

Tungsten PSIsafe Web Installation Guide

Version: 12.3.0

Date: 2024-08-22

TUNGSTEN
AUTOMATION

Table of Contents

Preface.....	3
System requirements.....	3
Product documentation.....	3
Online documentation.....	3
Offline mode.....	4
Training.....	4
Getting help with Tungsten Automation products.....	4
Install Tungsten PSISafe Web.....	6
PSISafe Web installation process.....	6
Web server prerequisites.....	6
Client station prerequisites.....	7
PSISafe Web deployment (Installer).....	7
Silent Installation.....	8
Set up communication between PSISafe API, PSISafe Web, and PSISafe SignalR.....	8
Sample appsettings.Production.json file.....	9
PSISafe Web and API Installation Troubleshooting.....	11
Failed to load ASP.NET Core runtime.....	11
No IPEndpoints were found for host localhost.....	11
We lost connection to the server.....	12
Internal Server Error with Error Code: 0x8007000d.....	12
An unhandled error has occurred. Reload X.....	13
Object reference not set to instance of object.....	13
Invalid object name 'FileDownloadSession'.....	13
Error. Not Found.....	14
'blazorInterop.DownloadFile'.....	14
Arg_NullReferenceException.....	14

Preface

This guide provides instructions for administrators who are responsible for installing Tungsten PSIsafe Web.

System requirements

Software requirements for Tungsten PSIsafe are listed in the Technical Specifications document, which is available from the [Tungsten PSIsafe Landing Page](#) on the Tungsten Automation website. The document is updated regularly, and we recommend that you review it carefully before installing your product.

Product documentation

The Tungsten PSIsafe product documentation set consists of guides and help systems to assist you with installing, configuring, and using the product.


Online documentation

The full product documentation set for Tungsten PSIsafe 12.3.0 product family is available online:

<https://docshield.tungstenautomation.com/Portal/Products/PSIsafe/12.3.0-9ldsno17y/PSIsafe.htm>

The full set of Tungsten PSIsafe Documentation includes:

- [Tungsten PSIsafe Release Notes](#)
- [Tungsten PSIsafe Technical Specifications](#)
- [Tungsten PSIsafe Installation Guide](#)
- [Tungsten PSIsafe User Help](#)
- [Tungsten PSIsafe Administrator Help](#)
- [Tungsten PSIsafe API Installation Guide](#)
- [Tungsten PSIsafe Web Installation Guide](#)
- [Tungsten PSIsafe Web User Help](#)

 If the security policy for your organization restricts Internet access or the Internet connection is not stable, you can access the documentation in [Offline mode](#) while using Tungsten PSIsafe products.

Offline mode

To make the documentation available for use in offline mode, obtain the following file from the Tungsten PSISafe product package that you downloaded from the [Tungsten Automation Fulfillment Site](#).

- TungstenPSISafeDocumentation_12.3.0_EN.zip

Copy the .zip file to your computer and extract the contents:

- **Print** folder: Includes the *Tungsten PSISafe Installation Guide*, *Tungsten PSISafe API Installation Guide*, and *Tungsten PSISafe Web Installation Guide*.
- **Help** folder: Includes the *Tungsten PSISafe Help*, *Tungsten PSISafe Web Help*, and *Tungsten PSISafe Administrator Help*.


Training

Tungsten Automation offers both on-demand and instructor-led training to help you make the most of your product. To learn more about training courses and schedules, visit the [Tungsten Automation Learning Cloud](#).

Getting help with Tungsten Automation products

The [Tungsten Automation Knowledge Portal](#) repository contains articles that are updated on a regular basis to keep you informed about Tungsten Automation products. We encourage you to use the Knowledge Portal to obtain answers to your product questions.

To access the Tungsten Automation Knowledge Portal, go to <https://knowledge.tungstenautomation.com/>.

 The Tungsten Automation Knowledge Portal is optimized for use with Google Chrome, Mozilla Firefox, or Microsoft Edge.

The Tungsten Automation Knowledge Portal provides:

- Powerful search capabilities to help you quickly locate the information you need.
Type your search terms or phrase into the **Search** box, and then click the search icon.
- Product information, configuration details and documentation, including release news.
To locate articles, go to the Knowledge Portal home page and select the applicable Solution Family for your product, or click the View All Products button.

From the Knowledge Portal home page, you can:

- Access the Tungsten Automation Community (for all customers).
On the Resources menu, click the **Community** link.
- Access the Tungsten Automation Customer Portal (for eligible customers).

