

SAASPASS 2FA Integration with TSplus



SAASPASS, the Leader of Multi-Factor Authentication, teams up with **TSplus** to provide highly secured remote connections.

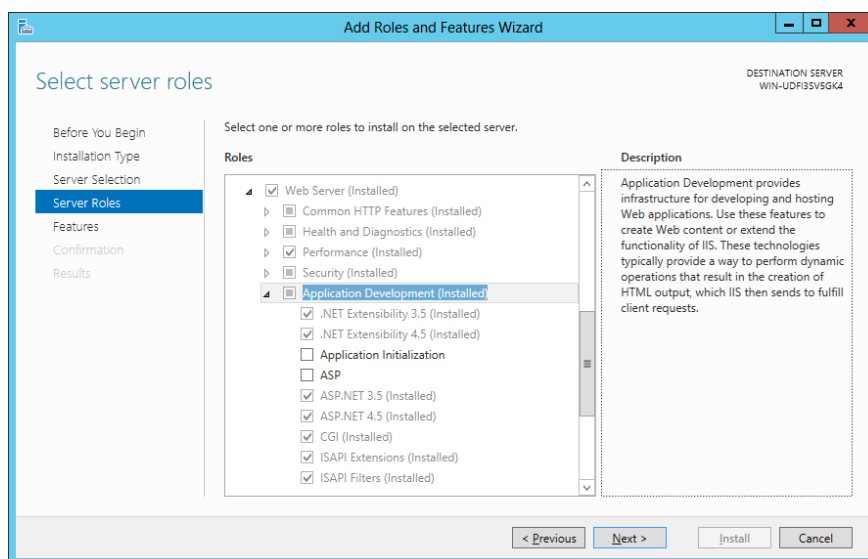
The SAASPASS-TSplus integration is a quick and straightforward process. Before you start, please make sure that your server is accessible from out of your network. If your server cannot be accessed by SAASPASS you will not be able to use Scan Barcode, Proximity Login and One-Time Password to log in.

The SAASPASS-TSplus integration can be done by following these steps (These instructions may be different on some Windows Server versions).

Prerequisites

Make sure you meet the pre-requisites before continuing the integration:

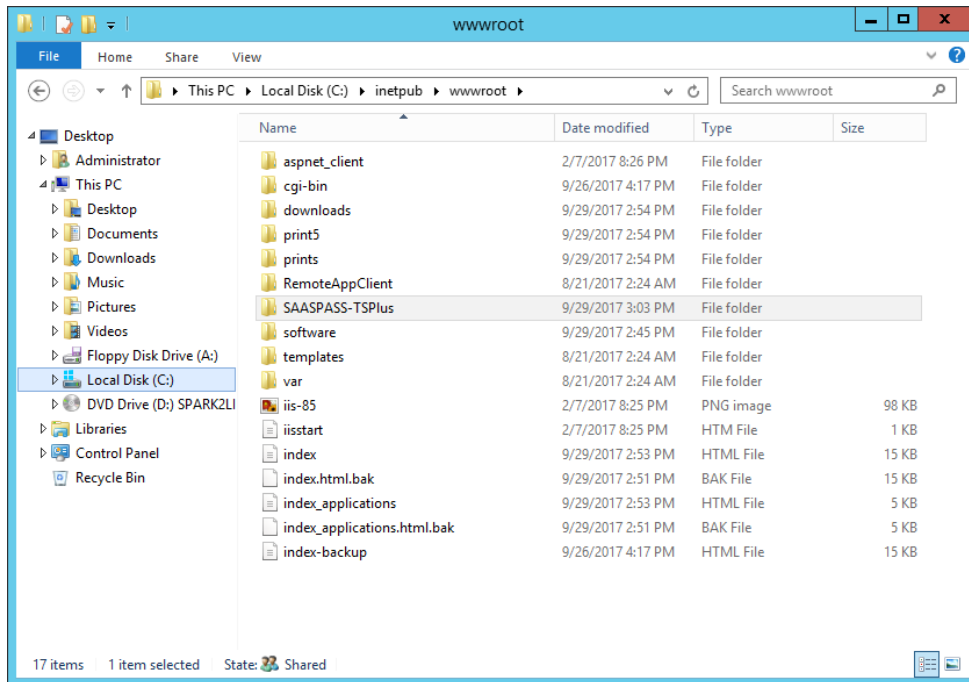
- [Installed the latest version of TSplus.](#)
- [Installed the SAASPASS mobile application or Desktop client.](#)
- **Company registration for SAASPASS from the admin portal at www.saaspass.com.**
- Reachable server from SAASPASS for Login options as Scan Barcode and Proximity.
- SAASPASS is reachable from the server.
- Installed IIS with the following modules: CGI, ISAPI Extensions and ISAPI Filters.



- WebSocket Protocol and ASP.NET 4.5 installed on the server.

STEP 1

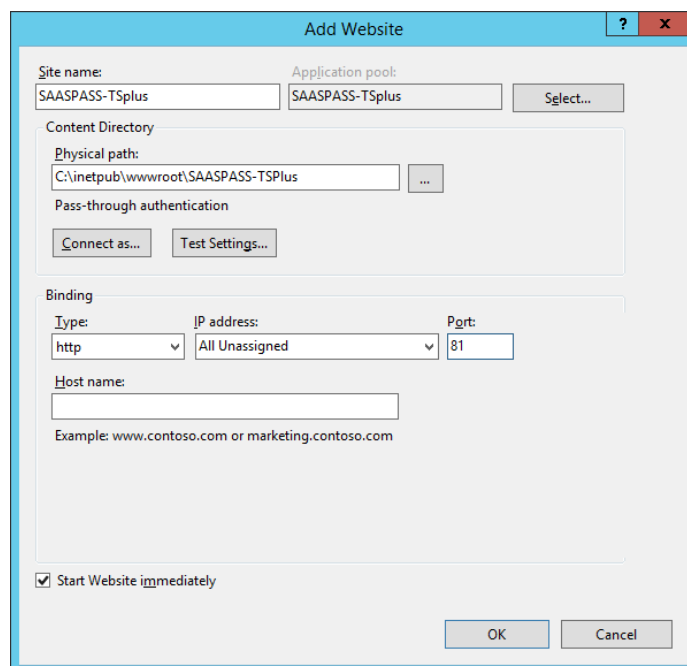
Download SAASPASS-TSplus plugin archive from [here](#) and extract the content into **C://inetpub/wwwroot/SAASPASS-TSPlus:**



➤ Give full permission to the group "Everyone" in the directory "C:\inetpub\wwwroot".

