



# Click Studios

## Passwordstate

## Installation Instructions

# Table of Contents

<b>1</b>	<b>SYSTEM REQUIREMENTS - GENERAL .....</b>	<b>3</b>
<b>2</b>	<b>INSTALLING MICROSOFT IIS AND SQL SERVER.....</b>	<b>4</b>
<b>3</b>	<b>INSTALLING PASSWORDSTATE .....</b>	<b>5</b>
<b>4</b>	<b>SSL CERTIFICATE CONSIDERATIONS.....</b>	<b>8</b>
<b>5</b>	<b>CONFIGURING PASSWORDSTATE FOR FIRST TIME USE.....</b>	<b>10</b>
<b>6</b>	<b>POST INSTALL INSTRUCTIONS.....</b>	<b>19</b>

# 1 System Requirements - General

Passwordstate has the following system requirements:

## Web Server

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

- Microsoft Windows Server 2008 & IIS 7.0
- Microsoft Windows Server 2008 R2 & IIS 7.5
- Microsoft Windows Server 2012 & IIS 8.0
- Microsoft Windows Server 2012 R2 & IIS 8.5
- Windows 7 & IIS 7.5
- Windows 8 & IIS 8.0
- Windows 10 & IIS 10.0

**Note:** Microsoft **.Net Framework 4.5**, and **PowerShell 3.0 or above** must also be installed on your web server.

## 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 create a database. SQL Server can be installed either on the same web server as Passwordstate, or on any other Windows Server in your environment.

- Microsoft SQL Server 2008
- Microsoft SQL Server 2008 Express
- Microsoft SQL Server 2008 R2
- Microsoft SQL Server 2008 R2 Express
- Microsoft SQL Server 2012
- Microsoft SQL Server 2012 Express
- Microsoft SQL Server 2014
- Microsoft SQL Server 2014 Express
- Microsoft SQL Server 2016
- Microsoft SQL Server 2016 Express

**Important:** SQL Server must be configured for mixed-mode authentication, so the Passwordstate web site can connect to SQL Server using an SQL Account. **Active Directory Accounts cannot be used to authenticate against the database.**

## 2 Installing Microsoft IIS and SQL Server

Before you install Passwordstate, you are required to already have Internet Information Servers (IIS) and SQL Server Express or above installed. Below are a couple of links to show how to install these if you require any help

- Install IIS (Web Server) - <https://www.clickstudios.com.au/community/index.php?/topic/1786-how-to-install-internet-information-services-iis/>
- Install SQL Server (Database Server) - [https://www.clickstudios.com.au/downloads/Installing\\_SQLServerExpress\\_2016.pdf](https://www.clickstudios.com.au/downloads/Installing_SQLServerExpress_2016.pdf)

### 3 Installing Passwordstate

To install Passwordstate, run 'Passwordstate.exe' and follow these instructions:

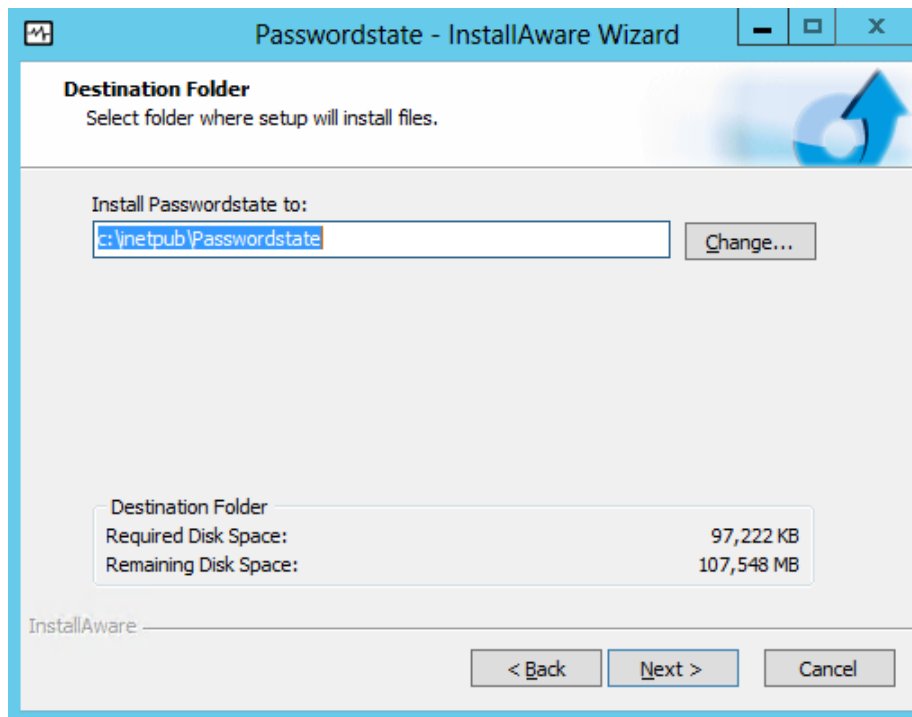
1. At the 'Passwordstate Installation Wizard' screen, click on the 'Next' button



2. At the 'License Agreement' screen, tick the option 'I accept the terms in the License Agreement', then click on the 'Next' button



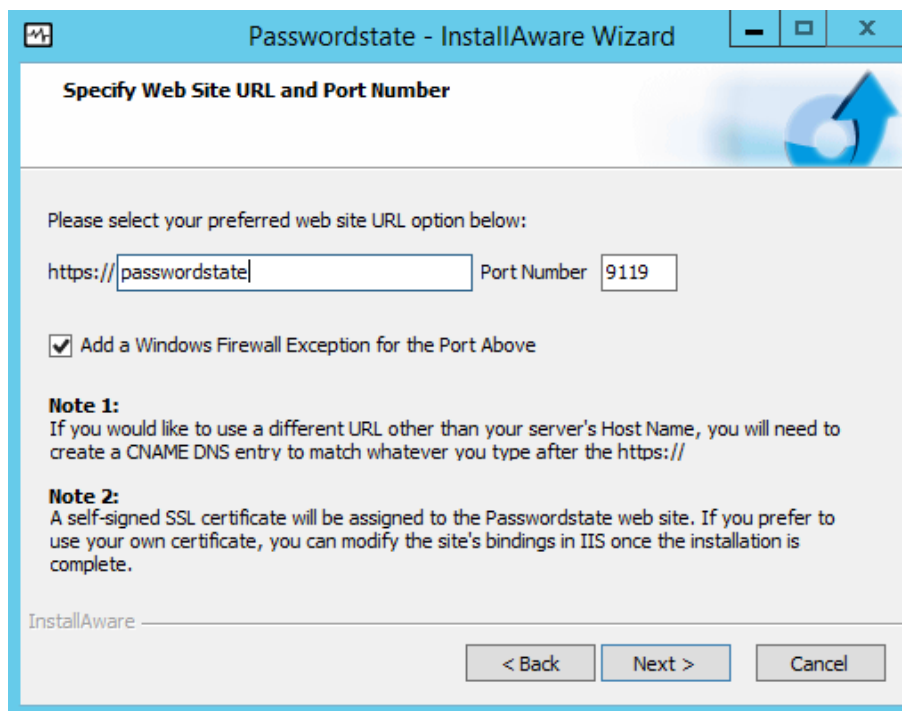
3. At the 'Destination Folder' screen, you can either accept the default path or change to a different location, then click on the 'Next' button



- At the 'Specify Authentication Options for Passwordstate' screen, select your preferred authentication method, and then click on the 'Next' button



- At the 'Specify Web Site URL and Port Number' screen, specify the URL you would like to use, then click on the 'Next' button



- At the 'Completing the InstallAware Wizard for Passwordstate' screen, click on the 'Next' button



- Once installed, click on the 'Finish' button
- If you have a Firewall enabled on your web server, you may need to open up the port number you specified during the install (default is 9119), so that users are able to access the web site

## 4 SSL Certificate Considerations

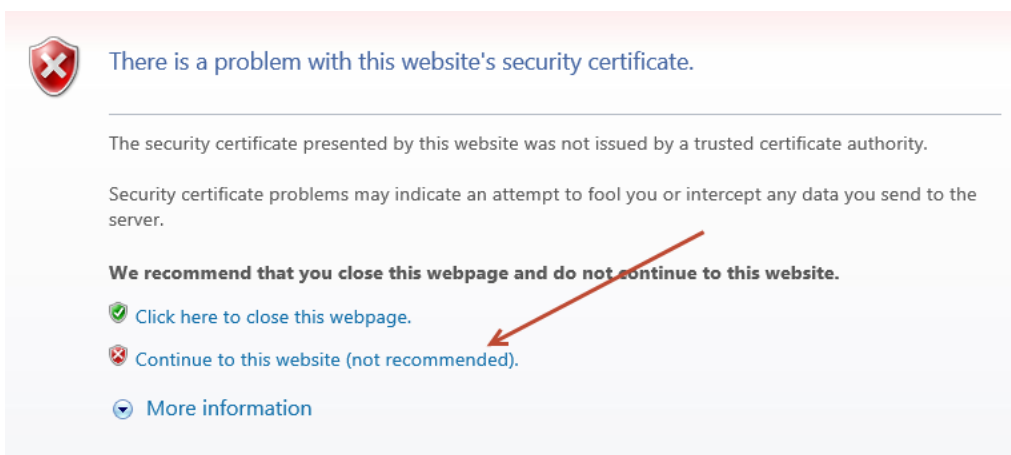
The installer for Passwordstate installs a self-signed SSL certificate on your web server, and binds it to the Passwordstate web site.

If you have your own SSL certificate installed on the web server you'd prefer to use, you can modify the bindings for the site in IIS, and select the appropriate certificate.

If you wish to continue using the self-signed SSL certificate, then you may want to instruct your users to "Install" the certificate on their computer, so the various Internet browsers don't complain about the certificate not being issued by a trusted authority.

To install the certificate, you can follow these steps:

1. Using Internet Explorer, browser to the Passwordstate web site
2. When you see the following screen, click on the 'Continue to this website' link

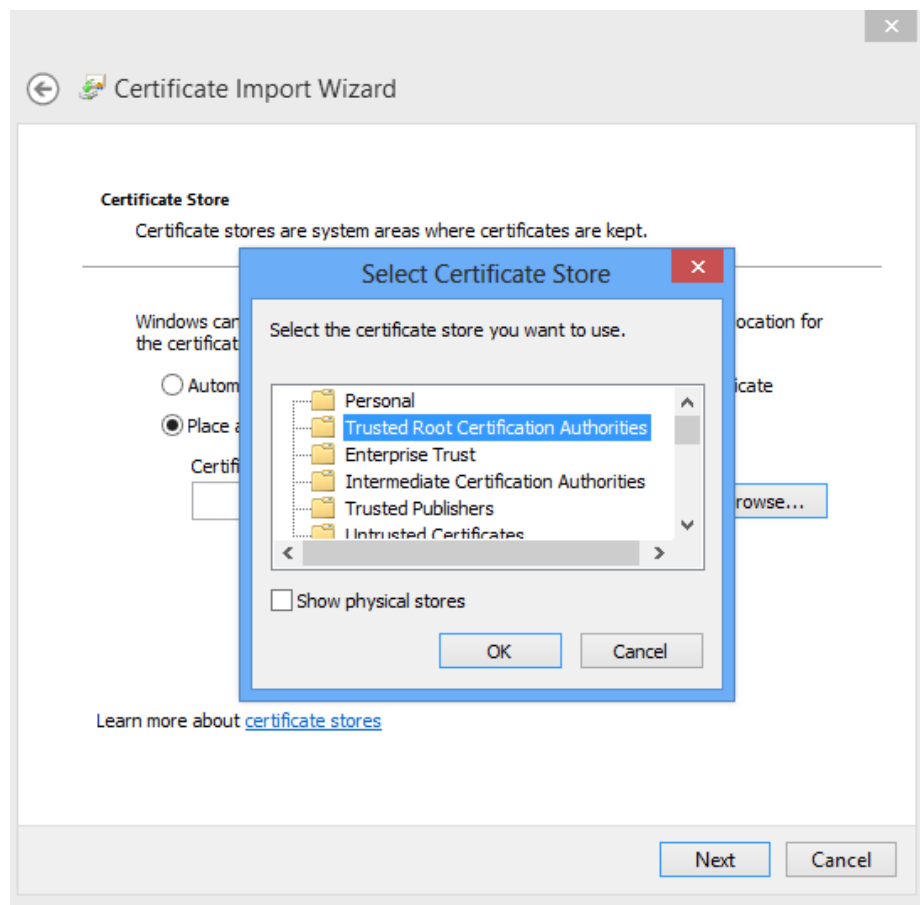


3. Now click on the 'Certificate error' link at the top of your screen



4. The click on 'View Certificates', then on the 'Install Certificate...' button
5. Select the 'Local Machine' Store Location, then click on the 'Next' button
6. Select 'Place all certificates in the following store' option, click on the 'Browse' button, and select 'Trusted Root Certification Authorities' as per the next screenshot



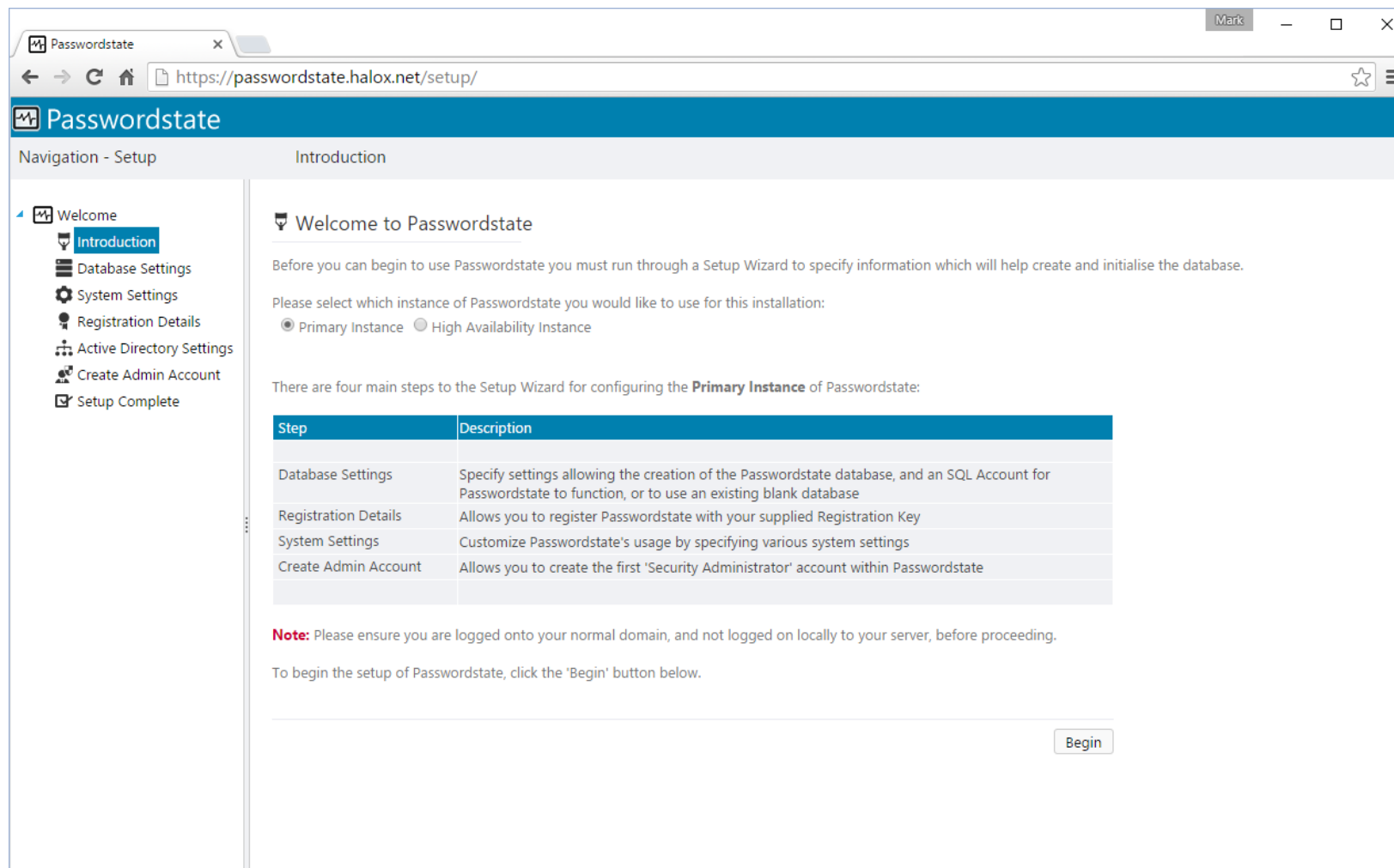


7. Now click on the 'OK' button, then the 'Next' and 'Finish' buttons
8. After the certificate is installed, you can close and re-open your browser to the Passwordstate web site, and it should no longer complain about an untrusted certificate

## 5 Configuring Passwordstate for First Time Use

**Introduction** - Now that Passwordstate is installed, you can direct your browser to the URL you specified during the initial install, and follow the initial Setup Wizard – this wizard will guide you through a series of questions for configuring Passwordstate for use.

**Please Note 1:** If using 'Active Directory Integrated' authentication, please ensure you are logged onto your domain, and not logged on locally to your server, before proceeding.



The screenshot shows a web browser window with the URL `https://passwordstate.halox.net/setup/`. The page title is "Passwordstate" and the navigation bar shows "Navigation - Setup" and "Introduction". The left sidebar contains a list of setup steps: Welcome, Introduction (selected), Database Settings, System Settings, Registration Details, Active Directory Settings, Create Admin Account, and Setup Complete. The main content area is titled "Welcome to Passwordstate" and contains the following text:

Before you can begin to use Passwordstate you must run through a Setup Wizard to specify information which will help create and initialise the database.

Please select which instance of Passwordstate you would like to use for this installation:

☒ Primary Instance ☐ High Availability Instance

There are four main steps to the Setup Wizard for configuring the **Primary Instance** of Passwordstate:

Step	Description
Database Settings	Specify settings allowing the creation of the Passwordstate database, and an SQL Account for Passwordstate to function, or to use an existing blank database
Registration Details	Allows you to register Passwordstate with your supplied Registration Key
System Settings	Customize Passwordstate's usage by specifying various system settings
Create Admin Account	Allows you to create the first 'Security Administrator' account within Passwordstate

**Note:** Please ensure you are logged onto your normal domain, and not logged on locally to your server, before proceeding.

To begin the setup of Passwordstate, click the 'Begin' button below.

[Begin](#)

**Database Settings – Create New Database** - On this screen you will need to specify database settings for creating the Passwordstate database. Please use the onscreen instructions if you have any issues connecting to the database.

**Please Note:** Creating the database, and populating the tables with data, could take up to a minute to complete.

Passwordstate

https://passwordstate.halox.net/setup/

Navigation - Setup

Database Settings

Welcome

Introduction

Database Settings

System Settings

Registration Details

Active Directory Settings

Create Admin Account

Setup Complete

### Database Settings

In order to create the Passwordstate database, the following conditions must be met:

**Condition 1:** Your SQL Server must be configured for **mixed-mode authentication**

**Condition 2:** You must supply an SQL Account (below) with sufficient privileges to create the Passwordstate database - at a minimum the 'dbcreator' and 'securityadmin' SQL Server roles

If you are having problems connecting to the database, click here for help - [Possible Connection Failure Reasons.](#)

**Please Note:** Creating the database, and populating the tables with data, can take up to a minute to complete.

[create new database](#) [connect to blank database](#) [database creation log](#)

To create a new database, please specify details below as appropriate.

Database Server Name \*

SQL Server Instance Name

SQL Login Name \*

sa

Specify an SQL Account login here - not a Windows Domain account.

Note: This account will no longer be used after the initial setup is complete.

Password \*

☐ I have clicked on the 'Test Connection' link

Status: Not tested

[Test Connection](#) [Next](#)

**Database Settings – Connect to Blank Database** – If you prefer to create the blank Passwordstate database yourself prior to tables being created and populated with data, you can do so by clicking on the ‘Connect to Blank Database’ tab first.

**Please Note:** You must first create a blank database to connect to, and an appropriate SQL Account which has db\_owner rights to this database. If connecting to a Microsoft Azure or Amazon AWS database, please refer to their documentation for how to create the database and SQL Account.

The screenshot shows the Passwordstate setup interface in a web browser. The browser address bar shows <https://passwordstate.halox.net/setup/>. The page has a blue header with the Passwordstate logo. A left sidebar contains a navigation menu with the following items: Welcome, Introduction, Database Settings (highlighted), System Settings, Registration Details, Active Directory Settings, Create Admin Account, and Setup Complete. The main content area is titled 'Database Settings' and contains the following text: 'In order to create the Passwordstate database, the following conditions must be met: Condition 1: Your SQL Server must be configured for mixed-mode authentication Condition 2: You must supply an SQL Account (below) with sufficient privileges to create the Passwordstate database - at a minimum the 'dbcreator' and 'securityadmin' SQL Server roles'. Below this is a link: 'If you are having problems connecting to the database, click here for help - Possible Connection Failure Reasons.' A 'Please Note' section states: 'Creating the database, and populating the tables with data, can take up to a minute to complete.' There are three tabs: 'create new database', 'connect to blank database' (selected), and 'database creation log'. The 'connect to blank database' tab contains the following text: 'To connect to a blank database you have manually created yourself, please specify details below as appropriate.' A red flag icon and note state: 'Note: You must have also created the SQL Login Name below yourself, and this account requires db\_owner rights to the Passwordstate database only.' The form fields are: 'Database Location \*' with radio buttons for 'Internal' (selected), 'Microsoft Azure', and 'Amazon RDS'; 'Database Server Name \*' with a text box; 'SQL Server Instance Name' with a text box; 'Database Name \*' with a text box containing 'passwordstate'; 'SQL Login Name \*' with a text box containing 'passwordstate\_user'; and 'Password \*' with a text box. Below the password field is a checkbox labeled 'I have clicked on the 'Test Connection' link'. At the bottom, the status is 'Status: Not tested' and there are 'Test Connection' and 'Next' buttons.

**System Settings** – On this screen you specify various system wide settings for Passwordstate usage. Explanation for each of these settings is detailed after this screenshot.

Navigation - Setup

System Settings

system settings

**Email Settings**  
Please specify the appropriate email details so Passwordstate can send emails - leave blank if you want no emails to be sent.

Email Server Host Name :

Email Server Port Number :

Send From Email Address :

Use Mailbox to Send : ☒ Yes ☐ No

Send Mail via TLS : ☐ Yes ☒ No

User Name :

Password :

Domain Name :

**Emergency Access Account**  
Please specify a Password for the Emergency Access account, and the URL for this login is 'https://passwordstate.halox.net/emergency'

Password: \*

Confirm Password: \*

**FIPS Support**  
If your environment needs to support FIPS compliance (Federal Information Processing Standards), please click the 'Yes' option below.

**Note:** FIPS support is generally not required, unless mandated by the US government for your organization. Once the FIPS supported encryption method is being used, it cannot be turned off.

☐ Yes ☒ No

**Proxy Server Settings**  
If required, specify proxy settings for checking for new builds:

Proxy Server :   
Format is "ServerName:PortNumber"

User Name :

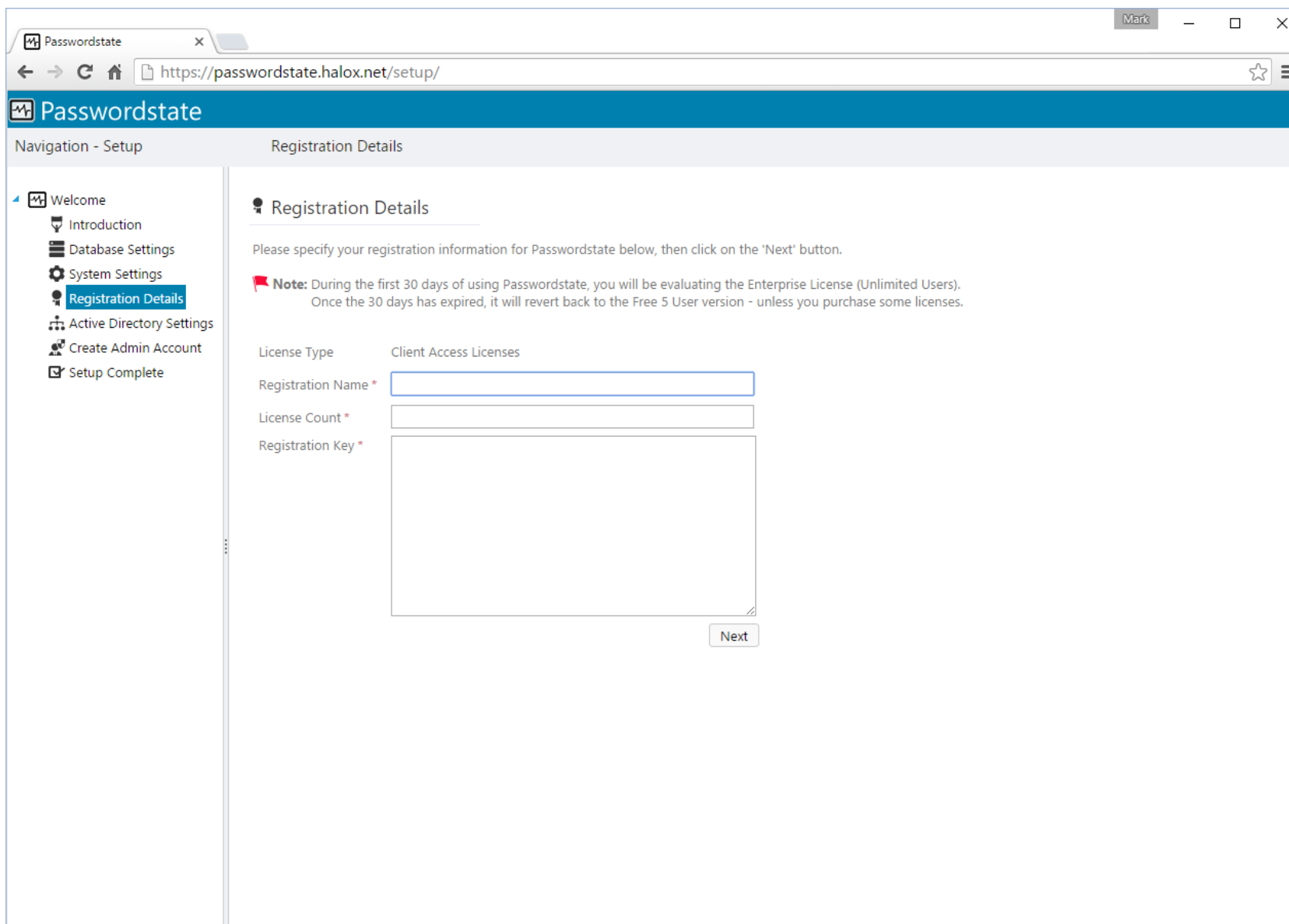
Password :

