



UDS Enterprise – Preparing Templates

Red Hat - CentOS 7 + XRDP 0.9.1 + UDS Actor

Introduction

This document shows how to configure a CentOS or Red Hat Linux virtual machine to be used as a template with UDS Enterprise.

During the procedure, the installation process of the OS (CentOS 7 in its Minimal ISO + XFCE), the connection or transport protocol (XRDP 0.9.1) and the UDS Actor (agent in charge of the communication between the OS and the Server) will be shown.

Necessary Elements

To make the configuration of the different elements that will make up the template to use with UDS Enterprise, we will need the following elements:

- **OS image**

We will use a minimum image of CentOS 7, available from the official CentOS repository:

http://isoredirect.centos.org/centos/7/isos/x86_64/CentOS-7-x86_64-Minimal-1708.iso

The following mirrors should have the ISO images available:

Actual Country -

http://ftp.rediris.es/mirror/CentOS/7/isos/x86_64/CentOS-7-x86_64-Minimal-1708.iso

http://mirror.uv.es/mirror/CentOS/7/isos/x86_64/CentOS-7-x86_64-Minimal-1708.iso

http://centos.uvigo.es/7/isos/x86_64/CentOS-7-x86_64-Minimal-1708.iso

http://mirror.tedra.es/CentOS/7/isos/x86_64/CentOS-7-x86_64-Minimal-1708.iso

http://ftp.uma.es/mirror/CentOS/7/isos/x86_64/CentOS-7-x86_64-Minimal-1708.iso

http://ftp.cica.es/CentOS/7/isos/x86_64/CentOS-7-x86_64-Minimal-1708.iso

http://mirror.arenetworks.es/CentOS/7/isos/x86_64/CentOS-7-x86_64-Minimal-1708.iso

http://ftp.cixug.es/CentOS/7/isos/x86_64/CentOS-7-x86_64-Minimal-1708.iso

- **XRDP**

The protocol used to connect to virtual desktops from UDS Enterprise will be XRDP, which will allow us, in addition to making the remote connection, the redirection of disk and storage drives.

The installation process of this version with all its functionalities is hard and sometimes frustrating. To facilitate this work, the UDS Enterprise development team has created a script that automates the entire installation process. This script can be downloaded from this repository:

http://images.udsenderprise.com/files/CentOS_7_RHEL/



Index of /files/CentOS_7_RHEL

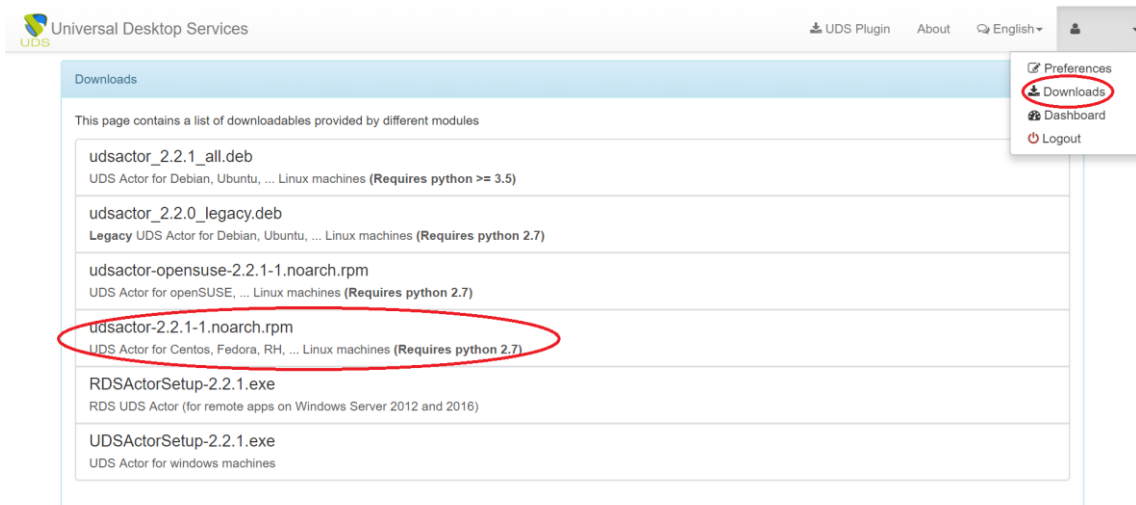
Name	Last modified	Size	Description
Parent Directory		-	
CentOS_RDP.sh	2018-03-14 16:51	783	

