VIRTUAL CABLE

UDS Enterprise Update Procedure

UDS ENTERPRISE 3.6

index

1. Introduction

Updating the version of a UDS Enterprise environment is a quick and simple process, but a series of tasks must be taken into account that we must carry out before and after the update, which will be essential for it to be carried out correctly.

The UDS Server component will be in charge of updating the MySQL database tables (BBDD) making it compatible with the new version.

In the UDS Tunnel machine it is not necessary to carry out any update process, since no information is stored in it. A new display of it will suffice.

The tasks that we have to carry out to update UDS Enterprise are:

- Deploy the new Virtual Appliances of the UDS Server and UDS Tunnel machines to a supported hypervisor platform
- Shut down the servers (Server and Tunnel) of the old version of UDS Enterprise
- Configure the new UDS servers with the same data as the previous version and connect it to the existing database.

2. Version compatibility

UDS Enterprise allows upgrading to new versions of the software, but only between contiguous versions.

If, for example, you want to upgrade from UDS Enterprise version 3.0 to version 3.6, you must first upgrade to version 3.5, then from 3.5 to 3.6.

UDS Server Upgrade Path

UDS Enterprise	3.6	3.5	3.0
3.5	✓	✓	
3.0	✗	✓	✓

UDS Clients Compatibility

UDS Clients / UDS Server	USD 3.0	UDS 3.5	UDS 3.6
Client 3.0	✓	✗	✗
Client 3.5	✓	✓	✗
Client 3.6	✓	✓	✓

UDS Actor Compatibility

UDS Actor / UDS Server	USD 3.0	UDS 3.5	UDS 3.6
Actor 3.0	✓	✓	✓
Actor 3.5	✓	✓	✓
Actor 3.6	✓	✓	✓

3. Pre-upgrade tasks

Before proceeding to update UDS Enterprise, the following tasks must be carried out:

- Have all the configuration data of the current UDS servers (UDS-Server and UDS-Tunnel): DNS Name, IP, Network Mask, Gateway, DNS

- Have all the database server connection data (name or IP address of the server, instance name, username and password).

- If a MySQL database supplied by VirtualCable is used, the default data is:

    - Instance: uds
    - User: uds
    - Password: uds

- It is highly recommended to provide the UDS server with direct access to the Internet (https) to carry out the subscription activation process, in case of not having access to the Internet, consult with the UDS Enterprise support staff.

- For the database migration process to be carried out correctly, it is necessary that the server that hosts it has a version of MySQL/MariaDB >= 5.6/10.3

- If you are using the database server provided by the UDS team, it is also recommended to update it, using the following script:

  https://images.udsenterprise.com/files/UDSPatchs/Mysql-update/upgrade-mysql.sh

- In versions prior to UDS 3.0, in case of using any custom HTML template in the UDS Server for user login windows, services, downloads, etc., it is necessary to export them from the old UDS Server and copy them to the new one, since these changes will not are stored in the database.

- As of version 3.0, all customizations applied from the “Custom” tab, in the UDS administration, will be automatically migrated during the upgrade process.

- It is recommended to take a snapshot or backup of the MySQL database server to have a valid restore point in case an anomaly occurs during the update.

- **Download the appliances of version 3.5 in this link and those of version 3.6 in the following link.**

4. UDS DbServer update

In order to update to a new version of UDS, it is always recommended that the database is updated to the latest level of patches.

The minimum supported versions are: MySQL/MariaDB >= 5.6/10.3

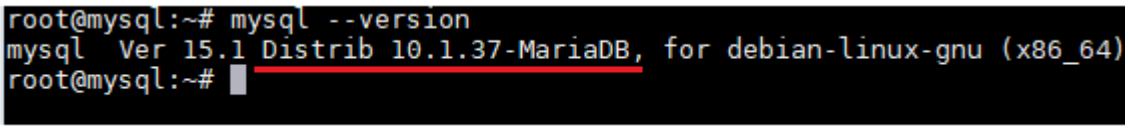
If you are using the database server provided by the UDS Enterprise team, you can run the following script that will automate the entire update process:

https://images.udsenterprise.com/files/UDSPatchs/Mysql-update/upgrade-mysql.sh

Before its execution, it is necessary to have a backup or snapshot that allows us to have a restore point in case an error has occurred during the update process.

To check the current version, we have on our current database server, we run the command:

```
mysql --version
```



As we have a version of MariaDB lower than 10.3, we will download and run the upgrade script.

We download the script using the wget command (we can also enable ssh on the server and copy the script):

```
wget https://images.udsenterprise.com/files/UDSPatchs/Mysql-update/upgrade-mysql.sh
```

```
root@mysql:~# wget http://images.udsenterprise.com/files/UDSPatchs/Mysql-update/upgrade-mysql.sh
--2020-09-12 11:33:36--  http://images.udsenterprise.com/files/UDSPatchs/Mysql-update/upgrade-mysql.sh
Resolving images.udsenterprise.com (images.udsenterprise.com)... 188.165.133.128
Connecting to images.udsenterprise.com (images.udsenterprise.com)|188.165.133.128|:80... connected.
HTTP request sent, awaiting response... 200 OK
Length: 322 [text/x-sh]
Saving to: 'upgrade-mysql.sh'

upgrade-mysql.sh                    100%[=================================================================>]

2020-09-12 11:33:36 (15.4 MB/s) - 'upgrade-mysql.sh' saved [322/322]

root@mysql:~#
```

We will give permissions to the script to execute it:

```
root@mysql:~# chmod 775 upgrade-mysql.sh
root@mysql:~#
```

We launch the update script, which will completely update the server at the OS level and also at the MySQL/MariaDB application level:

```
root@mysql:~# ./upgrade-mysql.sh
```

The update process will be long and at certain points confirmations will be requested to perform certain tasks, in all of them we will mark the default options.

