# Lab Assignment 3 (Part II) – Managing a Certificate Authority Server

## Lab Objective

The objective of this lab is to manage a Certificate Authority (CA) Server in an Active Directory (AD) domain by issuing and managing certificates for various purposes.

You will configure certificate templates, enable automatic enrollment, and use certificates for securing documents and internal web servers.

By the end of this lab, you will:

- Issue and manage User Certificates for authentication and encryption.
- Enable Automatic Certificate Enrollment for users and computers in the domain.
- Issue certificates to digitally sign documents and files.
- Secure internal web servers with SSL/TLS certificates for encrypted communications.

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## Lab Environment Requirements

- **Enterprise CA and Domain Controller (DC1XX)** – Active Directory integrated Certificate Authority

- **ClientXX** – To test certificate issuance.

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## Tasks

### Task 1: Issue User Certificates in an AD Domain

- Configure and publish **User Certificates** from **Enterprise CA**.

- Open a session on **ClientXX** with a user that has an **email address** and manually requests a user certificate.

- Verify that the user has obtain a **valid certificate** on the **Client** and on his account in the **AD**.

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**Task 2: Enable Automatic Certificate Enrollment in AD**

- Configure **Group Policy settings** to allow **automatic certificate enrollment**.

- Open a session on **ClientXX** using a **different user** from task 1, that has an **email address**. and verify if he has received **automatically** the necessary certificate.
- Check the user account in the **AD** to verify that he has a valid certificate.

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**Task 3: Issue Digitally Signed Documents and Files**

- Issue **Digital Signature Certificates** from **Enterprise CA**.

- Open a session on **ClientXX** with a user and manually request a user certificate.

- Verify that he has received this certificate.

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**Task 4: Secure Internal Web Servers with SSL/TLS Certificates**

- Create an **SSL** certificate on the **Enterprise CA**.

- Request and issue an **SSL/TLS Certificate** for **dc1XX.vlabsXX.com**.

- **Bind** the certificate to the **local web server (IIS)**.

- Test and verify **HTTPS access** to **dc1XX.vlabsXX.com**.

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## Lab Assignment Deliverables

You should submit a **lab report** in **PDF** including **screenshots** covering your work.