Leaving Traces Online
Securing Yourself in the Modern World

Irfan Kanat
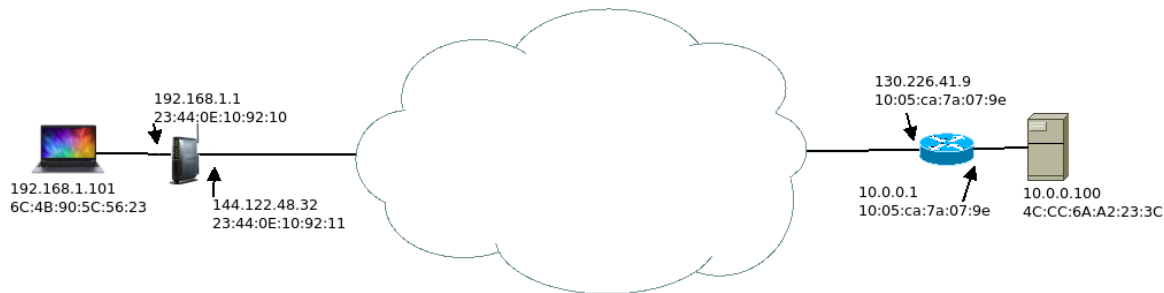
Department of Digitization
Copenhagen Business School

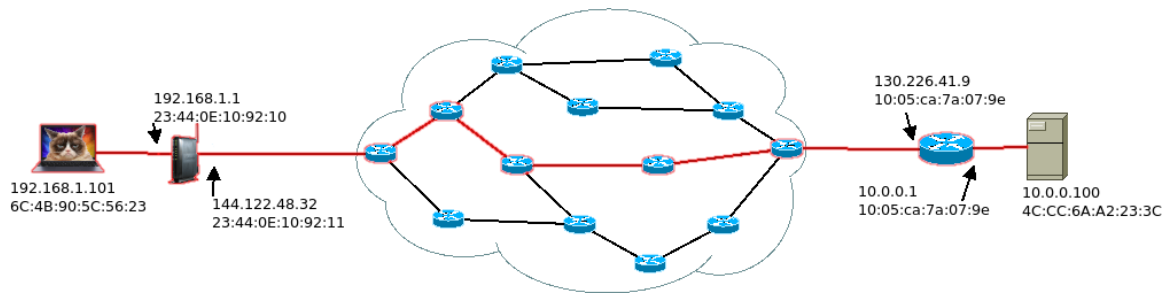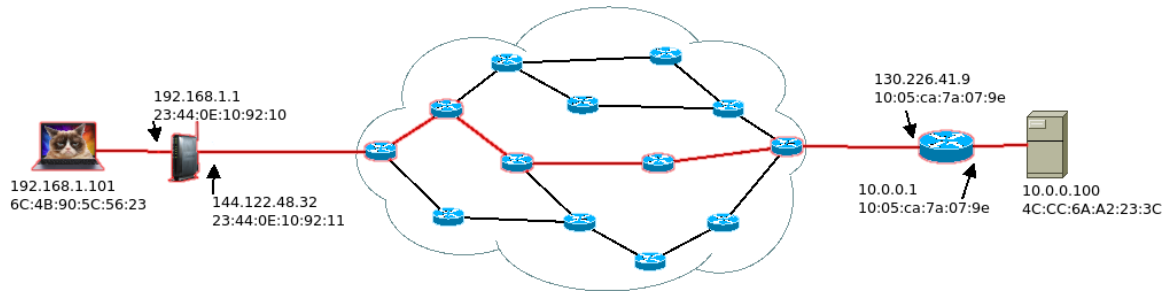May 24, 2021

Cat Video Here

How Internet Works?

Your Actions Echo Through Eternity

Every Device Along the Way is a Possible Weakness

Your Device

It may be your computer, laptop, or
cellphone...

- Browsing History
- Cookies from the websites
- Your Network addresses (MAC and IP)
- Configuration of your system...

192.168.1.101
6C:4B:90:5C:56:23

What Can Be Done About Your Device?

- USE A STRONG PASSWORD
- Update your software
- Delete Browsing History
- Disallow Cookies
- Don't Save Passwords in Browser
- Use Private Browsing

192.168.1.101
6C:4B:90:5C:56:23

Your Router

This is the device you host on your premises.

- Every Package You Send/Receive
- DNS querries
- Your and Target Servers' IP addresses
- ISP shenanigans...

192.168.1.1
23:44:0E:10:92:10

144.122.48.32
23:44:0E:10:92:11

What Can Be Done About Your Router?

This is the device you host on your premises.

- Use Encrypted Protocols
- Keep the Device Updated
- Use Strong Passwords
- Disable Remote Administration

192.168.1.1
23:44:0E:10:92:10

144.122.48.32
23:44:0E:10:92:11

Other Routers

Controlled by others.

- Every Package You Send/Receive
- DNS querries
- Your and Target Servers' IP addresses
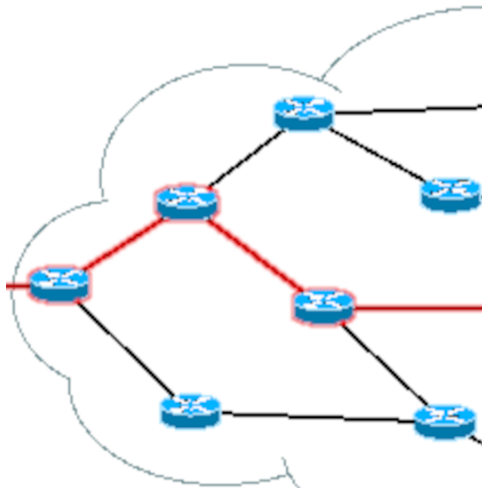
Trace Route Demo

Who are you worried about?

- VPN
- TOR Network

VPN Demo

- Your IP address
- What you received
- What you sent
- Account Information
- Payment Information

10.0.0.100
4C:CC:6A:A2:23:3C

- VPN
- Limit Linkable Data

10.0.0.100
4C:CC:6A:A2:23:3C

Threat Models

Threat	Ex-girlfriend/boyfriend breaking into your email account and publicly releasing your correspondence with the My Little Pony fan club	Organized criminals breaking into your email account and sending spam using your identity	The Mossad doing Mossad things with your email account
			Magical amulets?
Solution	Strong passwords	Strong passwords + common sense (don't click on unsolicited herbal Viagra ads that result in keyloggers and sorrow)	Fake your own death, move into a submarine?
			YOU'RE STILL GONNA BE MOSSAD'ED UPON

(Source: James Mickens (2014) This World of Ours)