



WEBINAR

The threat of cyber-attacks

Hosted by Diplo fellow
Vladimir Radunović

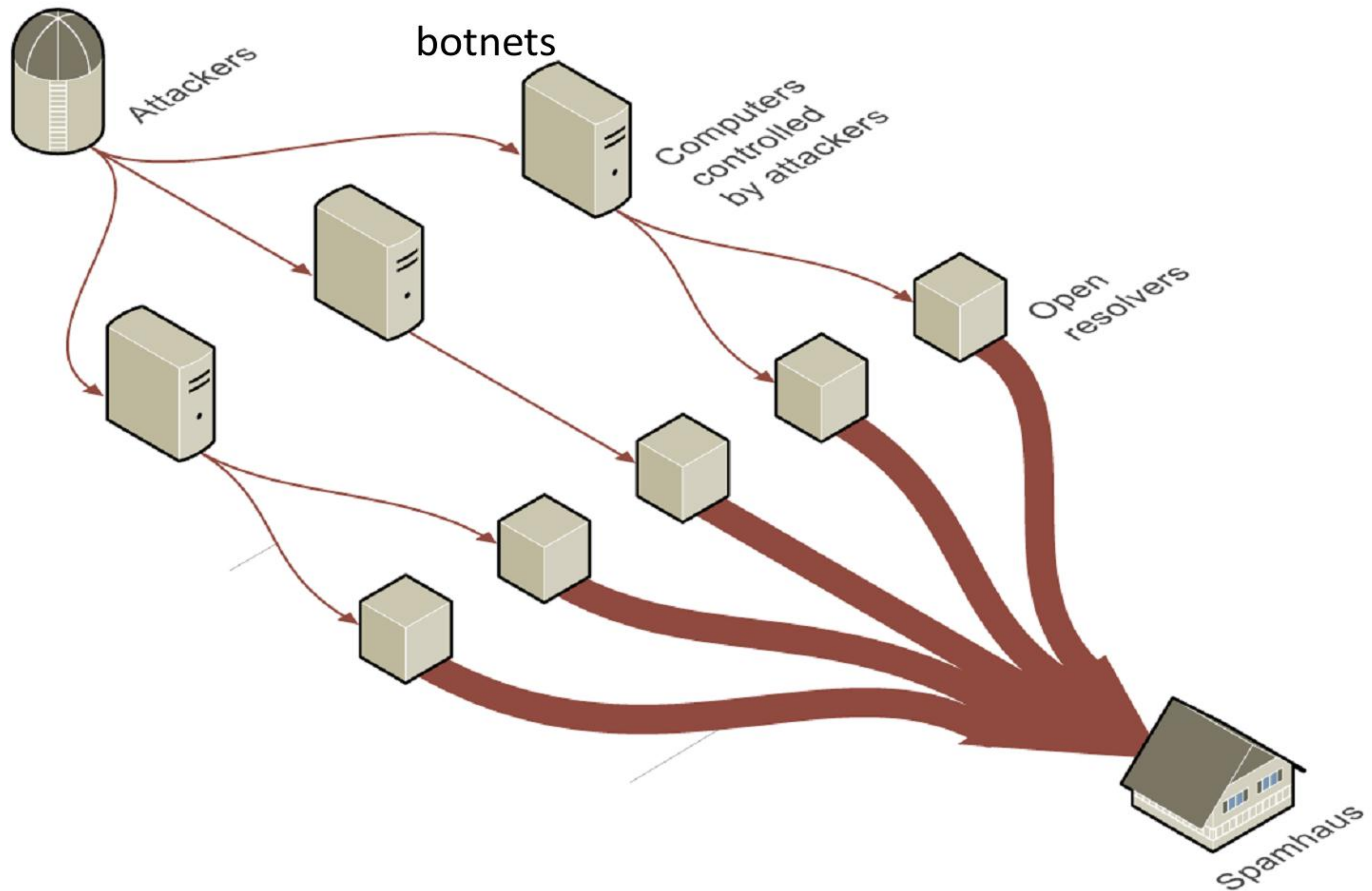
Contents

