



Click Studios

Passwordstate

Upgrade Instructions for Version 9

Table of Contents

1.	UPGRADE OVERVIEW	3
2.	BACKUPS AND CHECKSUM VALIDATION	5
3.	UPGRADING PASSWORDSTATE CORE INSTALLATION.....	6
4.	UPGRADING HIGH AVAILABILITY INSTANCE OF PASSWORDSTATE	7
5.	TROUBLESHOOTING MAINTENANCE MODE USER DURING AN UPGRADE	8
6.	APP SERVER UPGRADE INSTRUCTIONS.....	9
7.	PASSWORD RESET PORTAL UPGRADE INSTRUCTIONS	10
8.	REMOTE SITE LOCATIONS AGENT UPGRADE INSTRUCTIONS.....	11
9.	SELF DESTRUCT MESSAGE WEB SITE UPGRADE INSTRUCTIONS	12
10.	BROWSER BASED REMOTE SESSION LAUNCHER GATEWAY	13
11.	TROUBLESHOOTING SERVER ERROR IN '/' APPLICATION	14
12.	UPGRADE DEPENDENCY MATRIX.....	15

1. Upgrade Overview

This document will detail instructions for upgrading to the latest build of Passwordstate 9. It will also detail instructions for upgrading other modules if required.

Please reference the Upgrade Matrix section and the end of this document, to confirm if any dependant modules also need to be upgraded, when you upgrade your core Passwordstate installation.

1 System Requirements - General

Please note the system requirements below, if you are upgrading from versions earlier than 9.

Web Server

Your web server which will host the Passwordstate web site can be any of the following Operating System versions, with required components:

- Microsoft Windows Server 2012, 2012 R2, 2016, 2019, 2022
- Windows 10, 11
- Internet Information Services (installed automatically as a role in the Windows Operating System)
- Microsoft SQL Server 2012 Native Client
- .NET Framework 4.7.2. or Higher
- PowerShell 5.0 or above
- Open JDK 16 or above (if using Browser based Remote Session Launcher)

Database Server

You will need to have one of the following supported SQL Server versions installed prior to installing Passwordstate, so Passwordstate can connect to SQL Server and update the database. SQL Server can be installed either on the same web server as Passwordstate, or on any other Windows Server in your environment.

Any versions of SQL Server can be used i.e., Express, Standard, Enterprise.

- Microsoft SQL Server 2012
- Microsoft SQL Server 2014
- Microsoft SQL Server 2016
- Microsoft SQL Server 2017
- Microsoft SQL Server 2019

2. Backups and Checksum Validation

Prior to performing any upgrades of Passwordstate, it is strongly recommended you perform backups of your Passwordstate folder and database, and also check the Checksum of installer files you download from Click Studios' CDN network.

Backups

If using Passwordstate to perform backups, please refer to our 'Automatic Backup' documentation on the following page on our web site, if you are yet to configure this feature -


<https://www.clickstudios.com.au/documentation/>

Performing Checksum Validation

Downloading the Windows Installers to perform upgrades can be done via the following page on our web site - <https://www.clickstudios.com.au/passwordstate-checksums.aspx>.


On this page, the published checksums are also available, and below are instructions of how to validate the checksums using a PowerShell command.

Get-FileHash passwordstate.zip -Algorithm SHA256

 Note: There are only two files you would possibly need to download from Click Studios' CDN network, depending on what build number of Passwordstate you are currently using. Please refer to below instructions for further detail.

3. Upgrading Passwordstate Core Installation

The following instructions show how to upgrade your core installation of Passwordstate, with instructions for dependant modules below in this document.

 Note: If your core Passwordstate product is already version 9, you can upgrade to the latest build of version 9 from the version you are currently running – there is no need to do multiple upgrades.