Next

**System Settings Detail**

Action	Description
<b>Email Settings</b>	
<i>Email Server Host Name</i>	The host name of an email server which is able to send either anonymous SMTP email, or authenticated email from a specific mailbox
<i>Email Server Port Number</i>	The port number in which your email server is configured to send mail (port 25 is generally the default port)
<i>SMTP Address</i>	The SMTP address you would like emails to be sent from when generated from within Passwordstate
<i>Use Mailbox to Send</i>	If you would like to send all email in Passwordstate from an authenticated mailbox, then select this option. If unselected, email will be sent via anonymous SMTP
<i>User Name &amp; Password</i>	Domain user name and Password for the authenticated mailbox
<i>Domain Name</i>	NetBIOS name for the domain the mailbox belongs to
<b>Emergency Access Account</b>	The Emergency Access Account is only used if you're unable to authenticate with any other accounts
<b>Miscellaneous Settings</b>	
<i>FIPS Support</i>	If you're organization requires compliance for the FIPS standard, select this encryption option
<i>Proxy Server</i>	Passwordstate can check if new versions are available. If you require to specify some proxy server details to access the Internet, you can do so here (checks for updates can also be disabled once you've started Passwordstate)

**Registration Details** – On this screen you need to specify your Registration details for Passwordstate. If you have not received your registration details, please visit [www.clickstudios.com.au](http://www.clickstudios.com.au).



The screenshot shows a web browser window with the URL <https://passwordstate.halox.net/setup/>. The page title is "Passwordstate" and the navigation bar shows "Navigation - Setup" and "Registration Details". The left sidebar contains a list of setup steps: Welcome, Introduction, Database Settings, System Settings, Registration Details (highlighted), Active Directory Settings, Create Admin Account, and Setup Complete. The main content area is titled "Registration Details" and contains the following text:

Please specify your registration information for Passwordstate below, then click on the 'Next' button.

**Note:** During the first 30 days of using Passwordstate, you will be evaluating the Enterprise License (Unlimited Users). Once the 30 days has expired, it will revert back to the Free 5 User version - unless you purchase some licenses.

The form includes the following fields:

- License Type: Client Access Licenses
- Registration Name \*:
- License Count \*:
- Registration Key \*:

A "Next" button is located at the bottom right of the form.

## Active Directory Settings

If you have installed the Active Directory integrated version of Passwordstate, there are certain AD settings you must also supply. For the Privileged Account Credentials, you must at supply an account which has 'Read' access to AD, so Security Groups can be queried, and user account enabled/disabled status can be determined.

The screenshot shows a web browser window with the URL <https://passwordstate.halox.net/setup/>. The page title is "Passwordstate" and the navigation bar shows "Navigation - Setup" and "Active Directory Settings". The left sidebar contains a list of setup steps: Welcome, Introduction, Database Settings, System Settings, Registration Details, Active Directory Settings (highlighted), Create Admin Account, and Setup Complete. The main content area is titled "Active Directory Settings" and includes a sub-header "active directory settings". Below this, there is a section "Active Directory Domain" with the instruction "Please confirm the Active Directory settings are correct for your domain." It contains two input fields: "AD Domain NetBIOS Name \*" with the value "halox" and a hint "e.g. clickstudios", and "AD Domain LDAP Query String \*" with the value "DC=halox,DC=net" and a hint "e.g. dc=clickstudios,dc=com,dc=au". Below this is a section "Read Privileged Account Credentials" with the instruction "Specify account with Read access to query Active Directory Users and Security Groups:". It contains two input fields: "UserName : \*" with a placeholder "Domain\UserID" and "Password : \*" with a password strength indicator icon. A "Next" button is located at the bottom right of the form.