Attacks: Botnets, DDoS, IP Address Spoofing, Amplification

Challenges: attribution, distinction and “dual-use”
technology, proportionality,

Attacks

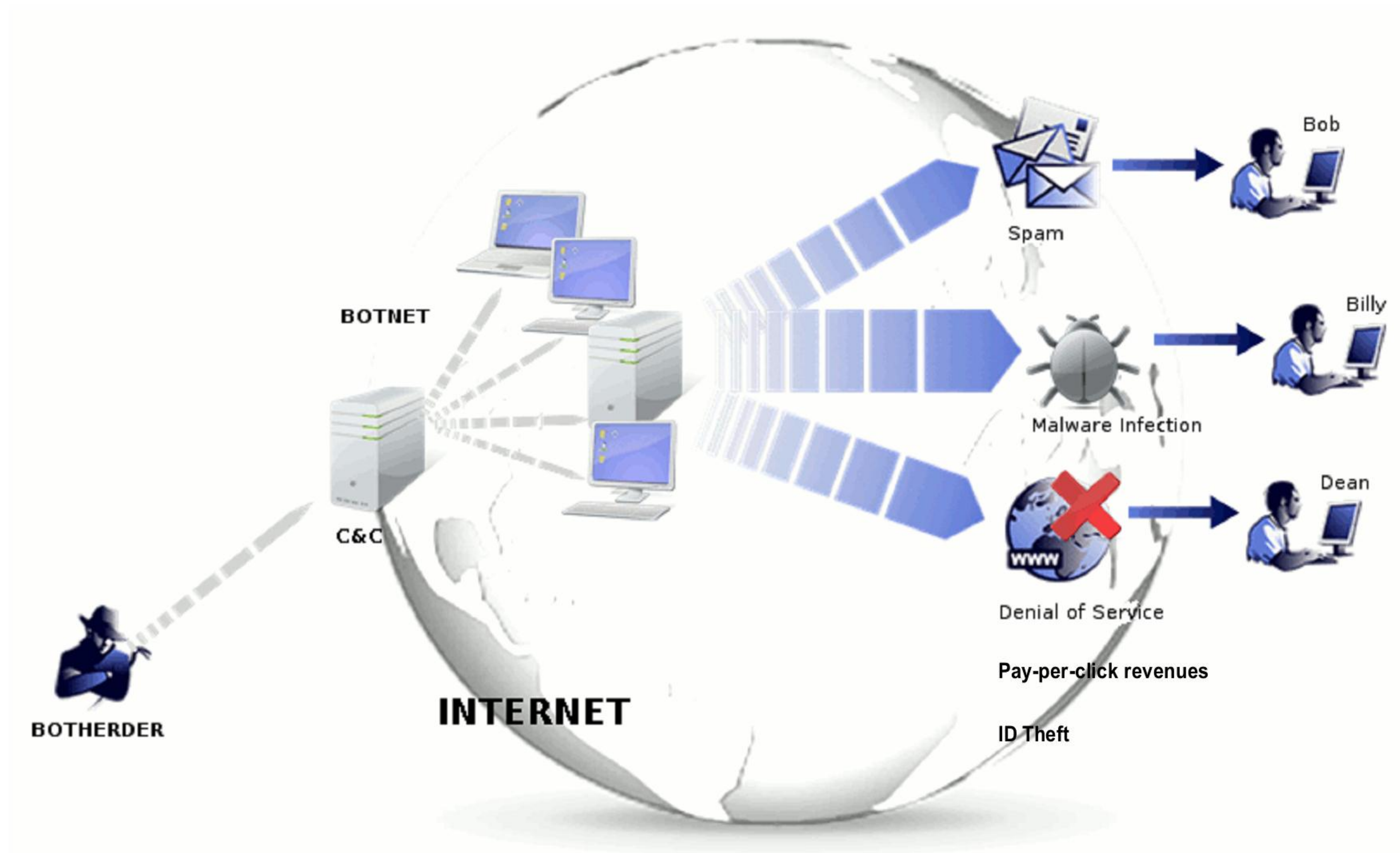
Spamhaus case

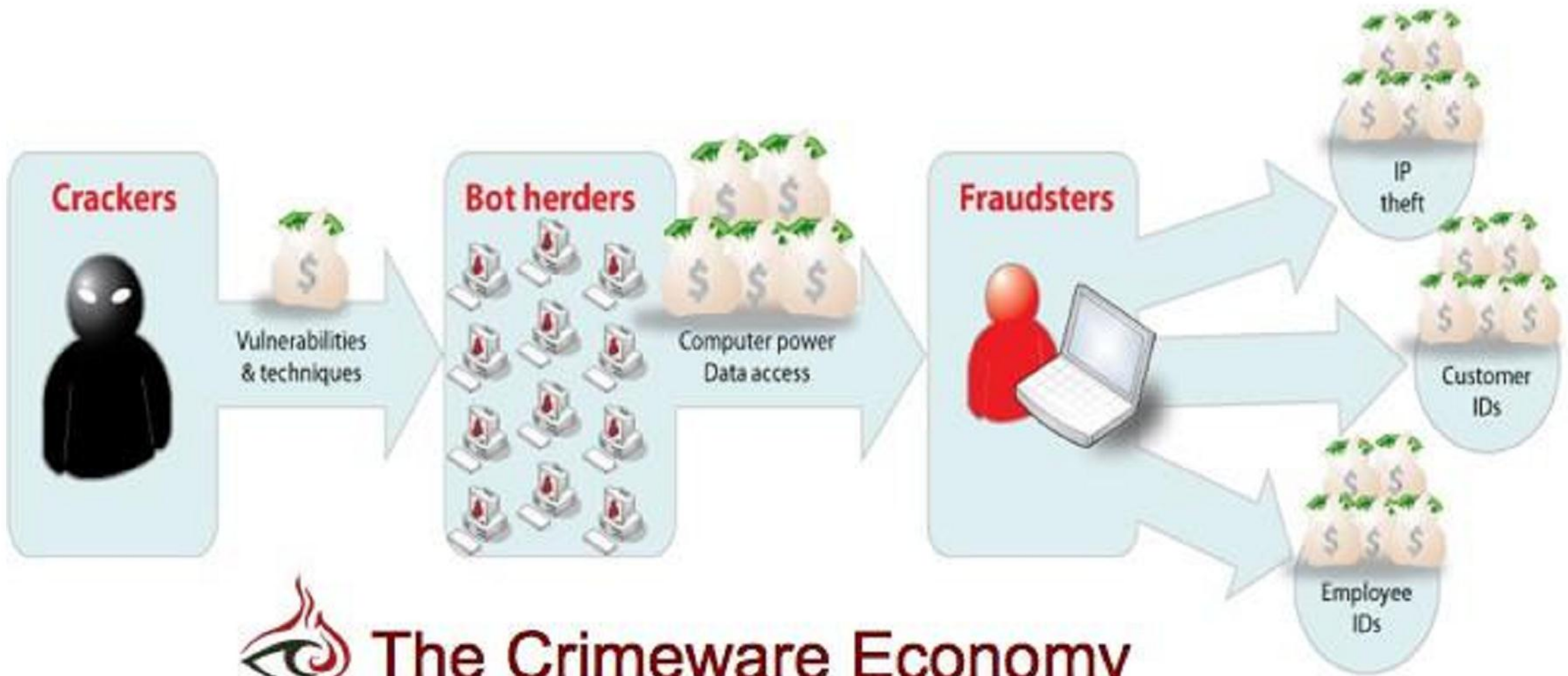


Botnets



