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1 Windows Mobile How To Guide

2 Windows Mobile How To Guide

3 Overview

NOTE: this version is for Windows Mobile versions 6.x and earlier. For Windows Phone 7.x, see [Windows Phone 7 How To Guide](#).

The Windows Mobile Swivel application, for the Windows Mobile phone allows the storage of 100 security strings or One Time Codes for PINless authentication on a .Net mobile phone. The PIN is not stored on the phone. Requesting a top up from the Swivel server resets all the security strings on the mobile phone. You can use the device to get one-time codes for Swivel login and PIN change.

For the Mobile Phone Clients such as the Java based version select [Swivlet How To Guide](#). For other phones see [Mobile Phone Client](#).

4 Prerequisites

User must have Mobile Phone Client or Swivlet enabled to use this application

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

Security strings must be entered including the comma and sequence number e.g. nnnn,nn

This application is not compatible with Swivel 3.8 or later

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.

4.1 Mobile App Store versions

- "Swivel Mobile Client" which is compatible with Windows 8 phones but not Windows 7 phones.
- "Swivel" which is compatible with Windows 7 phones but not Windows 8 phones.
- "Swivel Mobile" which is compatible with Windows 8 phone only and not a Windows 7 phone.

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 Windows Mobile Installation

To install it, you need either ActiveSync or Windows Mobile Device Centre installed on your computer (the latter is for Vista and Windows 7). Attach the mobile device to your computer, and copy the attached .cab file to it. Execute the cab file to install the Mobile Phone Client. You can remove the cab file once it is installed.

The first time this application is used, it must be configured with the details of the Swivel server. 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 by choosing the Configuration. Your administrator will provide you with these.

Once the Swivel server details are configured, for Swivel version 3.8 or later, you must provision your phone before you can request security strings. Press **Provision** to provision this phone with the Swivel server. You will need to request a provision code from your helpdesk, which must be used immediately. The code will be sent either to your phone as an SMS, or via email, depending on how your Swivel server is configured. Provisioning is not necessary for versions of Swivel earlier than 3.8.

Set the configuration as appropriate (note that the Swivel server must be publicly visible for the Mobile Phone Client to work, or else the phone must be able to access the Swivel server via the internal network). Once the device is configured, select the Top Up option to download 100 security strings to the phone. The phone doesn't need access to the Swivel server again until it runs out of strings and you need to Top Up again.

The **Beta** version of the software can be downloaded here: <http://www.swivelsecure.com/userfiles/File/software/beta/SwivletDeploy.zip>

7 Testing

You can top up the Mobile Phone Client and you should see a log message saying strings requested for user XXXX.

Send a user a provision code, the following should be displayed in the Swivel logs:

User "username" can now reprovision their mobile device

The user has been sent a provision code to provision their mobile client

User "username" provisioned successfully

The user has successfully provisioned their Mobile Phone Client, this message is displayed in the Swivel Administration console log.

8 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

Does the Swivel applet application have authorisation to access the network connection

Can the phone use self signed certificates if a https connection is being used

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

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.

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 on the end eexample: 292401, Swivel versions earlier than 3.10 require ,nn example: 2924,01 otherwise it will see it as a dual channel authentication.

8.1 Known Issues

If you have a self-signed certificate - even if you check the box to use a self signed certificate it will ignore this setting due to a problem with the .NET framework.

8.2 Error Messages

Mobile request from unprovisioned device; the user username needs to complete the reprovision process

Security strings are being requested by an unprovisioned device. The user needs to provision the Mobile Phone Client.

User "username" provision failed, A valid session could not be loaded or created for the user

The provisioning of the Mobile Phone Client has failed, either an incorrect provision code was used or the provision code has timed out.

AGENT_ERROR_NO_SECURITY_STRINGS, AGENT ERROR NO SECURITY STRINGS

The OTC is being entered without the ,nn at the end of the OTC, whereby nn is the number given with the security string

AGENT_ERROR_SESSION

Provisioning of Mobile Phone Client attempted without Provision code. Ensure user attempts with a valid provision code.

NOT FOUND

Provisioning error, this is displayed in the Swivel Windows Mobile Phone Client version 1.0 and is resolved by upgrading to version 1.2 or higher.

9 Tested Mobile Phones

As more information is fed back additional phones will be added here.

Mobile Phone Compatibility

Manufacturer	Model	Version	Windows Mobile Version	Operator	Compatible Y/N	.Net Applet Version
Samsung	Omnia	Not Known	6.5	Not Known	Y	Not Known

10 RADIUS Considerations

One thing to be aware of is that when using RADIUS authentication, except for the PAP protocol, you must use every string from the phone for authentication. If you generate a string and don't use it, authentication will fail until you Top Up again. This is an unavoidable consequence of the way most RADIUS protocols work.

11 Windows Phone 7 How To Guide

12 Overview

The Swivel Windows Phone 7 Mobile client allows the storage of 100 security strings on a Windows Phone 7 (and 7.5). The PIN is not stored on the phone. Requesting a top up from the Swivel server resets all the security strings on the mobile phone. You can use the device to get one-time codes for Swivel login and PIN change. The app is available for Windows 7 Phones as Swivel, for Windows 8 phones use the **Swivel Mobile Client**.

13 Prerequisites

This application is for phones running Windows Phone 7.x only

User must have Mobile Phone Client or Swivlet enabled to use this Application

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 example: 292401, Swivel versions earlier than 3.10 require ,nn example: 2924,01 otherwise it will see it as a dual channel authentication.

This application is compatible with versions of Swivel from 3.2 onwards. To download security strings from Swivel versions 3.8 onwards, the phone must be provisioned first. For versions 3.7 and earlier, provisioning is not required or supported.

Appliances using Swivel 3.8 may require an upgrade on their proxy to provision a mobile device, see [Appliance Proxy Server Upgrade](#)

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.

13.1 Mobile App Store versions

- "Swivel Mobile Client" which is compatible with Windows 8 phones but not Windows 7 phones.
- "Swivel" which is compatible with Windows 7 phones but not Windows 8 phones.
- "Swivel Mobile" which is compatible with both Windows 8 phone only and not a Windows 7 phone.

14 Swivel Configuration

14.1 Configuring Mobile Client user access on the Swivel 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.

14.2 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](#)

14.2.1 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 [Mobile 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](#).

14.2.2 Mobile Client Policies

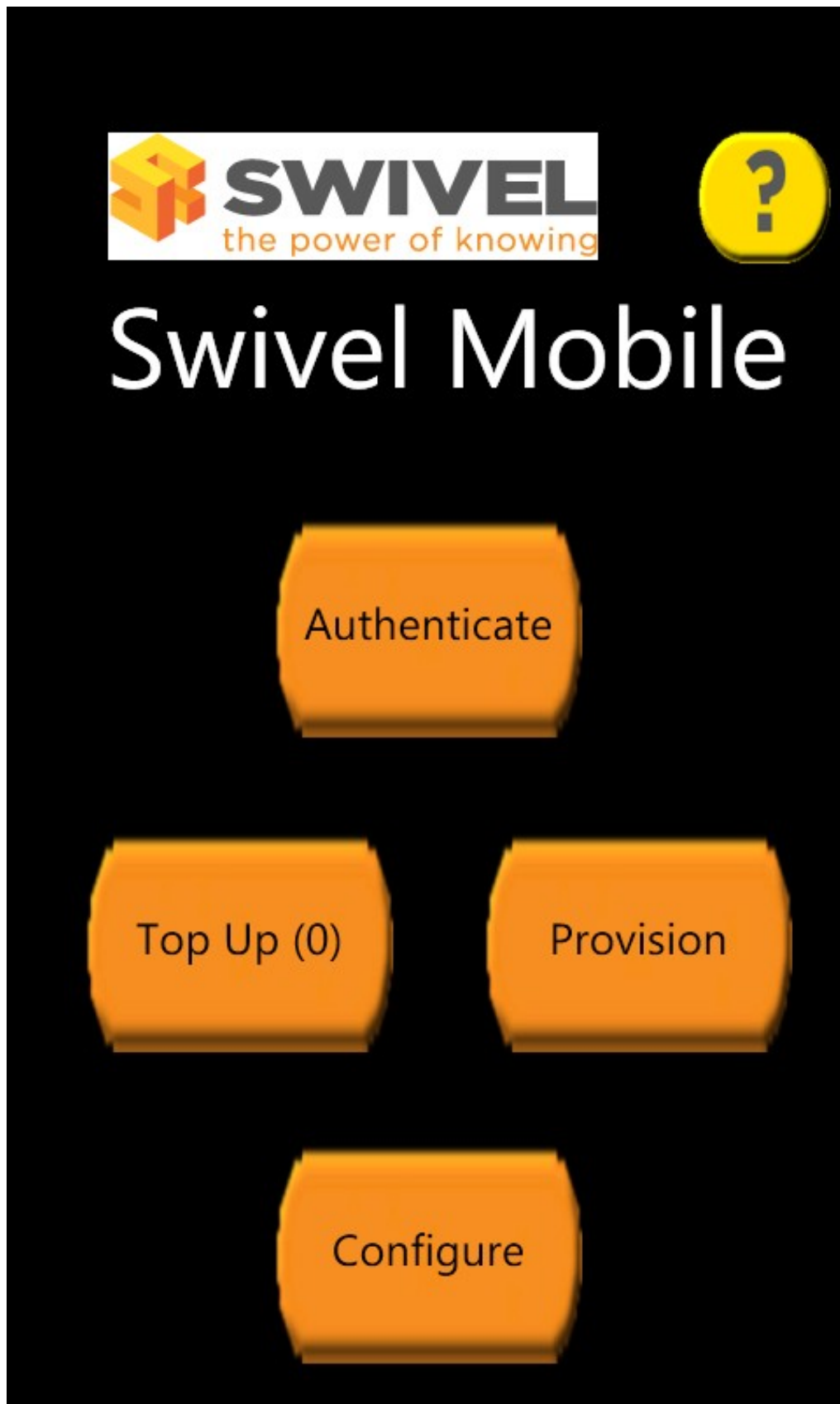
For the Server based policies see [Mobile Client Policies](#)

15 Getting the Application

The application must be downloaded from Windows Marketplace. Search for "Swivel".

16 Using the Application

When you start the application, you will see the following screen:



Help is available from the application on all pages by pressing the ? button at the top right.

The first time this application is used, it must be configured with the details of the Swivel server. 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 by choosing



the Configuration. Your administrator will provide you with these.

Once the Swivel server details are configured, for Swivel version 3.8 or later, you must provision your phone before you can request security strings. Press **Provision** to provision this phone with the Swivel server. You will need to request a **Mobile Provision Code** from your helpdesk, which must be used immediately. The code will be sent either to your phone as an SMS, or via email, depending on how your Swivel server is configured. Provisioning is not necessary for versions of Swivel earlier than 3.8.

Once the phone is provisioned, you can request new security strings. Press the **Top Up** button to do this. Your phone will be pre-loaded with 100 new security strings.

Once you have carried out the 3 steps above, you can use the **Authentication** button to request security strings one at a time for Swivel authentication. Your phone will not need to connect to the Swivel server again until you have used all your strings.

17 Configuration



Configuration

Server:

Port:

Context:

☒ SSL

☐ Allow self-signed

Username:

Enter the Swivel server details on this page.

You will need to get the server details from your system administrator.

WARNING: the "Allow self-signed" option does not work. Unfortunately, there is no way on a Windows Phone 7.x to connect to a web server over HTTPS if the SSL certificate is not valid. There may also be a problem with some servers, even if the certificate is valid, due to an issue with TLS Server

Name Indication (SNI). This has been observed and fixed on the Swivel Taskbar client for Windows 7 (desktop), but unfortunately the same fix cannot be used on Windows Phone. In this case, the only fix is on the server side: either disable HTTPS or ensure that the server (or firewall if Swivel is being proxied) either has SNI (or TLS) disabled, or has the correct server name(s) configured.

18 Provisioning



Provision

Provision Code:

1234567890



Before you can request security strings, you must provision your phone with the PINsafe server (PINsafe version 3.8 or later). Make sure that the phone is properly configured with the Swivel server details before doing this.

Ask your administrator or helpdesk to send you a provision code. You will receive this via SMS or email, depending on the configuration of your Swivel server. You must enter this code into this phone as soon as you receive it, as it has a limited lifespan.

19 Top Up



Top Up Strings

Top Up

Cancel

Use this page to request more security strings. Before you do this, make sure your phone is correctly provisioned with the PINsafe server (PINsafe version 3.8 or later).

Click **Top Up** to request more strings. If successful, you will be sent 100 new strings. Any previous strings you had been issued with will no longer be valid.



