

# Advanced DNS

A 2 day **Hands on** training course



## Description

This two-day hands on DNS training course studies both the UNIX BIND and the Microsoft (MS DNS) implementations. The course follows on from our Definitive DNS for engineers course starting with best practices. The majority of the course is spent on securing DNS and in particular DNSSEC. Some parts are specific to BIND. Students choose whether to use Windows or UNIX for the hands on sessions.



## Key outcomes

By the end of the course delegates will be able to:

- ✓ Implement DNS best practices.
- ✓ Harden DNS servers.
- ✓ Install, configure, maintain and troubleshoot DNSSEC.



## Training approach

This structured course uses Instructor Led Training to provide the best possible learning experience. Small class sizes ensure students benefit from our engaging and interactive style of teaching with delegates encouraged to ask questions throughout the course. Quizzes follow each major section allowing checking of learning. Hands on sessions are used throughout to allow delegates to consolidate their new skills.



## Details

### Who will benefit?

Technical staff wanting to learn DNS including Network personnel and System administrators.

### Prerequisites

TCP/IP foundation for engineers.  
Definitive DNS for engineers.

**Duration:** 2 days

**Customer rating:** ★★★★★

### Generic training



Generic training compliments product specific courses covering the complete picture of all relevant devices including the protocols "on the wire".

*"Friendly environment with expert teaching that teaches the why before the how."*  
G.C. Fasthosts

### Small class sizes



We limit our maximum class size to 8 delegates; often we have less than this. This ensures optimal interactivity between delegates and instructor.

*"Excellent course. The small class size was a great benefit..."*  
M.B. IBM

### Hands On training



The majority of our courses use hands on sessions to reinforce the theory.

*"Not many courses have practice added to it. Normally just the theoretical stuff is covered."*  
J.W. Vodafone

### Our courseware



We write our own courses; courseware does not just consist of slides and our slides are diagrams not bullet point text.

*"Comprehensive materials that made the course easy to follow and will be used as a reference point."*  
V.B. Rockwell Collins

### Customise your course



Please contact us if you would like a course to be customised to meet your specific requirements. Have the course your way.

*"I was very impressed by the combination of practical and theory. Very informative. Friendly approachable environment, lots of hands on."*  
S.R. Qinetiq

# Advanced DNS

## Course content

### Best practices

MX and PTR records, lame delegations, disallowing recursion, TTLs, online testing. Hands on: Review of your DNS servers.

### Zone integrity

Trusted anchors, Chains of trust, Zone status, Zone signing, Keys. ZSK, KSK, adding keys to a zone file. Secure delegations. Hands on: Zone signing

### Split DNS

Partitioning internal and external DNS, views. Hands on: Implementing split DNS.

### Maintaining Signed zones

Key rollover, pre publish, double signing, rollover cache.

### Hardening DNS

ACLs, recursion, queries, trusted sources, chroot jail, secure BIND template. Hands on: Securing the DNS server.

### DNSSEC

What is DNSSEC? DNSSEC benefits, DNSSEC RRs. DNSKEY, RRSIG, NSEC, DS. Hands on: Creating DNSSEC keys.

### Securing zone transfers

TSIG, shared secret. Securing DDNS. Hands on: Secure file transfers.

