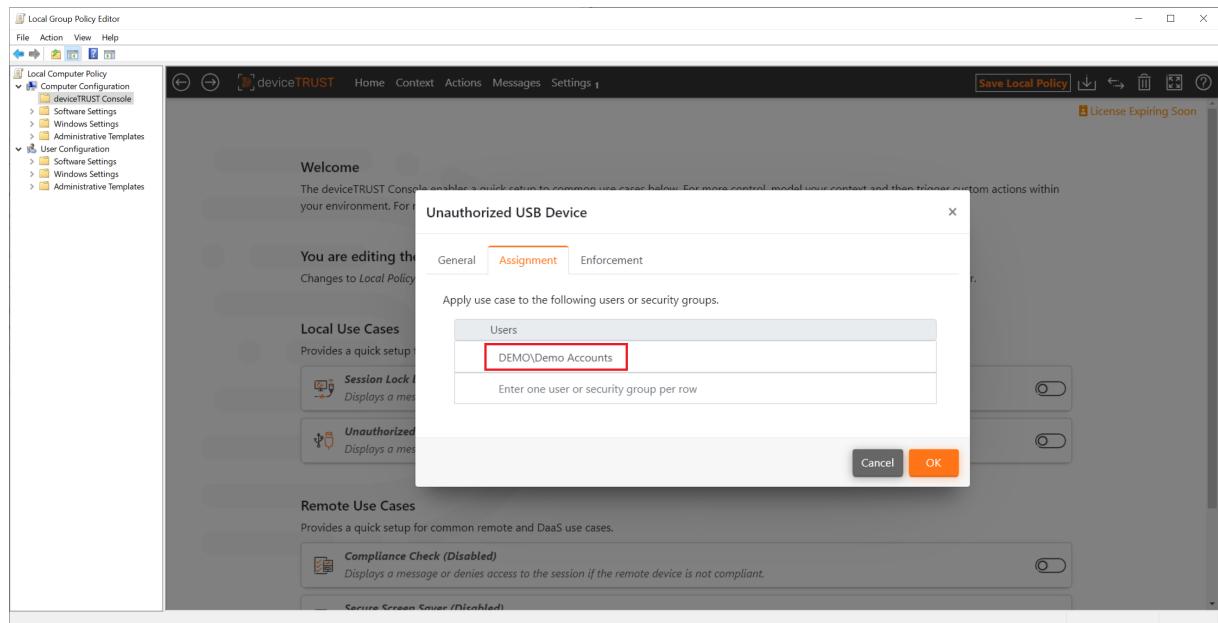
Select the **UNAUTHORIZED USB DEVICE** use case and add authorized USB devices on the **GENERAL** tab into the list of authorized USB devices.



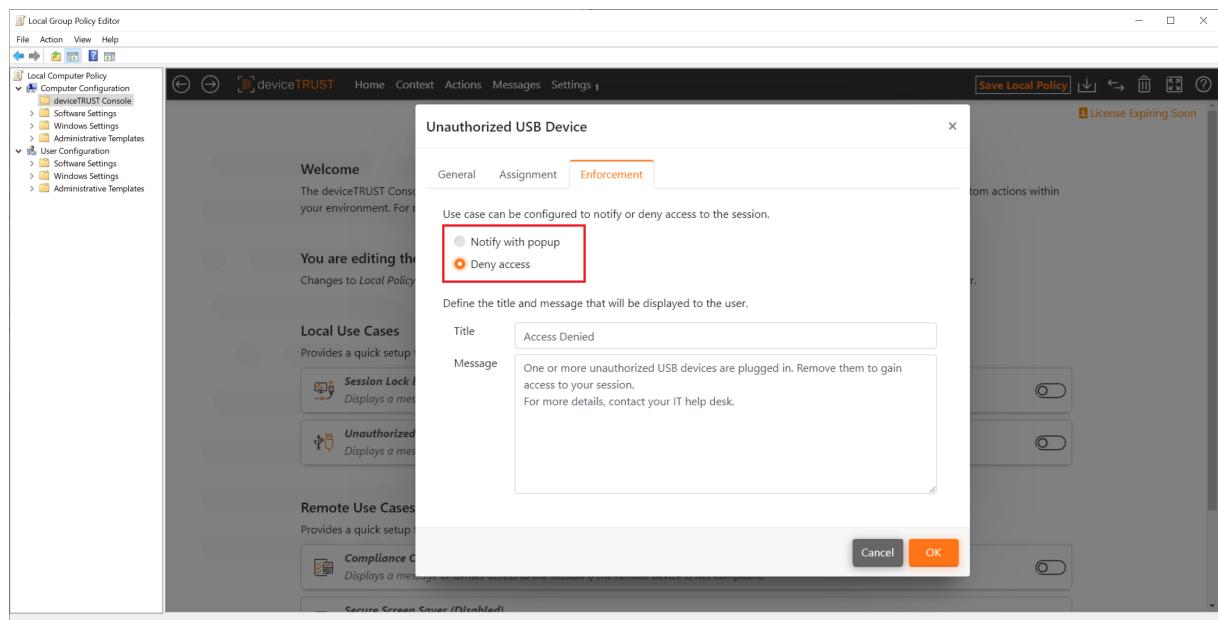
Click on the **ASSIGNMENT** configuration tab and add **USERS** and / or **SECURITY GROUPS** to apply

## deviceTRUST 21.1

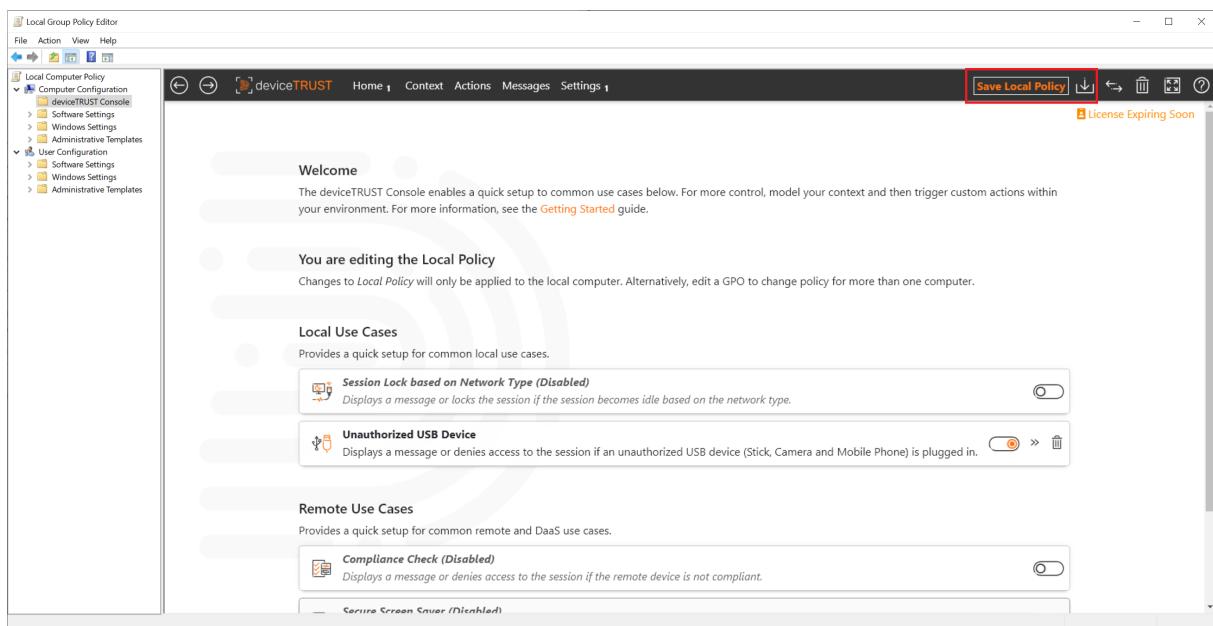
the use case for.



Click on the **ENFORCEMENT** configuration tab and select **DENY ACCESS**.

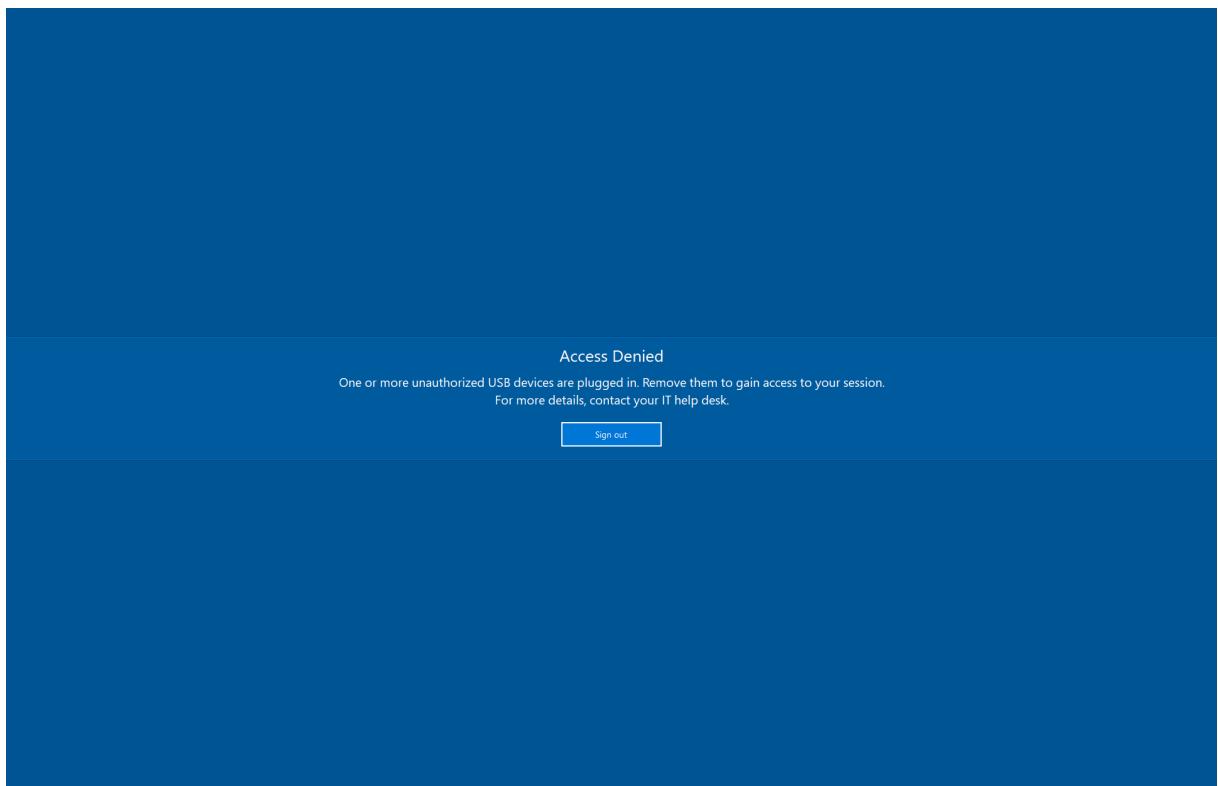


Click on **SAVE TO LOCAL COMPUTER POLICY** in the top right toolbar to save the unauthorized USB device use case to the local computer policy.



### Step 6: Test the Unauthorized USB Device use case

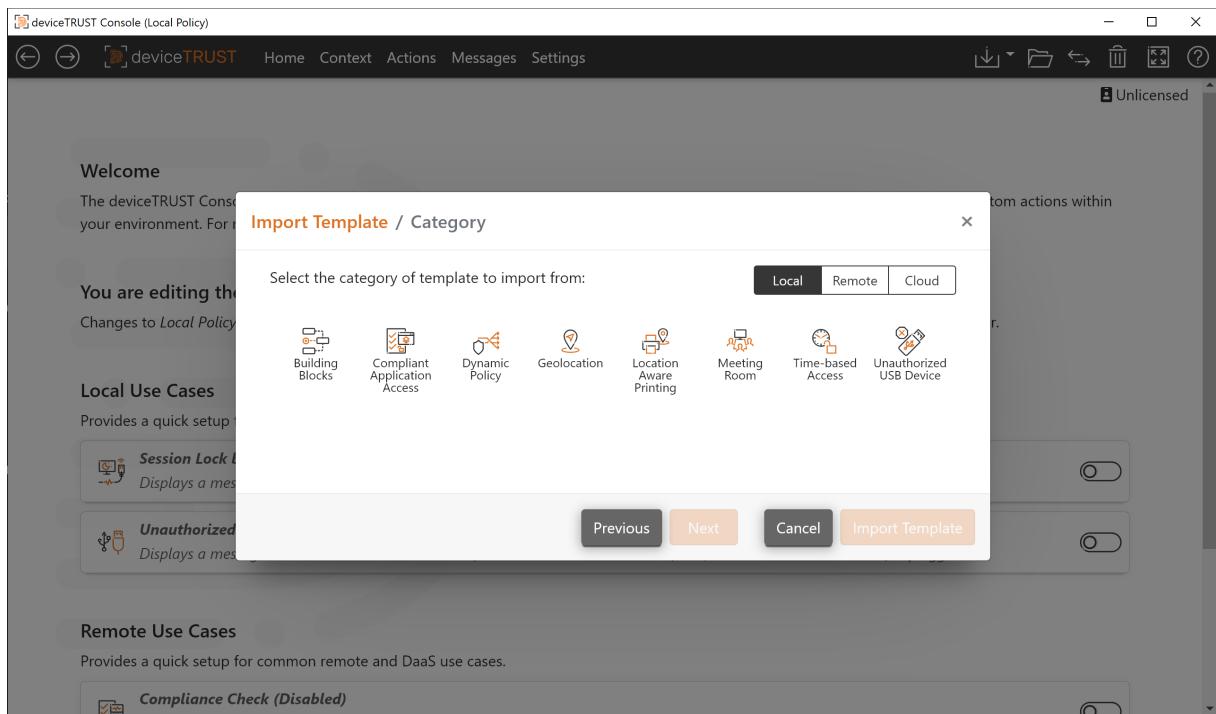
Sign in with a non-administrative user account to the local device and then plug in an authorized USB device at runtime. The authorized USB device is displayed in Windows Explorer and can be used. Now plug in an unauthorized USB device in addition or exclusively to see how deviceTRUST can easily and dynamically control access to the session depending on the USB device in use.



## Next steps

You have now successfully implemented your first use case with deviceTRUST for your local devices. Feel free to check out our additional use cases provided on the deviceTRUST Console homepage under [LOCAL USE CASES](#). In addition, the deviceTRUST Console gives you access to many more configuration [Templates](#) for a wide variety of use cases.

## deviceTRUST 21.1

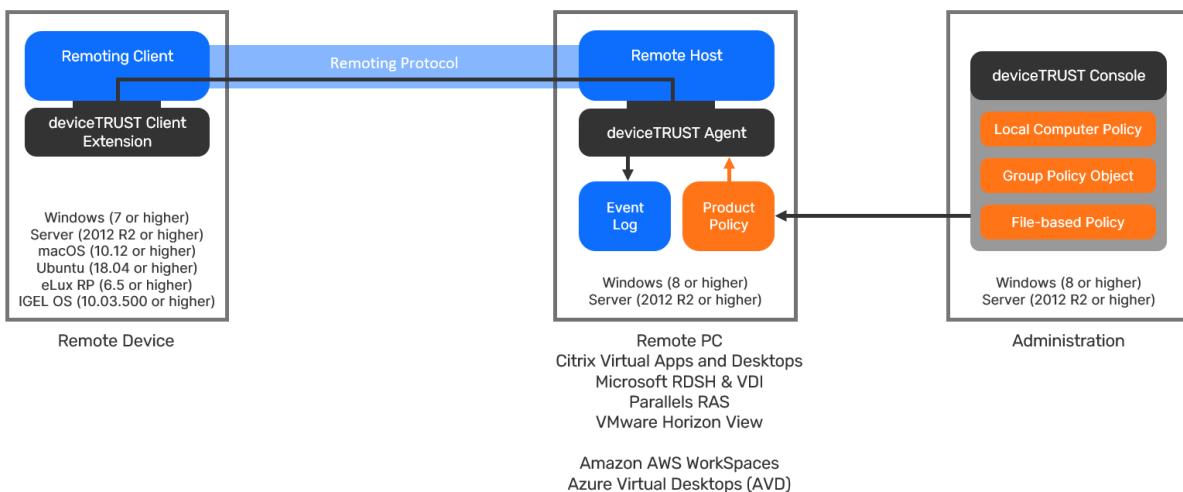


## Troubleshooting

If your deviceTRUST installation or configuration does not work as expected, you can use the [Troubleshooting](#) guide to start troubleshooting.

## Getting Started for Remote

deviceTRUST® requires some simple but essential configuration steps to be performed to enable deviceTRUST functionality for your remote environments. We will guide you step-by-step through simple deviceTRUST installation and configuration steps to enable deviceTRUST with a compliance check use case within your remote environment.



We will perform the following steps:

- [Step 1: Download the deviceTRUST setup binaries](#)
- [Step 2: Install the deviceTRUST Agent](#)
- [Step 3: Install the deviceTRUST Console](#)
- [Step 4: Enter your deviceTRUST License](#)
- [Step 5: Install the deviceTRUST Client Extension on a Microsoft Windows device](#)
- [Step 6: Enable the Compliance Check use case](#)
- [Step 7: Check that access is denied when the deviceTRUST Client Extension is not installed](#)
- [Step 8: Test the Compliance Check use case from a Microsoft Windows device](#)

### Step 1: Download the deviceTRUST setup binaries

The latest deviceTRUST software can be found on our [Download](#) page and your personalized license can be found within your product license certificate.

### Step 2: Install the deviceTRUST Agent

Start the installation of the deviceTRUST Agent on your remoting or DaaS host system, which can be Amazon WorkSpaces, Citrix Virtual Apps and Desktops (CVAD), Microsoft Azure Virtual Desktop (AVD), Microsoft Remote Desktop Session Host (RDSH) or VMware Horizon View. Follow the steps in the section [Installing the Agent](#) to complete the installation.

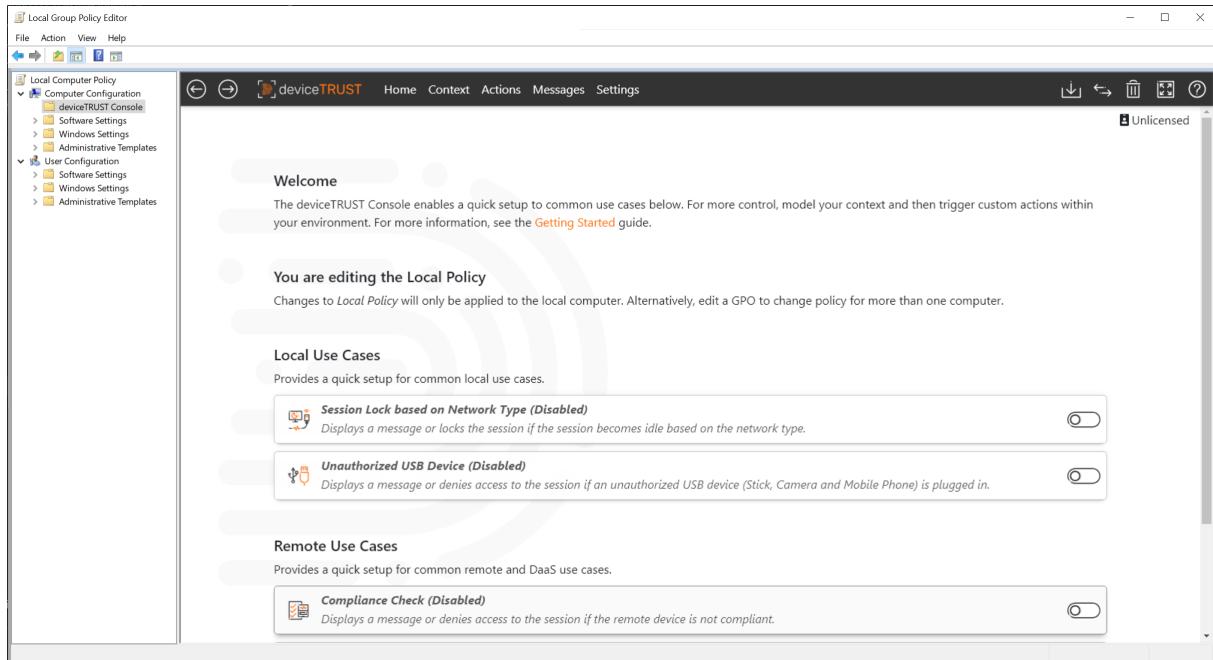
### Step 3: Install the deviceTRUST Console

To configure and to apply contextual security policies to the deviceTRUST Agent you need to use the deviceTRUST Console. The deviceTRUST Console supports various ways to provide the contextual

security policies to the deviceTRUST Agent. Those options are using the Local Policy Editor, a Group Policy Object (GPO) or file-based.

Within the Getting Started Guide, for simplicity, we use the Local Policy Editor to quickly and efficiently create, edit, and use contextual security policies. Follow the steps in the section [Installing the Console](#) to complete the installation.

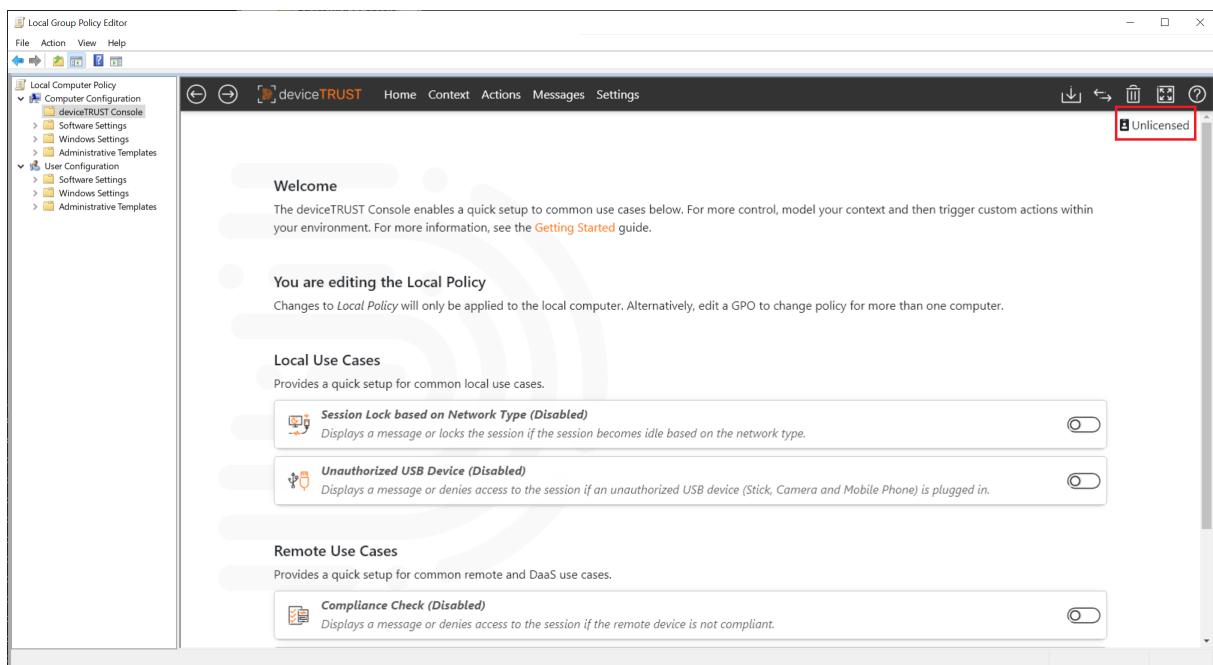
The deviceTRUST Console includes a node within the Local Policy Editor **COMPUTER CONFIGURATION \DEVICETRUST CONSOLE** which can be used to model the context of a user, and then act on changes to that context by triggering custom actions within your environment.



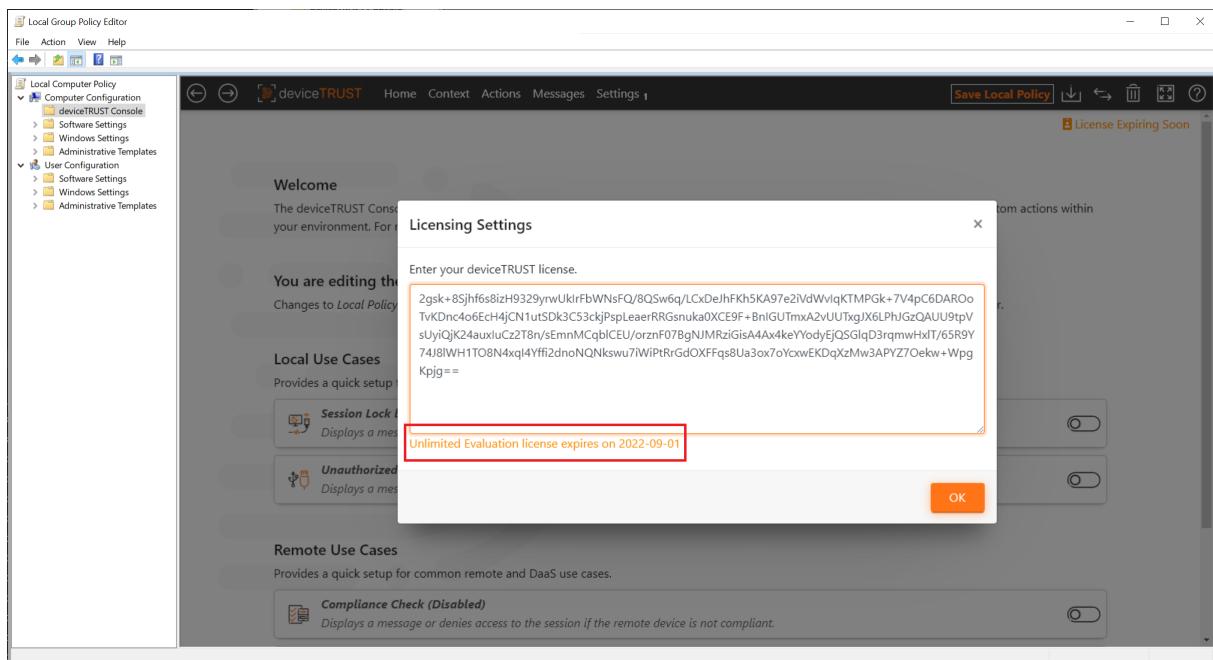
### Step 4: Enter your deviceTRUST License

To add the license into the deviceTRUST contextual security policy open the Local Policy Editor and navigate to **DEVICETRUST CONSOLE** and click on the **UNLICENSED** link on the homepage.

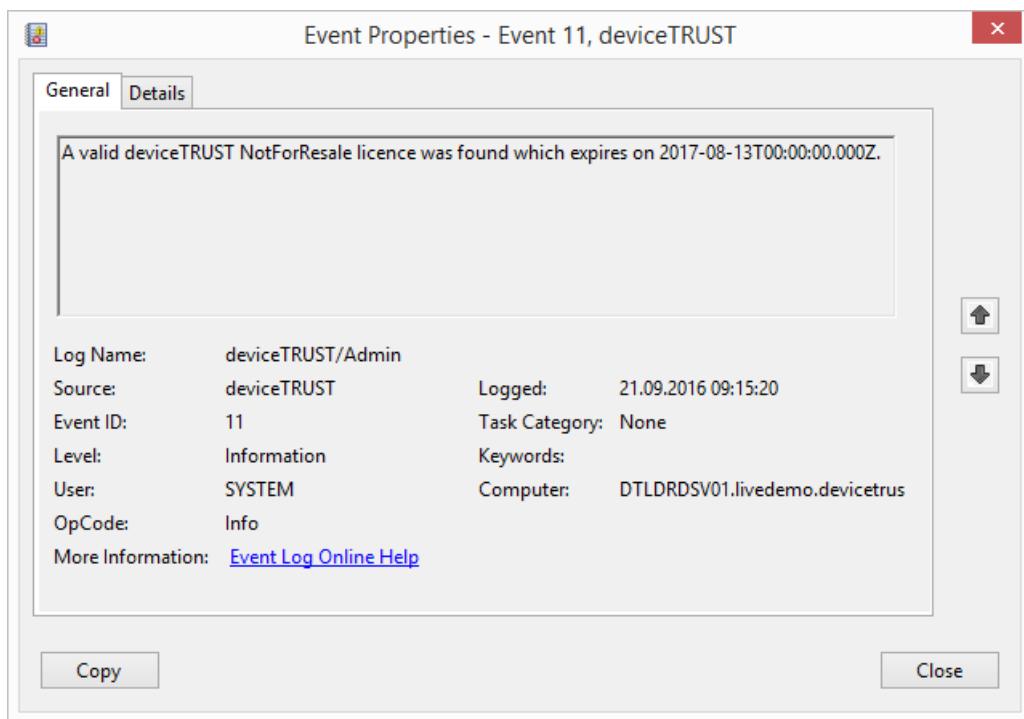
## deviceTRUST 21.1



Enter your deviceTRUST license and make sure it is valid. Close the license editor with **OK** and click on **SAVE TO LOCAL COMPUTER POLICY** in the top right toolbar.



deviceTRUST is now enabled and will work for all users except local administrators connecting to that remoting or DaaS host system with deviceTRUST Agent installed. To check if you have added a valid deviceTRUST license, open the Windows Event Log and navigate to **APPLICATION AND SERVICE LOGS\DEVICETRUST\ADMIN** and check for the existence of event ID 11 which states that your deviceTRUST license is valid.



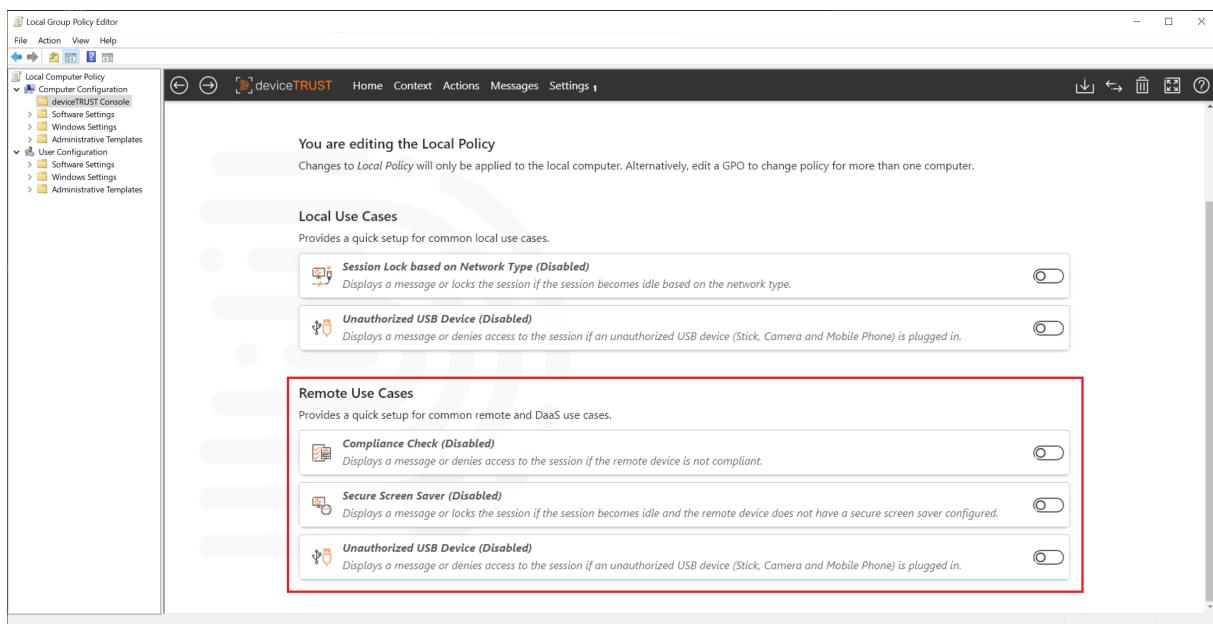
## Step 5: Install the deviceTRUST Client Extension on a Microsoft Windows device

Within the Getting Started Guide, for simplicity, we will only install the deviceTRUST Client Extension on a Microsoft Windows device. Other device operating systems are also supported and an overview of how to install the deviceTRUST Client Extension on the particular operating system can be found on the [Installation Client Extension](#) page. Now follow the steps in the section [Installing the Client Extension on Microsoft Windows device](#) to complete the installation.

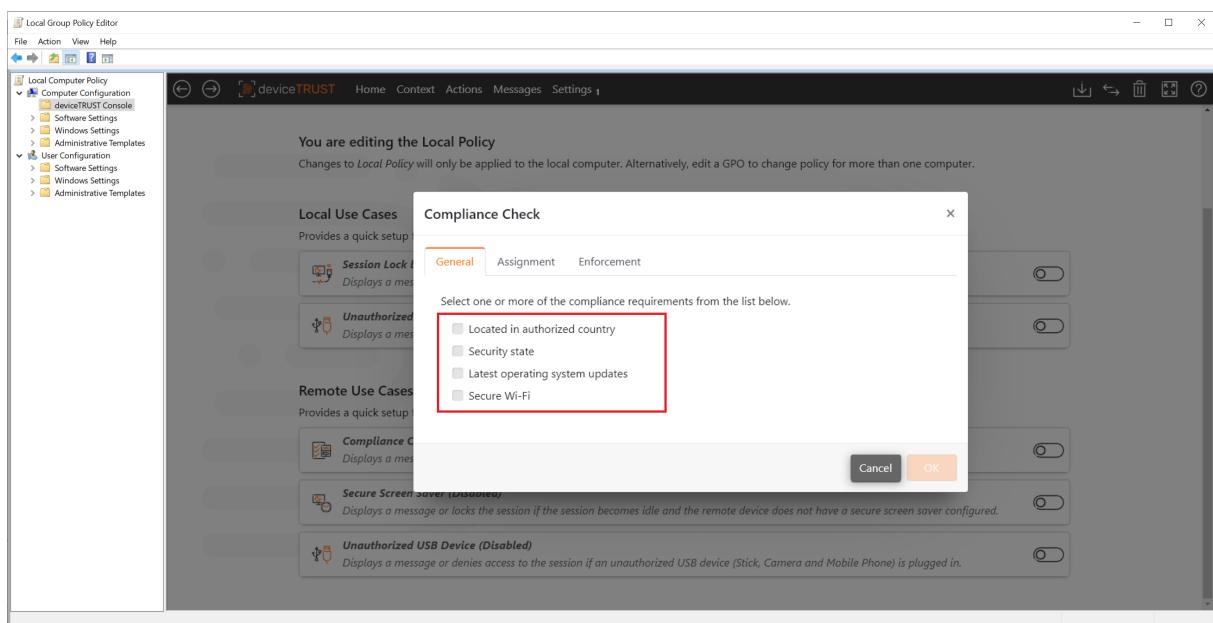
## Step 6: Enable the Compliance Check use case

We will use the deviceTRUST Console to create a contextual security policy which controls access to the session depending upon the compliance state of the remote device. The deviceTRUST Console includes a set of use cases which can be used to quickly implement a use case. Launch the deviceTRUST Console and navigate to [REMOTE USE CASES](#) on the homepage.

## deviceTRUST 21.1

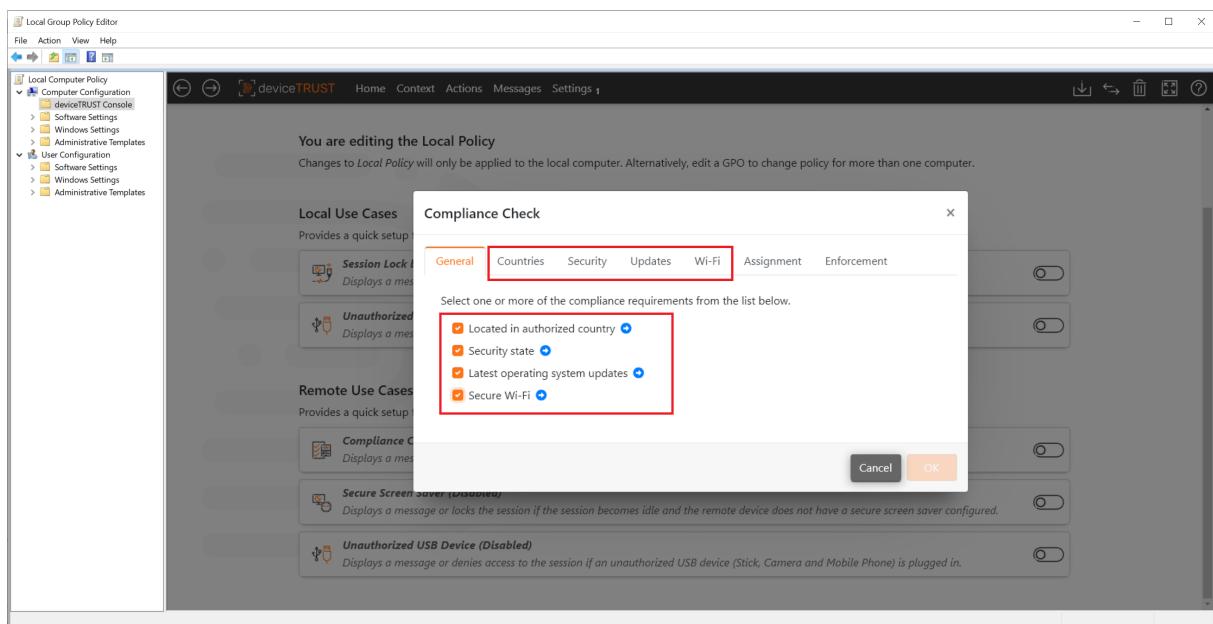


Select the **COMPLIANCE CHECK** use case, select on the **GENERAL** tab all options to be included in the compliance check.

