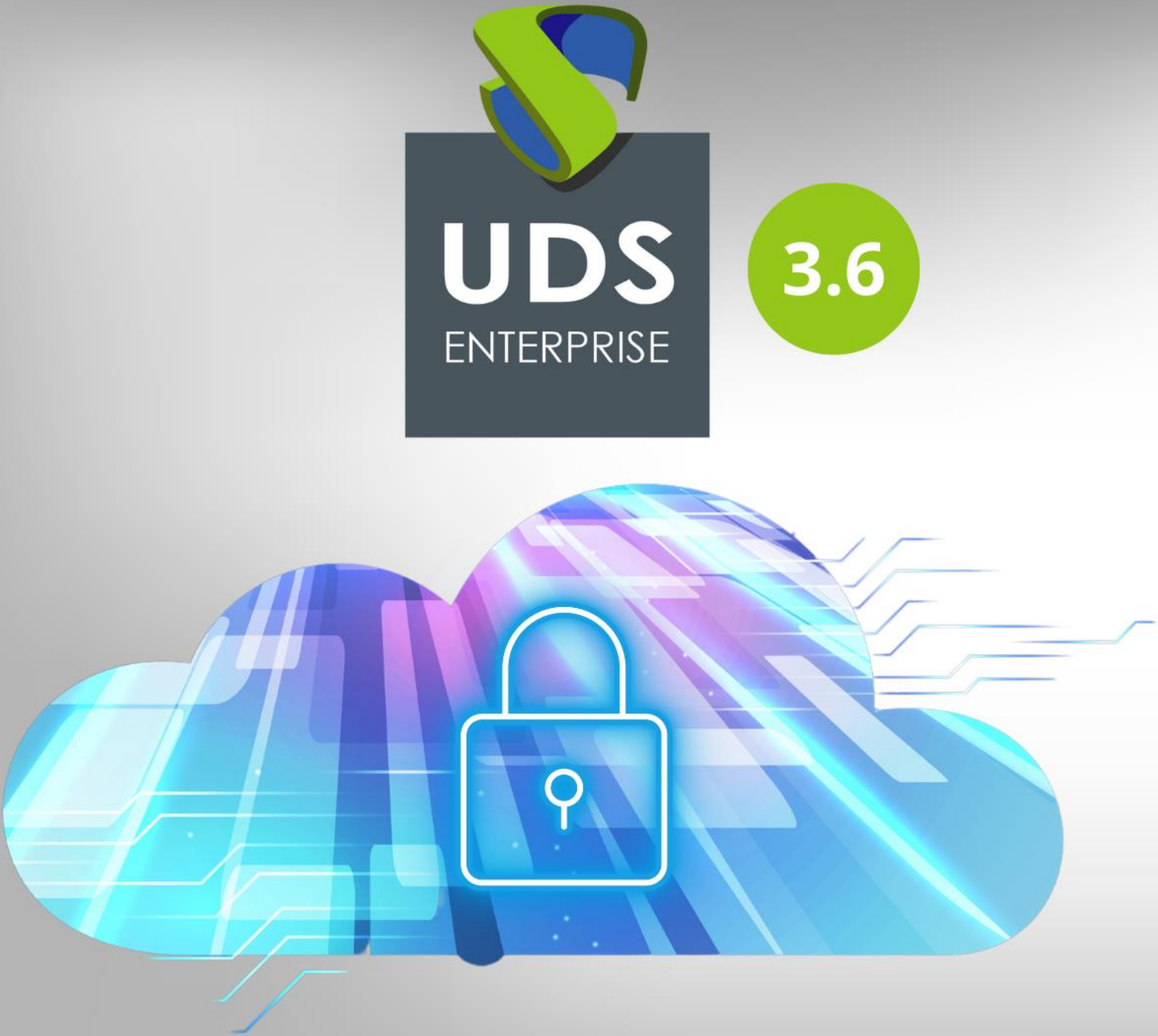
VIRTUAL CABLE

Google Workspace user authentication in UDS Enterprise 3.6



Index

Introduction

This document shows how to make the integration of a UDS Enterprise's SAML authenticator to validate existing users in Google Workspace.

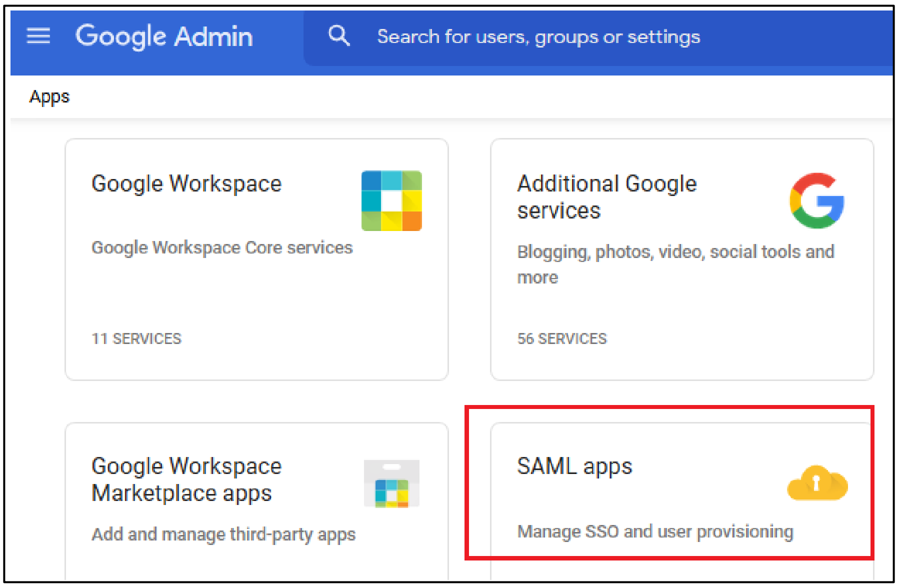
Once the new authenticator has been created in UDS Enterprise and integrated with Google Workspace, existing users in this environment will be able to access the services published in UDS Enterprise.

In order to carry out this integration, it will be necessary to have a registered user in UDS Enterprise and a user belonging to Google Workspace platform, both with administration permissions on their different environments.

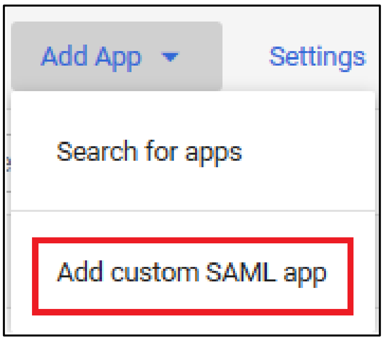
Creation of Google's SAML application

The first task will be performed in the administration dashboard of Google Workspace. A user with administration permissions is needed.

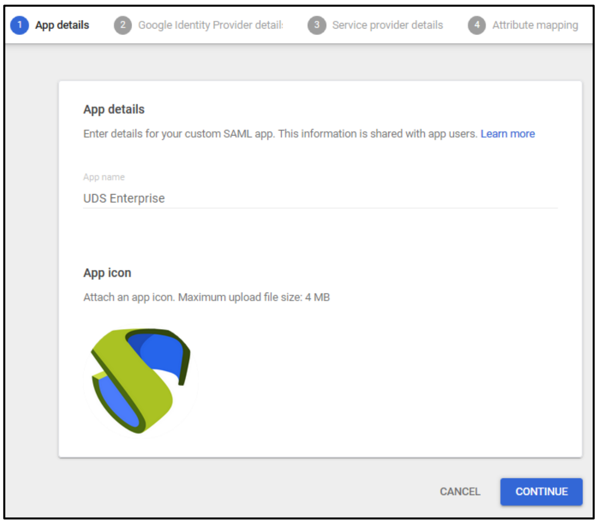
Access into the Google Workspace administration dashboard and select "**SAML apps**".


