

MICROSOFT IIS 8.5

Internet Information Services

Day 3



WHAT WE DISCUSSED LAST TIME

Day 2

Module 3: Application pools

- Application pools overview
- Configure and manage application pools
- Default settings
- Advanced settings
- Labs

Module 4: Authentication

- Authentication introduction
- Anonymous authentication
- Basic and digest authentication
- Windows authentication
- Forms authentication
- Labs

Module 5: SSL encryption

- HTTPS overview



COURSE OUTLINE

Day 3

Module 5: SSL encryption | continued...

- Installing an SSL certificate
- Backup and restore SSL certificate
- Trusting a self-signed certificate
- Lab 5

Module 6: IIS monitoring

- Worker processes monitoring
- Configure logging
- Request failed tracing
- Performance monitoring tool
- Lab 6



COURSE OUTLINE

Day 3

Module 7: FTP and administration

- Administer virtual directories
- Basic administrative tasks (PowerShell)
- Install FTP
- Configure FTP
- IIS Manager for Remote Administration
- Lab 7

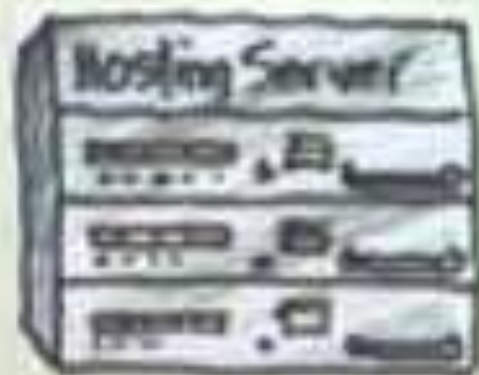
Module 8: Backup and load balancing

- HA vs DR
- Backup and restore IIS settings
- Lab 8

Module 5 -

SSL ENCRYPTION

SECURE SOCKET L?

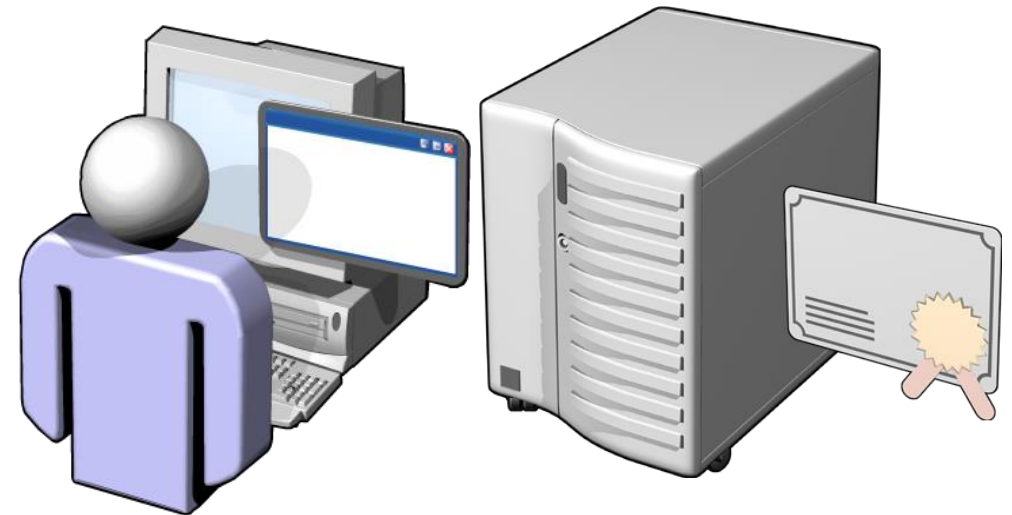
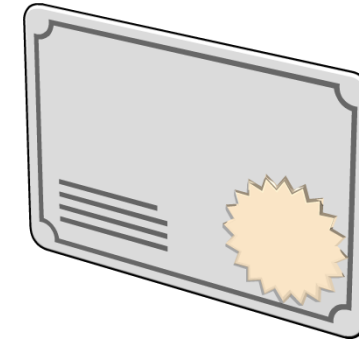


