

Form-based to Form-based Authentication

Technical Note

UPDATED: 28 July 2023

© 2022 Progress Software Corporation and/or one of its subsidiaries or affiliates. All rights reserved.

These materials and all Progress® software products are copyrighted and all rights are reserved by Progress Software Corporation. The information in these materials is subject to change without notice, and Progress Software Corporation assumes no responsibility for any errors that may appear therein. The references in these materials to specific platforms supported are subject to change.

#1 Load Balancer in Price/Performance, 360 Central, 360 Vision, Chef, Chef (and design), Chef Habitat, Chef Infra, Code Can (and design), Compliance at Velocity, Corticon, Corticon.js, DataDirect (and design), DataDirect Cloud, DataDirect Connect, DataDirect Connect64, DataDirect XML Converters, DataDirect XQuery, DataRPM, Defrag This, Deliver More Than Expected, DevReach (and design), Driving Network Visibility, Flowmon, Inspec, Ipswitch, iMacros, K (stylized), Kemp, Kemp (and design), Kendo UI, Kinvey, LoadMaster, MessageWay, MOVEit, NativeChat, OpenEdge, Powered by Chef, Powered by Progress, Progress, Progress Software Developers Network, SequeLink, Sitefinity (and Design), Sitefinity, Sitefinity (and design), Sitefinity Insight, SpeedScript, Stylized Design (Arrow/3D Box logo), Stylized Design (C Chef logo), Stylized Design of Samurai, TeamPulse, Telerik, Telerik (and design), Test Studio, WebSpeed, WhatsConfigured, WhatsConnected, WhatsUp, and WS_FTP are registered trademarks of Progress Software Corporation or one of its affiliates or subsidiaries in the U.S. and/or other countries.

Analytics360, AppServer, BusinessEdge, Chef Automate, Chef Compliance, Chef Desktop, Chef Workstation, Corticon Rules, Data Access, DataDirect Autonomous REST Connector, DataDirect Spy, DevCraft, Fiddler, Fiddler Classic, Fiddler Everywhere, Fiddler Jam, FiddlerCap, FiddlerCore, FiddlerScript, Hybrid Data Pipeline, iMail, InstaRelinker, JustAssembly, JustDecompile, JustMock, KendoReact, OpenAccess, PASOE, Pro2, ProDataSet, Progress Results, Progress Software, ProVision, PSE Pro, Push Jobs, SafeSpaceVR, Sitefinity Cloud, Sitefinity CMS, Sitefinity Digital Experience Cloud, Sitefinity Feather, Sitefinity Thunder, SmartBrowser, SmartComponent, SmartDataBrowser, SmartDataObjects, SmartDataView, SmartDialog, SmartFolder, SmartFrame, SmartObjects, SmartPanel, SmartQuery, SmartViewer, SmartWindow, Supermarket, SupportLink, Unite UX, and WebClient are trademarks or service marks of Progress Software Corporation and/or its subsidiaries or affiliates in the U.S. and other countries. Java is a registered trademark of Oracle and/or its affiliates. Any other marks contained herein may be trademarks of their respective owners.

Please refer to the NOTICE.txt or Release Notes – Third-Party Acknowledgements file applicable to a particular Progress product/hosted service offering release for any related required third-party acknowledgements.

© 2022 Progress Software Corporation and/or one of its subsidiaries or affiliates. All rights reserved.

Table of Contents

1 Introduction 4

2 How Form-based to Form-based Authentication Works 5

3 Configure Form-based to Form-based Authentication 6

4 POST Body Format 9

Last Updated Date 10

© 2022 Progress Software Corporation and/or one of its subsidiaries or affiliates. All rights reserved.

1 Introduction

When using a Kemp LoadMaster, it is possible to use form-based authentication as both the client and server authentication modes. Customers want to use form-based authentication as the server-side authentication type for several reasons:

- This functionality was previously supported by Microsoft's Threat Management Gateway (TMG) and some customers have existing implementations that depend on this configuration for legacy and security reasons.
- Server-side form-based authentication addresses some outstanding issues relating to password modification.
- There is a long-standing issue with the log-off string not working for Exchange 2016 and a recent Microsoft change has rendered a workaround to this issue obsolete. Using form-based authentication as the server-side authentication type is a more resilient solution.

© 2022 Progress Software Corporation and/or one of its subsidiaries or affiliates. All rights reserved.

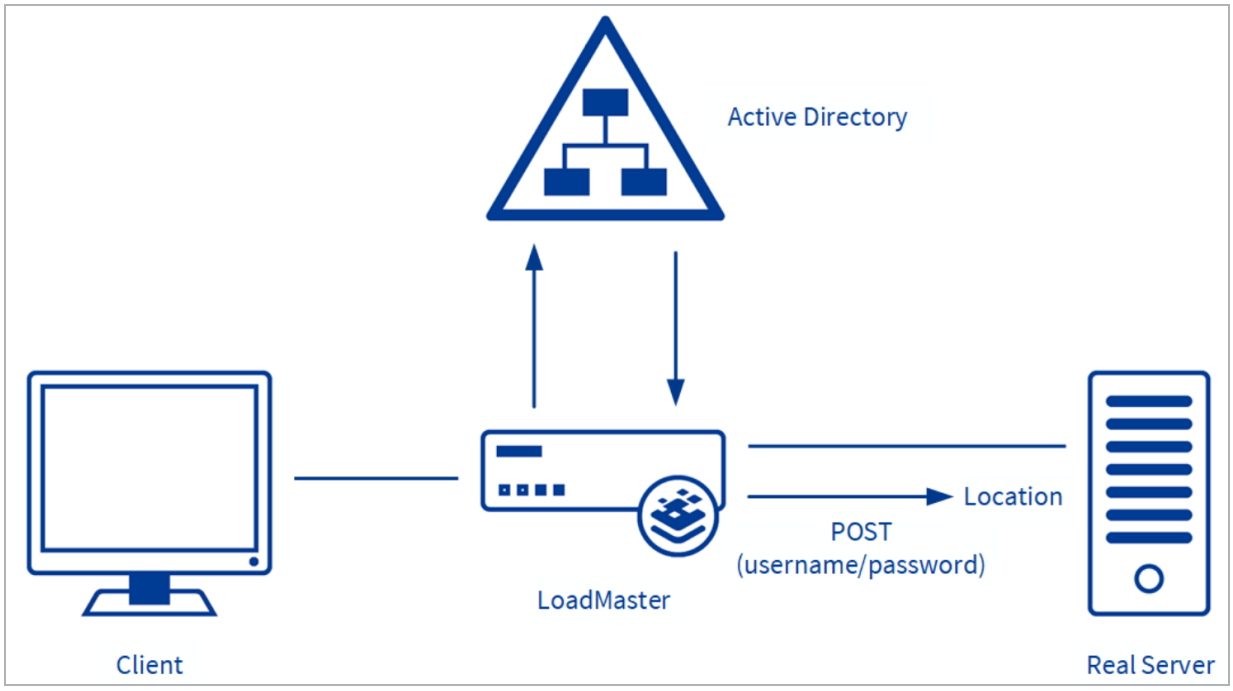
2 How Form-based to Form-based Authentication Works

The diagram below depicts how form-based to form-based authentication works:

1. The LoadMaster receives the connection from the client.

2. The LoadMaster uses the Active Directory to authenticate the user.

3. The username and password from the client-side, form-based authentication gets injected into the form POST format to build the POST body. This POST is sent to a specific location. This logs the user in, as if they had logged in using a standard login page.



© 2022 Progress Software Corporation and/or one of its subsidiaries or affiliates. All rights reserved.

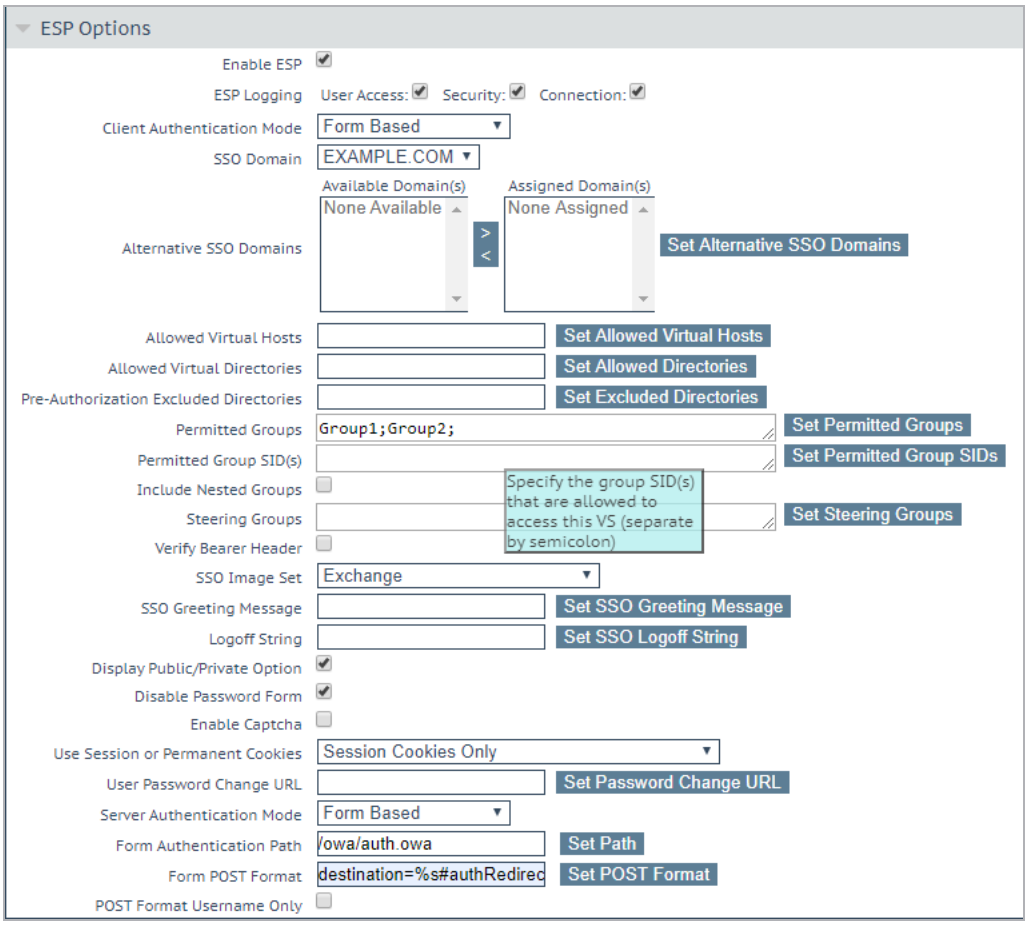
3 Configure Form-based to Form-based Authentication

To configure form-based to form-based authentication on the LoadMaster, first create a client-side Single Sign On (SSO) domain (**Virtual Services > Manage SSO**). Refer to the **Edge Security Pack (ESP) Feature Description** on the Kemp Documentation Page for further information.

Then, configure the Virtual Service by following the steps below in the LoadMaster Web User Interface (WUI):

1. In the main menu, go to **Virtual Services > View/Modify Services**.
2. Click **Modify** on the relevant Virtual Service.
3. Expand the **ESP Options** section.

© 2022 Progress Software Corporation and/or one of its subsidiaries or affiliates. All rights reserved.



4. Select the **Enable ESP** check box.
5. Select **Form Based** as the **Client Authentication Mode**.
6. Select the relevant **SSO Domain**.
7. Select **Form Based** as the **Server Authentication Mode**.
8. Enter the **Form Authentication Path** and click **Set Path**.
9. Enter the **Form POST Format** and click **Set POST Format**.

This feature is predominantly used in Microsoft Exchange deployments and it has only been tested with Exchange 2013 and 2016. The following strings do not need to be explicitly configured for Exchange 2013/2016. They are used by default in the implementation:

- **Form Authentication Path:** /owa/auth.owa

© 2022 Progress Software Corporation and/or one of its subsidiaries or affiliates. All rights reserved.

- **Form POST Format:**
destination=%s#authRedirect=true&flags=4&forcedownlevel=0&username=%s&password=%s&passwordText=&isUtf8=1

If the deployment is not Exchange, Kemp recommends that the settings are evaluated based on the required interaction with the Real Server and subsequently set appropriately.

© 2022 Progress Software Corporation and/or one of its subsidiaries or affiliates. All rights reserved.

4 POST Body Format

The server may require a specific POST body format. Essentially, this is the POST with the user credentials in the body.

The credentials are collected from the client (the username and password collected on the Kemp SSO form) and they are printed into this string, along with the destination string (URL string).

To identify POST content for other target Real Servers, you could:

- Connect the client directly to the Real Server
- Use Fiddler, if necessary
- Use the form-based authentication from the Real Server
- Examine what is POSTed to the Real Server when submitting the credentials

For example, if the POST looks like:

example=example&user=JBLOGGS&password=INSECUREPASS&example2=example2

The configuration string should be:

destination=%s&example=example&user=%s&password=%s&example2=example2

> "Destination" is not present in the hypothetical real POST, but the holder must be in the configuration string. IF a "destination"-like field is present in the real POST, include it as accurately as possible.

If there is a requirement for more than three dynamic pieces of information, then it will likely not work.

© 2022 Progress Software Corporation and/or one of its subsidiaries or affiliates. All rights reserved.

Last Updated Date

This document was last updated on 28 July 2023.

© 2022 Progress Software Corporation and/or one of its subsidiaries or affiliates. All rights reserved.