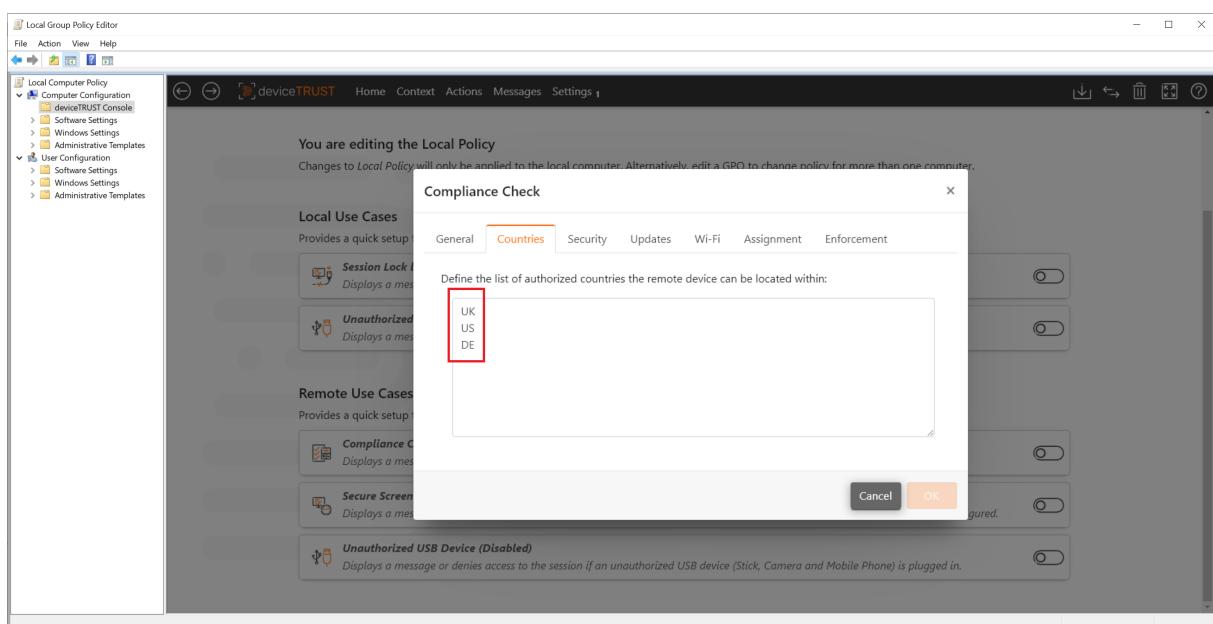


New configuration tabs will become visible.

## deviceTRUST 21.1

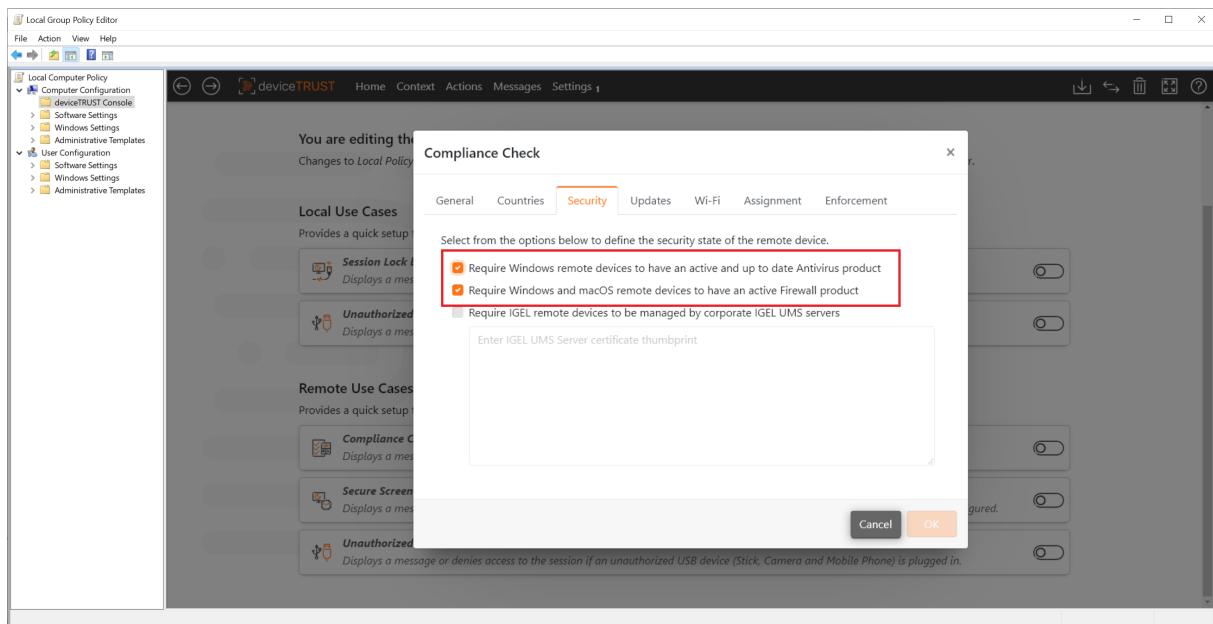


Click on the **COUNTRY** configuration tab and add all authorized countries using **ISO 3166-1 Alpha-2 code**.

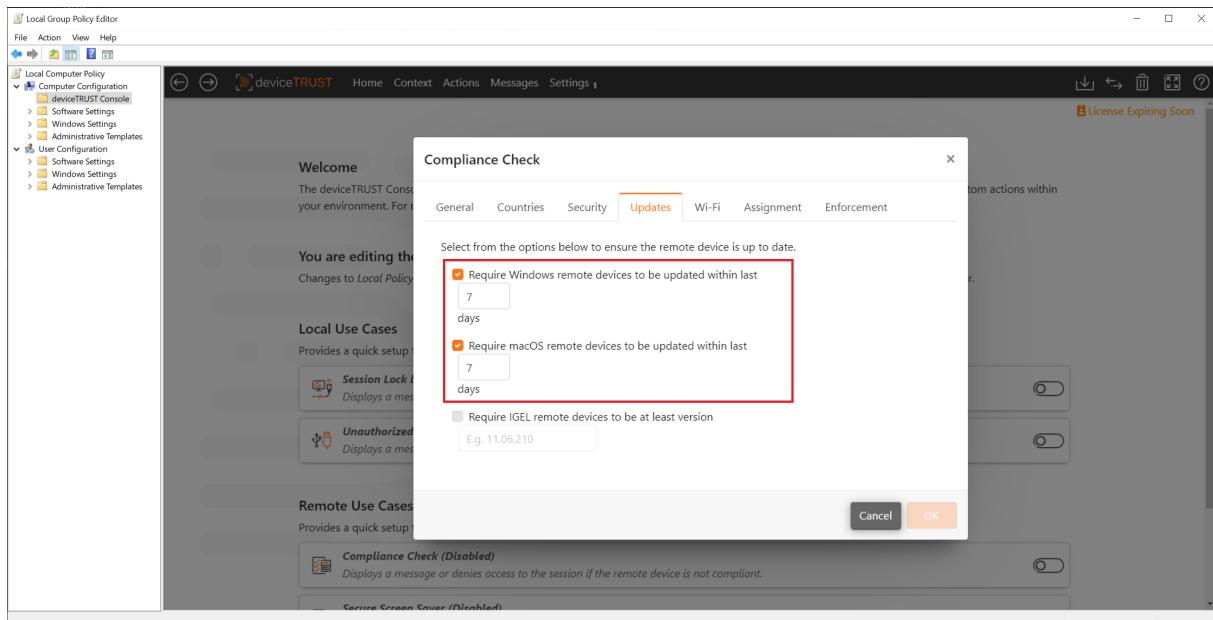


Click on the **SECURITY** configuration tab and enable the **REQUIRE WINDOWS REMOTE DEVICES TO HAVE AN ACTIVE AND UP TO DATE ANTIVIRUS PRODUCT** and **REQUIRE WINDOWS AND MACOS REMOTE DEVICES TO HAVE AN ACTIVE FIREWALL PRODUCT** options.

## deviceTRUST 21.1

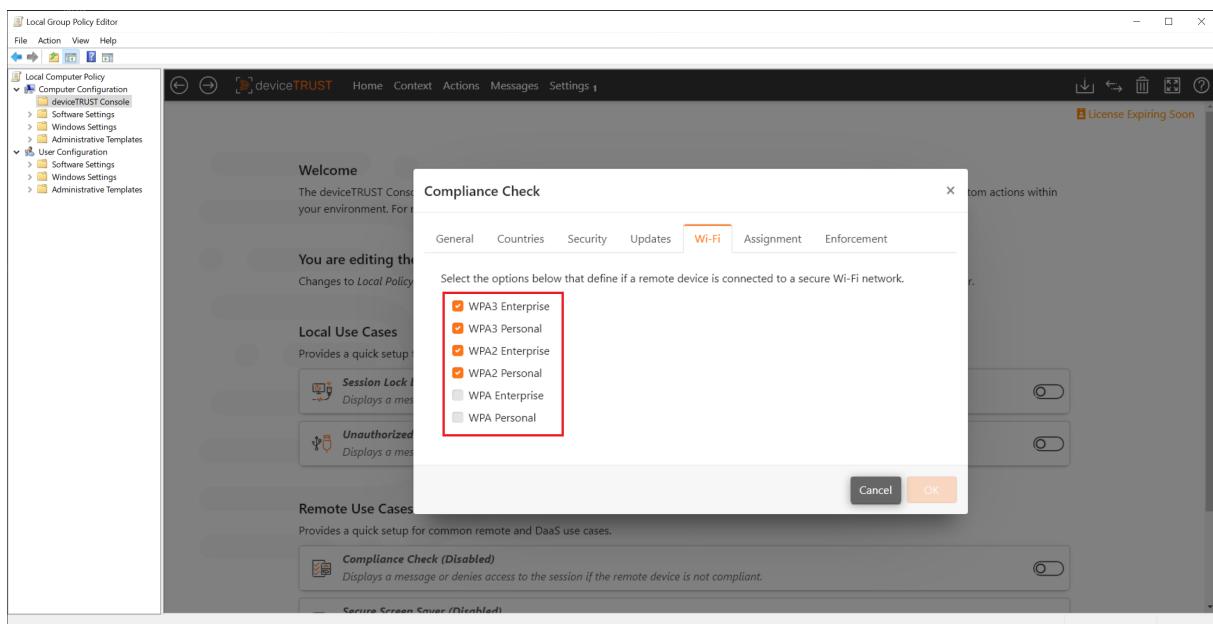


Click on the **UPDATES** configuration tab and enable the **REQUIRE WINDOWS REMOTE DEVICES TO BE UPDATED WITHIN THE LAST 7 DAYS** and **REQUIRE MACOS REMOTE DEVICES TO BE UPDATED WITHIN THE LAST 7 DAYS** options.

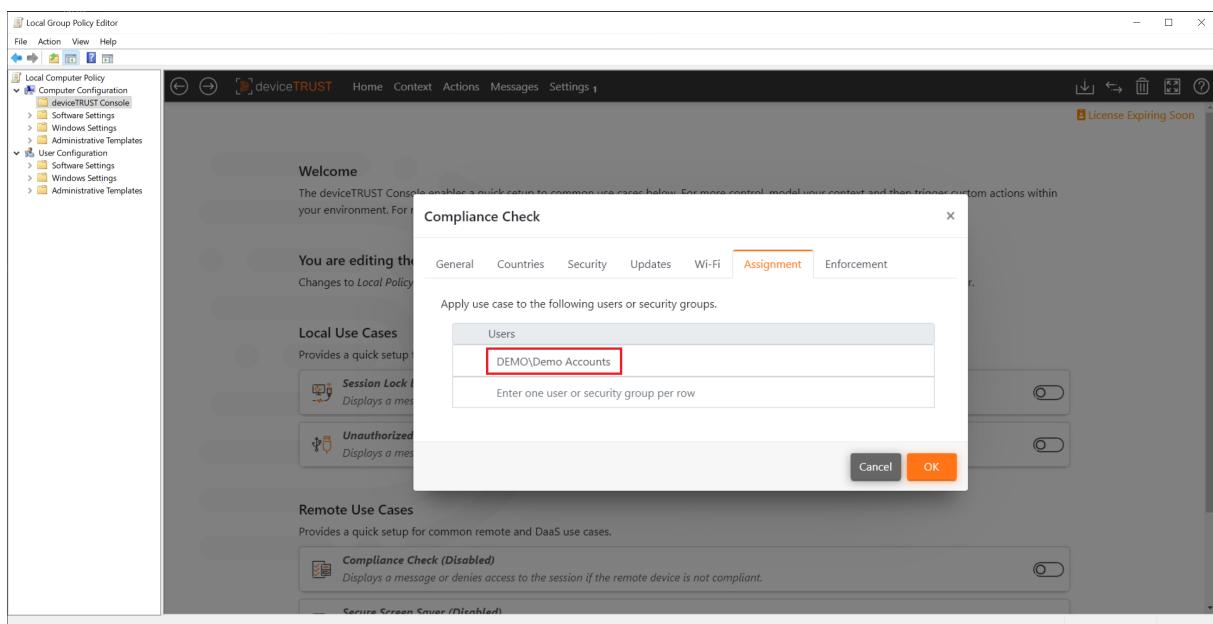


Click on the **WI-FI** configuration tab and enable the **WPA3 ENTERPRISE**, **WPA3 PERSONAL**, **WPA2 ENTERPRISE** and **WPA2 PERSONAL** options.

## deviceTRUST 21.1

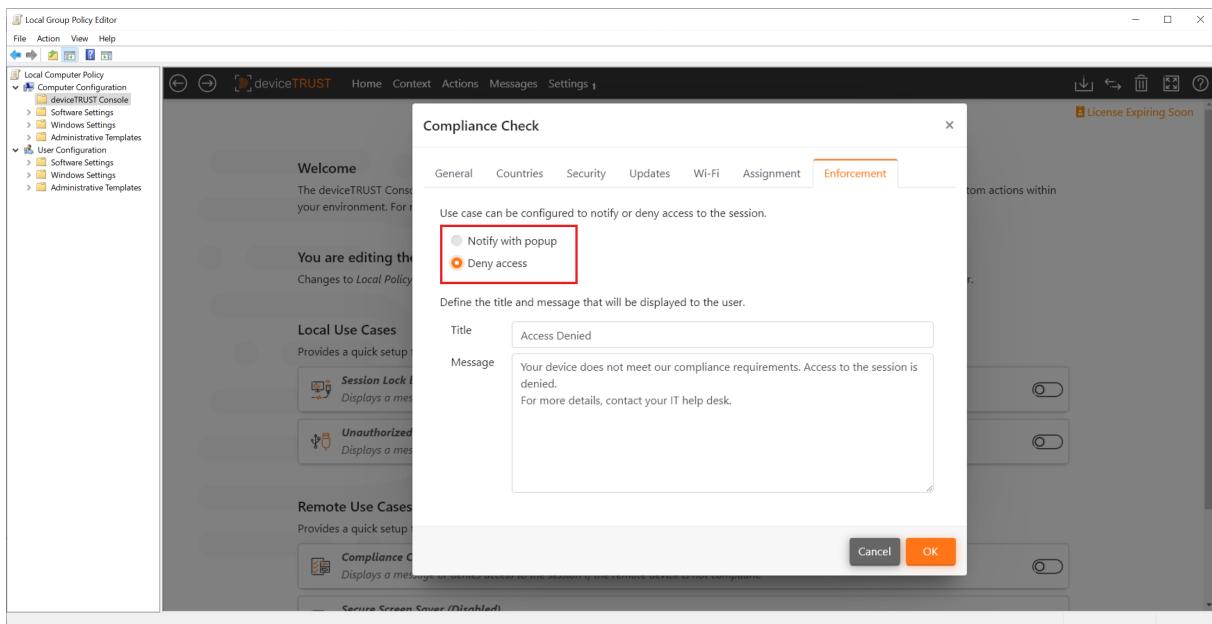


Click on the **ASSIGNMENT** configuration tab and add **USERS** and / or **SECURITY GROUPS** to apply the use case for.

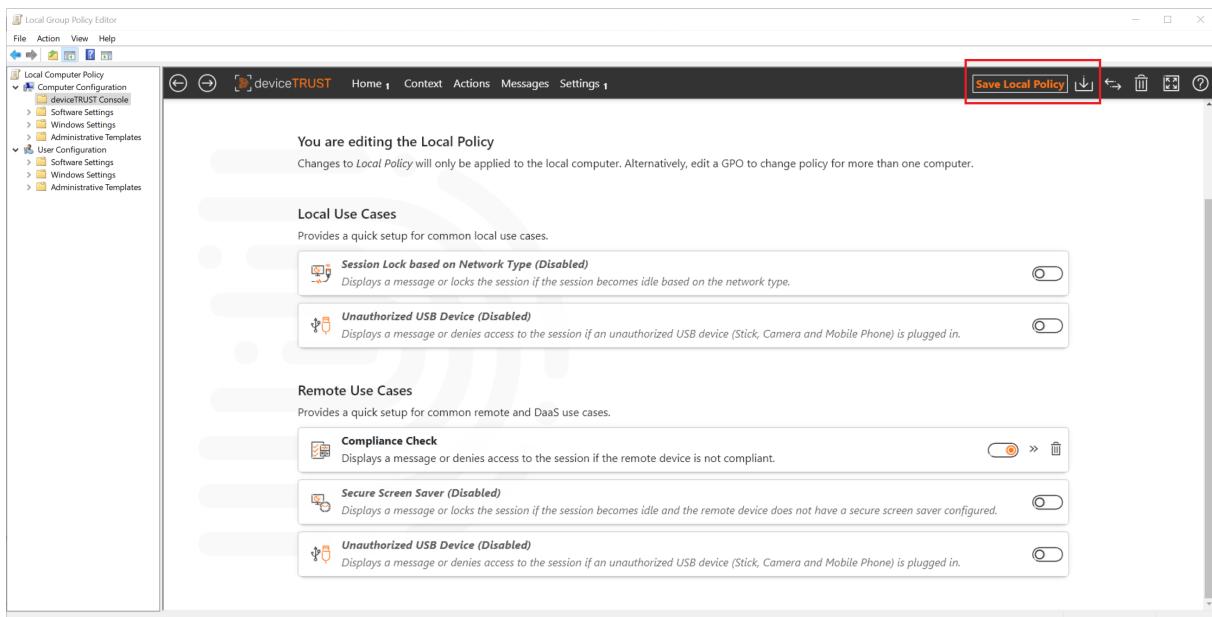


Click on the **ENFORCEMENT** configuration tab and select **DENY ACCESS**.

## deviceTRUST 21.1

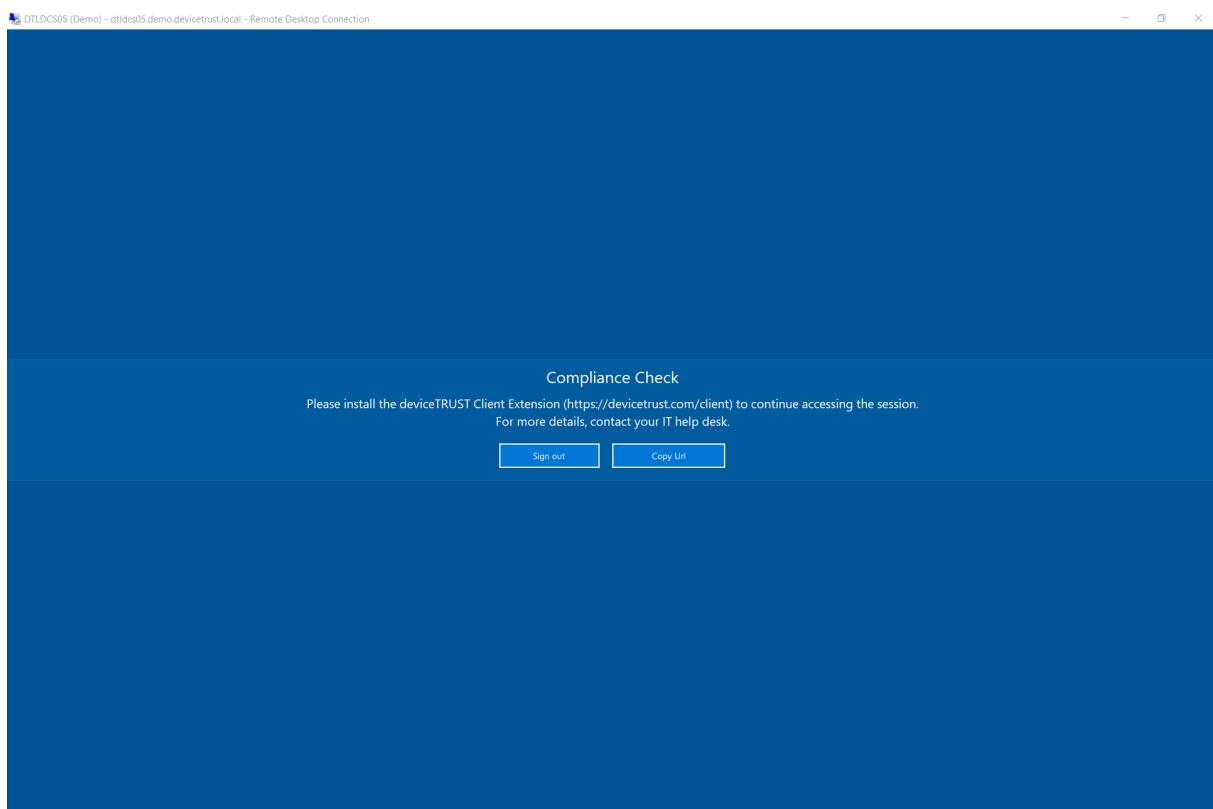


Click on **SAVE TO LOCAL COMPUTER POLICY** in the top right toolbar to save the compliance check use case to the local computer policy.



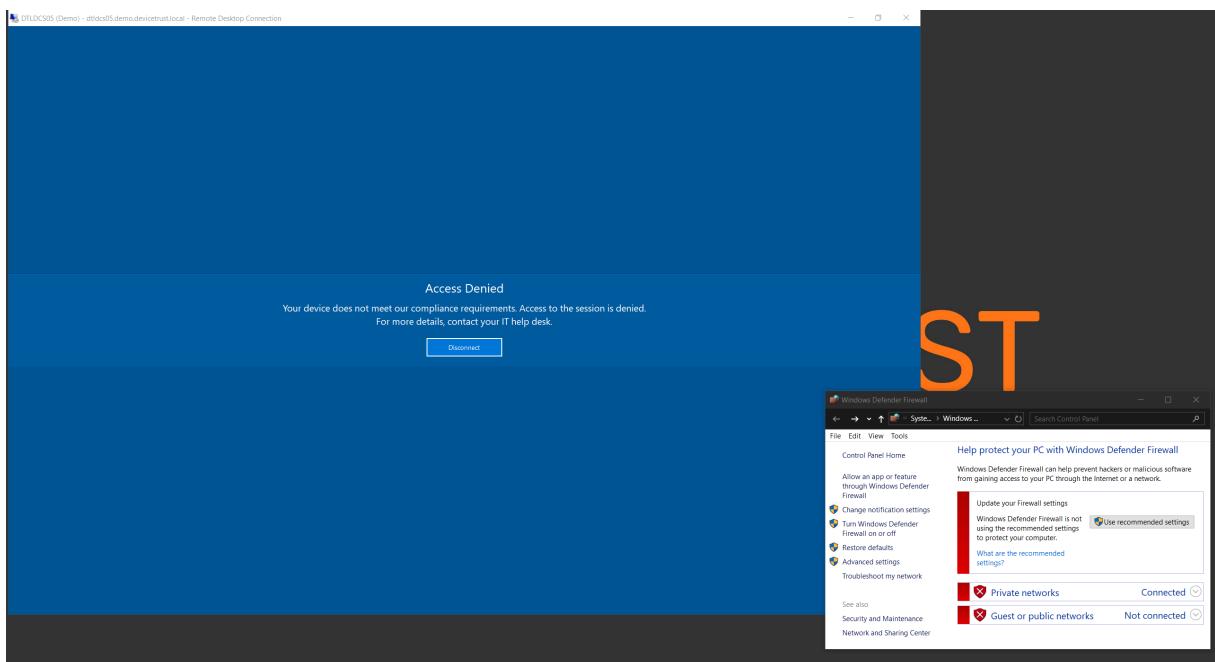
### Step 7: Check that access is denied when the deviceTRUST Client Extension is not installed

From a device without the deviceTRUST Client Extension installed, connect to your remoting or DaaS host system. Because the remote device does not have an active deviceTRUST Client Extension, the access will be denied with the following message:



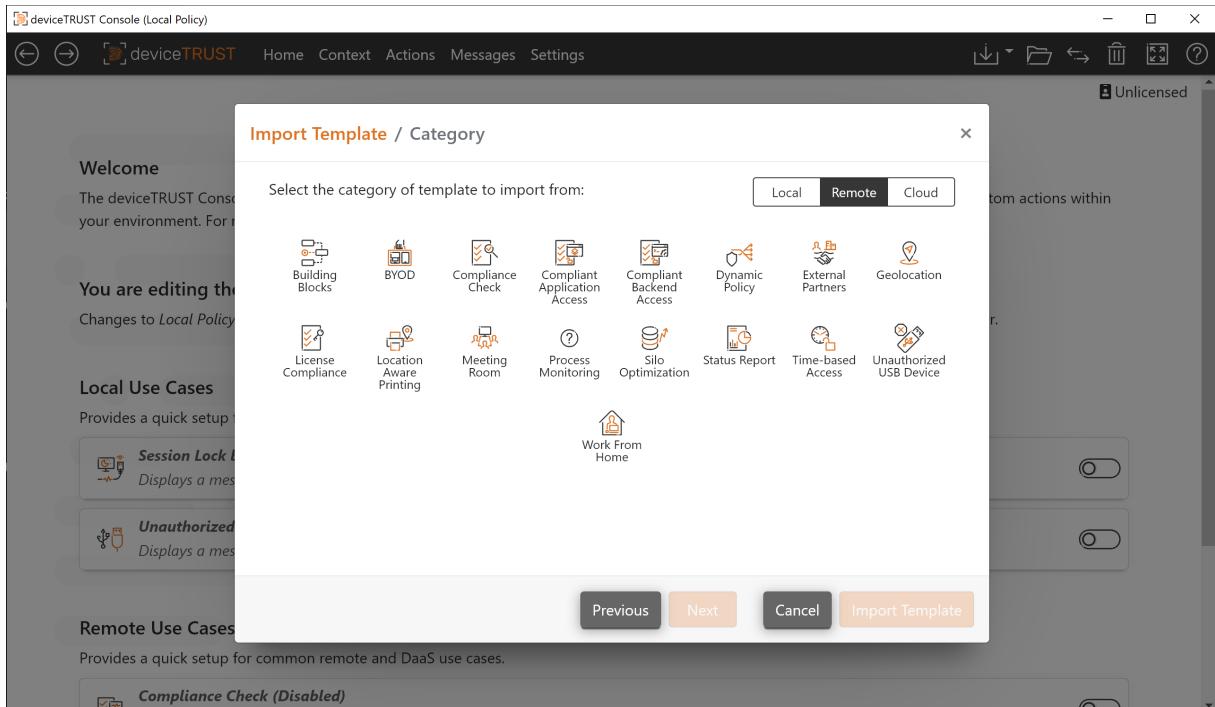
### Step 8: Test the Compliance Check use case from a Microsoft Windows device

From a Microsoft Windows device with the deviceTRUST Client Extension installed, connect to your remoting or DaaS host system. Toggle the state of the Windows Defender Firewall to see how deviceTRUST can simply and dynamically control access to the session depending on the firewall state of the remote device.



## Next steps

You have now successfully implemented your first use case with deviceTRUST for your remoting and DaaS environment. Feel free to check out our additional use cases provided on the deviceTRUST Console homepage under [REMOTE USE CASES](#). In addition, the deviceTRUST Console gives you access to many more configuration [Templates](#) for a wide variety of use cases.



## Troubleshooting

If your deviceTRUST installation or configuration does not work as expected, you can use the [Troubleshooting](#) guide to start troubleshooting.

## Download deviceTRUST® Client Extensions

The latest client extensions for Windows, macOS and Ubuntu can be download by end users from the [deviceTRUST Client Extension Download](#) page.

### Download deviceTRUST 21.1

The latest deviceTRUST 21.1 binaries can be downloaded from the link below:

---

Version	21.1.310
Release Date	18th October 2022
Link	<a href="https://storage.devicetrust.com/download/deviceTRUST-21.1.310.zip">https://storage.devicetrust.com/download/deviceTRUST-21.1.310.zip</a>
SHA256 Hash	5F7352EE9038C544AC7F5B04000A3DE7569ABB070FAA8F774B

---

### Download previous releases

Previous releases can be downloaded [download](#).

## Software components

After downloading the deviceTRUST software, you will find the following components within the compressed ZIP file:

---

Component	Description
DTAGENT-X64-RELEASE-x.x.x.x.MSI	The deviceTRUST 64-bit Agent installer.
DTAGENT-X86-RELEASE-x.x.x.x.MSI	The deviceTRUST 32-bit Agent installer.
DTCLIENT-EXTENSION-RELEASE-x.x.x.x.EXE	The deviceTRUST 32-bit and 64-bit Client Extension installer.
DTCONSOLE-X64-RELEASE-x.x.x.x.MSI	The deviceTRUST 64-bit Console installer.

---

Component	Description
DTCONSOLE-X86-RELEASE-x.x.x.x.MSI	The deviceTRUST 32-bit Console installer.
DTPOLICYDEFINITIONS-x.x.x.x.ZIP	The deviceTRUST ADMX policy definitions for configuring legacy options in the software from Microsoft Active Directory Group Policy (GPO).

**Note**

1 deviceTRUST Agent, Console and Client Extension components require administrative privileges **for** the installation.

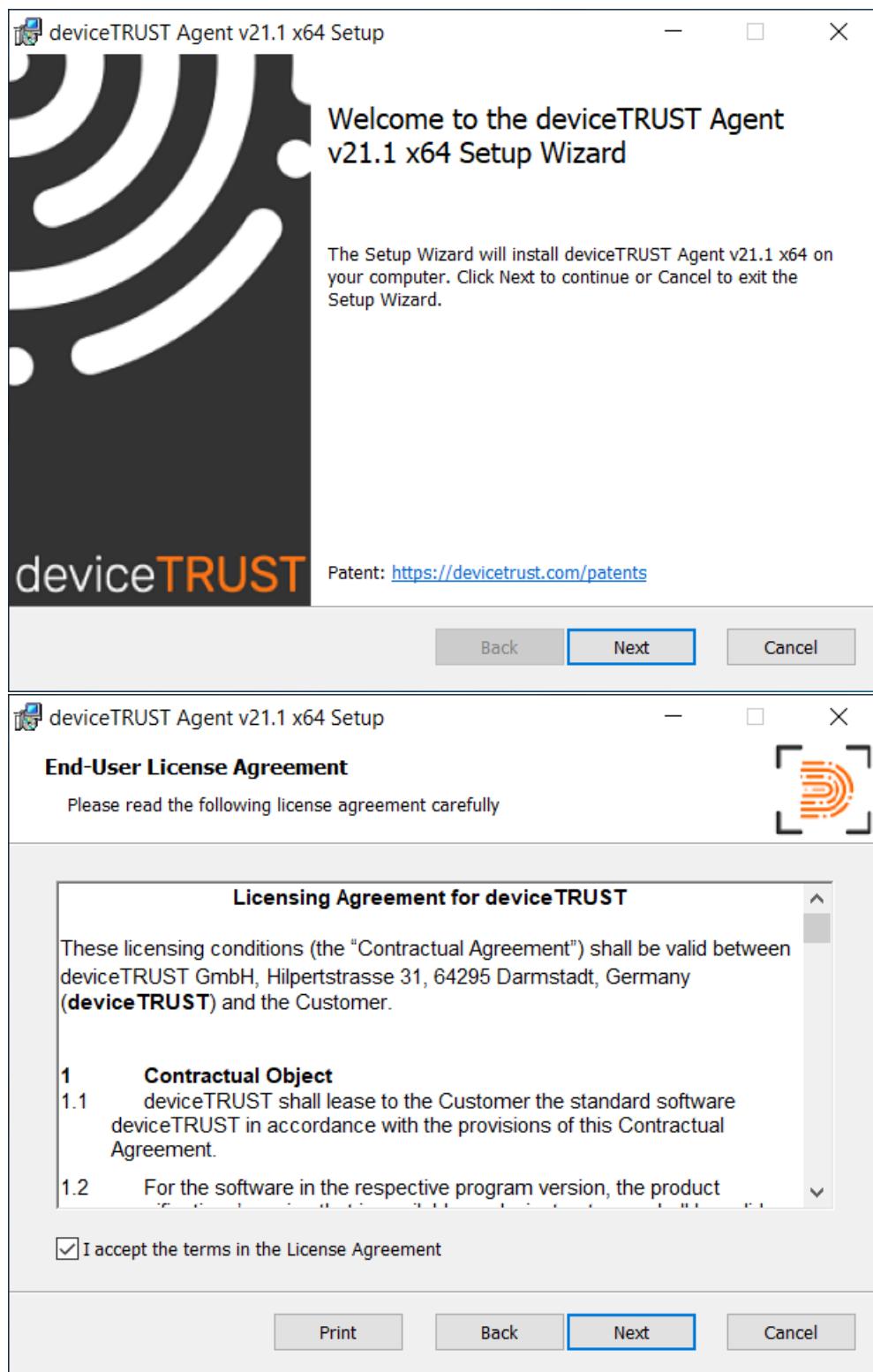
## Installation

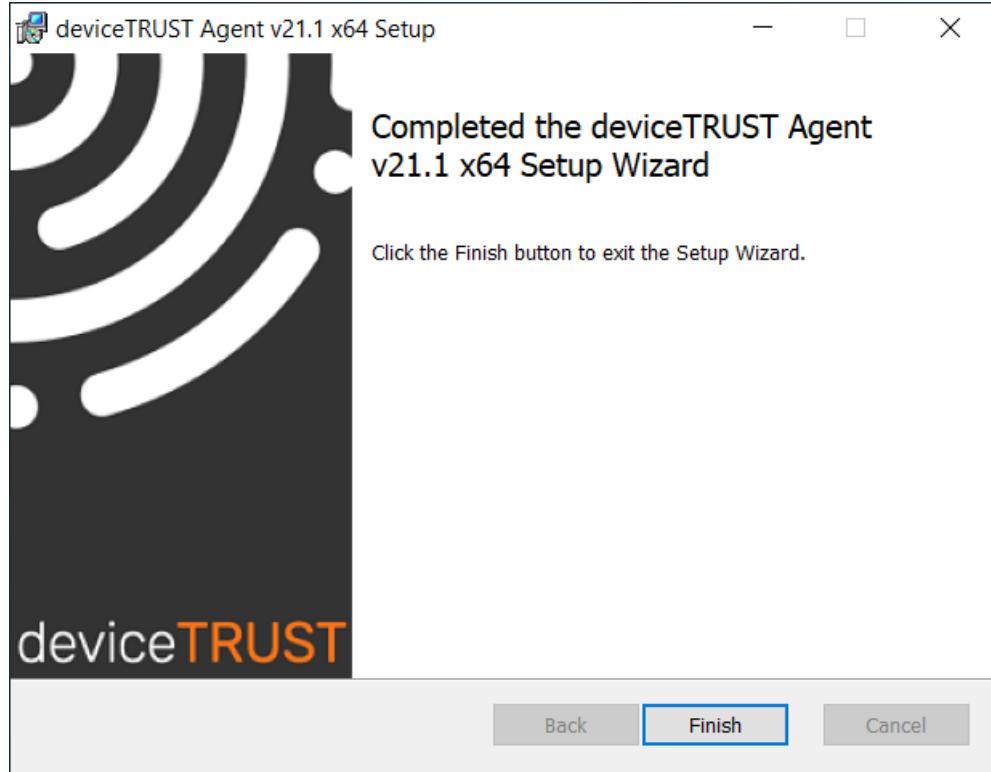
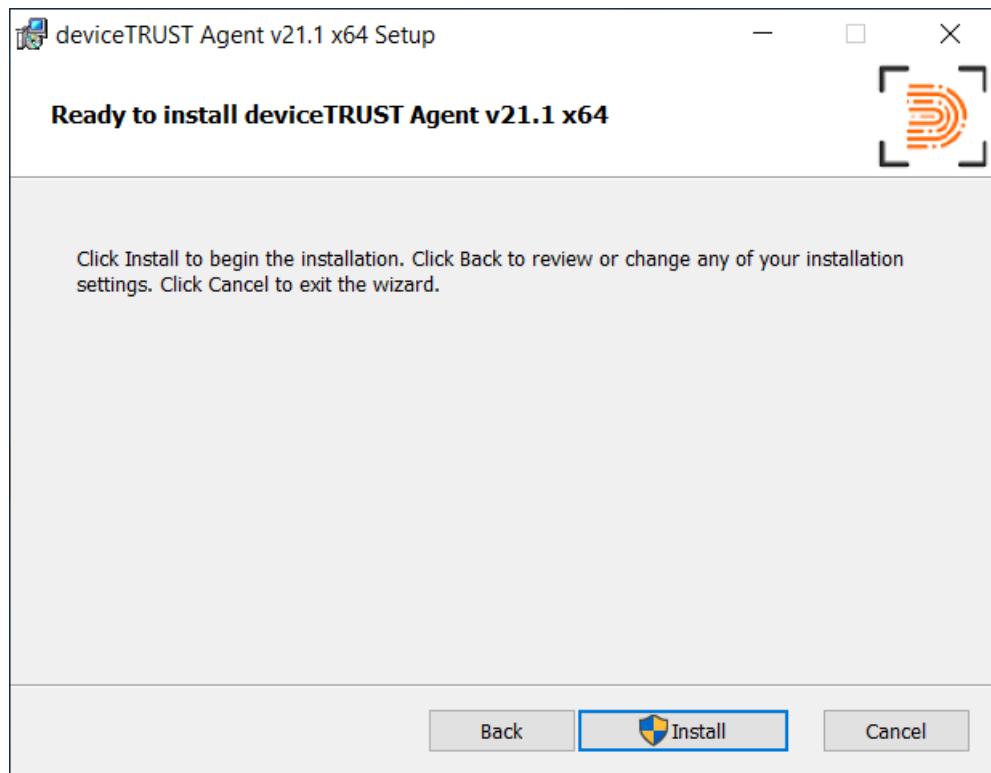
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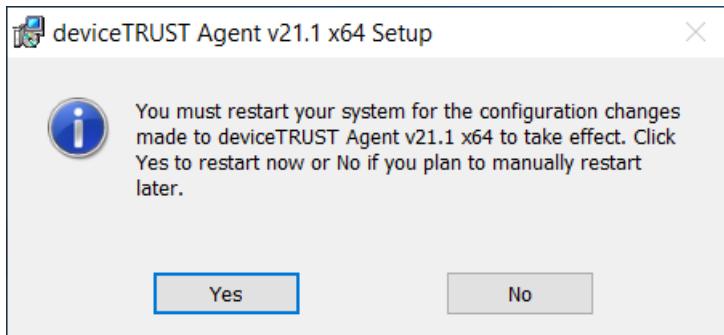
- [Agent](#)
- [Console](#)
- [Client Extension](#)

### Installing the deviceTRUST® Agent

The deviceTRUST Agent requires a user account with local administrative privileges to install the deviceTRUST Agent on the target system. The installation can be performed by following the steps of the deviceTRUST Agent installer.