Authentication

Get Next String

Security String:

1	2	3	4	5	6	7	8	9	0
-	-	-	-	-	-	-	-	-	-

Index:

--

Back

To get the next available security string, click *Get Next String*. You will be shown the next string and its index.

To authenticate, calculate your one-time code from the security string, then append "," and the 2-digit index shown.

For example, if the security string is "2468013579", the index is "02" and your PIN is 1357, the authentication code will be "2603,02".

20.1 Change PIN

To change your PIN, you need to apply the same process to both the current and the new PIN. Use the same security string for both PIN's.

For example to use the string above to change your PIN, if your existing PIN is 1357 and your new PIN will be 2468, use "2603,02" as your old one-time code, and "4815,02" as your new one-time code.

21 Known Issues

Allow self-signed Certificate does not work with the Windows Phone, where HTTPS is used a valid certificate must be used.

Windows Phone does not support connecting to HTTPS servers with certificate errors. If you are publishing a Swivel server using HTTPS, make sure that the certificate is valid, and that you use the correct host name when configuring the client.

If you are using a proxy server that supports TLS for HTTPS connections, be aware that you must configure the correct host name for server name indication (SNI), or the phone will reject the connection. There is no way to disable this, or to force the connection to use SSL instead of TLS.

We have had reports that this application is not available in all markets. To the best of our knowledge, the application should be available in all countries supported by the Microsoft Market Place, but if you have difficulty finding the application in your country, please let us know through support@swivelsecure.com, so that we can investigate the problem.

22 Troubleshooting

The remote server returned an error: Notfound

The Swivel server cannot be contacted. This may be due to certificate errors described above.

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.

23 Windows Phone(8) 2.0 How To Guide

24 The Swivel Windows Phone 8 2.0 App Overview

Swivel Secure now offers a Windows Phone 8 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.

25 Requirements

Swivel 3.10 or higher

Windows Phone 8, Q10, Bold, Curve, 8210

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 example: 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

26 Versions

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,

26.1 Which version do I need?

Pinsafe version 3.10 or later, Mobile Client 2.0

Windows Phone 8 Mobile Client 2.0 version 2.0

26.2 Mobile App Store versions

- "Swivel Mobile Client" which is compatible with Windows 8 phones but not Windows 7 phones.
- "Swivel" which is compatible with Windows 7 phones but not Windows 8 phones.
- "Swivel Mobile" which is compatible with both Windows 8 phone only and not a Windows 7 phone.

27 Swivel Configuration

27.1 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.

27.2 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.

27.3 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](#).

27.3.1 Mobile Client Policies

For the Server based policies see [Mobile Client Policies 2.0](#) for previous versions see [Mobile Client Policies](#)

28 Windows Phone 8 Installation and Configuration

The Swivel Windows Phone 8 Client 2.0 is available from the Windows App Store. You can click the icon below to open the App within the windows app store, or follow the instructions in this article to navigate to the App within the App Store.

28.1 Download compatible with Swivel 3.10 onwards

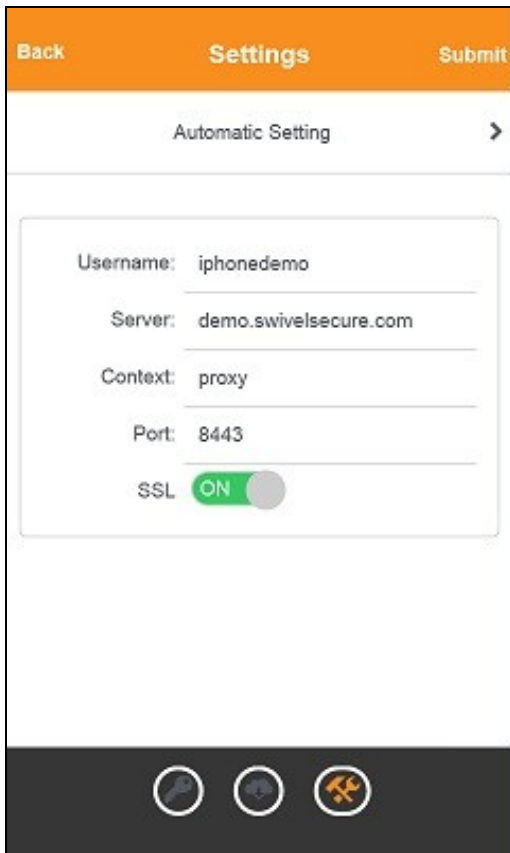


28.2 Configuring the app

When you launch the app you will see the helper wizard, at the bottom of the screen there will be menu icons to guide you through the mobile client options.