active directory settings

**Active Directory Domain**  
Please confirm the Active Directory settings are correct for your domain.

AD Domain NetBIOS Name \* :   
e.g. clickstudios

AD Domain LDAP Query String \* :   
e.g. dc=clickstudios,dc=com,dc=au

**"Read" Privileged Account Credentials**  
Specify account with Read access to query Active Directory Users and Security Groups:

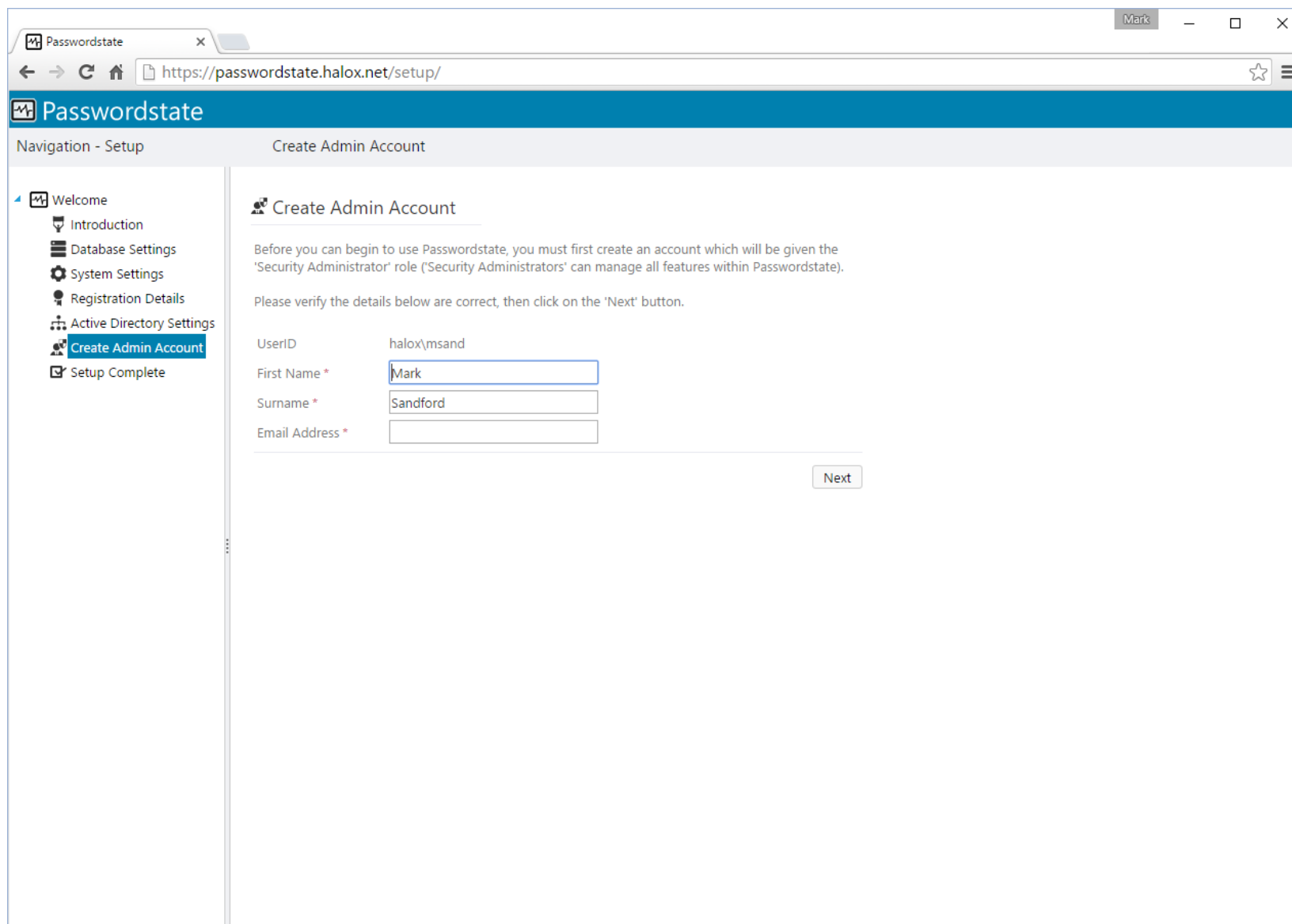
UserName : \*  Domain\UserID

Password : \*

Next



**Create Admin Account** – On this screen you specify details for the first user account to be created in Passwordstate. This account will be granted Security Administrator privileges, and assign all Security Administrator roles.



The screenshot shows a web browser window with the URL `https://passwordstate.halox.net/setup/`. The page title is "Passwordstate" and the navigation bar indicates "Navigation - Setup" and "Create Admin Account".