**Note:**

- Installation path: %PROGRAMFILES%\DEVICETRUST\AGENT
- If the installation of the deviceTRUST Agent has finished successfully, a reboot is required to enable deviceTRUST to get system notifications to act on.
- If the **\*Remote Desktop Services\*** server role is added after installing the deviceTRUST Agent, the deviceTRUST Agent will need to be reinstalled.
- The deviceTRUST Agent will not function until a valid license is applied.

## Citrix Virtual Channel Security

When using Citrix Virtual Apps and Desktops, you may need to edit the [Virtual channel allow list](#) policy to allow the deviceTRUST Agent to open a virtual channel to the deviceTRUST Client. More details can be found on the [Knowledge Base](#).

## Unattended Installation

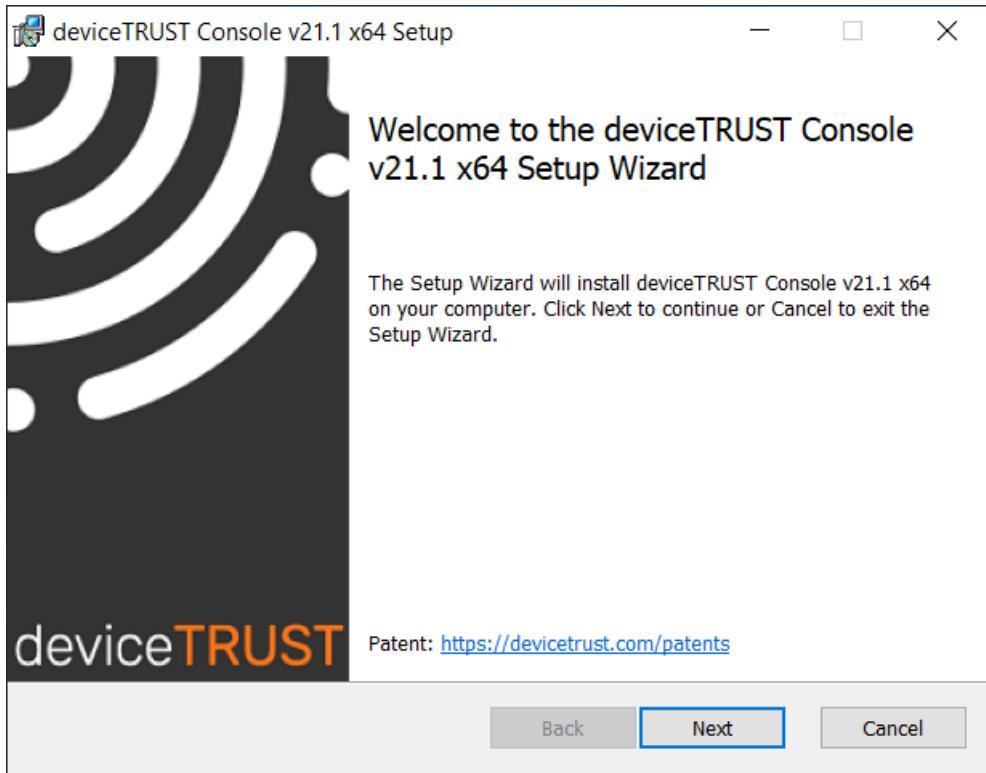
The deviceTRUST Agent can be installed unattended from the command line interface with the following options:

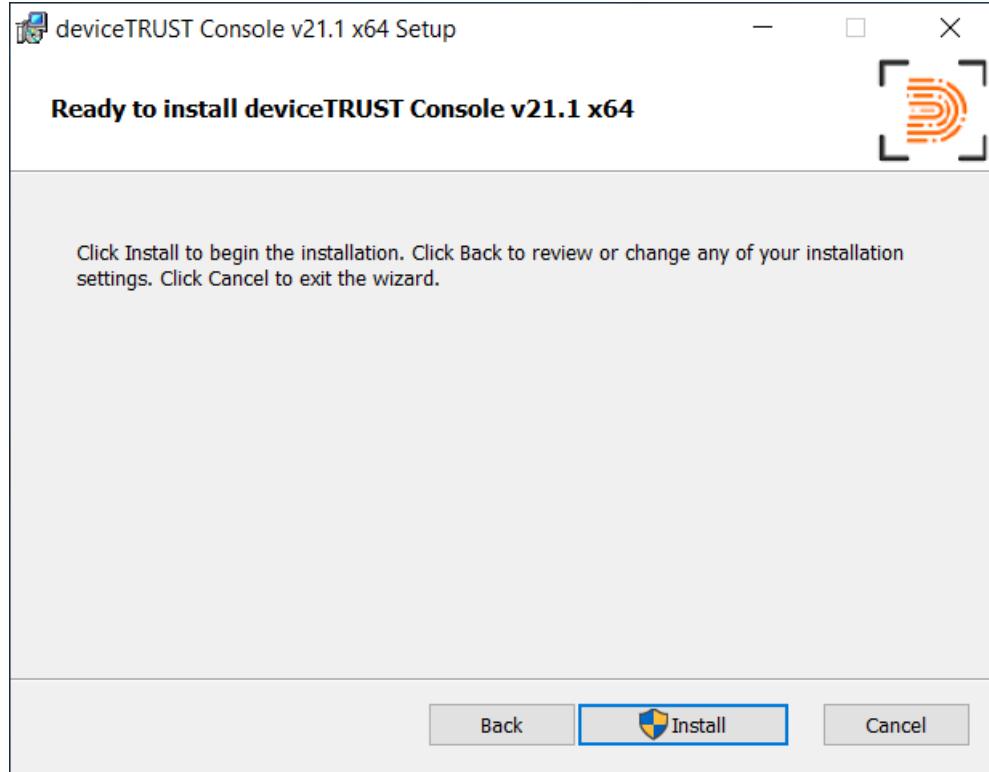
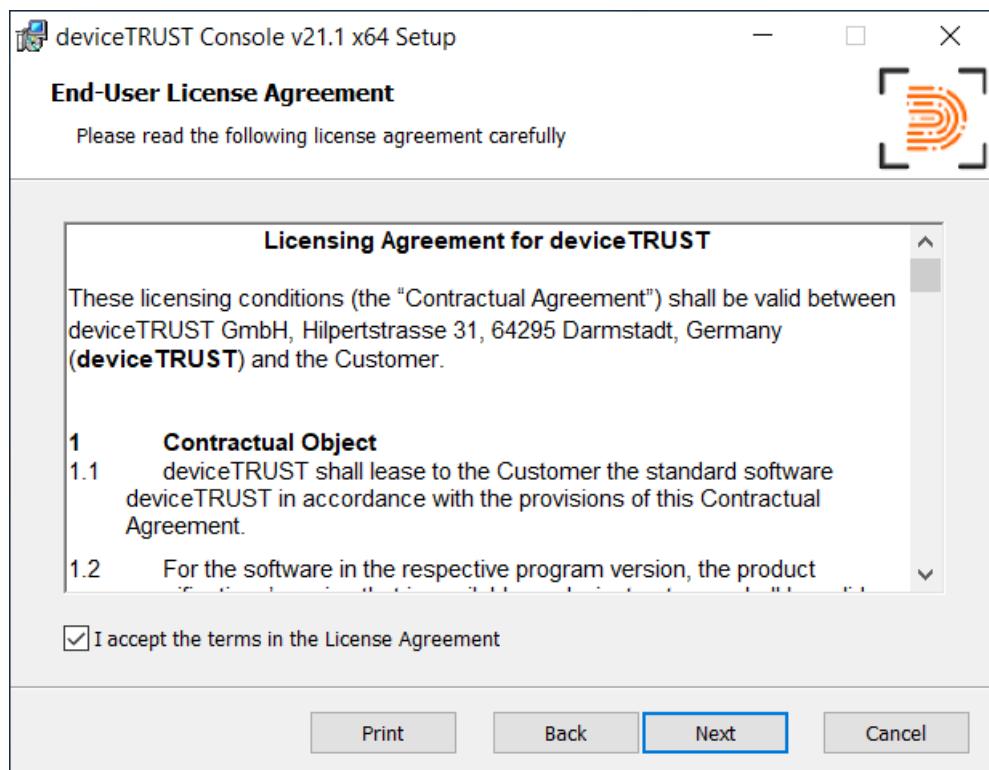
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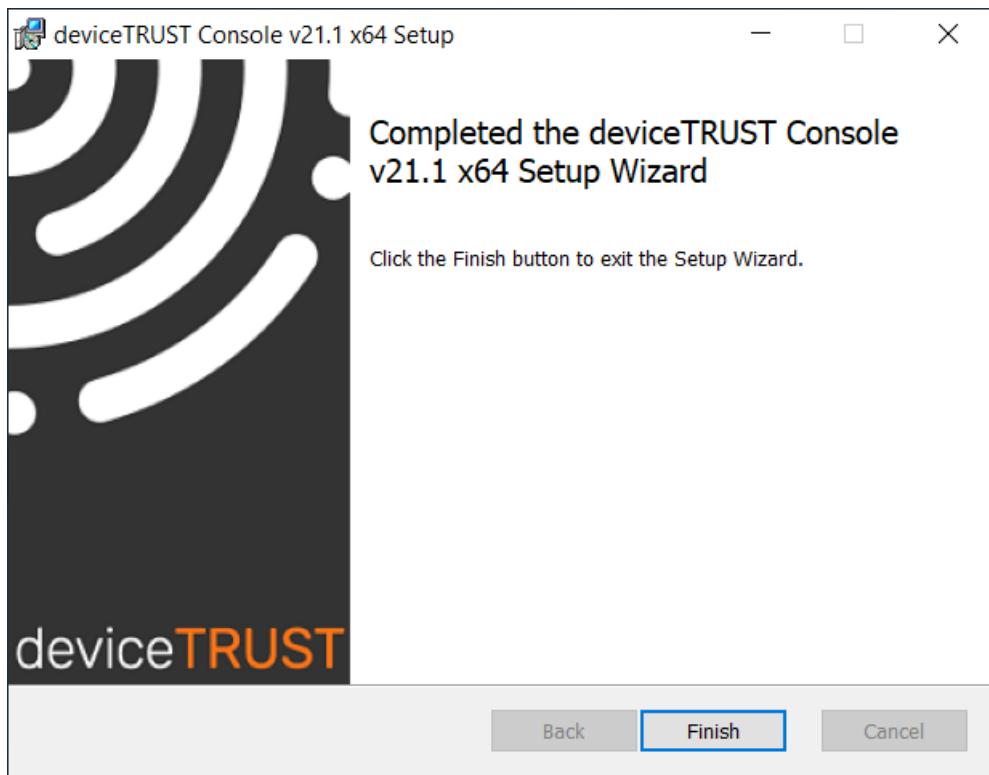
Component	Commandline
dtagent-x64-release-x.x.x.x.msi	The deviceTRUST 64-bit Agent installer file can be customized by common Microsoft Windows Installer parameters. An unattended installation can be achieved with the following parameters <code>MSIEXEC.EXE /I DTAGENT-X64-RELEASE-X.X.X.X.MSI /PASSIVE /FORCRESTART</code>
dtagent-x86-release-x.x.x.x.msi	The deviceTRUST 32-bit Agent installer file can be customized by common Microsoft Windows Installer parameters. An unattended installation can be achieved with the following parameters <code>MSIEXEC.EXE /I DTAGENT-X86-RELEASE-X.X.X.X.MSI /PASSIVE /FORCRESTART</code>

## Installing the deviceTRUST® Console

The deviceTRUST Console requires a user account with local administrative privileges to install the deviceTRUST Console on the targeting system. The installation can be performed by following the steps of the deviceTRUST Console installer.







#### Note

Installation path: %PROGRAMFILES%\DEVICETRUST\CONSOLE

### Unattended Installation

The deviceTRUST Console can be installed unattended from the command line interface with the following options:

---

Component	Commandline
dtconsole-x64-release-x.x.x.x.msi	The deviceTRUST 64-bit Console installer file can be customized by common Microsoft Windows Installer parameters. An unattended installation can be achieved with the following parameters <code>MSIEXEC.EXE /I DTCONSOLE-X64-RELEASE-X.X.X.X.MSI /PASSIVE</code>
dtconsole-x86-release-x.x.x.x.msi	The deviceTRUST 32-bit Console installer file can be customized by common Microsoft Windows Installer parameters. An unattended installation can be achieved with the following parameters <code>MSIEXEC.EXE /I DTCONSOLE-X86-RELEASE-X.X.X.X.MSI /PASSIVE</code>

## Installing the deviceTRUST® Client Extension

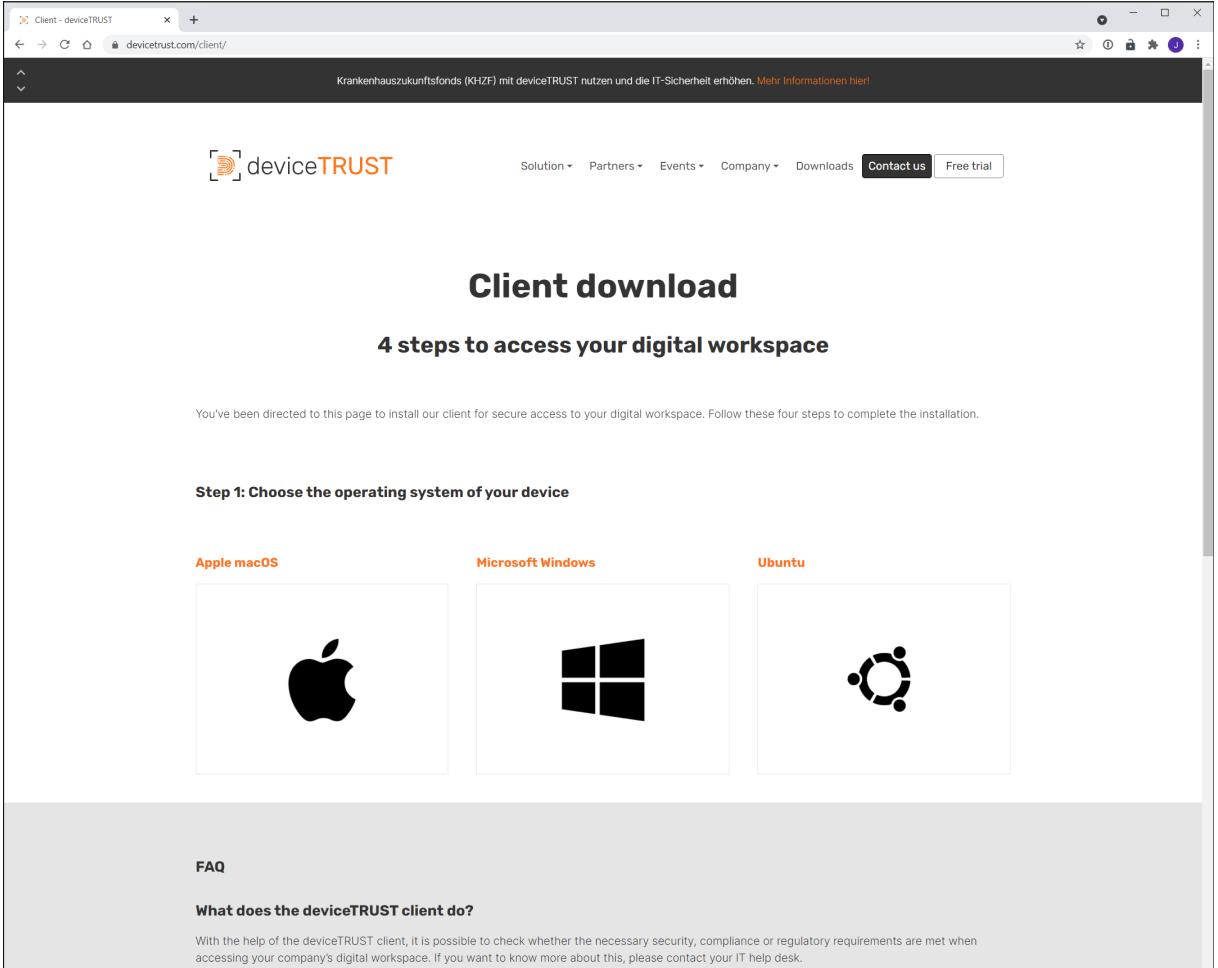
### TABLE OF CONTENTS

- [Microsoft Windows](#)
- [Apple macOS](#)
- [Ubuntu](#)
- [IGEL OS](#)
- [Unicon eLux](#)

### Client Extension installation on Microsoft Windows devices

The deviceTRUST Client Extension can be downloaded by following the steps on the [deviceTRUST Client Extension Download](#) page. The installation of the deviceTRUST Client Extension requires one-time administrative privileges of the user installing the deviceTRUST Client Extension.

The deviceTRUST® Client Extension for unmanaged Microsoft Windows devices supports an auto-update functionality. If a newer deviceTRUST Client Extension is available, the administrator of the remoting and DaaS environment can enforce a transparent update installation of the local deviceTRUST Client Extension.



The screenshot shows the deviceTRUST Client download page. At the top, there is a banner with the text: "Krankenhauszukunftsfoonds (KHZF) mit deviceTRUST nutzen und die IT-Sicherheit erhöhen. [Mehr Informationen hier!](#)". Below the banner, the deviceTRUST logo is displayed, along with navigation links: Solution, Partners, Events, Company, Downloads, Contact us (which is highlighted in a dark box), and Free trial.

## Client download

### 4 steps to access your digital workspace

You've been directed to this page to install our client for secure access to your digital workspace. Follow these four steps to complete the installation.

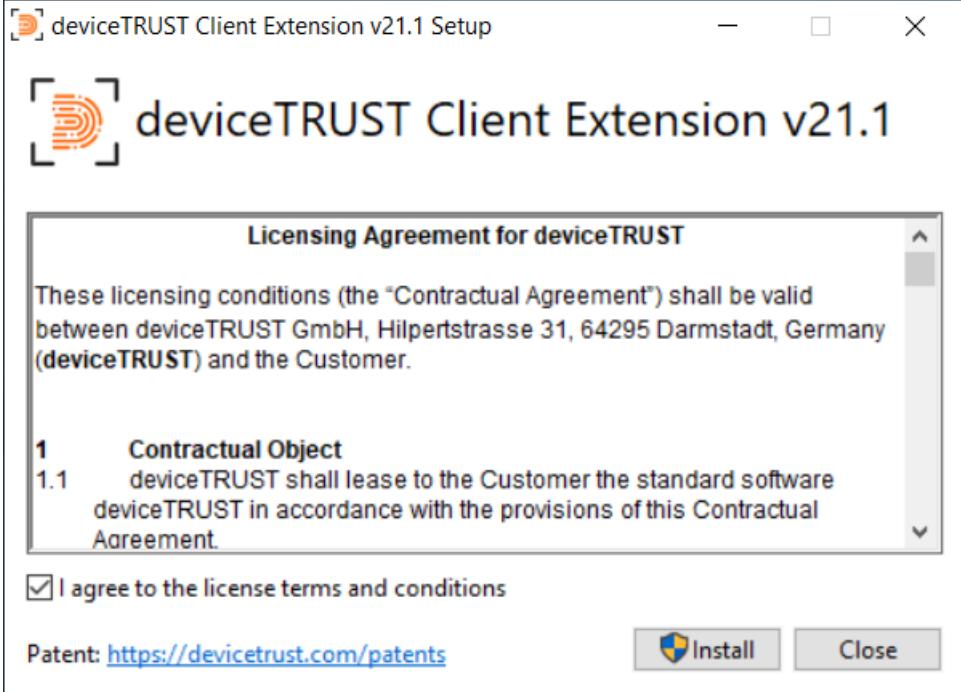
**Step 1: Choose the operating system of your device**

Three operating system icons are shown: Apple macOS (apple logo), Microsoft Windows (Windows logo), and Ubuntu (Ubuntu logo).

**FAQ**

**What does the deviceTRUST client do?**

With the help of the deviceTRUST client, it is possible to check whether the necessary security, compliance or regulatory requirements are met when accessing your company's digital workspace. If you want to know more about this, please contact your IT help desk.



The screenshot shows the deviceTRUST Client Extension v21.1 Setup window. The title bar reads "deviceTRUST Client Extension v21.1 Setup". The main title is "deviceTRUST Client Extension v21.1".

#### Licensing Agreement for deviceTRUST

These licensing conditions (the "Contractual Agreement") shall be valid between deviceTRUST GmbH, Hilpertstrasse 31, 64295 Darmstadt, Germany (deviceTRUST) and the Customer.

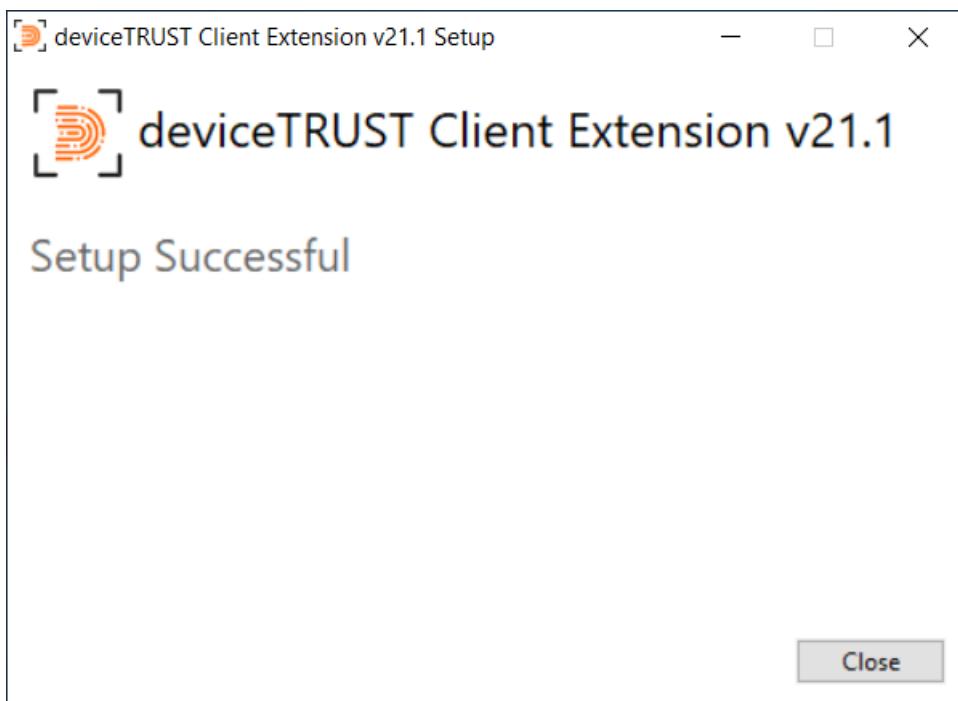
**1 Contractual Object**

1.1 deviceTRUST shall lease to the Customer the standard software deviceTRUST in accordance with the provisions of this Contractual Agreement.

I agree to the license terms and conditions

Patent: <https://devicetrust.com/patents>

**Install** **Close**



### Important

- When using Microsoft RDP or VMware Horizon, when installing with custom credentials the user must logoff from their session before the installation is effective.

## Client Extension Installation Command Line Options

The following command line options are available to the deviceTRUST Client Extension installer:

- `DTCLIENT-EXTENSION-RELEASE-X.X.X.EXE /INSTALL|REPAIR|UNINSTALL` - Installs, repairs or uninstalls the deviceTRUST Client Extension.
- `DTCLIENT-EXTENSION-RELEASE-X.X.X.EXE /PASSIVE|QUIET` - Passive displays a minimal user interface with no prompts for input. Quiet displays no user interface.
- `DTCLIENT-EXTENSION-RELEASE-X.X.X.EXE /NORESTART` - Suppresses any attempt to restart the local device.
- `DTCLIENT-EXTENSION-RELEASE-X.X.X.EXE /LOG <log.txt>` - Logs to a specific file. By default, logs are created within %TEMP%.

### Note:

- One or more of the above options can be combined.
- Installation path: %PROGRAMFILES%\DEVICETRUST\CLIENT
- The deviceTRUST Client Extension installer installs both the 32-bit and 64-bit deviceTRUST Client Extension components depending on the Windows operating system platform.

## Unattended Installation

The deviceTRUST Client Extension installer can be installed unattended from the command line interface with the following options:

---

Component	Commandline
dtclient-extension-release-x.x.x.exe	An unattended installation can be achieved with the following parameters <b>DTCLIENT-RELEASE-X.X.X.EXE / INSTALL /QUIET</b>

## Active Setup Components

The deviceTRUST Client Extension uses Active Setup to make changes to the users profile. This involves the creation of the following Active Setup components.

### ***deviceTRUST Channel Registration 64-bit component***

Registry Key: [HKLM\Software\Microsoft\Active Setup\Installed Components\{\2f780db6-903f-4c83-9d60-9d138e054dc9 }](#)

This Active Setup component is created during installation, and is responsible for the registration of the 64-bit Microsoft RDP Virtual Channel within the users profile. When not using the 64-bit Microsoft RDP Virtual Channel, it is safe to remove this key after the deviceTRUST Client Extension has been installed.

### ***deviceTRUST Channel Registration 32-bit component***

Registry Key: [HKLM\Software\Wow6432Node\Microsoft\Active Setup\Installed Components\{\8a4445d6-867e-4e60-8cc5-05bc2e3a2512 }](#) (or [HKLM\Software\Microsoft\Active Setup\Installed Components\{\8a4445d6-867e-4e60-8cc5-05bc2e3a2512 }](#) on a 32-bit OS)

This Active Setup component is created during installation, and is responsible for:

- The registration of the 32-bit Microsoft RDP Virtual Channel.
- The registration of the 32-bit Citrix ICA® Virtual Channel with per-user installations of Citrix Workspace™ within the users profile.
- The registration of the 32-bit Amazon WorkSpaces Virtual Channel with per-user installations of Amazon WorkSpace within the users profile.

When not using 32-bit Microsoft RDP or per-user installations of Citrix Workspace App or Amazon

WorkSpaces Client, it is safe to remove this key after the deviceTRUST Client Extension has been installed.

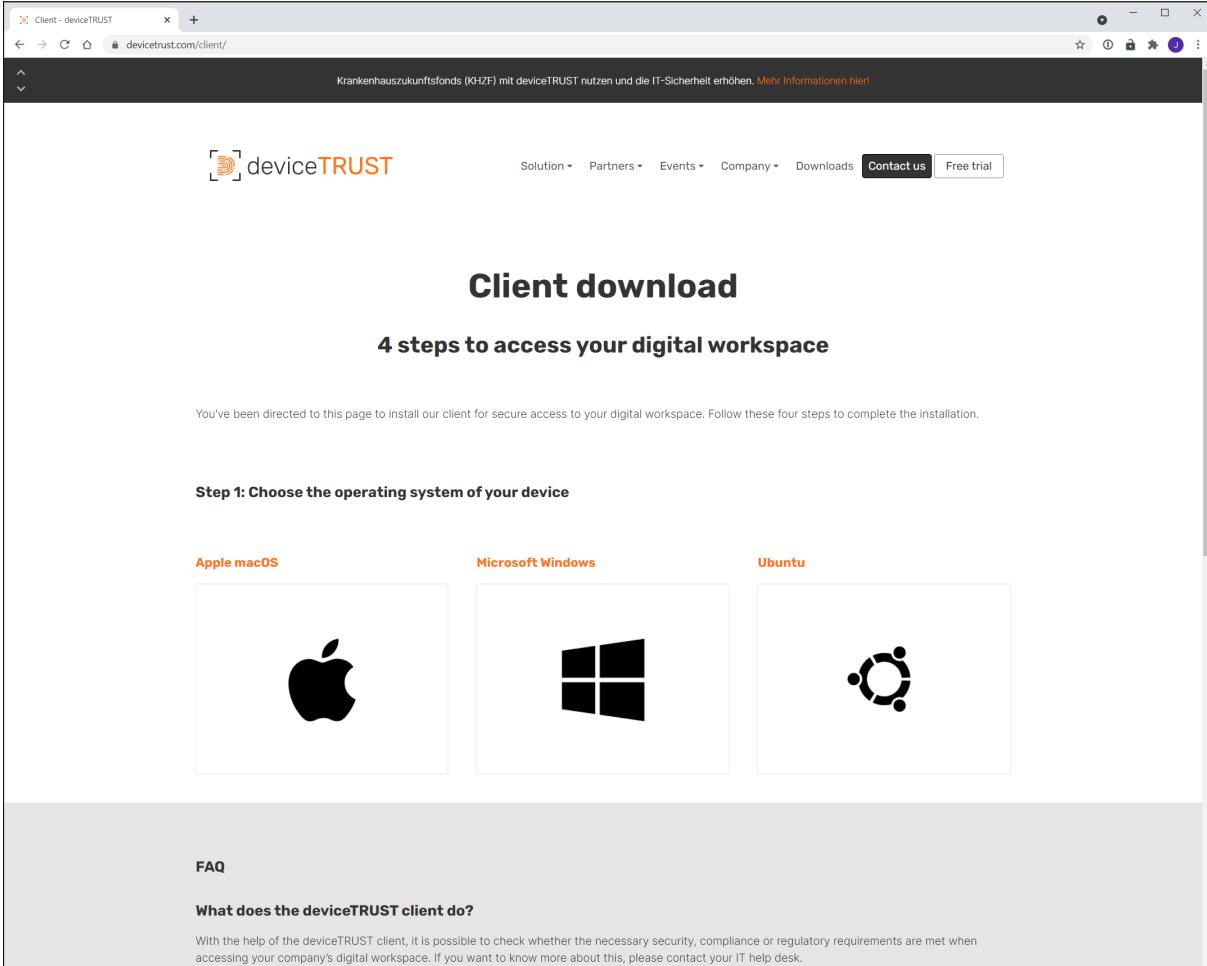
#### ***deviceTRUST Citrix Cleanup 32-bit component***

Registry Key: <HKLM\Software\Wow6432Node\Microsoft\Active Setup\Installed Components\{\ 3d65bd68-a307-4d64-af9c-17bc9c4b36e3 \}>

This Active Setup component is created during uninstallation and is responsible for removing the registration of the 32-bit Citrix ICA Virtual Channel with per-user installations of Citrix Workspace within the users profile. When not using per-user installations of Citrix Workspace, it is safe to remove this key after the deviceTRUST Client Extension has been uninstalled.

### **Client installation on Apple macOS devices**

The deviceTRUST macOS Client can be downloaded by following the steps on the [deviceTRUST Client Extension Download](#) page.



The screenshot shows a web browser window for the deviceTRUST client download page. The page features the deviceTRUST logo and navigation links for Solution, Partners, Events, Company, Downloads, Contact us, and Free trial. A banner at the top encourages users to use deviceTRUST to increase IT security. The main content is titled 'Client download' and '4 steps to access your digital workspace'. It instructs users to choose their operating system: Apple macOS, Microsoft Windows, or Ubuntu, each represented by its respective logo. A 'FAQ' section is present, and a note about the client's purpose is at the bottom.

Client - deviceTRUST

devicetrust.com/client/

Krankenhauszukunftsfonds (KHZF) mit deviceTRUST nutzen und die IT-Sicherheit erhöhen. [Mehr Informationen hier!](#)

deviceTRUST

Solution ▾ Partners ▾ Events ▾ Company ▾ Downloads Contact us Free trial

## Client download

### 4 steps to access your digital workspace

You've been directed to this page to install our client for secure access to your digital workspace. Follow these four steps to complete the installation.

**Step 1: Choose the operating system of your device**

**Apple macOS** **Microsoft Windows** **Ubuntu**

**FAQ**

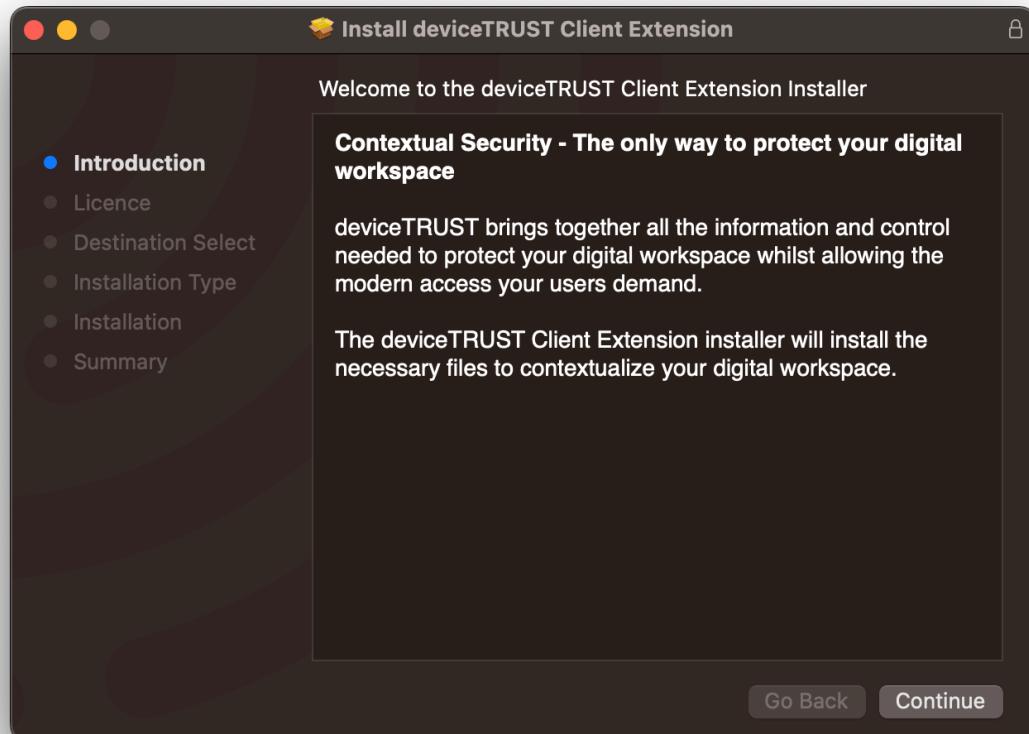
**What does the deviceTRUST client do?**

With the help of the deviceTRUST client, it is possible to check whether the necessary security, compliance or regulatory requirements are met when accessing your company's digital workspace. If you want to know more about this, please contact your IT help desk.

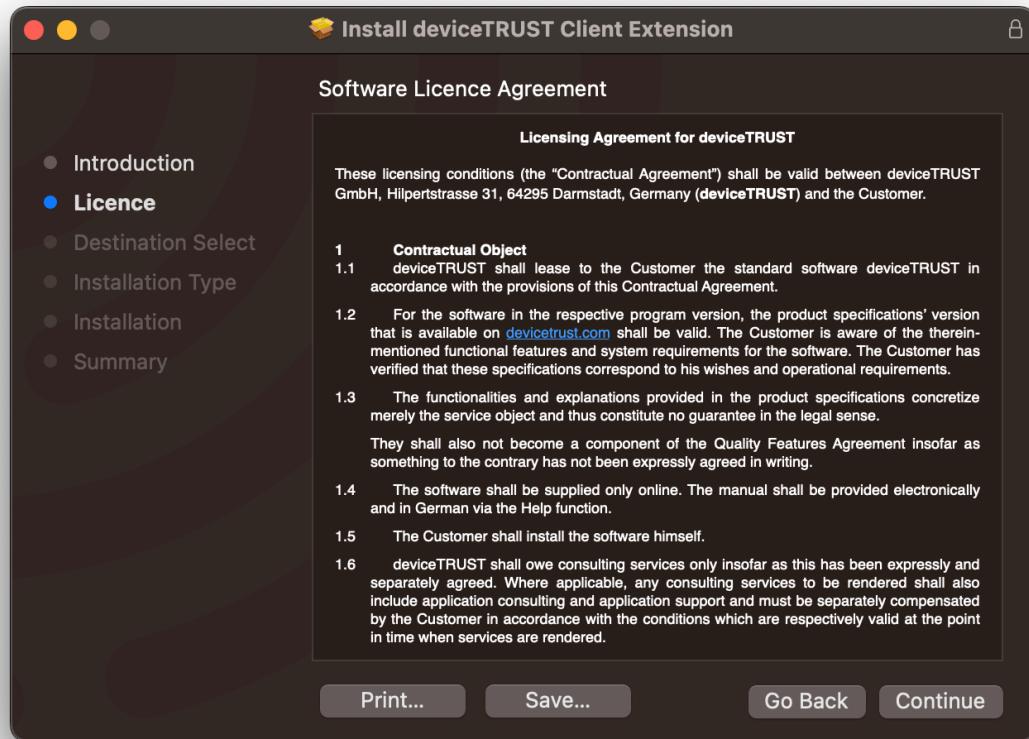
To access the installer, double click on the downloaded 'dtclient-extension-macos-universal-release-W.X.Y.Z.dmg' file.