Apache/2.4.25 (Debian) Server at images.udsenderprise.com Port 80

UDS Actor

We will need to have the latest stable version of the UDS Actor to handle the reconfiguration of all the virtual desktops generated automatically by the UDS Server.

To download the UDS Actor we will need to validate in the UDS Enterprise login window with a user with administrator permissions. We will display the user's menu and access downloads. In this window we will download the Actor for Linux machines and specifically for distributions based on Fedora, Red Hat, CentOS and similar systems (.rpm).



Miscellaneous

It is necessary to have internet access to perform the installation of both CentOS OS and the XRDP connection protocol.

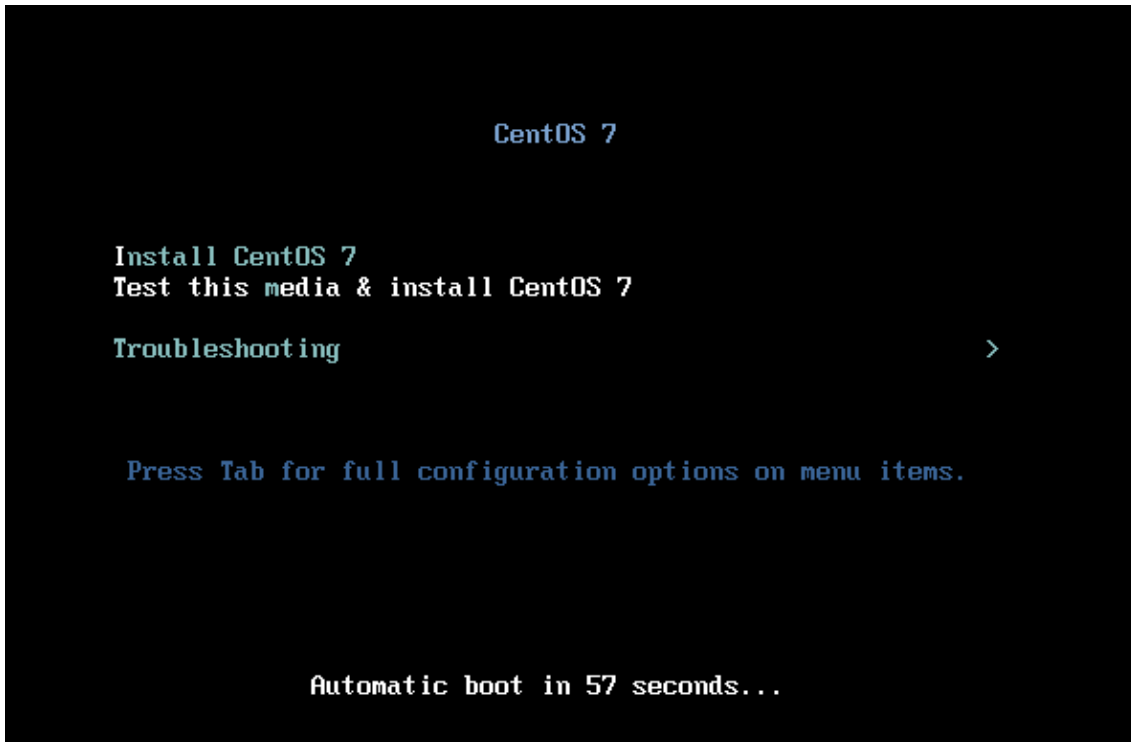
It will be necessary to configure the network of the template by DHCP, so we will need to have this service in the virtual interface where we connect the machine.



