
DNS Dynamic Updates

Susan Thomson, Yakov Rekhter, Jim Bound, Peter Ford

IETF DNSIND Working Group

July 1994

Definition and Goal

- Ability to update a zone without manual configuration
- However, do not attempt to eliminate manual configuration
- Goal is to make the minimal changes necessary, and still provide a useful service.

Motivation

- To complement dynamic address assignment
- To help enable host address autoconfiguration
 - when booting “out of the box”
 - when host booting at different network location
 - * because workstation moved to different office
 - * because computer is “portable”, e.g. laptop
- To ease address renumbering
 - when changing providers
- Mechanism NOT limited only to address registration

Requirements

- Enable records to be added, deleted, modified
- Also enable records to “time out”
- Node creation and deletion still manual
- This implies node names must be preregistered
- Believe this is not an impractical restriction
 - only system administrator has node creation authority
 - if security in use, key must be preregistered anyway
- There may be a requirement to ease system administrator’s task, but out of our scope

Other Requirements

- Updates must be able to be made secure
 - Authentication, integrity, protection vs replay
 - Access control on node, record type basis
- Updates can be made to a zone from anywhere
- Must be compatible with auto address assignment
- Must be compatible with existing servers and resolvers
- Changes to existing DNS must be minimal
- Changes independent of version of IP in use

Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.