Once the whole process is finished, we restart the server and check our MySQL/MariaDB version:

```
root@mysql:~# mysql --version
mysql  Ver 15.1 Distrib 10.3.23-MariaDB, for debian-linux-gnu (x86_64)
root@mysql:~#
```

Once we are in version 10.3, we will be able to perform the migration of the database through the UDS server configuration wizard.

NOTE: Remember that the database server provided by the UDS Enterprise team does not have direct support and therefore it will be necessary to frequently update and maintain.

5. UDS Server update

To update the UDS Server component we will need the MySQL database server to be accessible.

In the update process, the current UDS server is replaced by the new UDS server, connecting the latter with the existing MySQL database.

Here are the steps to perform the update:

Step 1. Upload Virtual Appliance UDS Server to the hypervisor platform.

We will upload the UDS Server Virtual Appliance to the hypervisor platform. On each platform we will carry out the necessary procedure. For more information you can consult the manual Installation, Administration and User of UDS Enterprise.

Step 2. Shut down the previous version UDS Server.

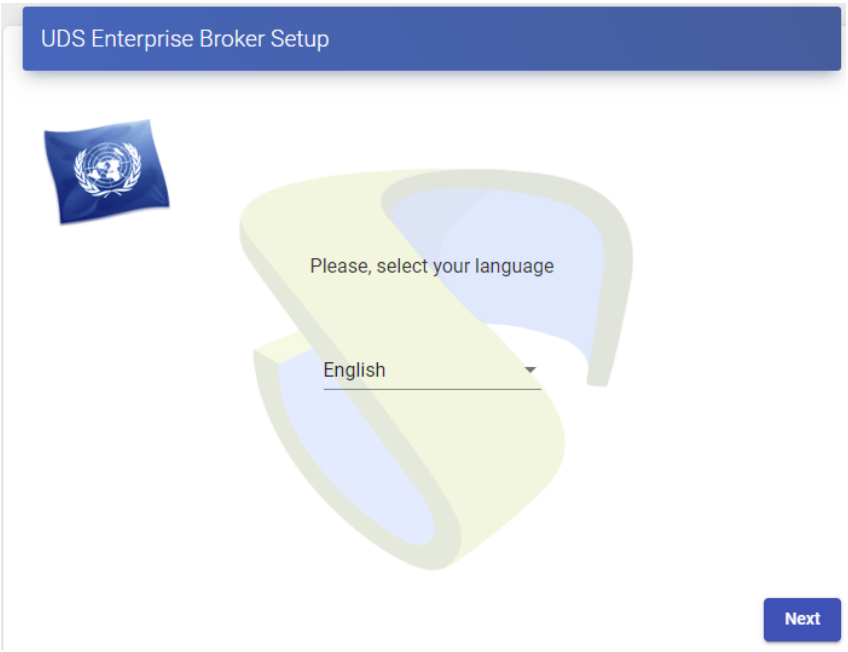
It is necessary to turn off the old UDS Server. Once the update process is carried out in the MySQL database, it should not be started again, unless a backup or snapshot is available in the MySQL database before the update process.

Step 3. Start and configure the new UDS Server.

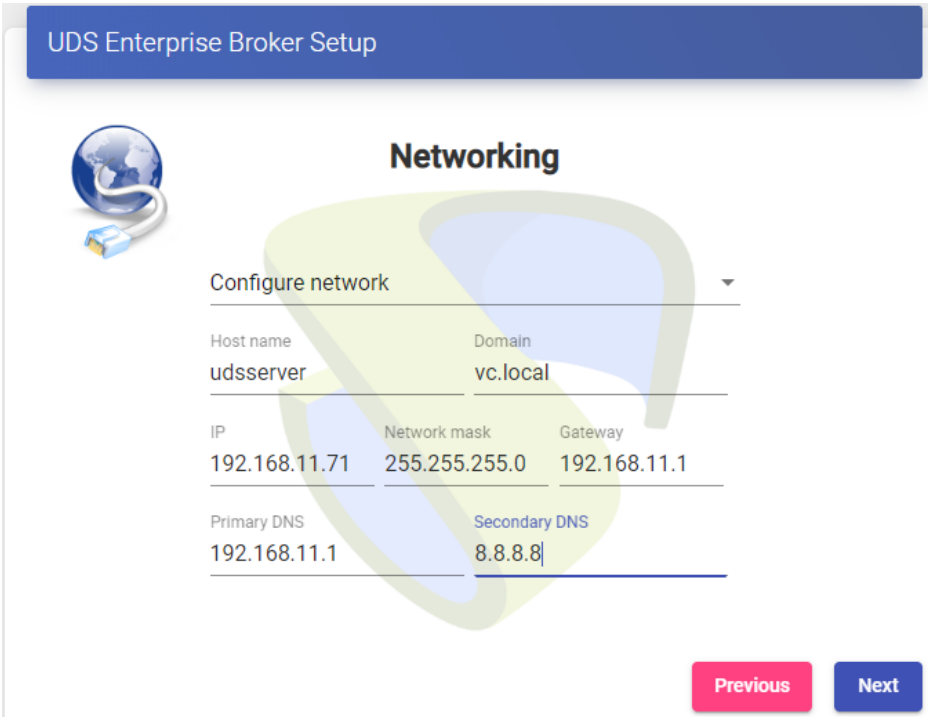
We started the UDS Server virtual machine and began its configuration with the same data that we had in the previous version.

We will access the server's IP address (if there is no dhcp server on the network, an IP address must be manually configured to the server via console) using port 9900.