Google Admin
Search for users, groups or settings
Apps
Google Workspace
Google Workspace Core services
11 SERVICES
Additional Google services
Blogging, photos, video, social tools and more
56 SERVICES
Google Workspace Marketplace apps
Add and manage third-party apps
SAML apps
Manage SSO and user provisioning

Register a new custom SAML application:



Indicate a name to identify the application in the configuration wizard. It is possible to add an icon so that users can easily find the service.



App details

Enter details for your custom SAML app. This information is shared with app users. Learn more

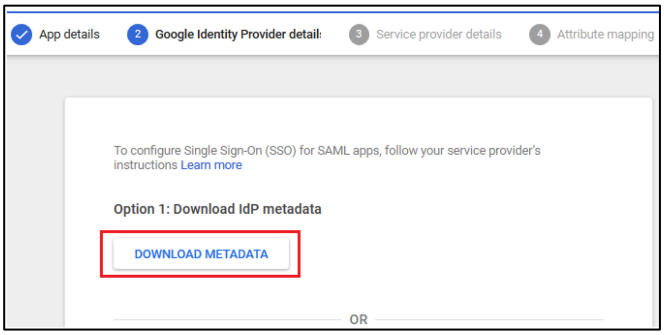
App name

UDS Enterprise

App icon

Attach an app icon. Maximum upload file size: 4 MB

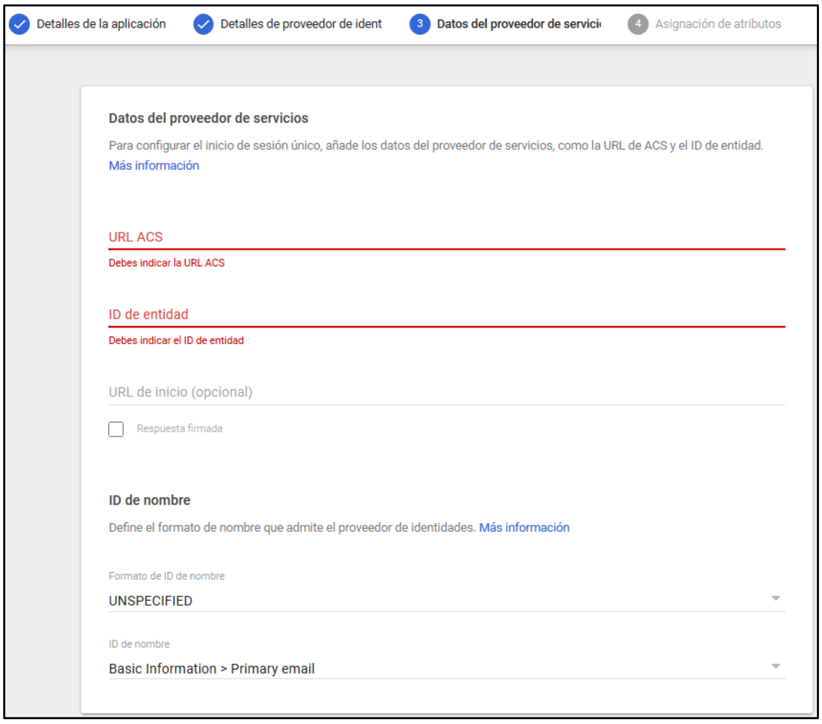
Now download the metadata and continue with the wizard:



To configure Single Sign-On (SSO) for SAML apps, follow your service provider's instructions Learn more

Option 1: Download IdP metadata

In step 3 of the wizard, it is necessary indicate the "**ACS URL**" and the "**Entity ID**":


Detalles de la aplicación
Detalles de proveedor de ident
3 Datos del proveedor de servici
4 Asignación de atributos

Datos del proveedor de servicios

Para configurar el inicio de sesión único, añade los datos del proveedor de servicios, como la URL de ACS y el ID de entidad. Más información

URL ACS

Debes indicar la URL ACS

ID de entidad

Debes indicar el ID de entidad

URL de inicio (opcional)

□ Respuesta firmada

ID de nombre

Define el formato de nombre que admite el proveedor de identidades. Más información

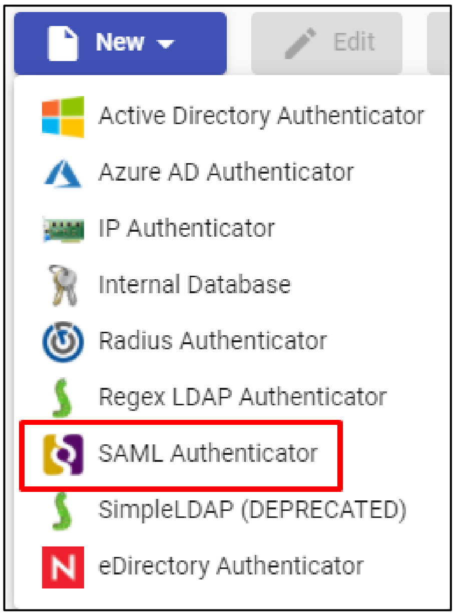
Formato de ID de nombre: UNSPECIFIED

ID de nombre: Basic Information > Primary email

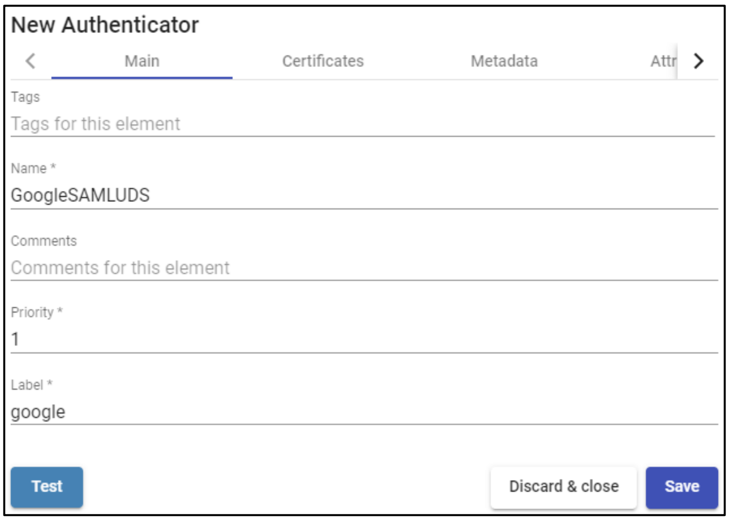
To obtain this data, access the administration of your UDS Enterprise environment and create a new SAML authenticator. Once you have the data, fill in the different sections of the wizard until it finishes.

Creating the SAML authenticator

Access into the UDS Enterprise administration and go to the "**Authenticators**" section. Select "**New**" and choose "**SAML Authenticator**".



In the "**Main**" tab, type a name for the authenticator (it cannot contain spaces), the priority and a "**Label**".



