

#### NWA090: Windows Server 2019 Active Directory Domain Services Administration

#### หลักการและเหตุผล:

This course provides the knowledge and skills that are required to deploy and configure in a Windows Server 2019 Active Directory Domain Services (AD DS) in a distributed, how to implement Group Policy, how to perform backup and restore, and how to monitor and troubleshoot Active Directory—related issues environment.

#### วัตถุประสงค์:

- Overview Active Directory Domain Service
- Describe Active Directory Domain Forest Model
- Describe role of Global Catalog, Domain Controller and DNS
- Design and implement DNS infrastructure of Active Directory
- Plan, install, and migrate Active Directory Domain Service Infrastructure
- Create Single Domain, Child Domain and Tree Root Domain
- Plan and implement Active Directory domain and Trusts
- Design and implement Active Directory sites and replication
- Manage Active Directory Objects such as User, Computer, OU and Group
- Automate Active Directory Administration
- Plan and configure group policy on Active Directory Domain
- Maintain and Backup to Active Directory Domain Service
- Monitor Active Directory Domain Service

#### หลักสูตรนี้เหมาะสำหรับ:

This course is intended for Active Directory Technology Specialists, Server and Enterprise Administrators who want to learn how to implement and admin Active Directory Domain Services in Windows Server 2019 environments. Those attending would be interested in learning how to secure domains by using Group Policies, back up, restore, monitor, and troubleshoot configuration to ensure trouble-free operation of Active Directory Domain Services.

# ความรู้พื้นฐาน:

- Basic experience operating Windows Servers in the area of account management, server maintenance, server monitoring, or server security.
- Basic knowledge of TCP/IP.

#### เนื้อหาหลักสตร:

# **Module 1: Introduction to Active Directory Domain Services**

- What is AD DS
- How AD DS Work
- Overview of AD DS Components
- AD DS Schema
- Domain, Tree and Forests concept
- AD DS Trusts
- AD DS Objects
- AD DS Domain Controllers
- DNS and Global Catalog
- AD DS Replication
- AD DS Sites



#### **Module 2: Configuring Domain Name Services**

- Reason for Name Resolution
- DNS Namespace Options for AD DS
- DNS Resource records
- Primary Zone
- Secondary Zone
- Stub Zone
- Active Directory Integrated Zone
- Conditional Forwarder
- About SRV Resource records
- DomainDNSZones and ForestDNS Zones

#### **Module3: Deploying of Active Directory Domain services**

- Requirement for Installing AD DS
- Planning an AD DS Deployment
- Active Directory port details
- Upgrading a previous version of AD DS
- Promote Forest Root Domain
- About Install from Media Feature
- Setup Additional Domain Controller
- Setup Read Only Domain Controller
- Configure Password Replication Policy
- About Functional Level on AD DS

### **Module4: Implementing AD DS Tree and Forests**

- Domain Design Model
- Reason for Deploying multiple AD DS Domains
- Single Forest vs. Multiple Forest
- Promote Child Domain
- Promote Tree Root Domain
- Concept Operation Master Roles on Active Directory
  - Schema Master
  - Domain Naming Master
  - RID Master
  - PDC Master
  - Infrastructure Master
- Transferring Operation Master (FSMO)
- Seizing Operation Master (In case Domain Controller Failure)

#### **Module5: Implementing Active Directory Domain and Trusts**

- Concept of Trust relationships
- Directional and Transitive concept
- Prepare and requirement about Trust on Active Directory domain
- Configuring AD DS Trust
  - Parent-Child Trust
  - Tree Root Trust
  - Short cut Trust
  - External Trust
  - Forest Trust
  - Realm Trust
- Create Alternative UPN Routing



#### Module6: Implementing Active Directory Domain Services Sites and Replication

- Overview of AD DS Replication
- Configuring AD DS Sites
- Design Single Site Replication
- Design Multiple Site Replication
- IP vs SMTP Replication
- About Site Link Cost/ Schedule/ Frequency
- Site Link Bridge and Bridgehead Server
- Configure Global Catalog Server
- Using Universal Group Member Caching