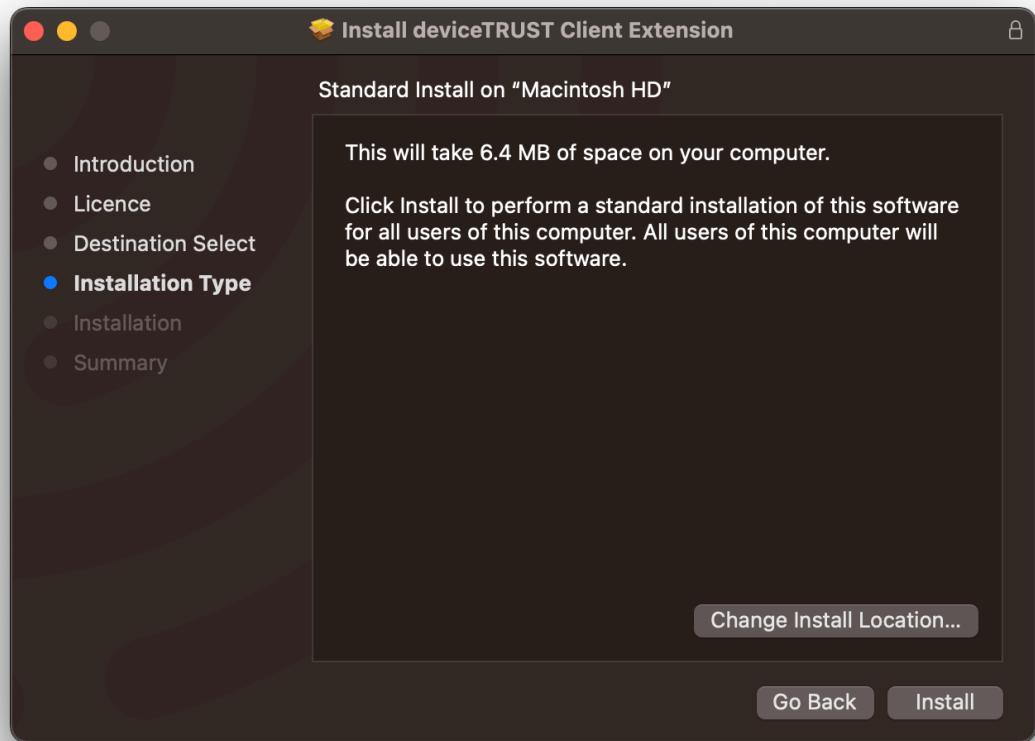


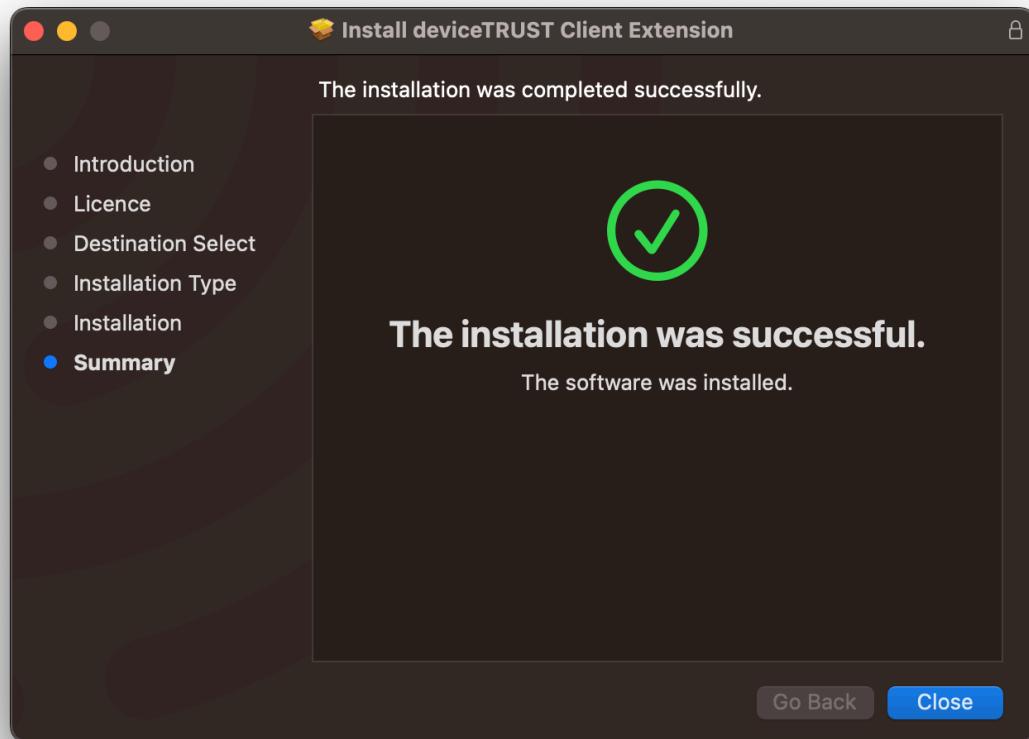
Launch the installer by double clicking on the 'Install.pkg' file.



Continue through the installation steps until complete.



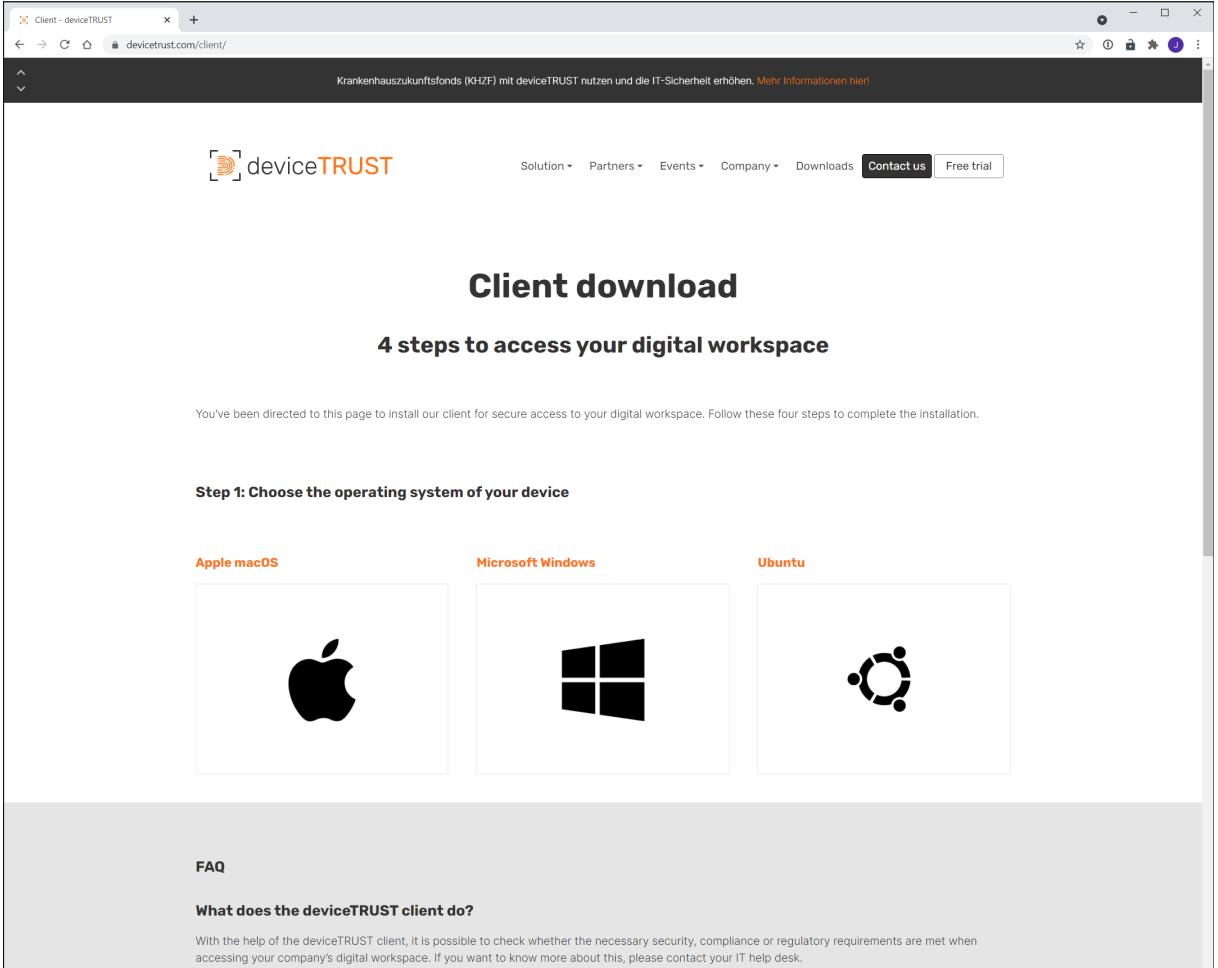




## Client installation on Ubuntu devices

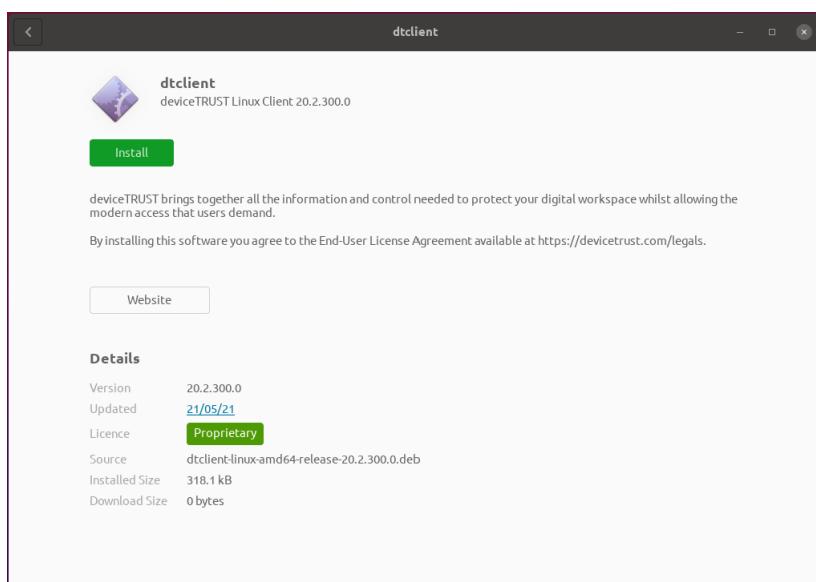
The deviceTRUST Ubuntu Client can be downloaded by following the steps on the [deviceTRUST Client Extension Download](#) page.

## deviceTRUST 21.1

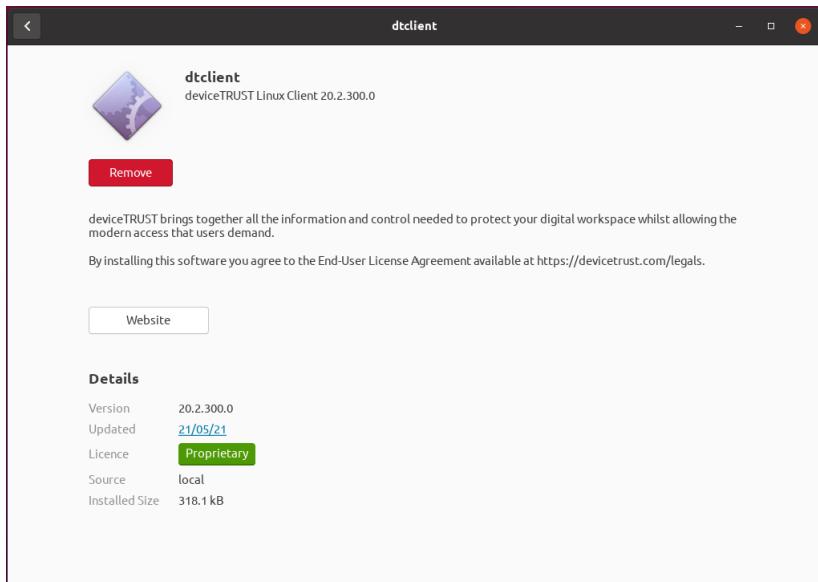


The screenshot shows a web browser window for the deviceTRUST client download page. The page features the deviceTRUST logo and navigation links for Solution, Partners, Events, Company, Downloads, Contact us, and Free trial. A banner at the top encourages users to use deviceTRUST to increase IT security. The main content is titled 'Client download' and '4 steps to access your digital workspace'. It instructs users to choose their operating system: Apple macOS, Microsoft Windows, or Ubuntu, each with its respective logo. Below this is a 'FAQ' section and a 'What does the deviceTRUST client do?' section, which states that the client helps check security requirements. A note at the bottom of the page advises users to contact their IT help desk for more information.

To access the installer, double click on the downloaded 'dtclient-linux-amd64-release-W.X.Y.Z.deb' file.



Click *Install* to complete the installation. An *Authentication Required* popup will be displayed and administrative credentials must be entered.



## Client installation on IGEL OS devices

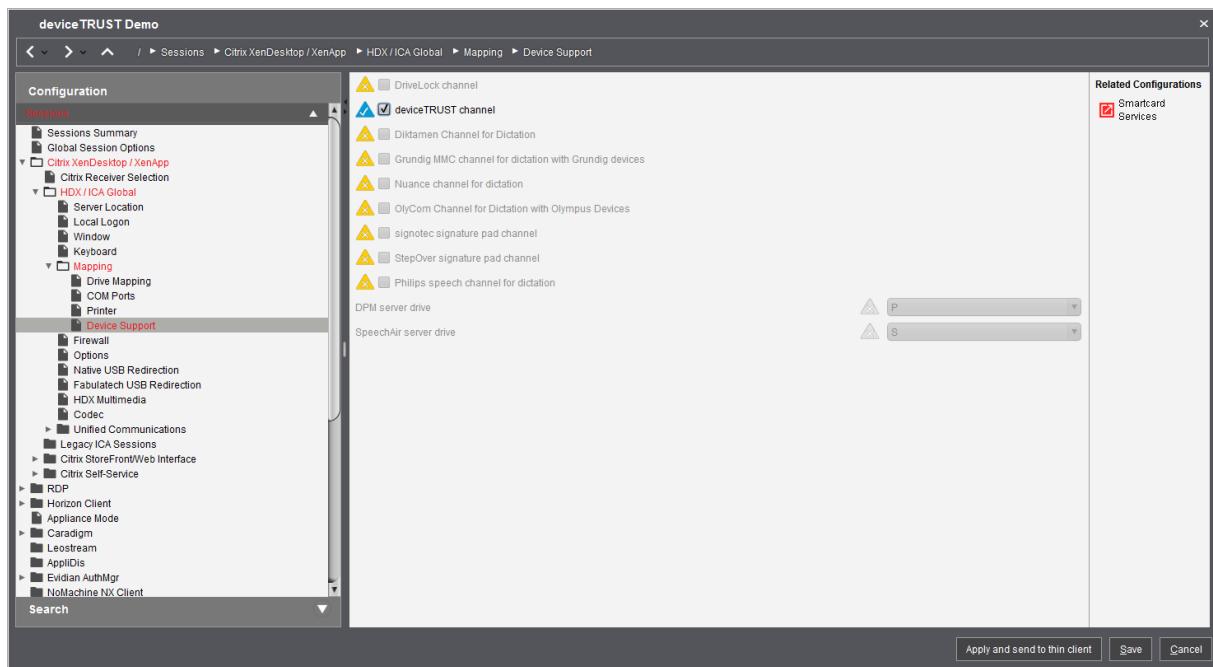
deviceTRUST is already integrated within the IGEL OS release 10.03.500 or higher and supports the Microsoft Remote Desktop Protocol (RDP) and the Citrix Independent Computing Architecture (ICA). Within the default IGEL profile, deviceTRUST is not enabled and needs to be enabled for both remoting protocols independently.

### Note:

- To enable deviceTRUST® within the IGEL OS you can use the IGEL Universal Management Suite (UMS) or the local administrative interface.
- IGEL devices must be restarted after enabling deviceTRUST.

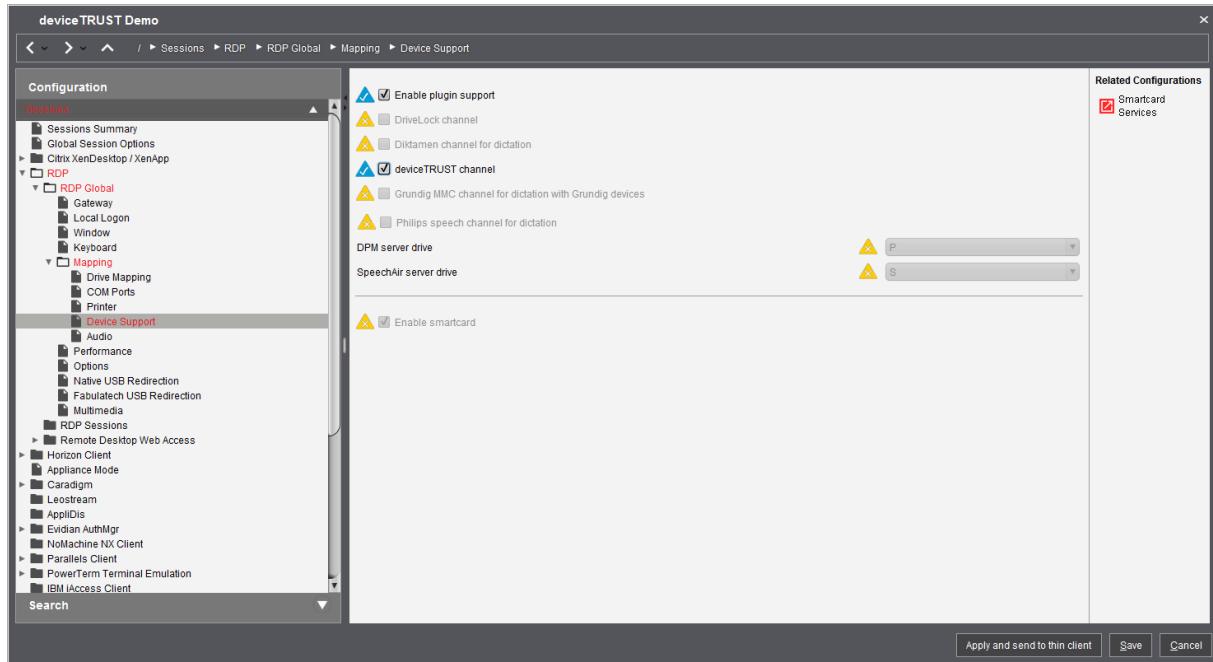
## Enable deviceTRUST for Citrix Independent Computing Architecture (ICA®)

Open the target profile (local or through the UMS) and navigate to SESSIONS\CITRIX XENDESKTOP / XENAPP\HDX / ICA GLOBAL\MAPPING and activate the DEVICETRUST CHANNEL option.



### Enable deviceTRUST for Microsoft Remote Desktop Protocol (RDP)

Open the target profile (local or through the UMS) and navigate to SESSIONS\RDP\RDP GLOBAL\MAPPING and activate the DEVICETRUST CHANNEL option.



## Client installation on Unicon™ eLux devices

### Import the deviceTRUST® certificate chain

The deviceTRUST eLux Client is signed with a certificate that must first be trusted by both ELIAS and the eLux devices. Full details of how to import certificates into ELIAS and deploy them to eLux devices can be found by searching for ‘Organizing certificates for package validation’ within the eLux documentation. The latest deviceTRUST certificate chain can be downloaded [Download certificate chain](#).

#### Note

The import of the deviceTRUST certificate chain is only necessary when the eLux® environment is configured to check the signatures of packages. However, it is good practice to ensure that the packages match the certificates.

Within ELIAS:

- Import `devicetrust-gmbh-20210321.pem` into Trusted Issuer.
- Import `globalsign-extended-validation-codesigning-ca-sha256-g3-20240615.pem` and `globalsign-intermediate-20280128.pem` into Intermediate CA.
- Import `globalsign-20280128.pem` into Trusted Root CA.

Within the Scout console:

- Deploy all of the above `pem` files into the `/setup/cacerts/` folder of the eLux device.

### Install the package

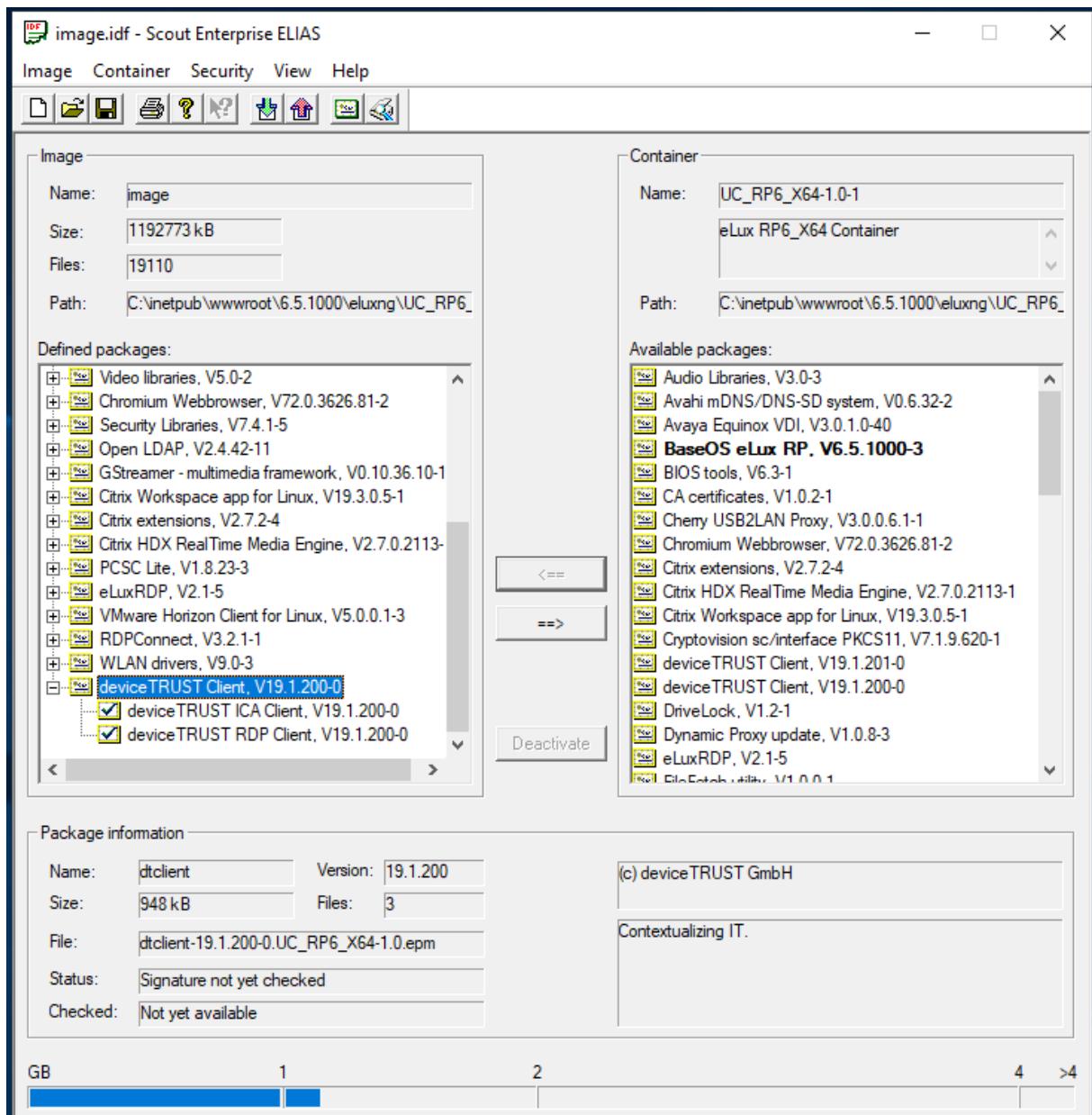
Within ELIAS:

- Ensure that the required ‘deviceTRUST Client’ package has been imported into the package library.
- If you’ve imported the deviceTRUST certificate chain, then check the signatures of the package.
- Assign the ‘deviceTRUST Client’ package to the image.

For ICA support, ensure the ‘deviceTRUST ICA Client, Vx.x.x-x’ option is active under the defined package ‘deviceTRUST Client, Vx.x.x-x’.

For RDP support, ensure the ‘deviceTRUST RDP Client, Vx.x.x-x’ option is active under the defined package ‘deviceTRUST Client, Vx.x.x-x’.

## deviceTRUST 21.1

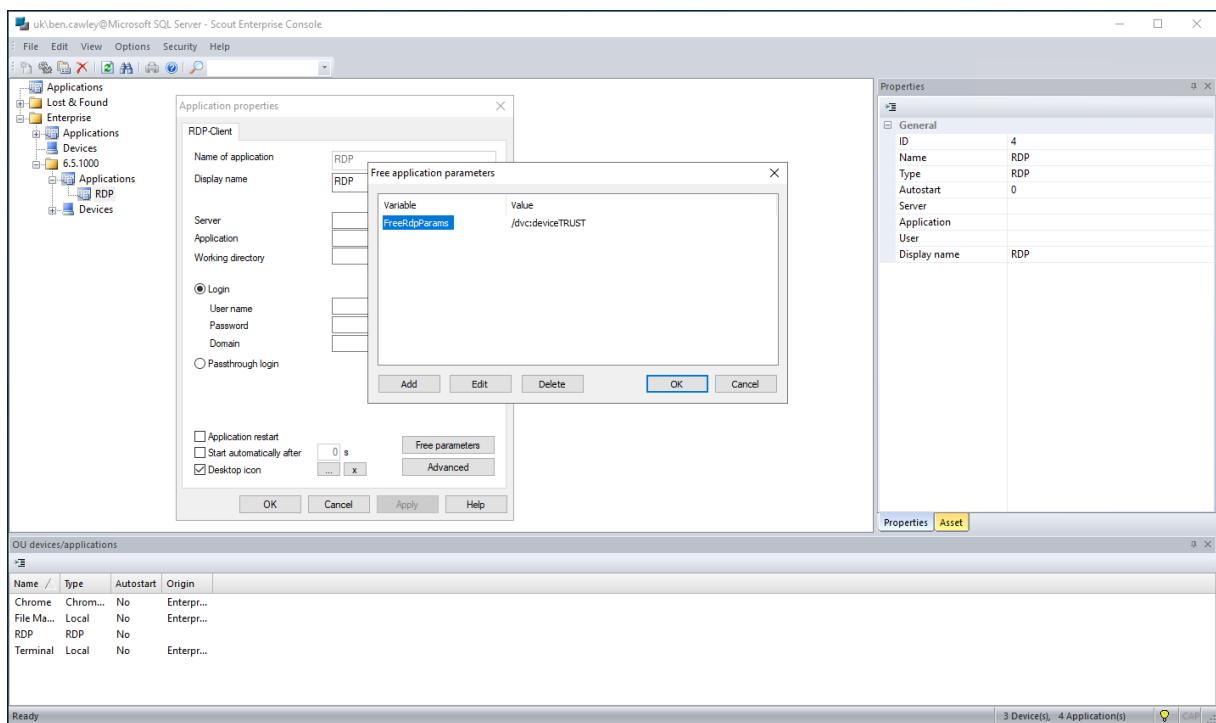


Within the Scout console:

- Update your eLux devices.

To enable the RDP virtual channel, within your eLux Scout console navigate to Enterprise > [eLux version number] > Applications > RDP, and select properties, then 'Free parameters'. Add variable 'FreeRdpParams' with value '/dvc:deviceTRUST'.

## deviceTRUST 21.1

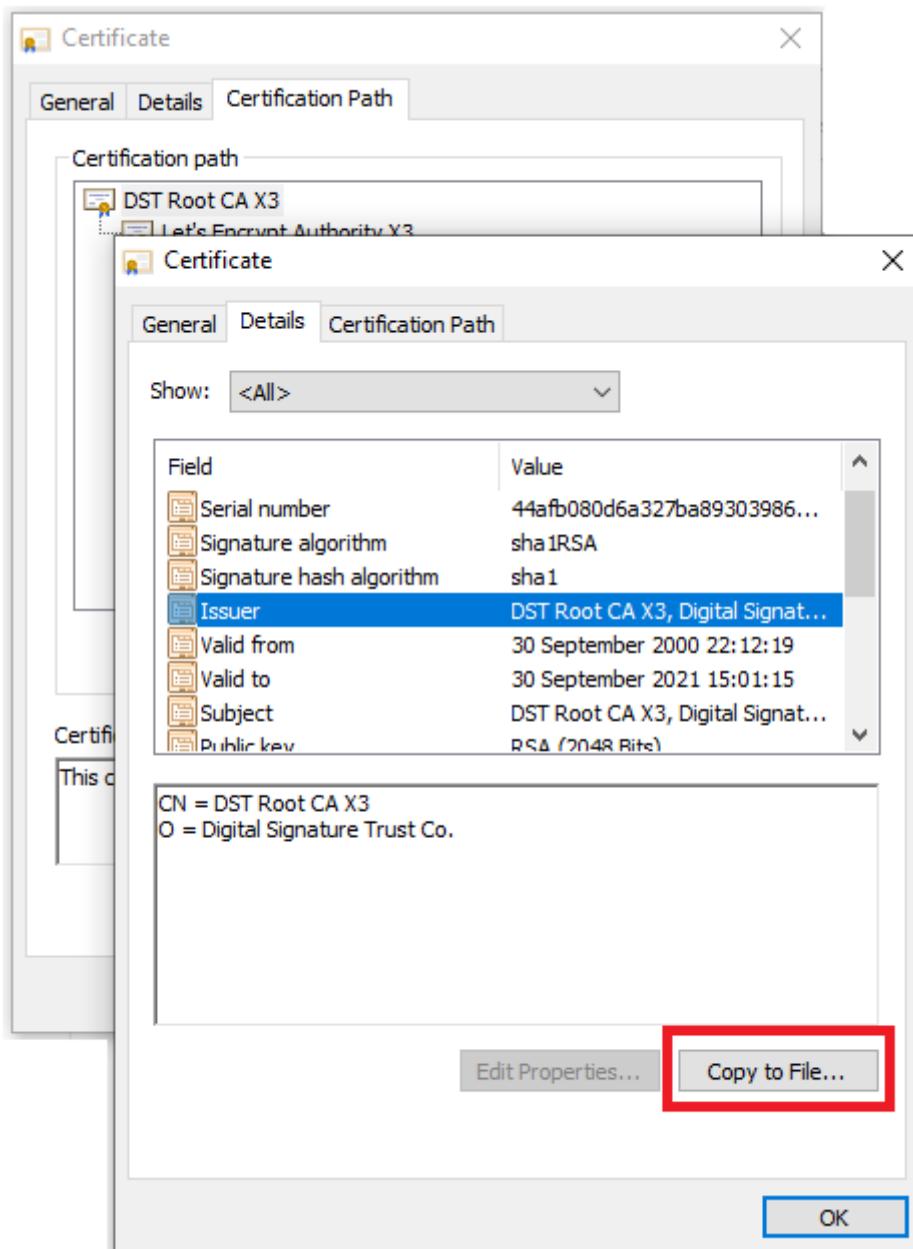


Next time you connect using ICA® or RDP to a server with a licensed deviceTRUST Host, the properties of your eLux device will be available within your virtual session.

## Deploy the ripe.stat root certificate

To ensure the deviceTRUST eLux client can successfully obtain whois information you will need to ensure that the required root certificate is deployed to all your eLux devices.

To obtain the root certificate, navigate to [stat.ripe.net](https://ripe.stat.ripe.net) within your browser and save the certificate to disk as a base-64 encoded X.509 file.

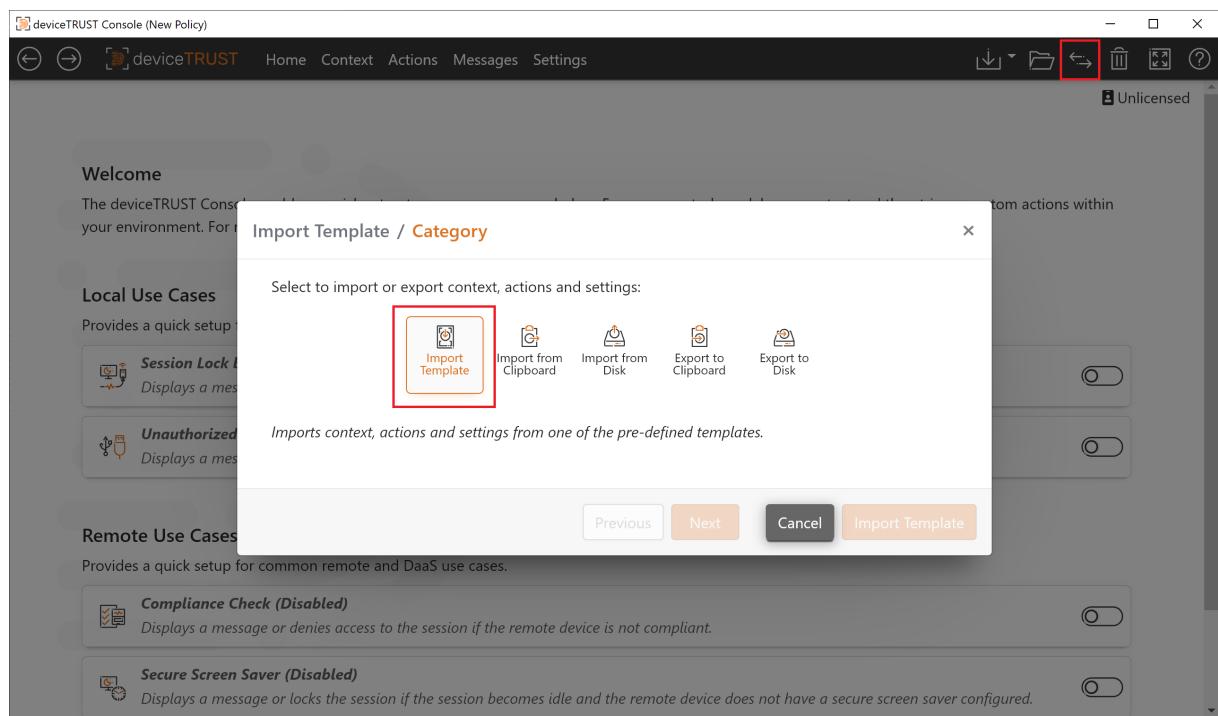


Within the Scout console select 'Advanced device configuration\Files' on the device container, import the certificate and deploy to your device certificate store location.

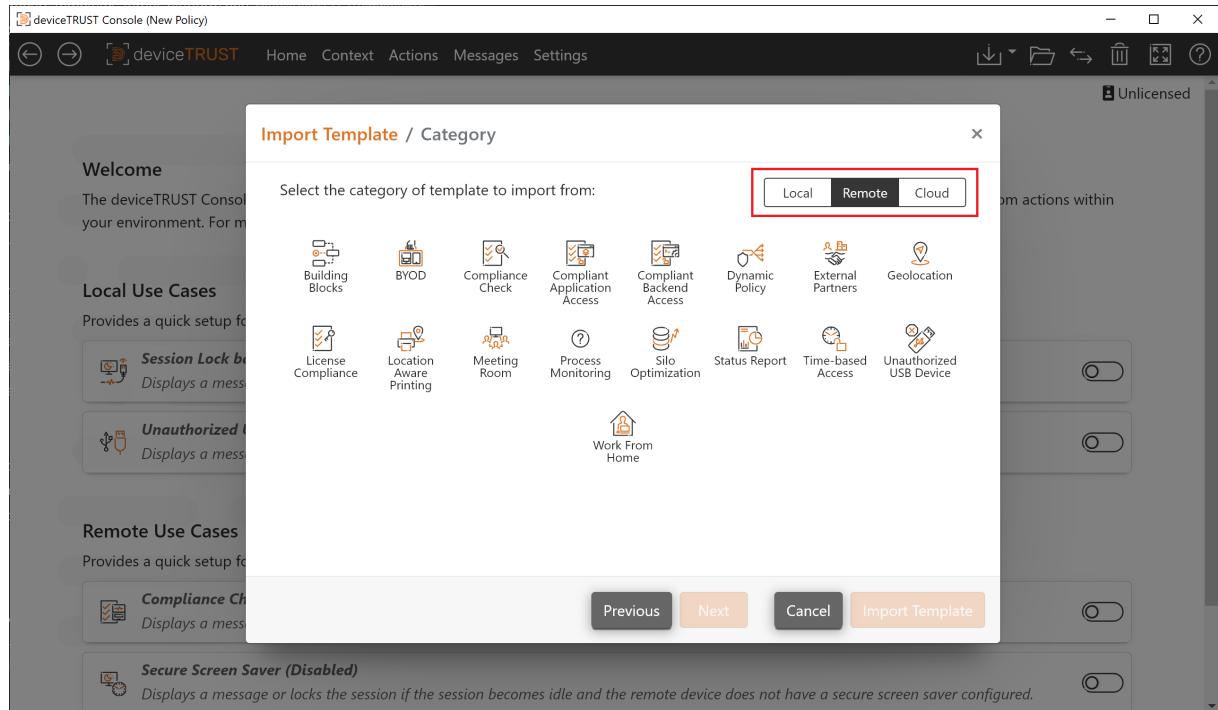
## Templates

The deviceTRUST® Console includes a set of templates which can be used to quickly implement a use case. Launch the deviceTRUST Console and select **SHARING** in the top right of the navigation bar and then **IMPORT TEMPLATE**.

## deviceTRUST 21.1

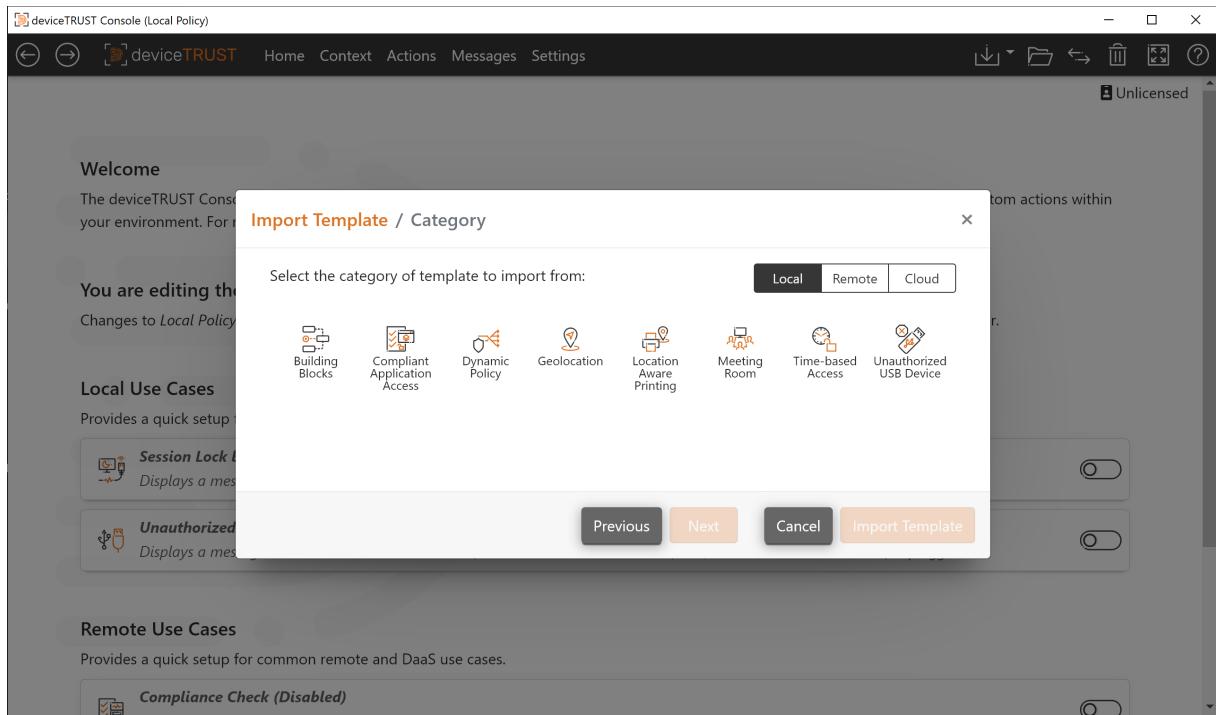


The deviceTRUST use cases are summarized in the following categories for each target platform. Use the filter to select the desired target platform.



