is a program to update Internet domain name servers supporting dynamic update. uses the DNS resolver library to pass messages to a DNS server requesting the additional or deletion of DNS resource records (RRs). reads input from or standard input. Sign updates with TSIG. Debug mode. Virtual circuit - use TCP to communication with server. Default is UDP. reads input records, one per line, each line contributing a resource record to an update request. All domain names used in a single update request must belong to the same DNS zone. A blank line causes the accumulated records to be formated into a single update request and transmitted to the zone's authoritative name servers. Additional records may follow, which are formed into additional, completely independent update requests. For the last request to be transmitted, a blank line must end the input. Records take one of two general forms. records specify conditions that must be satisfied before the request will be processed. records specify changes to be made to the DNS database. A update request consists of zero or more prerequisites and one or more updates. Each update request is processed atomically - all prerequisites must be satisfied, then all updates will be performed. understands the following input record formats:

Requires that no RR of any type exists with name

Requires that at least one RR named must exist.

Requires that no RR exists of the specified and

Requires that a RR exists of the specified and If is specified, it must match exactly.

Deletes RRs named If (and possibly is specified, only matching records will be deleted.

Adds a new RR with specified and

The following example illustrates the interactive use of to change an IP address by deleting any existing A records for a domain name and then inserting a new one. Since no prerequisites are specified, the new record will be added even if there were no existing records to delete. Note the trailing blank line, required to process the request. $ nsupdate > update delete test.example.com A > update add test.example.com 3600 A 10.1.1.1 >

In this example, a CNAME alias is added to the database only if there are no existing A or CNAME records for the domain name. $ nsupdate > prereq nxrrset www.example.com A > prereq nxrrset www.example.com CNAME > update add www.example.com 3600 CNAME test.example.com >

In this example, the nsupdate will be signed with the key "mykey", which is in the directory "/var/named/keys". $ nsupdate -k /var/named/keys:mykey > update add ftp.example.com 60 A 192.168.5.1 >

Typically indicates that the authoritative nameservers could not be reached

Typically indicates that the nameserver has rejected the update, either because the nameserver doesn't support dynamic update, or due to an authentication failure

(and no other messages) The update was successfully received and authenticated by the nameserver. The prerequisites, however, may have prevented the update from actually being performed. The only way to determine if the update was performed is to use debug mode and examine the status field in the nameserver's reply.

initial domain name and name server addresses RFC-1034, RFC-1035, RFC-2136, Dynamic Updates in the Domain Name System. Brent Baccala