STEP 2

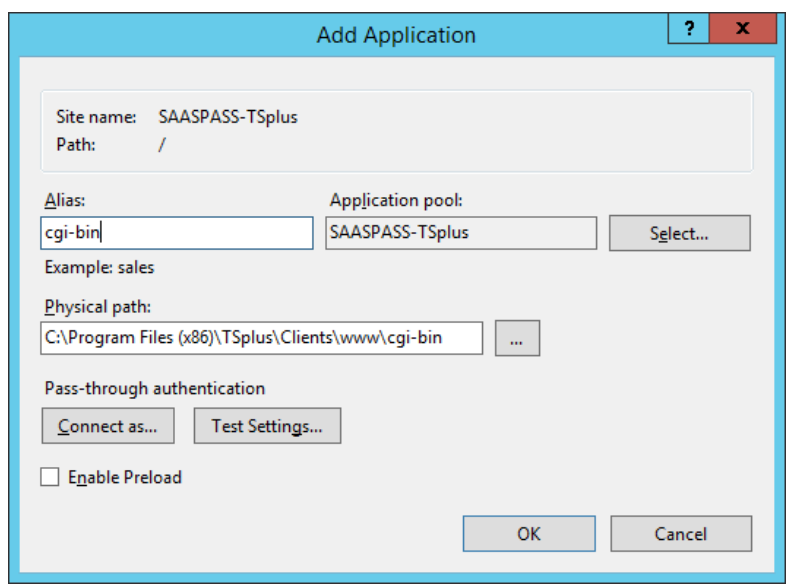
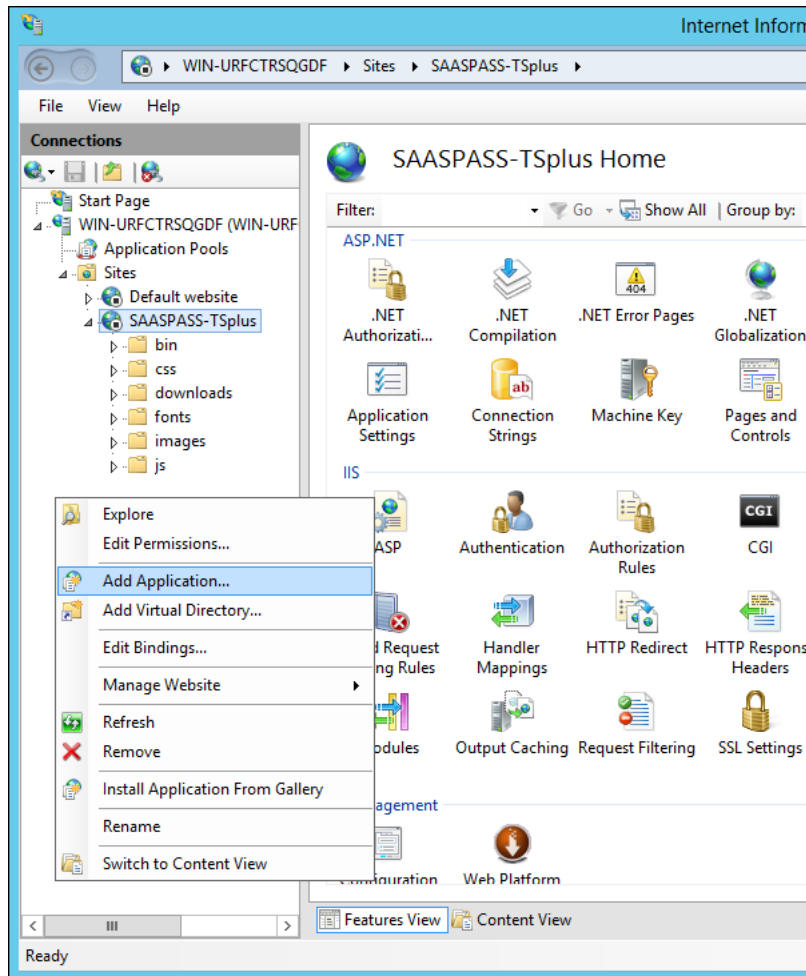
Open IIS Manager, right-click on Sites and then click on **Add Web Site**. Fill the form with appropriate data, where the Physical Path will point to the extracted content of the archive.



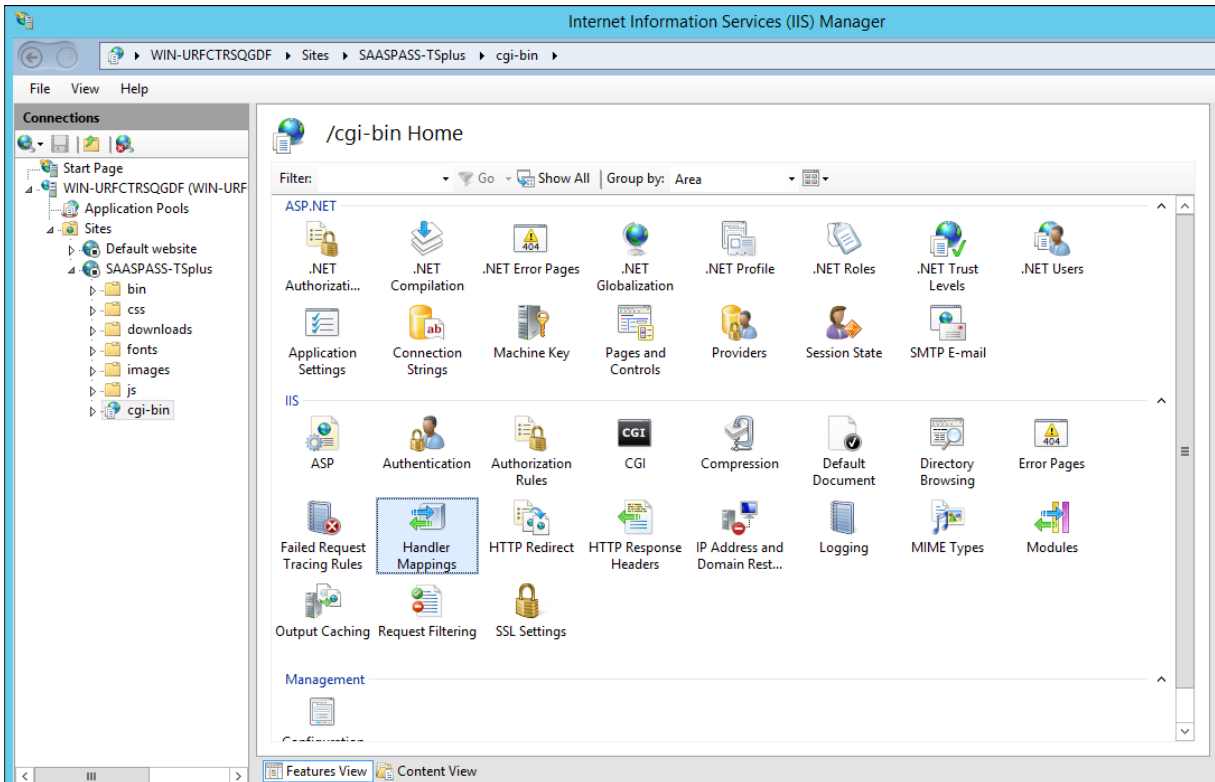
Don't forget to specify the http port to 81.