New Authenticator

Tags
Tags for this element

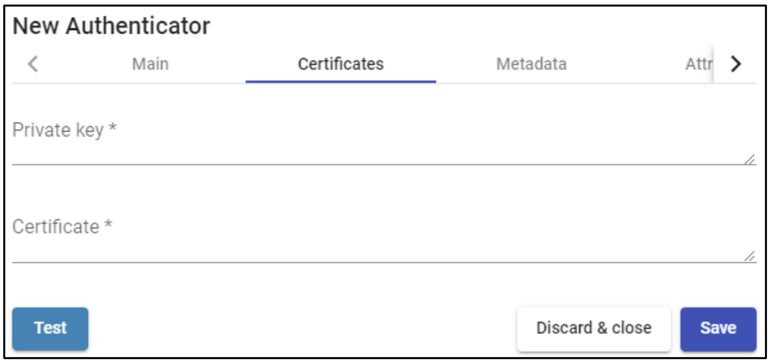
Name *
GoogleSAMLUDS

Comments
Comments for this element

Priority *
1

Label *
google

In the "**Certificates**" tab, it is necessary to indicate a valid certificate and its password. It must be in PEM format:



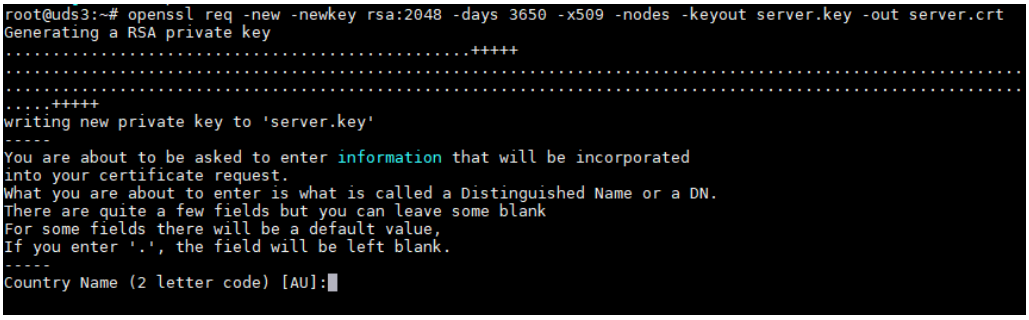
If you don't have certificates, you can generate one with **OpenSSL**. To create it, use the following statement (the UDS server has **OpenSSL** installed, so this machine can be used to generate the certificate):

```
openssl req -new -newkey rsa:2048 -days 3650 -x509 -nodes -keyout server.key -out
server.crt
```

Once the certificate is generated, share the key with RSA. Use the following command:

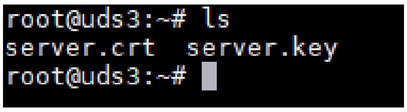
```
openssl rsa -in server.key -out server_rsa.key
```

Certificate generation example:



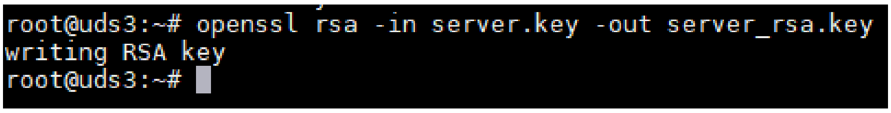
```
root@uds3:~# openssl req -new -newkey rsa:2048 -days 3650 -x509 -nodes -keyout server.key -out server.crt
Generating a RSA private key
...............................................+++++
......................................................................................................
......................................................................................................
.....+++++
writing new private key to 'server.key'
-----
You are about to be asked to enter information that will be incorporated
into your certificate request.
What you are about to enter is what is called a Distinguished Name or a DN.
There are quite a few fields but you can leave some blank
For some fields there will be a default value,
If you enter '.', the field will be left blank.
-----
Country Name (2 letter code) [AU]:
```

Execute the command and fill in the necessary data to generate the certificate:



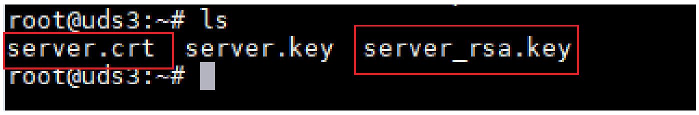
```
root@uds3:~# ls
server.crt  server.key
root@uds3:~#
```

Now convert the key to **rsa** :



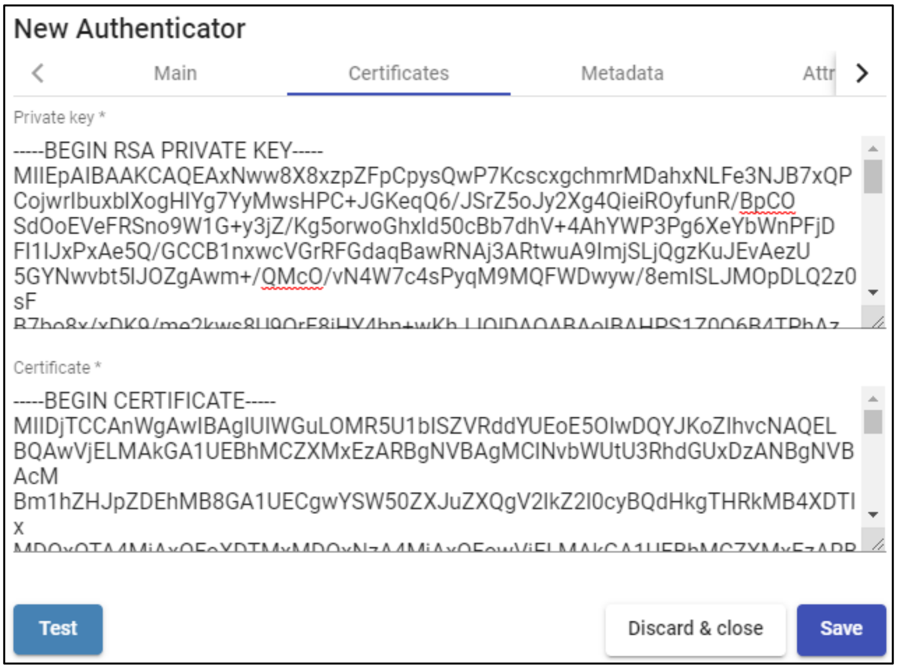
```
root@uds3:~# openssl rsa -in server.key -out server_rsa.key
writing RSA key
root@uds3:~#
```

Copy the content of the certificate file and the **rsa** key in UDS:



```
root@uds3:~# ls
server.crt  server.key  server_rsa.key
root@uds3:~#
```

Copy the key in the "**Private Key**" section and the certificate in "**Certificate**":



