



VIRTUAL
CABLE

UDS Enterprise 3.6 - Preparing templates Windows 11 + RDP + UDS Actor



UDS
ENTERPRISE

3.6



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Introduction

This document shows how to configure a Windows 11 OS virtual machine to be used as a template with UDS Enterprise 3.6.

During the procedure, the installation process of the Windows 11 OS will be shown, how to enable the RDP protocol and the configuration of the UDS Actor (agent in charge of the communication between the OS and the UDS Server)

Necessary elements

To configure the different elements that will make up the template to be used with UDS Enterprise, we will need the following:

- **OS Image**

We will be using a Microsoft Windows 11 image.

- **RDP**

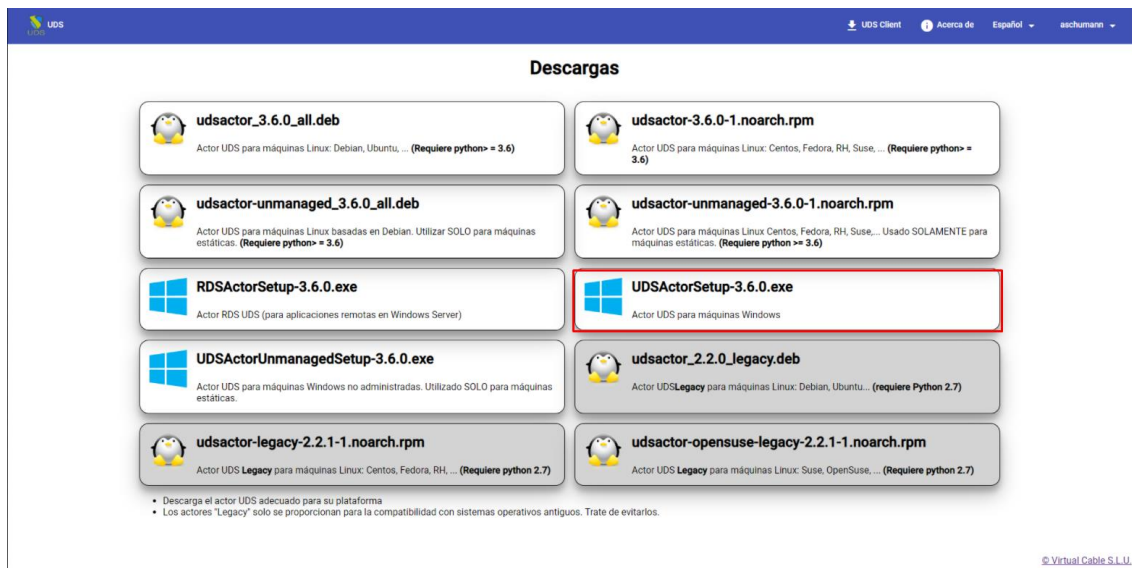
The protocol used to connect to the virtual desktops from UDS Enterprise will be RDP. It will allow us, in addition to making the remote connection, the redirection of disk units / storage drives, local printers, smart cards, various monitors, etc...

This protocol already comes by default in this OS and we will only have to enable it to be used by UDS Enterprise.

- **Actor UDS**

It will be needed to have the latest stable version of the UDS Actor to take care of the reconfiguration of all the virtual desktops automatically generated by the UDS Server.

To download the UDS Actor we will need to validate ourselves in the UDS login window with a user with administrator permissions. We will display the user menu and access the downloads. In this window we will download the Actor for Windows machines (.exe).



The screenshot shows the 'Descargas' (Downloads) section of the UDS Client interface. It lists several UDS Actor packages for different operating systems and architectures. The package 'UDSActorSetup-3.6.0.exe' is highlighted with a red border, indicating it is the one to be downloaded for Windows 11 + RDP + UDS Actor.

Package Name	Description
udsactor_3.6.0_all.deb	Actor UDS para máquinas Linux: Debian, Ubuntu, ... (Requiere python>= 3.6)
udsactor-3.6.0-1.noarch.rpm	Actor UDS para máquinas Linux: Centos, Fedora, RH, Suse, ... (Requiere python>= 3.6)
udsactor-unmanaged_3.6.0_all.deb	Actor UDS para máquinas Linux basadas en Debian. Utilizar SOLO para máquinas estáticas. (Requiere python>= 3.6)
udsactor-unmanaged-3.6.0-1.noarch.rpm	Actor UDS para máquinas Linux: Centos, Fedora, RH, Suse, ... Usado SOLAMENTE para máquinas estáticas. (Requiere python >= 3.6)
RDSActorSetup-3.6.0.exe	Actor RDS UDS (para aplicaciones remotas en Windows Server)
UDSActorSetup-3.6.0.exe	Actor UDS para máquinas Windows
UDSActorUnmanagedSetup-3.6.0.exe	Actor UDS para máquinas Windows no administradas. Utilizado SOLO para máquinas estáticas.
udsactor_2.2.0_legacy.deb	Actor UDS Legacy para máquinas Linux: Debian, Ubuntu, ... (requiere Python 2.7)
udsactor-legacy-2.2.1-1.noarch.rpm	Actor UDS Legacy para máquinas Linux: Centos, Fedora, RH, ... (Requiere python 2.7)
udsactor-opensuse-legacy-2.2.1-1.noarch.rpm	Actor UDS Legacy para máquinas Linux: Suse, OpenSuse, ... (Requiere python 2.7)