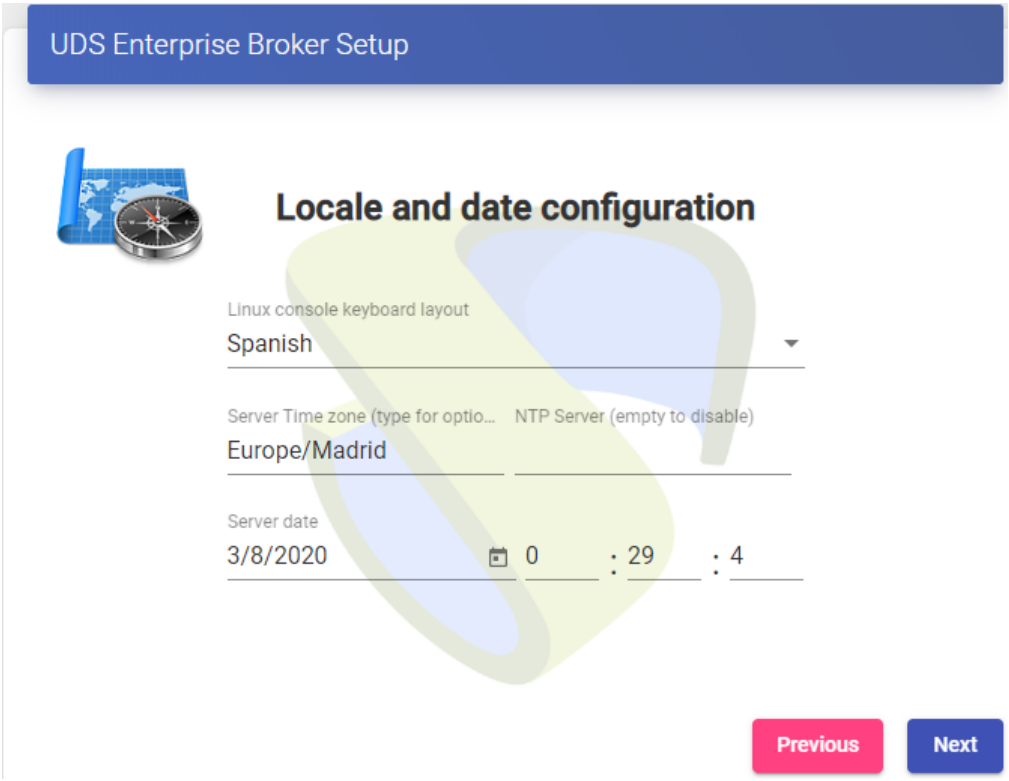
We select the language of the configuration wizard:



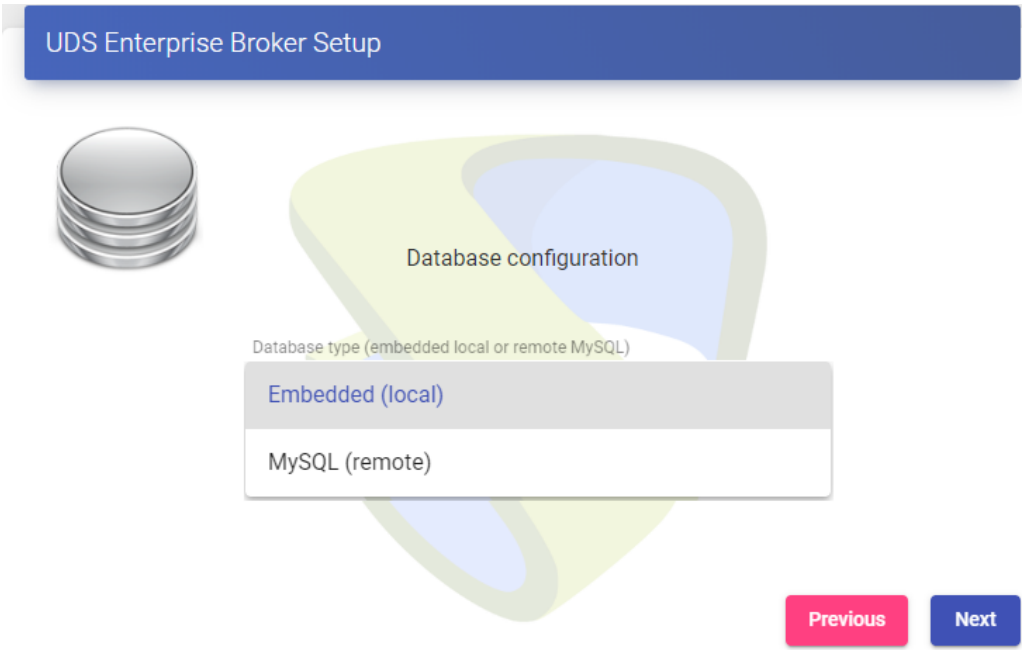
Indicate the server name, domain (optional) and server network data:



We configure the keyboard language that the server will have, the time zone and an NTP server (optional):



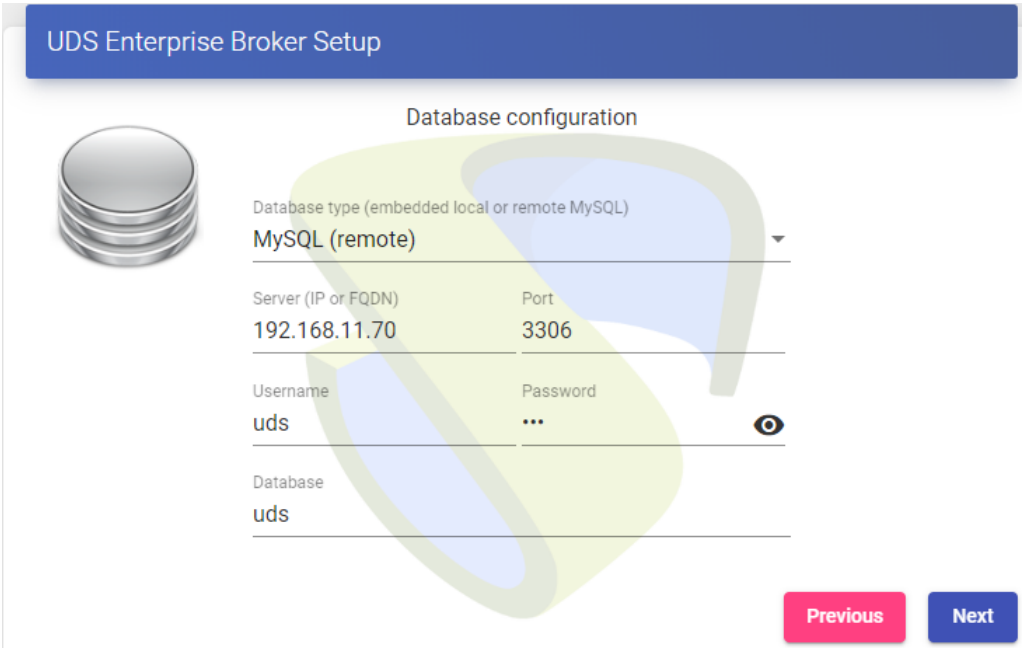
Select the type of database "MySQL (remote)":



