## Introduction

**CSC154** 

#### **Course Information**

- Instructor: Jun Dai
  - Assistant Professor of Computer Science
  - RVR 5060
  - <u>jun.dai@csus.edu</u> (indicate CSC154 in subject line)

- Syllabus
  - Roadmap to the whole course
  - "Legal Policy"

### PoP Quiz

- Have a password on your computer/account that is 9 characters or more with upper case, lower case, symbol and number
- Have a unique password for your work computer/device that is not used for other devices
- Always delete emails with the cute cat videos your mother/uncle/sister/friend sends you
- Run antivirus software to scan your systems periodically
- Keep firewall run for your systems
- Have never hit "remind me later" on a software update
- Have never used the website which you are prompted that its certificate is expired/fake
- Have your home wireless network protected by encryption
- Have enabled two step verification on one account

## Grouping

- After enrollment fixed, 4 persons grouped together as a team.
  - Group Project (the whole semester)
    - OPEN-MIND assignment

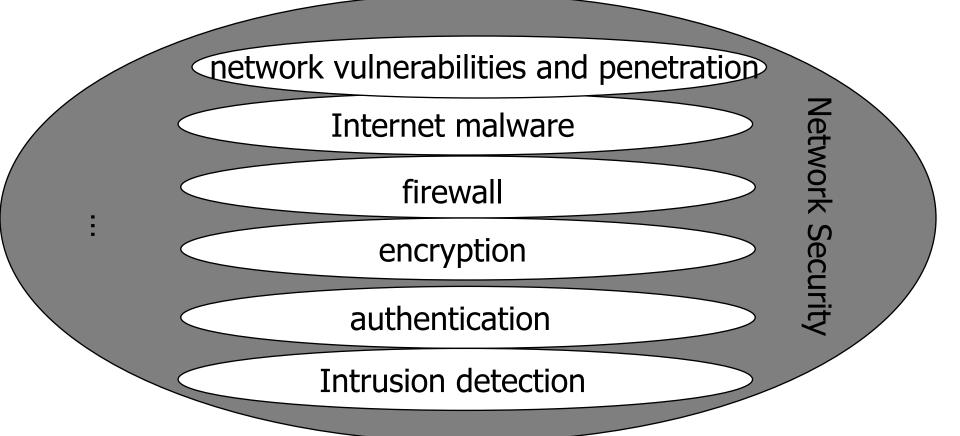
Done before next class!

# Two big pictures, a phrase, and a logic for CSC154

- Big picture (topics)
- Big picture (an example attack scenario)
- Resources: CIA
  - confidentiality, integrity, availability
- Logic:
  - attacker perspective->neutral perspective->defense perspective

## Big Picture of CSC154 (topics)

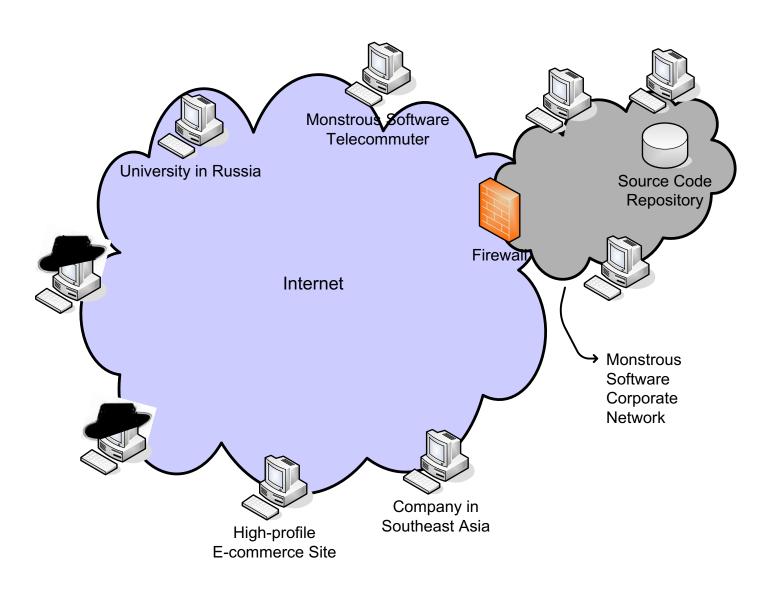
CSC154 is a bundle of 6-9 topics.