**Left Navigation Panel:**

- Welcome
- Introduction
- Database Settings
- System Settings
- Registration Details
- Active Directory Settings
- Create Admin Account** (highlighted)
- Setup Complete

**Main Content Area:**

### Create Admin Account

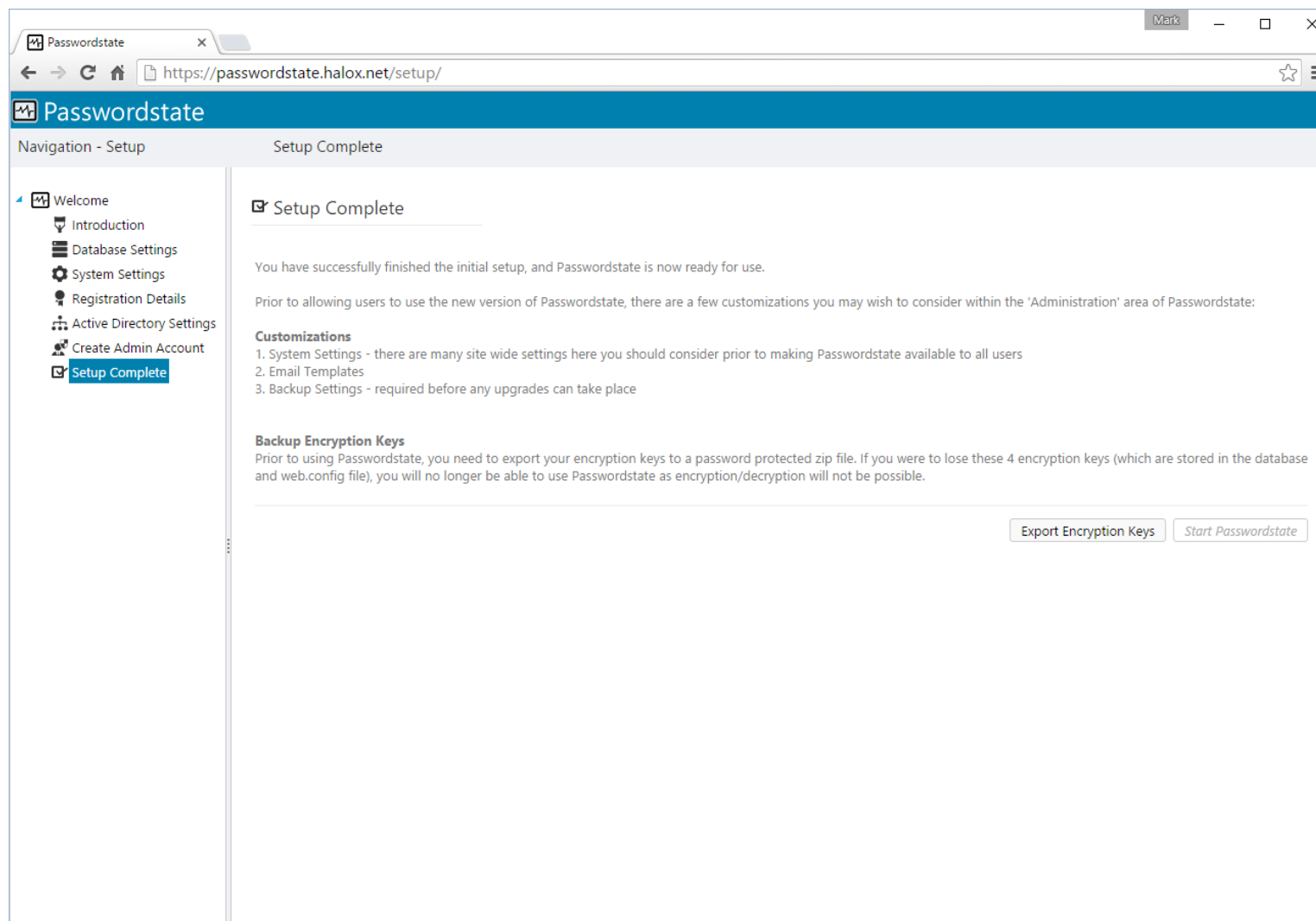
Before you can begin to use Passwordstate, you must first create an account which will be given the 'Security Administrator' role ('Security Administrators' can manage all features within Passwordstate).

Please verify the details below are correct, then click on the 'Next' button.

UserID	halox\msand
First Name *	<input type="text" value="Mark"/>
Surname *	<input type="text" value="Sandford"/>
Email Address *	<input type="text"/>

**Setup Complete** – The installation is now complete and you can begin using Passwordstate. Prior to granting access, or informing users of the new version, you may wish to review some of the system wide settings found under the 'Administration' area of Passwordstate.

**Export Encryption Keys** – It is very important you export your encryption keys for safe storage outside of Passwordstate. If you were to lose your web.config file in a disaster, Click Studios would not be able to help you rebuild your Passwordstate environment. The split encryptions keys are stored in the web.config file, and within the database.



## 6 Post Install Instructions

We also have additional information in our General Installation Guide, which answers many post install questions we have received from customers. Some of these questions include:

- Using a different URL for the site
- Accessing the site from Mac and Linux Desktops or from the Internet
- Encrypting settings in the web.config file
- Anti-Virus Considerations

Below is a link for our General Installation Guide if needed -

[https://www.clickstudios.com.au/downloads/version7/Installation\\_Instructions.pdf](https://www.clickstudios.com.au/downloads/version7/Installation_Instructions.pdf)