

# **KEAMANAN JARINGAN KOMPUTER**



**Eko Pratama**

**0901181320004**

**Program Studi Sistem Komputer**

**Fakultas Ilmu Komputer**

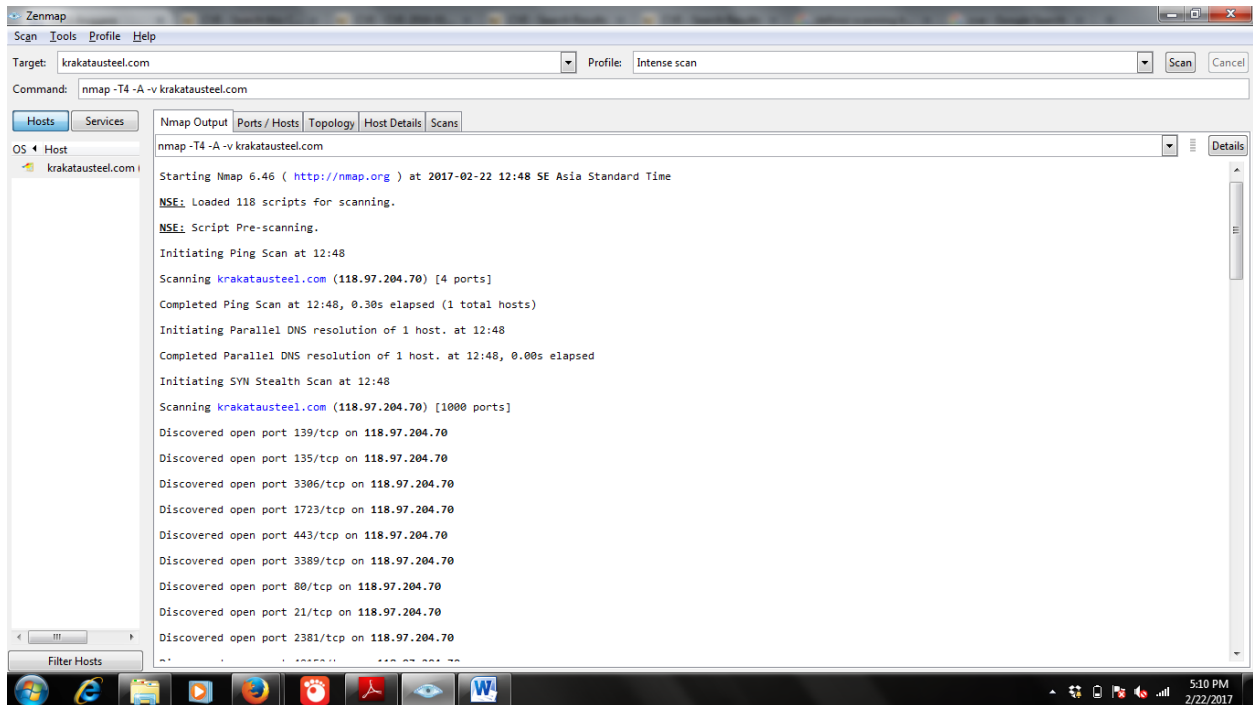
**Universitas Sriwijaya**

**2017**

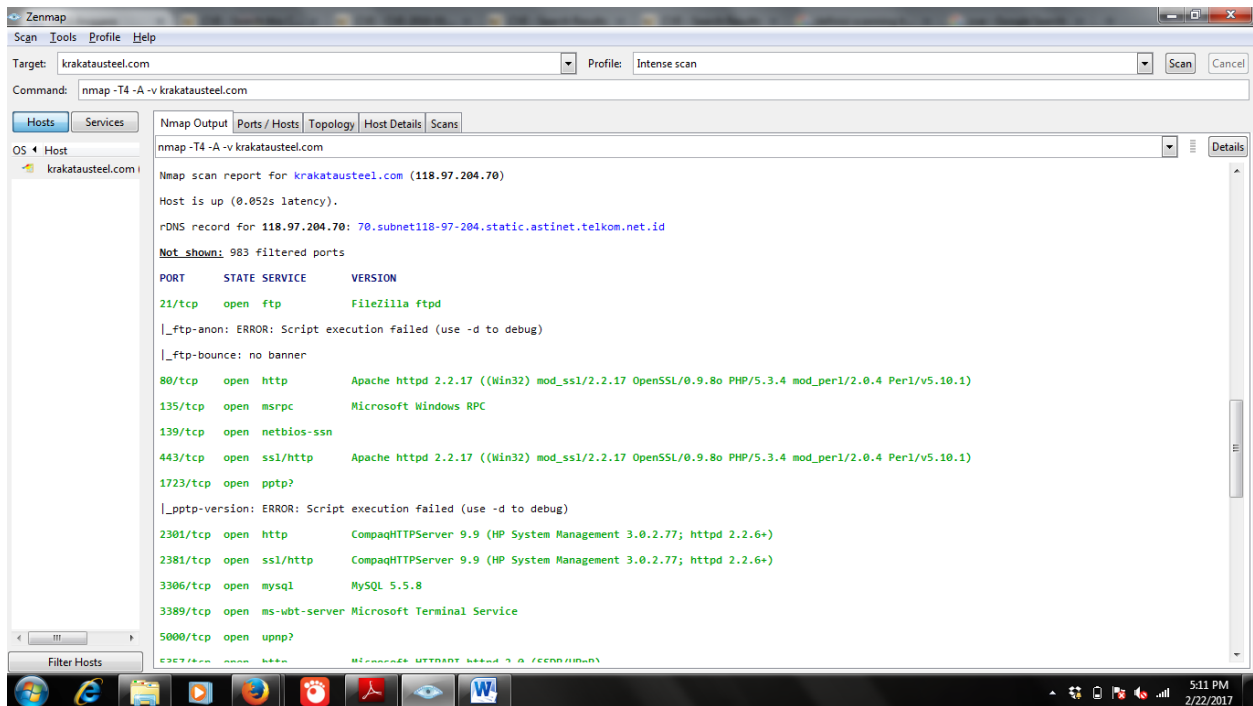