28.2.1 Get Server Settings

If an [SSD](#) server is being used, select **Get Server Settings** and enter the Server ID. Otherwise the settings can be manually entered with information from the Swivel System administrator.



The settings are

1. Username: Your username that you use when you authenticate via Swivel
2. Server: The URL from where the client can download security strings (or keys)
3. 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**
4. 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**

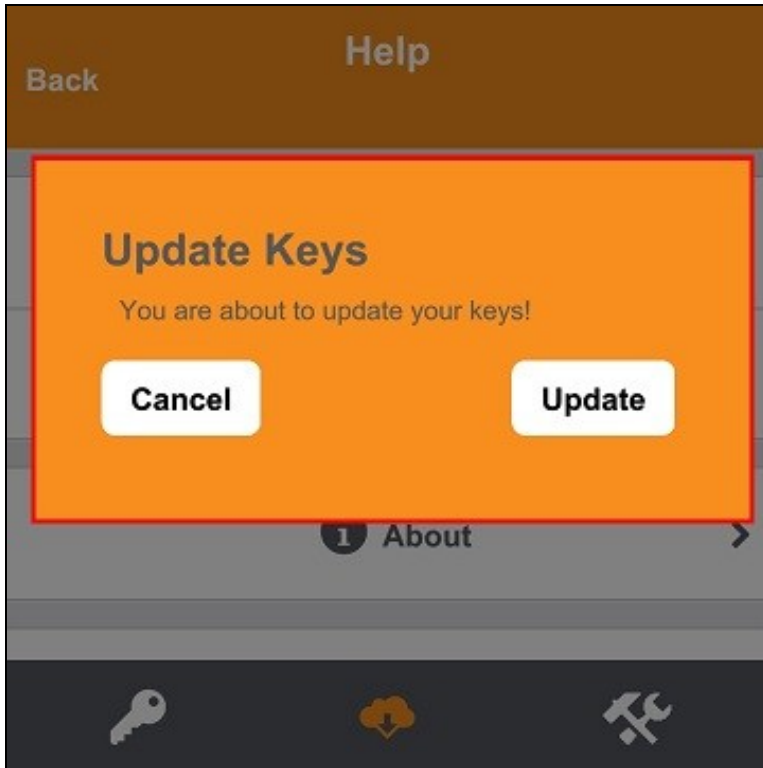
Once you have entered the settings you can select Submit in the header location of that page.

28.3 Mobile Provision Code

Swivel versions 3.10 and higher require each Mobile device to be Provisioned with a Code sent from the Swivel server. To provision a phone see [Mobile Provision Code](#).

28.4 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**

28.5 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.

28.6 Authenticating with app

To use the Swivel Windows Phone 8 app to authenticate is very simple.

1. Open the app. on your Windows Phone 8.
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 enrolment 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).

Enter PIN

Please enter your PIN and press submit

1234567890

SubmitClear

OTC

342801

This is your One Time Code (OTC).

28.7 Authenticating with app and PINsafe

To use the Swivel Windows Phone 8 app to authenticate is very simple.

- 1. Open the app on your Windows Phone 8.

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.



28.8 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 Windows Phone 8 is likely to be without network connectivity for any length of time.

29 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.

29.1 Device fails to Quick Provision

If the mobile device fails to quick provision and displays the provision information but the input fields cannot be edited, it may be that the Internet Explorer on the Windows Mobile is setup to use Desktop mode and for this reason they cannot see the button. This has been seen on a Nokia Lumia. Take the following steps to change this to the Mobile Version:

- a. Go to Internet Explorer.
- b. Click 'More'.
- c. Click Settings.
- d. Website preference > change to mobile version.

29.2 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](#)

30 Tested Mobile Phones

The following phones have been tested

Mobile Phone Compatibility

Manufacturer	Model	Version	Operator	Compatible Y/N
Windows Phone 8	Lumina	-	Y	
Windows Phone 8	Lumina	-	O2	Y
Windows Phone 8	Lumina	-	Vodafone	Y

- The current version only supports one device per user.

Keywords: Windows Phone 8, Lumina, AppStore

31 Legacy

Download compatible with Swivel 3.10 and later.