### **Module7: Managing Domain User and Computer Objects**

- Overview User Account
- User Account Password Option
- Manage User
  - Fine-grained Password Policy
  - Update Group Membership
  - Reset User Password
  - Setting User Expiration
  - Setting Logon Hours and Logon Script
  - Assign User Profiles and Home Folder
- User Account Template
- Using Directory Service Command Tools
  - dsadd/dsmod/dsget/dsguery/dsrm
- Using Windows PowerShell for AD DS Administration
- How to Export and Import Active Directory Objects
- Manage Computer
  - Join Domain
  - Disable Computer
  - Reset Computer
  - Delete Computer
  - Pre-stage Computer
- How to offline domain join
- Using Save Query

# **Module8: Managing Group and Organizational Units**

- Default Active Directory Group
- Active Directory Special Identities
- User Defined Group
- Design Group Type and Group Scope
- Domain Local vs. Global vs. Universal
- Group Nesting
- Concept of OU
- Create OU
- Delegate admin's permission on OU

### **Module 9: Configuring Group Policy Object**

- Concept of Group Policy
- Group Policy processing order
- Using Group Policy Management Console
- How Group Policy is applied
- Guidelines for designing Group Policy





- Check Result with GPResults and RSOP
- Group Policy Option
  - Inherit/Block/Enforce
  - Remote Refresh Group Policy
  - Filtering GPOs
  - Starter GPOs
  - Security Template GPOs
- Backup/Restore Group Policy
- Generate Group Policy Report

#### **Module 10: Maintaining & Monitoring Active Directory**

- Process for Backup Active Directory
- Best practices for Backup Active Directory
- Concept of Active Directory Recycle Bin
- Using Active Directory Recycle Bin
- Using Non-Authoritative Restore
- Using Authoritative Restore
- About Restartable AD DS
- Proceed to defragment AD DS database
- Monitoring Active Directory Domain Service

#### วิทยากร:



#### อาจารย์สุรัตน์ เกษมบุญศีริ

- วิทยากรรับเชิญประจำสถาบันพัฒนาบุคลากรแห่งอนาคต
- Managing Director (Born2Learn Co., Ltd)
- Microsoft Certified Trainer (MCT)
- Microsoft Certified System Engineer (MCSE)
- Microsoft Certified Solution Associate -Database
- Microsoft Certified Professional (MCP)
- Certified ITIL Foundation v.3
- Certified CompTIA Security +
- Cisco Certified Network Associate (CCNA)
- Certified AOTS of Japan Members

จำนวนชั่วโมงในการฝึกอบรม: 5 วัน (30 ชั่วโมง)

**กำหนดการอบรม:** ตามตารางปฏิทินอบรมประจำปี https://www.career4future.com/trainingprogram

ช่วงเวลาฝึกอบรม: 9.00 - 16.00 น.

ค่าลงทะเบียนอบรม: ท่านละ 14,500 บาท (ราคารวมภาษีมูลค่าเพิ่มแล้ว)\*\* สถาบันฯ เป็นหน่วยงานราชการ จึงไม่อยู่ในเกณฑ์ที่ต้องถูกหักภาษี ณ ที่จ่าย

#### สถานที่ฝึกอบรม:

สถาบันพัฒนาบุคลากรแห่งอนาคต เลขที่ 73/1 อาคารสำนักงานพัฒนาวิทยาศาสตร์และเทคโนโลยีแห่งชาติ (สวทช.) ชั้น 6 ถนนพระรามที่ 6 แขวงทุ่งพญาไท เขตราชเทวี กรุงเทพฯ 10400

## วิธีการการสำรองที่นั่ง:

ดิดต่อสำรองที่นั่งล่วงหน้า ในวัน-เวลาราชการ โทรศัพท์: 0 2644 8150 ต่อ 81886, 81887

โทรสาร: 0 2644 8110

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