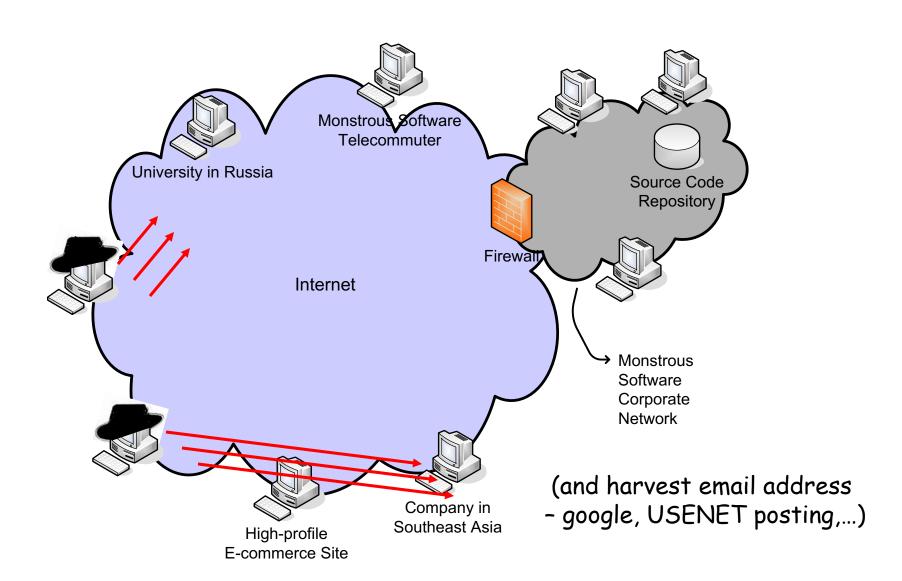
# Big Picture of CSC154 (an example attack scenario)

(Mission: Stealing the source code)

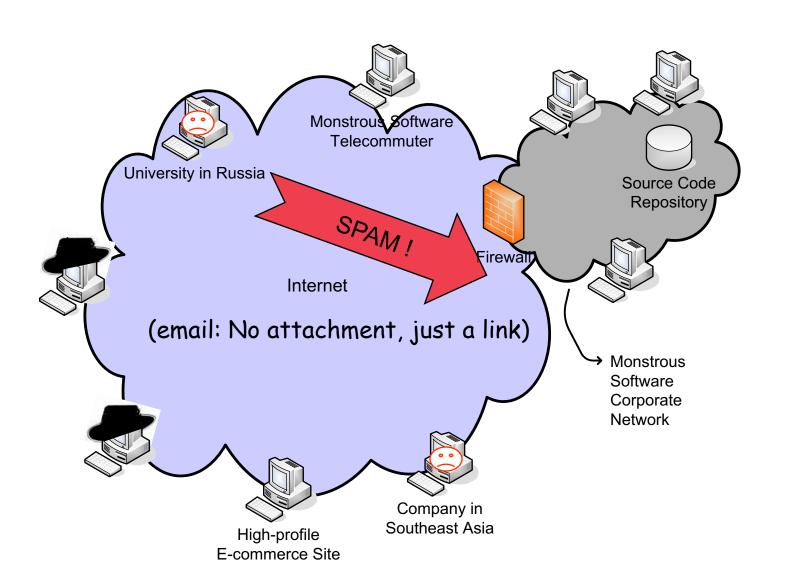
#### The Internet and the victim company



