

Syllabus – Introduction to DNS

Length: 4 hours

Format: Lecture and lab

Required Texts: None

Optional Texts:

- “DNS and BIND” - O'Reilly – fifth edition - 0596100574

Abstract: This course is designed to provide the student with comprehensive knowledge of the Domain Name System. A short introduction to the mechanics of DNS operation is followed by an in-depth look at the Berkeley Internet Name Domain (BIND) software package, the predominant DNS server in use today. Discussions will include Zone file management and components such as A, CNAME and MX records, server slaving, DNS query tools and more.

Syllabus:

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|---------------------------------------|-------------------------|
| 1) DNS Operation | Total: 0.5 hours |
| 1. Overview – what's going on? | |
| 2. Queries, authorities, caching | |
| 3. Tools – nslookup, dig | |
| 2) BIND | Total: 1.0 hours |
| 1. Introduction | |
| 2. BIND configuration files | |
| 3. Managing BIND | |
| 4. BIND logs | |
| 3) Database (Zone) files | Total: 1.5 hours |
| 1. Basic format | |
| 2. Records | |
| 1. SOA | |
| 2. NS | |
| 3. A, CNAME | |
| 4. MX | |
| 5. PTR | |
| 4) Advanced BIND configuration | Total: 1.0 hours |
| 1. Slaving | |
| 2. Subdomains | |
| 3. Zone transfers | |
| 4. Security | |