

## INTRODUCTION TO PKI

Discover PKI, Certificates and How to Use Them

### COMPREHENSIVE

Public Key Infrastructure (PKI) and Certificates are fundamental to internal and external network security. This course is targeted at people who have limited or no knowledge of PKI but need to incorporate PKI into their current or future responsibilities. It starts by describing PKI in an easy to understand manner and then does a deep-dive into PKI concepts and practical functionality. There is a strong emphasis on security, best practices, and hands-on skills labs.

This course focuses on building knowledge and skills that can be applied to IT System Administrators, IT & Software Architects, Developers, and DevOps Engineers. The platform specific examples and labs cover Linux and Windows platforms. The Linux specific content will also be useful to UNIX and MacOS platforms.

### HANDS-ON

Over the 3 days of training you will not only learn new skills and techniques, you will also put them to use during the course. The hands-on labs are designed to reinforce the material and keep you engaged the whole time.

**3 DAY CLASS**

**HANDS-ON LEARNING**

*DESIGNED FOR SUPPORT,  
ENGINEERS, OPERATIONS  
AND DEVELOPERS A LIKE.  
DEMYSTIFY KEYS AND  
CERTIFICATES!*



Onsite and Open-Enrollment Deliveries Available

### Course Scope

- PKI Fundamentals
- Real World Examples
- Management
- Hands-On Labs
- Best Practices
- Troubleshooting
- Tools

## Who Should Attend

IT System Administrators

IT Engineers

IT Architects

IT Security Engineers

DevOps Engineers

Programmers

## Prerequisites

General familiarity with Windows 7 or Ubuntu/RHEL Linux

## Standards

X.509 v3

PKCS#7

PKCS#10

PKCS#12

PEM/DER

OCSP (RFC2560)

TSP (RFC3161)

RFC 3647

# COURSE OUTLINE

## PKI

What is PKI

How PKI is Used

Why PKI is Important

## Core Concepts

Object Identifier

X.500 Distinguished Name

Standard File Encodings

## Private/Public Key pairs

How Keys Work

Creation Process

Tips & Tricks

## Digital Certificates

Anatomy

Extensions

Subject Alternate Names

Standard File Formats

## PKI Ecosystem

Subject Entities

Certificate Users

How Certificate Trust Works

Certificate Authorities

Certificate Management Systems

## PKI Processes

Certificate Creation

The Last Mile Challenge

Certificate Renewal

Certificate Revocation

Time Stamping

## PKI Best Practices

Best Practices for Keys

Best Practices for Certificates

Best Practices for CAs

## Launching PKI in Your Company

How to Start

Key Choices

Planning

Choosing CA Products

## AVAILABILITY

This course is available for on-site delivery at your organization or as part of an open-enrollment workshop in locations around the world. On-site deliveries offer the ability to customize the agenda as well as defining specific areas where additional emphasis is desired. Open-enrollment workshops provide flexibility for customers needing only a few individuals trained. They also offer the opportunity to network with other security conscience PKI organizations in your area. All of the logistics and planning are handled by PKI Solutions, you just need to show-up and learn!

## CERTIFICATE OF COMPLETION

Every student that attends and completes the full training will receive a Certificate of Excellence. Perfect for framing or providing as proof of course completion towards professional advancement goals. In addition, the course qualifies for ISC2 Continuing Education Credit for annual CPE commitments.

## THE INSTRUCTOR

Mike Cooper has 30+ years of IT experience in small startups to global Fortune 500 companies. Throughout his career he has worked with customers in the Financial, Manufacturing, Technology, Transportation, and Energy sectors as well as government intelligence agencies.

## EXPERTISE

- Design, security, policy, deployment and management of PKI
- PKI integration with Windows, iOS, Unix, Linux, Macintosh
- Java development
- IT infrastructure architecture and design
- Scalable system administration of Linux, Unix, Macintosh systems

### Consulting and Support

Ask us about our Consulting and PKI Support services for your organization

### Contact Us

Give us a call for more information about our services and products.

**PKI**  
**SOLUTIONS**

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