

Google Authenticator

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Overview

Google Authenticator supports the use of OATH HOTP such as used with the Swivel **Token**, and software tokens with a valid **Seed** can be used to authenticate Swivel users. Google Authenticator uses HMAC-SHA1 seeds.

Currently Swivel is not compatible with the Authenticator Time Based OATH TOTP token as Swivel tokens use a 30 second refresh, and Google Authenticator uses a 60 second refresh.

Prerequisites

Swivel 3.9.6

Google Authenticator

Configure the Swivel User

For configuring the seeds on the Swivel server see **Token**. Configuring a software token is similar to configuring a hardware token.

Swivel uses a Hexadecimal **seed**, to generate a valid seed see **seed**.

Configure the Google Authenticator App

Convert the Hexadecimal **seed** ((A-Z, 0-9) into Base32 (A-Z, 2-7 and = for padding), for Google. Google enforces a minimum seed length of 16 characters or 80-bits. The following online tool can be used for converting the seed:

<http://www.darkfader.net/toolbox/convert/>

Example:

Base16 seed: e0b10ee3a4bb2598c0575539529f33 (used by Swivel)

Base 32 seed: 4CYQ5Y5EXMSZRQCXKU4VFHZZT (used by Google Authenticator)

| Number base converter | | | |
|---|------------|---|------|
| QuickSelect | Characters | | Base |
| Hexadecimal (%16) lowercase | 0-9 a-z | C | 16 |
| Base32 (%32) UPPERCASE | A-Z 2-7 | C | 32 |
| Custom characters | | | |
| <input checked="" type="checkbox"/> Immediate mode. Automatically convert. Can be slow for non-base-2^n conversions. | | | |
| <input checked="" type="checkbox"/> Padding fix. Align conversion at the left of the input. Useful for 2^n base conversions only (e | | | |

Download the Google Authenticator from the appropriate app store.

On the Google Authenticator App select Set up account, then Enter key provided


Enter account name The Swivel user name

Enter your key The seed


Time-based change to **Counter-based**


Select Add

Then synchronise the token (see [Token](#))


 Add an account


MANUALLY ADD AN ACCOUNT


 Scan a barcode


 Enter key provided


AVAILABLE GOOGLE ACCOUNTS

 grahamfield@gmail.com



 Manual account entry

Time-based 



Back

Add

Manual account entry

gfield

4CYQ5Y5EXMSZRQCXKU4VFHZZ

Counter-based

Back

Add

1234567890

qwertyuiop

asdfghjkl

↑zxcvbnm↵

SymEnglish(UK)Done

Google Authenticator

You're all set.

When you're asked for a verification code, get it here. The code changes frequently, so no need to memorise it.

Try signing in to your account from a computer. When asked for a code, get one here.

gfield

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Testing

Known Issues

Troubleshooting