New Authenticator

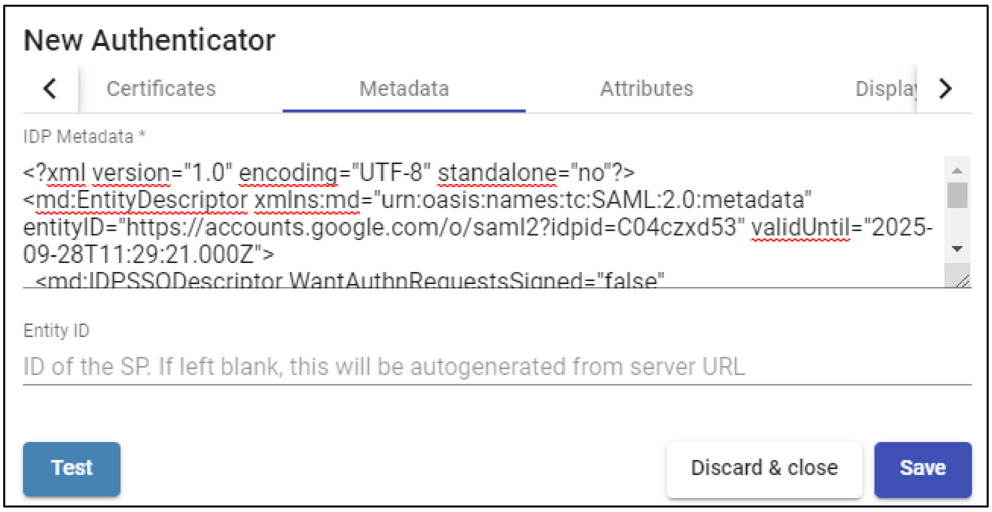
Private key *

```
-----BEGIN RSA PRIVATE KEY-----
MIIEpAIBAAKCAQEAxNww8X8xzpZFpCpysQwP7KcscxgchmrMDahxNLFe3NJB7xQP
CojwrlbuxblXogHIYg7YyMwsHPC+JGKeqQ6/JSrZ5oJy2Xg4QieiROyfunR/BpCO
SdOoEVeFRSno9W1G+y3jZ/Kg5orwoGhxld50cBb7dhV+4AhYWP3Pg6XeYbWnPFjD
FI1IJxPxAe5Q/GCCB1nxwcVGrRFGdaqBawRNAj3ARtwuA9lmjSLjQgzKuJEvAezU
5GYNwvbt5lJOZgAwm+/QMcO/vN4W7c4sPyqM9MQFWDwyw/8emISLJMOpDLQ2z0
sF
```

Certificate *

```
-----BEGIN CERTIFICATE-----
MIIDjTCCAnWgAwIBAgIUIWGuLOMR5U1bISZVRddYUEoE5OIwDQYJKoZIhvcNAQEL
BQAwVjELMAkGA1UEBhMCZXMxEzARBgNVBAgMCINvbWUtU3RhdGUxDzANBgNVB
AcM
Bm1hZHJpZDEhMB8GA1UECgwYSW50ZXJuZXQgV2lkZ2l0cyBQdHkgTHRkMB4XDTI
x
```

In the next tab, “**Metadata**”, complete the “**IDP Metadata**” section with the metadata downloaded from Google in previous steps (step 2 of the custom SAML application registration). It is important to copy all the content of the file. It is recommended to open the file with a suitable application and never with a browser (parts of the code can be hidden…):



New Authenticator

IDP Metadata *

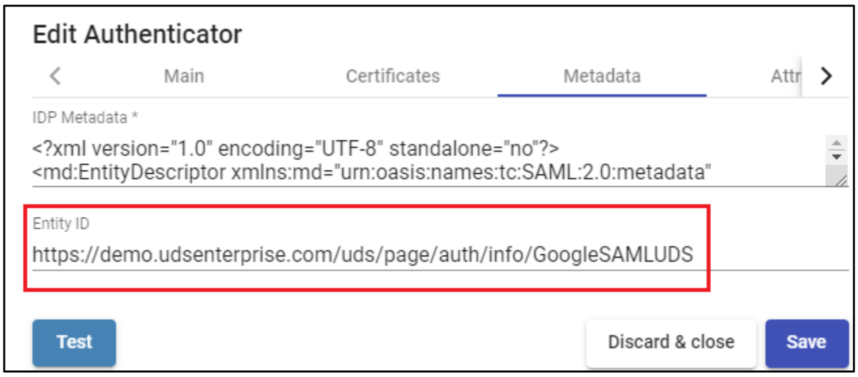
```
<?xml version="1.0" encoding="UTF-8" standalone="no"?>
<md:EntityDescriptor xmlns:md="urn:oasis:names:tc:SAML:2.0:metadata"
entityID="https://accounts.google.com/o/saml2?idpid=C04czxd53" validUntil="2025-
09-28T11:29:21.000Z">
 <md:IDPSSODescriptor WantAuthnRequestsSigned="false"
```

Entity ID

ID of the SP. If left blank, this will be autogenerated from server URL

Leave the "**Entity ID**" section empty, since it will be filled in automatically when the authenticator is saved. The data will be generated based on the URL used in the connection with the UDS Enterprise portal.

Save the authenticator (it is necessary to indicate some data in the "**Attributes**" tab so that it allows you to save. In the following steps we will return to this section and the final configuration will be applied) and when you edit it again you will be able to obtain the "**Entity ID**" data required to continue configuring the SAML custom application in the Google console.



Edit Authenticator

IDP Metadata *

```
<?xml version="1.0" encoding="UTF-8" standalone="no"?>
<md:EntityDescriptor xmlns:md="urn:oasis:names:tc:SAML:2.0:metadata"
```

Entity ID

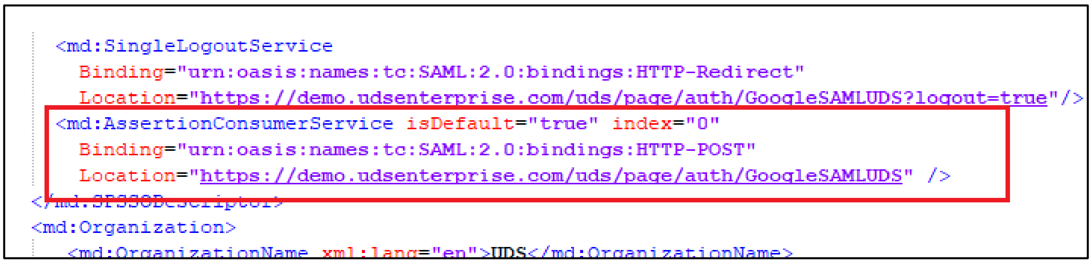
https://demo.udsenterprise.com/uds/page/auth/info/GoogleSAMLUDS

Configuring the SAML application

Go back to step 3 of the Google configuration wizard to create a custom SAML application, where the system will ask for the “**ACS URL**” and the “**Entity ID**”.

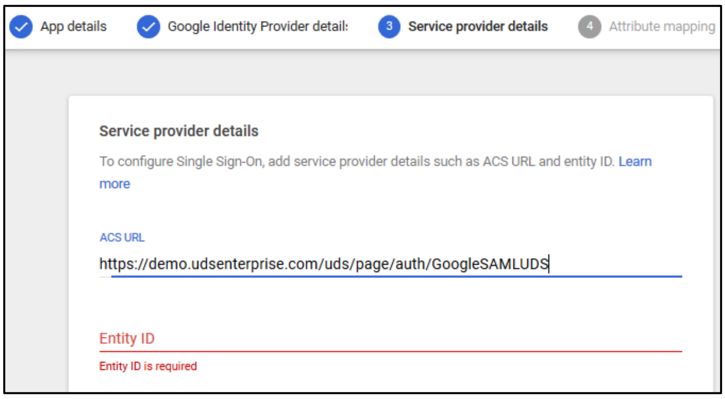
To indicate the ACS (Assertion Consumer Service) data, download the “**Entity ID**” file that UDS has generated automatically when saving the authenticator (enter the indicated URL in a browser and download it. In this example it would be: https://demo.udsenterprise.com/uds/page/auth/info/GoogleSAMLUDS)