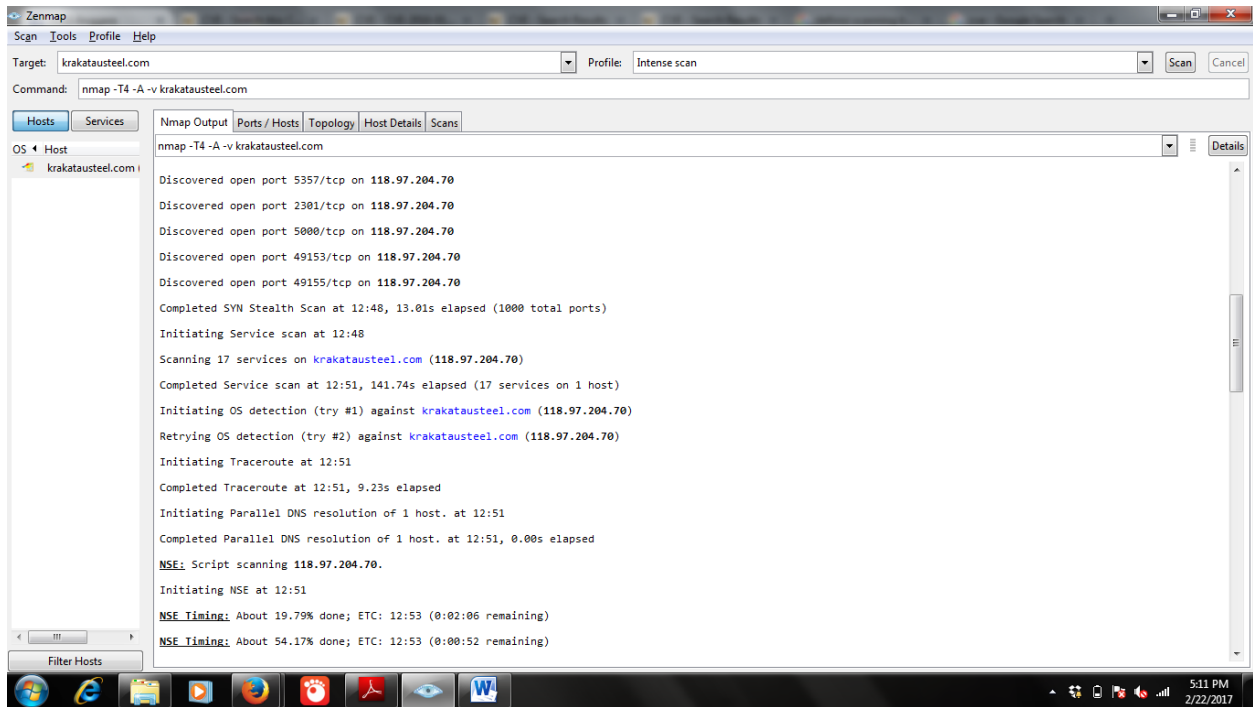
## SCANNING

Scanning adalah metode yang digunakan untuk mengetahui keberadaan sebuah user apakah dalam keadaan aktif atau off. Untuk itu diperlukan sebuah software yang dapat memastikan keberadaan dari user-user yang ada dalam jaringan.