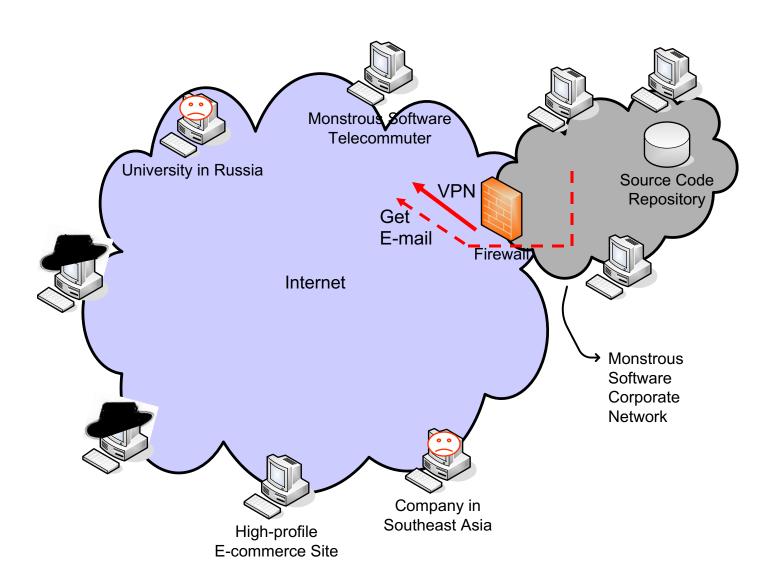
#### Attackers Scan for Intermediaries



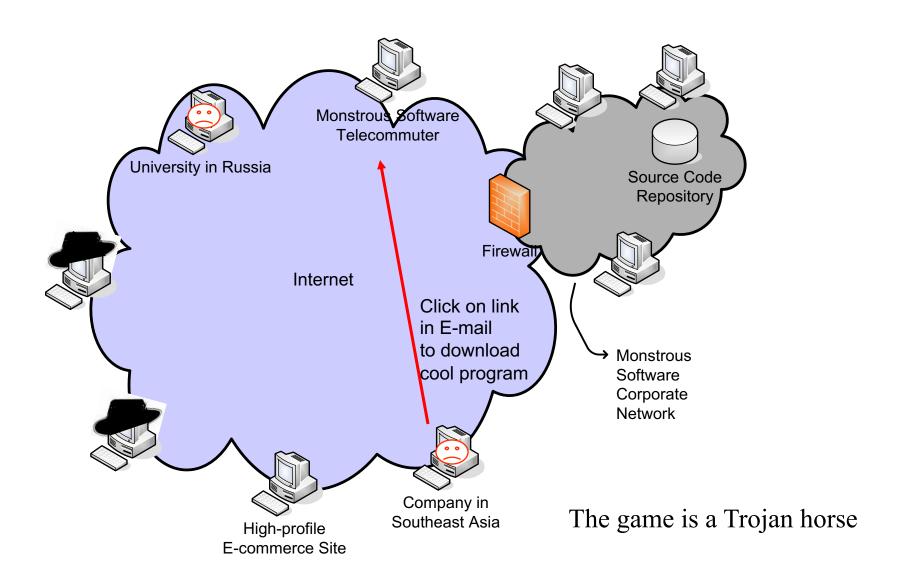
#### Send a Spam mail ("Re: Cool Game")



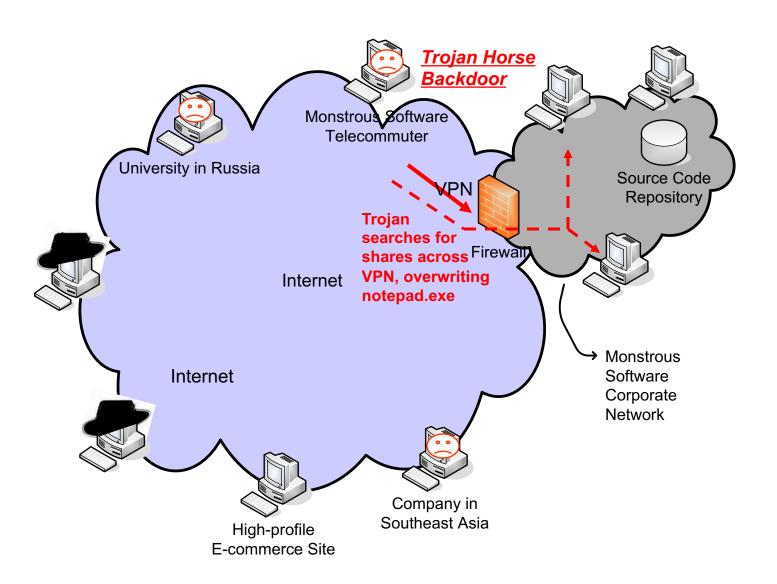
#### Telecommuter Gets the mail thru VPN