Go to the [Support Portal Information](#) page and click **Log in to the Customer Portal**.

- Access the Tungsten Automation Partner Portal (for eligible partners).

Go to the [Support Portal Information](#) page and click **Log in to the Partner Portal**.

- Access Tungsten Automation support commitments, lifecycle policies, electronic fulfillment details, and self-service tools.

Go to the [Support Details](#) page and select the appropriate article.

Install Tungsten PSISafe Web

Tungsten PSISafe Web is a standalone Internet Information Services (IIS) hosted application that enables you to use many of the PSISafe Desktop features in your web browser through a dedicated website.

This chapter describes the PSISafe Web on-premise installation prerequisites and procedure.

i In some places throughout this documentation, it is assumed that the PSISafe server and PSISafe Web installation are hosted in the same environment. Please adjust accordingly if using alternate paths for different workstations that comprise your unique installation.

If you plan to host the PSISafe server and PSISafe Web on separate computers, see [Set up communication between the PSISafe API and PSISafe Web](#) for specific steps required to configure PSISafe Web to point at an alternate PSISafe API endpoint.

PSISafe Web installation process

This guide assumes that the PSISafe API and PSISafe Web instances will be hosted in the same Windows Server 2016 or later environment.

Web server prerequisites

Microsoft Windows Server 2016 and later

PSISafe API and PSISafe server

- Version 12.3 or later

PSISafe Management via client installation

- Version 12.3 or later

Internet Information Services

Ensure that the following Windows features are enabled to host your own PSISafe Web instance:

- **Common HTTP Features**
 - Default Document
 - Directory Browsing
 - HTTP Errors
 - Static Content
- **Health and Diagnostics**
 - HTTP Logging

- Request Monitor
- **Performance**
 - Static Content Compression
- **Security**
 - Request Filtering
 - Windows Authentication
- **Application Development**
 - ISAPI Extensions
 - ISAPI Filters
- **Management Tools**
 - IIS Management Console
 - Management Service
 - ASP.NET Core 8.0 Hosting Bundle (installed via installer, manual installation is not necessary)
 - IIS URL Rewrite Module (installed via installer, manual installation is not necessary)
 - <https://www.iis.net/> and search for URL Rewrite.
- **SSL Certificate from qualified domain hosts (needed to host on-premise site external from Local Area Network)**

Client station prerequisites


- Microsoft Windows 10 and later
- Client login credentials created in PSISafe Desktop Management
- Supported browsers:
 - Microsoft Edge
 - Google Chrome
 - Mozilla Firefox
 - Apple Safari

PSISafe Web deployment (Installer)

Use this procedure to deploy PSISafe Web via the installation package (installer).

1. Right-click the downloaded installer and select **Properties**.
2. Select the **Unblock** checkbox, if it exists, and click **OK**.
3. Right-click the installer and select **Run as Administrator**.
If required, input administrator credentials for your environment.
4. Select **Next**, then accept the End User License Agreement (EULA) by selecting the respective radio button and select **Next** again.
5. Select **Next** to use the default installation location, which is `C:\Program Files\Tungsten Automation\PSISafe\PSISafeWeb`.
To specify another custom path, select **Change** and browse to the appropriate location.

6. On the Internet Information Service configuration screen, select the radio button for Website or Application as required for your configuration.
Input the **Site name**, **Port**, and **Application Name** into their respective fields as appropriate.
7. On the **PSISafe Web configuration** screen, specify the **PSISafe API URL** and **PSISafe Web URL** respectively, then select **Next**.

 The PSISafe API URL and PSISafe Web URL can be updated later in the configuration file **appsettings.Production.json**.

8. Select **Install** to complete the installation process.

Silent Installation

The PSISafe Web installer can accept the following parameters as a part of a silent installation:

- `INSTALLDIR=<"C:\Program Files\Tungsten Automation\PSISafe">`
- `InstallAsWebApplication=<0/1>`
 - 0: Install as a new IIS website.
 - 1: Install as a new application in existing IIS website.
- `ListSite=<"Default Web Site">`
 - The existing site name if `InstallAsWebApplication=1`.
- `WebSiteName=<PSISafeWeb>`
 - The website or application name based on the `InstallAsWebApplication` setting.
- `Port=<83>`
 - The IIS port of PSISafe Web if `InstallAsWebApplication=0`.
- `PSISafeAPIURL=<http://localhost:81>`
 - The PSISafe API URL is updated in **appsettings.Production.json**.
- `PSISafeAPISignalRURL=<http://localhost:82>`
 - The PSISafe API SignalR URL is updated in **appsettings.Productions.json**.