STEP 3

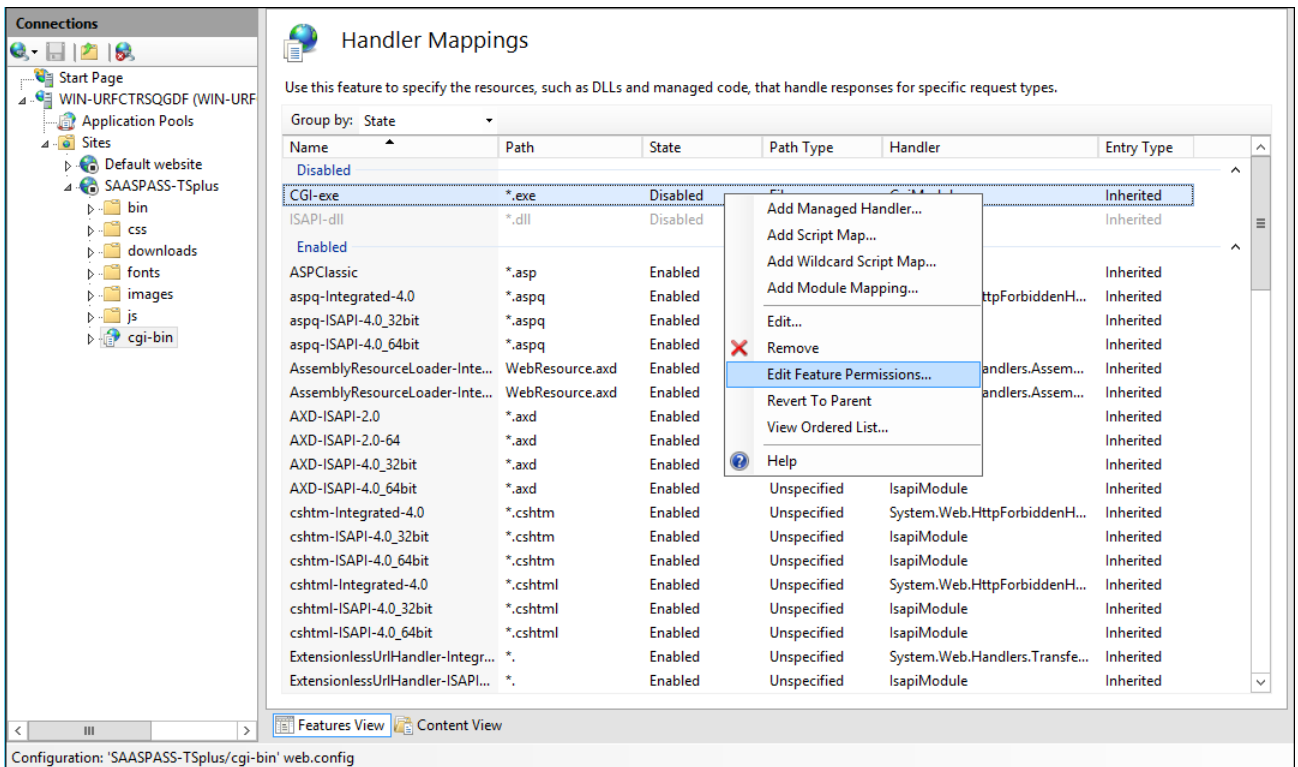
You will have to add the TSplus cgi-bin virtual directory - located under the path C:\Program Files (x86)\TSplus\Clients\www\cgi-bin - as an application into your newly created website:



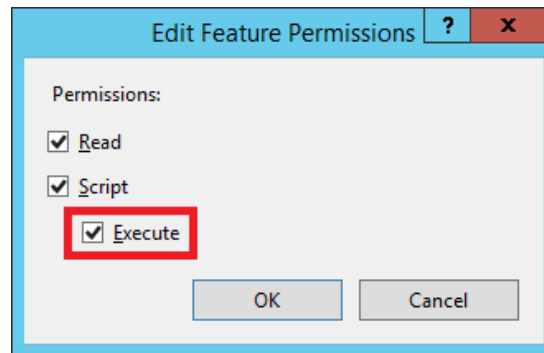
Then, double-click on the "Handler Mappings" icon for this folder on the right side of the Manager window:



Now, right-click on CGI-exe and click on "Edit Feature Permissions":