We indicate the connection data with the existing database server and that it was used by the previous version UDS server.

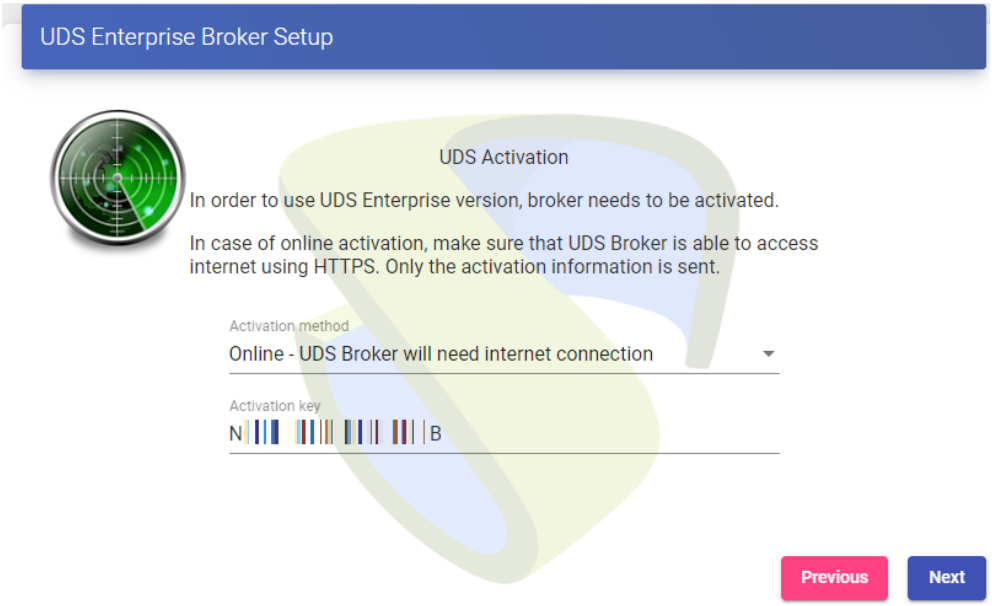
NOTE: It is advisable to have a backup/snapshot of the database in case its restoration is necessary. Once the migration process is complete, it is not possible to connect the database with a previous version UDS server.

If the database is in an unsupported version (MySQL/MariaDB >= 5.6/10.3), a notice will appear that we must update before carrying out the migration process. In this case, it is recommended to update the database server (being able to use the update script commented above) and launch the migration process again.



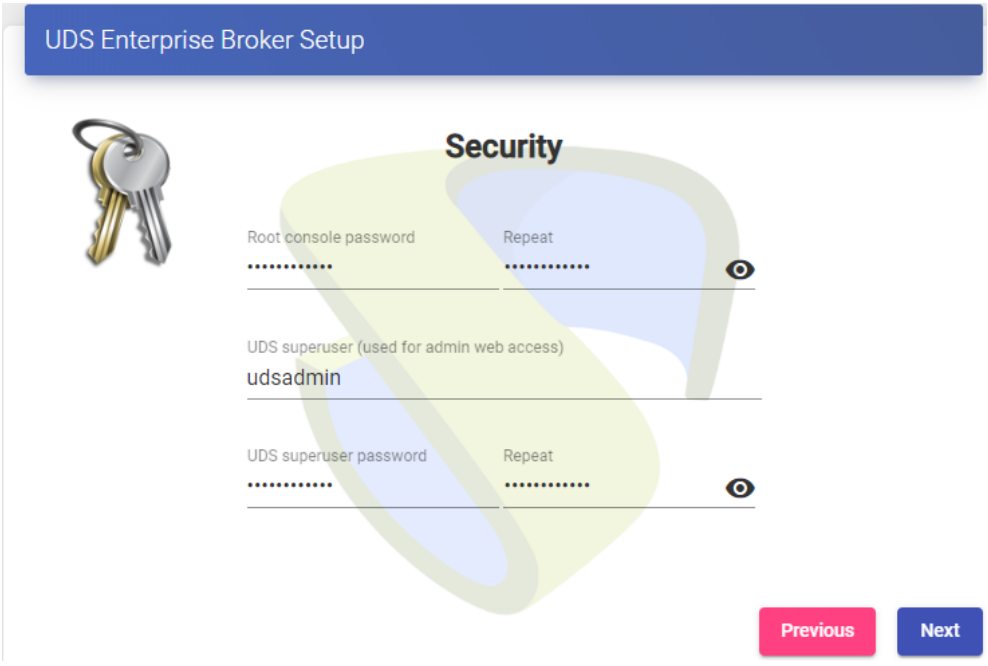
Wait for the database migration process to finish.

Once the database is migrated, we will perform the activation. It is not necessary to indicate any serial number, the system picks it up automatically from the database.



