Guide to a Zone Listing

Below is an example of a "zone listing". A zone listing is simply a file that defines all of the information for an Internet Domain. The file is used by the DNS server to provide information about the domain to the world. Whether setting up a domain for the first time or transferring a domain to **tw telecom**, please submit the information contained in the zone listing to complete your request.

Zone Listing Example and Explanation

```
$ORIGIN examplesite.com.

@       IN SOA ins1.milw.examplesite.net.      hostmaster.examplesite.net. (

                        2000100400              ;Serial 1993,10,22,00th
                        10800                   ;Refresh
                        3600                    ;Retry
                        604800                  ;Expire
                        86400 )                 ;TTL

                        IN NS                   ins1.milw.examplesite.net.
                        IN NS                   ins1.iplt.examplesite.net.
                        IN MX  10               thelmalou
                        IN MX  20               mx1.mail.examplesite.net.
                        IN MX  30               mx2.mail.examplesite.net.

localhost               IN A                    127.0.0.1

thelmalou               IN A                    168.215.33.107
auntbea                 IN A                    168.215.33.115
www                     IN A                    207.67.10.7
web                     IN CNAME                www
```

SOA (Start Of Authority) Record: indicates which nameserver is the best source of information for the data within the zone. The next entry on that line is the e-mail address of the person in charge of changing the data for the domain.

Serial Number: important for nameservers slaving the information about the domain. It determines if there is new information by comparing the serial number of their record against the serial number of the master nameserver. If the master's serial number is higher, this indicates new information and the slaves pull the new zone record so their information is matching. If the serial number is the same, or lower, than the serial number the slaves have, the zone is not pulled.

Refresh Number: tells a slave how often (in seconds) it should check with the Master to verify it still has the correct information.

Retry Number: tells a slave how often to attempt to contact the Master after a failure to connect when checking for new information.

Expire Time: tells the slave when to stop serving information for the domain. If the slave is unable to reconnect to gather new information from the Master in that timeframe, it will no longer give out information on the domain. This keeps the slaves from giving out stale information on a domain.

TTL Time: tells other nameservers on the Internet how long they should cache the information on this domain. If you are planning a big change (such as a new mailserver on a new IP, or changing hosts for your webpage), it's best to set the TTL down to a shorter timeframe at least 2 days in advance of making the change. This will ensure that the new information is propagated across the Internet faster.

NS Records: info about what other nameservers may know about this domain.

MX Records: where e-mail for this domain is delivered. The lower the number, the higher the priority of the mailserver. In this case, all e-mail for twtelecom.com will attempt to be delivered to the mailserver named thelmalou.twtelecom.com. Should thelmalou be unreachable, remote mailservers will attempt to deliver email to mx1.mail.twtelecom.net. Should mx1.mail.twtelecom.net fail, they will attempt mx2.mail.twtelecom.net. E-mail will be immediately bounced back to the sender, only if all 3 mailservers fail. These 'extra' mailservers are referred to as 'backup MX.'

A Record: assigns a name (www i.e. www.twtelecom.com) to an IP (207.67.10.7).

CNAME Record: assigns a name (web i.e. web.twtelecom.com) as an alias to another name (www.twtelecom.com). As an IP should only have one A record pointing to it in a domain, aliases are the best way to assign multiple names to one IP.