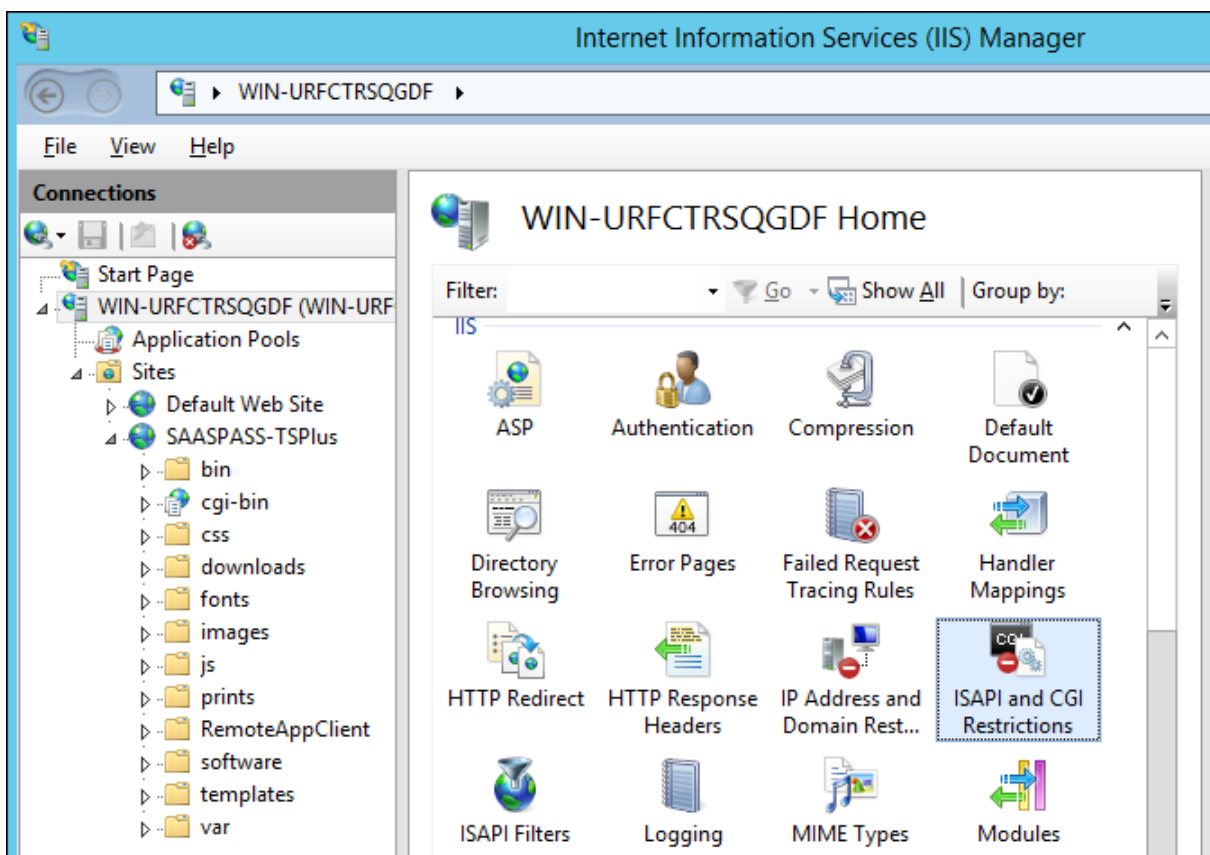
Check the "Execute" checkbox and click OK:



STEP 4

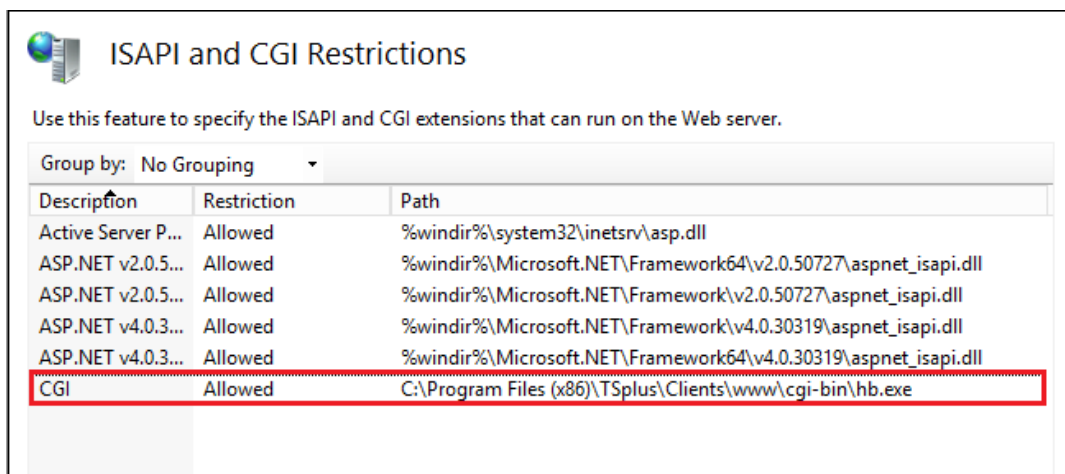
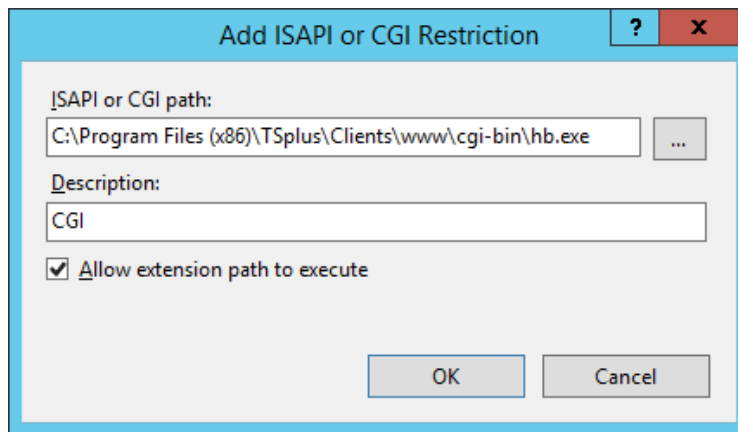
Configure CGI extension permission

Then, allow the CGI extension to run on the server. Click on the "ISAPI and CGI Restrictions" icon. This can be found by clicking on the machine name in the menu on the left side of the window:



On the "ISAPI and CGI Restrictions" page, click "Add ..." on the right side of the window. Now specify the full path to the "hb.exe" file hosted in the TSplus folder.