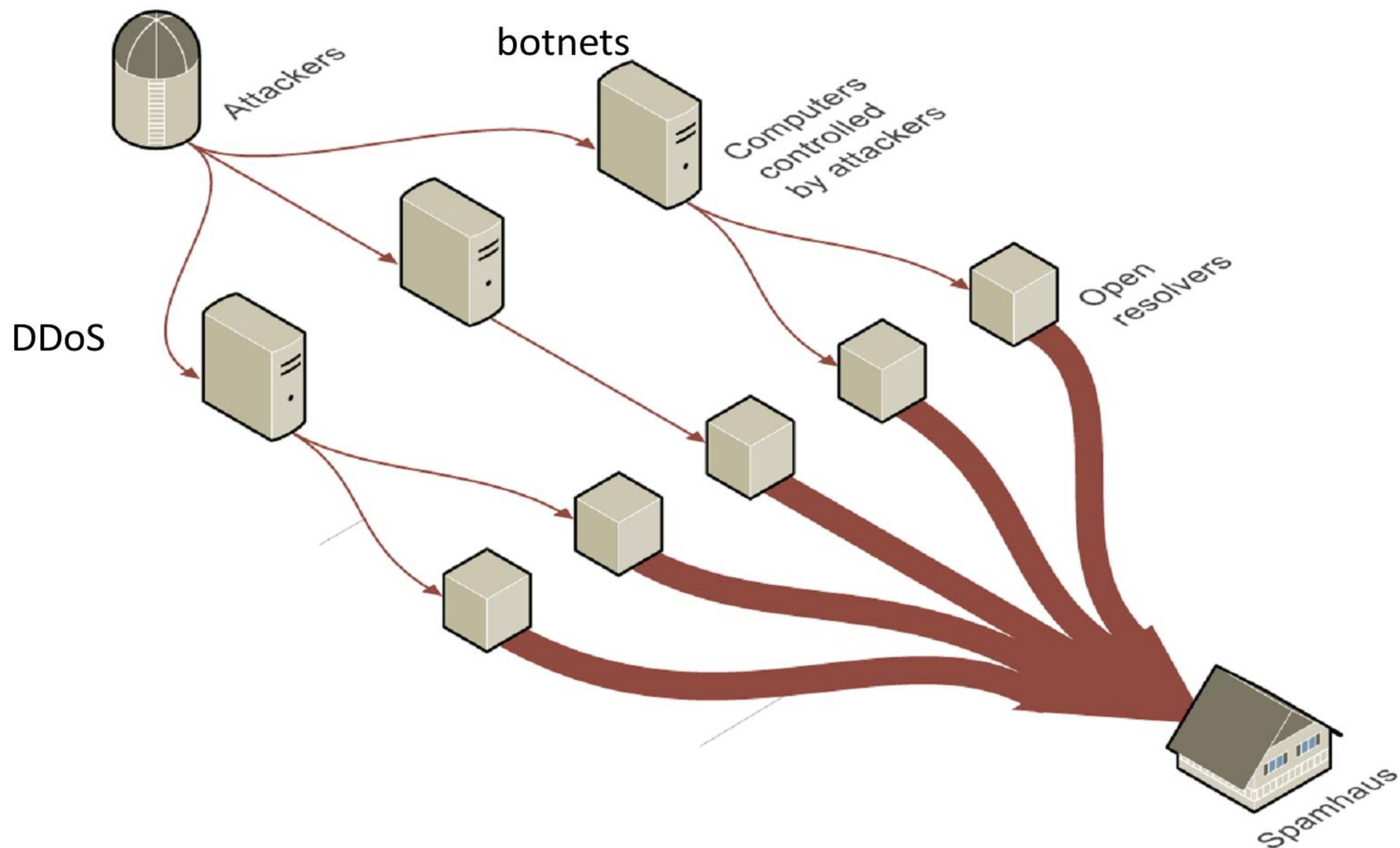
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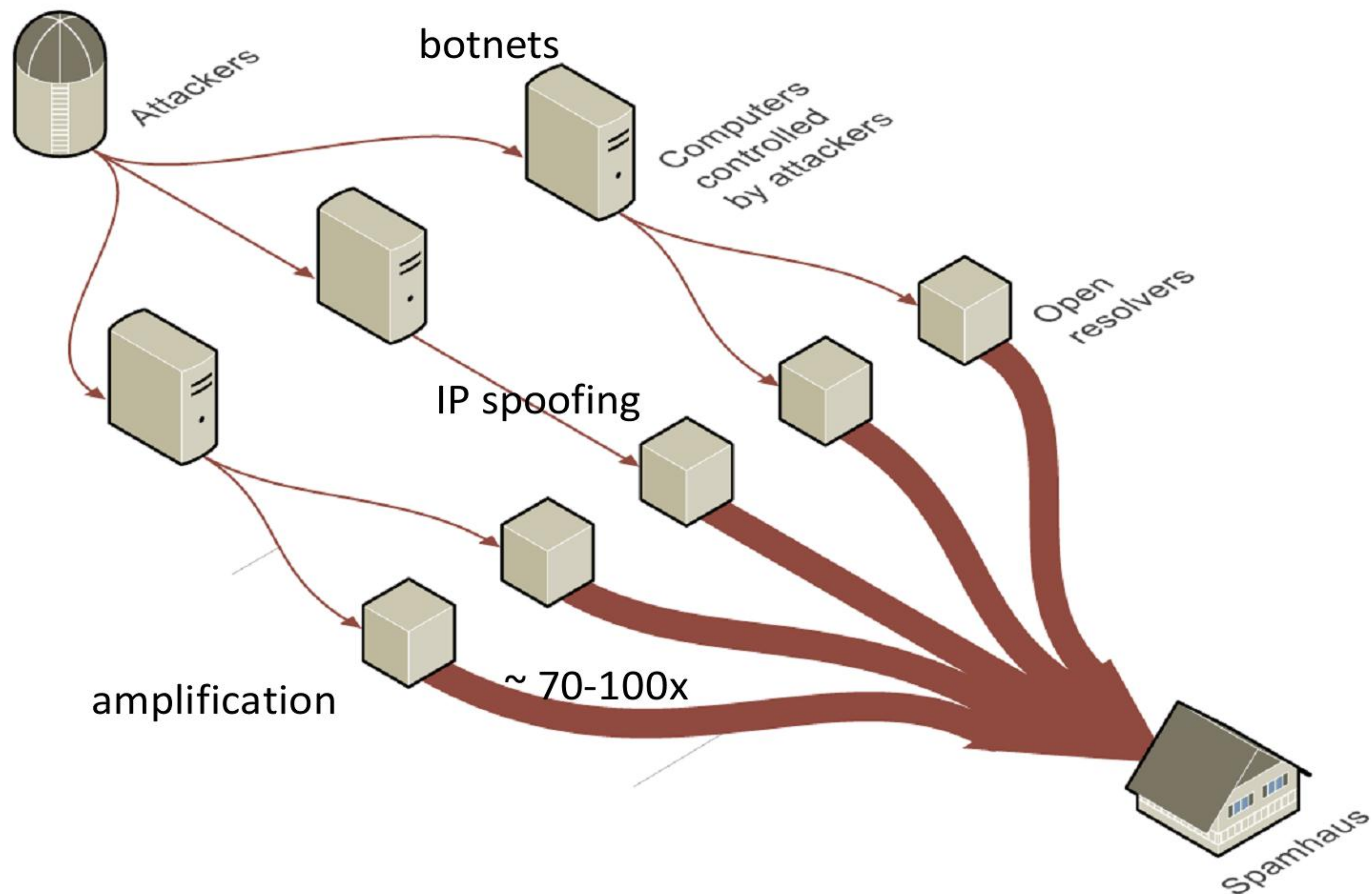