SSL CONFIGURATION

IIS SSL Configuration Steps

1. Get an appropriate certificate
2. Create an HTTPS binding on a site
3. Test by making an request to the site
4. Optionally configure SSL options, e.g. making SSL a requirement

➤ Choose Certificate:
Known Trusted CA
Local CA
Self-Signed



TYPES OF SSL CERTIFICATES

DOMAIN VALIDATION	ORGANIZATION VALIDATION	EXTENDED VALIDATION
<ul style="list-style-type: none">• Encryption• Validation of domain control• Padlock in browser Issued in minutes	<ul style="list-style-type: none">• Authentication of organization• Proof of applicant's right to request cert for domain• Organization details in Certificate Info	<ul style="list-style-type: none">• Stringnet,• industry-standardized authentication of organization• Business-beneficial green address bar in browser

A Domain Validated SSL Certificate (DV SSL) comes with 256-bit encryption and is recognized by all desktop and mobile browsers.

An Organization Validation assurance SSL certificate is issued to a company/business/organization.

Extended Validation SSL Certificates offer a top-notch level of safety and security that ultimately enhances customer confidence.



TYPES OF SSL CERTIFICATES



Wildcard SSL Certificate

A Wildcard SSL Certificate is designed to secure a domain name along with an unlimited number of sub-domains, which means a user can protect multiple sub-domains under a single certificate.



Multi-Domain (SAN) SSL Certificate

Multi-domain (SAN) is a built-in feature that comes with an SSL certificate. This lets users secure multiple domains under a single certificate.



Multi-Domain Wildcard SSL Certificate

A Multi-Domain Wildcard SSL Certificate is fabricated with combined features of both wildcard and multi-domain SSL certificates.

REQUESTING SSL CERTIFICATES

The screenshot displays the IIS Manager interface for the 'ALEXISE3LH Home' website. The 'Connections' pane on the left shows the site structure. The 'Actions' menu is open, with 'Create Self-Signed Certificate...' highlighted. The 'Site Bindings' dialog box is open, showing the 'https' binding on port 443. The 'Browse Web Site' section shows the 'Browse *:443 (https)' link highlighted. The 'SSL Settings' dialog box is open, showing the 'Require SSL' checkbox checked and the 'Client certificates' section set to 'Ignore'.

Connections

- Start Page
- ALEXISE3LH (ALEXISE3LH)

Actions

- Import...
- Create Certificate Request...
- Complete Certificate Request...
- Create Domain Certificate...
- Create Self-Signed Certificate...
- Help

Site Bindings

Type	Host Name	Port	IP Address
http		80	*
https		443	*

Browse Web Site

- Browse *:80 (http)
- Browse *:443 (https)

SSL Settings

This page lets you modify the SSL settings for the content of a Web site or application.

☒ Require SSL

☐ Require 128-bit SSL

Client certificates:

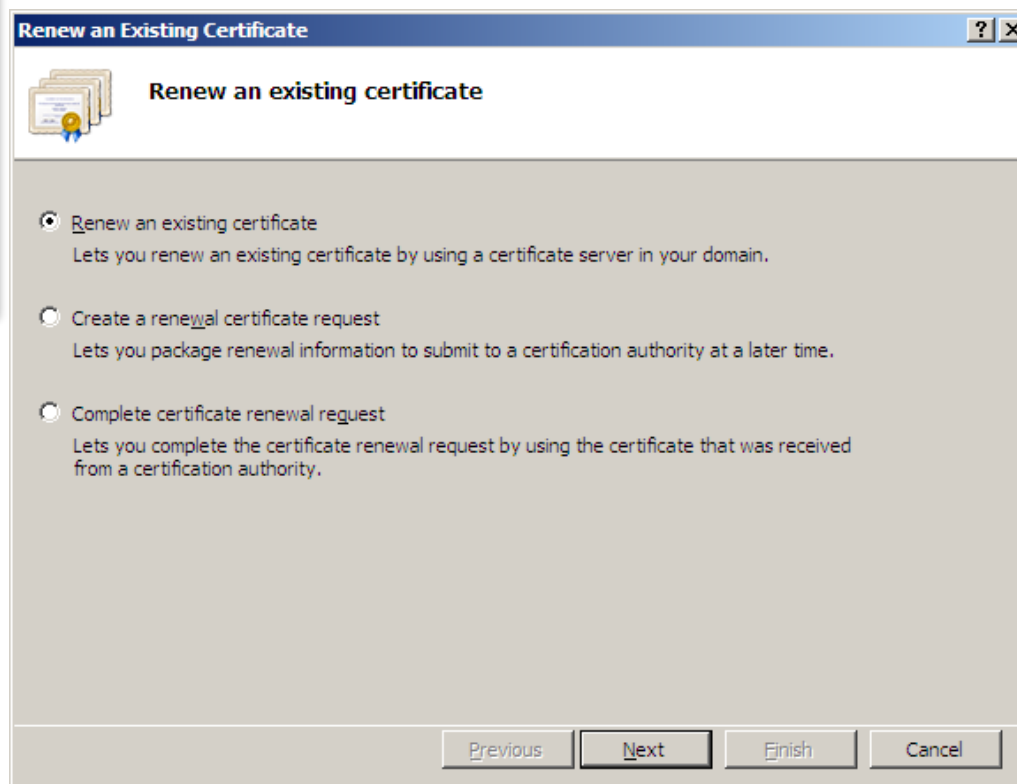
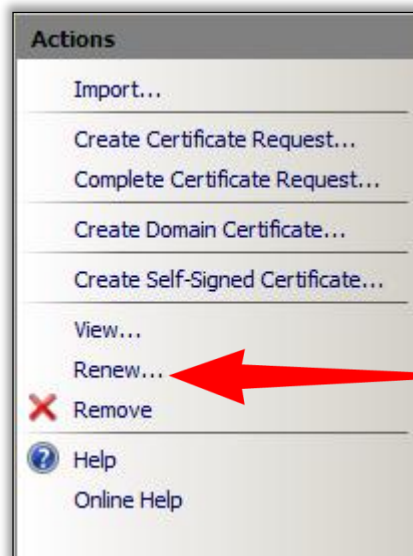
- ☒ Ignore
- ☐ Accept
- ☐ Require

