

1.5 Component of COM

COM allows creation of independent and re-usable component. COM component attract with each other on the basis of client-server model. Based on this COM component can be categorized into 2(two) parts:

1).Client Component.

2).Server Component.

1).Client Component.

Client Component uses the services and functionality provided by other component.

2).Server Component.

Server Component is a COM component that exposes it's functionality and services so they can use it.

Example:-

Consider a situation where a user insert into a word document. Here, bitmap image exposing it's functionality to the word document is acting as a server document was the word document. Using the functionality of Bitmap image is acting as a client.

Think about other situation where a user want to insert a power-point slide into an Excel Worksheet. Here, the power-point slide is acting as a server as a Excel Worksheet is accessing the functionality of the power-point application.

1.6 There are two(2) types of COM component

a). IN process Server.

b). Out-process Server.

a). IN process Server.

1).It means it's code execute in the same process which space as a client.

2).It is implemented as DLL.

3).DLL stands for "Dynamic Link Libraries". DLL stores a specific set of Function and Procedure separately for the executable.

4).DLL's occupies the memory only when the program call for the function or procedure define in them.

5).DLL get executed in same memory area of the client.

6).As DLL's occupy the same memory space that of the client they can communicate with the client at a faster speed.

7).Therefore, the best-suited for application that involve large amount of data transfer between the server and client, the n/w traffic will reduced

b). Out-process Server.

1). Out-process Server means it's code execute in another process at the same machine or remote machine.

- 2). Out-process Server implemented as a standard alone executable having an .exe extension.
- 3). Out-process Server is executed in different address space from that of the client.
- 4). They are executed in a separate space than of the client if they fail it does not affect the entire client application which is true in case of DLL. Therefore, exe are more stable than DLL.
- 5). They are slower in execution in DLL as data have to be transferred between client address and component address space.