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- **Several**

It is recommended to update the OS after its installation is complete. After said update, automatic updates must be disabled to prevent the generated virtual desktops from executing this process. This task is recommended especially with the use of non-persistent desktops.

It will be necessary to configure the network of the template machine by DHCP, so we will need to have said service in the virtual interface where we connect the machine.

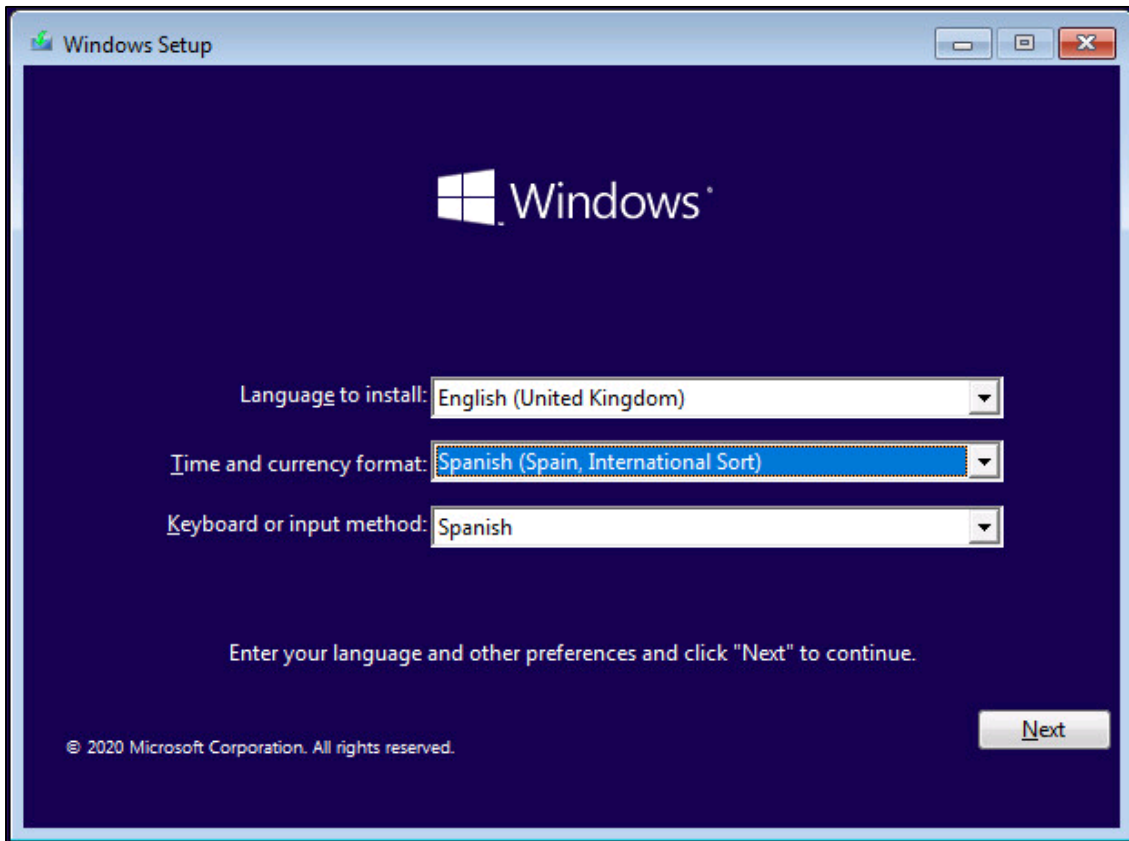
The template must never be added to an Active Directory domain. In case you need virtual desktops included in an AD domain, the configuration will be done from the control panel of the UDS Server (OS Manager).

The auto-login of a user cannot be configured in the template. A user should always be prompted for credentials (there are different ways to authenticate to virtual desktops, all of which are available in the service transport).