High Availability Considerations


If you have purchased and are using the High Availability module for Passwordstate, it is possible you may need to delete SQL Server Replication prior to upgrading your primary Passwordstate web server. This is a requirement if:

- You are using the older **SQL Server Transactional Replication** (not SQL Clustering, Basic or High Availability Groups, or Azure/Amazon SQL)
- And the '**Upgrade Dependency Matrix**' below shows database schema changes since the build you are upgrading from

Upgrading Your Core Passwordstate Installation

1. If you are upgrading from a build earlier than 8995, then:
 - a. Download the file <https://cdn.clickstudios.com.au/version8/passwordstate.zip> (please validate the checksums), and extract the zip file
 - b. Run the **passwordstate.exe** as an Administrator (right click and Run as Administrator) on your Passwordstate web server – simply follow the on-screen instructions for the upgrade wizard
 - c. Browse to your Passwordstate URL, and finish the database upgrade phase of the upgrade – a screen will be presented to you when you login, to upgrade the database
 - d. Then follow Step 2 directly below, to now upgrade to the latest build of version 9
2. If you are upgrading from build 8995 or later, then:
 - a. Download the file <https://cdn.clickstudios.com.au/version9/passwordstate.zip> (please validate the checksums), and extract the zip file
 - b. Run the **passwordstate.exe** as an Administrator (right click and Run as Administrator) on your Passwordstate web server – simply follow the on-screen instructions for the upgrade wizard
 - c. Browse to your Passwordstate URL, and finish the database upgrade phase of the upgrade – a screen will be presented to you when you login, to upgrade the database

 Note 1: Please refer to Section 11 below if you see a “Server Error in '/' Application” error after performing the upgrade above

 Note 2: If you are using Transactional Replication, and you see a notification on your database upgrade screen that replication still appears to exist, please execute the following commands using SQL Server Management Studio to clean up left over replication tables and data.


USE Master

EXEC sp_removedbreplication passwordstate

4. Upgrading High Availability Instance of Passwordstate

Once your primary site has been upgraded to the latest build of version 9, follow these instructions to upgrade your High Availability instance of Passwordstate

1. If using Transactional Replication, you would have deleted Transactional Replication as per the section '**High Availability Considerations**' above. You should now re-establish replication following section 4 & 5 of these instructions -
https://www.clickstudios.com.au/downloads/version9/SQL_Server_Transactional_Replication.pdf
2. If you are upgrading from a build earlier than 8995, then:
 - a. Follow Section 3.1 above to upgrade to build 8995, but there is no need to login to the UI once you have run this upgrader
 - b. Then manually delete the file c:\inetpub\passwordstate\App_JScript\cs_library-8537.min.js (this is just a test file we check during the upgrade of your primary site, to ensure it has been done correctly)
 - c. Follow section 3.2 above to upgrade to the latest release of version 9
3. If you are upgrading from build 8995 or later, then:
 - a. Follow section 3.2 above to upgrade to the latest release of version 9

 Note: When upgrading your High Availability webserver, you should never be prompted to upgrade the database. You should be able to log into Passwordstate and the version displayed in the User Interface will already be the latest version. If you are prompted to upgrade your database, there is something wrong with your SQL replication and you should investigate this before proceeding any further.

5. Troubleshooting Maintenance Mode User During an Upgrade

When you begin the upgrade process of Passwordstate, Maintenance Mode is enabled to ensure no other users are using the software, during the time of the upgrade.

Once the first stage of the upgrade process is complete, you will be logged out of Passwordstate, and asked to login a second time to complete the second phase of the database upgrade process.

If for any reason you are unable to login with the same account you enabled Maintenance Mode with, then please follow these instructions:

1. Using SQL Server Management Studio, execute the commands below:

USE Passwordstate

UPDATE SystemSettings SET MaintenanceModeUserID = ''

2. Now restart your browser, and access your Passwordstate URL again which will allow you to complete the upgrade.

6. App Server Upgrade Instructions

Please refer to the section '**Upgrades Dependency Matrix**' below to determine if you need to follow the instructions below to upgrade the Passwordstate App Server install.