Actions

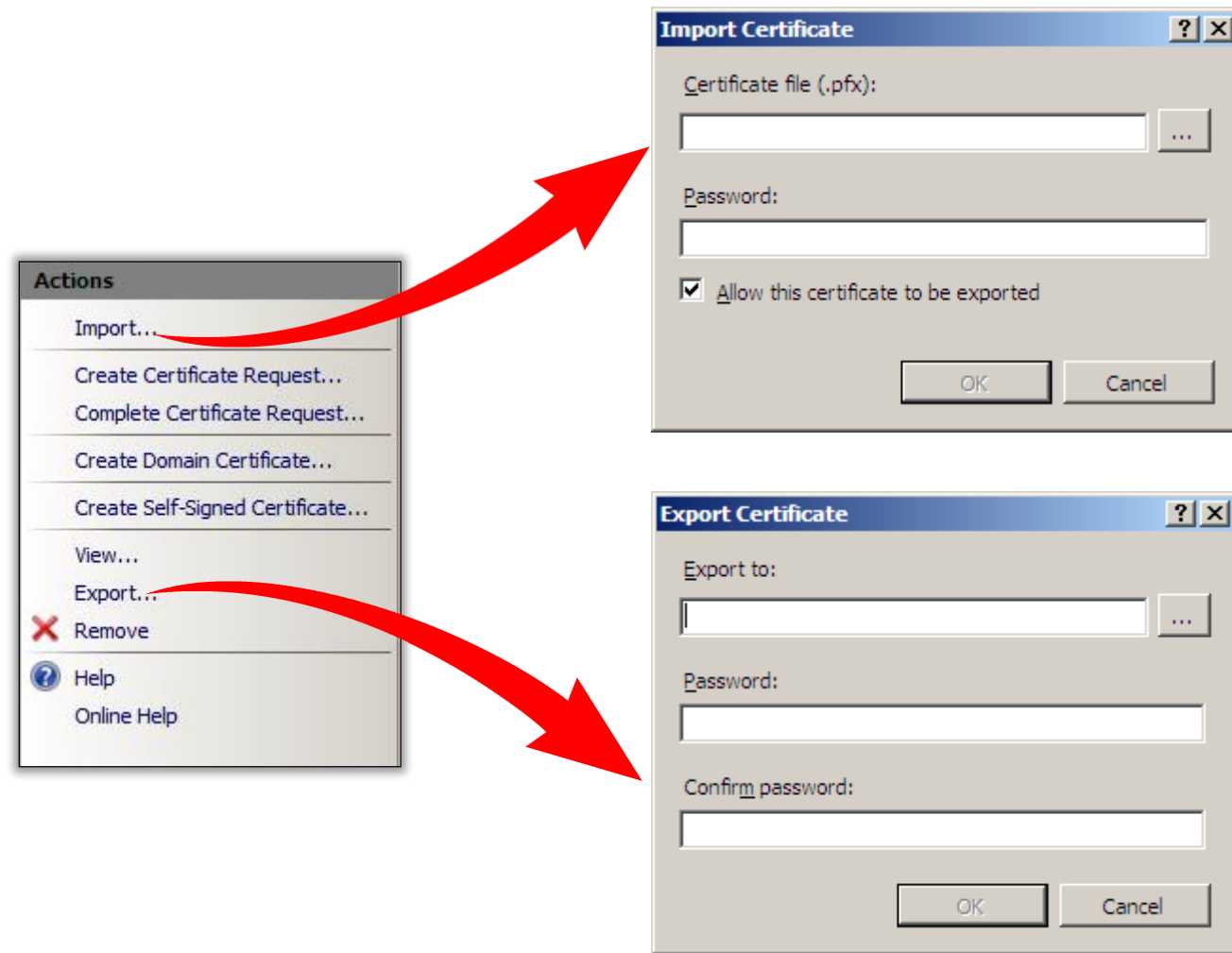
- Apply
- Cancel
- Help
- Online Help

- Obtain a certificate
- Create the SSL Binding
- Verify the SSL Binding
- Configure SSL Settings

RENEWING SSL CERTIFICATES



IMPORTING AND EXPORTING CERTIFICATES



Module 6 -

IIS MONITORING

INSTALL MONITORING COMPONENTS

- Logging Tools
- Request Monitor
- Tracing
- Custom Logging

HOW TO TROUBLESHOOT SLOWNESS

- Browse to (slow) website1.com
- Open IIS Manager → Server → Worker Process
 - Review the time elapsed.

Note: A simple page request should take no longer than 1 second



LOGGING TYPES

FAILED REQUESTS TRACING

- Open IIS Manager → Server → Failed request tracing → Add → Choose all → All Content
- Choose when will the IIS create the log
- We will choose code 401 and 2 seconds → All providers
- Go to IIS website1.com → Edit Site Tracing → Enable
- Review trace log

LOGGING IN IIS

- Open IIS Manager → Server → Logging

Is logging activated? How do we disable/enable it ?

- Review Select Fields
- Review logging stored folder.
- Review logs

ADVANCED LOGGING

- Open IIS Manager → Server → Web installer → Advanced logging → Install

Do you see it after you installed it in IIS Manager?