Installation and configuration

1. Microsoft Windows 11

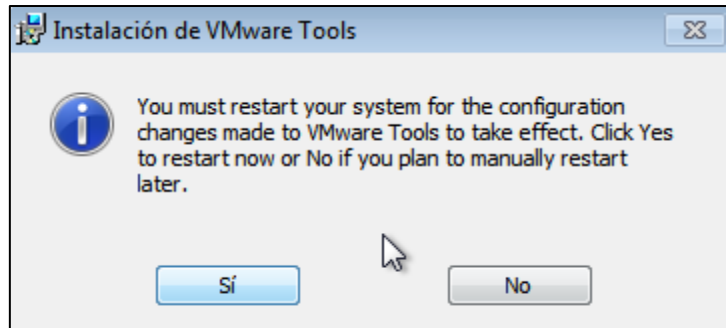
Proceed to the installation of the Windows 11 OS:



The installation will be carried out with the default values and indicating some resources (disk, vRAM and vCPUs) according to the use that we are going to give to the desktop.

Continue with all the steps of the default installation until it is finished and we have the virtual machine ready to start and install the UDS Actor.

Once the OS installation is finished, it is important to install the virtual machine drivers corresponding to the virtualization platform. In this example we will install the “VMware Tools”, since the machine will run on the VMware vSphere virtual platform.

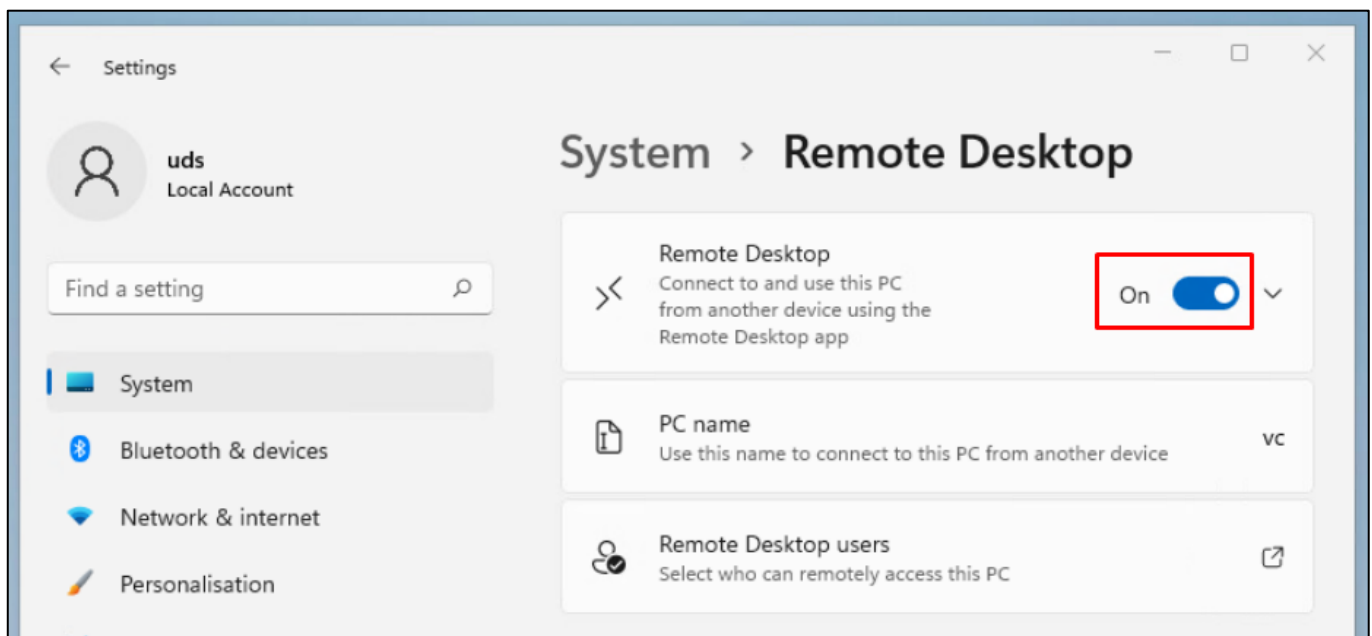


After installing the VMware Tools and restarting the VM, we can now enable the RDP connection protocol and configure the UDS Actor.