## Local Templates

The deviceTRUST® use cases for local devices are summarized within the following categories.

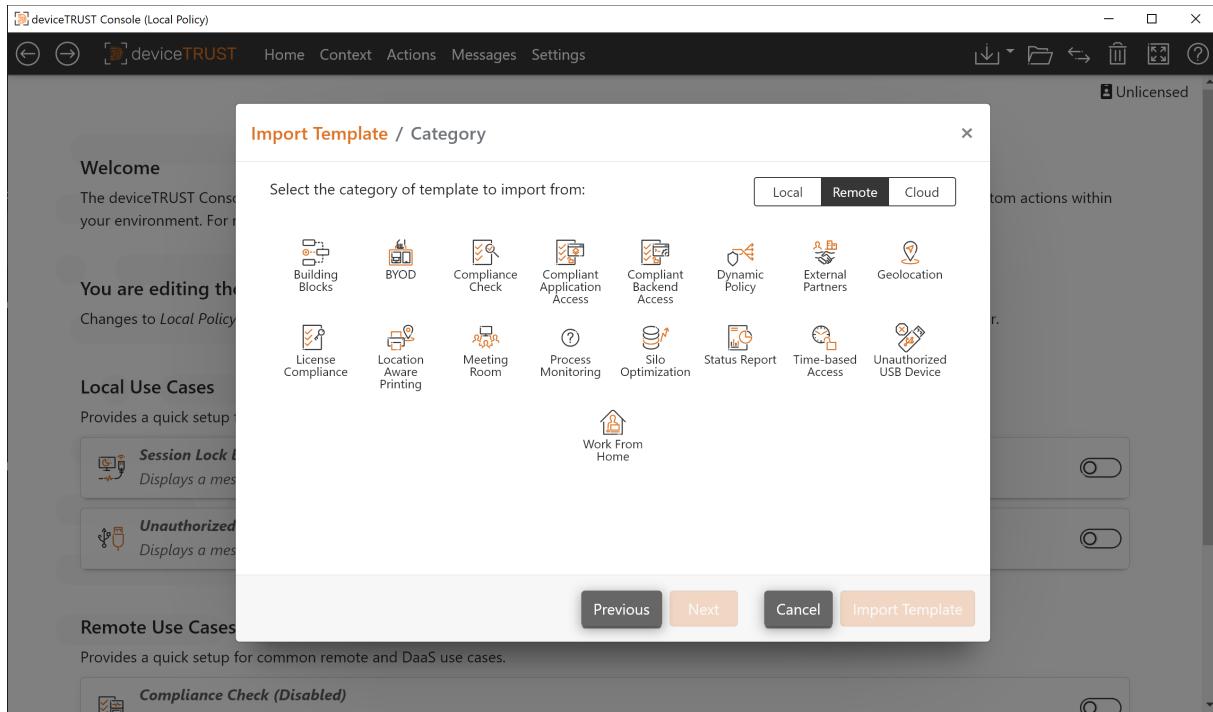


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- [Building Blocks](#) - Individual contexts and actions that can be used as building blocks within your configuration.
- [Compliant Application Access](#) - Controls access to applications within the session.
- [Dynamic Policy](#) - Applies a dynamic policy within the session.
- [Geolocation](#) - Validates and controls access based on geolocation information of the local device.
- [Location Aware Printing](#) - Maps network printers and defines a default printer based on the device placement within a building.
- [Meeting Room](#) - Controls an idle period for devices based upon whether the device is placed within a meeting room.
- [Time-based Access](#) - Controls access to the session or applications when accessed outside of working hours.
- [Unauthorized USB Device](#) - Denies access to the session when an unauthorized USB device is plugged in.

## Remote Templates

The deviceTRUST® use cases for remoting and DaaS are summarized within the following categories.



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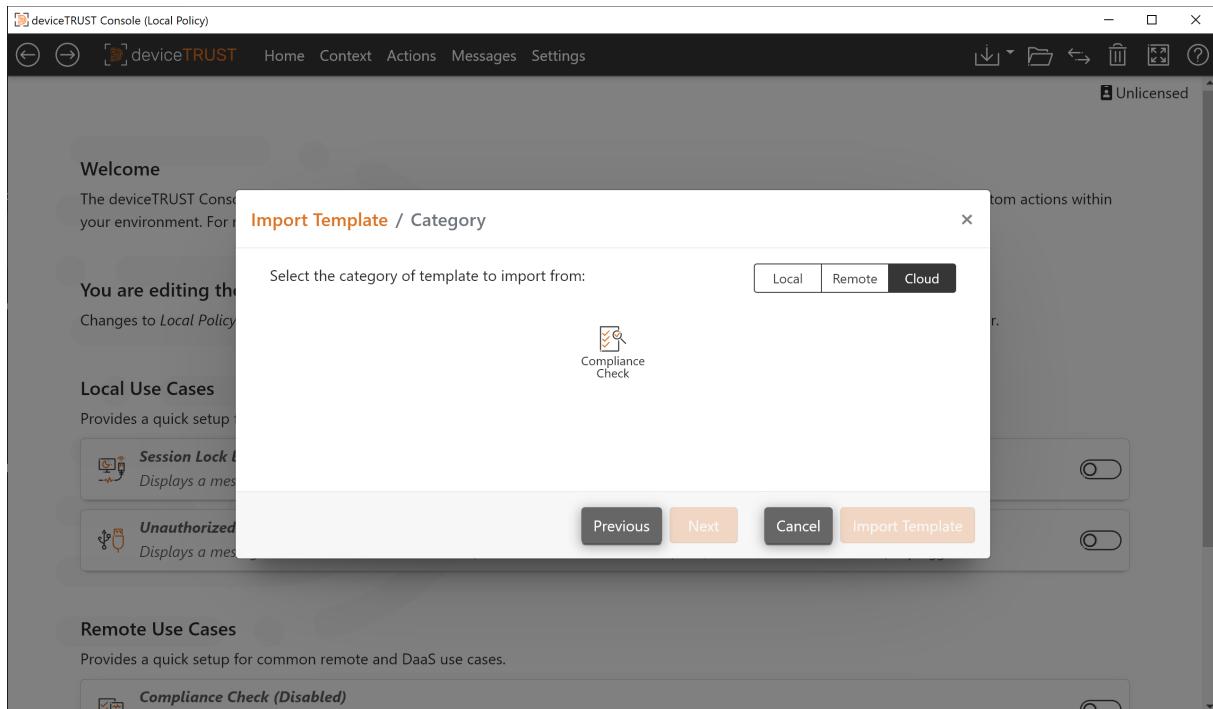
- [Building Blocks](#) - Individual contexts and actions that can be used as building blocks within your configuration.
- [BYOD \(Bring Your Own Device\)](#) - Controls access to the session or applications when compliance requirements for BYOD users are not satisfied.
- [Compliance Check](#) - Display a message or denies access to the session when compliance requirements on a remote device are not satisfied.
- [Compliant Application Access](#) - Controls access to applications within the session.
- [Compliant Backend Access](#) - Display a message or denies access to backend servers when compliance requirements are not satisfied.
- [Dynamic Policy](#) - Applies a dynamic policy within the session.
- [External Partners](#) - Controls access to the session and applications when compliance requirements for external partners are not satisfied.
- [Geolocation](#) - Validates and controls access based on geolocation information of the remote device.
- [License Compliance](#) - Controls access to applications within the session if the remote device is

not licensed.

- **Location Aware Printing** - Maps network printers and defines a default printer based on the device placement within a building.
- **Meeting Room** - Controls an idle period for devices based upon whether the device is placed within a meeting room.
- **Process Monitoring** - Controls access to applications or the session based on running processes on the remote device.
- **Silo Optimization** - Reduces the number of silos by controlling application access for remote devices within a single silo.
- **Status Report** - Reports the status of the remote device to various destinations.
- **Time-based Access** - Controls access to the session or applications when accessed outside of working hours.
- **Unauthorized USB Device** - Denies access to the session when an unauthorized USB device is plugged in.
- **Work From Home** - Validates and controls access based on the remote device for home office users.

## Cloud Templates

The deviceTRUST® use cases for cloud connected devices are summarized within the following categories.



## TABLE OF CONTENTS

[Compliance Check](#) - Display a message or denies access to the session when compliance requirements on a remote device are not satisfied.

## Reporting

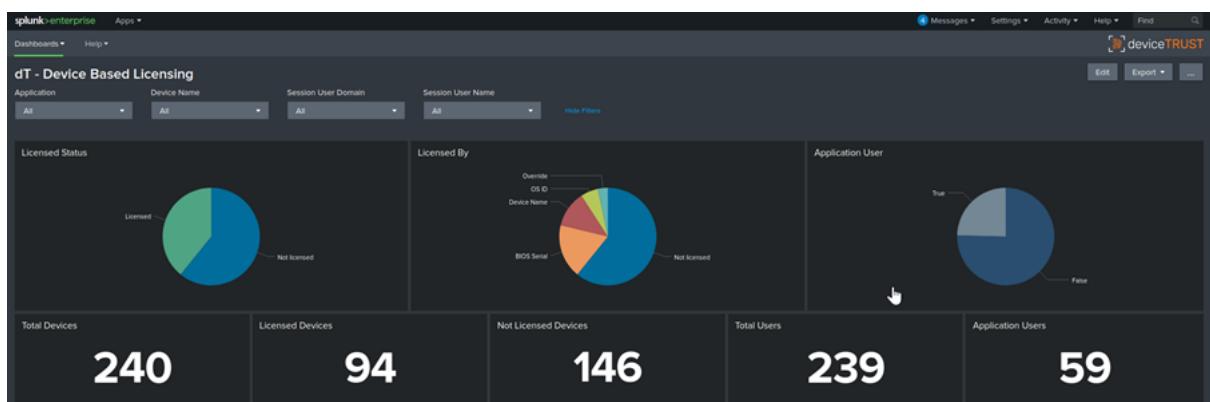
### TABLE OF CONTENTS

- [Splunk Dashboards](#)
- [ELK Stack Dashboards](#)

## Splunk Dashboards

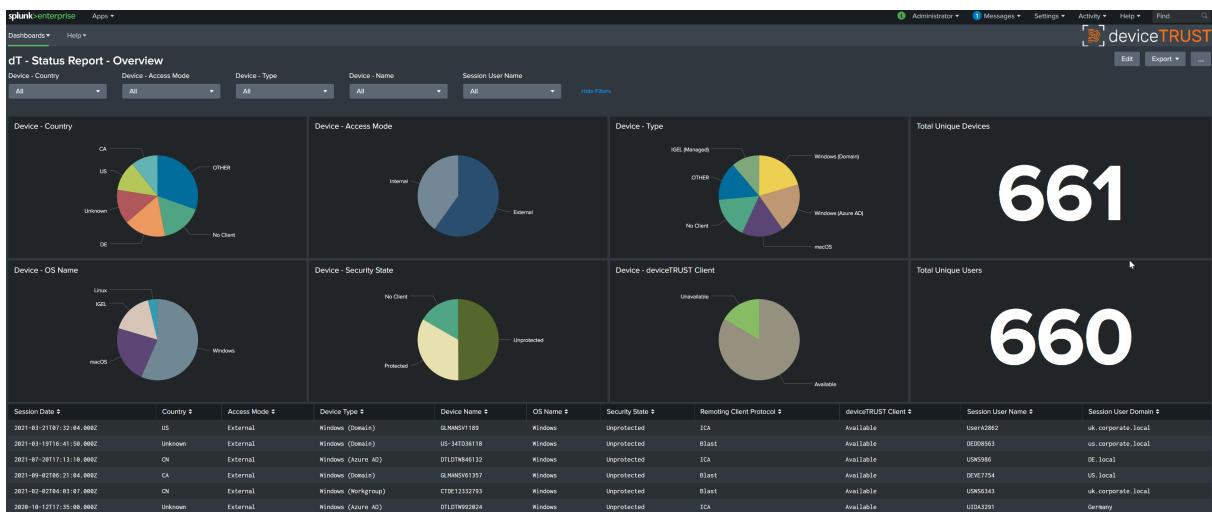
deviceTRUST® includes a Splunk app to easily create a Splunk dashboard to monitor the contextual status of your remoting and DaaS environment.

The [License Compliance Templates](#) can be used with the Splunk app to monitor or enforce Device-Based Licensing requirements for one or more applications:



The [Splunk Status Report Template](#) can be used to monitor the status of your remoting and DaaS environment:

## deviceTRUST 21.1



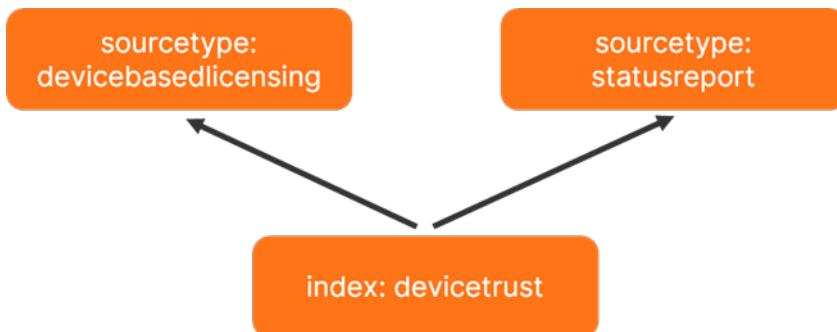
The following steps will be performed:

### Step 1: Creating the Splunk Index

Splunk collects data in *indexes* which holds the log data and make it searchable. There are different methods for working with indexes. Data can, for example, flow into one common index. Alternatively, multiple indexes can be created, one for each use case or scenario.

The deviceTRUST reports use one common index `devicetrust` for storing the data. The separation for the different use cases is done by applying *sourcetypes* `devicebasedlicensing` and `statusreport`.

Our deviceTRUST reports are built on the described combination of index and sourcetypes. If your implementation differs, the reports will have to be adjusted accordingly. Make sure to let us know, we'll happily assist.

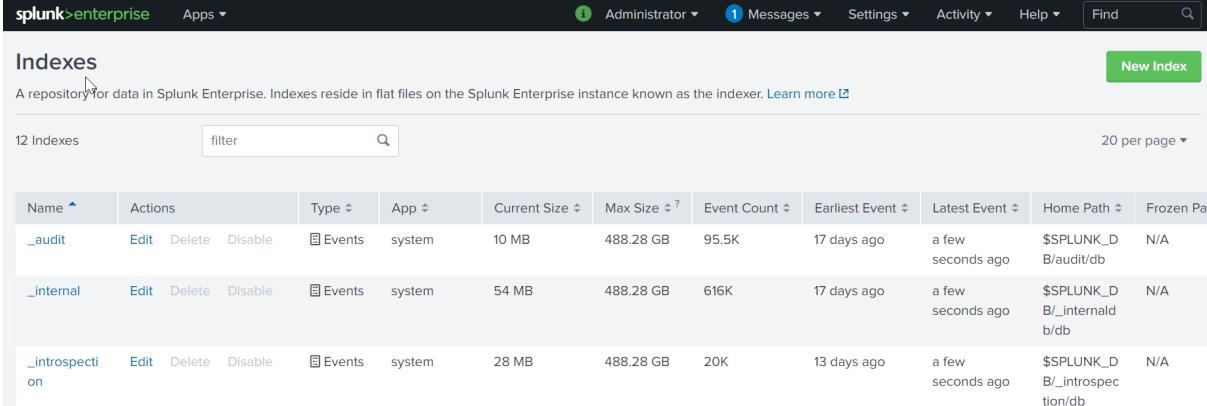


You can either create the index `devicetrust` manually or by importing our prepared app `dt_index`.

### Step 1.1: Manually creating the Splunk Index

Implementing the index manually does not require any special configuration.

- Open your Splunk management GUI
- Navigate to **Settings\Indexes** and click **New Index**.



The screenshot shows the Splunk Enterprise management interface with the following details:

- Header:** splunk>enterprise Apps ▾
- Top Bar:** Administrator ▾ 1 Messages ▾ Settings ▾ Activity ▾ Help ▾ Find
- Page Title:** Indexes
- Page Description:** A repository for data in Splunk Enterprise. Indexes reside in flat files on the Splunk Enterprise instance known as the indexer. [Learn more](#)
- Search Bar:** filter
- Table Headers:** Name ▾, Actions, Type ▾, App ▾, Current Size ▾, Max Size ▾ ?, Event Count ▾, Earliest Event ▾, Latest Event ▾, Home Path ▾, Frozen Path
- Table Data:**

Name	Actions	Type	App	Current Size	Max Size	Event Count	Earliest Event	Latest Event	Home Path	Frozen Path
_audit	Edit Delete Disable	Events	system	10 MB	488.28 GB	95.5K	17 days ago	a few seconds ago	\$SPLUNK_D/B/audit/db	N/A
_internal	Edit Delete Disable	Events	system	54 MB	488.28 GB	616K	17 days ago	a few seconds ago	\$SPLUNK_D/B/_internal/db	N/A
_introspection	Edit Delete Disable	Events	system	28 MB	488.28 GB	20K	13 days ago	a few seconds ago	\$SPLUNK_D/B/_introspection/db	N/A
- Buttons:** New Index

- Set the name to **devicetrust** and all other options are optional.

## New Index

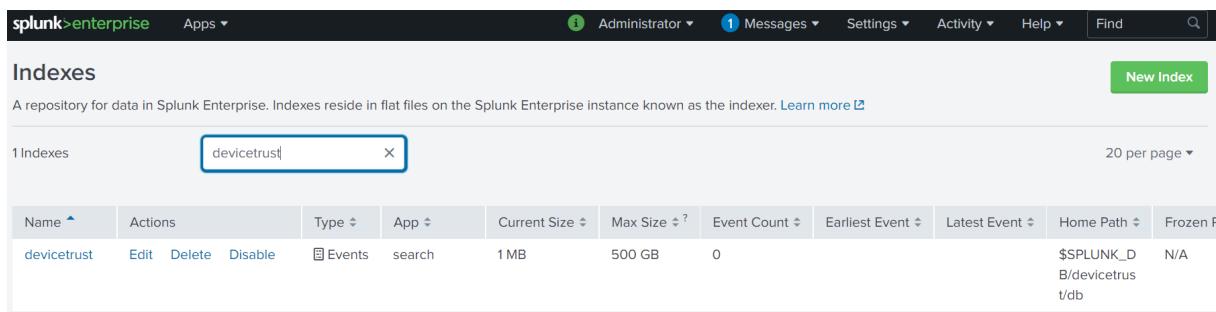
X

## General Settings

Index Name	devicetrust	
	Set index name (e.g., INDEX_NAME). Search using index=INDEX_NAME.	
Index Data Type	<input checked="" type="radio"/> Events	<input type="radio"/> Metrics
	The type of data to store (event-based or metrics).	
Home Path	optional	
	Hot/warm db path. Leave blank for default (\$SPLUNK_DB/INDEX_NAME/db).	
Cold Path	optional	
	Cold db path. Leave blank for default (\$SPLUNK_DB/INDEX_NAME/colddb).	
Thawed Path	optional	
	Thawed/resurrected db path. Leave blank for default (\$SPLUNK_DB/INDEX_NAME/thaweddb).	
Data Integrity Check	<input type="radio"/> Enable	<input checked="" type="radio"/> Disable
	Enable this if you want Splunk to compute hashes on every slice of your data for the purpose of data integrity.	
Max Size of Entire Index	500	GB ▾
	Maximum target size of entire index.	
Max Size of Hot/Warm/Cold Bucket	auto	GB ▾
	Maximum target size of buckets. Enter 'auto_high_volume' for high-volume indexes.	
Frozen Path	optional	
	Frozen bucket archive path. Set this if you want Splunk to automatically archive frozen buckets.	
App	Search & Reporting ▾	
<b>Storage Optimization</b>		
Tsidx Retention Policy	<input type="radio"/> Enable Reduction	<input checked="" type="radio"/> Disable Reduction
	Warning: Do not enable reduction without understanding the full implications. It is extremely difficult to rebuild reduced buckets. <a href="#">Learn More</a> ↗	
Reduce tsidx files older than		Days ▾
	Age is determined by the latest event in a bucket.	

**Save****Cancel**

- Click **Save** and the index will be created.



Name	Actions	Type	App	Current Size	Max Size	Event Count	Earliest Event	Latest Event	Home Path	Frozen
devicetrust	Edit Delete Disable	Events	search	1 MB	500 GB	0			\$SPLUNK_D B/devicetrust t/db	N/A

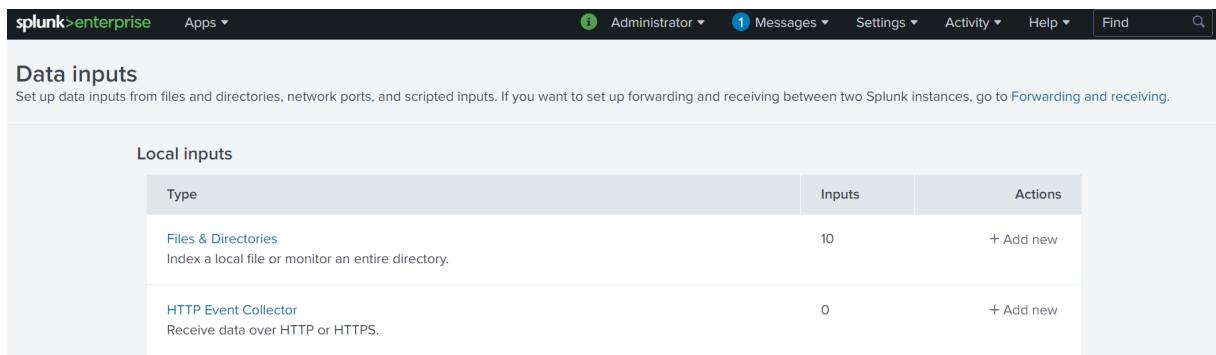
### Step 1.2: Creating the Splunk Index by installing the app

To create the index from the app, please refer to Step 3.2: Installing the Splunk app within this guide. The app `dt_index` does not contain any elements besides the index definition for the index `devicetrust`.

### Step 2: Creating the Splunk Data Inputs

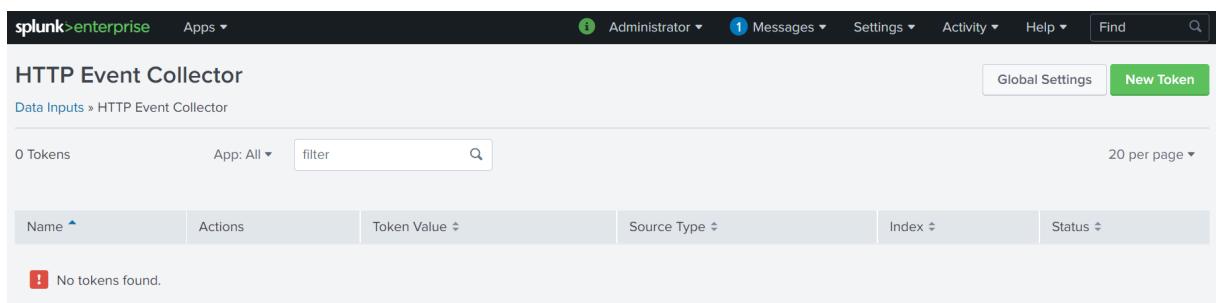
Data is sent to the Splunk server by using REST API calls. Splunk needs to be configured to accept http-based inputs. An authentication token is generated, that will be added to the deviceTRUST Console configuration later.

- Open your splunk management GUI and navigate to `Settings\ Data Inputs`.



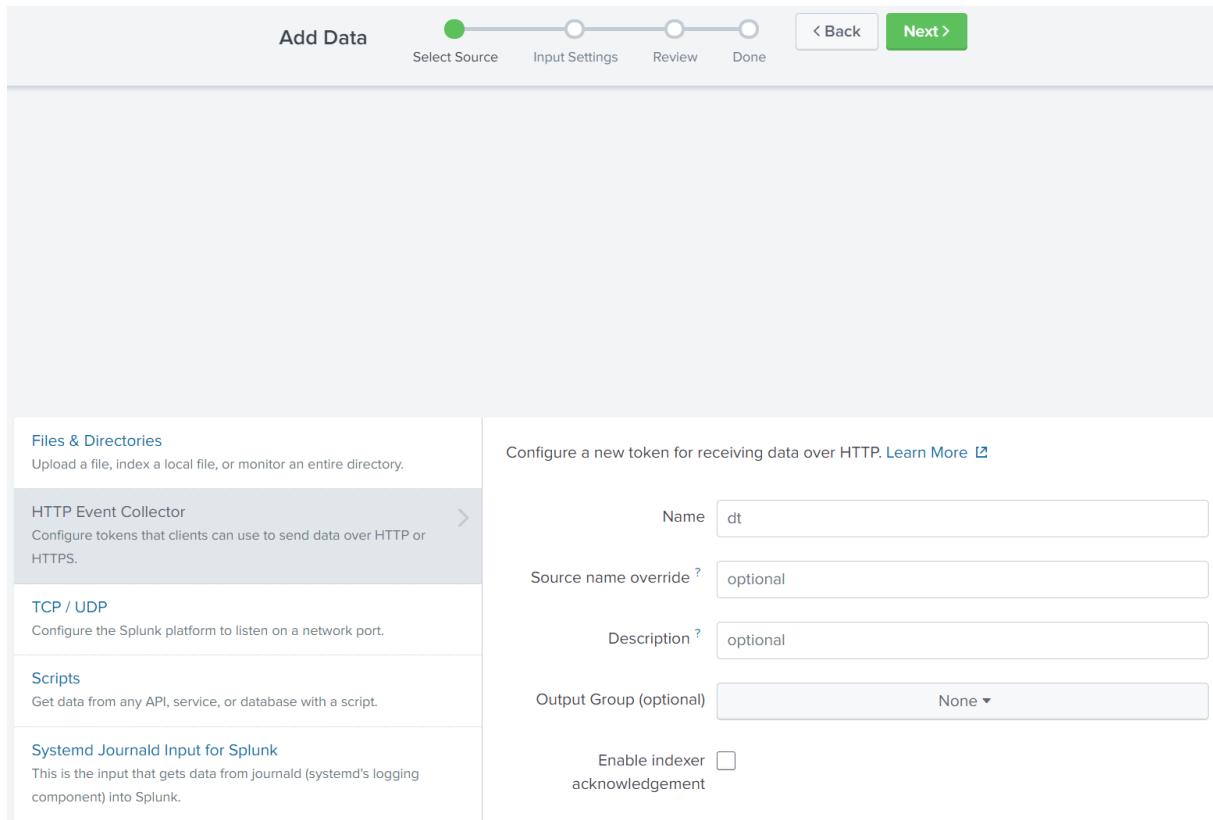
Type	Inputs	Actions
Files & Directories	10	+ Add new
HTTP Event Collector	0	+ Add new

- Select `HTTP Event Collector`
- Click 'New Token'



Name	Actions	Token Value	Source Type	Index	Status
No tokens found.					

- Set a **name** of your choice.
- All other settings are optional.



Files & Directories  
Upload a file, index a local file, or monitor an entire directory.

HTTP Event Collector  
Configure tokens that clients can use to send data over HTTP or HTTPS.

TCP / UDP  
Configure the Splunk platform to listen on a network port.

Scripts  
Get data from any API, service, or database with a script.

Systemd Journald Input for Splunk  
This is the input that gets data from journald (systemd's logging component) into Splunk.

Add Data

Select Source    Input Settings    Review    Done

Next >

Configure a new token for receiving data over HTTP. [Learn More](#)

Name: dt

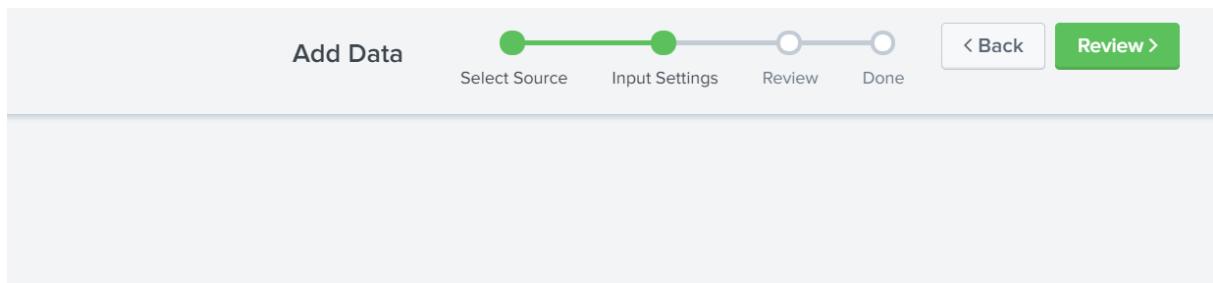
Source name override: optional

Description: optional

Output Group (optional): None

Enable indexer:  acknowledgement

**Input settings** does, for example, allow to restrict access for this data input to certain indexes. Any of these settings may be relevant for your environment. The function of the deviceTRUST reports will not be affected by setting them.



### Input Settings

Optionally set additional input parameters for this data input as follows:

#### Source type

The source type is one of the default fields that the Splunk platform assigns to all incoming data. It tells the Splunk platform what kind of data you've got, so that the Splunk platform can format the data intelligently during indexing. And it's a way to categorize your data, so that you can search it easily.

Automatic    Select    New

#### App context

Application contexts are folders within a Splunk platform instance that contain configurations for a specific use case or domain of data. App contexts improve manageability of input and source type definitions. The Splunk platform loads all app contexts based on precedence rules. [Learn More ↗](#)

App Context

App Exporter (app\_exporter) ▾

#### Index

The Splunk platform stores incoming data as events in the selected index. Consider using a "sandbox" index as a destination if you have problems determining a source type for your data. A sandbox index lets you troubleshoot your configuration without impacting production indexes. You can always change this setting later. [Learn More ↗](#)

The interface allows selecting allowed indexes. It shows a list of available indexes: devicetrust, history, main, and summary. The 'Selected item(s)' list is currently empty. A note at the bottom says 'Select indexes that clients will be able to select from.'

Select Allowed Indexes    Available item(s)    add all »    Selected item(s) « remove all

- devicetrust
- history
- main
- summary

Select indexes that clients will be able to select from.

Default Index

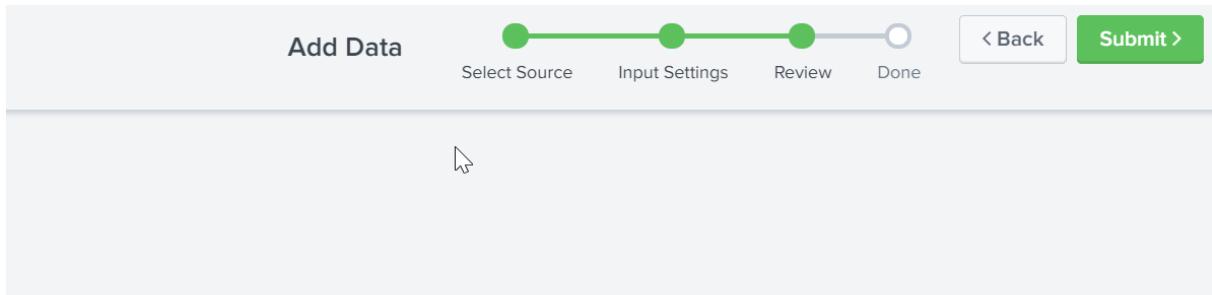
Default ▾

Create a new index

#### FAQ

- How do indexes work?
- How do I know when to create or use multiple indexes?

- Review the Settings.
- Click **Submit**.



## Review

Input Type ..... Token  
Name ..... dT  
Source name override ..... N/A  
Description ..... N/A  
Enable indexer acknowledg ..... No  
Output Group ..... N/A  
Allowed indexes ..... N/A  
Default index ..... default  
Source Type ..... Automatic  
App Context ..... launcher

- The created token is shown.

✓ **Token has been created successfully.**

Configure your inputs by going to [Settings > Data Inputs](#)

Token Value

c61ec5a7-269a-469f-ad34-1480bd941bc7

- The created token is also be displayed in the token overview page.

Name	Actions	Token Value	Source Type	Index	Status
dt	Edit   Disable   Delete	c61ec5a7-269a-469f-ad34-1480bd941bc7	Automatic	default	Enabled

Additionally, the http input method has to be configured. In the most basic configuration, we make sure SSL is not active and all tokens are enabled.

These settings may differ in your environment. The function of the deviceTRUST reports will not be

affected by setting them accordingly.

- Open your splunk management GUI and navigate to [Settings\Data Inputs\HTTP Data Collector](#)
- Click [Global Settings](#)
- Set [All Tokens](#) to Enabled.
- Set [Enable SSL](#) to Off.

### Edit Global Settings



All Tokens	<input checked="" type="checkbox"/> Enabled	<input type="checkbox"/> Disabled
Default Source Type	<input type="button" value="Select Source Type ▾"/>	
Default Index	<input type="button" value="Default ▾"/>	
Default Output Group	<input type="button" value="None ▾"/>	
Use Deployment Server	<input type="checkbox"/>	
Enable SSL	<input type="checkbox"/>	
HTTP Port Number ?	<input type="text" value="8088"/>	

---

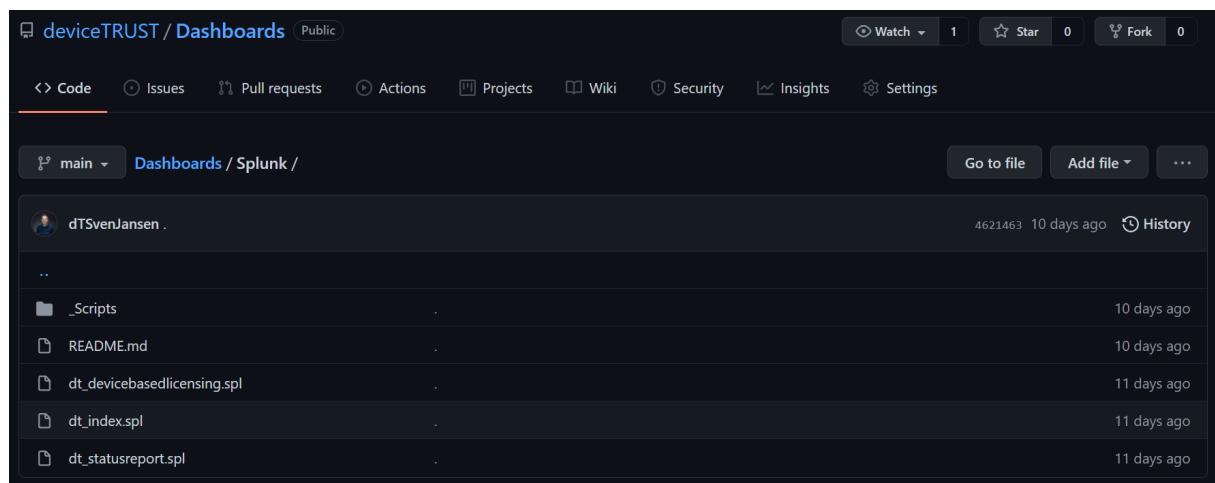
## Step 3: Importing the Splunk app

### Step 3.1: Downloading the Splunk app

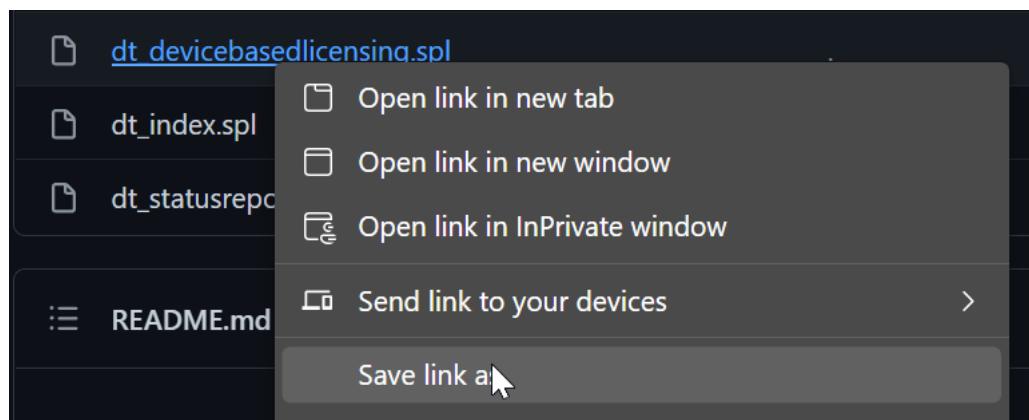
The deviceTRUST reports are delivered as Splunk apps. The apps is available from the [deviceTRUST GitHub repository](#) .

- Navigate to the [repository](#) and find the Splunk apps.

## deviceTRUST 21.1



- The apps are provided as “spl” files which should be downloaded.



- Alternatively the “spl” files can be synchronized via the GIT command line.

```
PS C:\_Data\GIT> git clone https://github.com/deviceTRUST/Dashboards.git
Cloning into 'Dashboards'...
remote: Enumerating objects: 205, done.
remote: Counting objects: 100% (205/205), done.
remote: Compressing objects: 100% (140/140), done.  Receiving objects: 13% (27/205)
remote: Total 205 (delta 72), reused 184 (delta 54), pack-reused 0
Receiving objects: 100% (205/205), 319.08 KiB | 3.39 MiB/s, done.
Resolving deltas: 100% (72/72), done.
PS C:\_Data\GIT> cd .\Dashboards\Splunk\
PS C:\_Data\GIT\Dashboards\Splunk> ls
```

Directory: C:\\_Data\GIT\Dashboards\Splunk

Mode	LastWriteTime	Length	Name
---	-----	-----	-----
d----	10/29/2021 4:52 PM	15444	_Scripts
-a----	10/29/2021 4:52 PM	11195	dt_devicebasedlicensing.spl
-a----	10/29/2021 4:52 PM	19415	dt_index.spl
-a----	10/29/2021 4:52 PM	810	dt_statusreport.spl
-a----	10/29/2021 4:52 PM		README.md

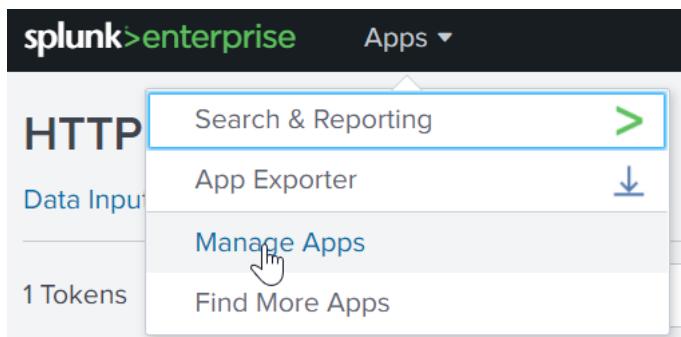
- With the apps available locally, they can be imported into Splunk.

