

# MICROSOFT PKI IN-DEPTH TRAINING



**BUILD SKILLS AND  
KNOWLEDGE WITH  
HANDS-ON LABS**

## COMPREHENSIVE DEEP-DIVE

The ability to design and manage a Public Key Infrastructure (PKI) is highly dependent on the skills and knowledge of those managing it. This course is a deep-dive into Microsoft Active Directory Certificate Services (ADCS) and focuses on building students' knowledge and skills so they can take full advantage of everything the platform has to offer. There is a strong emphasis on security, best practices, and hands-on skills labs. This is the most up-to-date ADCS training available focusing on Microsoft Active Directory Certificate Services (ADCS).

## HANDS-ON LABS

By completing this course either in person or online, you will not only learn new skills and techniques, you will also put them to use during the course. Our hands-on labs

are designed to reinforce the course material and keep you engaged throughout.

## COURSE SCOPE

**Designed by a former Microsoft Senior Engineer, this course covers advanced topics not available anywhere else, including:**

- Best Practices
- Design and Install
- Management
- Hands-on Labs
- Latest ADCS Features
- Under the Cover Tools and Diagnostics

## COURSE AVAILABILITY

The Microsoft PKI In-Depth course is offered with a range of different options to meet your needs:

- Online Self-Paced Training for Individuals
- 12-Month Online Training Subscriptions for Organizations to Access Trainings, Fully Transferable to Employees
- Onsite Training at Your Organization for Groups In-Person or Via Video Conferencing

Our online courses are delivered electronically in a self-paced environment. You receive access to download the student materials, lab manual and supporting materials. The courses feature video, audio and slide based content and cover all of the same topics and lessons as our in-person courses.

In person training at your location or with virtual remote delivery gives you the ability to customize the agenda and to define specific areas where additional emphasis is desired. Students will receive electronic and/or printed materials and our cloud-enabled lab environment means students only need internet access and a web browser to participate.

## CERTIFICATE OF COMPLETION

Every student who attends and completes a training course (including online) will receive a Certificate of Completion. The certificate indicates the student is a PKI Solutions ADCS PKI Specialist for Windows Server. 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.

## Course Outline

- PKI Components
- How Does PKI Work
- Digital Certificates
  - + Templates
  - + Auto-Enrollment
  - + Template changes in each Server OS
- CA Design
- Cryptographic providers and Crypto Next Generation
- CA Chains and Revocation
  - + Revocation Mechanisms
  - + Chaining Algorithms and Multiple Paths
- Manual Enrollment Options
  - + HTTP & MMC
- Best Practices for Microsoft PKI
  - + Security vs Compatibility
- Hardware Security Modules
- Online Certificate Status Protocol (OCSP)
- Certificate Enrollment Web Service (CES/CEP)
- High Availability CAs
- Upgrading and Migrating CAs between Hosts
- Known Issues with ADCS Configurations
- How to Troubleshoot a CA
- Advanced ADCS Debug Logging
- Exploring and Defining the Key Windows Registry Keys for ADCS
- Certutil and its Hidden Commands



## ABOUT THE INSTRUCTOR

Mark B. Cooper, president and founder of PKI Solutions, has deep knowledge and experience in all things Public Key Infrastructure (PKI), including Microsoft Active Directory Certificate Services (ADCS) and PKI design and implementation. Mark has custom developed the PKI training courses and has led hundreds of PKI trainings around the world. Mark is known as “The PKI Guy” since his early days at Microsoft, where he was a senior engineer designing, implementing, and supporting ADCS environments for Microsoft’s largest customers.



## GET STARTED TODAY

Find out More About our Programs and Services at:

[pkisolutions.com/training](http://pkisolutions.com/training)

Contact PKI Solutions at:

[hello@pkisolutions.com](mailto:hello@pkisolutions.com)

## REVIEWS

*“My PKI re-deployment definitely wouldn’t have been successful without the knowledge and tools I gained this week. Your class should definitely be required for anyone at-tempting ADCS.”*

- Matt Walker, IT Manager, Stronghold Ltd.

*“The class was excellent. The content was useful, detailed and as advanced as I was hoping it’d be. The hands-on labs were very well thought out, easy to understand and effectively linked the course content and lecture to actual implementation.”*

- William H. Knight, Sr. Systems Administrator, Deloitte

*“The training allowed me to deepen my understanding of ADCS and boost my confidence as the PKI administrator for my enterprise. Great company and training! By far the best in the market.”*

- LV McCoy, Cryptographic Management & Operation Subject Matter Expert