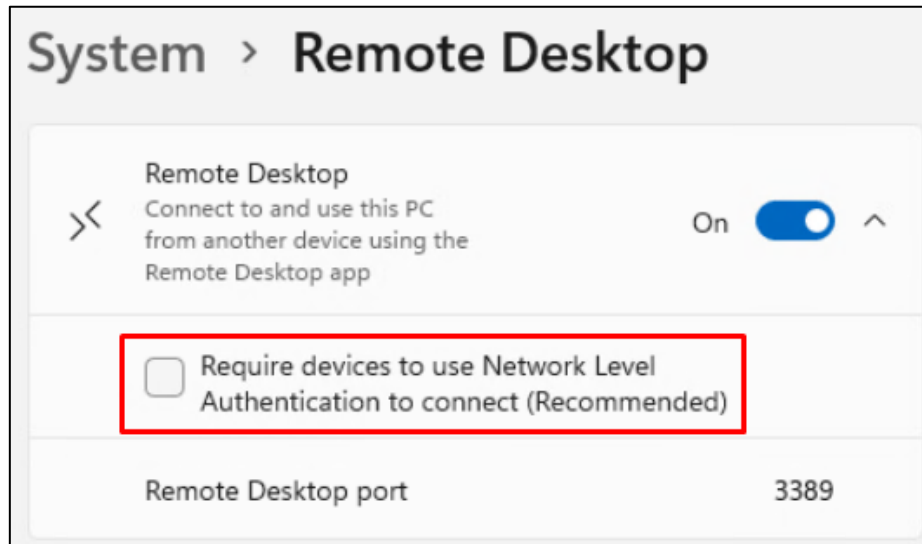
2. RDP

In order to connect to the virtual desktop, we must enable the remote desktop connection (RDP) in the template.

Settings – System – Remote Desktop



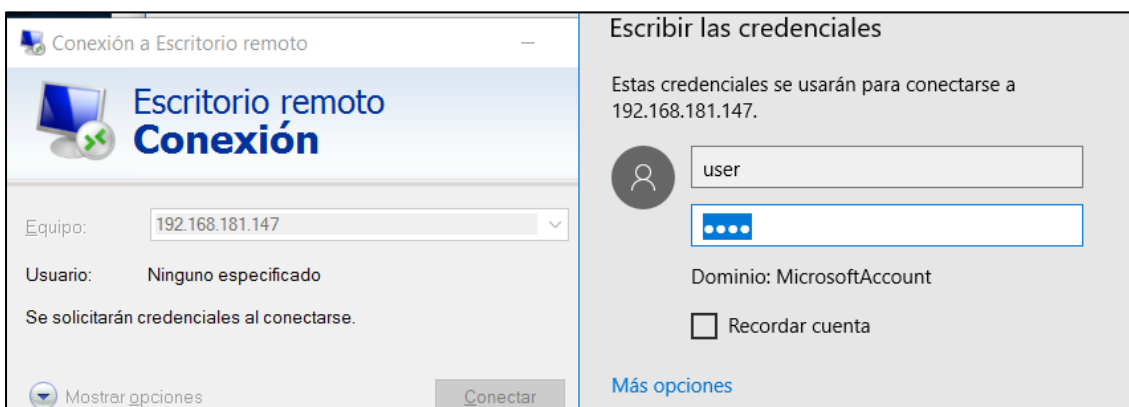
Enable: “**Enable Remote Desktop**” and in the advanced options we will review the section: “**Require computers to use Network Level Authentication to connect**”.



If we enable the option “**Require computers to use Network Level Authentication to connect**”, we will have to send the machine valid credentials, otherwise, the connection will not be made satisfactorily.

If we are also going to use a connection via HTML5, in some cases it will be necessary to modify the following section of the registry:

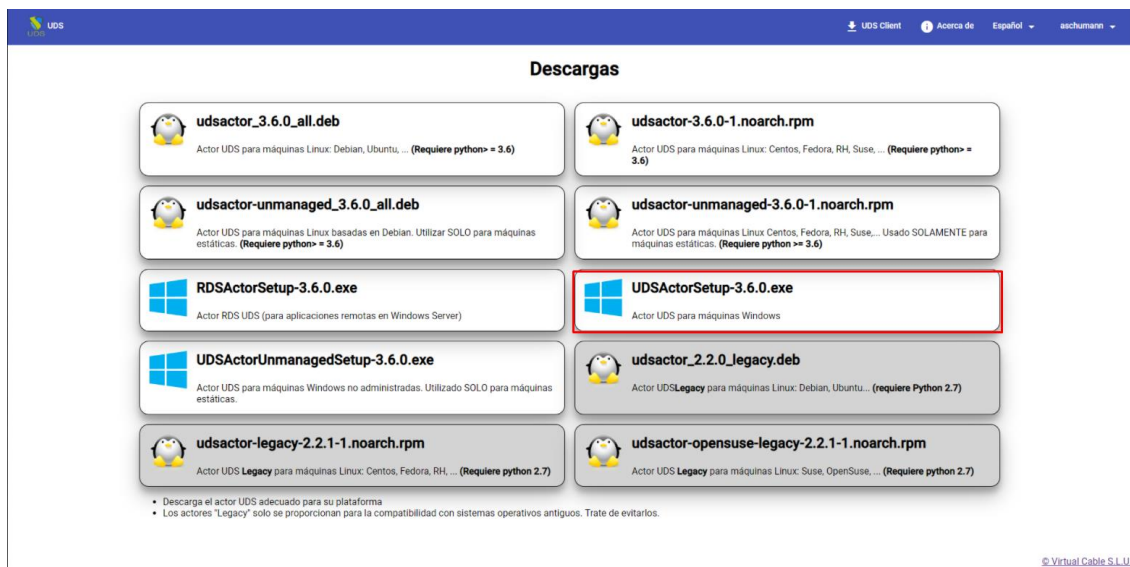
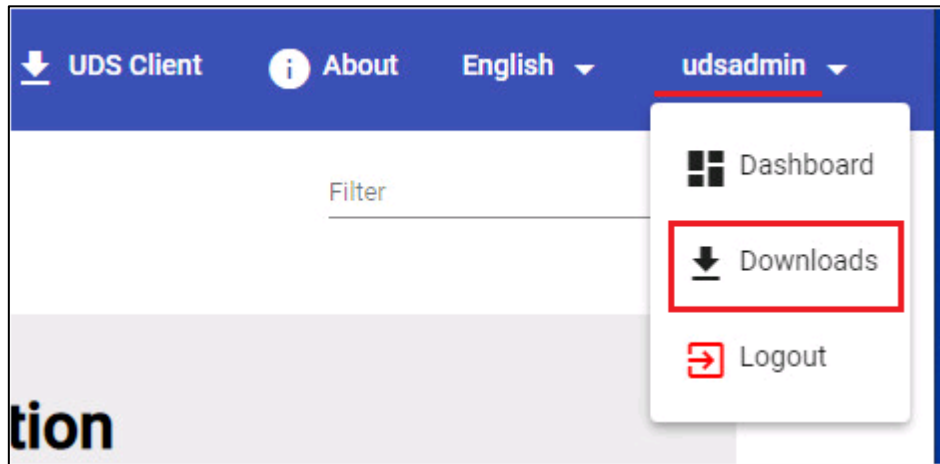
<https://www2.udsenderprise.com/en/wiki/Troubleshooting/Windows/Windows10-HTML5/>



Once verified, you can move on to the installation of the UDS Actor.

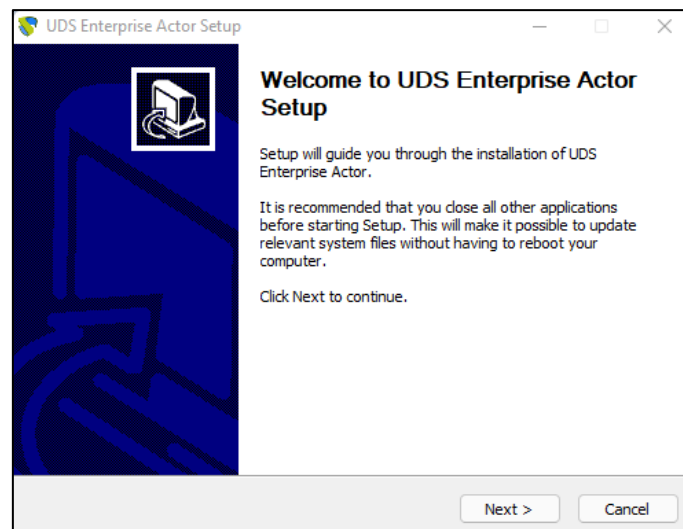
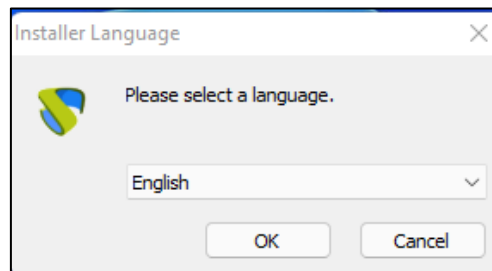
3. Actor UDS

Access the UDS server and validate ourselves with a user with administrator permissions. In the user menu we select "Downloads" to access the downloads of the UDS Actor.