Installation and Configuration

1. CentOS 7

Once downloaded the minimal image of CentOS 7 from the official repository indicated in the previous section, we proceed to perform its installation:



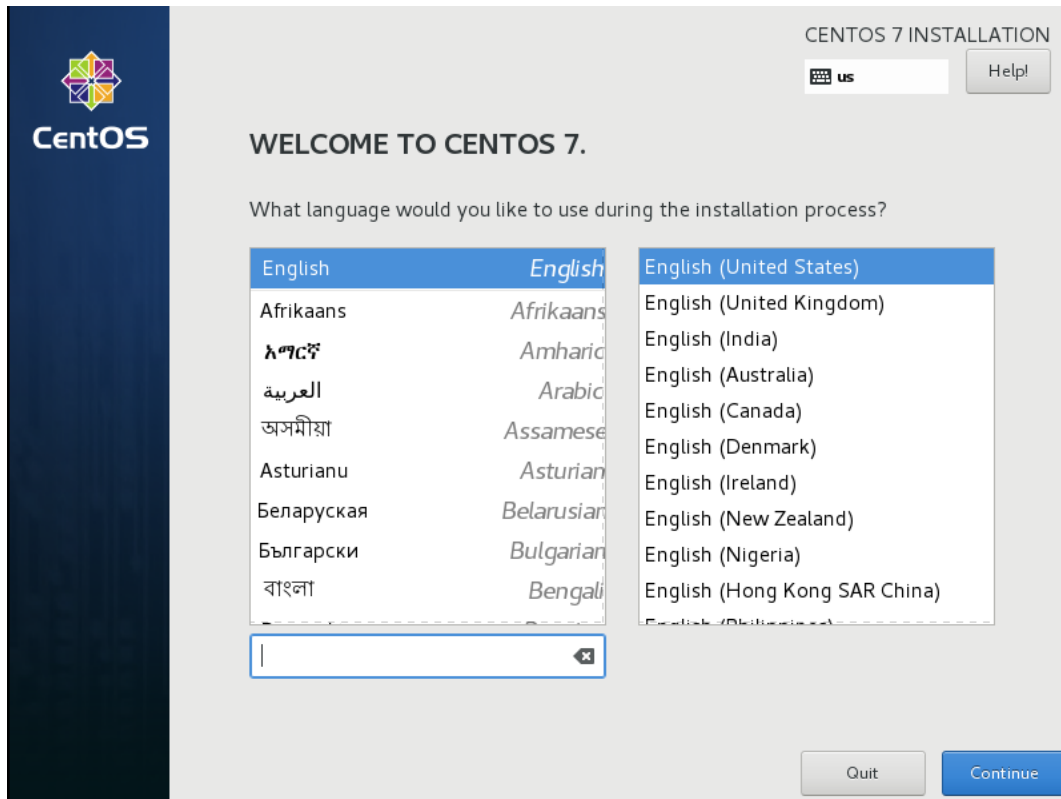
The installation is done with the default values and indicating some resources (disk, vRAM and vCPUs) according to the use of the desktop.