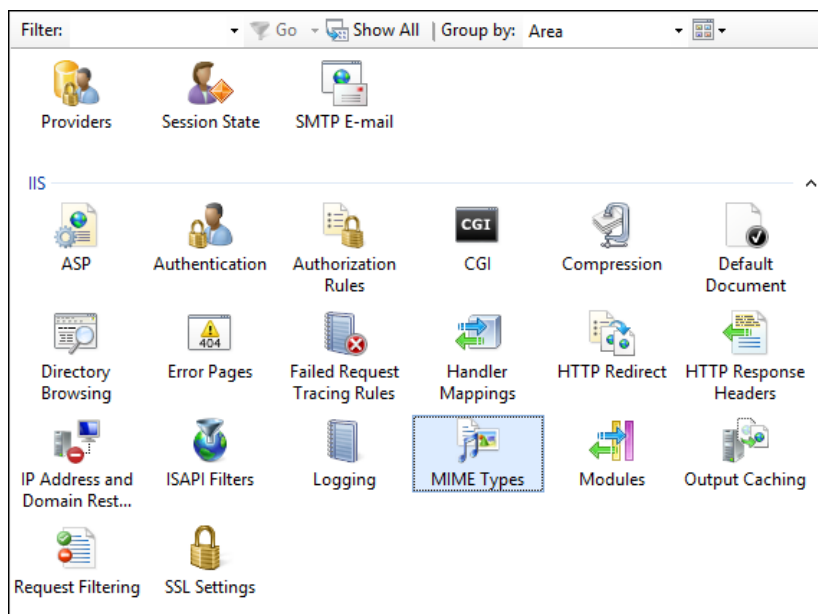
Be sure to check the "Allow extension path to execute" option, as illustrate the following screenshots:



STEP 5

Add Mime types in IIS

Double-click on the Mime Types icon:



And verify that the “.” and “.dat” extensions appear with a text/plain MIME type:

Extension	MIME Type	Entry Type
.jsx	text/jscript	Inherited
.	text/plain	Inherited
.asm	text/plain	Inherited
.bas	text/plain	Inherited
.c	text/plain	Inherited
.cnf	text/plain	Inherited
.cpp	text/plain	Inherited
.dat	text/plain	Inherited
.h	text/plain	Inherited
.map	text/plain	Inherited
.txt	text/plain	Inherited
.vcs	text/plain	Inherited
.xdr	text/plain	Inherited
dat	text/plain	Inherited

Otherwise, add them by opening a command prompt as an administrator and run the following commands:

```
%SystemRoot%\system32\inetsrv\appcmd set config /section:staticContent
/+[fileExtension='.dat',mimeType='text/plain']
```

```
%SystemRoot%\system32\inetsrv\appcmd set config /section:staticContent
/+[fileExtension='.',mimeType='text/plain']
```

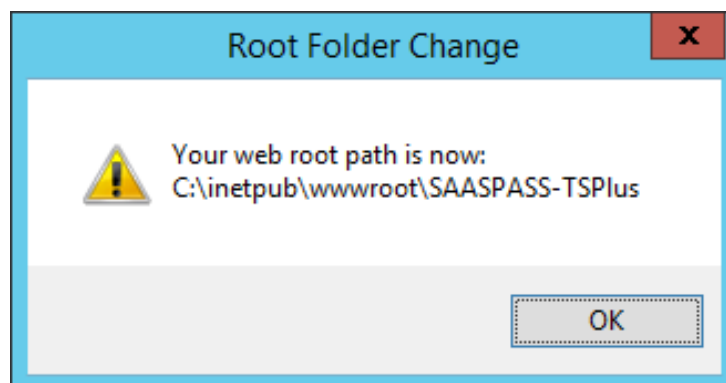
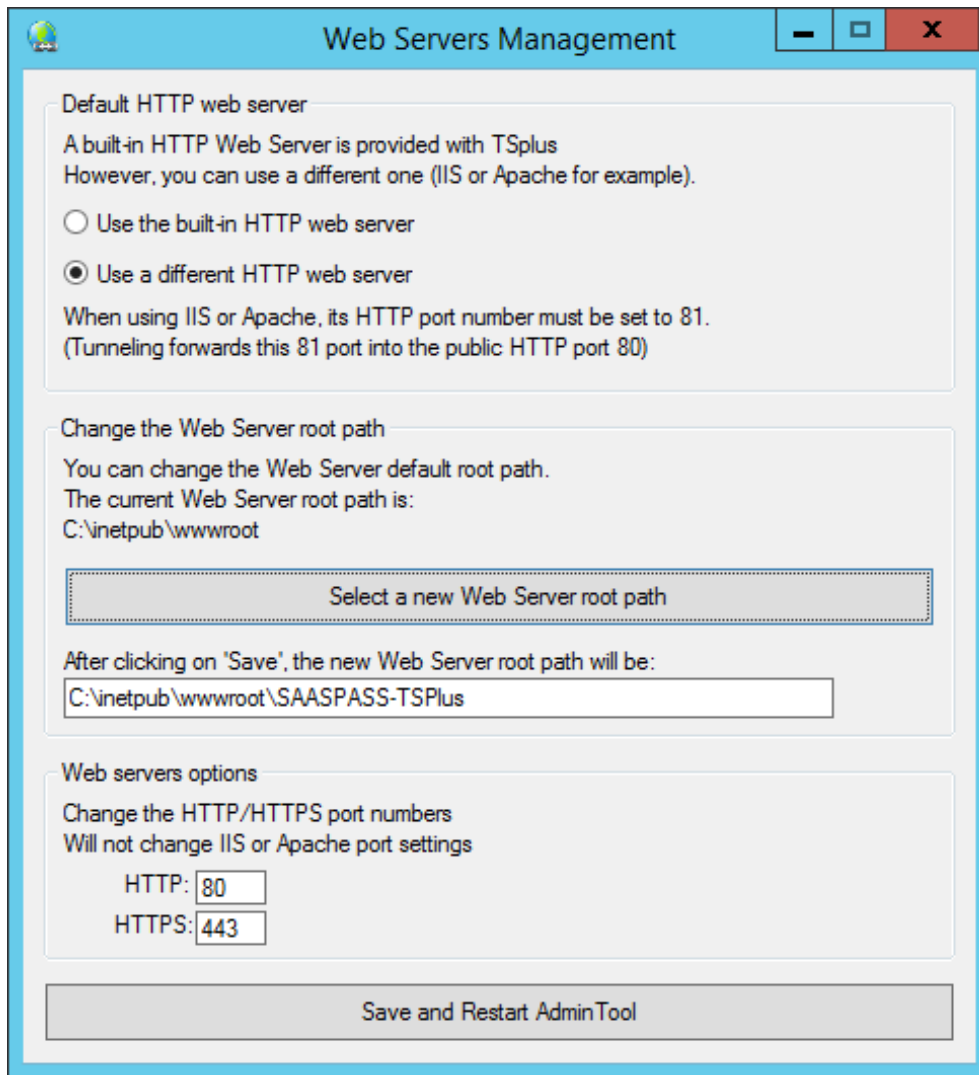
Then restart IIS.

