IIS

**1. What is an application pool? Can we deploy two different applications using two different versions of .Net on same IIS server?**

An internet information services (IIS) application pool is a set of URLs that is routed to one or more worker processes. application pool is responsible for to isolate one or more applications into their own process. For ex: if you have two different web sites like website- A and web site-B and want to deploy on the same server, then application pool to isolate the website means website-A runs on one application pool and website -B runs on another application pool.

**2.what is use of application pool?**

An application pool serves as a container for applications in IIS. It's a collection of one or more URLs that can be served by a worker process, and it provides isolation: applications that run on one application pool are in no way affected by other applications that run on different application pools.

**3. What is a configuration file and how to use it?**

A configuration file (web.config) is used to manage various settings that define a website. The settings are stored in XML files that are separate from application code.  Configuration system is used to describe the properties and behaviors of various aspects of ASP.NET applications.

**4. what do you know about the various logs on server? What does each log mean?**

server logs are records of events that happen day-to-day functioning on a site and on the server.

* **Access logs** Contains information about requests coming in to the web server. This information can include what pages people are viewing, the success status of requests, and how long the request took to respond.
* **Error Logs** Contains information about errors that the web server encountered when processing requests, such as when files are missing.
* **An application log** is a file of events that are logged by a software application. It contains errors, informational events and warnings.
* **A security log** keeps a digital record of all your server activity and can provide an security admin a centralized view to better log and track who has made what changes, as well as if there are any issues with the data.

**5.** **what is server farm?**

A server farm or server cluster is a set of many servers interconnected together to provide better functionality and accessibility.

A server farm is designed to provide a massive and redundant source of computing power for computing-intensive applications. Server farms generally consist of thousands of servers, but their size can vary in different organizations and based on underlying requirements. Each server within the server farm is networked to the others and to a central management server. The central server manages the overall operations of these servers such as assigning processes, resource balancing, scheduling, security, updates and more. Although server farms are primarily used for enterprise and scientific applications, they can also be used to provide various services, such as core computing services for the primary application (ERP/CRM), data and application backup services, load balancing and more.

**6. what is worker process in iis?**

Worker processes provide the execution environment for all web sites and applications configured in IIS. Valuable information such as CPU utilization and memory footprint can be obtained from the API to help monitor the health of worker processes and the web server.

7. **What are the different layers of IIS?**

Internet Information Server IIS has two main layers - Kernel Mode and User Mode. The Kernel Mode contains the HTTP.SYS and User Mode contains WAS(web admin service) and W3 service.

**8. Role of HTTP.sys in IIS?**

HTTP.SYS is the part of kernel mode of IIS. Every client request is passes through the kernel mode, Http.sys then makes a queue for each and individual application pool based on the request. Whenever we create any application pool IIS automatically registers the pool with HTTP.sys to identify the particular during request processing. It provides the following services in IIS:

1. Routing HTTP requests to the correct request queue.
2. Caching of responses in kernel mode.
3. Performing all text-based logging for the WWW(W3) service.
4. Implementing quality of service functionality, which includes connection limits, connection timeouts, queue-length limits, and bandwidth throttling.

**9. what are the different security settings available in iis?**

Below are the commonly used IIS Security settings: ★ Anonymous. ★ Integrated Windows Authentication. ★ Digest Authentication. ★ Passport Authentication. ★ Basic Authentication

For set security permission: go to Virtual directory> Right click>Properties>Directory security and click on edit button.

10. **What is web Garden in Windows?**

By default, each application pool runs with a single worker process (W3Wp.exe). When an application pool runs with multiple worker process, it is called web garden.

**11. what is Windows activation process (WAP)role in IIS?**

WAP is a controller of worker process in application pool. Windows Activation Process which is managed by the worker process by starting, stopping and recycling the application pool. When to start, stop and Recycle should be defined on application pool settings. Activation process is also responsible for health monitor of application pool during runtime.

**12. what is web farm?**

A *web farm* is a group of two or more web servers (or *nodes*) that host multiple instances of an app. When requests from users arrive to a web farm, a *load balancer* distributes the requests to the web farm's nodes. This increases response time, performance, and reliability.

**13. what are the different ways to host site on iis?**

A Website can be Hosted on IIS either by creating a Virtual Directory through IIS manager or Using Folder Web Sharing facility offerd by O.S.

**14. what does iis process an asp.net request?**

IIS has its own ASP.NET Process Engine to handle the ASP.NET request. So, when a request comes from client to server, IIS takes that request and process it and send the response back to clients.

**15. what are the different execution permissions available in iis?**

There are three Execution Permission available. 1. None 2. Scripts Only 3. Scripts and Executable.

**16. what is the use of iis metabase?**

Internet Information Services stores its information in an internal database called the MetaBase. The metabase is an inheritable, hierarchical database that allows for configuration of HTTP / HTTPS, FTP, SMTP, and NNTP at the server, the site, or the folder or file level.

**17. what is app pool and app domain and its differences?**

Application pool and App-domain, both of them can provide isolations, but use different approaches. Application pool use the process to isolate the applications which works without .NET. But App-domain is another isolation methods provided by .NET. If your server host thousands of web sites, you wont use thousands of the application pool to isolate the web sites, just because, too many processes running will kill the OS.