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1 Blackberry

2 Overview

For Verion 2 of the Swivel Blackberry App see Blackberry 2.0.

The Swivel Mobile Phone Client allows 99 security strings or One Time Codes for PINless authentication to be stored on the Blackberry. These can be updated at any time from the client.

For Blackberry Devices of OS Version 4.5 and later a Blackberry Client app exists as described below. For earlier devices the Swivel app can be installed; please refer to the Swivlet How To Guide

There are two versions of the Blackberry Mobile Phone client one for Versions 3.8 and later and one for earlier versions.

This article covers the Blackberry client for Swivel, for other phones see Mobile Phone Client.

3 Prerequisites

- On the Swivel Administration Console the user must have Swivlet or Mobile Client enabled to use the Java Applet (or other Mobile Client App)

- The Swivel server must be reachable from the mobile phone to receive security strings

- The index is required to be entered as nn on the end eaxample: 292401, Swivel versions earlier than 3.10 require ,nn example: 2924,01 otherwise it will see it as a dual channel authentication.

- Where SSL communications are used the server must have a valid certificate for the hostname. If a self signed certificate is used it would need to be installed on the handset.

- RADIUS authentications made against Swivel must use PAP RADIUS authentication since with other RADIUS protocols such as CHAP and MSCHAP the access device requests the OTC from Swivel.

- Virtual or hardware appliances using Swivel 3.8 may require an upgrade on their proxy to provision a mobile device, see Appliance Proxy Server Upgrade

- Swivel 3.8 requires the mobile phone to be provisioned before use, see Mobile Provision Code

4 Versions

Swivel Blackberry Mobile Client 1.7.1 (Awaiting App Store release, available for the Blackberry Enterprse Server as file download (see below)) 23/02/2015

- Supports Quick provision
- Requires Swivel 3.8 to 3.10

Swivel Blackberry Mobile Client 1.6 release 05/12/2013 (please note his is labelled as version 3.0)

- You can now "Get Server Settings" and provision the device using a URL from a text message
- It is possible for the server to allow users to navigate through the security strings backwards as well as forwards
- Several UI/UX improvements

Swivel Blackberry Mobile Client 1.6

- Added a "Get Server Settings" screen where users can use a 10-digit code they have been given to download the server settings
- Added server configurable ability to automatically extract otc prompting user for PIN

5 Swivel Configuration

5.1 Configuring Mobile Client user access on the Swivel virtual or hardware appliance

To allow a user to authenticate using a One Time Code from the Mobile Phone Client, the user must have the Mobile Client authentication enabled. To do this on the Swivel Administration console ensure that the group they are part of has access to the Mobile Client under Repository Groups.

5.2 Configuring the Swivel Authentication

Swivel can authenticate users using the mobile client to authenticate by RADIUS or Agent-XML authentication

- For RADIUS authentication see RADIUS Configuration Note: The access device must be configured to use PAP for authentication.

- For Agent-XML authentication see XML Authentication Configuration

5.2.1 Mobile Provisioning

Swivel 3.8 and higher requires each mobile phone to be provisioned so it can be uniquely identified. Ensure that all Mobile Client users have suitable Transports configured to receive their Provision Code. To provision the mobile client select the user and click Re-provision. Earlier versions of Swivel do not need to use a Mobile Provision Code. See Mobile Provision Code.

5.2.2 Mobile Client Policies

For the Server based policies see Mobile Client Policies

6 Installing the Client

There are a number of ways to install the client. Via Blackberry App World is the recommended approach.

All the files required for either method are available here Blackberry Software

6.1 Via Blackberry App World

After logging into the Blackberry App World search for Swivel. The version of the app created by Swivel Secure Ltd is the correct version. Install this. Updates should be managed through the App World application.

6.2 Over the air

To install the client over-the-air you need to use the browser on you blackberry device and navigate to the location of the client .jad file.

This will instigate the download and installation of the client.

You may be prompted to allow the application "trusted status". You should respond Yes to this. You do not need to edit the applications permissions.

You can place the files required to perform OTA provision on a web-server of your choosing or you can install the client from the demo site.

https://demo.swivelsecure.com/Rim/PinsafeClient.jad

If you wish to use the client with Swivel 3.7 or older, you can use a version that is backward compatible.

https://demo.swivelsecure.com/Rim/pre38/PinsafeClient.jad

When used in conjunction with pre 3.8 versions, there is no requirement to provision the client

6.3 Blackberry Desktop

It is also possible to install the application via the Blackberry Desktop software.

For this you need to extract the application. From the desktop software select import and then select the .alx file.

However the .alx file may need to be edited to reflect your device Java and OS version.

6.4 Blackberry Enterprise Server

The software for the Blackberry Enterprise can be downloaded here | Swivel BB Mobile Client 1.7.1.zip

7 Navigation

You can navigate either using the selectable buttons on the user-interface or the menus. Certain devices lend themselves to different methods.

To get back to the main screen from any other screen use the cancel option.

8 Configuration

Before you can provision the client you need to configure it.

If a SSD server is being used, then select **Get Server Settings** and enter the Server ID, otherwise the settings can be manually entered with information from the Swivel System administrator.

The manual configuration screen has the following entries:

Debug This is a message field that shows the last error encountered or action completed relating to the client attempting to connect to the Swivel server. It is a read-only field

Username As recognised by the Swivel Authentication Platform

Server The host name of the Swivel Authentication Platform as accessible by the client. **nb** No http:// or https:// prefix required.

Context The context or path the client should use on the host to me able to communicate with the platform. For virtual or hardware appliances this would be proxy by default.

Port The port the client should use on the host to me able to communicate with the platform. For virtual or hardware appliances this would be 8443 by default.

SSL Is SSL communication required. Default is yes for virtual or hardware appliances.

PINless Is the user a PINless user.

Once these settings are complete the client can be provisioned.

If using in pre version 3.8 client there will be no debug field but there will be a pre38 setting which must be selected to use the client with a pre 3.8 version.

If pre38 is set then there is no need to provision the client.

9 Provisioning

In order to provision the client you need to obtain a provision code. This will usually be sent to you by the administrator of your Swivel Platform or you maybe able to request one to be sent. A provision code is a 10 character code that you enter on the provision screen. Once you enter the code and select provision, the client will contact the platform and if the code is valid you device will be provisioned. See also Mobile Provision Code.

10 Downloading Strings

To download security strings select the refresh option.

11 Authentication

To authenticate using the client select the authenticate option. This will then display the security string you need to use to authenticate. Note the actual format you need to enter into the login-form is 1234nn or Swivel version prior to 3.10 1234,nn where 1234 represents your one-time code and nn represents the string index.

12 Troubleshooting

Login fails and User receives a security string or One Time Code by SMS or email at each login attempt. The index is required to be entered as nn or ,nn example 2924,01 otherwise it will see it as a dual channel authentication.

If the login continues to fail, try subtracting 1 from the security string index, example for 7432,32 try 7432,31.

12.1 Error Messages

AGENT_ERROR_NO_SECURITY_STRINGS, **AGENT ERROR NO SECURITY STRINGS**

See AGENT ERROR NO SECURITY STRINGS

net.rim.device.cldc.io.ssl.TLSIOException (net.rim.device.api.crypto.tls.TLSAlertException

When configuring the Blackberry App with an SSL connection, the hostname for the Swivel servers public IP should be used rather than the IP address.

HTTP error 0 ()

Ensure that the option to use SSL is enabled if HTTPS is being used.

13 Known Issues

Blackberry only support HTTP and not HTTPS for the Provision URL.

14 Tested Mobile Phones

The following phones have been tested

Mobile Phone Compatibility

Manufacturer	Model	Version	Operator	Compatible Y/N	Client Version
Blackberry	Curve 8520	v4.2.0.135	O2	Y	1.0.1
Blackberry	Curve 8900	(Emulator)	N/A	Y	1.0.1
Blackberry	9300	v6.6.0.195	Not Known	Y	Not Known
Blackberry	9300	v6.6.0.207	Not Known	Y	Not Known
Blackberry	Torch 9810	v6	O2	Y	1.0.1
Blackberry	Q10	-	-	Y	2.0.x
Blackberry	Z10	-	-	Y	2.0.x

15 Blackberry 2.0

16 The Swivel Blackberry 2.0 App Overview

Swivel Secure now offers a Blackberry mobile client for use with the Swivel platform. This article explains how to download, configure and use this client. For other phones see Mobile Phone Client for earlier versions.

17 Requirements

Swivel 3.10 or higher

Blackberry 10 OS. (For older Blackberry versions see Blackberry)

The Swivel virtual or hardware appliance must be reachable from the mobile phone to receive security strings

The index is required to be entered as nn on the end eaxample: 292401, Swivel versions earlier than 3.10 require ,nn example: 2924,01 otherwise it will see it as a dual channel authentication.

Valid certificate on the Swivel server or non SSL, but not a self signed certificate

18 Versions

Swivel Mobile version 2.1.3.1 released 17/02/2015

Swivel Beta version 2.1.1 released: 05/02/2014

- QR Code Provision
- Push Authentication Support

version 2.0 released

- Simple User Interface
- Extra Mobile Policies
- Help Section
- Citrix Receiver VPN Client support (iPhone Only)
- Removal of comma from OTC,

18.1 Which version do I need?

Pinsafe version 3.10 or later, Mobile Client 2.0

Blackberry Mobile Client 2.0 version 2.0

19 Swivel Configuration

19.1 Configuring Mobile Client user access on the Swivel virtual or hardware appliance

To allow a user to authenticate using a One Time Code from a mobile app, the user must have Mobile app authentication enabled. To do this on the Swivel Administration console ensure that the group they are part of has access to the Mobile Client under Repository Groups.

19.2 Configuring the Swivel Authentication

Swivel can authenticate users using the mobile client to authenticate by RADIUS or Agent-XML authentication

- For RADIUS authentication see RADIUS Configuration Note: The access device must be configured to use PAP for authentication.

- For Agent-XML authentication see XML Authentication Configuration

Allow user to browse strings: Options Yes/No, Default No. Version 3.9.6 onwards. This option allows the Mobile Phone App user to browse through the security strings. Availability to this feature is server controlled.

19.3 Mobile Provisioning

Swivel 3.8 and higher requires each mobile phone to be provisioned so it can be uniquely identified. Ensure that all Mobile Client users have suitable Transports configured to receive their Provision Code. To provision the mobile client select the user and click Re-provision. Earlier versions of Swivel do not need to use a Mobile Provision Code. See Mobile Provision Code.

19.3.1 Mobile Client Policies

For the Server based policies see Mobile Client Policies 2.0 for previous versions see Mobile Client Policies

20 Swivel Mobile Application Installation

The Swivel Mobile Phone Client 2 is available from the App store (see versions above). You can click the link to the and install from a web browser, or follow the instructions in this article to navigate to the App within the App Store.

21 Swivel Mobile Application Configuration

A user may use one of the following methods to provision a mobile device:

21.1 URL Provisioning

Provision URL Swivel 3.10 onwards

21.2 QR Code Provisioning

QR Code Provision Swivel 3.10.4 onwards

21.3 Get Server Settings

If an SSD server is being used, select **Get Server Settings** and enter the Server ID.

21.4 Manual Configuration

Manual entry may not be possible depending upon Swivel server policy

The settings are:

1. Username: Your username that you use when you authenticate via Swivel

1. Server: The URL from where the client can download security strings (or keys)

1. Context: The context used by the web service. For a virtual or hardware appliance this is **proxy**, for a software install this is usually **pinsafe**

1. Port: The port number used by the web service. For an virtual or hardware appliance this is **8443**, for a software install this is **8080**

1. SSL: SSL settings

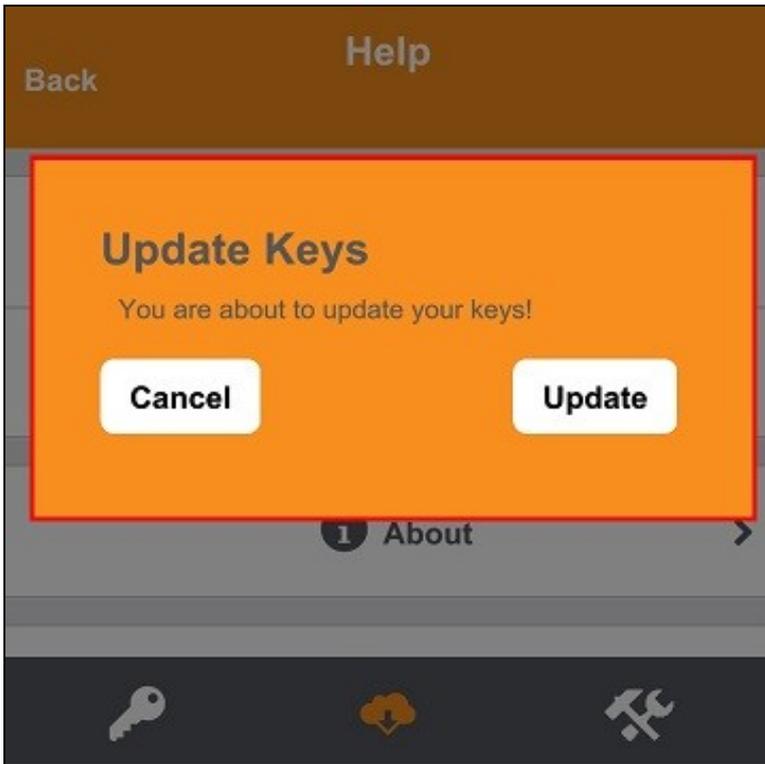Once you have entered the settings you can select Submit in the header location of that page.

21.5 Downloading Security Strings

From the bottom menu there is a update keys button, pressing this will get you a new set of 99 security strings. This will attempt to retrieve Security Strings from the Swivel server.

If there are any problems and error message will be displayed

You can confirm that keys have been downloaded by checking the server logs

The Swivel server will display the following log message **Security strings fetched for user: username**

21.6 Options

The following options are available:

Auto extract OTC, **Prompt for PIN Number to auto-extract OTC**, Options, enable/disable. This option may be turned off on the Swivel server. When enabled this allows the user to enter their PIN number and a One Time Code will be displayed. Note that there is no error checking of the PIN, so if an incorrect PIN is entered an incorrect One Time Code will be displayed.

Allow String Browsing, This is a Swivel server controlled option, which if enabled will allow the user to browse through security strings on the mobile app.

Provision is numeric, allows the keyboard type to be either alpha numeric of numeric depending on the users provision code type.
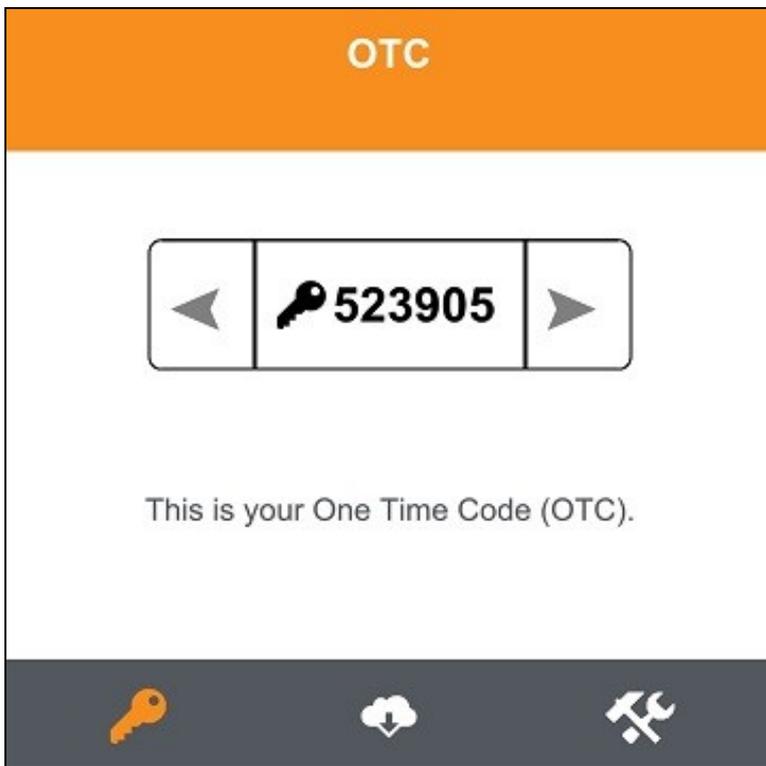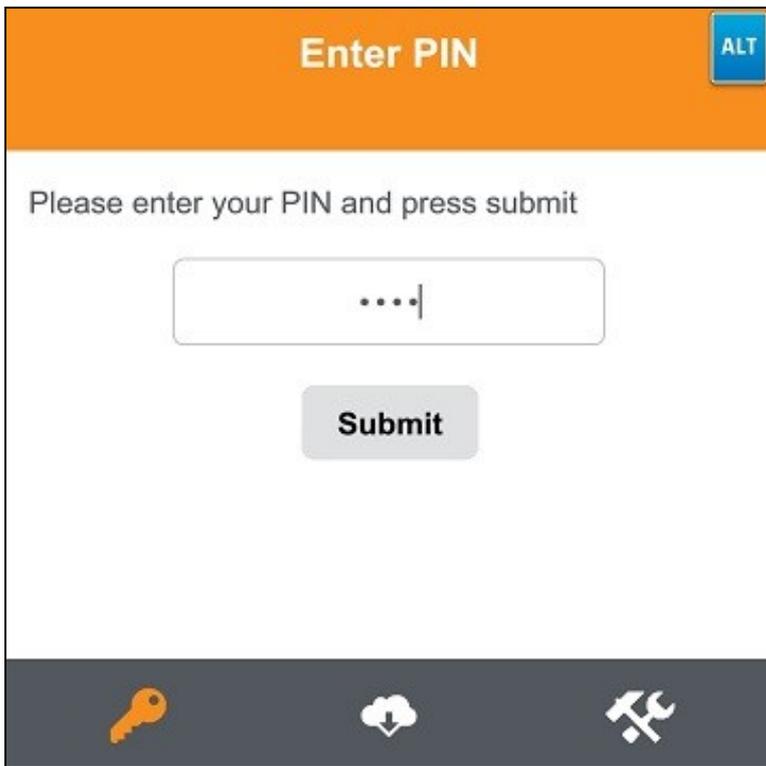
Set Support Email Address. Set Support Phone Number. Set VPN client URL.

21.7 Authenticating with app

To use the Swivel Blackberry app to authenticate is very simple.

1. Open the app. on your Blackberry.
2. Select the key icon on the bottom menu.
3. Depending on your policy settings you will either be prompted for a PIN or immediately shown a One-Time-Code (OTC).
4. If you are asked for a PIN, enter the PIN number previously sent during the enrollment phase.
5. Enter the OTC into the authentication dialogue, make sure you enter all the characters.

If you need to authenticate again you can select the '<' or '>' button and a new string will be displayed (you may have to enter your PIN again).

21.8 Authenticating with app and Swivel

To use the Swivel Blackberry app to authenticate is very simple.

1. Open the app on your Blackberry.
2. Select the key icon on the bottom menu.
3. The client will show a security string with a row of placeholders 1234567890 below it.
4. Use your PIN to extract your One-Time-Code (OTC), eg if your PIN is 2468 take the 2nd 4th 6th and 8th characters of the security string.
5. In the example screen shoot the OTC would be: 1825.
6. After the OTC has been worked out, you will also need to ensure you type in the last two characters shown (the index).
7. Using the example screen shot you would type 182512.

If you need to authenticate again you can select the '<' or '>' button and a new string will be displayed.
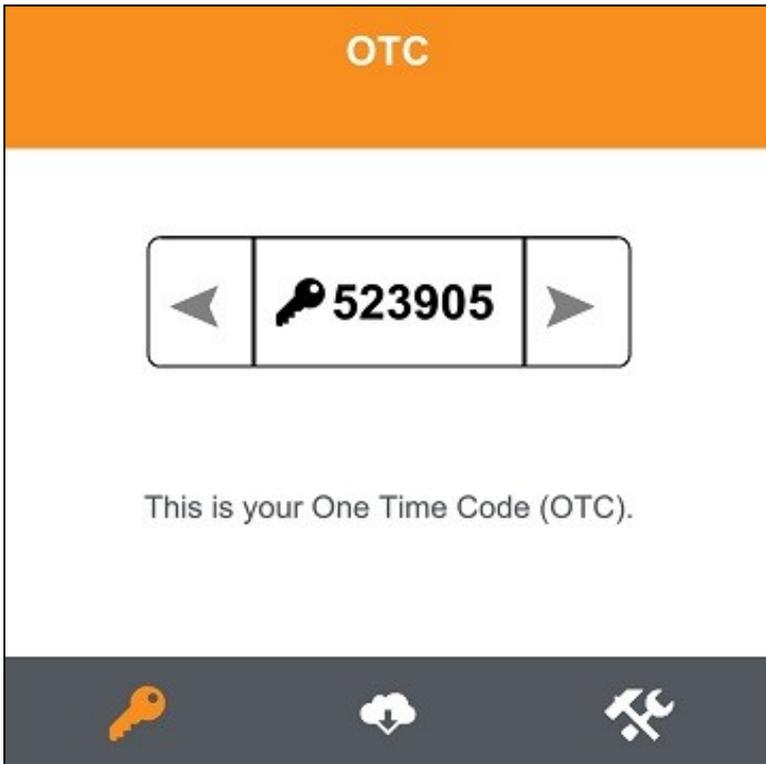
21.9 Updating Keys

The client downloads 99 keys at a time and these keys are used one at a time until there are none left. However a new set of 99 keys can be downloaded at any time by selecting Update Keys. Downloading keys requires network connectivity so it is recommended that you download a new set of keys before the Blackberry is likely to be without network connectivity for any length of time.

22 Known Issues

The Blackberry App version 2.0 may incorrectly display its version as 3.0

When using PIN entry and the app is started, the key symbol should be pressed before entering the PIN, otherwise it will use the previous OTC, which will work on the first authentication but fail on subsequent authentications.

23 Troubleshooting

- Is the Swivel server accessible on the internet

- Check the connection settings to the Swivel server

- Check the Swivel logs for any error messages

- Can the phone access the internet

- If a RADIUS connection is seen from the access device to the Swivel server but authentication fails, try using PAP

- Download new security strings to the phone and retest

- Is the pin 6 characters when you only entered a 4 digit pin? If yes then enter all of the numbers you see on screen (the extra 2 are used as an index).

- Login fails and User receives a security string or One Time Code by SMS or email at each login attempt. Again make sure you are entering all of the numbers shown on screen.

- If the proxy port (8443) on the virtual or hardware appliance is being used, ensure that it supports the proxy request of the key retrieval using AgentXML. If this is the case then contact Support for an updated version of the Proxy.

23.1 Error Messages

Incorrect settings - please check your settings

The settings for downloading the security strings are incorrect. Verify what has been entered, and check what the values should be.

Timed Out

The settings for connecting to the Swivel server may be incorrect or the port is being blocked.

AGENT_ERROR_NO_SECURITY_STRINGS, **AGENT ERROR NO SECURITY STRINGS**

See AGENT ERROR NO SECURITY STRINGS

24 Tested Mobile Phones

The following phones have been tested

Mobile Phone Compatibility

Manufacturer	Model	Version	Operator	Compatible Y/N
Blackberry	Q10	-	Orange	Y
Blackberry	Q10	-	O2	Y
Blackberry	Q10	-	Vodafone	Y

      • The current version only supports one device per user.

Keywords: Blackberry, Q10, BB World, Blackberry App, AppStore, Apple, iPad

25 Legacy

Download compatible with Swivel 3.10 and later.