In this upgrade Matrix, if there are any builds which indicate the App Server, Self-Destruct or Browser Extensions require an upgrade from the build you are currently using, then follow these instructions:

1. In your Passwordstate folder (typically **c:\inetpub\passwordstate**), you will see a sub-folder called **Downloads**.
2. Take a copy of the file **PasswordstateAppServer.exe**, and copy it across to the server where you have your App Server installed
3. Run **PasswordstateAppServer.exe** as an Administrator (right click and Run as Administrator), and follow the on-screen instructions for the upgrade wizard

7. Password Reset Portal Upgrade Instructions

Please refer to the section 'Upgrades Dependency Matrix' below to determine if you need to follow the instructions below to upgrade the Password Reset Portal install. If needed, follow these instructions:

1. In your Passwordstate folder (typically **c:\inetpub\passwordstate**), you will see a sub-folder called **Downloads**.
2. Take a copy of the file **PasswordstateResetPortal.exe**, and copy it across to the server where you have your Password Reset Portal installed
3. Run **PasswordstateResetPortal.exe** as an Administrator (right click and Run as Administrator), and follow the on-screen instructions for the upgrade wizard

8. Remote Site Locations Agent Upgrade Instructions

With any deployed Remote Site Location Agents, these will automatically upgrade themselves within 10 to 15 minutes after you have upgraded your main Passwordstate server.

As of build 9300, the upgrade process has been changed to download upgrades from your Passwordstate web server itself, instead of from Click Studios' CDN network.

Because of this change in architecture, if you are upgrading Passwordstate from a build earlier than build 9300, you need to follow the instructions below to perform a manual upgrade – all subsequent upgrades will be automatic:

1. In your Passwordstate folder (typically **c:\inetpub\passwordstate**), you will see a sub-folder called Downloads.
2. Take a copy of the file **PasswordstateAgent.exe**, and copy it across to the server where you have your Agent installed
3. Open a DOS prompt as Administrator, and run the following command:
 - a. **PasswordstateAgent.exe /s**

9. Self Destruct Message Web Site Upgrade Instructions

There are two versions of the Self Destruct Message Web sites available, and each have different upgrade processes.

Standard Self Destruct

With the standard Self Destruct web site implementation, the web site itself communicates directly to your Passwordstate SQL Database. This site is embedded by default with your main Passwordstate install, so will get upgraded automatically when you upgrade the core product.

It can also be used as part of the Passwordstate App Server, and section “**App Server Upgrade Instructions**” above describes upgrading this feature, if you have deployed this separately from your Passwordstate install.

Push/Pull Self Destruct

Another version of Self Destruct is available called “**Push/Pull**”, in which the site uses a local SQLite database, and your core Passwordstate installation pushes and pulls all data to this SQLite database. This Self Destruct web site implementation does not require any access back to your Passwordstate SQL database.

To upgrade the Push/Pull version of the Self Destruct Message web site, follow these instructions:


1. In your Passwordstate folder (typically `c:\inetpub\passwordstate`), you will see a sub-folder called Downloads.
2. Take a copy of the file **PasswordstateSelfDestruct.exe**, and copy it across to the server where you have your Self Destruct Web Site installed
3. Run **PasswordstateSelfDestruct.exe** as an Administrator (right click and Run as Administrator), and follow the on-screen instructions for the upgrade wizard

10. Browser Based Remote Session Launcher Gateway

By default, the Browser Based Remote Session Launcher Gateway is embedded with your Passwordstate web site.

This Gateway can also be installed on a separate server to where you have Passwordstate installed if desired. If you have deployed the Gateway separately to your main Passwordstate web site, you will need to follow the instructions below to manually upgrade your Gateway.

1. Log into the server where the Gateway has been installed, stop the '**Passwordstate Gateway Maintenance**' and '**Passwordstate-Gateway**' Windows Services
2. From your core Passwordstate installation, copy the following 4 files across from the folder **C:\inetpub\Passwordstate\hosts\gateway** to where you have the Gateway installed, and overwrite existing files:
 - a. License
 - b. Passwordstate-Gatewayw.exe
 - c. SparkGateway.exe
 - d. SparkGateway.jar
3. Restart the '**Passwordstate Gateway Maintenance**' and '**Passwordstate-Gateway**' Windows Services

 Note: You do not need to upgrade the Browser Based Remote Session Launcher Gateway, if you are using the one that is embedded within your core Passwordstate website.