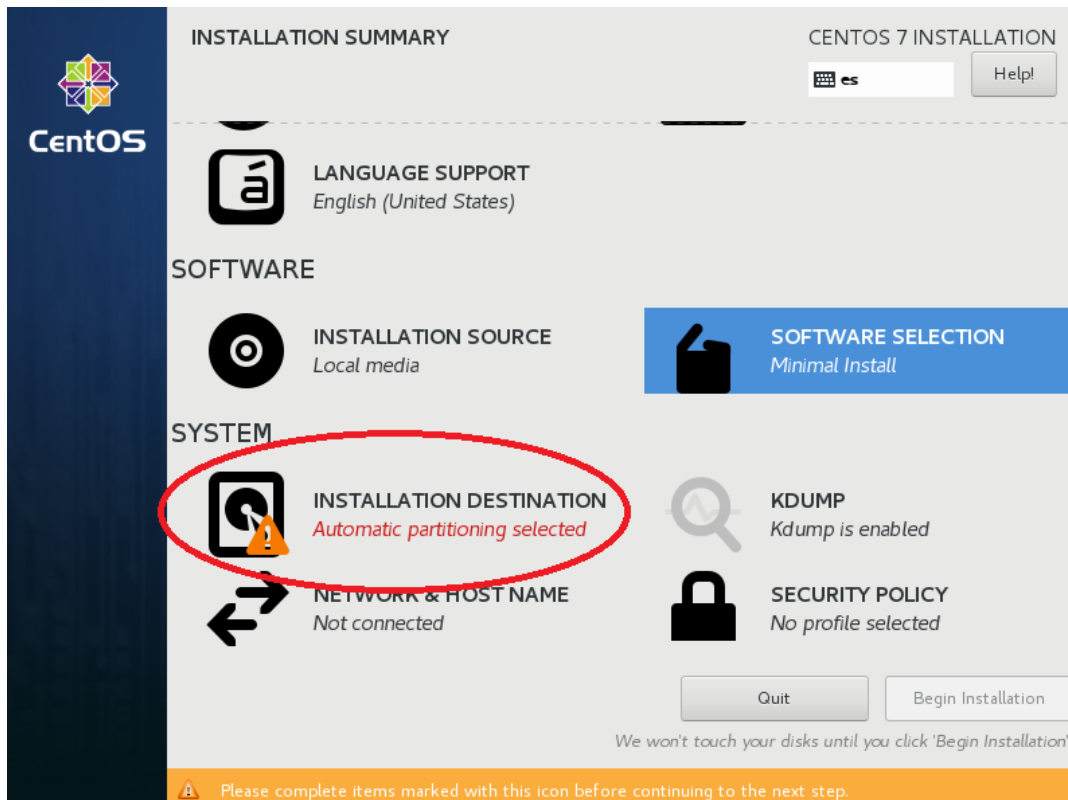
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First, select language and keyboard layout.



We select the storage to save the installation and the system.





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INSTALLATION DESTINATION

Done CENTOS 7 INSTALLATION es Help!

Device Selection

Select the device(s) you'd like to install to. They will be left untouched until you click on the main menu's "Begin Installation" button.

Local Standard Disks

20 GiB

VMware, VMware Virtual S
sda / 20 GiB free

Disks left unselected here will not be touched.

Specialized & Network Disks

Add a disk...

Disks left unselected here will not be touched.

Other Storage Options

Partitioning

Automatically configure partitioning. I will configure partitioning.

I would like to make additional space available.

[Full disk summary and boot loader...](#) 1 disk selected; 20 GiB capacity; 20 GiB free [Refresh...](#)

Leave default values and start the setup process.

SYSTEM

	INSTALLATION DESTINATION <i>Automatic partitioning selected</i>		KDUMP <i>Kdump is enabled</i>
	NETWORK & HOST NAME <i>Not connected</i>		SECURITY POLICY <i>No profile selected</i>

Quit Begin Installation

We won't touch your disks until you click 'Begin Installation'.

We configure the password of the "root" user and create a user (optional).

CONFIGURATION

CENTOS 7 INSTALLATION es Help!

USER SETTINGS

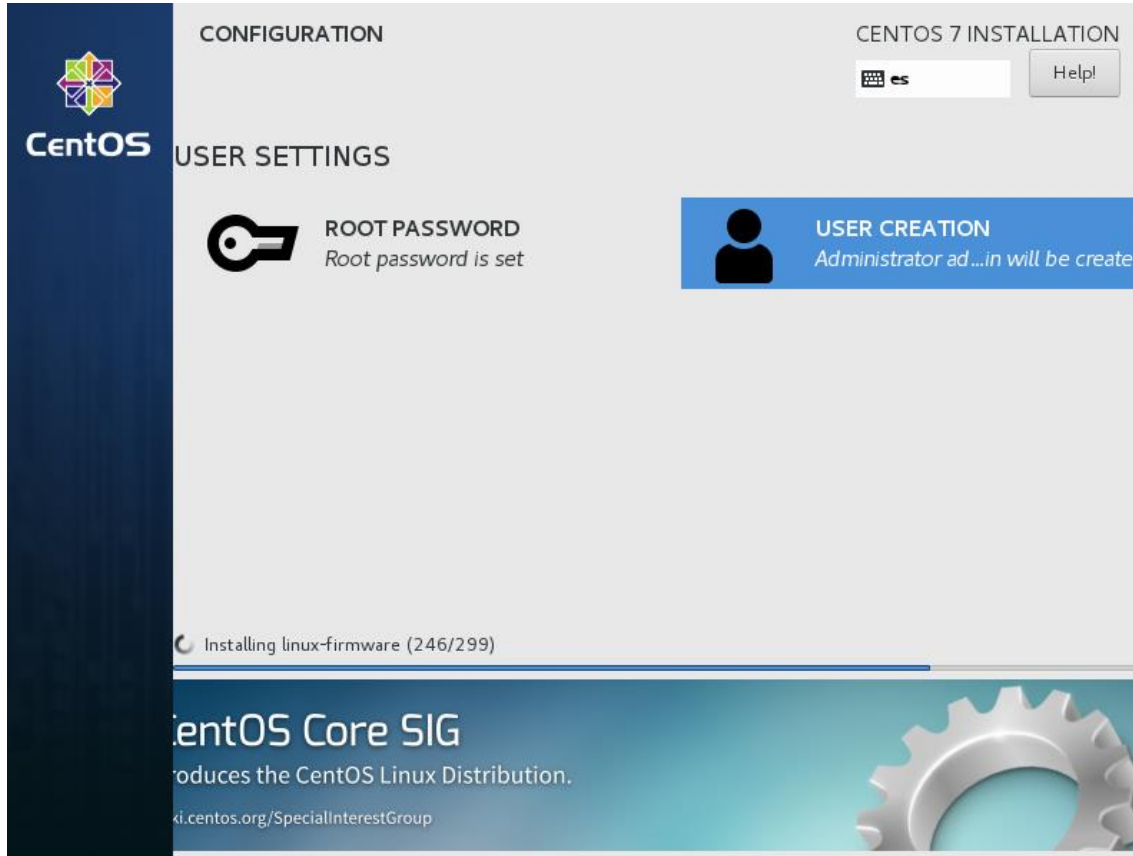
	ROOT PASSWORD <i>Root password is not set</i>		USER CREATION <i>No user will be created</i>
--	---	--	--



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We validate the password and the user and wait for the installation of the system to finish.



2. XFCE Desktop and XRDP

Once the process of installing the system is finished, we will proceed to the installation of the XFCE and XRDP desktop in its version through the [script](#) provided by the UDS Enterprise development team.

We download the script to our CentOS 7 template and execute it:

Sudo wget

```
http://images.udsenderprise.com/files/CentOS_7_RHEL/CentOS_RDP.sh -O /usr/CentOS_RDP.sh
```

Execute the script: sudo sh /usr/CentOS_RDP.sh

```
[root@localhost admin]# wget http://images.udsenderprise.com/files/CentOS_7_RHEL/CentOS_RDP.sh -O /usr/CentOS_RDP.sh
--2018-03-14 18:46:22-- http://images.udsenderprise.com/files/CentOS_7_RHEL/CentOS_RDP.sh
Resolving images.udsenderprise.com (images.udsenderprise.com)... 51.254.16.51
Connecting to images.udsenderprise.com (images.udsenderprise.com)[51.254.16.51]:80... connected.
HTTP request sent, awaiting response... 200 OK
Length: 829 [text/x-sh]
Saving to: '/usr/CentOS_RDP.sh'

100%[=====]
2018-03-14 18:46:22 (156 MB/s) - '/usr/CentOS_RDP.sh' saved [829/829]

[root@localhost admin]# sudo sh /usr/CentOS_RDP.sh
```



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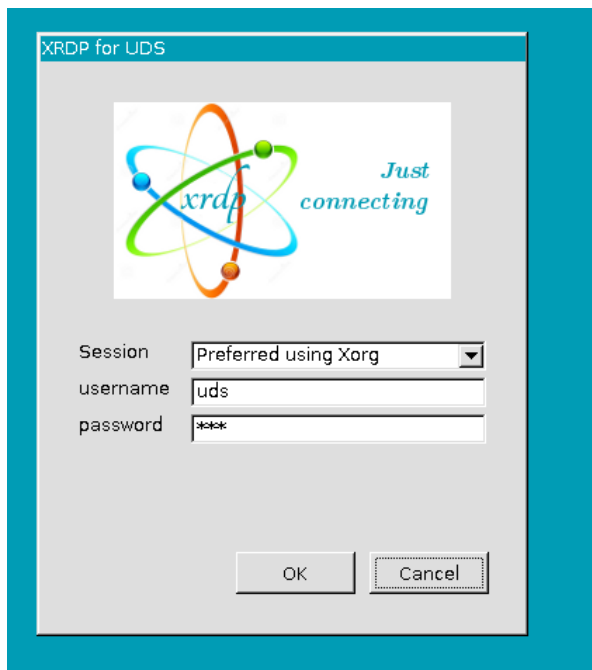
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During the installation process, other necessary components will be automatically added. The estimated time of this installation is 6 to 12 minutes depending on the speed of the connection.

During the installation process, the following tasks are performed:

- Update the system
- Install the dependency packages
- Install **vm-open-tools**
- Install **X Window, Fonts and XFCE desktop**
- Install **Mozilla Firefox**
- Install **XRDP**
- Disable automatic updates
- Reboot the system

When the installation process by the script is finished, we check the access through the Windows RDP client remote desktop or Linux FreeRDP / Rdesktop.



If the access is ok, we proceed with the completion of the installation of the XFCE Desktop.

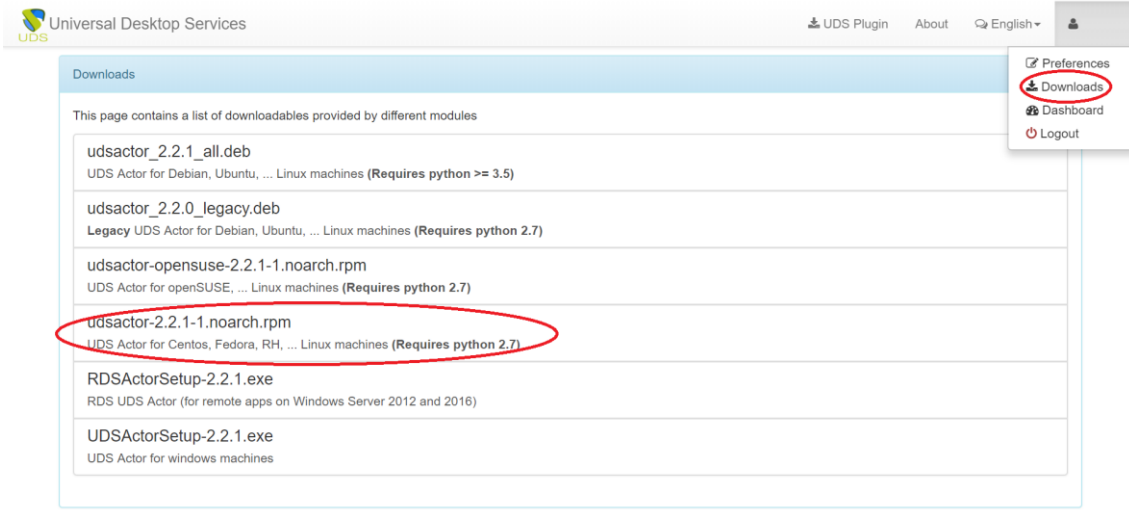


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3. UDS Actor

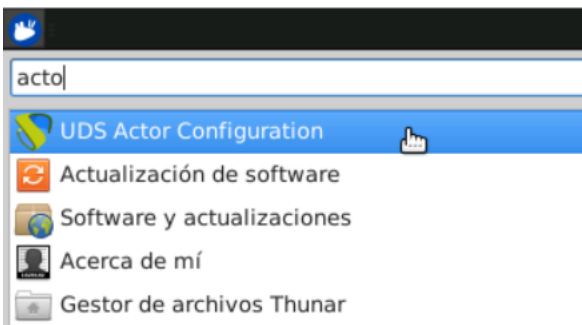
Download the UDS Actor for distributions based on Fedora, Red Hat, CentOS and similar systems (.rpm).