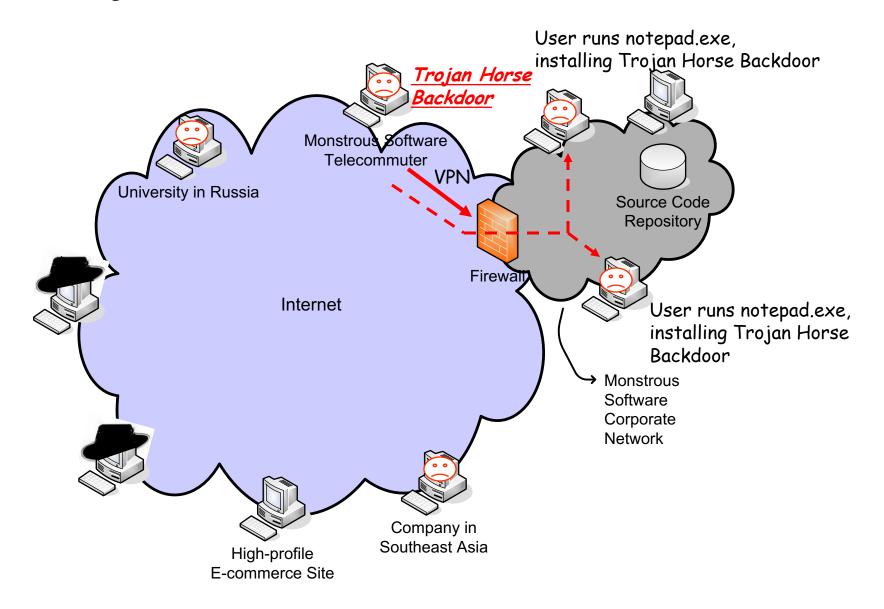
#### Download the Game.... Stupid :-(



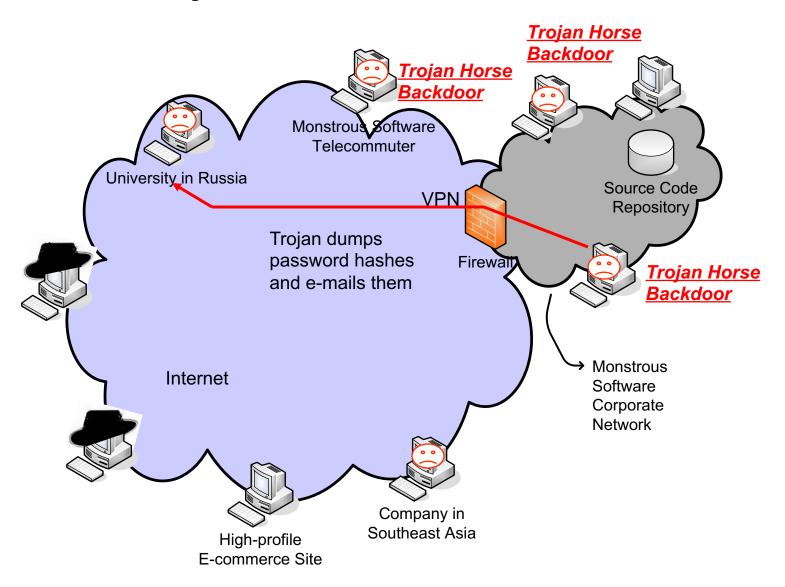
#### Trojan Copies Itself to Intranet Thru VPN



