



### Locate the Network Range

### Unearth Initial Information



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### What is Footprinting?

Footprinting is the Reconnaissance phase of the 5 step attack wheel  
The first of the three pre-attack phases  
Information gathering

### Information Gathering Methodology

- 1 - Unearth Initial Information → Footprinting
- 2 - Locate the network range → Footprinting
- 3 - Ascertain active machines
- 4 - Discover open ports / access points
- 5 - Detect operating systems
- 6 - Uncover services on ports
- 7 - Map the network

Information can be obtained from  
ARIN  
APNIC  
RIPE  
IANA Providers

After gathering information, next step is to find the network range of the target

Exploits the IP TTL  
Reveals path IP packets take  
Sends out consecutive UDP packets with ever increasing TTLs  
Device sends back an ICMP TTL Exceeded message  
Some devices will also reply with DNS information

Traceroute Trace the route between your network and the target

Commonly Includes  
Domain Name Lookups  
Locations  
Telephone  
E-mail  
Mail  
Contacts

Information Sources  
Search Engines and Websites  
Open Source  
Domain and IP information  
Information about Registered Domains  
Whois  
SmartWhois Tools

Hacking Tools  
Provides DNS information  
Nslookup  
Provides Whois and DNS Dig functionality  
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