STEP 6

Once you set up the SAASPASS-TSplus plugin to run under IIS, now we need to change TSplus to use IIS Server instead of the built-in server:

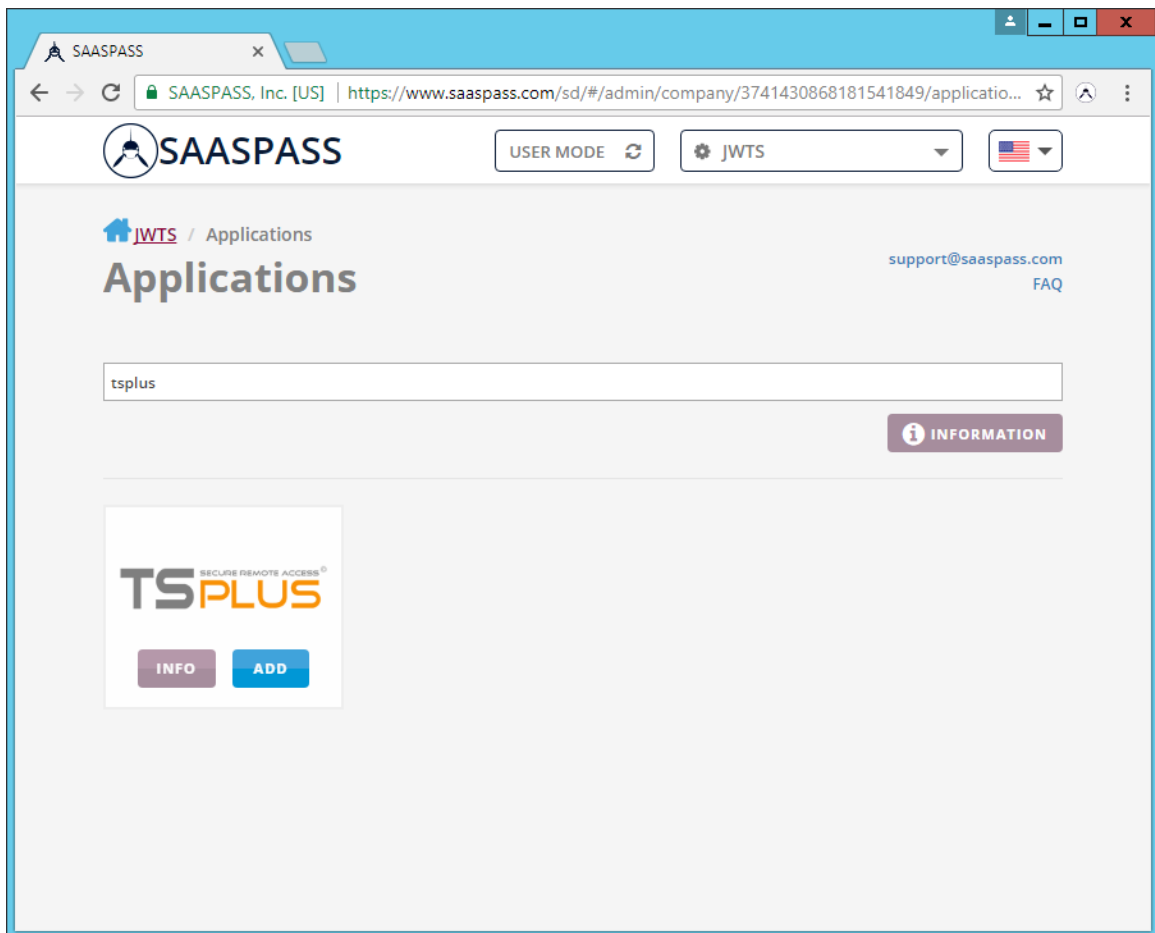
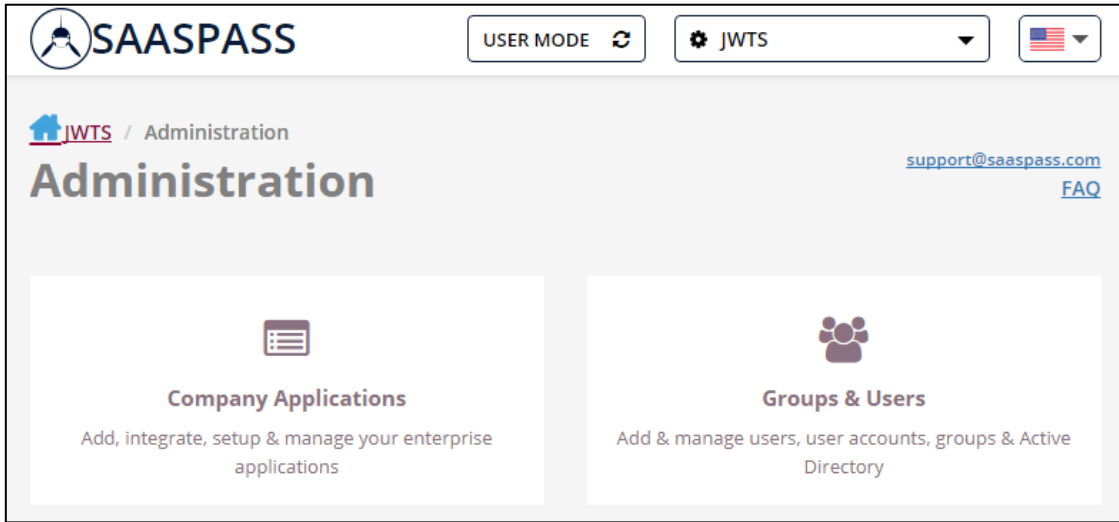
- Open the **TSplus** Administrator Tool and click on the Manage Web Servers tile under the Web Tab.
- Select **Use a different HTTP Web server**
- Then, change the Web server root path to point to ISS SAASPASS-TSplus.