Inside the downloaded file, look for: **AssertionConsumerService:**



```
  <md:SingleLogoutService
    Binding="urn:oasis:names:tc:SAML:2.0:bindings:HTTP-Redirect"
    Location="https://demo.udsenterprise.com/uds/page/auth/GoogleSAMLUDS?logout=true"/>
  <md:AssertionConsumerService isDefault="true" index="0"
    Binding="urn:oasis:names:tc:SAML:2.0:bindings:HTTP-POST"
    Location="https://demo.udsenterprise.com/uds/page/auth/GoogleSAMLUDS" />
</md:SPSSODescriptor>
<md:Organization>
   <md:OrganizationName xml:lang="en">UDS</md:OrganizationName>
```

Copy the URL provided in the field “**URL ACS**":



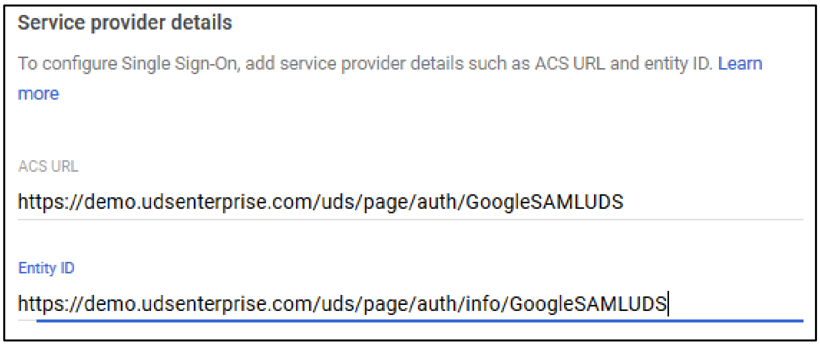
Service provider details

To configure Single Sign-On, add service provider details such as ACS URL and entity ID. Learn more

ACS URL
https://demo.udsenterprise.com/uds/page/auth/GoogleSAMLUDS

Entity ID
Entity ID is required

Lastly, to finish configuring step 3, enter the "**Entity ID**". It is auto generated by UDS Enterprise in the "**Entity ID**" field of the "**Metadata**" tab of the authenticator:



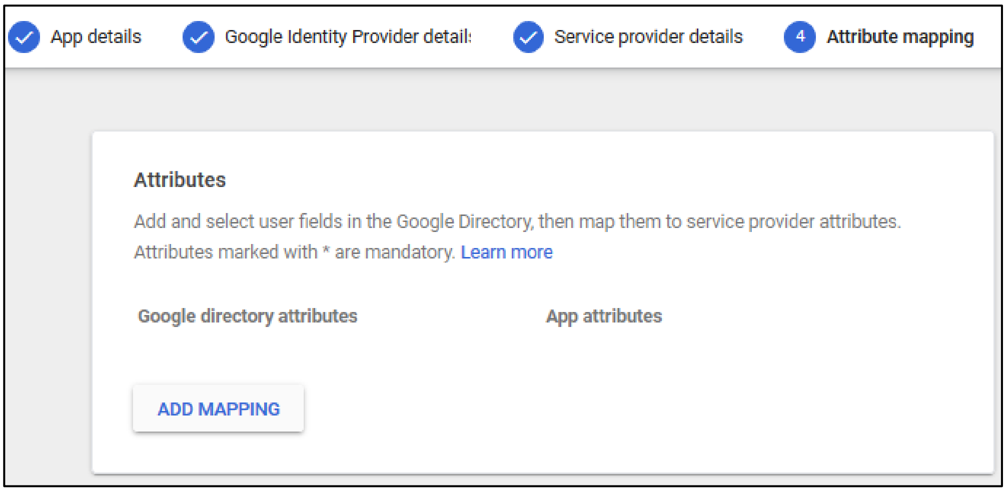
Service provider details

To configure Single Sign-On, add service provider details such as ACS URL and entity ID. Learn more

ACS URL
https://demo.udsenterprise.com/uds/page/auth/GoogleSAMLUDS

Entity ID
https://demo.udsenterprise.com/uds/page/auth/info/GoogleSAMLUDS

Leave the other default options and continue with step 4. There you will define the attributes that will be used by UDS Enterprise to validate users and configure groups:



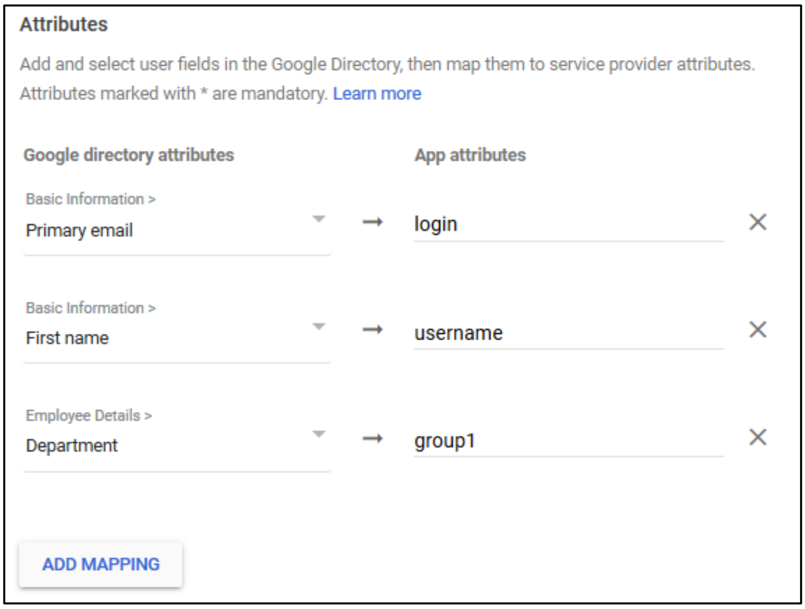
Attributes

Add and select user fields in the Google Directory, then map them to service provider attributes. Attributes marked with * are mandatory. Learn more

Google directory attributes | App attributes

In this example, the following attributes will be used:

- The "**Primary email**" will be used for user login. It will be labelled as "**login**".
- To display the name of the user, use "**First name**". It will be labelled as "**username**".
- To define the group membership of the users, use "**Department**". It will be labelled as "**group1**".



Attributes

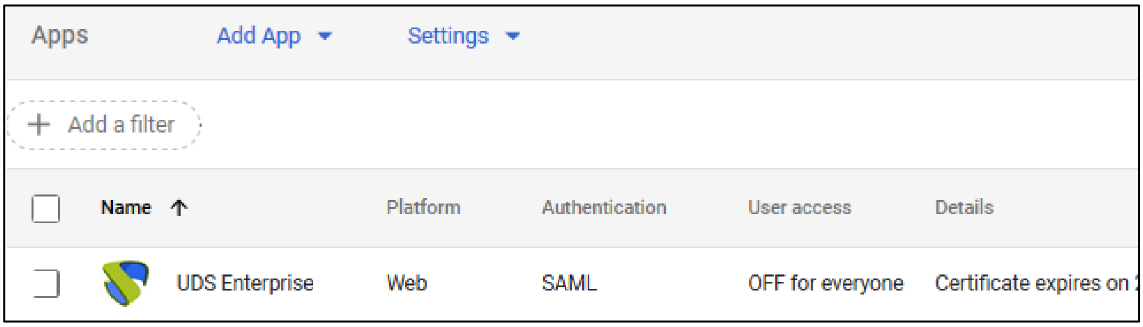
Add and select user fields in the Google Directory, then map them to service provider attributes. Attributes marked with * are mandatory. Learn more