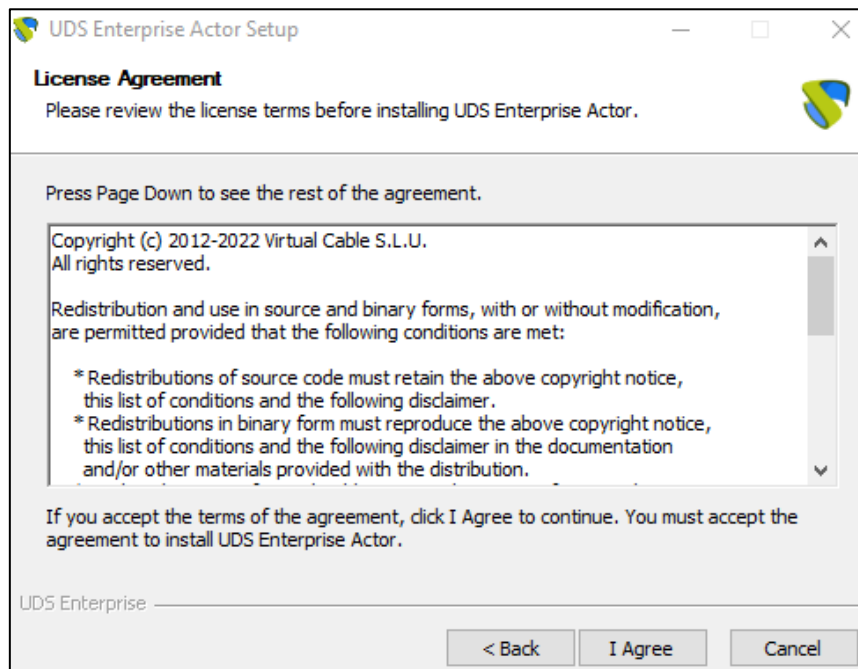


Download the UDS Actor for Windows machines corresponding to machines with Windows OS:

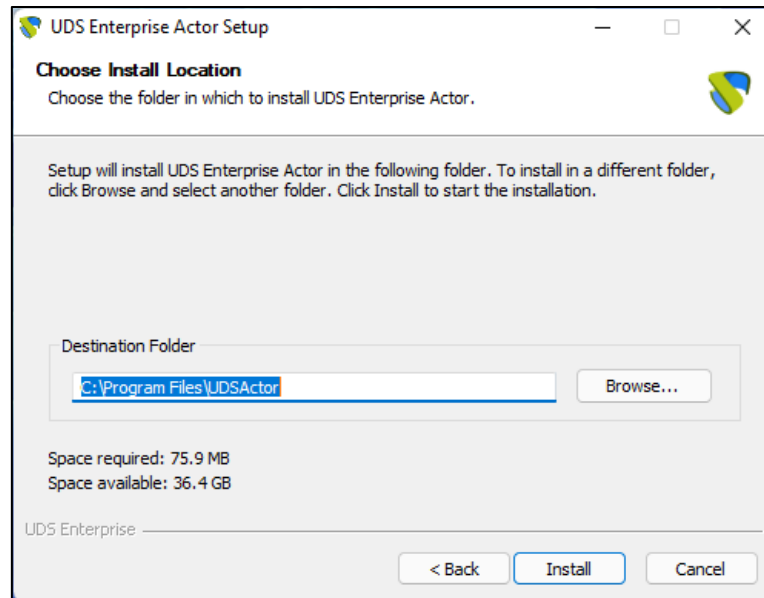
Once the Actor is downloaded, we start the installation.



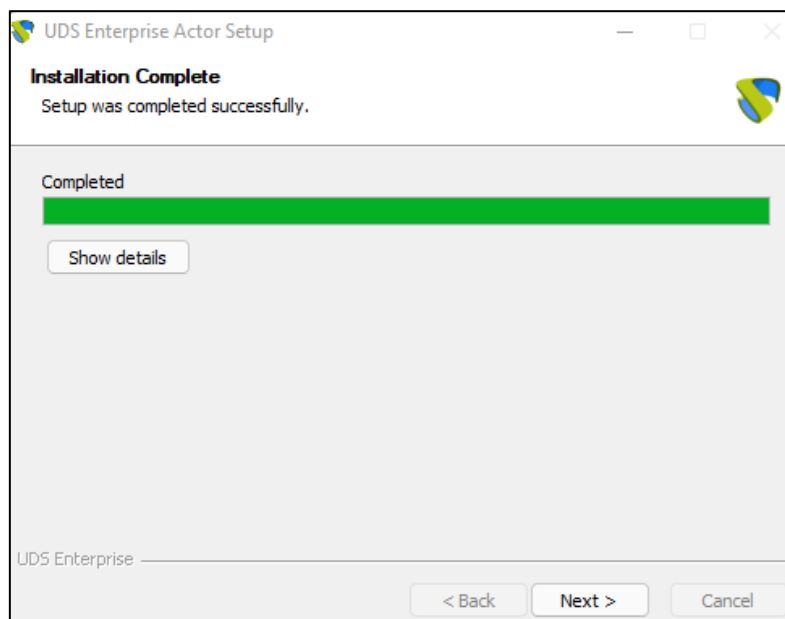
Accept the license agreement:



Select the installation path of the UDS Actor:



Click on "Install" to proceed with the installation:



Once the installation is done, proceed to the configuration of the UDS Actor:



In the UDS Server tab we will register the Actor with the UDS instance indicating the following parameters:

SSL Validation:Type of security with which the communication with the UDS server will be carried out.

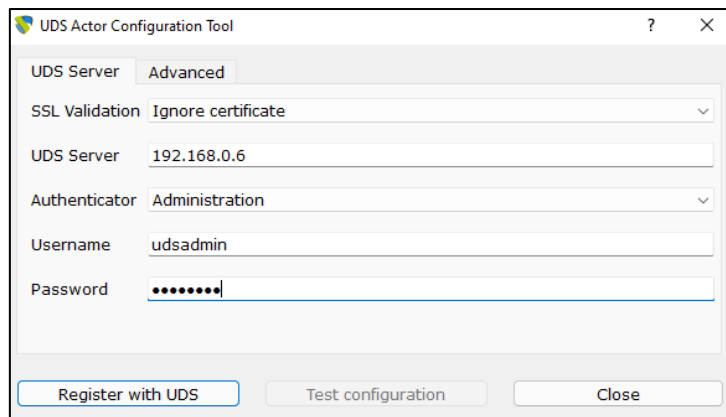
UDS Server:Name or IP address of the UDS server.

authenticator:Authenticator to which the administrator user indicated to register the UDS Actor belongs.

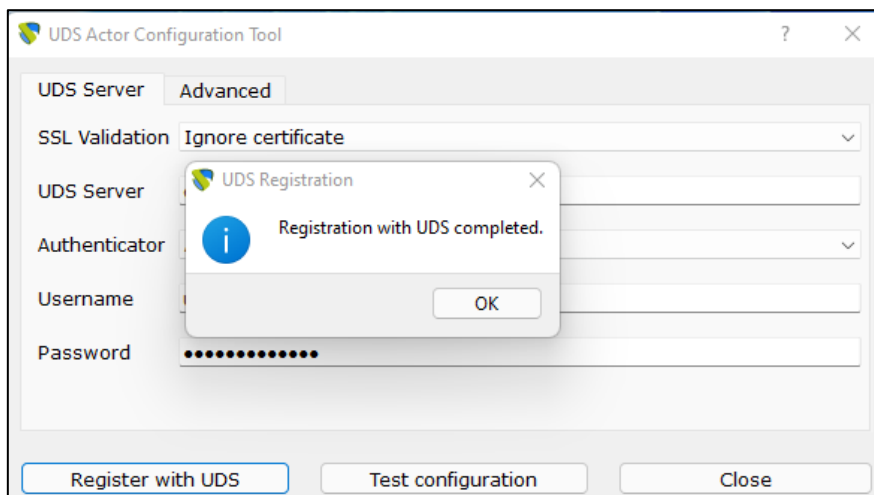
It is necessary that the communication with the UDS server be carried out correctly so that the different authenticators are displayed. There must be at least one registered in the UDS administration (the "Administration" authenticator corresponds to the super-user created in the UDS server configuration wizard).

username:Username with administration permissions in the UDS environment (must belong to the authenticator selected above).

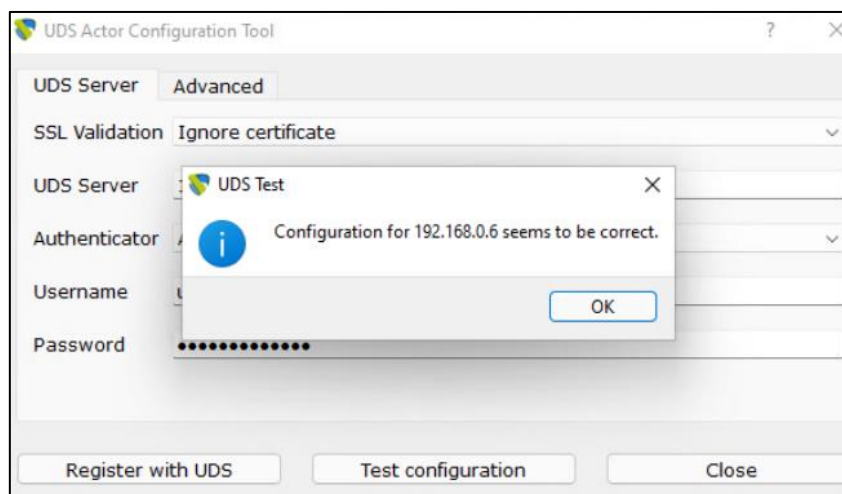
Password:Password of the administrator user used.



Once these data have been indicated, we will click on "Register with UDS":



We can also carry out a test by clicking on "Test configuration" to verify the correct connection with the UDS server at any time:



In the “Advanced” tab we can indicate the following advanced parameters:

Preconnect: script that will be executed just before allowing the user to connect to the virtual desktop.

UDS will automatically pass the following parameters, which can be used in the script: username, protocol (rdp, nx, pcoip...), IP (IP that UDS has recognized in the client (SRC IP)), hostname (SRC Host).

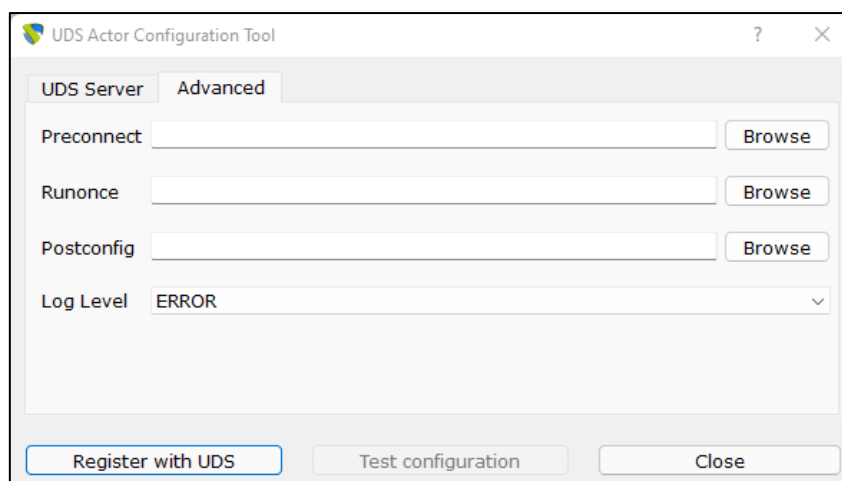
runonce: script that is executed only once and before the UDS Actor applies its configuration. After its execution it is deleted from the configuration. Parameters can be passed directly to it.

It is necessary that the script that is executed finishes by restarting the virtual desktop. Otherwise, the desktop will never apply the Actor configuration, preventing reaching the “Valid” status in the UDS administration.

post config: script that is executed when the UDS Actor has finished its configuration. Parameters can be passed directly to it.

The script runs only once, but unlike Runonce mode you don't need to restart the virtual desktop. This script is useful to add some element of your own to the configuration carried out by the UDS Actor, such as copying files from the local network, executing configurations, etc...

Log Level: Types of records that will be shown in the log files of the UDS Actor. These log files (udsactor.log) will be located in the following paths: %temp% (path to temporary user files) and C:\Windows\Temp (path to temporary OS files).



It is very important to bear in mind that to apply the values of the "Advanced" tab it will always be necessary to carry out the registration process afterwards, since if we add a script or modify the log level and we have not registered the Actor again, these will not be registered. Will apply.

Once the UDS Actor has been installed and configured, the template machine (gold image) can now be turned off and will be available to be used by UDS to auto-generate virtual desktops.

Summary

Once all these steps have been completed, we will have our Windows 11 OS template available for use with UDS Enterprise using the RDP connection protocol.

It is recommended to carry out certain optimization tasks in the template before proceeding to its publication, among them we highlight:

- Disable unnecessary services (also during VM startup).
- Disable automatic Windows updates, antivirus, etc...
- Disable computer sleep due to inactivity.
- In case of using AD roaming profiles, make a custom configuration (folder redirection, disk quotas, etc...).

From this template, UDS Enterprise will automatically generate virtual desktops, which can be accessed from Windows, Linux and macOS connection clients:

- From Windows computers with the client: Remote Desktop.
- From Linux computers with the client: FreeRDP.
- From macOS computers with clients: FreeRDP and Microsoft Remote Desktop.

About Virtual Cable

[Virtual Cable](#) is a company specialized in the digital **transformation of the workplace**. The company develops, supports and markets UDS Enterprise. Its team of experts has designed **VDI** solutions tailored to each sector to provide a unique user experience fully adapted to the needs of each user profile. Virtual Cable professionals have **more than 30 years of experience** in IT and software development and more than 15 in virtualization technologies. **Millions of Windows and Linux virtual desktops with UDS Enterprise are deployed all over the world every day.**