

---

# IISADMPWD Replacement Tool v2.7 Installation and Configuration Guide

---

Instructions to Install and  
Configure IISADMPWD  
Replacement Tool v2.7

---

Web Active Directory, LLC

---

# IISADMPWD Replacement Tool v2.7

## Installation and Configuration Guide

---

### Contents

- Overview ..... 2
- Solution Benefits ..... 2
- Solution Architecture ..... 2
- IISADMPWD Replacement Tool Features ..... 3
- IIS Technical Notes ..... 4
- Installation Support..... 5
- System Requirements ..... 5
- Installation Instructions ..... 6
  - Installation Procedure..... 6
- Quick Start Guide ..... 7
  - Run the Check Password Status Web Application ..... 7
  - Configure the Check Password Status Application ..... 7
  - Run the Change Password Web Application..... 7
  - Configure the Change Password Application..... 8
- IISADMPWD Replacement Tool Administration ..... 8
  - Best Practices for Implementation ..... 8
- Securing the Admin Page ..... 8
- Changing the text in the Application ..... 9
  - Localization ..... 9
- Upgrades from Previous Versions of IISADMPWD Replacement Tool ..... 10
  - Upgrade Procedure for Releases prior to v2.0 ..... 10
  - Upgrading IISADMPWD Replacement Tool from a pre-v2.0 Release ..... 10

# IISADMPWD Replacement Tool v2.7

## Installation and Configuration Guide

---

### Overview

IISADMPWD Replacement Tool sits in front of your web application and checks the password status for a user before routing them to your web application. The solution comprises two simple ASP.NET web applications: one to check the password status and one to allow password changes if the password is expired or must be changed at next logon. The solution essentially acts as a front end for your web application and you can configure where the IISADMPWD Replacement Tool application redirects after it checks a user's password status.

These configuration notes provide direction on installing and configuring IISADMPWD Replacement Tool for your environment. The WebAD IISADMPWD Replacement Tool replaces the original IISADMPWD ASP application available from Microsoft® for versions of Internet Information Services (IIS) before IIS 7 and Windows Server 2008. Make sure you meet the system requirements before you install the solution and you can get more information about IISADMPWD Replacement Tool at <https://www.webactivedirectory.com/products/iisadmpwd/>.

### Solution Benefits

IISADMPWD Replacement Tool offers several benefits to your organization from ease of use to affordability.

- Users can change their own password and avoid calls to the help desk.
- IISADMPWD Replacement Tool only requires one extra step in the authentication process: asking the user for her Active Directory user name to check password status. Otherwise, your application works exactly the same way as it does now.
- You do not need to make changes to your web application's authentication scheme.
- IISADMPWD Replacement Tool has a very affordable purchase price and you can use it for multiple web applications.

### Solution Architecture

The diagram shows the workflow for IISADMPWD Replacement Tool. This simple workflow provides a consistent approach for authentication and only adds one extra step to the authentication process.

1. A user requests to log in to the check password status application. This application acts as a front end to your web application and uses Anonymous authentication in IIS.
2. The check password status application checks the Active Directory password status to determine if the user needs to change the password.
3. The check password status application sends the user to your web application if no password change is required. Otherwise, the user goes to the change password application

# IISADMPWD Replacement Tool v2.7

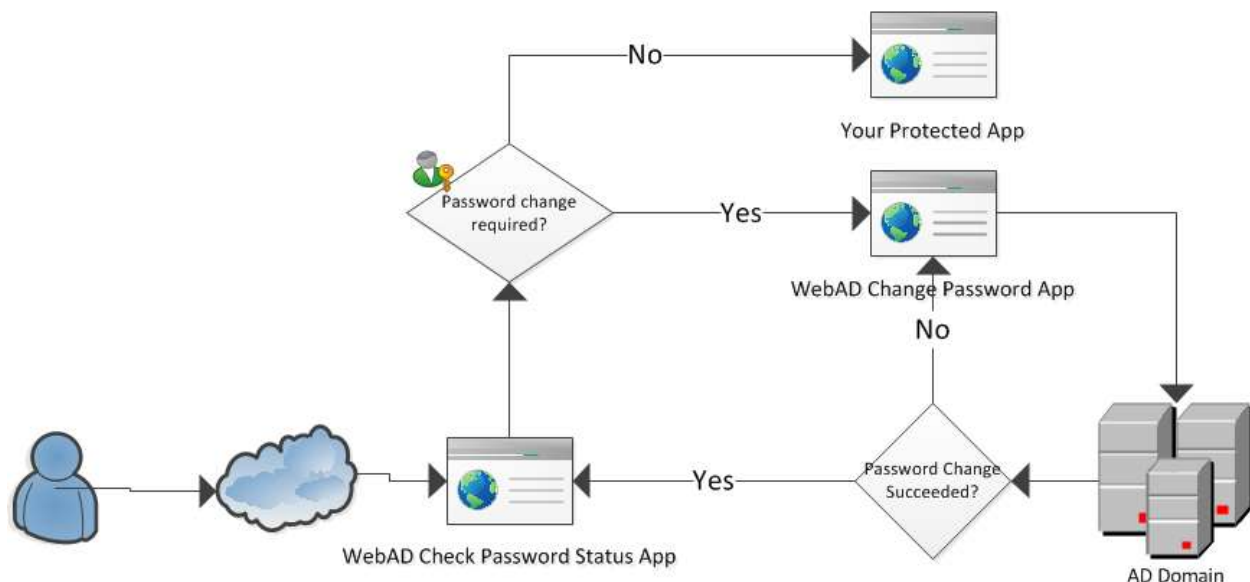
## Installation and Configuration Guide

---

where she can change her AD password. The change password application also uses Anonymous authentication.

4. After the password change completes successfully, the user is routed back to the check password status application to begin the login process again.

### Web Active Directory IISADMPWD Replacement Tool Application Architecture



### IISADMPWD Replacement Tool Features

Take note of the following features in IISADMPWD Replacement Tool.

- The IISADMPWD Replacement Tool solution includes two web applications:
  1. Check Password Status: Acts as the first page of the authentication process and checks the Active Directory password status for a user to determine if the password must be changed.
  2. Change Password: Allows users to change their AD password.
- IIS Anonymous authentication allows users to access the web applications regardless of their password status.
- Once the password status check completes and no password change is needed, the Check Password Status web application redirects the user to your web application and your application then authenticates the user normally.
- You can use the redirect-401-1-auth-failure.htm file to redirect clients who receive a HTTP 401.1 status code response (Access is denied due to invalid credentials). This allows you to send these

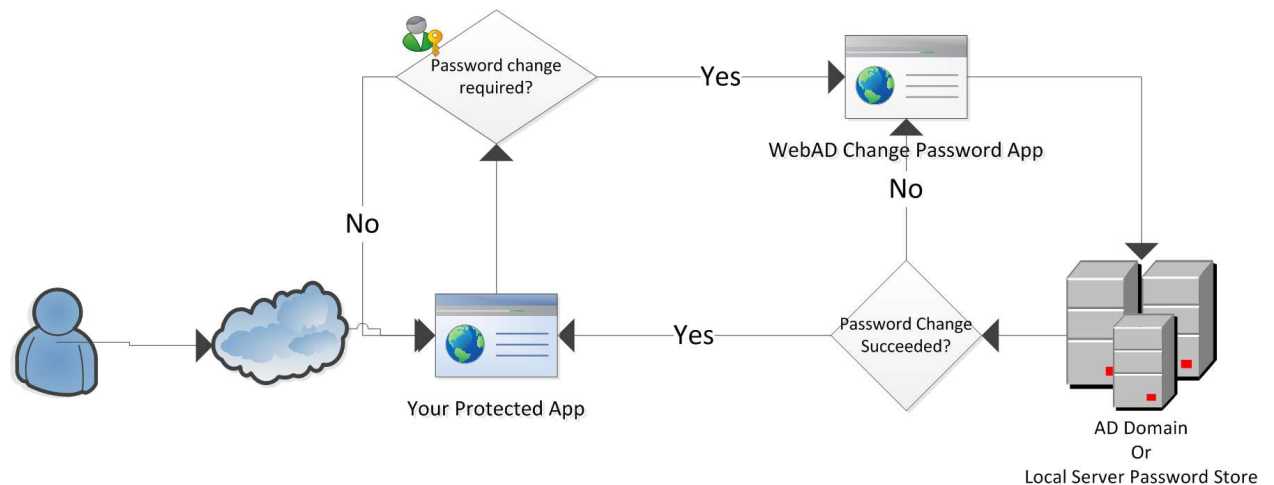
# IISADMPWD Replacement Tool v2.7

## Installation and Configuration Guide

---

clients to the Check Password Status application or alternately the Change Password application if you desire. The following architecture diagram shows what this looks like when this file is used to redirect to the Change Password application. Note in this case the Check Password application is not used:

Web Active Directory IISADMPWD Replacement Tool Alternate Architecture



- Change your web application configuration to start with the Check Password Status application. This ensures the password status is checked before the user tries to authenticate against your web application.

## IIS Technical Notes

You do not need to make any IIS changes to continue using your existing web application with IISADMPWD Replacement Tool.

- IIS 7 and later editions will not authenticate users under Windows, Basic or Digest authentication when the user has an expired password or the password must be changed at next logon.
- IISADMPWD Replacement Tool uses Anonymous authentication to allow all users to access the application, regardless of AD password status.
- IISADMPWD Replacement Tool allows you to continue using your web application without changing your current authentication architecture or scheme.

# IISADMPWD Replacement Tool v2.7

## Installation and Configuration Guide

---

### Installation Support

Visit <https://www.webactivedirectory.com/support> if you need assistance with issues that arise while installing or configuring IISADMPWD Replacement Tool.

### System Requirements

Please note the important system requirements detailed below before installing IISADMPWD Replacement Tool. You can also install each component individually by adding roles to your server using Server Manager.

Requirement	Description
<b>Windows Server 2016, Windows Server 2008 and 2008 R2, Windows Server 2012 and 2012 R2</b>	Supported Operating Systems
<b>IIS 7 or Later with ASP.NET and Windows Integrated Security</b>	The Webserver That hosts ASP.NET Web Applications
<b>Microsoft .NET Framework version 4.5.1</b>	Runs .NET applications. You must install at least version 4.5.1 of the .NET Framework. You can download the framework from Microsoft's download site at <a href="https://www.microsoft.com/en-us/download/details.aspx?id=40779">https://www.microsoft.com/en-us/download/details.aspx?id=40779</a> .
<b>Optional: Windows service account with permissions to change passwords in Active Directory</b>	Used by IISADMPWD Replacement Tool to change passwords in Active Directory. <b>Important Note</b> Web Active Directory recommends that you do not set up a service account to change passwords as the permissions to change passwords in Active Directory are already in place by default.
<b>7 MB disk space</b>	Stores physical files used to run IISADMPWD Replacement Tool

# IISADMPWD Replacement Tool v2.7

## Installation and Configuration Guide

---

### Installation Instructions

This section includes installation instructions for new installations of IISADMPWD Replacement Tool. If you are upgrading from a previous version, please review the instructions for upgrading at the end of this document.

### Installation Procedure

The IISADMPWD Replacement Tool installer includes two web applications. The default installation directory is %Program Files%\WebActiveDirectory\IISADMPWD\_ReplacementTool.

The IISADMPWD Replacement Tool installer contains everything you need to run IISADMPWD Replacement Tool. Refer to the System Requirements section on page 5 for more information about prerequisites. The installation takes a very small amount of time and leaves you with a clean IISADMPWD Replacement Tool installation that is ready for you to use in your environment after a little configuration.

### NOTE

---

When installing applications on Windows Server 2008 or 2012, ***you must run the installer as an administrator*** or the installation will not complete all the setup tasks. Even if you are logged in to the installation server as an administrator, the operating system will not run the installation under the administrator account's privileged security context unless you explicitly run it this way. Ensure you right-click the WebAD\_IISADMPWD\_ReplacementToolSetup.exe file and choose ***Run as administrator*** to install IISADMPWD Replacement Tool under an administrative security context.

---

1. Unzip the contents of the zip file you downloaded from the Web Active Directory download site to a location on your local installation system.
2. Read the important installation notes contained in the installation guide included with the download package.
3. To begin the installation, right-click and choose Run as administrator to run the WebAD\_IISADMPWD\_ReplacementToolSetup.exe file that you extracted from the zip file. This starts the product installer under an administrative user security context. The installer will not work correctly if you do not right-click and choose Run as administrator.
4. Follow the steps through installer and when you reach the end Click Finish to close the installer.
5. You are now ready to run IISADMPWD Replacement Tool. Check out the Quick Start Guide to customize your configuration settings for your environment.

# IISADMPWD Replacement Tool v2.7

## Installation and Configuration Guide

---

### Quick Start Guide

Once you complete installation of IISADMPWD Replacement Tool, you can run it on the local server through the Program Files > Web Active Directory IISADMPWD Replacement Tool menu. You can also go directly to the web applications using your browser on ports 8501 and 8502.

### Run the Check Password Status Web Application

Point a browser to <http://<YourServerName>:8501/> to run the Check Password Status application. You need to go to the /Admin page to configure application settings and the path to the Admin page looks like <http://<YourServerName>:8501/Admin>.

Once you verify that you can connect to the Check Password Status web application, go to the Configure the Check Password Status Application topic to set up the basic configuration values for the application.

### Configure the Check Password Status Application

Once on the Check Password Status Admin page, you need to set a few configuration values so that you can properly run the Check Password Status web application. At a minimum, configure the following values to get started. Refer to the help text on the right side of the Admin page for help with other configuration values.

#### NOTE

You typically do not need to set the Service account name and Service account password values for the Check Password Status web application. Leave these values blank to begin and only set them if the application pool account (Network Service) cannot read the directory to determine a user's password status.

- **Change password app URL:** Set this value to the URL of the Change Password web application. This value tells the Check Password Status web application how to route a user who needs to change her password.
- **Application path:** Enter the URL to the back-end web application that you are protecting with the Check Password Status web application. This value tells the Check Password Status web application how to route a user whose password does not need to change.

### Run the Change Password Web Application

Point a browser to <http://<YourServerName>:8502/> to run the Change Password application. You need to go to the /Admin page for the application to configure application settings and the path to the Admin page looks like <http://<YourServerName>:8502/Admin>.

Once you verify that you can connect to the Change Password web application, go to the Configure the Change Password Application topic to set up the basic configuration values for the application.



# IISADMPWD Replacement Tool v2.7

## Installation and Configuration Guide

---

### Configure the Change Password Application

Once on the Change Password Admin page, you should set the correct values for your local password policy. Refer to the help text on the right side of the Admin page for help with other configuration values.

### NOTE

---

The Change Password web application typically **does not** require a service account since Active Directory provides access to all users to change any other user's password.

---

### IISADMPWD Replacement Tool Administration

The IISADMPWD Replacement Tool includes two web applications to allow you to replace the functionality in the original IISADMPWD tool from Microsoft. For each application, go to the Admin page available at <http://<YourServerName>:xxx/Admin> to configure application settings. The Admin page explains the purpose of each configuration setting.

### Best Practices for Implementation

Ideally, you will set up the IISADMPWD Replacement Tool Check Password Status application as the front end to the web application you are protecting. This application checks Active Directory to see if a user's password needs to change. If the password needs changing, the user is redirected to the IISADMPWD Replacement Tool Change Password application. If no password change is required, the user will be passed through to the web application you are protecting and will be authenticated by that application.

### Securing the Admin Page

You can secure the Admin pages for both the IISADMPWD Replacement Tool web applications— Check Password Status and Change Password—using the Web.config file in each application's root directory.

1. Open Windows Explorer.
2. Go to the IISADMPWD Replacement Tool installation directory, typically %Program Files%\WebActiveDirectory\IISADMPWD\_ReplacementTool.
3. Access the Login directory to modify Check Password Status application security and use the ChangePassword directory for Change Password application security.
4. Open the Web.config file for each directory in a text editor. You might need to run your text editor as an administrator to save the settings.
5. Find the <location /> element as specified below.

```
<location path="Admin">  
  <system.web>  
  <authorization>
```

# IISADMPWD Replacement Tool v2.7

## Installation and Configuration Guide

---

```
<allow roles="Everyone" />
<deny users="*" />
</authorization>
</system.web>
</location>
```

6. Modify the value of the roles attribute in the <allow /> element. Set this value to the DOMAIN\GroupName for the domain members you want to allow to access the Admin page. Separate multiple groups using a comma.
7. Save your changes.
8. Test the security to ensure that only authorized users can access the Admin page

### Changing the text in the Application

You can easily change the text in IISADMPWD Replacement Tool pages. Simply edit the resource files containing the application's text strings using the procedure below.

1. Open Windows Explorer.
2. Navigate to the IISADMPWD Replacement Tool installation directory, typically at %Program Files%\WebActiveDirectory\IISADMPWDReplacementTool.
3. Open each of the web application directories--IISChangePassword and IISCheckPasswordStatus-- and navigate to the App\_GlobalResources directory that contains the Views.resx file for each application
4. Make a backup copy of the Views.resx file in case you need to restore it later.
5. Open the Views.resx file using a text editor like Notepad or a tool like Visual Studio.
6. Change the text you want to modify. Be careful not to modify anything else other than displayed text.
7. Save the file.
8. Refresh the IISADMPWD Replacement Tool application you modified to test and make sure you like your changes.

### Localization

Note that you can put other language files inside of this directory names "Views.<language/locale>.resx" that will display if the user's browser locale is set to match the language/locale that you have included. In this way IISADMPWD Replacement Tool supports multiple languages on the fly depending on your user's browser settings. Simply include the new resource file in the App\_GlobalResources directory and refresh/relaunch the application with the corresponding browser locale and the application will display in that language.

# IISADMPWD Replacement Tool v2.7

## Installation and Configuration Guide

---

### Upgrades from Previous Versions of IISADMPWD Replacement Tool

Web Active Directory made changes to update IISADMPWD Replacement Tool from a 32-bit application to a 64-bit application with the release of v2.0. These changes cause IISADMPWD Replacement Tool to install into a different directory than previous versions and you need to follow the guidelines below to properly migrate to the new version.

### Upgrade Procedure for Releases prior to v2.0

The IISADMPWD Replacement Tool upgrade procedure requires a few manual steps as documented below. You need to make a backup copy of your current IISADMPWD Replacement Tool installation, uninstall the pre-v2.0 version of IISADMPWD Replacement Tool, run the installer package to install the new version of IISADMPWD Replacement Tool, and copy your old configuration, log, and optionally customized files that affect the look and feel of the application to the new installation location. This migration process preserves all your current IISADMPWD Replacement Tool customizations.

Use the Installation Procedure section on page 7 to install the latest release from scratch if you don't need to preserve any previous settings.

### Upgrading IISADMPWD Replacement Tool from a pre-v2.0 Release

Follow the simple procedure here to upgrade IISADMPWD Replacement Tool from a release prior to v2.0.

1. Use XCOPY (or just Copy and Paste through Windows Explorer) to make a backup of your current IISADMPWD Replacement Tool installation, typically located at %Program Files (x86)%\WebActiveDirectory\IISADMPWD\_ReplacementTool. This backup will be used in rare cases to restore a botched migration and also to preserve configuration files that you may wish to re-use.
2. Open the Programs and Features applet from the Windows Control Panel.
3. Locate the current installed version of WebAD IISADMPWD Replacement Tool in Programs and Features and uninstall it.
4. Once the uninstallation process completes, locate the product installer package for the new release of IISADMPWD Replacement Tool.
5. Run the installation to complete the upgrade process using the guidance in the Installation Procedure section on page 6.
6. After you successfully install the new version of IISADMPWD Replacement Tool, copy both the AppSettingsData.xml files from the App\_Data directories in each of the ChangePassword and Login directories in your XCOPY location in Step 1. Replace the respective files in the new installation location, typically located at %Program Files%\WebActiveDirectory\IISADMPWD\_ReplacementTool.

# IISADMPWD Replacement Tool v2.7

## Installation and Configuration Guide

---

7. Repeat Step 6 for the contents each of the two Logs directories under the ChangePassword and Login directories in your XCOPY location in Step 1 to the equivalent location in the newly installed destination directories.
8. Repeat Step 6 and copy each Web.config file under the ChangePassword and Login directories in your XCOPY location in Step 1 to the equivalent location in the newly installed destination directories.
9. Finally, copy any customizations you made to the Content (and more rarely the Views directories) under both the ChangePassword and Login directories from the XCOPY location in Step 1 to the corresponding folders in their newly installed destination directories.