

Upgrade Your Public Key Infrastructure (PKI) Skills
with Training from Encryption Consulting LLC

VIRTUAL & ONSITE PKI TRAINING

Class Audience > Beginners | Intermediate | Advanced



About The Course

Planning a Public Key Infrastructure (PKI) can have a significant skill ceiling, as an organization's authentication, encryption, and digital signing can depend on how the PKI is built. An organization needs a robust and secure PKI infrastructure to ensure security, privacy, and regulation compliance. Creating and managing a PKI requires ample knowledge, which Encryption Consulting brings along with the experience needed for organizations to have a custom solution for their needs.

Customers will learn how to deploy or design PKI solutions in the enterprise in our three days of PKI training delivered online, in-person training focusing on Microsoft Active Directory Certificate Service (ADCS) training. You will learn how to build a PKI on Windows Server 2019, focusing on areas such as integration with HSM, Two-tier PKI, Cloud PKI, and more.

There is a strong emphasis on the following:

- PKI Governance
- PKI Design Best Practices
- Certificate Lifecycle Management Process
- PKI Operations
- Hands-on Labs
- Real World Examples

A Hands-On Learning Experience

Our training offers hands-on labs, which provide practical opportunities to implement the concepts and skills you are learning. These labs are an important component of the learning experience, allowing you to apply theoretical knowledge in real-world scenarios and thereby enhance your understanding and retention of the material.

Certificate of Completion

Every student who attends and completes the full training, scoring 70% in the General-purpose PKI exam, will receive a certificate of completion. The certificate will allow the student to qualify for ISC2 continuing education credit for annual CPE commitments. Every student who attends and completes the full training, scoring 70% in the PKI exam, will receive a certificate of completion. The certificate will allow students to qualify for ISC2 continuing education credit for annual CPE commitments.

Why Attend Our PKI Training?

Expert Guidance: Learn from professionals with 20+ years of consultation experience in AD CS and learn from their hands-on expertise from various industries.

Hands-on Learning: Gain practical knowledge through interactive labs and exercises, ensuring you grasp each concept thoroughly.

Tailored Experience: We offer customizable training dates for groups of three or more to align with your team's schedule and specific learning goals.

Course Breakdown

Day 01

Module 01: Introduction to PKI

- Introduction to Cryptography
- Symmetric Encryption
- Asymmetric Encryption
- Hash Functions and Digital Signatures
- Introduction to HSM
- Introduction to PKI

Module 02: Certificate Revocation and Chain Building

- This module will Give you a vital understanding of
- Certificate Verification and Chain Building
- Certificate Revocation Lists (CRLs)
- Functionality
- Design considerations
- How to deal with revocation cache
- Lab 1: Deploying 2 tier PKI
- Online Certificate Status Protocol (OCSP)
- Troubleshooting

Day 02

Module 03: Deploy a Two-Tier PKI Hierarchy

In this module, you will learn:

- Define CAPolicy.inf for root Certification Authority (CA) and subordinate CA
- Active Directory Certificate Services (AD CS) PowerShell cmdlets
- Install and configure offline root CA
- Publish root CA certificate and CRL to CDP and AIA URLs
- Install and configure subordinate CA
- Post-install health checks
- CA Security
- Lab 2: Deploying OCSP

Module 04: Certificate Templates and Enrollment Methods

This module covers the purpose of certificate templates. Configuration and management will be explained in addition to different enrollment methods. This module will give you an overview of:

- Certificate Templates
- Template Versions
- Configuration of Templates
- Enrollment methods

Day 03

Module 05: Enhancements in Windows Server 2022 R2

Windows Server 2022 and Windows 11 introduce a lot of new PKI-related features:

- New installation and deployment features
- New Server Core features
- Enhanced RPC Security
- ADCS Site Awareness for ADCS and PKI Clients
- Support for Internationalized Domain Names (IDNs)
- Template management and Version 4 templates
- Group Protected PFX
- Certificate Lifecycle Notification

- Key-based renewal
- Certificate renewal with same key
- TPM Key Attestation
- Policy module for NDES

Module 06: Public Key Infrastructure (PKI) Maintenance & Availability Operations

CA Operations

- Offline CA Maintenance
- CA Backup
- Private Key Backup & Storage
- CA Renewal
- Maintenance Tasks on a Clustered CA

Module 07: Cloud PKI Hierarchy

In this module, you will learn:

- Different PKI Hierarchy in Cloud PKI deployment
- AWS Certificate Manager (ACM)
- AWS Private Certificate Authority (CA)
- CA Security considerations in the Cloud

Client Testimonial

"Professional, Knowledgeable, Responsive; A Pleasure To Work With"

Submitted Jan 30, 2024

5.0 ★★★★★ Overall User Rating

Product(s): [Encryption Advisory Services](#)

Overall Comment: "Representative and his team are a pleasure to work with, they respond quickly, they are knowledgeable and can easily communicate highly technical requirements into actions that are helping us mature our PKI posture."

5 ●●●●● Evaluation & Contracting	5 ●●●●● Integration & Deployment
5 ●●●●● Service & Support	5 ●●●●● Product Capabilities

See it in action

Encryption Consulting LLC is a customer-focused cyber security consulting firm providing an array of services in all aspects of data protection.

[Contact Us](#)