📁	_Scripts	29/10/2021 16:52	File folder
📄	dt_devicebasedlicensing.spl	29/10/2021 16:52	SPL File 16 KB
📄	dt_index.spl	29/10/2021 16:52	SPL File 11 KB
📄	dt_statusreport.spl	29/10/2021 16:52	SPL File 19 KB
📝	README.md	29/10/2021 16:52	Markdown Source File 1 KB

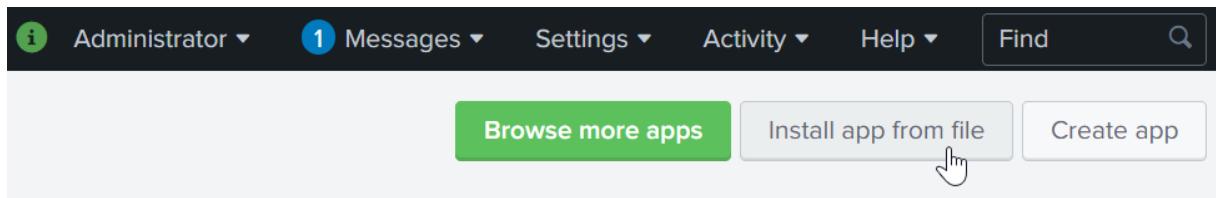
### Step 3.2: Installing the Splunk app

All three deviceTRUST apps are installed the same way. Thus, the app installation is described by using one example.

- Open your Splunk management console.
- Click **Manage Apps** in the apps menu.



- Click **Install app from file**.



- Click **Choose File**.

## Upload an app

If you have a .spl or .tar.gz app file to install, you can upload it using this form.

You can replace an existing app via the Splunk CLI. [Learn more](#).

File

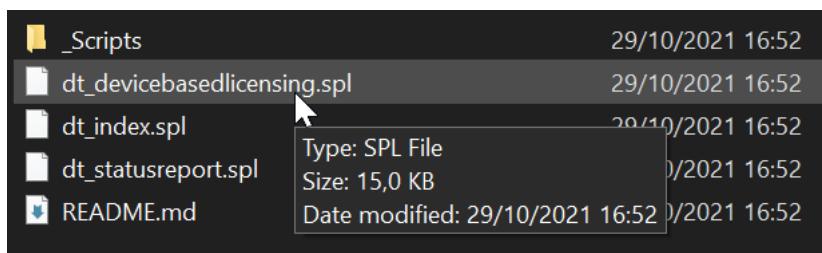
**Choose File**  No file chosen

Upgrade app. Checking this will overwrite the app if it already exists.

**Cancel**

**Upload**

- Select your app file.



- Confirming your selection.
- Optionally select to upgrade apps, if applicable.
- Click **Upload**.

## Upload an app

If you have a .spl or .tar.gz app file to install, you can upload it using this form.

You can replace an existing app via the Splunk CLI. [Learn more](#).

File

dt\_devicebasedlicensing.spl

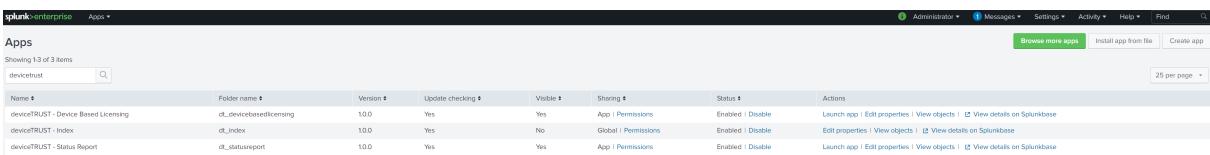
Upgrade app. Checking this will overwrite the app if it already exists.

- Splunk will ask to restart the service. This is only required after importing the last app.
- Choose [Restart Now](#) or [Restart Later](#) accordingly.

### Restart Required

You must restart Splunk Enterprise to complete the update.

- The menu [Apps\Manage Apps](#) displays all apps that are installed in your Splunk environment.



Name	Folder name	Version	Update checking	Visible	Sharing	Status	Actions
deviceTRUST - Device Based Licensing	dt_devicebasedlicensing	1.0.0	Yes	Yes	App   Permissions	Enabled   Disable	<a href="#">Launch app</a>   <a href="#">Edit properties</a>   <a href="#">View objects</a>   <a href="#">View details on Splunkbase</a>
deviceTRUST - Index	dt_index	1.0.0	Yes	No	Global   Permissions	Enabled   Disable	<a href="#">Edit properties</a>   <a href="#">View objects</a>   <a href="#">View details on Splunkbase</a>
deviceTRUST - Status Report	dt_statusreport	1.0.0	Yes	Yes	App   Permissions	Enabled   Disable	<a href="#">Launch app</a>   <a href="#">Edit properties</a>   <a href="#">View objects</a>   <a href="#">View details on Splunkbase</a>

## Step 4: Configuring deviceTRUST

After the the index has been created, the data input object added and all apps have been imported, Splunk is ready to accept, store and compute data for the deviceTRUST reports.

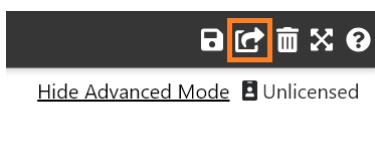
As both reports [Device-Based Licensing](#) and [Status Report](#) differ in their details, both are described here separately.

### Step 4.1: The Device-Based Licensing Report

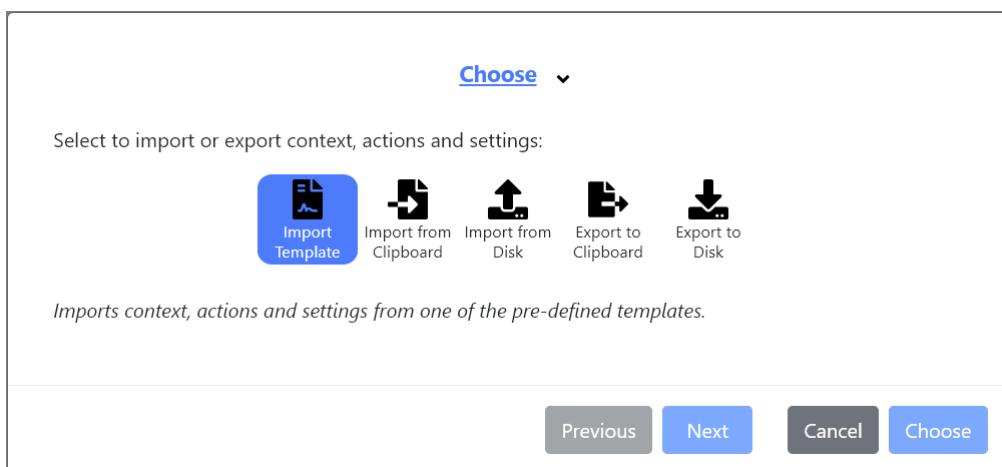
This step describes the configuration to be added to the deviceTRUST Console to send [Device-Based Licensing](#) data to Splunk.

The integrated templates contain all elements that are required to fully configure the agent for the Device-Based Licensing of five example applications. These five example applications can be easily edited for your own applications, or cloned to represent new applications. The elements are contexts, actions, messages and settings.

- Open the [deviceTRUST Console](#).
- Click [Sharing](#) in the top right menu. You may need to click [Show Advanced View](#) if this button is not visible.



- Select [Import Template](#)



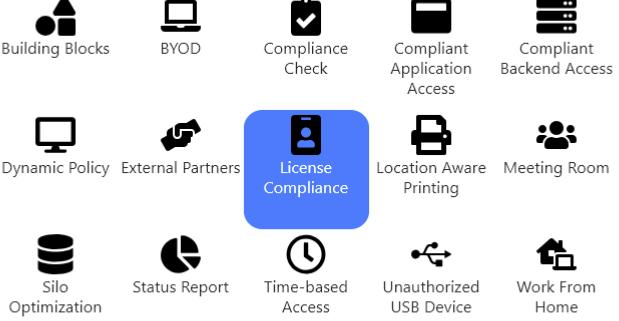
- The report [Device-Based Licensing](#) can be found within the template category [License Compliance](#) when [Remoting](#) is selected.

[Import Template](#) >

[From Category](#) ▾

Select the category of template to import from:

[Remoting](#) [Fat Client](#)



*Controls access to applications within the session if the remote device is not licensed.*

[Previous](#) [Next](#) [Cancel](#) [Import Template](#)

- The category contains templates for different example applications. We use [Adobe Acrobat DC](#) as an example here.

[Import Template](#) >

[From License Compliance for Remoting](#) >

[Adobe Acrobat DC](#) ▾

Select a template to import:

- Adobe Acrobat DC** Reports, hides or denies Adobe Acrobat DC within the session if the remote device is not licensed. [?](#)
- Microsoft Office** Reports, hides or denies Microsoft Office within the session if the remote device is not licensed. [?](#)
- Microsoft Project** Reports, hides or denies Microsoft Project within the session if the remote device is not licensed. [?](#)
- Microsoft Visio** Reports, hides or denies Microsoft Visio within the session if the remote device is not licensed. [?](#)
- Nuance PDF** Reports, hides or denies Nuance PDF within the session if the remote device is not licensed. [?](#)

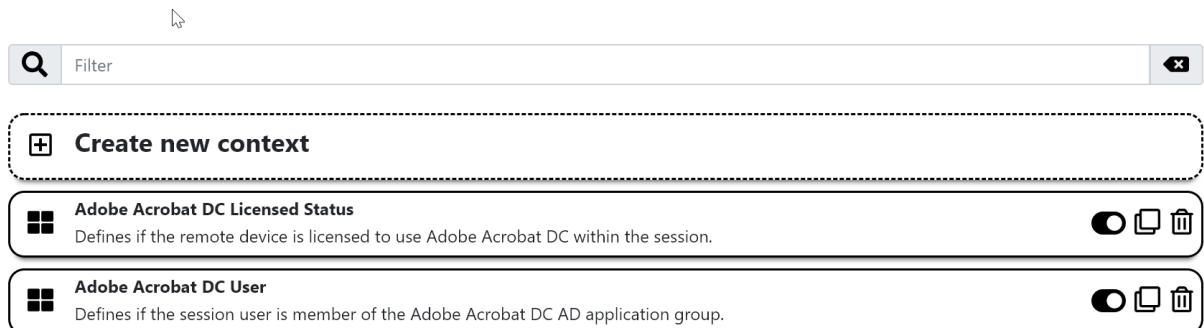
[Previous](#) [Next](#) [Cancel](#) [Import Template](#)

Two contexts are included within the template:

- [Adobe Acrobat DC Licensed Status](#) to evaluate the device license status.
- [Adobe Acrobat DC User](#) to define if the accessing user is licensed to use the software.

### Context

Create the contexts that are important to your business. Each context is evaluated using properties from the remote device or the local host. They are assigned a value which can be acted upon by a task.



**Create new context**

**Adobe Acrobat DC Licensed Status**  
Defines if the remote device is licensed to use Adobe Acrobat DC within the session.

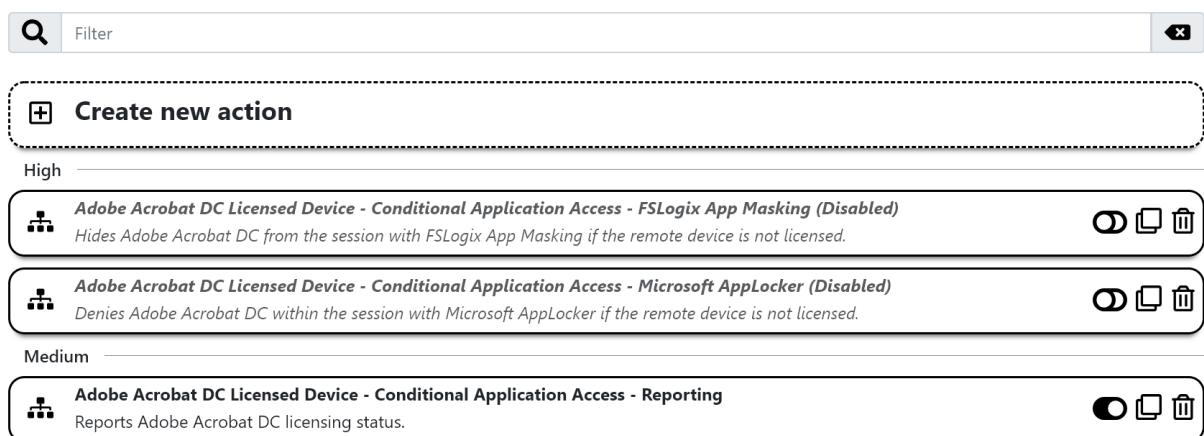
**Adobe Acrobat DC User**  
Defines if the session user is member of the Adobe Acrobat DC AD application group.

Three actions are included within the template:

- **Adobe Acrobat DC Licensed Device - Conditional Application Access**
  - **FSLogix App Masking** is used for application control via **FSLogix App Masking** and can be ignored or deleted for the reporting use case.
- **Adobe Acrobat DC Licensed Device - Conditional Application Access**
  - **Microsoft AppLocker** is used for application control via **Microsoft AppLocker** and can be ignored or deleted for the reporting use case.
- **Adobe Acrobat DC Licensed Device - Conditional Application Access**
  - **Reporting** the only action required for reporting.

### Actions

Actions can be used to execute a sequence of tasks on either changes to context or on predefined triggers during the lifetime of a user session.



**Create new action**

High

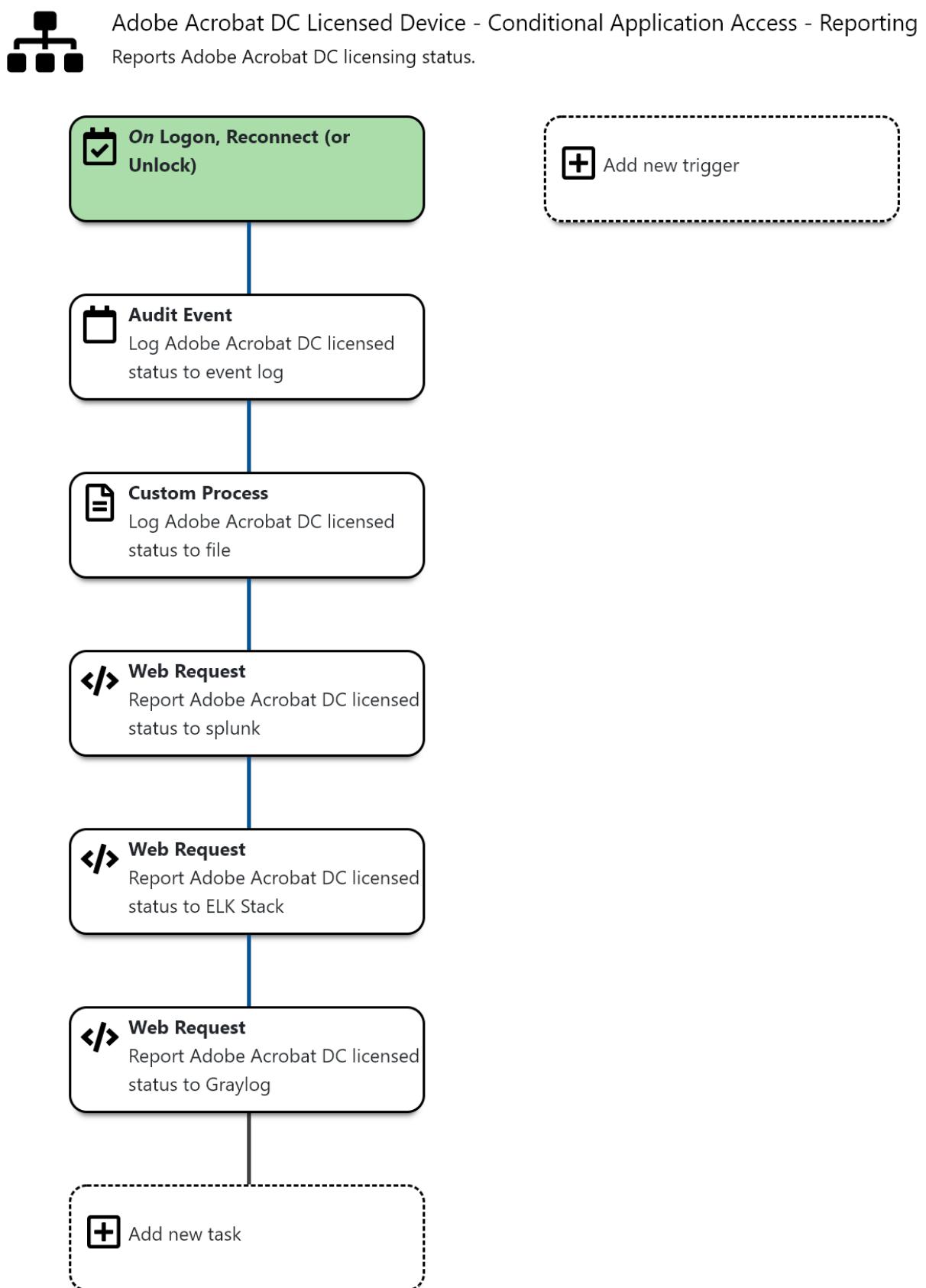
**Adobe Acrobat DC Licensed Device - Conditional Application Access - FSLogix App Masking (Disabled)**  
Hides Adobe Acrobat DC from the session with FSLogix App Masking if the remote device is not licensed.

**Adobe Acrobat DC Licensed Device - Conditional Application Access - Microsoft AppLocker (Disabled)**  
Denies Adobe Acrobat DC within the session with Microsoft AppLocker if the remote device is not licensed.

Medium

**Adobe Acrobat DC Licensed Device - Conditional Application Access - Reporting**  
Reports Adobe Acrobat DC licensing status.

- The action contains uses the **Web Request** task to send data to Splunk. The **Audit Event**, **Custom Process** and also the **Web Request** tasks for ELK Stack and Graylog can be deleted, as we are configuring Splunk here.



- The [Splunk Web Request](#) task needs to be edited to suit your environment. If you do not require SSL transport, you'll only have to configure your [server's fqdn](#) and the [authorization token](#) (http data input). Make sure to leave the keyword `splunk` and only add/change your authorization token's GUID.

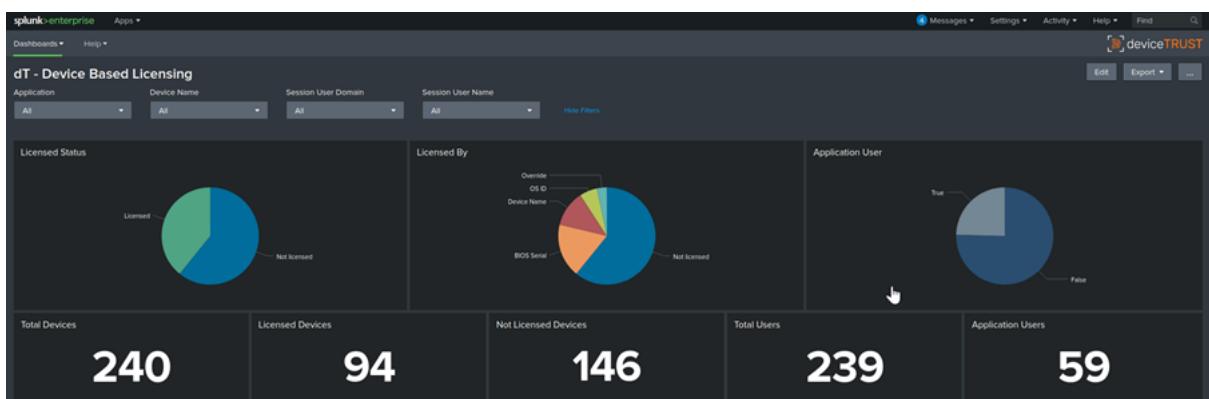
Enter the method and a fully qualified URL such as <https://example.com/path>.

http://YOUR\_SPLUNK\_SERVER:8088/services/collector

Optional enter one or more headers.

Name	Value
Authorization	Splunk 12345678-1234-1234-1234-123456789101
Enter header name	Enter header value

The use case has successfully been configured. deviceTRUST will now send [Device-Based Licensing](#) data on every access to the Splunk server. The data will be presented using dashboards.

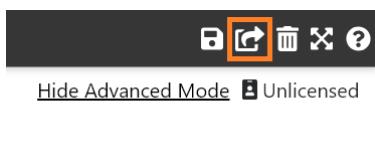


## Step 4.2: The Status Report

This step describes the configuration, that is to be added to the deviceTRUST console to send [Status Report](#) data to splunk.

Our integrated templates contain all elements that are required to fully configure the agent for the Device-Based Licensing of five example applications. The elements are contexts, actions, messages and settings.

- Open the deviceTRUST console and click [Sharing](#) in the top right menu.



- Select [Import Template](#)

[Choose](#) ▾

Select to import or export context, actions and settings:

 Import Template    Import from Clipboard    Import from Disk    Export to Clipboard    Export to Disk

*Imports context, actions and settings from one of the pre-defined templates.*

[Previous](#) [Next](#) [Cancel](#) [Choose](#)

- The [Status Report](#) template can be found within the template category [Status Report](#) when [Remoting](#) is selected.

[Import Template](#) >

[From Category](#) ▾

Select the category of template to import from:

[Remoting](#) [Fat Client](#)

 Building Blocks	 BYOD	 Compliance Check	 Compliant Application Access	 Compliant Backend Access
 Dynamic Policy	 External Partners	 License Compliance	 Location Aware Printing	 Meeting Room
 Silo Optimization	 Status Report	 Time-based Access	 Unauthorized USB Device	 Work From Home

*Reports the status of the remote device to various destinations.*

[Previous](#) [Next](#) [Cancel](#) [Import Template](#)

- This category contains templates for several ways of storing data. Choose [Splunk](#).

[Import Template](#) >

[From Status Report for Remoting](#) >

**Splunk** ▾

Select a template to import:

- Application Log** Reports the status of the remote device to the Windows application log. [?](#)
- ELK Stack** Reports the status of the remote device to ELK Stack. [?](#)
- Email** Send the status of the remote device by email. [?](#)
- Graylog** Records the status of the remote device to Graylog. [?](#)
- Log File** Records the status of the remote device to a log file. [?](#)
- Splunk** Records the status of the remote device to Splunk. [?](#)

Previous [Next](#) Cancel [Import Template](#)

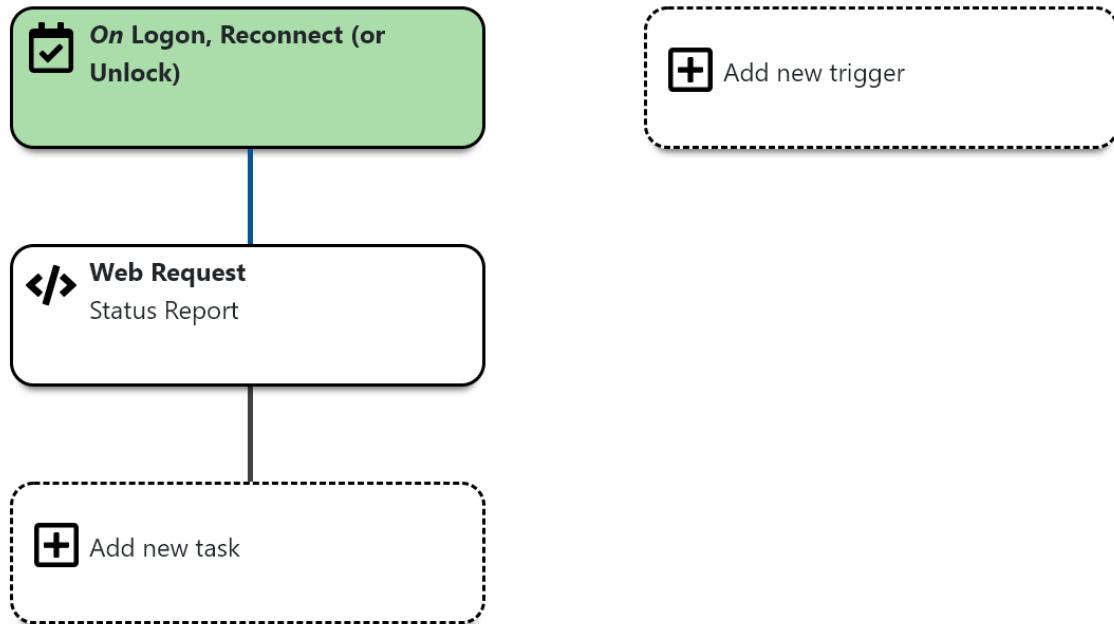
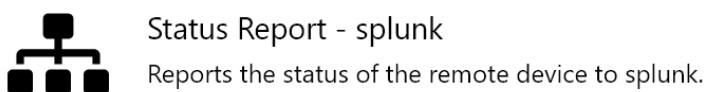
- The imported template consists of 50 contexts and one action.
- The Action Status Report – Splunk collects all relevant data and sends them over to Splunk.

### Actions

Actions can be used to execute a sequence of tasks on either changes to context or on predefined triggers during the lifetime of a user session.

The screenshot shows a search bar with a magnifying glass icon and a 'Filter' button. Below it is a button labeled '+ Create new action'. Underneath is a list item for 'Status Report - Splunk', which includes a small icon of a server, a description 'Reports the status of the remote device to Splunk.', and three small icons for edit, delete, and preview.

- Sending data to Splunk is configured by using a [Web Request](#) task.



The Web Request task needs to be edited to suit your environment. If you do not require SSL transport, you'll only have to configure your [server's fqdn](#) and the [authorization token](#) (http data input). Make sure to leave the keyword [splunk](#) and only change your authorization token's GUID.

[When executing Web Request task](#) >[Apply settings](#) ▾

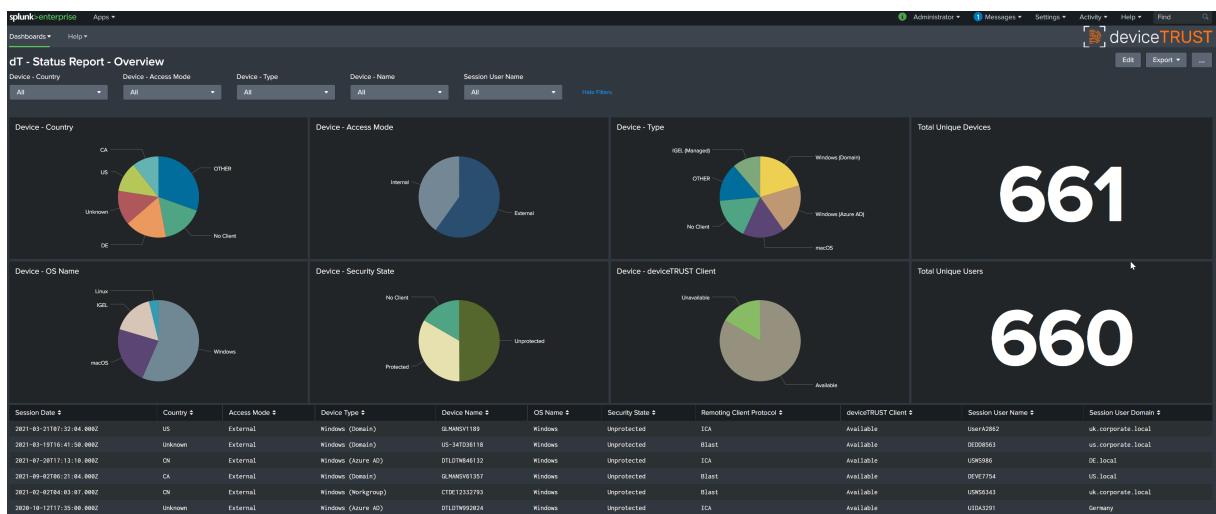
Enter the method and a fully qualified URL such as <https://example.com/path>.

POST ▾ [http://YOUR\\_SPLUNK\\_SERVER:8088/services/collector](http://YOUR_SPLUNK_SERVER:8088/services/collector)

Optionally enter one or more headers.

Name	Value
Authorization	Splunk YOUR_AUTH_TOKEN
Enter header name	Enter header value

The use case has successfully been configured. deviceTRUST will now send [Status Report](#) data on every access to the remoting platform to the splunk server. There, the data will be presented using dashboards.

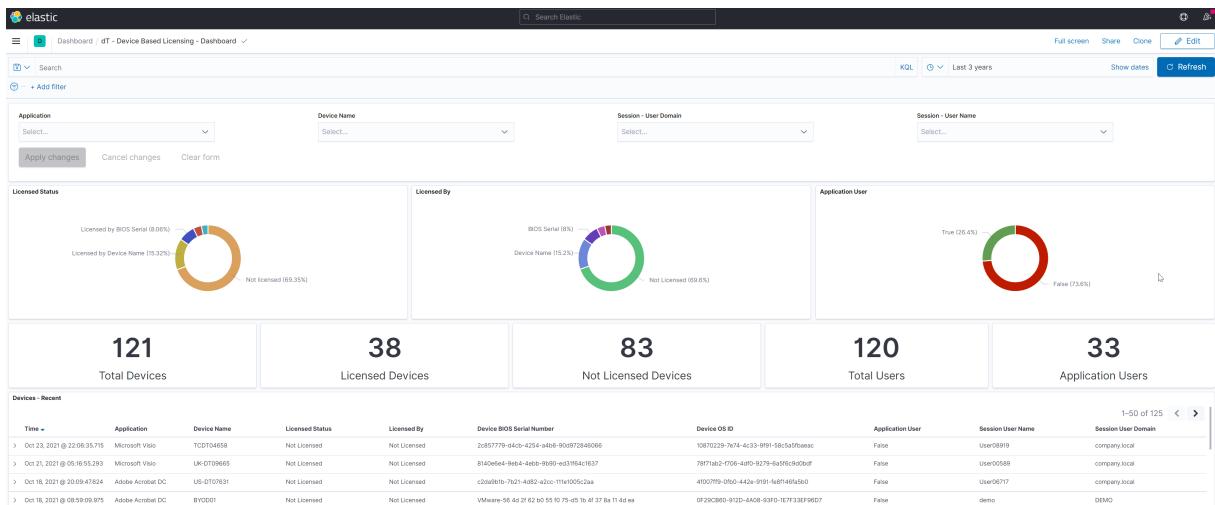


## ELK Stack Dashboards

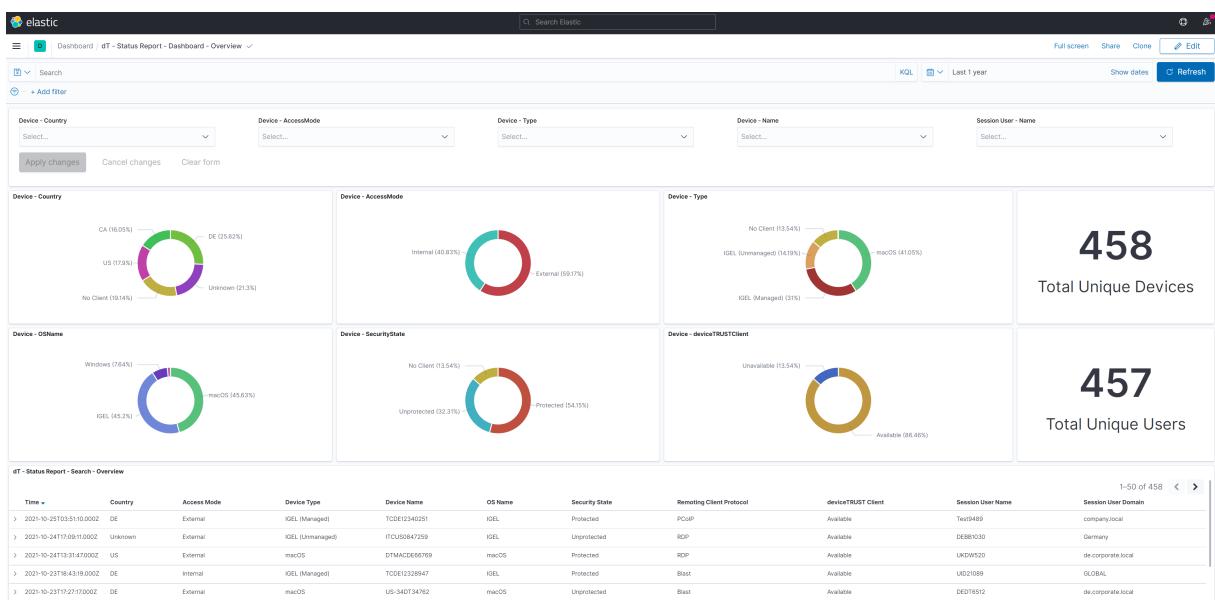
deviceTRUST® includes components for an ELK Stack to easily create a dashboard to monitor the contextual status of your remoting and DaaS environment.

The [License Compliance Templates](#) can be used with your ELK Stack to monitor or enforce Device-Based Licensing requirements for one or more applications:

## deviceTRUST 21.1



The [ELK Stack Status Report Template](#) can be used to monitor the status of your remoting and DaaS environment:



- [Step 1: Components](#)

- [Step 1.1: Components - GitHub](#)
- [Step 1.2: Components - Templates](#)

- [Step 2: The Device-Based Licensing Report](#)

- [Step 2.1: Add Index Template to ELK Stack](#)
- [Step 2.2: Import Saved Objects to ELK Stack](#)
- [Step 2.3: Configuring deviceTRUST](#)

- [Step 3: The Status Report](#)

- [Step 3.1: Add Index Template to ELK Stack](#)

- [Step 3.2: Import Saved Objects to ELK Stack](#)
- [Step 3.3: Configuring deviceTRUST](#)
- [Step 3.4: Edit index settings](#)

## Step 1: Components

The deviceTRUST dashboards for ELK Stack consist of several components. All elements that need to be imported on the ELK Stack side can be found on GitHub. The configuration for the deviceTRUST Agent is available as a template within the deviceTRUST Console.

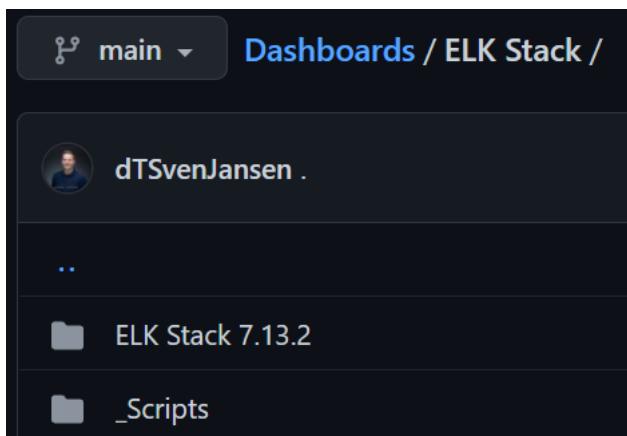
### Step 1.1: Components - GitHub

All required components for ELK Stack can be found on our [GitHub repository](#).

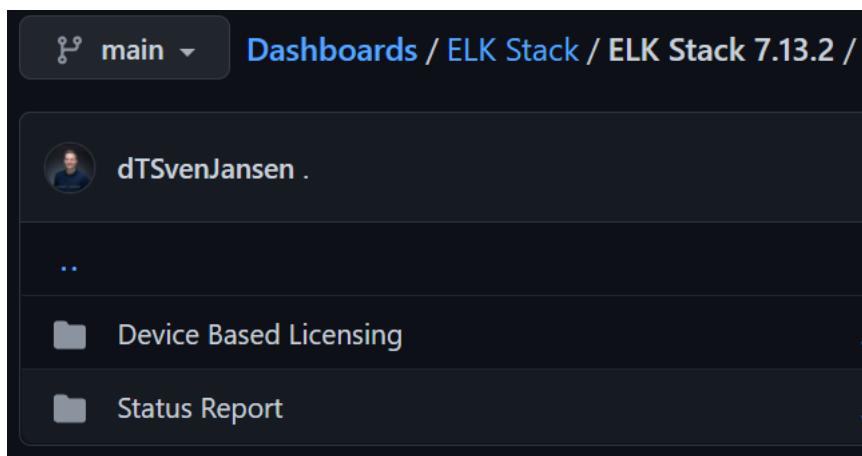
**Note:**

Saved objects for ELK are not backward compatible. Please use only versions matching or older than your system.

- Select the version number matching your ELK Stack system and download the files. You can of course also clone the whole repository if you like.

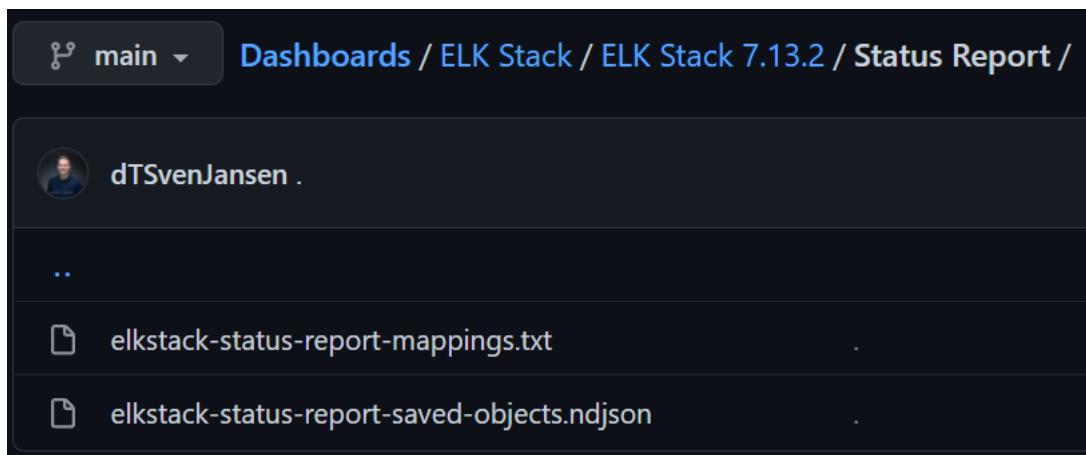


Every version folder contains folders for each use case. Each of these use case folders contains the relevant stored object and mapping files.