11. Troubleshooting Server Error in '/' Application

During the upgrade of the core product in Section 3 above, if you see a screen like the screenshot below when trying to access Passwordstate after running the upgrader, then please try the following:

1. Stop your Passwordstate Windows Service
2. Stop Internet Information Services (IIS)
3. Delete all temporary folders and files from the folder
C:\Windows\Microsoft.NET\Framework64\v4.0.30319\Temporary ASP.NET Files
4. Now reboot your server

The error appears to be related to some cached files in IIS, and the instructions above generally fix this issue.

Server Error in '/' Application.

Runtime Error

Description: An exception occurred while processing your request. Additionally, another exception occurred while executing the custom error page for the first exception. The request has been terminated.

If you continue to see this error after following the instructions above, please do the following:

1. In the file c:\inetpub\passwordstate\web.config file, turn customErrors off like in the screenshot below
2. Now try accessing your Passwordstate URL again, and please take a full screenshot of your browser, and report the issue to Click Studios

```
1  <?xml version="1.0" encoding="utf-8"?>
2  <configuration>
3    <configSections>
4      <sectionGroup name="telerik.web.ui">
5        <section name="radScheduler" type="Telerik.Web.UI.RadSchedulerConfigu
6        <section name="radCompression" type="Telerik.Web.UI.RadCompressionCon
7      </sectionGroup>
8    </configSections>
9    <connectionStrings>
10     <add name="PasswordstateConnectionString" connectionString="Data Source
11   </connectionStrings>
12   <appSettings>
13     <add key="SetupStage" value="Setup Complete" />
14     <add key="Secret1" value="{
15     <add key="Secret2" value="1
16   </appSettings>
17   <system.web>
18     <customErrors mode="Off" defaultRedirect="/error/generalerror.aspx" />
19     <xhtmlConformance mode="Strict" />
20     <webServices>
21       <protocols>
22         <add name="HttpPost" />
23       </protocols>
24     </webServices>
25     <!-- MachineKey is used to provide a common encryption key for viewStat
26     <machineKey decryption="AES" decryptionKey="3A5B21E2BF3A6D19EFC71454923
27     <compilation debug="true" defaultLanguage="vb" targetFramework="4.7.2"
28     <httpRuntime maxRequestLength="102400" executionTimeout="1200" requestV
29     <httpHandlers>
30     <add verb="*" path="Telerik.RadUploadProgressHandler.ashx" type="Tale
```

12. Upgrade Dependency Matrix

The following table below shows which Passwordstate Build Numbers require schema changes in the database, or any other dependant modules which also require upgrading at the same time - after you have upgraded your installation of Passwordstate.

Some of these modules do get updates to them over time, but you are not necessarily forced to upgrade them when you upgrade your main Passwordstate instance.

Build No	Database Schema Updates	App Server	Mobile Apps	Password Reset Portal	Remote Site Locations Agent	Browser Extensions	Self Destruct	Remote Session Launcher Gateway
9519	Yes	No	No	No	No	No	No	No
9512	Yes	No	No	No	No	No	No	No
9500	No	No	No	No	No	No	No	No
9493	Yes	Yes	Yes	Yes	No	No	No	No
9471	Yes	No	No	No	Yes	No	No	No
9455	Yes	No	No	No	No	No	No	No
9435	Yes	Yes	Yes	No	No	No	Yes	No
9414	No	No	No	Yes	No	No	No	No
9400	Yes	No	No	Yes	No	No	No	No
9381	Yes	No	No	No	Yes	No	No	No
9360	No	No	No	No	No	No	No	No
9350	Yes	No	No	No	Yes	No	No	No
9300	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes
9117	Yes	No	No	No	Yes	No	No	No

Click Studios**Passwordstate Upgrade Instructions**

9112	Yes	No	No	No	No	No	No	No
9100	No	No	No	No	No	No	No	No
9073	No	No	No	No	No	No	No	No
9065	Yes	No	No	No	No	No	No	No
9050	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes
9000	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes