



SecurLogin Proxy Deployment Guide

Document Version: 17.1

Date: 30 March 2022

Copyright © 2021 i-Sprint Innovations. All rights reserved.

Neither the whole nor any part of the information contained in this document may be adapted or reproduced in any material or electronic form without the prior written consent of the copyright holder.

TRADEMARK INFORMATION and DISCLAIMER

i-Sprint Innovations Pte Ltd, i-Sprint, i-Sprint Innovations, enterprise services manager are registered trademarks of i-Sprint Innovations Pte Ltd in Singapore. AccessMatrix™, Universal Sign On™, Enterprise AdminGuard™ are worldwide trademarks of i-Sprint Innovations.

All other trademarks are the property of the respective trademark holders.

Information in this document is subject to change without notice.

i-Sprint Innovations makes no warranty of any kind with regard to this information, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose.

i-Sprint Innovations shall not be liable for errors contained herein or for incidental or consequential damages concerned with the furnishing, performance or use of this material.

Table of Contents

Part 1: Introduction	4
1 Preface	4
Related Documents	4
2 Overview	4
Part 2: Deployment	5
3 SecurLogin Proxy Deployment Consideration	5
4 SecurLogin Proxy Installation and Deployment	5
4.1 SecurLogin Proxy System Requirements	5
4.2 SecurLogin Proxy Pre-installation Checklist	5
4.3 SecurLogin Proxy Installation	5
4.4 Creating SecurLogin Proxy Database	5
4.5 Setting Up SecurLogin Proxy System Configuration Properties	6
4.5.1 Configuration for User Reconciliation Proxy Service	6
4.5.2 Configuration for RADIUS Authentication Proxy Service	6
4.6 Starting/Stopping SecurLogin Proxy	6
5 Uninstalling SecurLogin Proxy	6
Part 3: Appendices	8
A. Limitations	8
B. Log Files	8

Part 1: Introduction

1 Preface

This guide contains instructions on how to deploy SecurLogin Proxy. This guide is intended as a reference for System Administrator and SecurLogin subscriber.

Related Documents

For more information, see the following document;

- High Availability for SecurLogin Proxy on RADIUS Authentication

2 Overview

SecurLogin Proxy is a component of SecurLogin that includes User Reconciliation Proxy Service and RADIUS Proxy Service. The function of the User Reconciliation Proxy is to sync up user information between SecurLogin and end user database, preventing potential security threat of exposing information to external parties. The RADIUS proxy acts as an VPN gateway to control access to the network.

In this document, the term <ABSOLUTE_FILE_PATH> will be used to refer to the root or the installation directory of SecurLogin Proxy.

Part 2: Deployment

3 SecurLogin Proxy Deployment Consideration

As SecurLogin Proxy consists of two Proxy Services, each service's function is described here to help determine the appropriate service to be utilized.

User Reconciliation Service

As the name suggests, User Reconciliation Proxy Service is capable of reconciling/sync-ing user information between SecurLogin and the client database to keep the user information updated while preventing any threat of information exposure. Synchronization can be done from multi user stores such as AD, LDAP or from the cloud.

RADIUS Authentication Service

RADIUS Authentication Proxy Service is a middleware that communicates the SecurLogin and the client service. For example, when a user logs in to an application via VPN, RADIUS Proxy will authenticate the user validity against the user information from SecurLogin, check for 2FA requirements for the particular user and prompts the VPN client for the 2FA authentication credentials.

4 SecurLogin Proxy Installation and Deployment

Following installation and deployment guide is applicable for both User Reconciliation Service and RADIUS Authentication Service. To activate/deactivate each service, refer to Section [4.5 Setting Up SecurLogin Proxy System Configuration Properties](#).

4.1 SecurLogin Proxy System Requirements

- Supports Windows platform only
- Supports JDK 1.6 and above

4.2 SecurLogin Proxy Pre-installation Checklist

There are two packages for SecurLogin Proxy installation:

1. SecurLoginProxy-2.0.0-win32 OR SecurLoginProxy-2.0.0-win64 (for Windows 32-bit Operating System and 64-bit Operating System respectively)
2. SecurLoginProxy-2.0.0-dbscripts

SecurLoginProxy-2.0.0-win32 OR SecurLoginProxy-2.0.0-win64 should include:

- SecurLoginProxy.jar - Main execution jar file
- db folder - Apache Derby database
- system_config.properties in config folder - Configuration file for SecurLogin Proxy
- Install-Remove-Service.bat - Install and uninstall script
- SecurLoginProxy.exe - SecurLogin Proxy service class for Windows platform
- SecurLoginProxyw.exe - Simple GUI to monitor SecurLogin Proxy service

SecurLoginProxy-2.0.0-dbscripts should include:

- derby-create.sql – SQL Script to create database

4.3 SecurLogin Proxy Installation

Follow the steps below to install SecurLogin Proxy:

1. Open command prompt with administrator right
Click on "Start" and search for 'cmd.exe', right click on it and select "Run as administrator"
2. Navigate to installation directory
Type command 'cd <ABSOLUTE_FILE_PATH>'
3. Execute installation bat file
Type command 'Install-Remove-Service.bat install' to install SecurLogin Proxy as Windows service
4. To verify that the service is installed successfully, check Services to make sure Securlogin Proxy Service is inside
Go to Control Panel -> System and Security -> Administrative Tools -> Services
5. Close command prompt to exit

4.4 Creating SecurLogin Proxy Database

Apache Derby Database Server is a JDBC compliant database. Therefore, a java SQL client is recommended to use, for SecurLogin Proxy to interact with the Apache Derby Database Server via JDBC.

Connect to Apache Derby Database Server using a java SQL client:

- Define the JDBC URL as 'jdbc:derby:<ABSOLUTE_FILE_PATH>/SLProxy;create=true'

- The driver file is located at '<ABSOLUTE_FILE_PATH>\lib\derby-10.12.1.1.jar'
- Select driver class 'org.apache.derby.jdbc.EmbeddedDriver'
- Create database instance using the same JDBC URL above

After the database instance has been created, the administrator is required to run the SecurLogin database create script manually to create tables for internal configuration use. The database script is located in "SecurLoginProxy-2.0.0-dbscripts" folder.

Note: Only run the Create Table scripts. Do not run Drop Table scripts.

4.5 Setting Up SecurLogin Proxy System Configuration Properties

Proxy servers make use of a system properties file to configure the proxy components. Perform the following steps to configure the system properties file:

4.5.1 Configuration for User Reconciliation Proxy Service

1. Go to directory '<ABSOLUTE_FILE_PATH>\config'.
2. Open file 'system_config.properties'.
3. Under *Proxy Service*, make sure *proxy_service_idm* is indicated as 'Y' (for Yes) for the User Reconciliation Proxy Service to be activated and indicate 'N' (for No) for *proxy_service_radius* to deactivate the RADIUS Authentication Service, unless it is used.
Note: By default, User Reconciliation server is already activated.
4. Under *Configuration for Proxy Server*, enter *userStoreKeys* and *userStoreSecrets* obtained from SecurLogin Portal, under User Store Management.
(e.g. *api_userstore* = *cAHJAW4MnjmdHPkTA3p,Uqfn9joWFP7yj0VCp0yrrU6HQkc4HLF3klQvtQ46hw9GfqIKXm2VlrM7SlqUDksm*; where the former is the *userStoreKey* and the latter the *userStoreSecret*, seperated by comma.)
5. Under *Quartz Scheduler configuration*, enter the *datasource* URL created before (e.g. 'jdbc:derby:<ABSOLUTE_FILE_PATH>/SLProxy;create=true') to establish connection to the database.
6. Save the changes made.

4.5.2 Configuration for RADIUS Authentication Proxy Service

1. Go to directory '<ABSOLUTE_FILE_PATH>\config'.
2. Open file 'system_config.properties'.
3. Under *Proxy Service*, indicate 'Y' (for Yes) for *proxy_service_radius* to activate the RADIUS Authentication Proxy Service and indicate 'N' (for No) for *proxy_service_idm* to deactivate the User Reconciliation Service, unless it is used.
4. Under *Configuration for Radius server*, enter *radius_api_key* and *radius_api_securekey* obtained from SecurLogin Portal, under Application Management.
5. Under Quartz Scheduler configuration, enter the *datasource* URL created before (e.g. 'jdbc:derby:<ABSOLUTE_FILE_PATH>/SLProxy;create=true') to establish connection to the database.
6. Save the changes made.

4.6 Starting/Stopping SecurLogin Proxy

Start Proxy

1. In SecurLoginProxy installation directory, right click "SecurLoginProxyw.exe" and select "Run as administrator".
2. On the UI, click "Start" to start the service. Once the service is started, click "OK" to close the UI.

To verify that the service has started successfully, check the status of "ProxyService" in Services (Control Panel -> System and Security -> Administrative Tools -> Services). "Started" indicates the service has started successfully.

Note: If the proxy could not be started successfully, check the log file for errors. The default location of the log file is "<ABSOLUTE_FILE_PATH>\logs\ securLogin_Proxy.log".

Stop Proxy

1. In SecurLoginProxy installation directory, right click "SecurLoginProxyw.exe" and select "Run as administrator".
2. On the UI, click "Stop" to stop the service. Click "OK" to close the UI.

To verify that the service has stopped successfully, check the status of "ProxyService" in Services (Control Panel -> System and Security -> Administrative Tools -> Services). Empty status indicates the service has stopped successfully.

5 Uninstalling SecurLogin Proxy

Follow the steps below to uninstall SecurLogin Proxy:

1. Open command prompt with administrator right
Click on "Start" and search for 'cmd.exe', right click on it and select "Run as administrator"
2. Navigate to installation directory
Type command 'cd <ABSOLUTE_FILE_PATH>'

3. Execute installation bat file
Type command 'Install-Remove-Service.bat remove' to remove SecurLogin Proxy service
4. To verify that the service is removed successfully, check Services to make sure "ProxyService" is no longer inside
Go to Control Panel -> System and Security -> Administrative Tools -> Services
5. Close command prompt to exit

Part 3: Appendices

A. Limitations

- Due to the usage of embedded derby, only a single connection to the database is available at a time.

B. Log Files

Once SecurLogin Proxy has started, three log files will be created inside the Logs folder, *<ABSOLUTE_FILE_PATH>\logs*, as followed:

- **commons-daemon.yyyy-mm-dd.log** - Contains Commons Daemon UI log
- **securLogin_callback_error.log** - Contains API failures
- **securLogin_Proxy.log** - Contains SecurLogin Proxy log