Pada Scanning yang dilakukan dengan software Zenmap dengan target [www.krakatausteel.com](http://www.krakatausteel.com) (IP Address 118.97.204.70) didapatkan hasil scanning output yang telah di screenshoot dibawah:



```
Starting Nmap 6.46 ( http://nmap.org ) at 2017-02-22 12:48 SE Asia Standard Time
NSE: Loaded 118 scripts for scanning.
NSE: Script Pre-scanning.
Initiating Ping Scan at 12:48
Scanning krakatausteel.com (118.97.204.70) [4 ports]
Completed Ping Scan at 12:48, 0.30s elapsed (1 total hosts)
Initiating Parallel DNS resolution of 1 host. at 12:48
Completed Parallel DNS resolution of 1 host. at 12:48, 0.00s elapsed
Initiating SYN Stealth Scan at 12:48
Scanning krakatausteel.com (118.97.204.70) [1000 ports]
Discovered open port 139/tcp on 118.97.204.70
Discovered open port 135/tcp on 118.97.204.70
Discovered open port 3386/tcp on 118.97.204.70
Discovered open port 1723/tcp on 118.97.204.70
Discovered open port 443/tcp on 118.97.204.70
Discovered open port 3389/tcp on 118.97.204.70
Discovered open port 80/tcp on 118.97.204.70
Discovered open port 21/tcp on 118.97.204.70
Discovered open port 2381/tcp on 118.97.204.70
```



Zenmap

Scan Tools Profile Help

Target:  Profile:

Command:

Hosts Services

OS Host

krakatausteel.com

Nmap Output Ports/Hosts Topology Host Details Scans

nmap -T4 -A -v krakatausteel.com

3389/tcp open ms-wbt-server Microsoft Terminal Service

5000/tcp open upnp?

5357/tcp open http Microsoft HTTPAPI httpd 2.0 (SSDP/UPnP)

49152/tcp open msrpc Microsoft Windows RPC

49153/tcp open msrpc Microsoft Windows RPC

49154/tcp open msrpc Microsoft Windows RPC

49155/tcp open msrpc Microsoft Windows RPC

49156/tcp open msrpc Microsoft Windows RPC

**Warning:** OSScan results may be unreliable because we could not find at least 1 open and 1 closed port

**Device type:** general purpose|phone

Running (JUST GUESSING): Microsoft Windows 2008|7|Phone|Vista (90%)

**OS CPE:** cpe:/o:microsoft:windows\_server\_2008 cpe:/o:microsoft:windows\_8 cpe:/o:microsoft:windows\_7::sp1 cpe:/o:microsoft:windows\_vista::sp1 cpe:/o:microsoft:windows\_vista:sp1

**Aggressive OS guesses:** Microsoft Windows Server 2008 R2 (90%), Microsoft Windows Server 2008 SP1 (89%), Microsoft Windows Server 2008 R2 or Windows 8 (89%), Microsoft Windows 7 SP1 (89%), Microsoft Windows Phone 7.5 (89%), Microsoft Windows Server 2008 Beta 3 (88%), Microsoft Windows Server 2008 SP1 or Windows 8 (88%), Microsoft Windows 7 (88%), Microsoft Windows 7 Professional (88%), Microsoft Windows 7 SP1 or Windows Server 2008 SP1 - SP2 (88%)

No exact OS matches for host (test conditions non-ideal).

**Uptime guess:** 8.815 days (since Mon Feb 13 17:31:15 2017)

**TCP Sequence Prediction:** Difficulty=261 (Good luck!)

**IP ID Sequence Generation:** Busy server or unknown class

**Service Info:** OS: Windows; CPE: cpe:/o:microsoft:windows

Filter Hosts

5:11 PM 2/22/2017

Zenmap

Scan Tools Profile Help

Target:  Profile:

Command:

Hosts Services

OS Host

krakatausteel.com

Nmap Output Ports/Hosts Topology Host Details Scans

nmap -T4 -A -v krakatausteel.com

cpe:/o:microsoft:windows\_vista::sp1

**Aggressive OS guesses:** Microsoft Windows Server 2008 R2 (90%), Microsoft Windows Server 2008 SP1 (89%), Microsoft Windows Server 2008 R2 or Windows 8 (89%), Microsoft Windows 7 SP1 (89%), Microsoft Windows Phone 7.5 (89%), Microsoft Windows Server 2008 Beta 3 (88%), Microsoft Windows Server 2008 SP1 or Windows 8 (88%), Microsoft Windows 7 (88%), Microsoft Windows 7 Professional (88%), Microsoft Windows 7 SP1 or Windows Server 2008 SP1 - SP2 (88%)

No exact OS matches for host (test conditions non-ideal).