To install PSISafe Web and server silently, open a command prompt or powershell as an administrator and input something similar to the following, customized for your environment.

For example, to install to C:\PSISafe folder in silent mode, with name PSISafeWebTest, port 543, run this command:

```
MSIEXEC /i TungstenPSISafeWeb-12.3.0.msi INSTALLDIR="C:\PSISafe"
WebSiteName=PSISafeWebTest Port=543 /q
```

Set up communication between PSISafe API, PSISafe Web, and PSISafe SignalR

Follow the steps below to allow PSISafe Web to communicate with the PSISafe API and PSISafeSignalR.

1. Navigate to the location where you deployed the application.

2. Open the folder **wwwroot**.
3. Open the file **appsettings.Production.json** in a text editor such as Notepad.
4. Edit the line below to point to the PSISafe API endpoint:

```
"PSISafeAPIURL": "https://localhost:81"
```

The preceding line is edited to become:

```
"PSISafeAPIURL": "https://[Insert PSISafe API endpoint]"
```

5. Edit the line below to point to the PSISafeSignalR endpoint:

```
"PSISafeSignalRURL": "https://localhost:82"
```

The preceding line is edited to become:

```
"PSISafeSignalRURL": "https://[Insert PSISafe SignalR endpoint]"
```

6. Select your PSISafeWeb site and select **Browse** on the right under **Actions**. Confirm your installation and **Connect To** details.

Sample appsettings.Production.json file

The entire appsettings.Production.json file is provided here for reference, which may be useful if you need to manually edit or restore it.

i The **OnPremise** setting below in the **appsettings.Production.json** configuration file only determines whether the **License Agreement** or **Terms of Service** information windows are displayed to users.

For On-Premise PSISafe Web users, when this setting is set to **True** then the **About Tungsten PSISafe Web** button will display the **License Agreement** information window, and for **Cloud** users, this same button will display the **Terms of Service** information window.

```
{
  "PSISafeWebAppSettings": {
    "PSISafeAPIURL": "https://localhost/PSISafeAPI", //PSISafe API endpoint
    "PSISafeSignalRURL": "https://localhost/PSISafeSignalR", //PSISafe SignalR endpoint
    "PSISafeAPISubscriptionKey": "", //Key used to access API in Azure API Management. Set
    to "" if you are using an API
    with no subscription key
    "OnPremise": "true",
    "PrivacyLink": "https://www.tungstenautomation.com/legal/privacy",
    "SupportLink": "https://support.psigen.com",
    "HelpLink": "https://docshield.tungstenautomation.com/Portal/Products/
    PSISafe/12.3.0-9ldsnos17y/PSISafe.htm"
  },
  "ApplicationInsights": {
    "InstrumentationKey": ""
  },
  "Logging": {
    "Console": {
    "LogLevel": {
      "Default": "Debug",
      "System": "Information",
      "Microsoft": "Information"
    }
  },
  "IncludeScopes": false
}
}
```


PSIsafe Web and API Installation Troubleshooting

This section includes solutions for issues that may occur during the installation of PSIsafe Web or PSIsafe API.

Failed to load ASP.NET Core runtime

When testing the PSIsafe API at example address: `http://localhost:81/api`

You may encounter an error like this:

Error: "HTTP Error 500.31 - Failed to load ASP.NET Core runtime"

Problem:

ASP.NET Core Hosting Bundle dependency is not installed.

Solution:

Install the ASP.NET Core 8.0 Hosting Bundle or later from the following link:

<https://dotnet.microsoft.com/en-us/download/dotnet/thank-you/runtime-aspnetcore-8.0.7-windows-hosting-bundle-installer>

No IPEndpoints were found for host localhost

An error occurs when testing if the PSIsafe API can access PSIsafe DB using a path similar to this:

`http://localhost:81/api/databases?customercode=default`

You may encounter an error:

Error: "Error: No IPEndpoints were found for host localhost. For more details on error provide log ID to your Administrator.Log ID: 0" and in some cases `{"statusCode":500,"details":"No IPEndpoints were found for host localhost"}`

Problem:

PSIsafe Server Service is not running.

Solution:

This error indicates that your PSIsafe API Server Service (named **PSIGEN Affinity Server** in the Windows Services dialog) is not running.