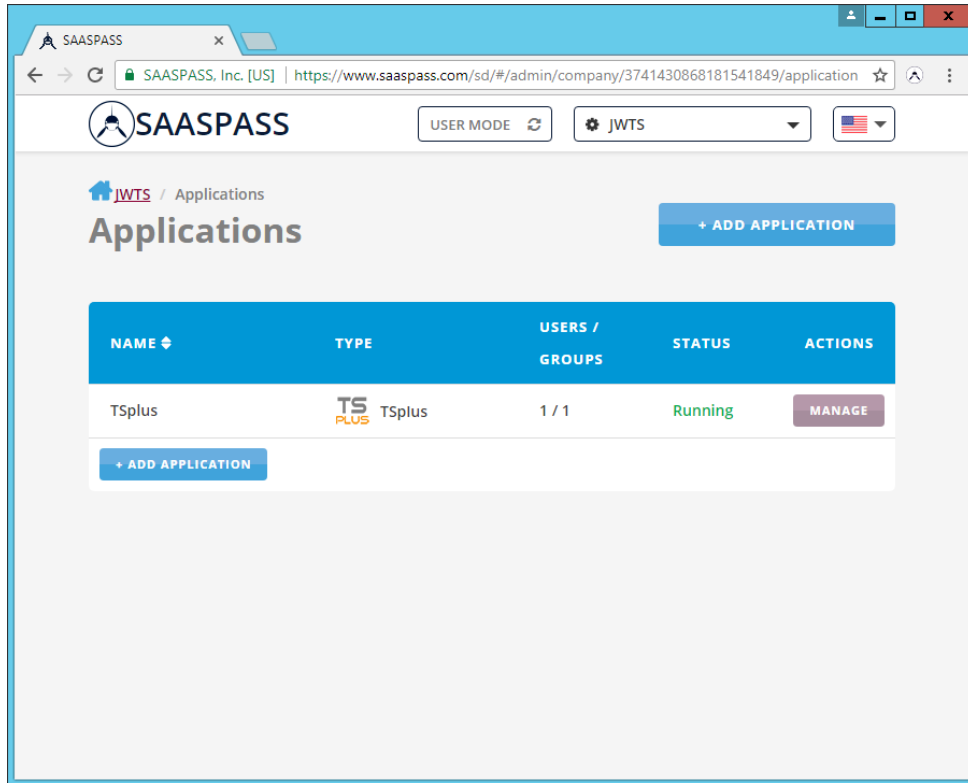
- Save the changes, the AdminTool will restart.



STEP 7

On the SAASPASS Portal, when switched to Company mode, you can add users on the Groups & Users tile and **TSplus** on the Company Applications tile:

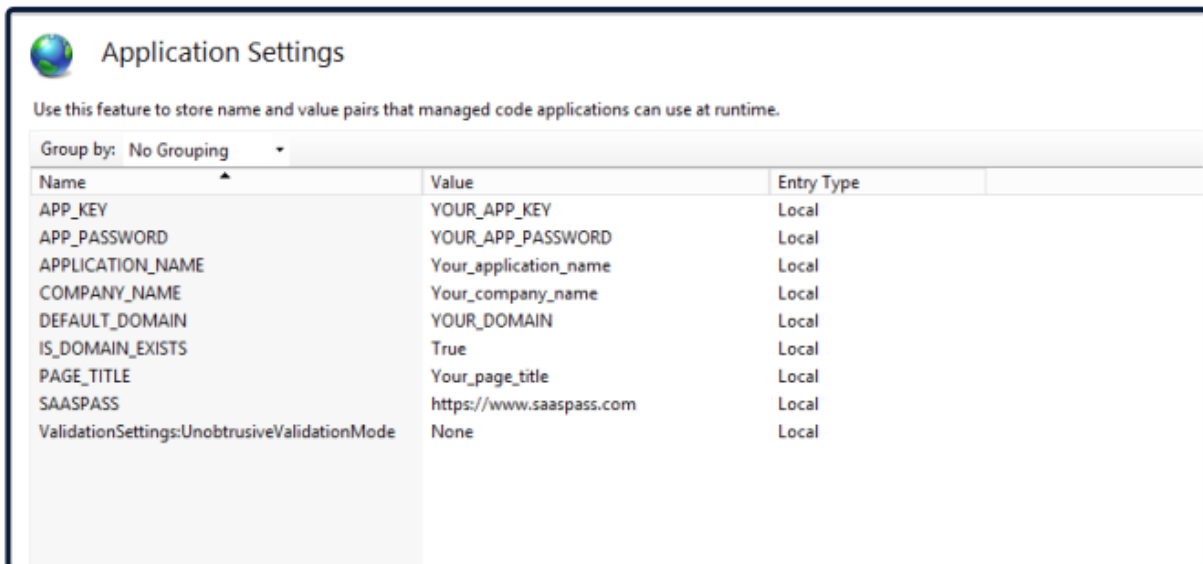




You can see that the application is running and one user or group is connected.