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TRACEROUTE (using port 139/tcp)

| HOP | RTT      | ADDRESS      |
|-----|----------|--------------|
| 1   | 16.00 ms | 10.100.203.1 |
| 2   | ...      | 30           |

**NSE:** Script Post-scanning.

**Read data files from:** C:\Program Files (x86)\Nmap

OS and Service detection performed. Please report any incorrect results at <http://nmap.org/submit/>.

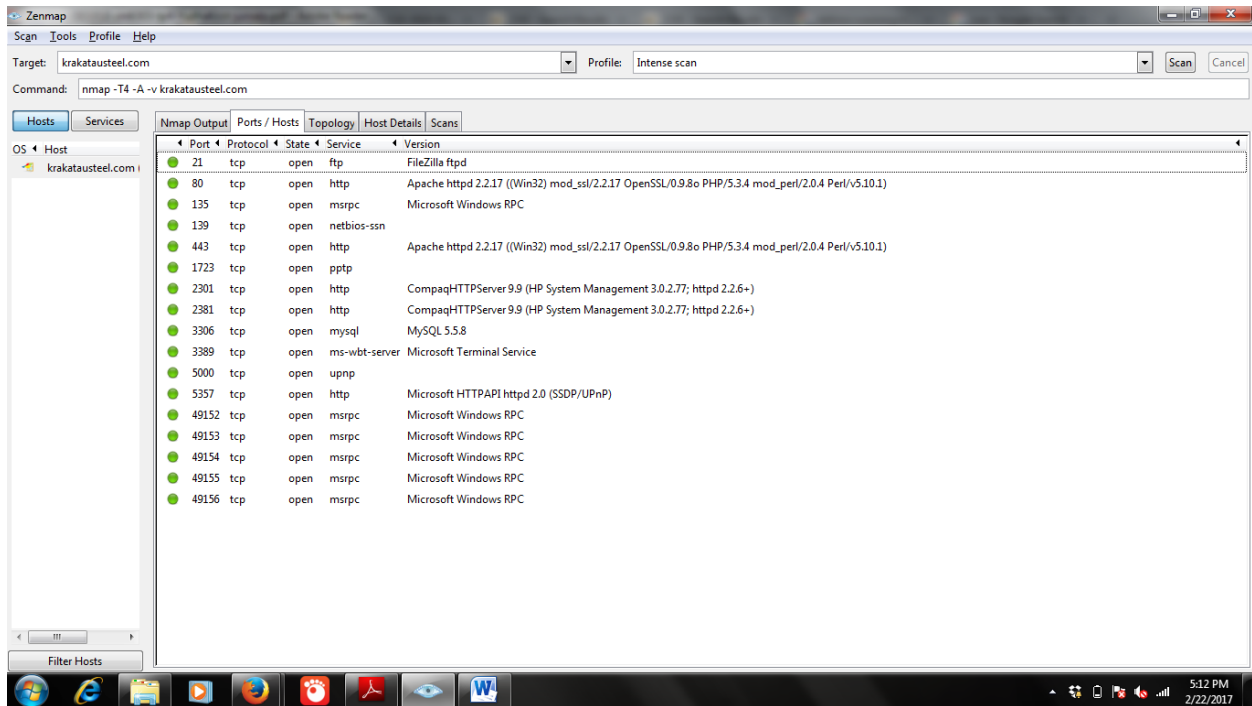
**Nmap done:** 1 IP address (1 host up) scanned in 969.82 seconds

Raw packets sent: 3144 (142.692KB) | Rcvd: 63 (3.342KB)