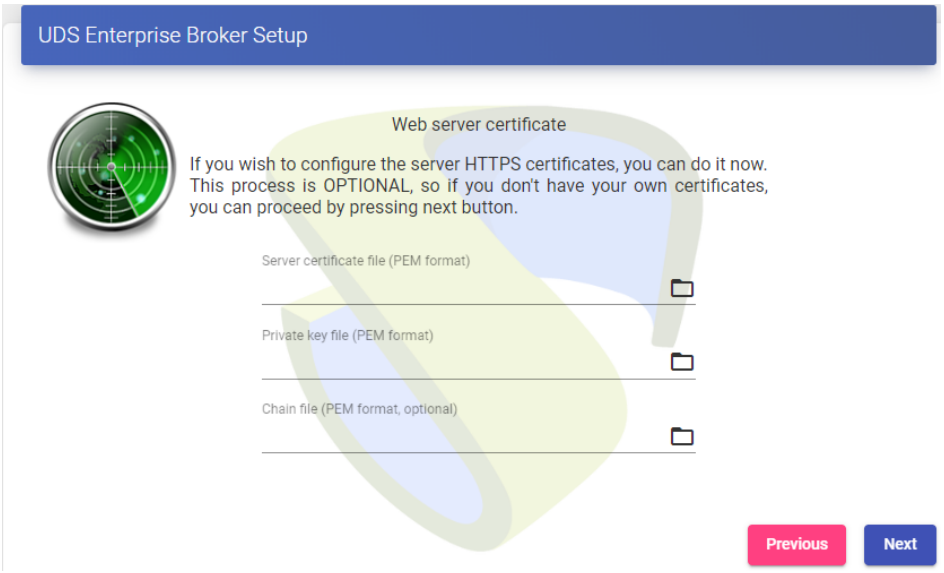
It will be necessary to provide an Internet connection to the UDS server so that it can carry out the activation. In case of not being able to access the internet to the UDS server, it will be necessary to follow the steps of the "Offline" activation process, which can significantly delay the environment update time.

We configure the password of the local root user of the UDS server and indicate the name and password of the UDS system administrator user (super-user to access the UDS web administration).

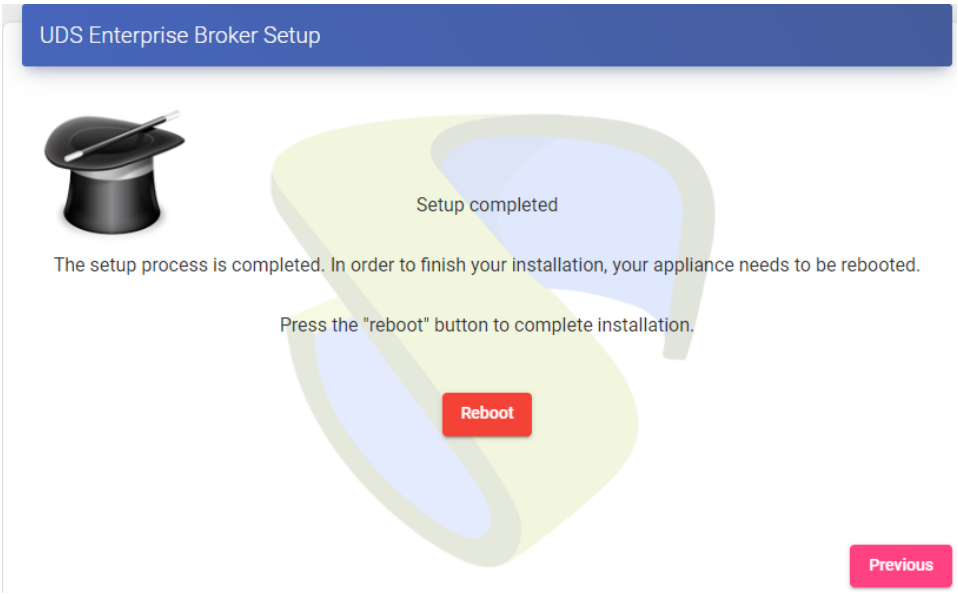


If we have the certificate files, we will indicate them. Otherwise, we can install them after finishing the wizard via console.

We need to indicate the certificate file in the "Server certificate" field (.crt, .pem, etc...), the file with the "Private key" (.key, .pem, etc...) and optionally we can indicate the file of the certifying entity “Chain file” (.crt, .pem, etc...).



We finish the configuration of the UDS server by clicking on “***Reboot***” for the server to reboot and apply all the indicated settings.



Step 4. Verify operation of the new UDS Server.

To verify that the update process has been carried out correctly, we connect with a web browser to the name or IP of the UDS server, validate ourselves in the system and confirm that in the administration we have all the data we had in the previous version.

6. UDS Tunnel Update

To update the UDS Tunnel component we will need the UDS Server to be configured and accessible.

In the update process, the current UDS Tunnel server is replaced by the new server, connecting the latter with the existing UDS Server component.

Here are the steps to perform the update:

Step 1. Upload Virtual Appliance UDS Tunnel to the hypervisor platform.

We will upload the UDS Tunnel Virtual Appliance to the hypervisor platform.

In each platform we will carry out the necessary procedure, for more information you can consult the manual of Installation, Administration and User of UDS Enterprise.

Step 2. Turn off the previous version UDS Tunnel.

