

# LinOTP for two phase authentication

October 14, 2016 / Gavin Jackson

authentication

linotp

linux

python

security

two phase authentication



At work we just completed a migration from a closed source 2 phase authentication product (that ran on our Windows AD Server) to an open source product called [LinOTP](#) that integrates with Google Authenticator (in fact it work with any authenticator that supports the HMAC-Based One-Time Password (HOTP) or Time-Based One-Time Password (TOTP) algorithms - these include Lastpass Authenticator and FreeOTP).

LinOTP is written in Python (Python 2/Pylons), is extremely modular (allowing you to configure it to suit your environment).

Our configuration makes use of the following modules:

- PAM authentication module (which is used by Openvpn to perform the two phase authentication).
- LDAP against AD to perform user ID resolution
- Postgresql to host the token and audit databases
- Apache2 to provide authentication to the management interface and SSL

A lot of the configuration is plumbing - as it is running on python 2 I did have to use [pyenv](#) to get a version of python 2 with a working virtualenv (Ubuntu seems to have broken virtualenv in their recent 16.04 LTS upgrade).

The LinOTP [documentation](#) is **VERY** good.

LinOTP Config

Tools

Import Token File

Help

LinOTP

Logged in as: gavinj | Logout

Selected User

Selected Token

TOTP00012E16

Realms:

les-mills-asia-pacific

Enroll

Assign

Unassign

Enable

Disable

Set PIN

Reset Failcounter

Delete

Token View

User View

Policies

Audit Trail

Lost Token

Token Info

Resync Token

Set Token Realm

| Serial Number | Active | Username | Realm              | Type | Login Attempts Failed | Description      | Max Login Attempts | OTP Length | Count Window | Sync Window |
|---------------|--------|----------|--------------------|------|-----------------------|------------------|--------------------|------------|--------------|-------------|
| TOTP00012E16  | true   |          | les-mills-asia-pac | TOTP | 0                     | web ui generated | 10                 | 6          | 10           | 1000        |
| TOTP00015C44  | true   |          | les-mills-asia-pac | TOTP | 0                     | web ui generated | 10                 | 6          | 10           | 1000        |
| TOTP00016FB3  | true   |          | les-mills-asia-pac | TOTP | 0                     | web ui generated | 10                 | 6          | 10           | 1000        |
| TOTP0001735B  | true   |          | les-mills-asia-pac | TOTP | 0                     | web ui generated | 10                 | 6          | 10           | 1000        |
| TOTP0001970E  | true   |          | les-mills-asia-pac | TOTP | 0                     | Les Mills VPN    | 10                 | 6          | 10           | 1000        |

Find

Login Name

Search

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Displaying 1 to 5 of 5 items

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Tidy Management Interface (with self service portal capability)

Enroll Token

The token will be enrolled for user **andrew (Imap (LDAPIdResolver))**.

Token type

HMAC eventbased

OCRA - challenge/response Token

mOTP - mobile otp

Day OTP Token / Tagespasswort

E-mail token

Forwarding Token

HMAC eventbased

HMAC time based

OCRA2 - challenge/response Token

QRToken - challenge/response Token

RADIUS token

Remote token

SMS OTP

Simple Pass Token

YubiKey

Token seed

generate

Enter seed

Token settings

Google

OTP Digits

Hash algorithm

Description

Token PIN:

Enter PIN:

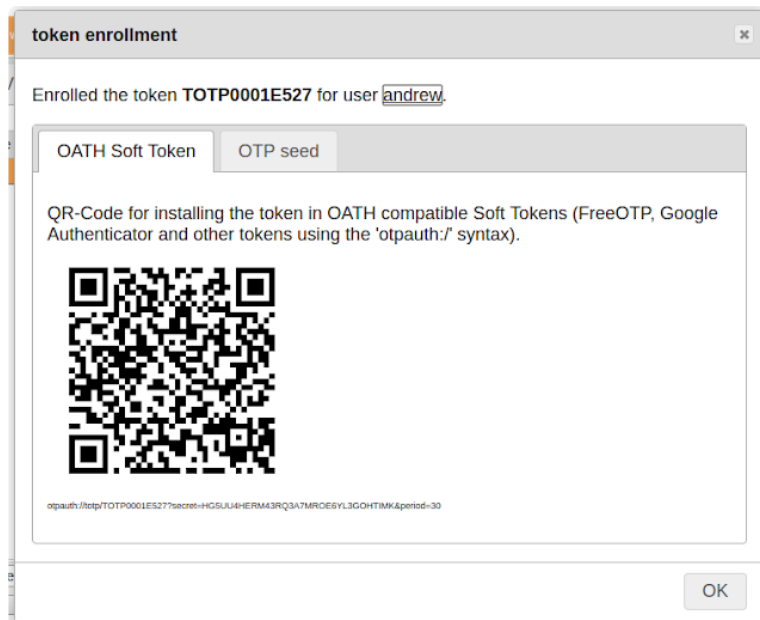
Confirm PIN:

Enroll

Cancel

Experts GmbH

Range of Token types supported



### *QRCode Scanning Screen*

Downloaded from <https://www.gavinj.net/post/linotp-for-two-phase-authentication>

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