Each use case folder contains the following files:

- `elkstack-<use case>-mappings.txt` contains data definitions for the data being sent to ELK Stack index mapping.
- `elkstack-<use case>-saved-objects.ndjson` contains all objects that are required to store, search and visualize data, such as indexes, scripted fields, dashboards and searches.



### Step 1.2: Components - Templates

deviceTRUST must be configured to send the required data for each use case. Templates for both use cases are included in the deviceTRUST Console.

[Import Template](#) >

[From Category](#) ▾

Select the category of template to import from:

[Remoting](#) [Fat Client](#)

 Building Blocks	 BYOD	 Compliance Check	 Compliant Application Access	 Compliant Backend Access
 Dynamic Policy	 External Partners	 License Compliance	 Location Aware Printing	 Meeting Room
 Silo Optimization	 Status Report	 Time-based Access	 Unauthorized USB Device	 Work From Home

*Reports the status of the remote device to various destinations.*

[Previous](#) [Next](#) [Cancel](#) [Import Template](#)

## Step 2: The Device-Based Licensing Report

This part of the guide relates to [Device-Based Licensing](#). It lists all steps that are required to configure the ELK Stack, and also how to configure the deviceTRUST Agent.

### Step 2.1: Add Index Template to ELK Stack

The first step is to create an [Index Template](#). Index Templates describe the data that is being sent to an index. They make sure that every date is treated according to its type.

- Within the ELK Stack management console, navigate to [Menu\Stack Management\Index Management\Index Templates](#).
- Click [Create Template](#).

## Index Management

Indices Data Streams [Index Templates](#) Component Templates

Use index templates to automatically apply settings, mappings, and aliases to indices. [Learn more.](#)

[View](#) [1](#) [Reload](#)

Search... [Create template](#)

- Set **Name** to `dt_devicebasedlicensing`.
- Set **Index Patterns** to `dt_devicebasedlicensing*`.

## Create template

1 Logistics 2 Component templates 3 Index settings 4 Mappings 5 Aliases 6 Review template

Logistics [Index Templates docs](#)

**Name**  
A unique identifier for this template.

**Index patterns**  
The index patterns to apply to the template.

**Name** `dt_devicebasedlicensing`

**Index patterns** `dt_devicebasedlicensing*`

Spaces and the characters \ / ? " < > | are not allowed.

- Skip all options until **Mappings**.
- Select **Load Json** to import the file `elkstack-device-based-licensing-mappings.txt` that was downloaded in Step 1.1.

## Create template

Logistics Component templates Index settings **Mappings** Aliases Review template

### Mappings (optional)

Define how to store and index documents.

Mapped fields Runtime fields Dynamic templates Advanced options

Define the fields for your indexed documents. [Learn more.](#)

Field name	Field type
	Text

Add field

Search fields

Add field

Back Next > Preview index template

- Proceed with [Load](#) and [overwrite](#).

## Load JSON

Provide a mappings object, for example, the object assigned to an index mappings property. This will overwrite existing mappings, dynamic templates, and options.

### Mappings object

```
  "doc_values": true
},
"LicensedStatus": {
  "eager_global_ordinals": false,
  "norms": false,
  "index": true,
  "store": false,
  "type": "keyword",
  "split_queries_on_whitespace": false,
  "index_options": "docs",
  "doc_values": true
},
"DeviceName": {
  "eager_global_ordinals": false,
  "norms": false,
  "index": true,
  "store": false,
  "type": "keyword",
  "split_queries_on_whitespace": false,
  "index_options": "docs",
  "doc_values": true
},
"SessionDate": {
  "index": true,
  "ignore_malformed": false,
  "store": false,
  "type": "date",
  "doc_values": true
}
}
```

[Cancel](#) [Load and overwrite](#)

The imported mappings are displayed. Please review them carefully.

- `SessionDate` needs to be recognized as type `Date` for the report to function properly.

## Create template

Logistics Component templates Index settings **4** Mappings **5** Aliases **6** Review template

**Mappings (optional)** [Load JSON](#) [Mapping docs](#)

Define how to store and index documents.

Mapped fields Runtime fields Dynamic templates Advanced options

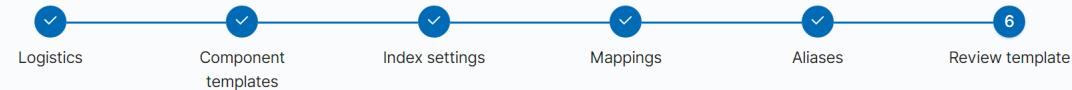
Define the fields for your indexed documents. [Learn more](#)

Search fields

Application	Keyword		
ApplicationUser	Keyword		
DeviceBIOSSerialNumber	Keyword		
DeviceName	Keyword		
DeviceOSID	Keyword		
LicensedStatus	Keyword		
SessionDate	Date		
SessionUserDomain	Keyword		
SessionUserName	Keyword		

- Skip all options until **Review Template**.
- Generate the template with **Create Template**.

## Create template



Review details for 'dt\_devicebasedlicensing'

Summary   Preview   Request

Index pattern <b>dt_devicebasedlicensing*</b>	Index settings No
Priority <b>None</b>	Mappings Yes
Version <b>None</b>	Aliases No
Component templates <b>None</b>	

[Back](#) [Create template](#)

You'll be given an overview of the created template. A blue marked **M** in the **Content** section indicates that mappings are available.

## Index Management

Indices   Data Streams   [Index Templates](#)   Component Templates

Use index templates to automatically apply settings, mappings, and aliases to indices. [Learn more.](#)

[View](#) [1](#) [Reload](#)

Search... [Create template](#)

Name ↑	Index patterns	Components	Data stream	Content	Actions
<input type="checkbox"/> <a href="#">dt_devicebasedlicensing</a>	<a href="#">dt_devicebasedlicensing*</a>			<span style="background-color: blue; border: 1px solid black; padding: 2px 5px;">M</span> <span style="border: 1px solid black; padding: 2px 5px;">S</span> <span style="border: 1px solid black; padding: 2px 5px;">A</span>	<a href="#">...</a>

## Step 2.2: Import Saved Objects to ELK Stack

All other parts of the report are to be imported as **Saved Objects**. The Saved Objects consist of Index Patterns with Scripted Fields, Visualizations and Dashboards.

- Navigate to **Menu\Stack Management\Saved Objects** in your ELK Stack management console.
- Click **Import**.

Saved Objects

Manage and share your saved objects. To edit the underlying data of an object, go to its associated application.

Export 1 object Import Refresh

Search... Type Tags Actions

Advanced Settings [7.13.2] Delete Export

Rows per page: 50 < 1 >

- Select the file `elkstack-device-based-licensing-saved-objects.ndjson`.
- Check `Create new objects with random IDs` to make sure no existing objects are altered.

## Import saved objects

### Select a file to import

elkstack-device-based-licensing-saved-objects.ndjson Remove

### Import options

Check for existing objects  ⓘ

Automatically overwrite conflicts

Request action on conflict

Create new objects with random IDs  ⓘ

After importing, an overview of the imported objects will be displayed.

## 15 objects imported

### 15 new

---

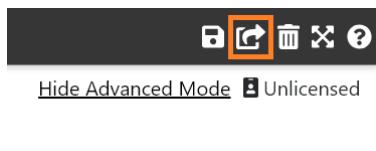
☰ Advanced Settings [7.13.2]	✓
☷ dT - Device Based Licensing - Dashboard	✓
☷ dt_devicebasedlicensing*	✓
⌚ dT - Device Based Licensing - Lens - Application Users	✓
⌚ dT - Device Based Licensing - Lens - Licensed Devices	✓
⌚ dT - Device Based Licensing - Lens - Not Licensed Devices	✓
⌚ dT - Device Based Licensing - Lens - Total Devices	✓
⌚ dT - Device Based Licensing - Lens - Total Users	✓
⌚ dT - Device Based Licensing - Search - Older than 365 days	✓
⌚ dT - Device Based Licensing - Search - Older than 90 days	✓
⌚ dT - Device Based Licensing - Search - Recent	✓
תפריט dT - Device Based Licensing - Menu	✓
תפריט dT - Device Based Licensing - Pie Chart - Application User	✓
תפריט dT - Device Based Licensing - Pie Chart - Licensed By	✓
תפריט dT - Device Based Licensing - Pie Chart - Licensed Status	✓

### Step 2.3: Configuring deviceTRUST

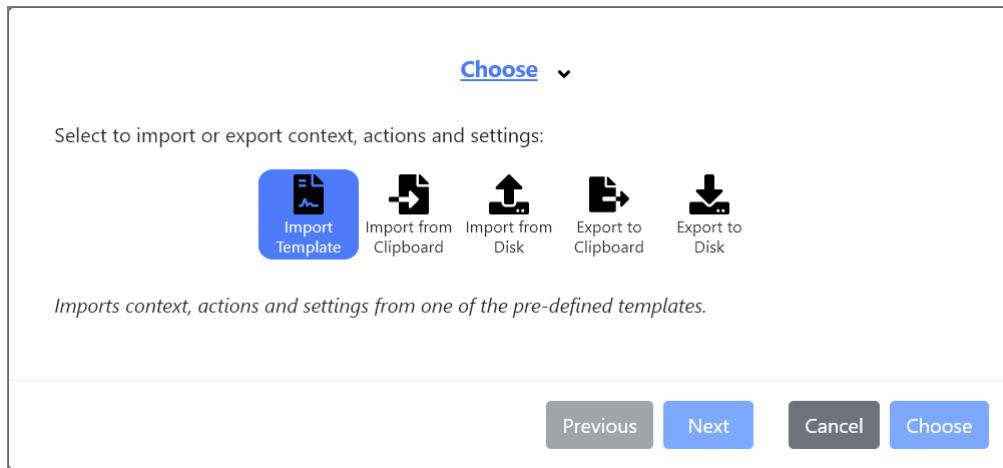
After the Index Mapping has been created and the Saved Objects are included, the ELK Stack is prepared for storing, sorting, and displaying your data.

The final step is to create the deviceTRUST configuration that will make sure all the required data is provided.

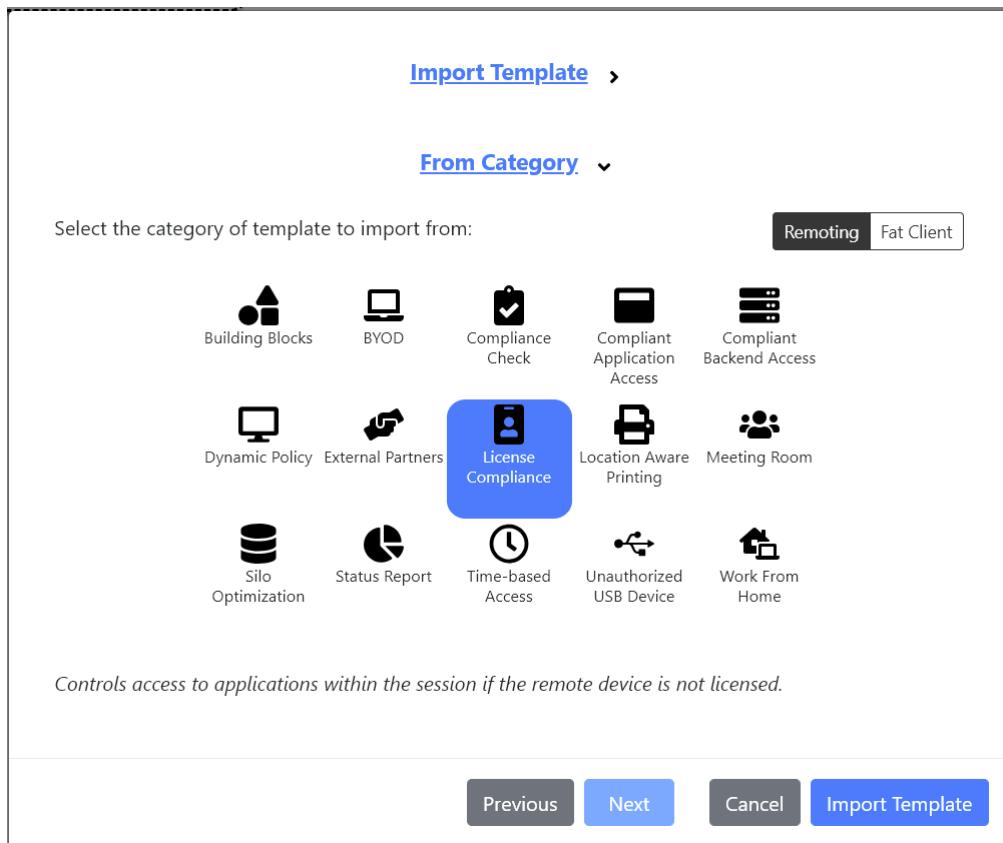
- Open the [deviceTRUST Console](#).
- Click [Sharing](#) in the top right menu. You may need to click [Show Advanced View](#) if this button is not visible.



- Select [Import Template](#).

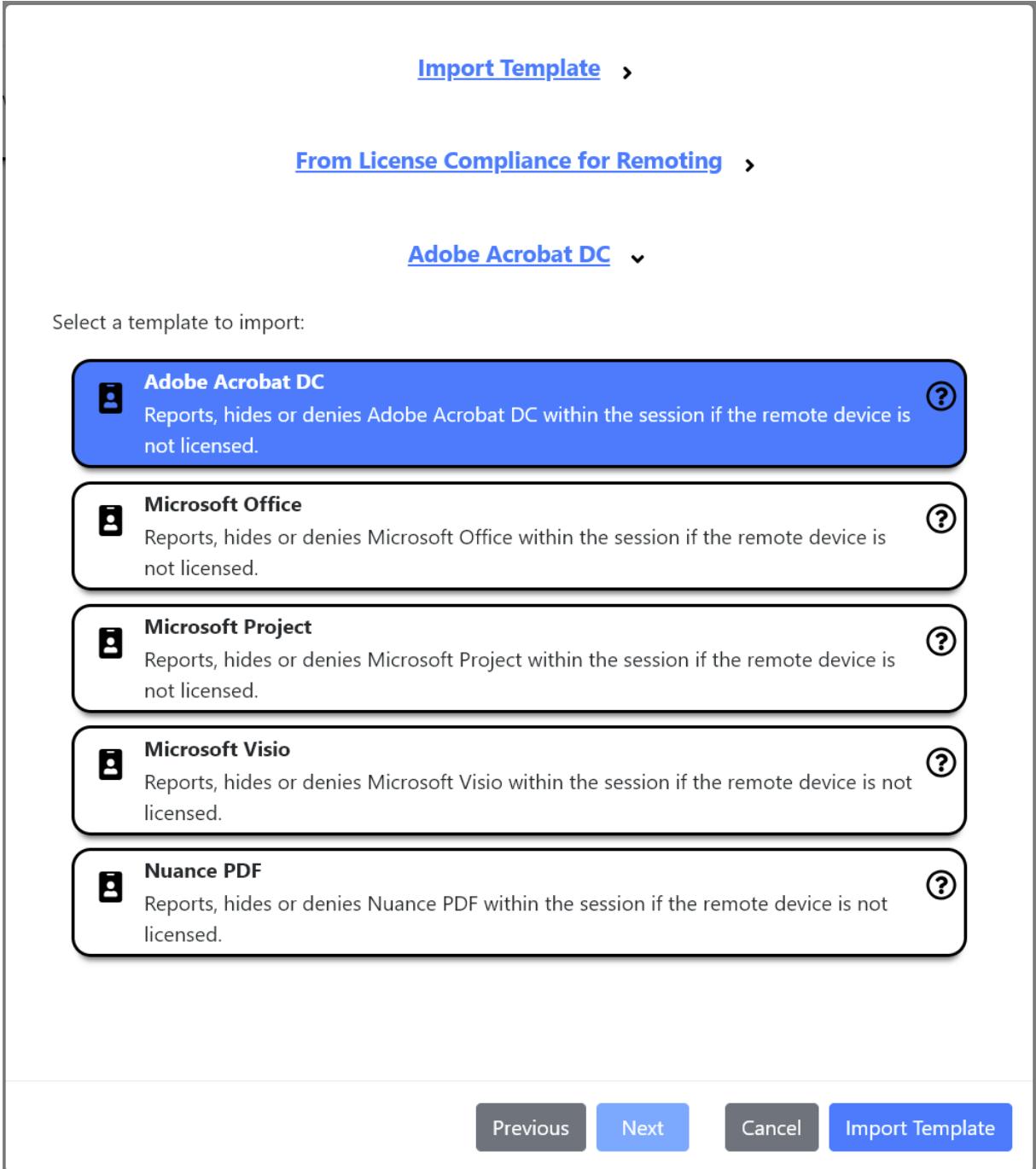


- For [Device-Based Licensing](#), the template category [License Compliance](#) is used.



This category contains templates for several software products. This example uses [Acrobat DC](#), but

can easily be customised for other applications.



The screenshot shows a 'Import Template' dialog box. At the top, there are three navigation links: 'Import Template >', 'From License Compliance for Remoting >', and 'Adobe Acrobat DC <'. Below these is a sub-section titled 'Select a template to import:' with a dropdown menu set to 'Adobe Acrobat DC'. The main content area displays a list of five templates, each in a blue-bordered box:

- Adobe Acrobat DC** (with a question mark icon): Reports, hides or denies Adobe Acrobat DC within the session if the remote device is not licensed.
- Microsoft Office** (with a question mark icon): Reports, hides or denies Microsoft Office within the session if the remote device is not licensed.
- Microsoft Project** (with a question mark icon): Reports, hides or denies Microsoft Project within the session if the remote device is not licensed.
- Microsoft Visio** (with a question mark icon): Reports, hides or denies Microsoft Visio within the session if the remote device is not licensed.
- Nuance PDF** (with a question mark icon): Reports, hides or denies Nuance PDF within the session if the remote device is not licensed.

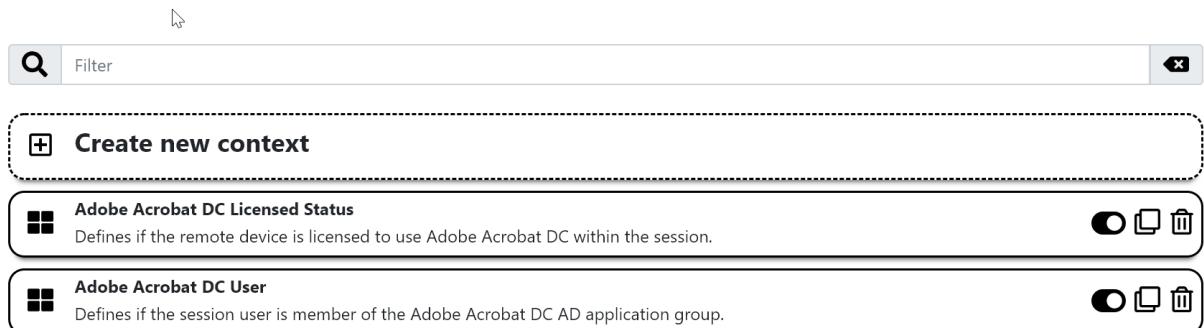
At the bottom of the dialog box are four buttons: 'Previous' (disabled), 'Next', 'Cancel', and 'Import Template' (highlighted in blue).

Two contexts are included:

- [Adobe Acrobat DC Licensed Status](#) to evaluate the device's license status.
- [Adobe Acrobat DC User](#) to define if the accessing user shall or shall not be using the software.

### Context

Create the contexts that are important to your business. Each context is evaluated using properties from the remote device or the local host. They are assigned a value which can be acted upon by a task.



**Create new context**

**Adobe Acrobat DC Licensed Status**  
Defines if the remote device is licensed to use Adobe Acrobat DC within the session.

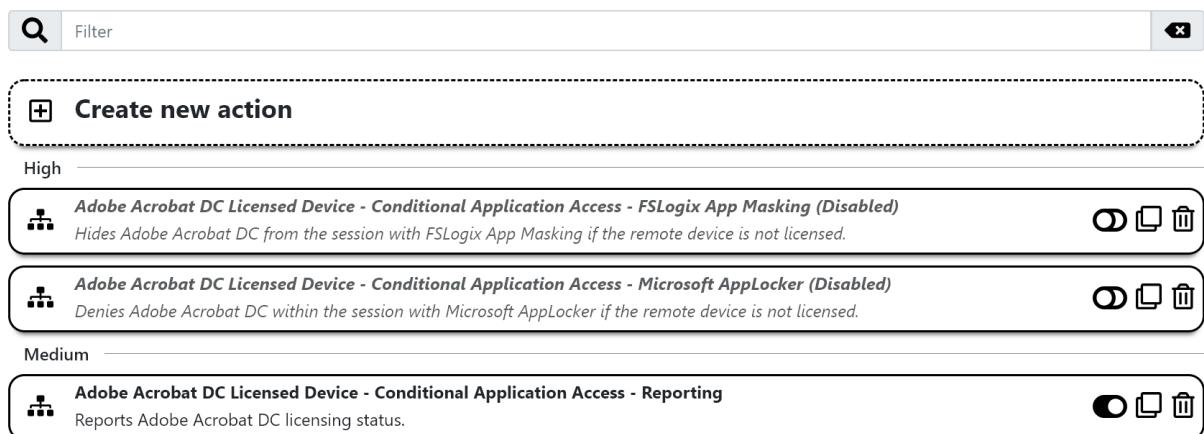
**Adobe Acrobat DC User**  
Defines if the session user is member of the Adobe Acrobat DC AD application group.

Three actions are included:

- **Adobe Acrobat DC Licensed Device - Conditional Application Access**
  - **FSLogix App Masking** is used for controlling access to the software using FSLogix App Masking. This action can be ignored or removed for now.
- **Adobe Acrobat DC Licensed Device - Conditional Application Access**
  - **Microsoft AppLocker** is used for controlling access to the software using Microsoft Applocker. This action can be ignored or removed for now.
- **Adobe Acrobat DC Licensed Device - Conditional Application Access**
  - **Reporting** is the only action required for reporting.

### Actions

Actions can be used to execute a sequence of tasks on either changes to context or on predefined triggers during the lifetime of a user session.



**Create new action**

High

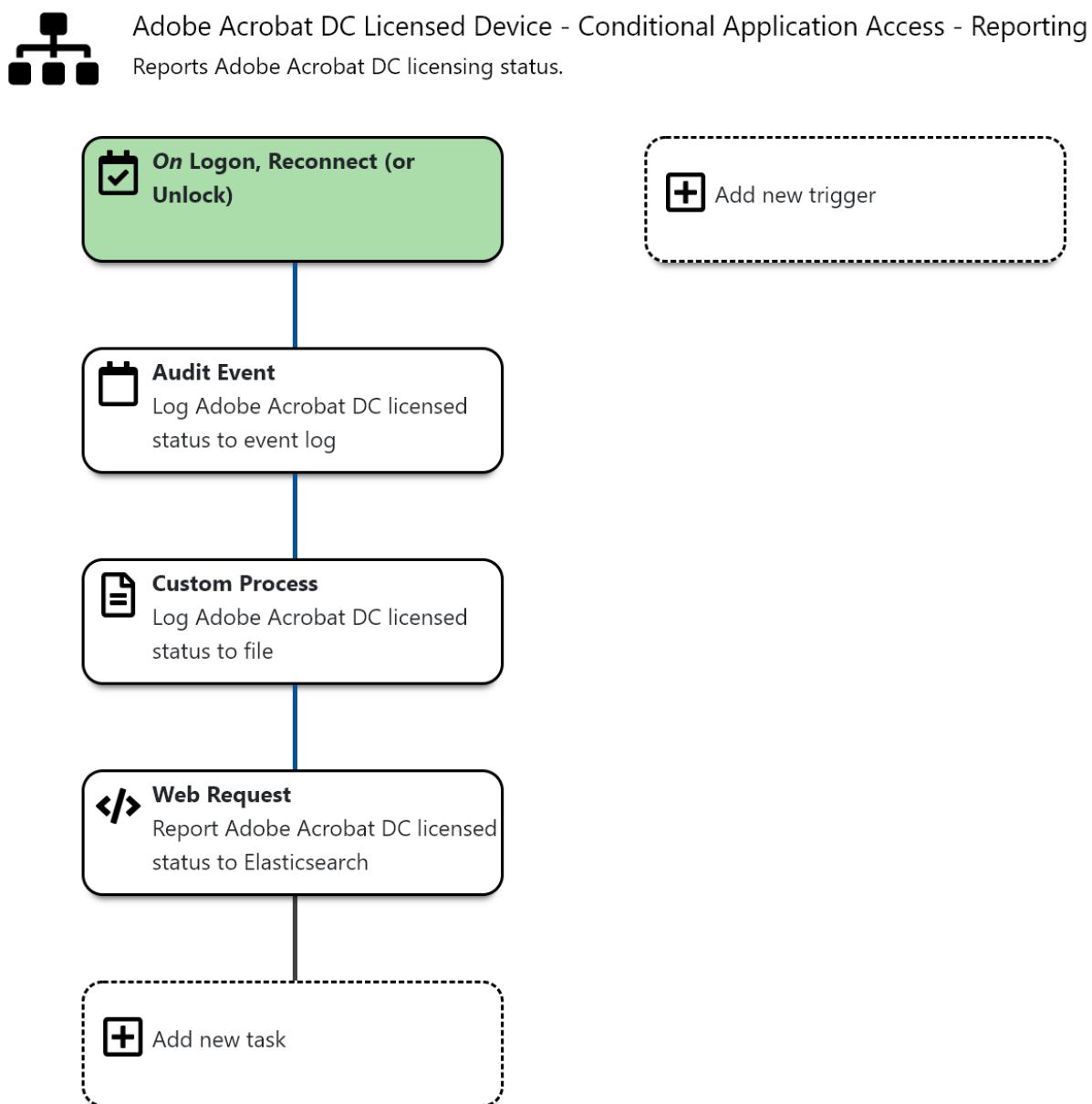
**Adobe Acrobat DC Licensed Device - Conditional Application Access - FSLogix App Masking (Disabled)**  
Hides Adobe Acrobat DC from the session with FSLogix App Masking if the remote device is not licensed.

**Adobe Acrobat DC Licensed Device - Conditional Application Access - Microsoft AppLocker (Disabled)**  
Denies Adobe Acrobat DC within the session with Microsoft AppLocker if the remote device is not licensed.

Medium

**Adobe Acrobat DC Licensed Device - Conditional Application Access - Reporting**  
Reports Adobe Acrobat DC licensing status.

- The action contains multiple ways to store the data. Sending data to ELK Stack is configured by using a **Web Request** task. The **Audit Event**, **Custom Process**, as well as the **Web Request** Tasks for Splunk and Graylog can be deleted, as we are looking at ELK Stack here.



- The Web Request task must be edited to suit your environment. If you use a basic setup without SSL or authorization, adding `your server's fqdn` is the only required configuration change.

[When executing Web Request task](#) >

[Apply settings](#) ▾

Enter the method and a fully qualified URL such as https://example.com/path.

POST ▾ http://YOUR\_ELKSTACK\_SERVER:9200/dt\_devicebasedlicensing\_acrobat\_dc/\_update/%HC

Optionally enter one or more headers.

Name	Value
Enter header name	Enter header value

Optionally enter the web request body.

[Text](#) [JSON](#)

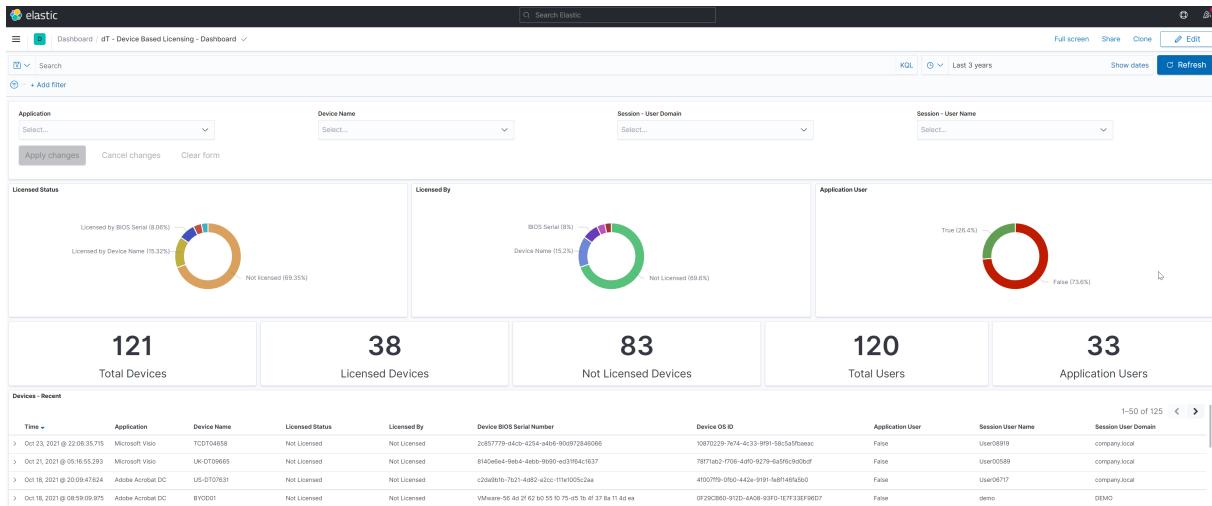
```
{  
  "doc": {  
    "Application": "Adobe Acrobat DE",  
    "Session Date": "%TRIGGER_TIME%",  
    "LicensedStatus": "%CONTEXT_ADOBE_ACROBAT_DC_LICENSED_STATUS%",  
    "Device Name": "%HOST_REMOTECONTROL_REMOTE_NAME%",  
    "Device BIOS Serial Number": "%DEVICE_HARDWARE_BIOS_SERIAL%",  
    "Device OS ID": "%DEVICE_OS_ID%",  
  }  
}
```

- Wait for the web request to complete before continuing
- Send the web request even when the content is unchanged

[Name task](#) >

After the index template has been created, the saved objects are imported and the agent-side has been configured, the use case [Device-Based Licensing](#) has been implemented successfully.

deviceTRUST now sends status data about the application usage and the required hardware information to ELK Stack on every access to the remoting system. The data is presented in the created dashboards.



## Step 3: The Status Report

This part of the guide relates to the [Status Report](#). It lists all steps that are required to configure the use case on the agent-side, as well as on the ELK Stack side.

### Step 3.1: Add Index Template to ELK Stack

The first step is to create an [Index Template](#). Index Templates describe the data that is being sent to an index. They make sure, that every date is treated according to its type.

- Within the ELK Stack management console, navigate to [Menu\Stack Management\Index Management\Index Templates](#).
- Click [Create Template](#).

The interface shows the following sections:

- Index Management** (Section title)
- Indices**, **Data Streams**, **Index Templates** (selected), **Component Templates** (tab navigation)
- Search bar** with placeholder "Search..."
- Buttons:** **View** (with dropdown showing "1"), **Reload**, **Create template**
- Text:** "Use index templates to automatically apply settings, mappings, and aliases to indices. [Learn more.](#)"

- Set **Name** to `dt_statusreport`.
- Set **Index Patterns** to `dt_statusreport*`.

## Create template

Logistics

[Index Templates docs](#)

**Name**  
A unique identifier for this template.

**Index patterns**  
The index patterns to apply to the template.

**Name**  
dt\_statusreport

**Index patterns**  
dt\_statusreport\* (x)

Spaces and the characters \ / ? " < > | are not allowed.

- Skip all options until **Mappings**.
- Select [Load JSON](#) to import the `elkstack-status-report-mappings.txt` that was downloaded in Step 1.1.

## Create template

[Load JSON](#) [Mapping docs](#)

**Mappings (optional)**  
Define how to store and index documents.

[Mapped fields](#) [Runtime fields](#) [Dynamic templates](#) [Advanced options](#)

Define the fields for your indexed documents. [Learn more.](#)

Field name  Field type Text Add field

[Add field](#)

[Back](#) [Next >](#) [Preview index template](#)

- Proceed with [Load](#) and [overwrite](#).

## Load JSON

Provide a mappings object, for example, the object assigned to an index mappings property. This will overwrite existing mappings, dynamic templates, and options.

### Mappings object

```
  "eager_global_ordinals": false,
  "norms": false,
  "index": true,
  "store": false,
  "type": "keyword",
  "split_queries_on_whitespace": false,
  "index_options": "docs",
  "doc_values": true
},
"CountryProvider": {
  "eager_global_ordinals": false,
  "norms": false,
  "index": true,
  "store": false,
  "type": "keyword",
  "split_queries_on_whitespace": false,
  "index_options": "docs",
  "doc_values": true
},
"DeviceName": {
  "eager_global_ordinals": false,
  "norms": false,
  "index": true,
  "store": false,
  "type": "keyword",
  "split_queries_on_whitespace": false,
  "index_options": "docs",
  "doc_values": true
}
}
```

Cancel

Load and overwrite

- The imported mappings are displayed. Please review them carefully. [Session Date](#), [Anti-Virus Timestamp](#) and [Hardware BIOS Release Date](#) need to be recognized as type [Date](#) for the report to function properly.

## Create template

Progress: Logistics (✓) → Component templates (✓) → Index settings (✓) → **Mappings (4)** → Aliases (5) → Review template (6)

### Mappings (optional)

Define how to store and index documents.

Mapped fields    Runtime fields    Dynamic templates    Advanced options

Define the fields for your indexed documents. [Learn more](#).

Search fields

AccessMode Keyword

AntivirusName Keyword

AntivirusSignatureStatus Keyword

AntivirusStatus Keyword

Country Keyword

CountryProvider Keyword

DeviceIdentifier

- Skip all options until **Review Template**.
- Generate the template with **Create Template**.

## Create template

Progress: Logistics (✓) → Component templates (✓) → Index settings (✓) → Mappings (✓) → Aliases (✓) → **Review template (6)**

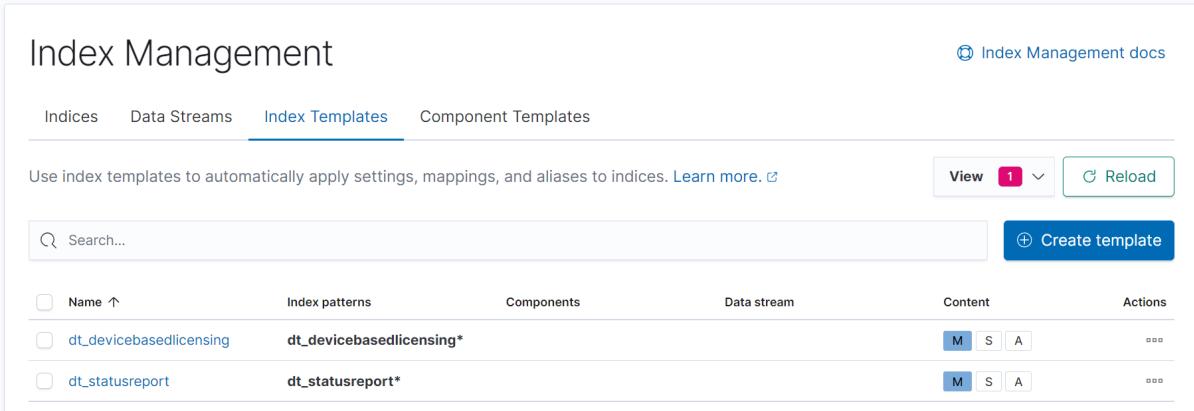
### Review details for 'dt\_statusreport'

Summary    Preview    Request

Index pattern <b>dt_statusreport*</b>	Index settings No
Priority <b>None</b>	Mappings Yes
Version <b>None</b>	Aliases No
Component templates <b>None</b>	

[Back](#)

- You'll be given an overview of the created template. A blue marked **M** in the Content section indicates, that mappings are available.



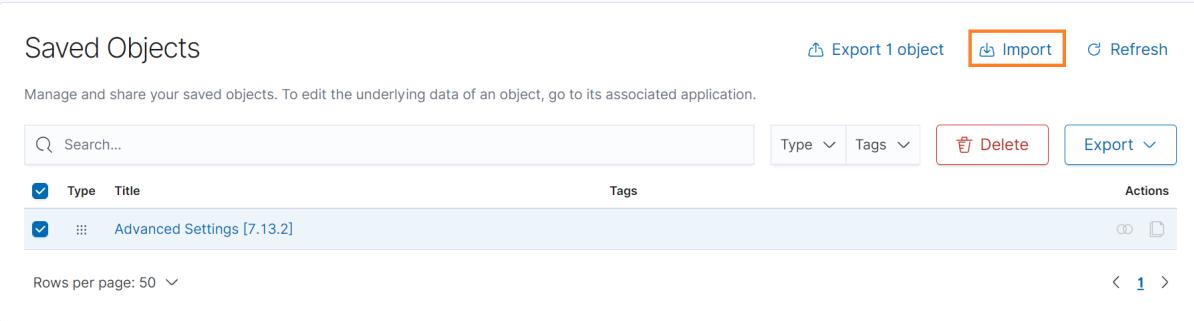
The screenshot shows the 'Index Management' interface with the 'Index Templates' tab selected. The page title is 'Index Management' and there is a link to 'Index Management docs'. Below the title, there are tabs for 'Indices', 'Data Streams', 'Index Templates' (which is highlighted in blue), and 'Component Templates'. A search bar and a 'Create template' button are visible. A message at the top says 'Use index templates to automatically apply settings, mappings, and aliases to indices. Learn more.' with a link. Below this, a table lists index templates with columns for Name, Index patterns, Components, Data stream, Content (which shows 'M' for mappings), and Actions. Two entries are shown: 'dt\_devicebasedlicensing' and 'dt\_statusreport'.

Name	Index patterns	Components	Data stream	Content	Actions
<a href="#">dt_devicebasedlicensing</a>	dt_devicebasedlicensing*			M S A	...
<a href="#">dt_statusreport</a>	dt_statusreport*			M S A	...

### Step 3.2: Import Saved Objects to ELK Stack

All other parts of the report are to be imported as **Saved Objects**. The Saved Objects consist of Index Patterns with Scripted Fields, Visualizations and Dashboards.

- Navigate to **Menu\Stack Management\Saved Objects** in your ELK Stack management console.
- Click **Import**.



