



ForgeRock Identity Cloud Guide

/ Web Agents 5.8

Latest update: 5.8.2.1

Copyright © 2020-2021 ForgeRock AS.

Abstract

Instructions for configuring Web Agents with the ForgeRock Identity Cloud.



This work is licensed under the Creative Commons Attribution-NonCommercial-NoDerivs 3.0 Unported License.

To view a copy of this license, visit <https://creativecommons.org/licenses/by-nc-nd/3.0/> or send a letter to Creative Commons, 444 Castro Street, Suite 900, Mountain View, California, 94041, USA.

ForgeRock® and ForgeRock Identity Platform™ are trademarks of ForgeRock Inc. or its subsidiaries in the U.S. and in other countries. Trademarks are the property of their respective owners.

UNLESS OTHERWISE MUTUALLY AGREED BY THE PARTIES IN WRITING, LICENSOR OFFERS THE WORK AS-IS AND MAKES NO REPRESENTATIONS OR WARRANTIES OF ANY KIND CONCERNING THE WORK, EXPRESS, IMPLIED, STATUTORY OR OTHERWISE, INCLUDING, WITHOUT LIMITATION, WARRANTIES OF TITLE, MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, NONINFRINGEMENT, OR THE ABSENCE OF LATENT OR OTHER DEFECTS, ACCURACY, OR THE PRESENCE OF ABSENCE OF ERRORS, WHETHER OR NOT DISCOVERABLE. SOME JURISDICTIONS DO NOT ALLOW THE EXCLUSION OF IMPLIED WARRANTIES, SO SUCH EXCLUSION MAY NOT APPLY TO YOU.

EXCEPT TO THE EXTENT REQUIRED BY APPLICABLE LAW, IN NO EVENT WILL LICENSOR BE LIABLE TO YOU ON ANY LEGAL THEORY FOR ANY SPECIAL, INCIDENTAL, CONSEQUENTIAL, PUNITIVE OR EXEMPLARY DAMAGES ARISING OUT OF THIS LICENSE OR THE USE OF THE WORK, EVEN IF LICENSOR HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

DejaVu Fonts

Bitstream Vera Fonts Copyright

Copyright (c) 2003 by Bitstream, Inc. All Rights Reserved. Bitstream Vera is a trademark of Bitstream, Inc.

Permission is hereby granted, free of charge, to any person obtaining a copy of the fonts accompanying this license ("Fonts") and associated documentation files (the "Font Software"), to reproduce and distribute the Font Software, including without limitation the rights to use, copy, merge, publish, distribute, and/or sell copies of the Font Software, and to permit persons to whom the Font Software is furnished to do so, subject to the following conditions:

The above copyright and trademark notices and this permission notice shall be included in all copies of one or more of the Font Software typefaces.

The Font Software may be modified, altered, or added to, and in particular the designs of glyphs or characters in the Fonts may be modified and additional glyphs or characters may be added to the Fonts, only if the fonts are renamed to names not containing either the words "Bitstream" or the word "Vera".

This License becomes null and void to the extent applicable to Fonts or Font Software that has been modified and is distributed under the "Bitstream Vera" names.

The Font Software may be sold as part of a larger software package but no copy of one or more of the Font Software typefaces may be sold by itself.

THE FONT SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT OF COPYRIGHT, PATENT, TRADEMARK, OR OTHER RIGHT. IN NO EVENT SHALL BITSTREAM OR THE GNOME FOUNDATION BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, INCLUDING ANY GENERAL, SPECIAL, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF THE USE OR INABILITY TO USE THE FONT SOFTWARE OR FROM OTHER DEALINGS IN THE FONT SOFTWARE.

Except as contained in this notice, the names of Gnome, the Gnome Foundation, and Bitstream Inc., shall not be used in advertising or otherwise to promote the sale, use or other dealings in this Font Software without prior written authorization from the Gnome Foundation or Bitstream Inc., respectively. For further information, contact: fonts@gnome.org.

Arev Fonts Copyright

Copyright (c) 2006 by Tavmjong Bah. All Rights Reserved.

Permission is hereby granted, free of charge, to any person obtaining a copy of the fonts accompanying this license ("Fonts") and associated documentation files (the "Font Software"), to reproduce and distribute the modifications to the Bitstream Vera Font Software, including without limitation the rights to use, copy, merge, publish, distribute, and/or sell copies of the Font Software, and to permit persons to whom the Font Software is furnished to do so, subject to the following conditions:

The above copyright and trademark notices and this permission notice shall be included in all copies of one or more of the Font Software typefaces.

The Font Software may be modified, altered, or added to, and in particular the designs of glyphs or characters in the Fonts may be modified and additional glyphs or characters may be added to the Fonts, only if the fonts are renamed to names not containing either the words "Tavmjong Bah" or the word "Arev".

This License becomes null and void to the extent applicable to Fonts or Font Software that has been modified and is distributed under the "Tavmjong Bah Arev" names.

The Font Software may be sold as part of a larger software package but no copy of one or more of the Font Software typefaces may be sold by itself.

THE FONT SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT OF COPYRIGHT, PATENT, TRADEMARK, OR OTHER RIGHT. IN NO EVENT SHALL TAVMJONG BAH BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, INCLUDING ANY GENERAL, SPECIAL, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF THE USE OR INABILITY TO USE THE FONT SOFTWARE OR FROM OTHER DEALINGS IN THE FONT SOFTWARE.

Except as contained in this notice, the name of Tavmjong Bah shall not be used in advertising or otherwise to promote the sale, use or other dealings in this Font Software without prior written authorization from Tavmjong Bah. For further information, contact: tavmjong@free.fr.

FontAwesome Copyright

Copyright (c) 2017 by Dave Gandy, <https://fontawesome.com/>.

This Font Software is licensed under the SIL Open Font License, Version 1.1. See <https://opensource.org/licenses/OFL-1.1>.

Table of Contents

Preface	iv
About This Guide	iv
Example Installation for This Guide	iv
1. About Web Agents and the ForgeRock Identity Cloud	1
2. Enforce Policies From ForgeRock Identity Cloud	3

Preface

ForgeRock Identity Platform™ serves as the basis for our simple and comprehensive Identity and Access Management solution. We help our customers deepen their relationships with their customers, and improve the productivity and connectivity of their employees and partners. For more information about ForgeRock and about the platform, see <https://www.forgerock.com>.

About This Guide

This guide is for customers using an agent-based integration model, with ForgeRock Access Management on-premise, or another on-premise access management solution. The guide provides an example of how to transition from on-premise access management to ForgeRock Identity Cloud without changing the architecture of the agent-based model.

Example Installation for This Guide

Unless otherwise stated, examples assume the following installation:

- Web Agents are installed on <http://www.example.com:80> in the `alpha` realm. For more information, see "*Installing Web Agents*" in the *User Guide*.
- ForgeRock Identity Cloud is installed with the default configuration described in the ForgeRock Identity Cloud Docs.

Find the value of the following properties:

- The root URL of your ForgeRock Identity Cloud. This guide uses <https://Tenant.forgeblocks.com:443>.
- The URL of the Access Management component of the ForgeRock Identity Cloud. This guide uses <https://Tenant.forgeblocks.com:443/am>.
- The realm where you work. This guide uses `alpha`.

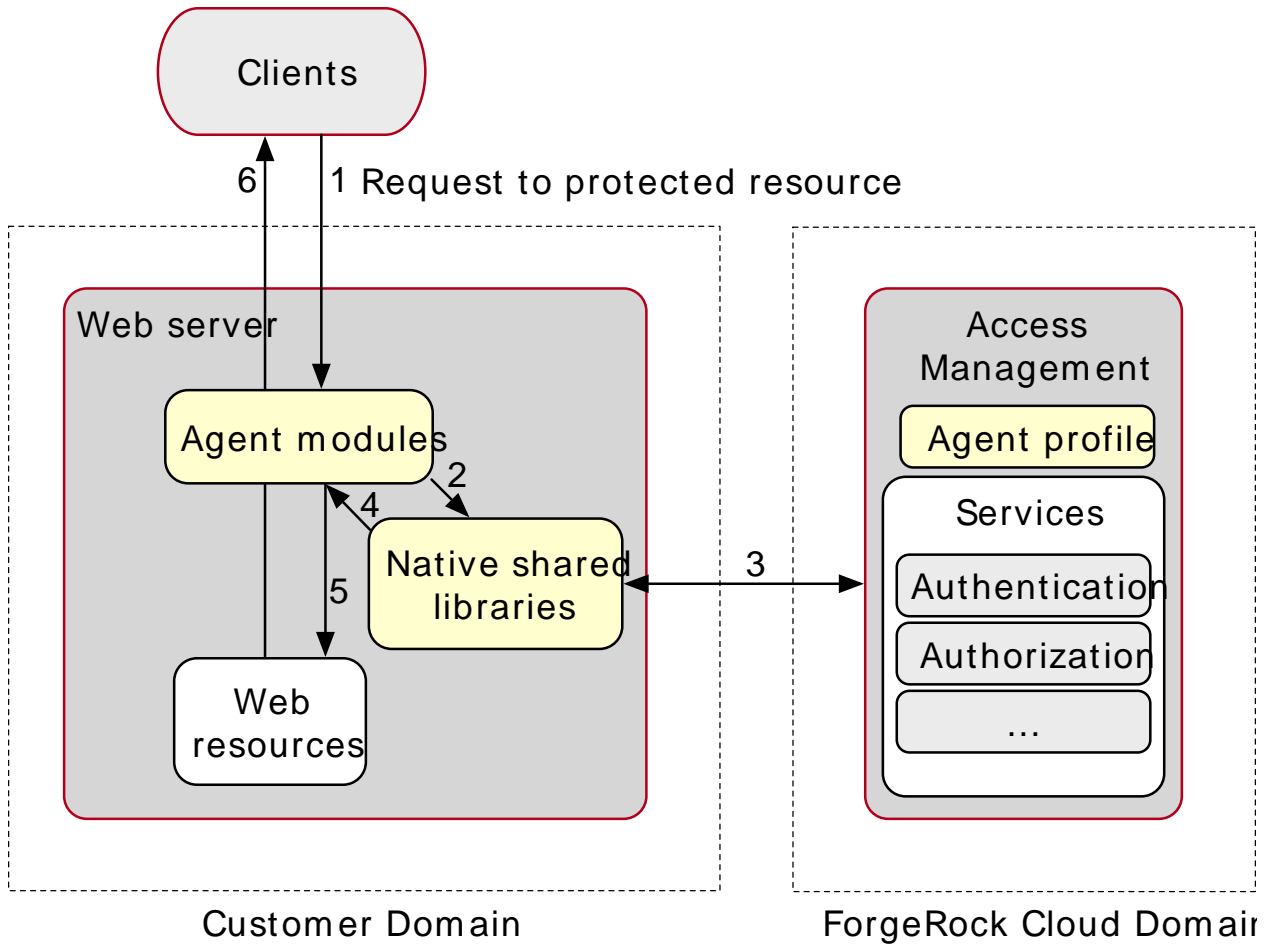
If you use a different configuration, substitute in the procedures accordingly.

Chapter 1

About Web Agents and the ForgeRock Identity Cloud

ForgeRock Identity Cloud simplifies the consumption of ForgeRock as an Identity Platform. However, many organizations have business web applications and APIs deployed across multiple clouds, or on-premise. This guide provides an example of how to use Web Agents with the ForgeRock Identity Cloud, without changing the architecture of the agent-based model.

The following image illustrates the flow of an inbound request to a website, through an agent, and the Web Agents's interaction with ForgeRock Identity Cloud to enforce resource-based policies.






For information about the ForgeRock Identity Cloud, see the [ForgeRock Identity Cloud Docs](#).

Chapter 2

Enforce Policies From ForgeRock Identity Cloud

This example sets up ForgeRock Identity Cloud as a policy decision point for requests processed by Web Agents. For more information about Web Agents, see the [User Guide](#).

1. Set up Identity Cloud:
 - a. Install Identity Cloud with the default configuration in "Example Installation for This Guide", as described in the [ForgeRock Identity Cloud Docs](#).
 - b. Log in to the ForgeRock Identity Cloud as an administrator.
 - c. Make sure that you are managing the `alpha` realm. If not, click the current realm at the top of the screen, click  Realm Settings, and switch to the `alpha` realm.
 - d. In the platform console, go to Identities > Manage > Alpha realm - Users, and add a new user with the following values:
 - Username: `demo`
 - First name: `demo`
 - Last name: `user`
 - Email Address: `demo@example.com`
 - Password: `Ch4ng3!t`
2. Set up Access Management in Identity Cloud:
 - a. Go to the alpha realm in the AM console:
 - i. In the platform console, click Native Consoles > Access Management. The Access Management console is displayed.
 - ii. Make sure that you are managing the `alpha` realm. If not, click the current realm at the top of the screen, click  Realm Settings, and switch to the `alpha` realm.
 - b. Add an agent:
 - i. Click  Applications > Agents > Web, and add an agent with the following values:

- Agent ID: `web-agent`
- Agent URL: `http://www.example.com:80`
- Server URL: `https://Tenant.forgeblocks.com:443/am`
- Password: `password`


ii. On the AM Services tab, set the following values:

- AM Conditional Login URL: `|https://Tenant.forgeblocks.com:443/am/oauth2/authorize?realm=/alpha`

Note the `|` at the start of the URL.

- Policy Evaluation Realm: `/alpha`
- Policy Set: `PEP`

c. Add a policy to protect a web page:

i. Click  Authorization > Policy Sets, and add a new policy set with the following values:

- Id: `PEP`
- Resource Types: `URL`

ii. In the policy set, add a policy with the following values:

- Name: `PEP-policy`
- Resource Type: `URL`
- Resource pattern: `*://*:*/*`
- Resource value: `*://*:*/*`

This policy protects all web pages.

iii. On the Actions tab, add actions to allow HTTP `GET` and `POST`.

iv. On the Subjects tab, remove any default subject conditions, add a subject condition for all `Authenticated Users`.

3. Set up Web Agents:

a. Create a text file containing the agent profile password:

Linux


```
$ echo password > /tmp/pwd.txt  
$ chmod 400 /tmp/pwd.txt
```

Windows

```
C:\> echo password > pwd.txt
```

b. Using "*Installing Web Agents*" in the *User Guide*, install an agent with the following values:

- Configuration file [/opt/apache/conf/httpd.conf]: Enter the path to your Apache configuration file.
- Existing agent.conf file: Skip the import, or enter the path to your file.
- OpenAM URL: `https://Tenant.forgeblocks.com:443/am`
- Agent URL: `http://www.example.com:80`
- Agent Profile name: `web-agent`
- Agent realm/organization name: `/alpha`
- Agent Profile password source: `/tmp/pwd.txt`

c. Restart Web Agents; for example:

```
$ apachectl -k stop  
$ apachectl -k start
```

4. Test the setup:

- a. In a new browser, go to `http://www.example.com:80`. The Identity Cloud login page is displayed.
- b. Log in to Identity Cloud as user `demo`, password `Ch4ng3!t` to access the agent.