STEP 8

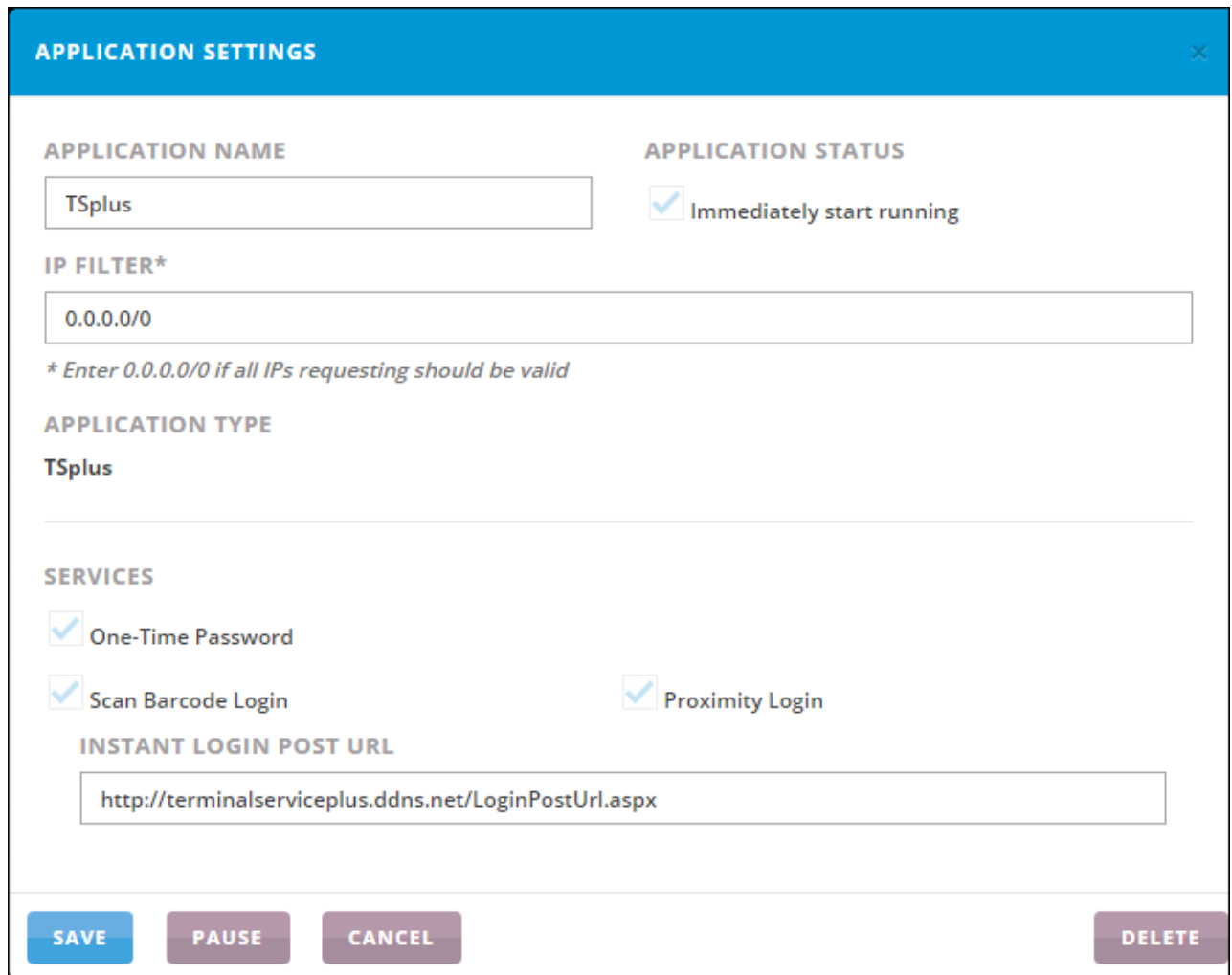
Once everything is in place, open IIS Manager and go to Application Settings for the SAASPASS-TSplus site.



Enter the correct values for your application API_KEY and API_PASSWORD, which you can get from **APP KEY & PASSWORD** on the SAASPASS Admin Portal when you are managing your Application.

STEP 9

Under the **TSplus** application on the SAASPASS Admin Portal, open Application Settings and enter your desired IP Filter, as well as the TSplus URL, with your domain name, for example:



The screenshot shows the 'APPLICATION SETTINGS' form for the 'TSplus' application. The form is contained within a blue header bar with a close button (X) in the top right corner. The form fields are as follows:

- APPLICATION NAME:** A text input field containing 'TSplus'.
- APPLICATION STATUS:** A checkbox labeled 'Immediately start running' which is checked.
- IP FILTER*:** A text input field containing '0.0.0.0/0'. Below this field is a note: '* Enter 0.0.0.0/0 if all IPs requesting should be valid'.
- APPLICATION TYPE:** A dropdown menu with 'TSplus' selected.
- SERVICES:** Three checkboxes are present: 'One-Time Password' (checked), 'Scan Barcode Login' (checked), and 'Proximity Login' (checked).
- INSTANT LOGIN POST URL:** A text input field containing 'http://terminalserviceplus.ddns.net/LoginPostUrl.aspx'.

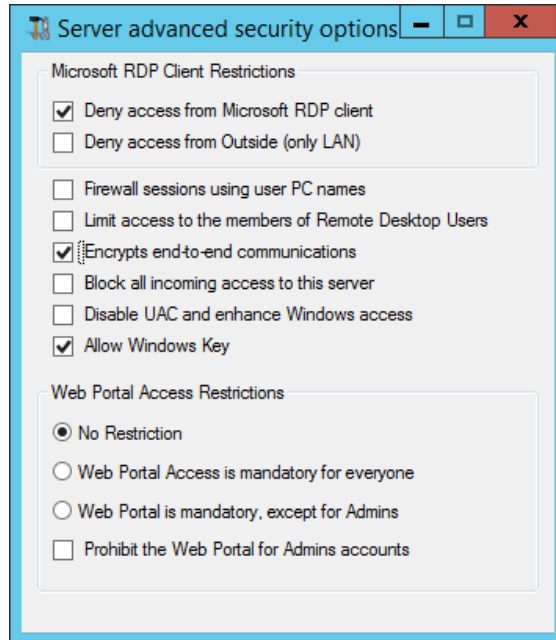
At the bottom of the form, there are four buttons: 'SAVE' (blue), 'PAUSE' (purple), 'CANCEL' (purple), and 'DELETE' (purple).

STEP 10

To add the RemoteApp or the Load Balancing options under TSplus to configure it please see this [documentation page](#). For SSL setup instructions please refer to this [documentation](#).

STEP 11

Open the TSplus AdminTool and navigate to Security -> Advanced Security. Enable 'Deny access from Microsoft RDP client' and 'Encrypts end-to-end communications'. Save the changes. Restart TSplus.



You are all set, now you can login to TSplus with SAASPASS:

