# **Primus HSM PKCS#11 Provider Training**

Setup & Usage of PKCS#11 Provider

## **Description**

The course is a "hands-on" workshop and covers the basics of installing, configuring and integrating the Securosys PKCS#11 Provider to connect to the Primus HSM or CloudsHSM Service and perform cryptographic operations.

#### **Contents**

- Introduction, architecture overview
  - PKCS#11 standard (slot/token, credentials), HSM partitions/cluster), documentation
- Initial provider installation on Linux
- Basic provider configuration and connectivity test
  - Adapt configuration files
  - HSM connectivity, fetching permanent secret (ppin tool)
  - Basic test tools (ppin, testPrimus, pkcs11-tool), logs and error analysis
- Advanced provider topics
  - Multiple HSMs and partitions
  - HSM clusters, CloudsHSM, load balancing, performance optimization
  - Provider update
- Intro application landscape (based on p11-kit)

### **Details**

Audience: Application engineers, HSM integrators, Consultants, Technical Pre-Sales

Prerequisites: Linux knowledge (installation, access rights, OpenSSL, etc.),

Basic knowledge of PKCS#11 Standard

Conceptual knowledge of Primus HSM (Operator training recommended)

Duration: 2 hours

Language: English, German (documents and online content in English)

Participants: Up to 6 (on-site/online)

Location: Classroom (Securosys SA in Zürich, Switzerland) or

Webinar (teacher-based, see remote training preparations below)

## **Remote Training Preparations**

Due to the high practical focus of the training, it is necessary that the participants have access to Primus HSM partitions in the cloud (or on-premise) with enabled PKCS#11 API.

Please make sure that you have the following infrastructure, setup, documentation and software ready **before the training starts**:

- For training purposes Securosys provides temporary access to Training/Developer HSMs, reachable over the Internet or Two (2) configured user partitions on Primus HSM (cluster) on-premises or CloudsHSM.
  - PKCS#11 license installed, and PKCS#11 API enabled on these partitions
  - Key Invalidation disabled on these partitions
- HSM connection details and credentials: DNS/IP, Port, User names, and valid Setup Passwords (Note: Setup Password has limited lifetime!)
- Laptop/PC with Linux and graphical desktop installed, root access (or within VM)
  (CentOS/RHEL 8, Ubuntu 20, Debian 10)
  - Zoom Client App installed for web-conference (presentations, remote control) <a href="https://zoom.us/download">https://zoom.us/download</a>?os=linux (or use separate Windows PC for Zoom conference)
  - Headset or audio input-/output-device for Zoom conference
- Stable Network/Internet connection (2Mbps+) and access:
  - for Zoom conference
  - to Securosys Support Portal, <a href="https://support.securosys.com">https://support.securosys.com</a>
    (User Guide, Application Notes and Provider software)
  - to Linux repositories to install additional packages (p11-kit, OpenSC, p11-tools)
  - to your HSMs, CloudsHSM or Securosys remote Training/Developer HSMs
- Download from Securosys Support Portal latest versions of:
  - PKCS#11 User Guide: PrimusAPI\_PKCS11-UserGuide\_UG-Enn.pdf
  - PKCS#11 Provider Software: PrimusAPI\_PKCS11-v1.x.x.zip
  - Application Note "Primus PKCS#11 Integration into P11-Kit":
    PrimusHSM\_P11-Kit-Tool\_AN-Enn.pdf

Approx. 3 days before the training Securosys will provide the Zoom web-conference link (and connection details to remote Training HSMs).

Please verify that your infrastructure is working properly before the training.