THALES

Thales Luna HSM 7 Professional Certification Course (Online)

TRAINING AGENDA

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Overview

This instructor led, remote certification course focuses on the Luna HSM 7 product line. The theoretical part of the course focuses on the product overview, solution architecture, deployment, administration and maintenance of a network-based, hardware security module.

The practical sessions will be in the form of a live, instructor led demonstration of each lab exercise. As this is a remote course; students will not have access to a physical HSM.

Student interaction and live Q&A with the instructor is available throughout the entire training course.

Training Objectives

- Review Hardware Security Modules and core cryptographic concepts.

- Understand and demonstrate all aspects of the initialization, setup and configuration of a Luna HSM.

- Discuss common use cases and 3rd party integrations with the Luna HSM 7 product line.

- Evaluate device architecture, usage schemes, authentication methods (PED and Password), and security mechanisms.

- Deep dive into the system configuration, secure Luna Client configuration, utilize HSM tools, and extensive troubleshooting methodologies.

- In depth discussion of high availability concepts, key migration methods and best practices.

- Cover backup and restore of cryptographic objects and supported topologies.

- Discuss advanced topics including auditing/logging, application integrations, functionality modules and supported APIs.

Duration

4 days in total.

Each online training session with be 3 hours in duration with an additional 20 minute break in between reserved for the students.

Thales Certification Exam

This course prepares you to take the Luna HSM 7 Professional Certification Exam.

When completing the certification course and passing the exam, Thales issues you with a certificate and a digital badge.

Included in the price is one exam voucher redeemable for up to 30 days post-training.

Modules and Sessions

Day 1 – Intro to HSMs, Luna HSM 7 Product Overview and Configuration

Course Introduction

Module 1 – Cryptography Fundamentals and Introduction to HSMs

- Intro to cryptography basic, define what is an HSM and purpose as a hardware root of trust.

Module 2 – Luna HSM 7 Product Overview

- Discuss the Luna HSM 7 product line and components.

Module 3 – Product Basics

- Explain HSM properties, product types – PED vs Password, model comparisons, and licensing.

Module 4 – Product Configuration

- Describe roles – HSM vs appliance, configuration best practices, cloning domain concepts, partitions & policies, FIPS, and secure transport mode (STM).

Module 5 – Initialization and Configuration

- Live instructor demo of the Luna 7 solution – initialize and configure the HSM.
- Video Tutorial: Initialization of a Luna 7 PED HSM.
- Video Tutorial: Initialization of a Luna 7 Password HSM.
- Video Tutorial: Remote RPV Initialization Walkthrough.

Day 2 – Client Configuration and HSM Administration

Module 1 – Client Registration and Configuration

- Understand the purpose of the Luna Client, features, authentication (NTLS & STC).

- Compare NTLS vs STC performance and security considerations.

- Review a client's HSM utilities and the customizing base configuration.

- Live instructor demo of Luna Client configuration.

- Live instructor demo of partition initialization, role initialization and policy management.

- Live instructor demo of Luna Client HSM tools.

Module 2 – Product Administration

- Discuss administrative related topics including, backup & restore, high availability, Luna 5.x & 6.x migration methods.

- Differentiate between Backup HSM hardware (G7 vs G5).

Module 3 – Backup and Restore

- Live Instructor demo of a remote backup and restore operation.

- Video Tutorial: Remote Backup Service (RBS) Walkthrough.

- Video Tutorial: Luna HSM Backup and Restore Walkthrough.

- Video Tutorial: Luna Cloud HSM Backup Walkthrough.

Day 3 – HSM Management and Logging

Module 1 – High Availability

- Live instructor demo of HA, key synchronization, load balancing, and failover functionality.

Module 2 – STC Security

- Live instructor demo of STC client authentication.

Module 3 - Audit and Logging

- Discuss the importance of auditing in an HSM to achieve compliance.

- Define what is Audit Officer role, secure logging events, configuring syslog, HSM logs, and client-side CKLog analysis.

- Review the differences between HSM logging vs appliance-side logging.

- Live instructor demo of audit and logging.

Day 4 – Advanced Concepts, SDKs, and Integrations

Module 1 – Functionality Modules and APIs

- Understand the technology behind a Functionality Modules (FM), FM compiling, and core use cases.
- Cover the Luna SDK, PKCS#11 and cryptographic API support.
- Integration concepts and requirements.
- REST-API administration and Crypto Command Center (CCC).
- Video Tutorial: Functionality Module Walkthrough.
- Video Tutorial: Crypto Command Center 3.7 Walkthrough.

Module 2 – Active Directory Certificate Services Integration

- Final live instructor demo of the Luna 7 solution – ADCS Integration with an HSM.
- Video Tutorial: Luna HSM 7 MS ADCS Integration.

Appendix

Luna HSM 7.7.0 - Technical Training Deep Dive

- Review the latest updates introduced in firmware v7.7.0.
- HSM upgrades and requirements.
- In depth coverage of advanced HSM features such as SKS, PKA, the LCO.
- Luna PED Enhancements.
- STCv2.
- Video Tutorial: Luna HSM 7.7.0 - SKS Walkthrough.
- Video Tutorial: Luna HSM 7.7.0 - PKA Walkthrough.

Course Summary and Certification Exam.

Additional questions about Thales Technical Training?

Contact the CPL Technical Training Team at: *idppartnertraining@thalesgroup.com*