

Intro to Linux



1.5.2 - Name Resolution

Name Resolution

- The process of converting human-readable names, such as domain names or hostnames, into IP addresses
- Name Service Switch (nsswitch)
 - A configuration file that determines the order of lookup sources for various services
 - /etc/nsswitch.conf
- Domain Name System (DNS) resolver
 - /etc/resolv.conf



systemd

- Software suite that provides an array of system components for Linux OSs
- **hostnamectl**
 - Used for querying and changing the system hostname and related settings
- **resolvectl**
 - Provides information about DNS resource records, services, and the local DNS server



Bind-utils

- Collection of utilities used for querying DNS name servers for information about Internet hosts
- **dig** (Domain Information Groper)
 - Command-line tool for querying DNS name servers
 - Provides information about DNS queries and responses
- **nslookup**
 - Used to query DNS servers for information about domain names and IP addresses and is commonly used for troubleshooting DNS-related issues
- **host**
 - Used for DNS lookups and can query DNS servers for information about various types of DNS records



WHOIS

- Command-line tool used for querying databases that store information about registered domain names and IP addresses
- Provides details about domain registration, ownership, and contact information