1. Open the Windows Services Dialog.
2. Confirm that the PSIsafe Desktop Server service is running.

We lost connection to the server

An error occurs when testing the PSIsafe API at the example address:

```
http://localhost:81/api
```

When logging in to PSIsafe Web. A message is displayed at the top of the login page saying: "We lost connection to the server. Refresh browser to retry."

The error is displayed at the top of the screen:

Error: "We lost connection to the server. Refresh browser to retry."

Problem:

PSIsafe Web cannot reach the PSIsafe API endpoint. Typically, this can be caused by:

1. The PSIsafe API Web Site is not running.
2. The PSIsafeAPIURL is not set to the correct path in the file **appsettings.Production.json**.

Solution:

1. Start the PSIsafe API web site in IIS.
2. Check the PSIsafeAPIURL configuration in appsettings.Production.json:

```
[PSIsafeWebInstallationFolder]/wwwroot/appsettings.production.json
```

Make sure that path does NOT end with **/api**. That path is used only to retrieve API version during testing.

Internal Server Error with Error Code: 0x8007000d

When trying to access PSIsafe Web. The browser displays an error:

Error: "HTTP Error 500.19 - Internal Server Error" and error code "0x8007000d"

Problem:

The pre-requisite **IIS URL Rewrite Module** is not installed.

Solution:

1. Install the IIS Rewrite Module from the following link:

```
https://www.iis.net/downloads/microsoft/url-rewrite
```

2. Restart IIS.

An unhandled error has occurred. Reload X

When trying to access PSISafe Web, the browser displays the following error:

Error: "An unhandled error has occurred. Reload X"

Problem:

PSISafe Web was deployed as sub-application under another web site (such as Default Web Site). This is currently not supported (as of version 12.2.0.1.0.358).

Solution:

Create a separate website in IIS for deployment of PSISafe Web.

Object reference not set to instance of object

When trying to log into PSISafe Web, the browser displays an error:

Error: "Object reference not set to instance of object"

Problem:

PSISafe Web cannot connect to its SQL Database.

Solution:

1. Check that you have a **CNGDBList.xml** in the root folder where PSISafe Server was installed. For a new deployment this file is copied from the PSISafe 32-bit server after DB registration. Check that the file contains information for the databases you will be using.
2. If you are on a load balanced system with multiple PSISafe Desktop Server instances, open **ServerAppSettings.xml** in the Config folder of the PSISafe Desktop Server. The shared path to the file is defined with key ServerXMLFiles:

```
<add key="ServerXMLFiles" value="\\[PathToTheSharedLocation]
```

Invalid object name 'FileDownloadSession'

When testing the PSISafe Web downloads, you may encounter an error that reads:

Error: "Invalid object name 'FileDownloadSession'".

Problem:

The SQL table **FileDownloadSession** is missing. The required **PSISafeDatabaseUpdates.SQL** script required for PSISafe API and PSISafe Web has not been executed on the database.

Solution:

Execute the PSISafe API script on the PSISafe Database in SSMS. The script is including in your installation package.

Error. Not Found.

When testing the PSISafe Web imports/uploads, you may encounter an error that reads:

Error: "Error. Not Found For more details on error provide your Log ID to your Administrator."

Problem:

The **PSISafeAPIURL** in **appsettings.Production.json** file contains "/" (front slash) at the end of API URL.

Solution:

- 1: Start the PSISafe API web site in IIS.
- 2: Check the **PSISafeAPIURL** configuration in **appsettings.Production.json**, for example:

```
[PSISafeWebInstallationFolder]/wwwroot/appsettings.production.json
```

Make sure that path does NOT end with a slash/.

'blazorInterop.DownloadFile'

When testing the PSISafe Web downloads, you may encounter an error that reads:

Error: "blazorInterop.DownloadFile: Could not get the requested file on the API".

Problem:

This can happen on deployments where the API is load balanced using multiple servers. If load balanced, then the **AffinityTempFilesLocation** needs to be set to a shared location that all API server instances share. See **appsettings.json** where API is installed.

Solution:

In the **appsettings.json** for the PSISafe API. Make sure that **AffinityTempFilesLocation** is pointing to a share that all PSISafe API instances write to.

Arg_NullReferenceException

When testing the PSISafe Web imports/uploads, you may encounter an error that reads:

Error: "Arg_NullReferenceException".

Problem:

The SQL table **FileUploadSessions** and/or **FileUploadParts** are missing. The required **PSISafeDatabaseUpdates.SQL** script required for PSISafe API and PSISafe Web has not been executed on the database.

Solution:

Execute the PSISafe API script on the PSISafe Database in SSMS. The script is including in your installation package.