Proceed with the installation of the UDS Actor: `yum localinstall udsActor-2.2.1-1-noarch.rpm`

```
[root@localhost ~]# yum localinstall /home/admin/Downloads/udsactor-2.2.1-1-noarch.rpm_
```

Open the Actor from the menu:

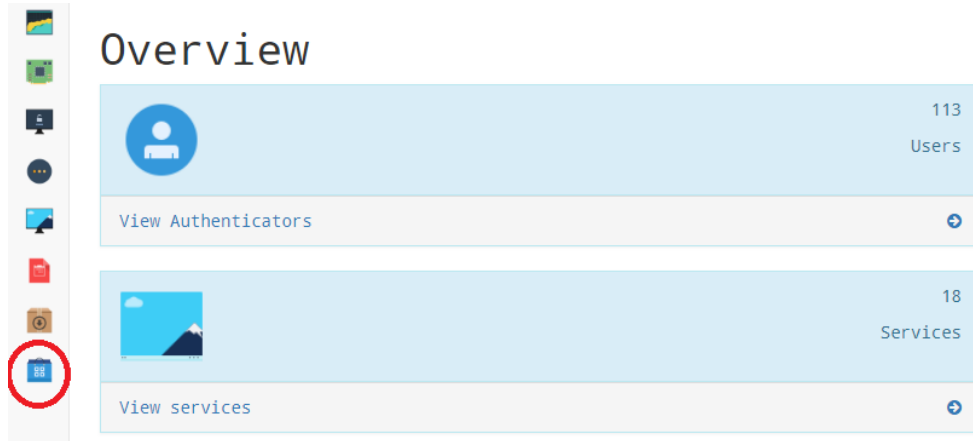




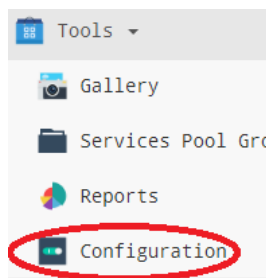
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After installing the Actor, we copy the “**Master Key**” from our UDS system to the newly installed Actor in the template.

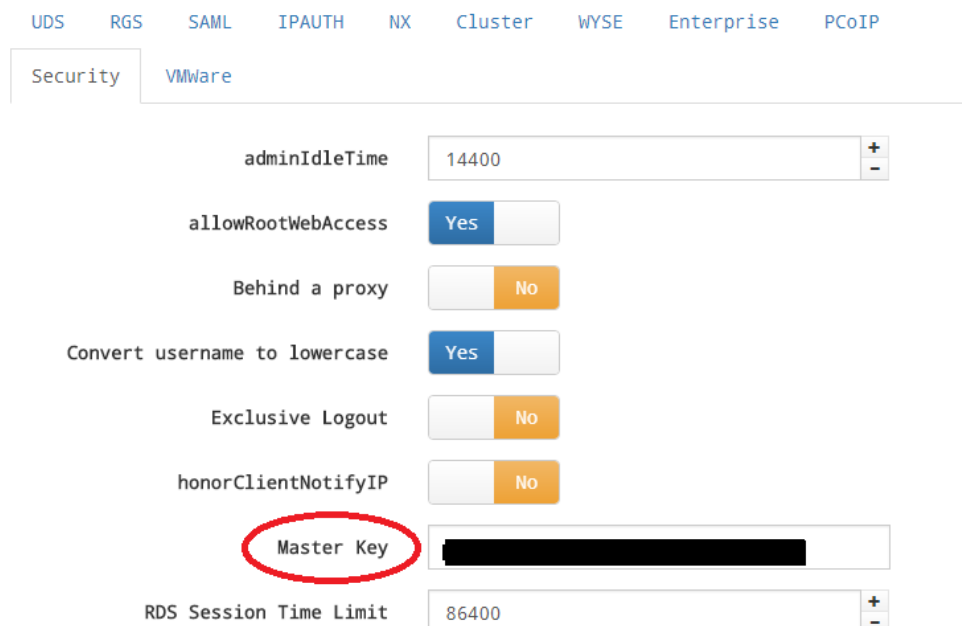


In the Dashboard, go to the “**Tools**” menu and select “**Settings**”.