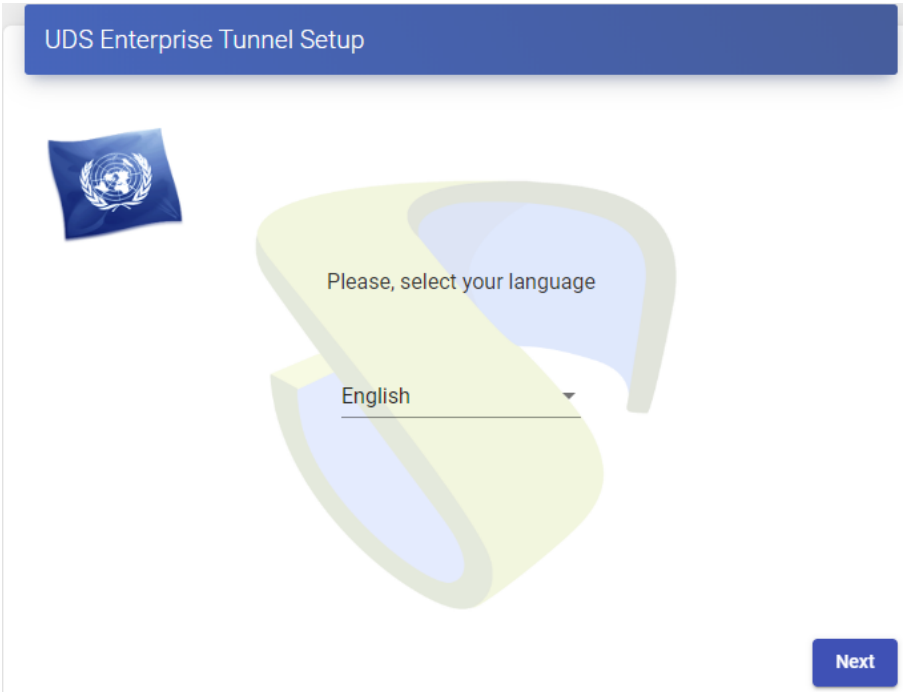
It is necessary to turn off or disconnect the old UDS Tunnel from the network.

Step 3. Start and configure the new UDS Tunnel.

We started the UDS Tunnel virtual machine and began its configuration with the same data that we had in the previous version.

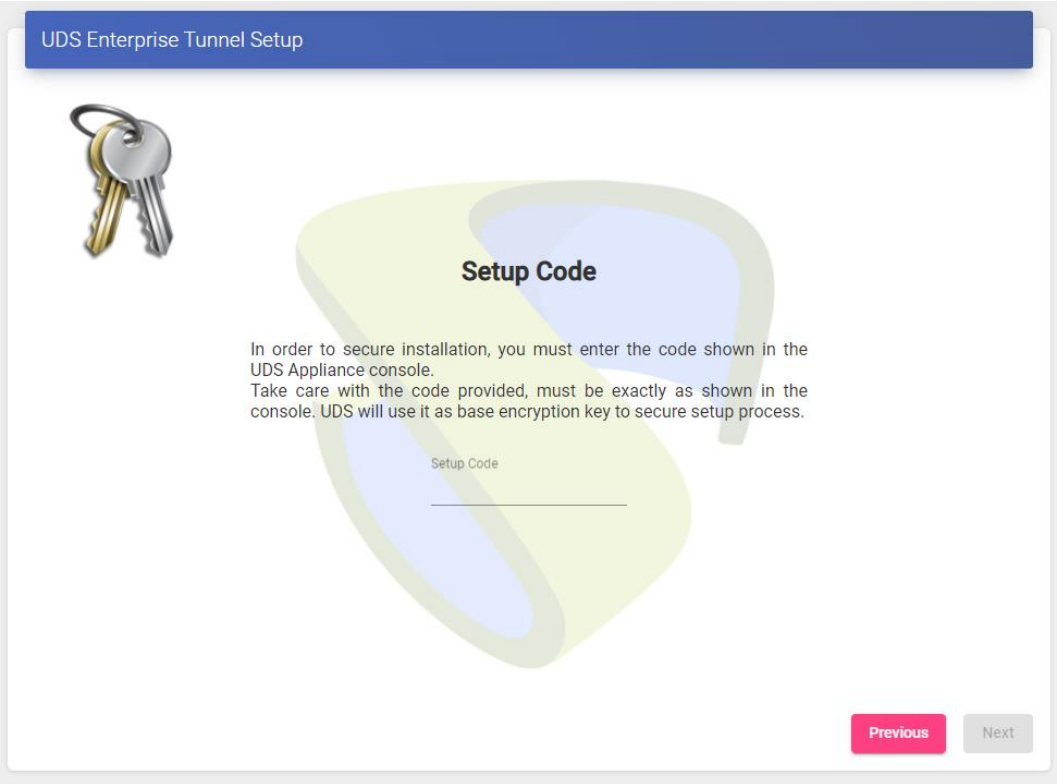
We will access the server's IP address (if there is no dhcp server on the network, an IP address must be manually configured to the server via console) using port 9900.

We select the language of the configuration wizard:

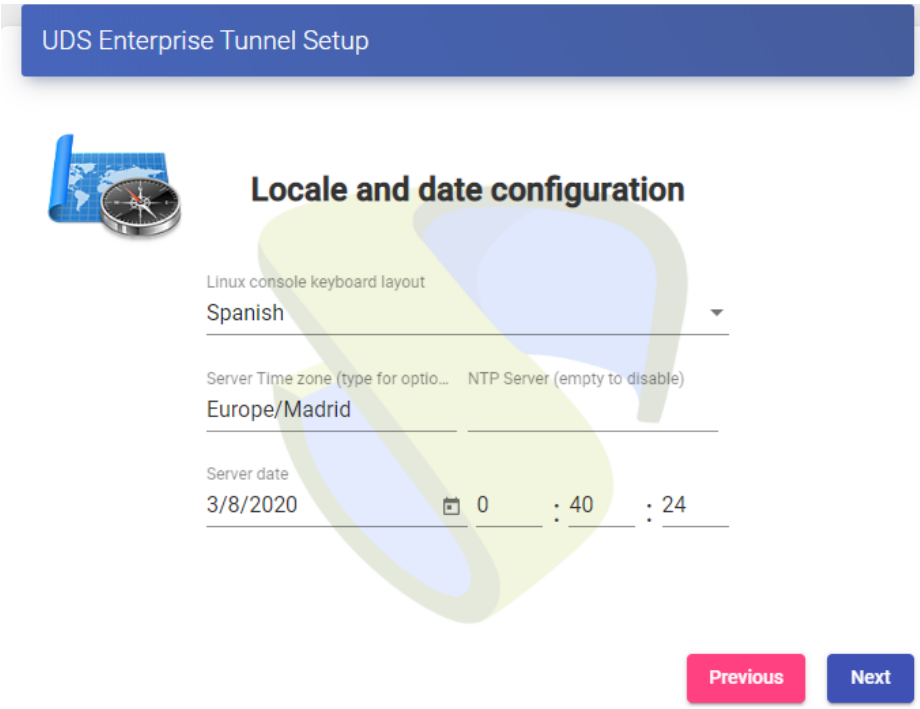


We indicate the name of the server, domain (optional) and network data of the server:

Next, we will add the security code that appears in our Appliance:



Configure the keyboard language that the server will have, the time zone and an NTP server (optional):



For the UDS Tunnel to trust the UDS Server self-signed certificate and to validate the connection, you will have to use the command "uds trust""'

```
root@tunnel-360:~# uds trust -h
UDS Enteprprise tunnel CLI tool
usage: uds trust [-h] [-c] HOSTNAME PORT

positional arguments:
  HOSTNAME     Hostname of the remote server.
  PORT         Port of the remote server.

optional arguments:
  -h, --help   show this help message and exit
  -c, --chain  Trust the certificate full chain.
root@tunnel-360:~#
```

```
root@tunnel-360:~# uds trust 10.1.0.4 443
UDS Enteprprise tunnel CLI tool
Reading certificate from server 10.1.0.4:443 done
Certificate name: uds
Valid from: 2023-05-03 13:45:58
Valid until: 2033-04-30 13:45:58
Fingerprint: 45c4057ccfb7868c46a7a380d14eb7469154aae7ba01eac02e3fbd6e6b3158b5
Issuer: CN=uds,O=UDS Enterprise Self Signed Certificate,L=Madrid,ST=Madrid,C=ES
Subject: CN=uds,O=UDS Enterprise Self Signed Certificate,L=Madrid,ST=Madrid,C=ES
Serial number: 964377329676414671361997497992543456138676985 68
Self signed: Yes
Writing certificate to trust file (/usr/local/share/ca-certificates/uds.crt)... done
Ensuring that the name uds resolves to the IP 10.1.0.4...
updating /etc/hosts... done
Updating trusted database...
Updating certificates in /etc/ssl/certs...
0 added, 0 removed; done.
Running hooks in /etc/ca-certificates/update.d...

done.
done.
Trusted certificate installed
```

Once done we will have to indicate to the UDS Tunnel the name of our UDS Server "uds"

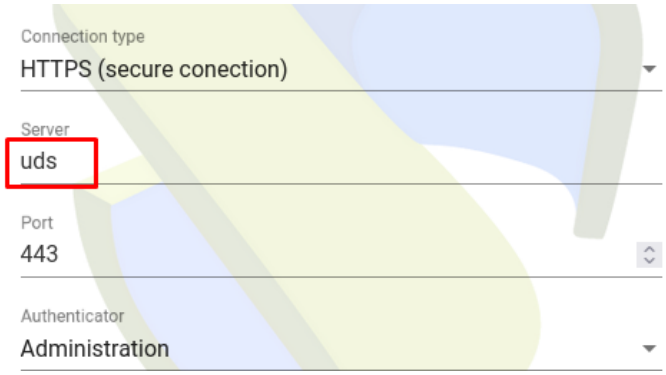
```
Ensuring that the name uds resolves to the IP 10.1.0.4...
```

Editing the /etc/hosts file:

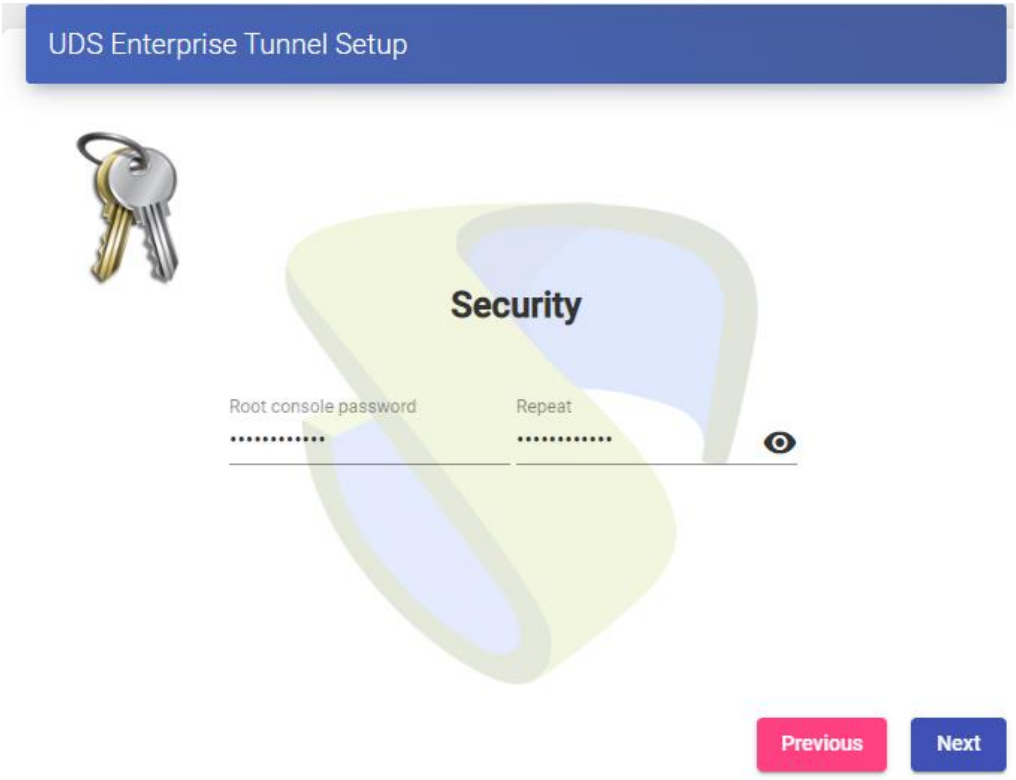
```
# Autogenerated by UDS installer
127.0.0.1       localhost
127.0.1.1       tunnel-360.domain.local tunnel-360
10.1.0.4        uds
```