Google directory attributes		App attributes
Basic Information > Primary email	→	login
Basic Information > First name	→	username
Employee Details > Department	→	group1

ADD MAPPING

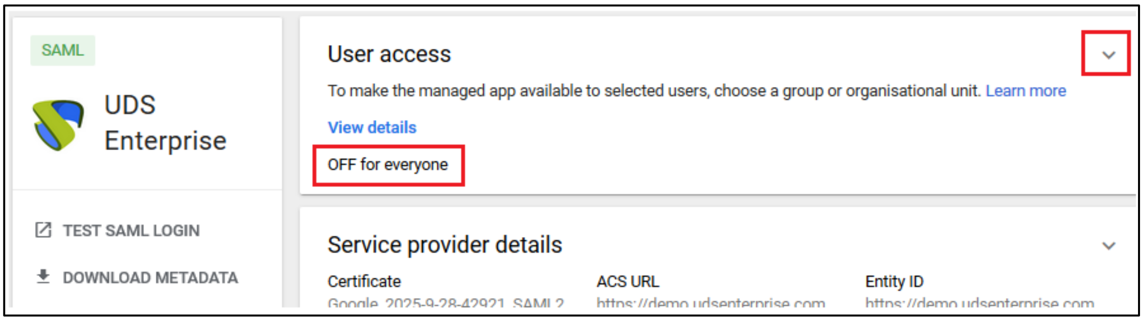
You can use or add custom attributes. In this example the default attributes provided by Google will be used.

Once the necessary attributes have been selected, finish the wizard.



□	Name ↑	Platform	Authentication	User access	Details
□	UDS Enterprise	Web	SAML	OFF for everyone	Certificate expires on

If you access the created application, you will see that by default it is deactivated for all users, so you must enable it. Access the "**User Access**" options:



SAML

UDS Enterprise

TEST SAML LOGIN

DOWNLOAD METADATA

User access

To make the managed app available to selected users, choose a group or organisational unit. Learn more

View details

OFF for everyone

Service provider details

Certificate

Google_2025-9-28-42921_SAML2

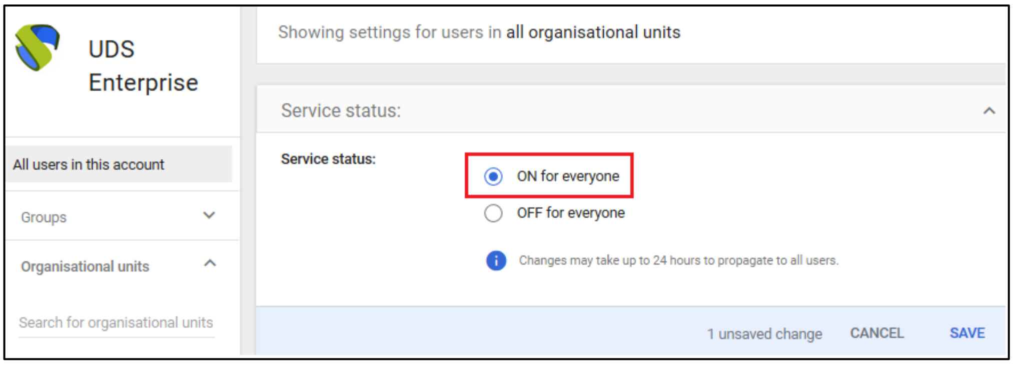
ACS URL

https://demo.udsenterprise.com

Entity ID

https://demo.udsenterprise.com

In this example the application will be activated for all users, but it is possible to limit it by groups.



UDS Enterprise

All users in this account

Groups

Organisational units

Search for organisational units

Showing settings for users in all organisational units

Service status:

Service status:

● ON for everyone

○ OFF for everyone

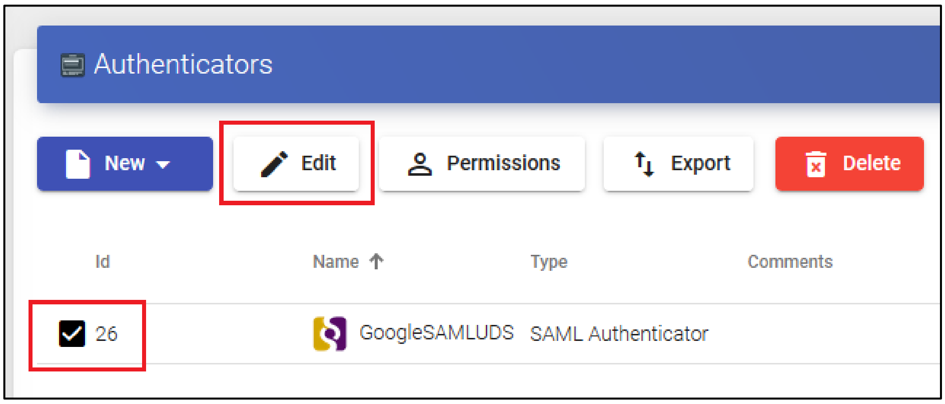
Changes may take up to 24 hours to propagate to all users.

1 unsaved change CANCEL SAVE

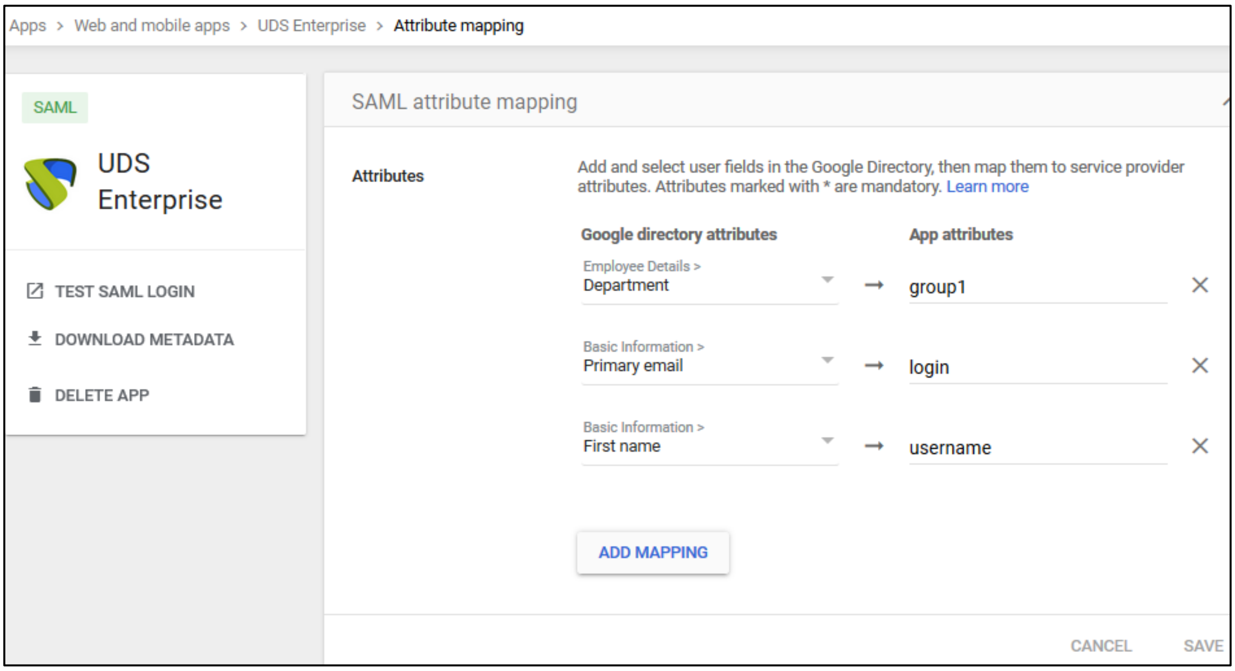
Save to apply the change.