The screenshot shows the 'Saved Objects' interface. The title is 'Saved Objects' and there are buttons for 'Export 1 object', 'Import' (which is highlighted with an orange border), and 'Refresh'. A message below the title says 'Manage and share your saved objects. To edit the underlying data of an object, go to its associated application.' A search bar and a 'Delete' button are visible. The table lists saved objects with columns for Type, Title, Tags, and Actions. Two entries are shown: 'Type' and 'Advanced Settings [7.13.2]'. At the bottom, there are buttons for 'Export' and 'Import', and a message 'Rows per page: 50'.

Type	Title	Tags	Actions
Type			
Advanced Settings [7.13.2]			

- Select the file `elkstack-status-report-saved-objects.ndjson`.
- Check **Create new objects with random IDs** to make sure no existing objects are altered.

## Import saved objects

---

### Select a file to import

 **elkstack-status-report-saved-objects.ndjson**

[Remove](#)

### Import options

Check for existing objects (i)

Automatically overwrite conflicts

Request action on conflict

Create new objects with random IDs (i)

After importing, an overview of the imported objects will be displayed.

## Import saved objects

---

60 objects imported

60 new

---

⋮⋮ Advanced Settings [7.13.2]	✓
✉ dT - Status Report - Dashboard - Hardware	✓
✉ dT - Status Report - Dashboard - Location	✓
✉ dT - Status Report - Dashboard - Network	✓
✉ dT - Status Report - Dashboard - OS	✓
✉ dT - Status Report - Dashboard - Overview	✓
✉ dT - Status Report - Dashboard - Remote User	✓
✉ dT - Status Report - Dashboard - Security	✓
✉ dT - Status Report - Dashboard - Software	✓
✉ dT_statusreport*	✓
⌚ dT - Status Report - Lens - Protected Devices	✓
⌚ dT - Status Report - Lens - Protected Devices Over Time	✓
⌚ dT - Status Report - Lens - Total Unique Devices	✓
⌚ dT - Status Report - Lens - Total Unique Users	✓
⌚ dT - Status Report - Lens - Unprotected Devices	✓
⌚ dT - Status Report - Search - Hardware	✓
⌚ dT - Status Report - Search - Location	✓
⌚ dT - Status Report - Search - Network	✓
⌚ dT - Status Report - Search - OS	✓
⌚ dT - Status Report - Search - Overview	✓
⌚ dT - Status Report - Search - Remote User	✓
⌚ dT - Status Report - Search - Security	✓
⌚ dT - Status Report - Search - Software	✓
✉ dT - Status Report - Menu	✓
✉ dT - Status Report - Vis - Remote Device - AccessMode	✓
✉ dT - Status Report - Vis - Remote Device - AntivirusStatus	✓
✉ dT - Status Report - Vis - Remote Device - BiOSRelease Date	✓
✉ dT - Status Report - Vis - Remote Device - Country	✓
✉ dT - Status Report - Vis - Remote Device - Country Provider	✓
✉ dT - Status Report - Vis - Remote Device - DeviceType	✓
✉ dT - Status Report - Vis - Remote Device - Economic Region	✓
✉ dT - Status Report - Vis - Remote Device - FirewallStatus	✓
✉ dT - Status Report - Vis - Remote Device - Hardware - Model	✓

Cancel

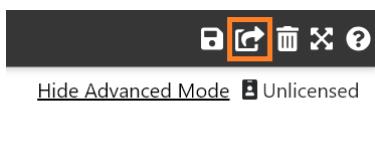
Done

### Step 3.3: Configuring deviceTRUST

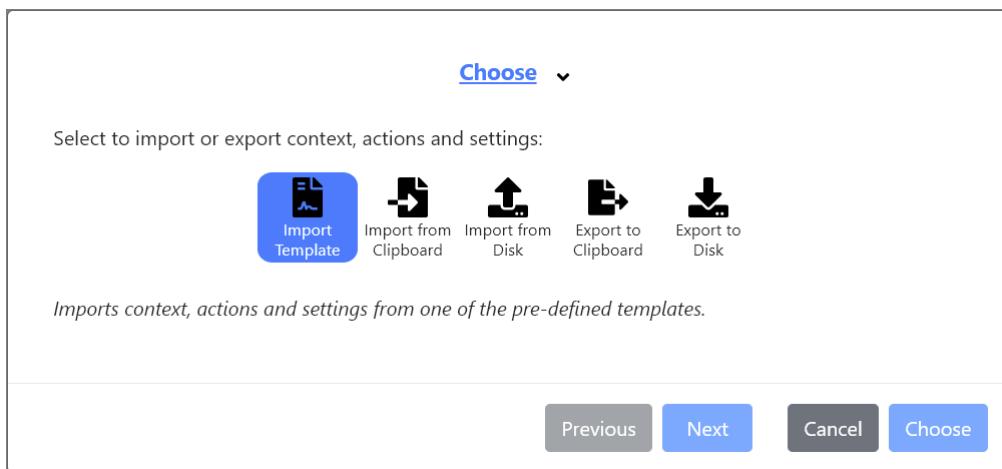
After the Index Mapping has been created, the Saved Objects are included the index has been edited and the agent-side has been configured, the ELK Stack is prepared for storing, sorting, and displaying your data.

The last step is to create the deviceTRUST configuration, that will make sure all required data is provided.

- Open the [deviceTRUST Console](#).
- Click [Sharing](#) in the top right menu. You may need to click [Show Advanced View](#) if this button is not visible.



- Select [Import Template](#).



- For [Status Report](#), the template category [Status Report](#) is used.

[Import Template](#) >

[From Category](#) ▾

Select the category of template to import from:

[Remoting](#) [Fat Client](#)

 Building Blocks	 BYOD	 Compliance Check	 Compliant Application Access	 Compliant Backend Access
 Dynamic Policy	 External Partners	 License Compliance	 Location Aware Printing	 Meeting Room
 Silo Optimization	 Status Report	 Time-based Access	 Unauthorized USB Device	 Work From Home

*Reports the status of the remote device to various destinations.*

[Previous](#) [Next](#) [Cancel](#) [Import Template](#)

- This category contains templates for several ways of storing data. Choose [ELK Stack](#).

[Import Template](#) >

[From Status Report for Remoting](#) >

**ELK Stack** ▾

Select a template to import:

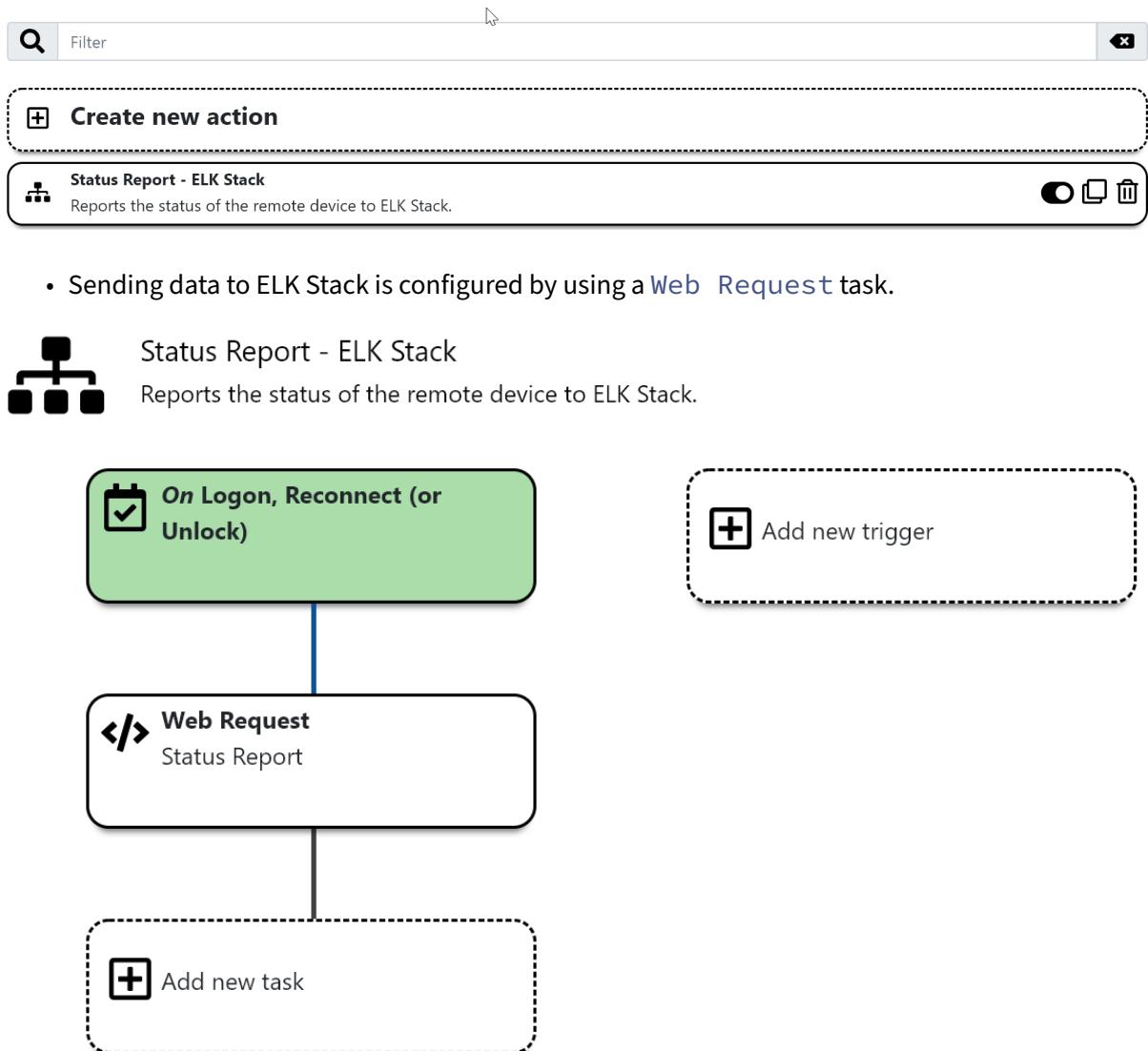
- Application Log** Reports the status of the remote device to the Windows application log. [?](#)
- ELK Stack** Reports the status of the remote device to ELK Stack. [?](#)
- Email** Send the status of the remote device by email. [?](#)
- Graylog** Records the status of the remote device to Graylog. [?](#)
- Log File** Records the status of the remote device to a log file. [?](#)
- Splunk** Records the status of the remote device to Splunk. [?](#)

Previous [Next](#) Cancel [Import Template](#)

- The imported template consists of 50 contexts and one action.
- The Action Status Report – ELK Stack collects all relevant data and sends them over to the ELK Stack.

### Actions

Actions can be used to execute a sequence of tasks on either changes to context or on predefined triggers during the lifetime of a user session.



- Sending data to ELK Stack is configured by using a [Web Request](#) task.



- The Web Request task must be edited to suit your environment. If you use a basic setup without SSL or authorization, simply adding your [server's fqdn](#) will do.

[When executing Web Request task](#) >

[Apply settings](#) ▾

Enter the method and a fully qualified URL such as https://example.com/path.

POST ▾ http://YOUR\_ELKSTACK\_SERVER:9200/\_statusreport/\_doc

Optionally enter one or more headers.

Name	Value
Enter header name	Enter header value

Optionally enter the web request body.

[Text](#) [JSON](#)

```
{  
  "Session Date": "%TRIGGER_TIME%",  
  "Device Name": "%HOST_REMOTECONTROL_REMOTE_NAME%",  
  "Access Mode": "%CONTEXT_ACCESS_MODE%",  
  "Anti-Virus Name": "%CONTEXT_ANTI_VIRUS_NAME%",  
  "Anti-Virus Status": "%CONTEXT_ANTI_VIRUS_STATUS%",  
  "Anti-Virus Timestamp": "%CONTEXT_ANTI_VIRUS_TIMESTAMP%",  
  "Country": "%CONTEXT_COUNTRY%"}
```

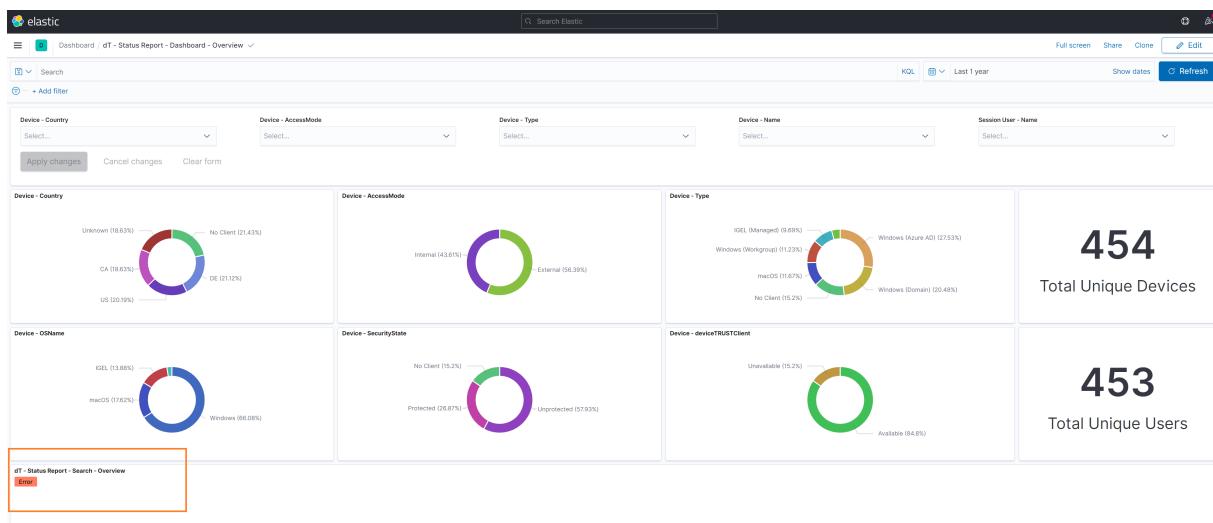
- Wait for the web request to complete before continuing
- Send the web request even when the content is unchanged

[Name task](#) >

### Step 3.4: Edit index settings

For the Status Report Dashboards to work properly, a configuration needs to be made at the index level: In a basic setting, ELK Stack allows to use 25 “calculated fields” per index. For the Status Report Dashboard, 48 calculated fields are used. Thus, the [allowed number of calculated fields](#) needs to be set to a higher value.

## deviceTRUST 21.1



You need to send data to ELK Stack first. Sending data will create the index with basic settings. It can then be edited.

- After sending your first data, you will find the index `dt_statusreport` has been created in the Index Management Menu.

### Index Management

Index Management docs

Indices Data Streams Index Templates Component Templates

Update your Elasticsearch indices individually or in bulk. [Learn more.](#)

Include rollup indices   Include hidden indices

Search Lifecycle status Lifecycle phase Reload indices

Name	Health	Status	Primaries	Replicas	Docs count	Storage size	Data stream
<code>dt_statusreport</code>	yellow	open	1	1	1063	613.7kb	

Rows per page: 10 < 1 >

- Select the Index and chose [Edit Settings](#). You'll be presented a json configuration view.

## dt\_statusreport

Summary    Settings    Mappings    Stats    [Edit settings](#)

Edit, then save your JSON

[Save](#)

[Settings reference](#)

```
1 * {  
2     "index.blocks.read_only_allow_delete": "false",  
3     "index.priority": "1",  
4     "index.query.default_field": [  
5         "*"  
6     ],  
7     "index.refresh_interval": "1s",  
8     "index.write.wait_for_active_shards": "1",  
9     "index.routing.allocation.include._tier_preference": "data_content",|  
10    "index.number_of_replicas": "1"  
11 }
```

- Add `"index.max_script_fields": "50"` as a new line, making sure to keep the correct json formatting.
- Save your changes.

# dt\_statusreport

Summary    Settings    Mappings    Stats    [Edit settings](#)

Edit, then save your JSON

[Save](#)

[Settings reference](#)

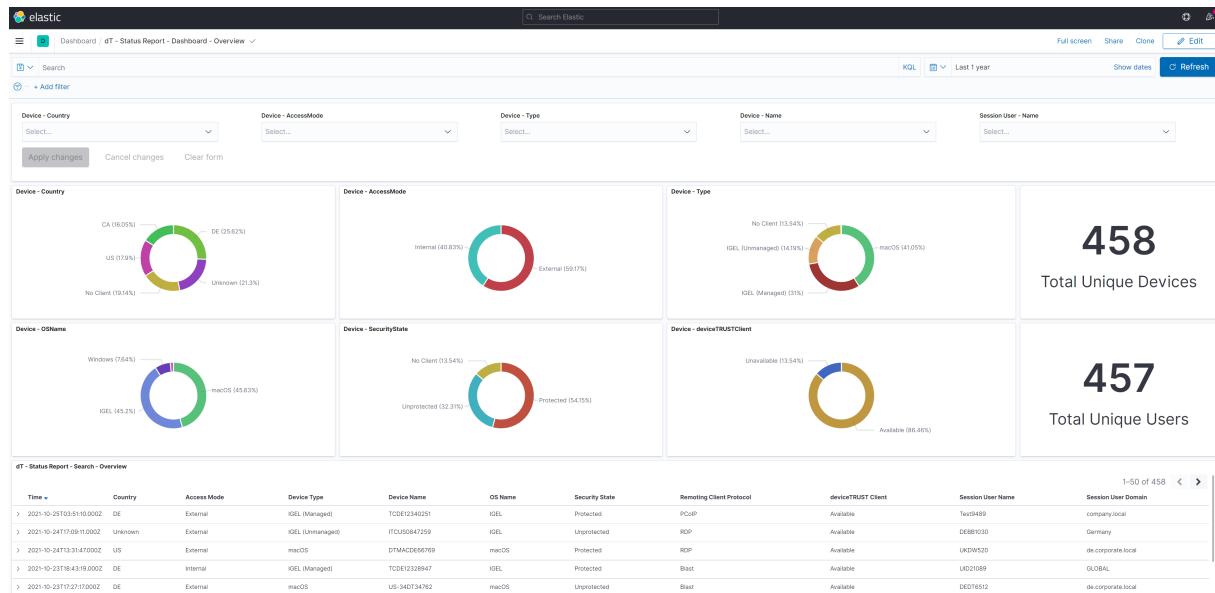
```

1 ▾ {
2   "index.blocks.read_only_allow_delete": "false",
3   "index.priority": "1",
4 ▾ "index.query.default_field": [
5     "*"
6   ],
7   "index.refresh_interval": "1s",
8   "index.write.wait_for_active_shards": "1",
9   "index.routing.allocation.include._tier_preference": "data_content",
10  "index.max_script_fields": "50",
11  "index.number_of_replicas": "1"
12 }
```

Your Dashboard will now be displayed without errors.

After the index template has been created and the saved objects are imported, the use case [Status Report](#) has been implemented successfully.

deviceTRUST now sends status data to ELK Stack on every access to the remoting system. The data is presented in the created dashboards.



## Reference

### TABLE OF CONTENTS

- [Properties](#)
- [Agent](#)
- [Console](#)

## Properties

- [Access Point Properties](#) - Describes the available Wi-Fi access points.
- [Browser Properties](#) - Describes installed internet browsers.
- [Cellular Properties](#) - Describes the active cellular capabilities of an endpoint.
- [Certificate Properties](#) - Describes the private certificates available within the users certificate store.
- [ChromeOS Properties](#) - Provides properties unique to a Google ChromeOS device.
- [Custom Properties](#) - Provides a condition that can operate on any property, including custom properties created using 'dtcmd.exe'.
- [deviceTRUST Properties](#) - Provides information about whether a connection to a deviceTRUST Client Extension has been established, the version of the deviceTRUST software and the status of the deviceTRUST license.
- [Display Properties](#) - Describes the displays available to the user session.
- [Domain Properties](#) - Describes the domain membership of the endpoint.
- [eLux Properties](#) - Provides properties unique to a Unicon eLux device.
- [Hardware Properties](#) - Describes the hardware and its capabilities.
- [IGEL Properties](#) - Provides properties unique to an IGEL device.
- [Input Properties](#) - Describes the input devices available to the user session.
- [iOS Properties](#) - Provides properties unique to an Apple iOS endpoint.
- [Location Properties](#) - Describes the geographical location of the endpoint.
- [Logical Disk Properties](#) - Describes the logical disks available to the user.
- [macOS Properties](#) - Describes properties unique to an Apple macOS endpoint.
- [macOS Firewall Properties](#) - Provides real-time properties describing the state of the macOS Firewall.
- [macOS Update Properties](#) - Describes the status of macOS Software Update settings and updates.
- [Mapped Drive Properties](#) - Describes the mapped drives available within a user session.
- [Multihop Properties](#) - Describes the number of hops taken by the user over deviceTRUST connected sessions.
- [Name Properties](#) - Identifies the endpoint.

- [Network Properties](#) - Describes the network adapters and their bound network addresses.
- [OS Properties](#) - Provides information about the operating system installed on the endpoint.
- [Password Policy Properties](#) - Describes the password policy of the logged in user.
- [Performance Properties](#) - Describes the performance of the remoting protocol.
- [Power Properties](#) - Describes the power profile of the endpoint.
- [Printer Properties](#) - Describes the printers available to the user session.
- [Region Properties](#) - Describes the regional information of the user session.
- [Remote Control Properties](#) - Determines whether the user session is being remote controlled and provides information about the remote controlling endpoint.
- [Remoting Client Properties](#) - Provides properties about the remoting client used to remote control the user session.
- [Screen Saver Properties](#) - Describes the screen saver applied to the user session.
- [Security Product Properties](#) - Provides real-time properties describing the state of the installed Antivirus, Antispyware and Firewall security products.
- [Session Properties](#) - Provides information describing the user's logon session.
- [Smartcard Reader Properties](#) - Describes the connected smart-card readers available to the user.
- [User Properties](#) - Identifies the logged in user.
- [WHOIS Properties](#) - Provides the results of a WHOIS lookup of the endpoint.
- [Windows Properties](#) - Provides real-time properties unique to a Microsoft Windows device.
- [Windows Defender Properties](#) - Provides real-time properties describing the state of Microsoft Windows Defender Antivirus.
- [Windows Firewall Properties](#) - Provides real-time properties describing the state of the Microsoft Windows Firewall.
- [Windows Registry Properties](#) - Provides access to Windows Registry entries.
- [Windows Update Properties](#) - Describes the status of Microsoft

## Agent Reference

### TABLE OF CONTENTS

- [Product Events](#) - Product Events

## Console Reference

### TABLE OF CONTENTS

- [Actions](#) - Actions Reference

- [Settings](#) - Settings Reference

## Troubleshooting

If your deviceTRUST installation or configuration does not work as expected, then the [Knowledge Base](#) is a useful resource for common problems and resolutions. The following sections detail some useful knowledge base articles depending upon your deployment scenario:

### Scenario: Remote

In remote scenarios, deviceTRUST® transports the context information from the user's remote device to the virtual session where the configuration is enforced. Please check the following knowledge base articles:

- [Step 1: Make sure that you have a valid license](#)
- [Step 2: Check that your contextual security policy has been saved and deployed](#)
- [Step 3: Check that the user is managed by deviceTRUST](#)
- [Step 4: Check that the deviceTRUST Client Extension is installed on the remote device](#)
- [Step 5: Check that Citrix Virtual Channel Security is configured \(Citrix Only\)](#)
- [Step 6: Check that your contexts are correctly defined](#)
- [Step 7: Exclude specific users from the deviceTRUST policy](#)
- [Step 8: Check that the deviceTRUST Agent service is running](#)
- [Step 9: Check that you are using the latest deviceTRUST version](#)

### Scenario: Local

In local scenarios, deviceTRUST collects context information and executes actions locally. Please check the following knowledge base articles:

- [Step 1: Make sure that you have a valid license](#)
- [Step 2: Check that your contextual security policy has been saved and deployed](#)
- [Step 3: Check that the user is managed by deviceTRUST](#)
- [Step 4: Check that your contexts are correctly defined](#)
- [Step 5: Exclude specific users from the deviceTRUST policy](#)
- [Step 6: Check that the deviceTRUST Agent service is running](#)
- [Step 7: Check that you are using the latest deviceTRUST version](#)

## **Open a support ticket with us**

Additional articles may be found by searching the [Knowledge Base](#). However, if you are still experiencing difficulties please raise a ticket with the Citrix Support Portal at <https://support.citrix.com>.

## **Releases**

### **TABLE OF CONTENTS**

- [Next Release \(23.1\)](#)
- [Ubuntu Client 21.1.300](#)
- [macOS Client 21.1.300](#)
- [deviceTRUST 21.1.310](#)
- [IGEL Client 21.1.310](#)

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June 20, 2025

- [deviceTRUST 25.3](#)
- [macOS Client 25.3](#)
- [eLux Client 25.3](#)
- [Ubuntu Client 25.3](#)
- [Previous Release \(23.1\)](#)

## **Ubuntu Client Extension 21.1.300**

This release includes enhancements and bug fixes to the deviceTRUST® Client Extension for Ubuntu Desktop.

### **Support for VMware Horizon View**

The deviceTRUST Ubuntu Client now includes support for VMware Horizon View using the Blast, PCoIP or RDP protocols. The full list of supported technologies can be found at [Operating System Compatibility](#)

## Custom Properties for Linux devices

The [Custom Properties Settings](#) now supports remote Linux devices. This allows a custom script to be executed on the remote Linux device to return one or more properties beginning with REMOTE\_CUSTOM by writing e.g. `REMOTE_CUSTOM_NAME=VALUE` to the output.

## Minor enhancements

- Added VPN and Adapter properties to the WHOIS results.

## Bug Fixes

- Fixed a potential crash during the logoff or disconnect from a session.

## Compatibility

There are no compatibility concerns with this release of the deviceTRUST Ubuntu Client.

## macOS Client Extension 21.1.300

This release includes enhancements and bug fixes to the deviceTRUST® Client Extension for macOS.

## Native support for Apple silicon

We've integrated native support for Apple silicon processors, such as the Apple M1 and M2, alongside our existing support for Intel processors into a single universal installation package. This removes the previous requirement for Rosetta 2 translations. A remoting client that is also built with native Apple silicon support is required, and is therefore currently supported with the following clients:

- Citrix Workspace App for macOS v22.11.0.12 or later.
- FreeRDP v2.8.2 or later.
- VMware Horizon View v8.7.0 or later.

## Bug Fixes

- Fixed an issue where Location properties were unavailable on macOS Ventura.
- Fixed an issue where Display properties contained unavailable Adapter and Monitor products and vendor properties on Apple silicon processors on macOS Ventura.
- Fixed a potential crash during shutdown of the remoting client.

## Compatibility

There are no compatibility concerns with this release of the deviceTRUST macOS Client.

## deviceTRUST 21.1 SP2 (version 21.1.310)

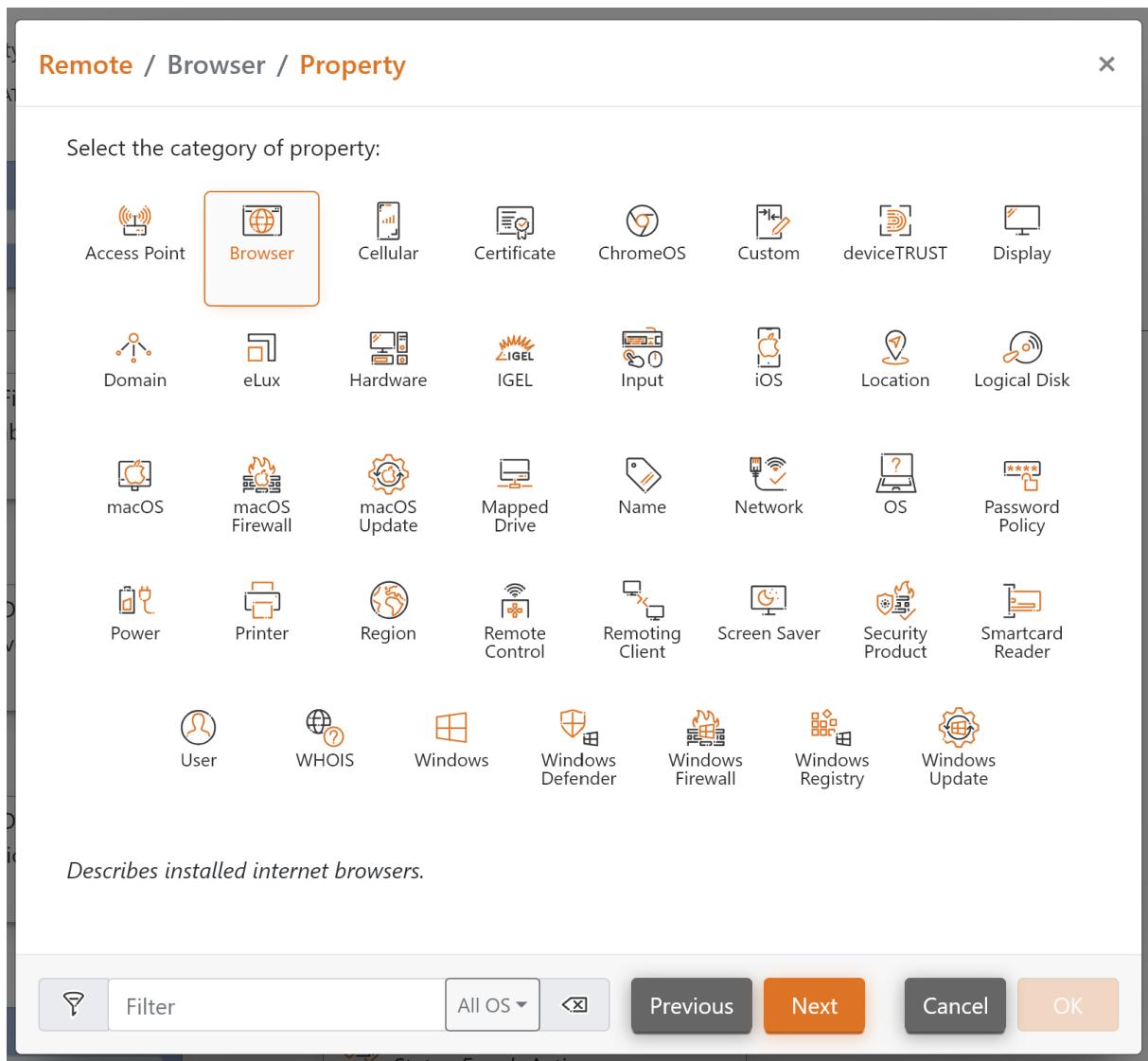
This service pack release includes minor features and bug fixes to the deviceTRUST Console, Agent and Client Extension for Microsoft Windows. See [deviceTRUST 21.1.210](#) release notes for full details of the changes introduced in 21.1.210. Please refer to Compatibility for changes that may impact users upgrading from previous releases.

The deviceTRUST 21.1.310 patch includes bugfixes and minor enhancements to the deviceTRUST Console, Agent and Client Extension.

- [User interface refinement](#)
- [New Cloud Templates](#)
- [Other changes](#)
- [Bug fixes in 21.1.300](#)
- [Bug fixes in 21.1.310](#)
- [Minor enhancements to 21.1.310](#)
- [Compatibility](#)

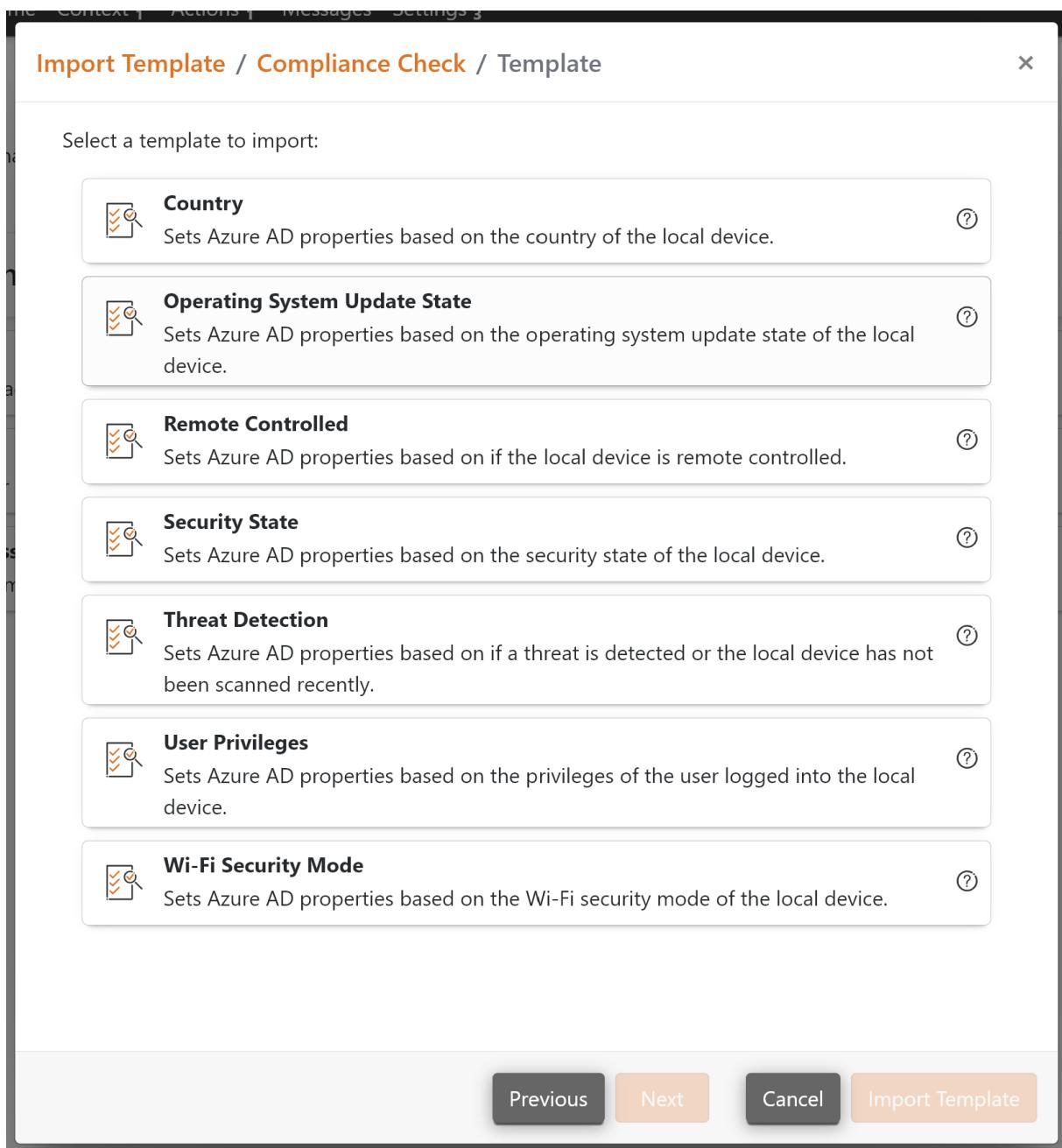
### User interface refinement

We've refined the branding within the deviceTRUST® Console, and also enhanced the layout of many of our pages. This includes the context condition picker, which now offers a filter allowing faster navigation of properties either by name or by their supported operating system.



## New Cloud Templates

A new collection of templates targeting the cloud and our Azure AD integration has been added. More information can be found [cloud](#).



## Other changes

- The Custom Properties Settings now supports remote Linux and IGEL devices. The forthcoming deviceTRUST Client Extension 21.1.300 or later for IGEL and Linux devices is required.
- The Terminate App task now groups together processes with matching names and parent / child relationships.
- When configured with mobile integration, the deviceTRUST Agent no longer calls to the server on Citrix® platforms when Citrix reports that the remote device is Windows, Linux or macOS.

## Bug fixes in 21.1.300

- Fixed an issue where the Please Wait screen would appear on Local console sessions even when the [Block user session during Logon and Reconnect \(or Unlock\)](#) advanced setting was enabled.
- Fixed an issue where multiple resizes of a full screen Citrix session would occur during an Unlock on a Local device running the deviceTRUST Agent.
- Fixed an issue where Remote Custom Properties for Windows would not work when using Local Custom Properties on the same device.
- Fixed an issue where the WHOIS country could be cached even when it was empty.
- Fixed an issue where the deletion of properties would fail when the remote device was running the deviceTRUST Client Extension 20.2 or earlier.
- Fixed an issue where the Terminate App task, when matching processes by process name, could be triggered when the context filter no longer matches.

## Bug fixes in 21.1.310

- Fixed a bug where the deviceTRUST Console would very rarely save or export encrypted deviceTRUST Policy files with a truncated random key, preventing the policy from being loaded.
- Fixed issue where Event ID's 201, 202 and 203 from remote custom properties execution would have a 1970 trigger time.

## Minor enhancements to 21.1.310

- Added support for session idle time of remote Windows devices.
- Added support for the Popup Task to execute a named trigger when the default OK button is clicked.
- Updated the deviceTRUST Console's supported remote device properties available on Linux, IGEL and iOS platforms.

## Compatibility

Please refer to our general approach to compatibility which can be found on the [compatibility](#) page.

If upgrading from a version older than deviceTRUST 21.1.210, be sure to refer to the [deviceTRUST 21.1.210 Compatibility](#) notes.

## IGEL Client Extension 21.1.310

This release includes new features and bug fixes, and is natively integrated into IGEL OS 11.08.200 and later.

### Custom Properties for IGEL OS devices

The [Custom Properties Settings](#) now supports remote IGEL OS devices. This allows a custom script to be executed on the remote IGEL device by writing `REMOTE_CUSTOM_NAME=VALUE` to the output.

### Native IGEL OS integration

IGEL OS 11.08.200 now supports native integration of the deviceTRUST Client Extension for Amazon WorkSpaces, Citrix Workspace App, Microsoft Azure Virtual Desktop and Free RDP. Additionally, VMware Horizon View is supported in IGEL OS 11.08.230. For more information, see [Supported IGEL Operating Systems for Client Extension](#).

### Bug fixes

- Fixed an issue where the Third Party Geolocation provider could fail to determine a position.

### Known issues

- We don't have the necessary permissions to determine the `REMOTE_HARDWARE_BIOS_SERIAL` property on an IGEL device. Until we have a permanent solution, this can be solved by running `dmidecode -s system-serial-number > /wfs/bios_serial_number` within the IGEL configuration at System -> Firmware Customization -> Custom Commands -> Base -> Final initialization command. Please note that the location of this file has changed in this release.

### Compatibility

Please see the Known issues for a change to the default location of the `bios_serial_number` file.

There are no other compatibility concerns with this release of the deviceTRUST® IGEL Client Extension.



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