In UDS Configuration, go to the “**Security**” tab and copy the “**Master Key**”.

UDS Configuration

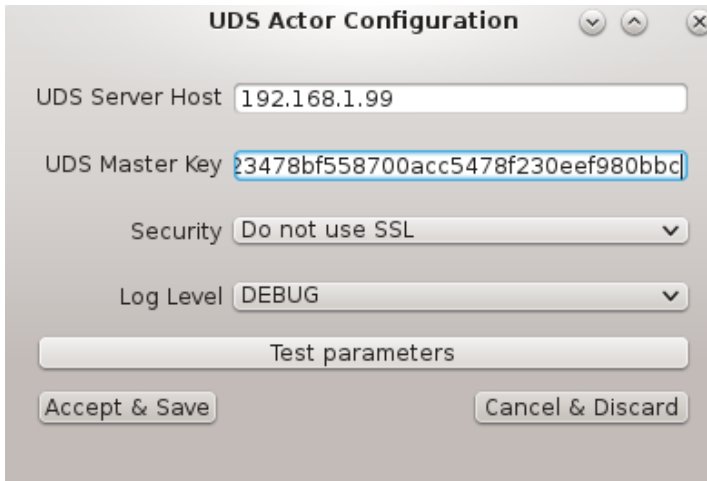




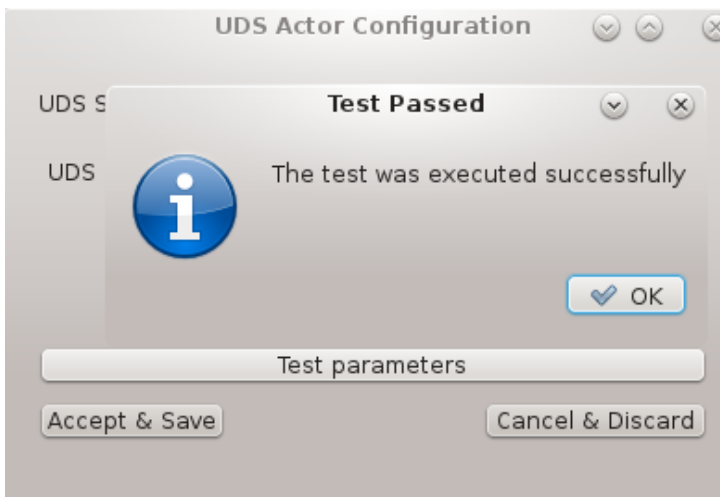
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We open the Actor configuration from the menu of our CentOS 7 template.
We enter the IP address of our UDS Server and the “**Master Key**”:



We click on “**Test Parameters**”. If the test passes successfully, we can save and exit the configuration.



Click “**Accept & Save**” to save the configuration. Now you can turn off the template and start configuring services in UDS Enterprise.



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Summary

Once all these steps are done, we will have our CentOS 7 or higher OS template available for use with UDS Enterprise using the RDP connection protocol.

This installation and configuration mode will allow the redirection of disk drives and storage drives to the virtual desktop.

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

- From Windows computers with the RDP client: Remote Desktop
- From Linux computers with RDP clients: FreeRDP and Rdesktop

Support and professional services

VirtualCable markets UDS Enterprise through a subscription model, including support and updates, depending on the number of users.

In addition, VirtualCable offers professional services to install and configure UDS Enterprise and other virtualization technologies.

For more information, visit www.udsenderprise.com or send us an email at info@udsenderprise.com