Defining attributes in SAML

Access the UDS Enterprise administration, select the previously created SAML authenticator and click on “**Edit**”.



In the "**Attributes**" section indicate the correct attributes. They are defined and visible in the Google SAML extension created in previous steps:



Apps > Web and mobile apps > UDS Enterprise > Attribute mapping

SAML attribute mapping

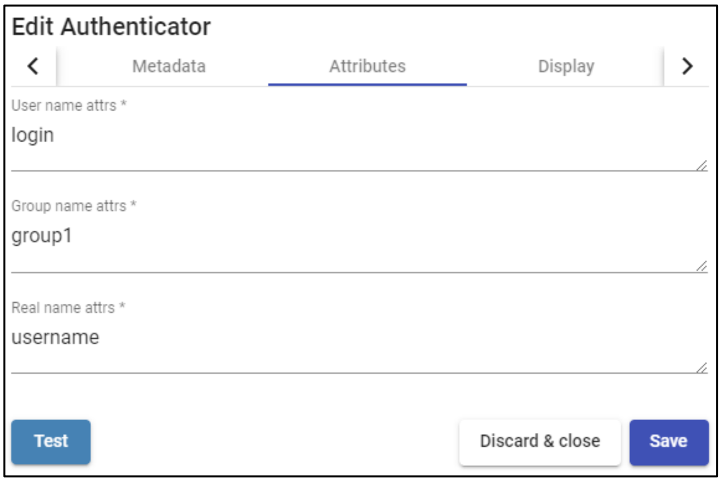
Attributes

Add and select user fields in the Google Directory, then map them to service provider attributes. Attributes marked with * are mandatory. Learn more

Google directory attributes		App attributes
Employee Details > Department	→	group1
Basic Information > Primary email	→	login
Basic Information > First name	→	username

As you can see in the example:

- The previously defined “**login**” attribute, which will be the user's “**primary email**” in Google Workspace, will be used to log in to UDS Enterprise, since it is defined in “**User name attrs**”.
- The “**username**” attribute, which will be the “**First name**” of the username in Google Workspace, will be used in UDS Enterprise to display the user's name. It is defined in "**Real name attrs**".
- The attribute "**group1**", which will be the "**Department**" to which a user belongs in Google Workspace, will be used in UDS Enterprise as the group to which the users belong. It is defined in "**Group name attrs**".



User name attrs *
login

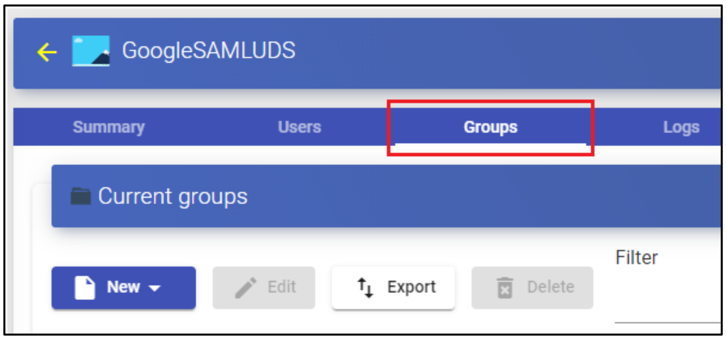
Group name attrs *
group1

Real name attrs *
username

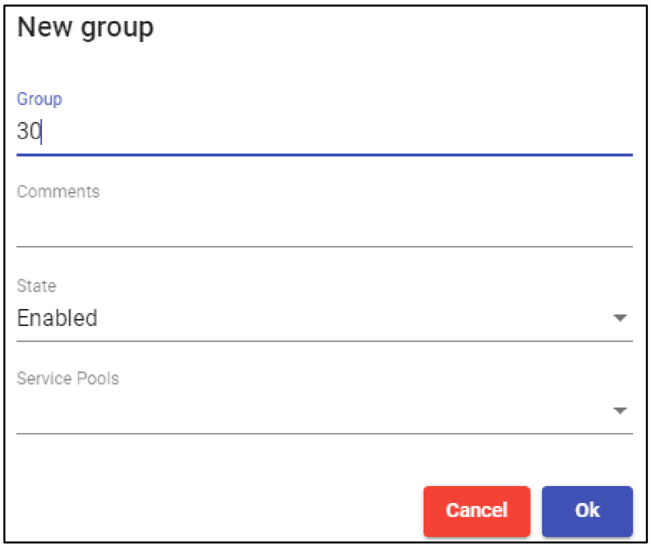
NOTE: In UDS Enterprise it is possible to indicate various attributes or use regular expressions. For example, to indicate new group membership attributes.

Once the attributes are correctly defined, save and access the authenticator created in UDS Enterprise.

Within the authenticator, access the "**Groups**" section to add the necessary groups.



The groups will have to be added manually since the automatic search does not apply with this type of authenticator:


New group

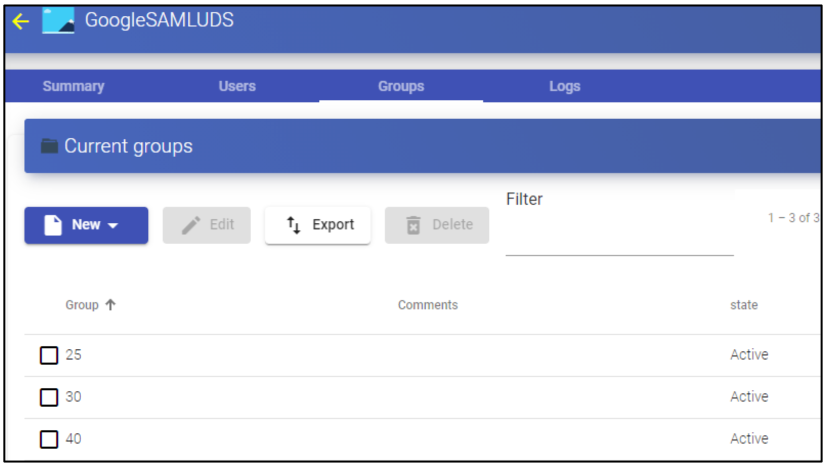
Group: 30

Comments:

State: Enabled

Service Pools:

Add all the necessary groups (in this example, the different departments to which the users belong are added, since the group membership attribute used in Google Workspace is the "**department**"):

