Security for Power Systems AIX

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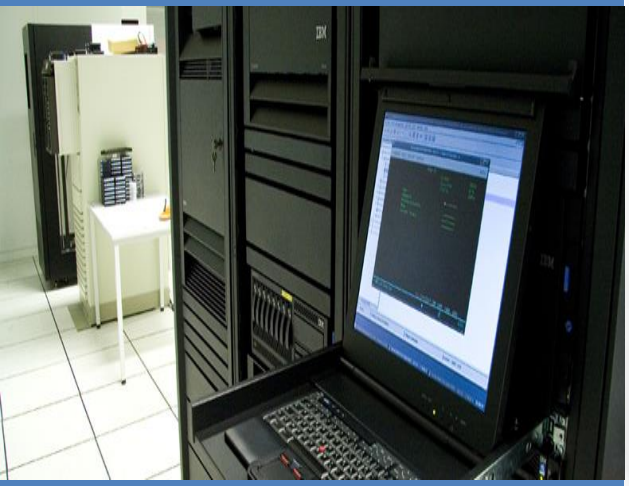
Skills and expertise to help you increase the business value from your Power Systems investment.



Purpose:
Today's leaders face multiple challenges, including the need to secure the enterprise against a barrage of new and evolving sophisticated threats. The IBM business-driven approach to enterprise security helps to identify gaps in your existing capabilities across the people, processes, applications, data, technology and physical facilities across your organization.

The goal of this course is to provide participants a detailed knowledge and hands-on experience in implementing AIX security mechanisms under AIX 7.1 and AIX 7.2. Customer using version AIX 6 may also attend this course.

For additional details on other AIX courses, please visit: https://www.tlcpak.com/educ.html

Audience:

This course is intended for persons who:

- Want to learn what the security mechanisms are built-in AIX Version 7.1 and 7.2
- Will plan, implement, or distribute a security policy in AIX

The audience for this training includes:

- AIX technical support individuals
- System administrators
- System architects

Prerequisites:

Students should have basic AIX administration experience. The AIX prerequisite may be met by attending one of the two following classes or having equivalent AIX skills:

- Power Systems for AIX II - AIX Implementation and Administration.

For complete details on the topics covered in each unit can be viewed at the following link.

https://www.tlcpak.com/tn470.html

Course Requirement:

Students are required to bring their laptops with VPN configured to access one of their test LPAR for performing hands-on labs.

Objectives:

On completion of this course participants should be able to:

- Security in an IT Environment
- Describe security threats to a computer system
- Understand AIX Base Security in detail
- List the AIX commands and components that can meet both the base system and network security threats.
- Configure, distribute, and monitor a security policy using AIX Security Expert.
- Configure the Role Based Access Control (RBAC) feature
- Implement the encrypted file systems feature
- Implement the Trusted Computing Base
- Implement the AIX install time options of Secure by Default and Trusted AIX

Detail Information

Course Code	:TN470
Course Duration	: 3 Day
Course Location	: Customer onsite (Karachi, Lahore and Islamabad), Online on Zoom
Discount	: Discounts are available on a registration of 3 or more students.
Deliverables	: Comprehensive Student Guide and Course Certificate
Terms and Conditions:	: 100% Payment in Advance

For additional information please write to us at:
info@tlcpak.com
or send us your nominations at
www.tlcpak.com/nomination.html

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Unit 1: Security in an IT Environment

- Define the importance of IT Security
- Describe some common threats to IT security
- Define a basic model of security architecture
- The ISO 7498-2 Security Architecture
- Understanding Logical and physical security
- List common AIX security services and threats
- List AIX mechanisms for host security
- List general guidelines for security policies
- Firewall Technologies
- Enterprise Security in a view
- Integrating the physical, logical security layer
- IBM Security Framework.

Unit 2: AIX Base System Security

- Understand the concepts of users and groups.
- Controlling root access on the system.
- Define the uses of SUID, SGID and SVTX bits.
- Understanding system wide security critical logs.
- Users initialization process in AIX.
- Assigning security privileges to a normal user.
- Add/Change/Delete user and group accounts. Setting up a long character user login ID.
- Locking and unlocking a user account. Assigning users with ADMIN rights.
- AIX security files associated with Users and Groups.
- AIX security checkpoint for security administrator.
- Documenting Security Policy and Setup.

Unit 3: AIX network security

- Potential security breaches in TCP/IP.
- Check common security requirements: Availability, Integrity, Confidentiality and Monitoring.
- Understanding TCP/IP start-up flow.
- TCP/IP network services – Ports and Sockets
- Use AIX Network Monitoring tools – iptrace, ipreport, netpmon and securetcpip.
- Understanding network configuration files.
- Why ssh is secure as compare to telnet.
- Hardening host security.

Unit 4: Implementing Role Based Access Control (RBAC)

- Introduction to AIX Role Back Access Control.
- Traditional approach to AIX system administration.
- Understanding available roles and authorizations.
- Describe the role of Kernel Security Table.
- The RBAC Framework. Understand AIX RBAC commands.
- Configuring Role Based Access Control.
- Understanding Domain RBAC.

Unit 5: Implementing Trusted Computing Base

- Protecting you system from attacks.
- Trojan Horse Practical Example.
- Customization of system login prompt.
- Configuring the Restricted Shell.
- Configure AIX User defined authentication.
- Extended File Permissions – Access Control List. Concurrent recording of user's activity.
- Use the Trusted Computing Base (TCB) facility to monitor your system and maintain system integrity.
- Describe and utilize TCB components.

Unit 6: Implementing and distributing a Security Policy with AIXpert

- Holistic view of AIX security framework.
- Learn AIX security and regulatory and compliance.
- Different levels of securities offered by AIXpert.
- Illustrates how to configure security levels.
- Distributing a security policy.
- Undo a security policy
- Check the consistency of the security policy
- Disabling the remote logins.
- Actions against server tampering.

Unit 7: Implementing Encrypted File Systems

- Introduction and Encrypted File System usability.
- Understanding CryptoLite cryptographic library.
- Create and test EFS and related commands.
- To backup & restore EFS.

Unit 8: AIX Install Time Security Options

- BOS Install Security Options
- Understand Secure by Default (SbD) Installation.
- Actions to perform on a newly installed system.
- Enabling and disabling SbD option.
- Login control and setting up a specific herald.
- AIX X11 and CDE concerns and Security Baselines.
- Hardening OS, Network, and Application security.

Unit 9: Maintaining Systems Availability

- System continuous availability
- Understand Denial of Service (DoS) attack.
- DoS Vs. DDoS – A Basic AIX Example.
- Basic tools for detecting DoS attacks.
- AIX host security checklist.
- List common warning signs of a security breach.
- AIX commands used to detect intrusion.
- Real Time countermeasures.
- Cleaning up the system after intrusion.

Opportunities are made, not found