iDENprotect™plus User Guide

Apply Mobile

March 13th, 2018
This guide describes how to start using a hardware iDENprotect\textsuperscript{plus} card for authentication.

When iDENprotect\textsuperscript{plus} is enrolled on an iDENprotect\textsuperscript{server}, its owner can authenticate on applications and resources secured by that iDENprotect\textsuperscript{server}.

In a typical authentication scenario, the iDENprotect\textsuperscript{plus} user needs to access a secured service. To do this, iDENprotect\textsuperscript{plus} connects locally over Bluetooth to an iDENprotect application, which in turn creates an Ethernet connection to the iDENprotect\textsuperscript{server}.

iDENprotect\textsuperscript{plus} contains an internal cryptographic keystore that stores all certificates required for identifying it and communicating with iDENprotect\textsuperscript{server}.

iDENprotect\textsuperscript{plus} can store Bluetooth pairing information from 4 separate external devices.

### Using iDENprotect\textsuperscript{plus}

![Figure 1. iDENprotect\textsuperscript{plus}](image)

iDENprotect\textsuperscript{plus} is designed for simple and durable everyday use. It has a single Button and 2 LEDs housed inside a dust- and waterproof (IP66) Casing.

iDENprotect\textsuperscript{plus} works by connecting over Bluetooth to an external iDENprotect application that requires authentication. The client application relays all communication from the [token] to the iDENprotect\textsuperscript{server}, and vice versa. Communication between the iDENprotect\textsuperscript{plus} and the iDENprotect\textsuperscript{server} is secured with cryptographic keys only known to the iDENprotect\textsuperscript{plus} card and iDENprotect\textsuperscript{server}.

iDENprotect\textsuperscript{plus} is operated with the Button. In its default state, iDENprotect\textsuperscript{plus} is in sleep mode and does not advertise its own Bluetooth presence or accept external connection requests.

- To establish a Bluetooth connection, press the Button.
  - Button press switches Bluetooth Smart advertising on/off. If there are no suitable Bluetooth devices in range to form a connection with, nothing happens.
Advertising turns off automatically after 20 seconds if no Bluetooth connection has been established.

To terminate an established connection, press the Button.

Connection terminates automatically after 60 seconds if no data has been transferred.

The current status of iDENprotect\textsuperscript{plus} is indicated by the LEDs below the Button.

<table>
<thead>
<tr>
<th>Table 1. iDENprotect\textsuperscript{plus} Device States</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green LED</td>
</tr>
<tr>
<td>Off</td>
</tr>
<tr>
<td>Blinking 1x /s</td>
</tr>
<tr>
<td>Blinking 2x /s</td>
</tr>
<tr>
<td>Blinking 3x /s</td>
</tr>
<tr>
<td>Blinking rapidly</td>
</tr>
<tr>
<td>Off</td>
</tr>
<tr>
<td>Blinking</td>
</tr>
<tr>
<td>On constantly</td>
</tr>
</tbody>
</table>

**Clearing Bluetooth Pairings**

To clear all Bluetooth pairings from the device:

1. Make sure is in sleep mode (both LEDs off)
2. Push the Button and keep it pressed
3. After a moment, the red LED starts to blink rapidly. Release the Button.

After performing the operation, all Bluetooth pairings from iDENprotect\textsuperscript{plus} have been cleared.

**Hard Reset**

A hard reset can be performed to restore the device to its factory default state. A hard reset flushes iDENprotect\textsuperscript{plus} keystore, which means that you cannot use iDENprotect\textsuperscript{plus} before enrolling it again. To perform a hard reset:

1. Make sure iDENprotect\textsuperscript{plus} is in sleep mode (both LEDs off)
3. Release the Button
4. Press Button again for 60 seconds. When 60 seconds have passed, the red light stays on and stops blinking
5. Release the Button

iDENprotect\textsuperscript{plus} can be used immediately after Hard Reset.

After a hard reset, iDENprotect\textsuperscript{plus}'s keystore has been flushed, and the provisioning process has to be
started again.

**General Precautions**

- Normal operating temperature of the device is 0 - 35 °C (32 - 95 °F)
- Do not use or store the device in temperatures above 60 °C (140 °F), even temporarily
- Do not heat the device or leave it under direct sunlight
- Do not puncture, bend or twist the device

Device contains a lithium battery. Dispose of this product in accordance with local and national disposal regulations.