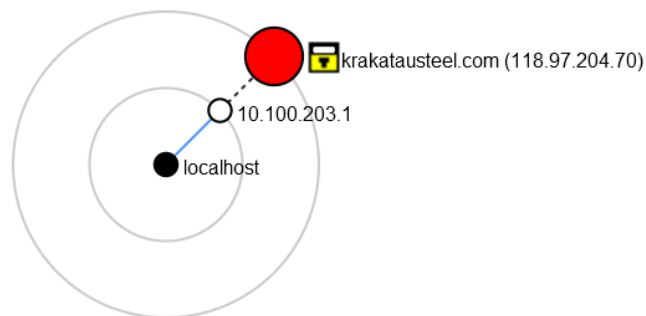
Filter Hosts

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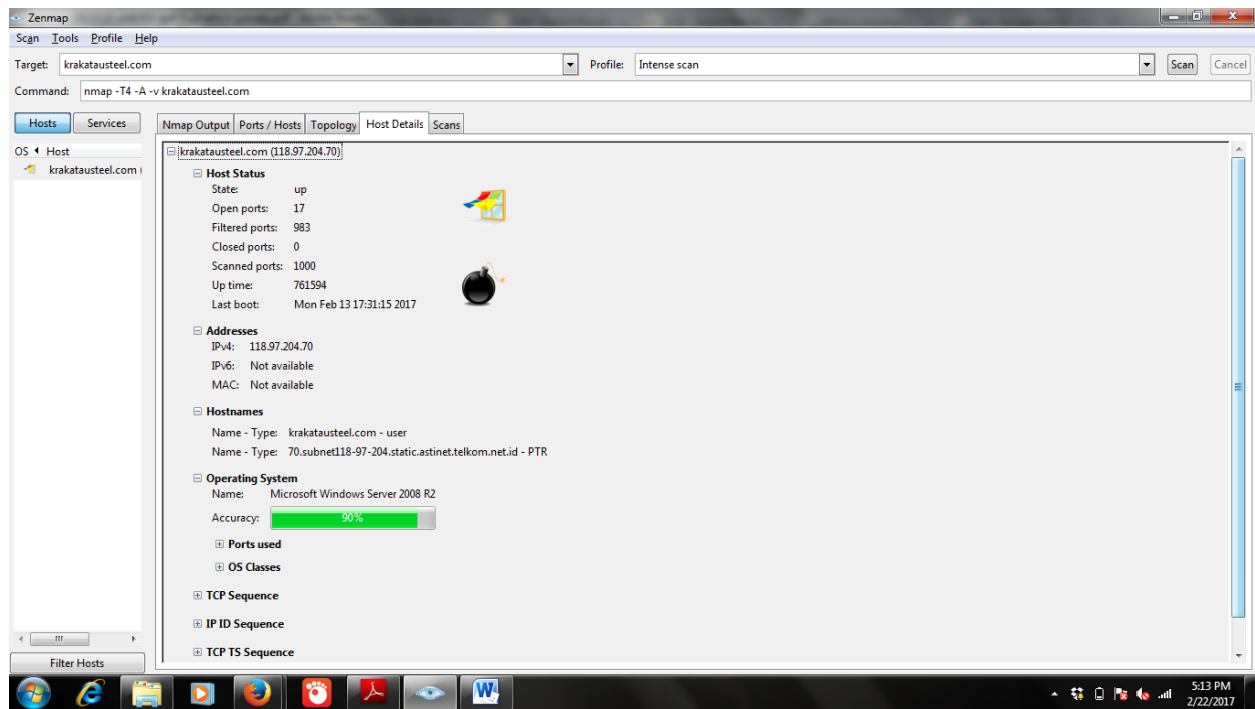
Port scanning merupakan suatu proses untuk mencari dan membuka port pada suatu jaringan computer. Dari hasil scanning akan didapat letak kelemahan sistem tersebut. Hasil screenshot dibawah merupakan beberapa port yang terbuka untuk memulai serangan.



Dapat dilihat dari Gambar diatas bahwa terdapat 17 Port yang terbuka yang biasa digunakan penyerang untuk masuk melakukan serangan disalah satu port tersebut. Seperti diantaranya port 21, 80, 135, 139, dll. Dari screenshot diatas terlihat bahwa seluruh port yang terbuka menggunakan protocol TCP.



Dari gambar dibawah dapat dilihat hasil hop dari localhost menuju ke PT.Krakatau Steel dimana terjadi 2 hop. Hop pertama menuju ke IP 10.100.203.1 sebelum akhirnya sampai ke IP 118.97.204.70 milik KrakatauSteel.com



Screenshoot diatas menggambarkan tentang detail dari hosts yang dimana terdapat beberapa status dari host itu sendiri seperti yang terjadi ketika selesai melakukan scanning didapatkan StateUP, Port yang terbuka 17, port yang terfilter 983, port yang tertutup tidak ada, Port yang terscan 1000 dan Operating System yang digunakan target adalah Microsoft Windows Server 2008 R2.