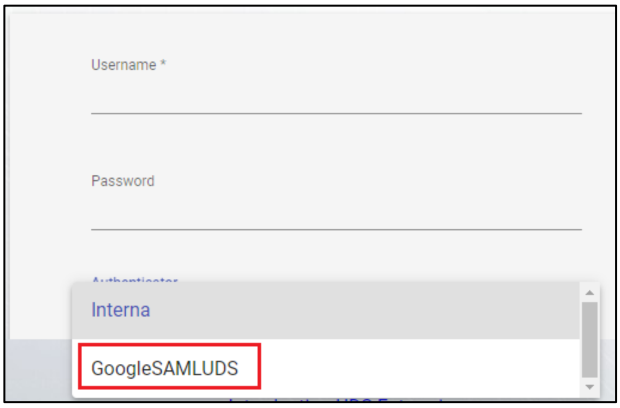


	Group	Comments	state
□	25		Active
□	30		Active
□	40		Active

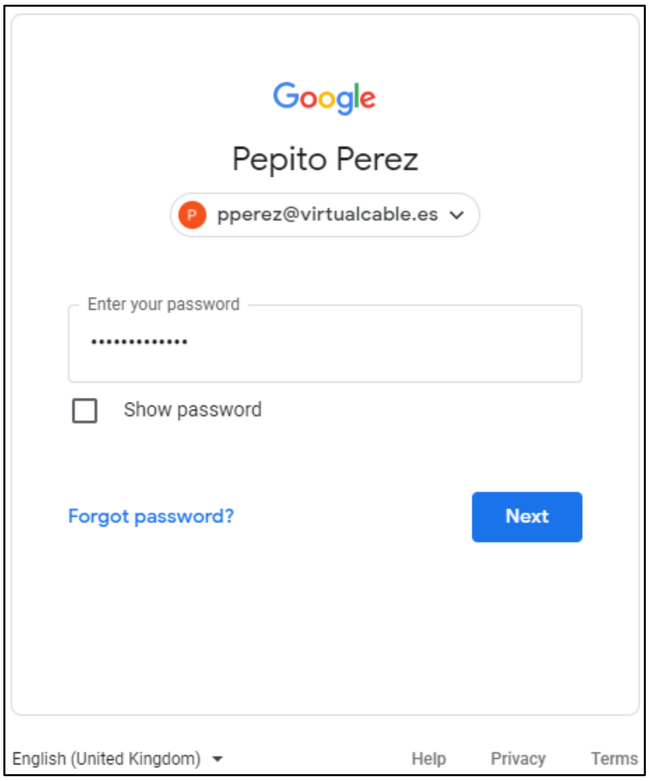
With the configuration applied in this example, all users who have a value of 25, 30 or 40 in their "**department**" attribute, will be able to log in to the UDS Enterprise platform.

Access through authenticator

To confirm that all settings are correct, access UDS Enterprise portal through the newly created SAML authenticator:

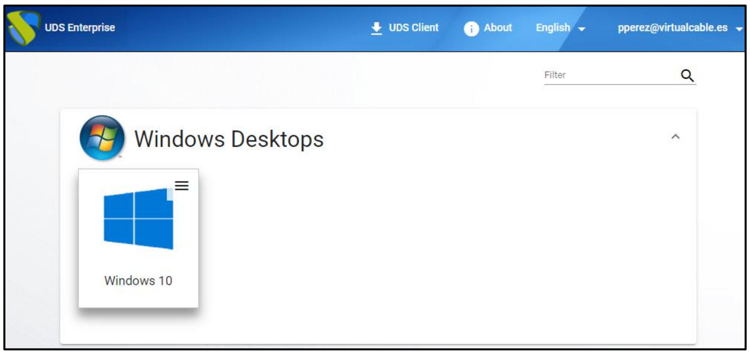


By selecting the SAML authenticator, you will automatically be redirected to the provider's page. The system will ask you for valid credentials:



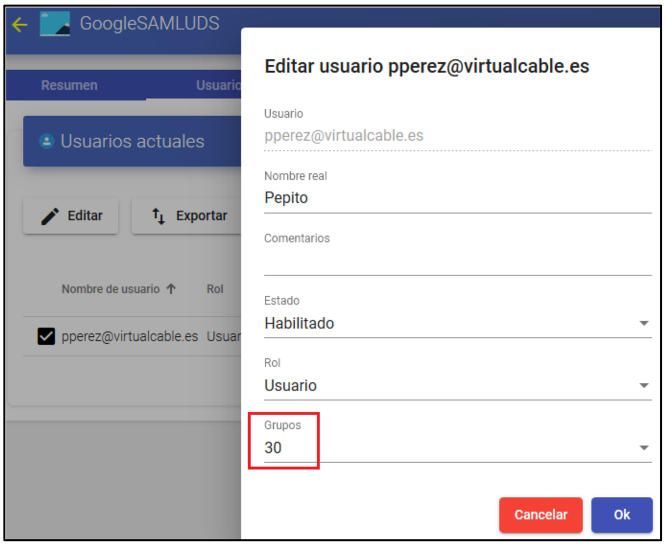
NOTE: The validation mode will be the one configured in the provider itself. That is, if you have user validation via MFA, it will be used.

Once you have log in Google Workspace, a redirection will be made and you will return to the UDS Enterprise services page:



NOTE: If the group to which the user belongs has services assigned, they will be shown to him and he will be able to access them.

You can check which groups a user belongs to if you edit it. To do this, access the authenticator and edit the user:



Editar usuario pperez@virtualcable.es

Usuario: pperez@virtualcable.es

Nombre real: Pepito

Comentarios:

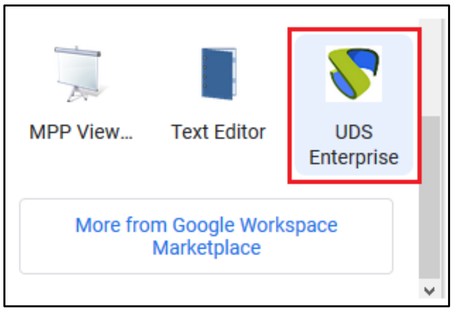
Estado: Habilitado

Rol: Usuario

Grupos: 30

You can verify that in this example, the user *pperez* belongs to department 30 and, since he is registered as a group in the authenticator, he can access.

If you have enabled your users' access to the application, it will also appear in the list of Google Workspace applications and you will automatically access the VDI environment after validation:

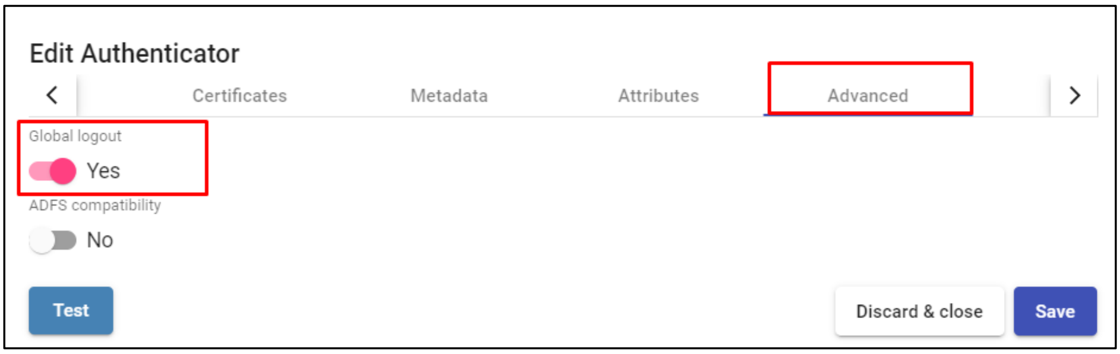


Enable Global logout

It should be kept in mind that when a user accesses from UDS Enterprise and logs in with his Google account, when he closes his session from UDS, his Google account won't be closed by default. If you want to make a global logout (both from UDS and from the Google account), you will need to indicate it in the authenticator created in UDS:

Access the Authenticator, section "**Advanced".**

Parameter "**Global logout** ":



Edit Authenticator

Global logout: Yes

ADFS compatibility: No

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. **Everyday millions of Windows and Linux virtual desktops are deployed with UDS Enterprise around the world**.