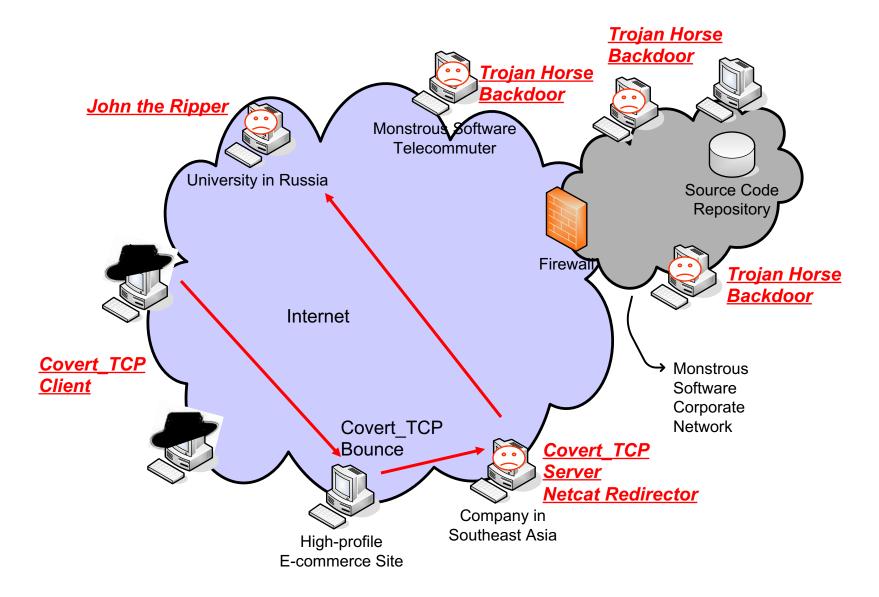
## Trojan Installed on Internal Net



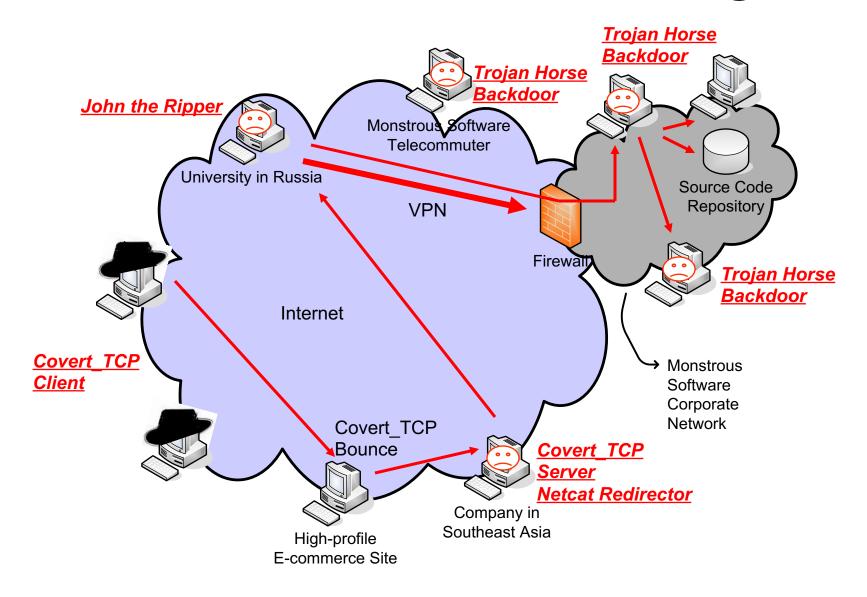
## Trojan Steals Passwords



#### **Attackers Retrieve Passwords**



## Attackers Gain Access through VPN



### Yes! Grab the Source Code!

