

# PASSWORD TOKENS AND MOBILE TOKENS SUPPORTED BY FREJA

## **OATH OTP**

There are many different types of OTP (one-time password) tokens on the market. OATH OTP increases security since the user password changes for each login. A new password is generated every time the button is pressed. Since many competing vendors deliver tokens that comply with the OATH standard, the price for these units is generally lower than buying a proprietary solution.

# **Combining OTP with a fixed PIN**

It is possible to increase the security of using OTP tokens by combining the one time password with a fixed PIN or even a traditional password. By combining the OTP with a fixed PIN the solution is almost as secure as a true two-factor solution (see below).







# **2FA with OATH**

Two-factor authentication (or 2FA) is a higher level of security than the OATH OTP. It is still a one-time password, but the generation of the password takes place after the user has entered a PIN on the token keyboard. Since the PIN is required to generate the password the solution is called two-factor, i.e a knowledge factor (the PIN) and a physical factor (having the token) are required in combination. Just having the token in your possession is not enough to generate a password.



Digipass 261



**Pocket OTP Token** 



**Digipass 301 Comfort Voice** 





#### **OATH OTP USB**

The advantage of a USB unit is that they require no battery, which is environmentally friendly and increases life expectancy. Security is equivalent with the OATH OTP described above. By pressing the button on the OATH OTP token a one-time password is sent to the login window automatically. From a user perspective this means that no password needs to be typed in the password field of the login window, making the unit more user friendly.



OATH USB Key

## **Mobile OATH Token**

A mobile client emulating a physical token with keyboard is an option available for most mobile phones on the market today. The security of these mobile tokens is equivalent to the 2FA with OATH described above. The user is required to enter a PIN to access the application, and can then generate passwords and access the protected system.



**Mobile OATH Client** 

#### **SMS OTP**

Support for SMS and e-mail authentication is built into the Freja authentication platform. When a user wishes to login, a SMS or e-mail is sent to a pre-defined number or e-mail address. Based on this message the user can then complete the login procedure. SMS and e-mail authentication does not in itself constitute strong authentication, but allows for a flexible and cost efficient one-time password solution.



SMS OTP

