Dynamic Domain Name Service

Definition of Dynamic Domain Name Service

DNS is a service that maps a local name to an IP address and conversely an address to a name. DDNS provides client machines with a static DNS name even if their IP address is dynamically assigned. Dynamic DNS circumvents the need for static IP addresses If you or your company uses a dynamic IP Address, which you need to connect to remotely, DDNS is PERFECT for you. You've probably had to call in to someone at your home office to find out what the new IP Address, then change your network configurations. With DDNS, you only have to remember a simple hostname. DDNS generally used in client server model. When the load on a single server gets to be too high, it is better to distribute it to a group of servers using DDNS

Introduction of Dynamic Domain Name Service

Having a Dynamically assigned IP addresses is alot like having to change your phone number once a day, if other people need to connect to your computer they would have no way of knowing your current number. The need for a static IP address comes from those users who want to run server software such as Web Servers, FTP Servers, Game Servers, Email Servers or run business related services such as VPN 's , Remote Access Software. There are many other needs for Static IP addresses as well, far to many to list here.

Dynamic DNS comes into play when a internet user either cannot afford a static IP address, or acquire a static IP address from there ISP. Working much like an old style phone operator. Dynamic DNS enables a user to update a DNS server automatically each time there IP changes. So anyone who wants to connect to the users computer can always reach his server by entering the users domain name. The whole process works despite the changing IP addresses.

If you live in a relatively large town there are likely millions spent each year by local businesses that require static IP addressing. Most do not know about Dynamic DNS. Many would be happy to know that there is a fully qualified alternative to the thousands of dollars they spend each year for static or persistent IP addresses. With our software you can run a Dynamic DNS service. You set the prices. You choose the market

Now looking closer at internal networks, larger ones are typically divided into different DNS zones. There are several different ways that this can be organized in regards to DNS configuration. When designing any name resolution service it is important to take into account what would happen if a DNS server were to fail. What if your company has an extensive intranet that is vital to the operation of the company and only 1 DNS server? If that server fails, the users will not be able to access any internal resources unless they know the IP address of the resource that they are trying to access(and they won't know).

This is why fault tolerance is important in designing your namespace. Have you ever set up your home computer to access your ISP? Have you ever noticed that when configuring your IP settings you are(or should be) given 2 DNS server IP addresses to enter? This provides backup in case of a failure. Of the 2 DNS servers that you enter, 1 of them is primary and 1 is secondary. The secondary server is only contacted if there is a problem with the primary server