Una vez realizado el proceso podremos continuar con la configuración del Tunnel

It will be necessary to indicate a user with administration permissions to validate the tunnel configuration:

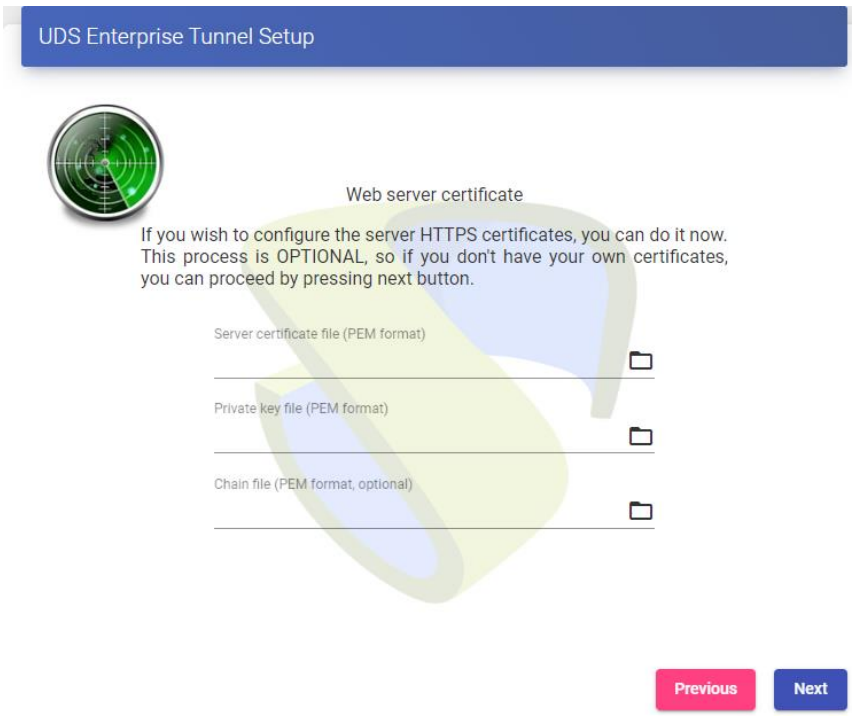


We configure the password of the local root user of the Tunnel server:

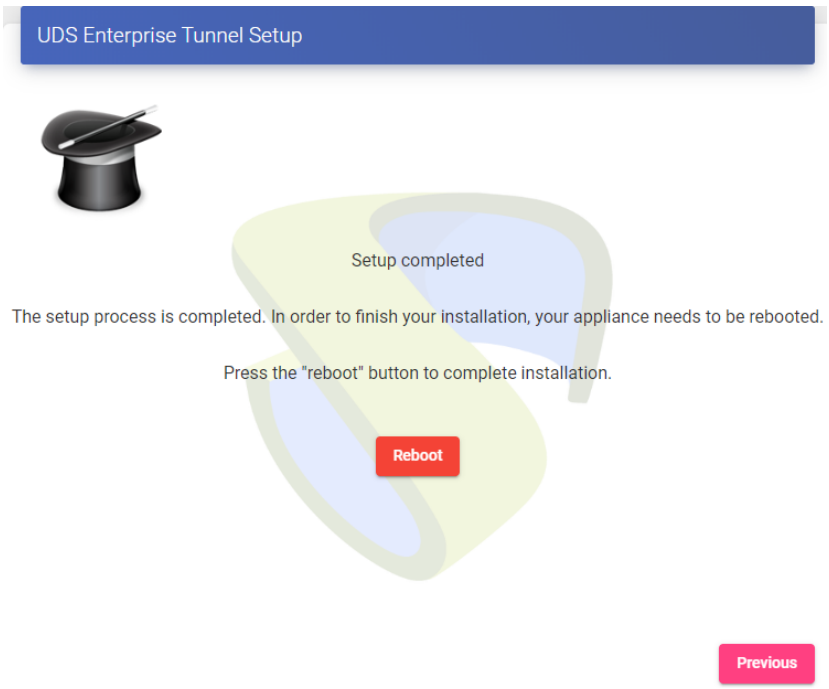


If we have the certificate files, we will indicate them. Otherwise, we can install them after finishing the wizard via console.

We need to indicate the certificate file in the "Server certificate" field (.crt, .pem, etc...), the file with the "Private key" (.key, .pem, etc...) and optionally we can indicate the file of the certifying entity “Chain file” (.crt, .pem, etc…).



Finish the configuration of the Tunnel server by clicking on "***Reboot***" for the server to reboot and apply all the indicated settings.



You can close the page of the configuration wizard and, once restarted, the UDS Tunnel server will be fully configured.

7. UDS Client and UDS Actor

In the event that UDS Server is updated to a new version, the version of the UDS Client and UDS Actor installed on the platform must be taken into account.

UDS Client:

- There is a version of UDS Server 3.0 deployed:

In this case, it can be used in both UDS Client 3.0 and 3.5 or 3.6, although from UDS it is always recommended to use the latest compatible UDS Client available.

- There is a version of UDS Server 3.5 deployed:

In this case you will have to use the version 3.5 client as there is no compatibility with the version 3.0 client.

- You have a version of UDS Server 3.6

In this case, only the client of version 3.6 itself will be compatible.

UDS Actor:

In the case of the UDS Actor we will have the freedom to use both the version 3.0, 3.5 and 3.6 Actor regardless of the version of UDS we have on the platform.

Although from UDS we will always recommend using the latest version available to maintain the homogeneity of the platform.

8. About VirtualCable

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.**