- Add log Definition → Enable
- Choose: Time – UTC+Local+Taken, Status, Site Name, Server IP, Referrer, CPU, User Agent
- Remember to click Apply!
- Review log folder and review log

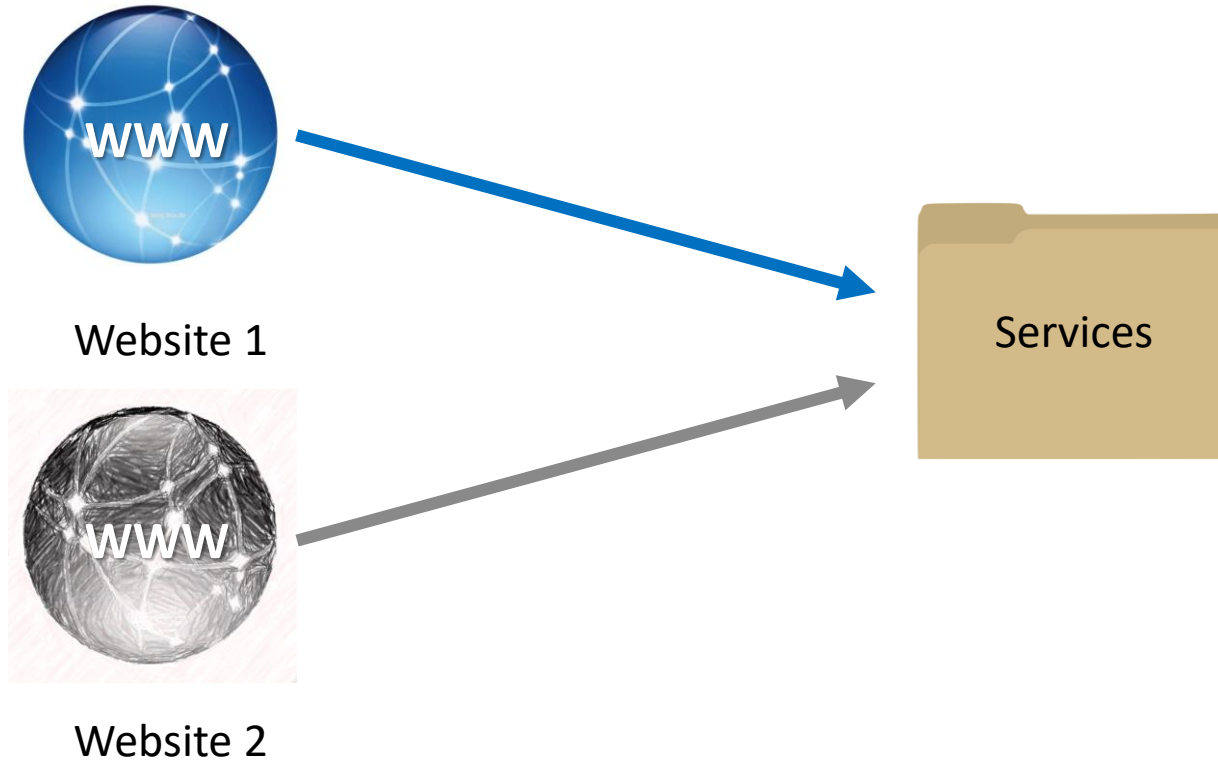
PERFORMANCE MONITORING TOOL

- Click on Start → Search Perfmon → Click on Performance Monitor
What does Perfmon monitor by default?
- Add the following counters: CPU (default), Memory: % Committed Bytes
→ OK
- You can change the color of the lines
- Add the following:
 - ASP.NET Applications → Request Execution Time + Request failed + Requests/sec
 - .NET CLR Exceptions → # of exceps thrown
 - .NET CLR Memory → GC counters (optional, not relevant for now)
- It is possible to change the report type

Module 7 -

FTP AND ADMINISTRATION

WHAT IS A VIRTUAL FOLDER?





ADMINISTER WITH POWERSHELL

POWERSHELL COMMANDS

- Open Powershell
- Get-Website
- New-Website
- New-webBinding

How do you delete a website?

THANK YOU

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