The Crimeware Economy

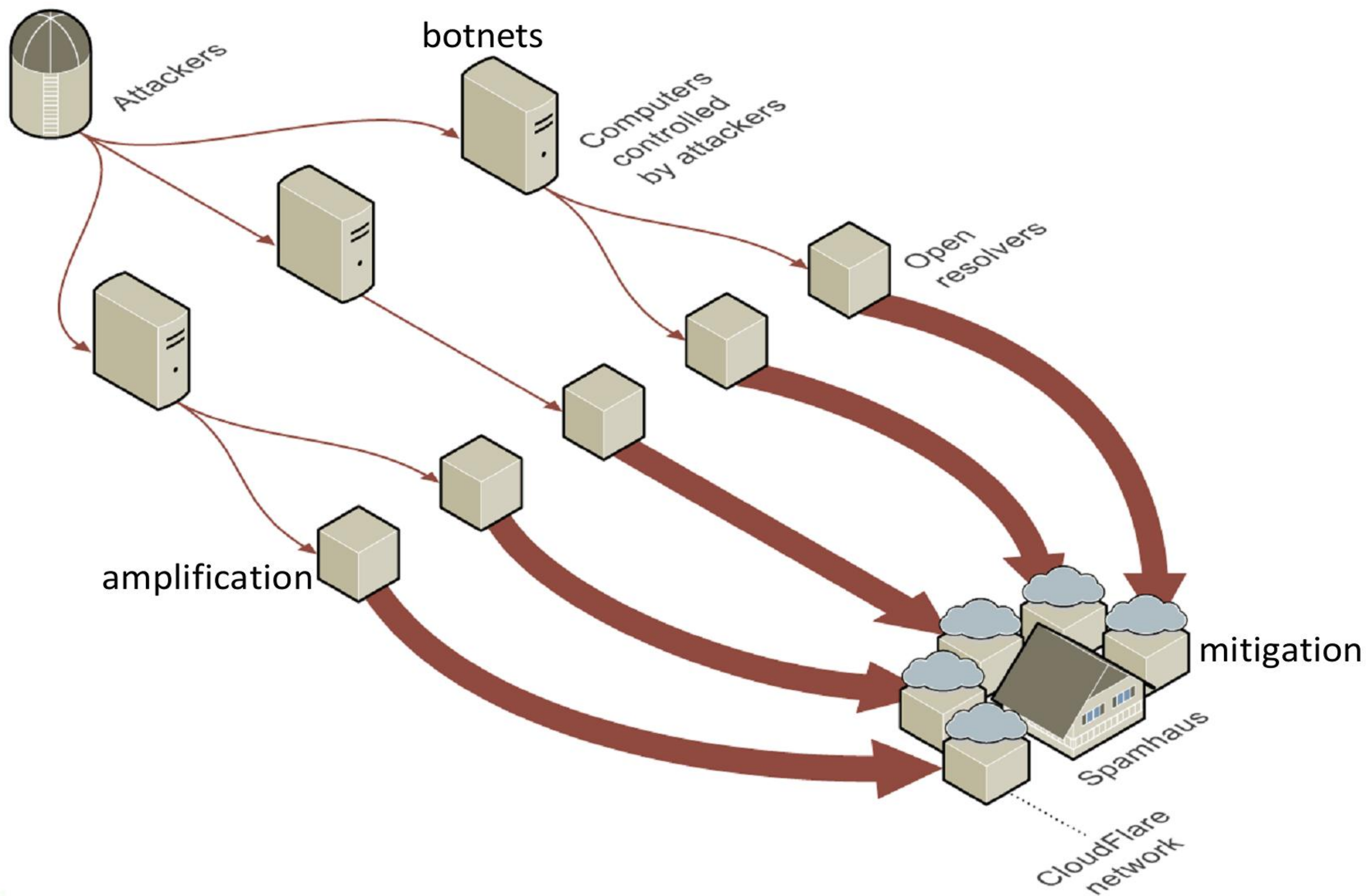
Spamhaus case



Spamhaus case



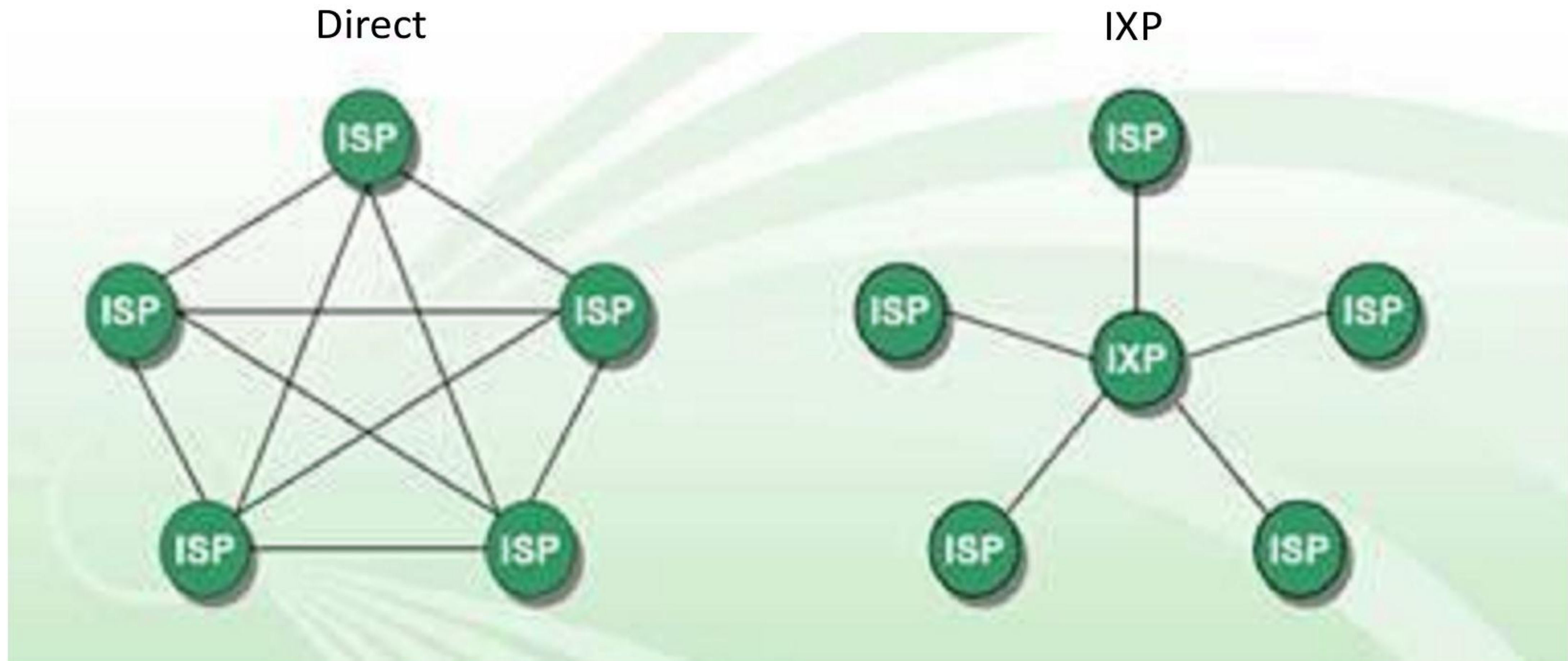
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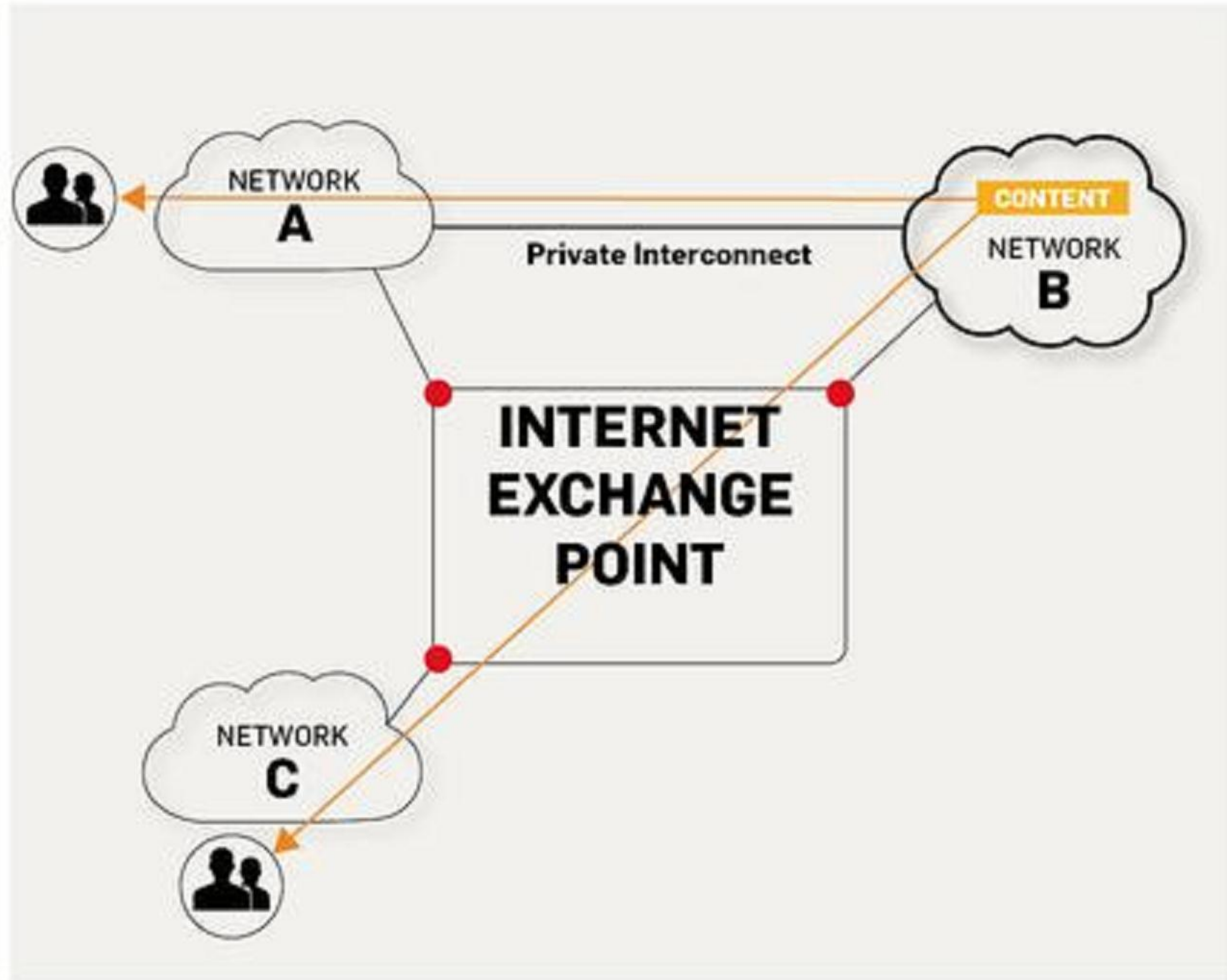
Anycast



Peering



Connectivity



World Internet Topology

Brought to you by **AT&T Labs**
powered by **LUMETA**

This map represents the backbone of the Internet as of August 2007.

Each line depicts the physical routing of data from its source to its destination. The map does not represent the physical or geographical location of servers, but rather the logical representation of the network topology that connects them.

It shows the hierarchical structure of the Internet, with nodes and links forming a complex web. The map is a visual representation of the global network of computers and servers that make up the Internet.

AT&T's Network by the Numbers.

9.81
Percentages of data transmitted across AT&T's network on an average business day. It is the equivalent of reading the entire contents of the Library of Congress every three minutes.

1
AT&T's rank among broadband providers in the United States.

12.9 Million
AT&T broadband customers in America.

540,000
Times of Internet connections per AT&T core and optical.

\$6 Billion
Revenue AT&T will generate by 2008 by using fiber optics deeper into neighborhoods.

36
AT&T Internet data centers around the world.

301,760
AT&T employees worldwide.

97%
Percentage of the U.S. economy reached by AT&T's network.

99.998%
AT&T's network reliability.

49,000
Number of IP-in nodes AT&T provides at 100Mbps.

166
Number of United States cities where AT&T offers 35 wireless high-speed Internet access.

3 Million
AT&T wireless business data subscribers.

160%
Increase in broadband demand per AT&T user between June 2006 and October 2006.

7
Rising Price awarded for innovation developed at the AT&T Bell Labs.

2
Average number of new patent applications AT&T files every day.

AT&T Labs is a leading research and development organization. It is a part of AT&T Intellectual Property, which is a subsidiary of AT&T Knowledge Ventures. AT&T Labs is focused on developing new technologies and services for the future of the Internet.

World Internet by the Numbers.

More than **320,000**
Individual network nodes found by the Internet Mapping Project.

48 Million
Users on the Internet in 2006.
(Source: IDC)

1.133 Billion
Internet users in 2006.
(Source: Internet World Stats)

6.4 Million
New Internet users getting online every month.
(Source: Internet World Stats)

1.6 Billion
Emails sent in 2006.
(Source: IDC)

40 Million
New DNS hosts every year.
(Source: Internet World Stats)

35,000
Web pages it takes to equal the amount of data transferred from a user to a server.
(Source: Internet World Stats)

100 Million
Files downloaded every day.
(Source: NetScout)

161
Billion of new electronic data created every year.
(Source: IDC)

12 Million
Files of new files posted in 2006.
(Source: Internet World Stats)

15 Million
Files of new files to be deployed annually by 2008.
(Source: Internet World Stats)

\$72.5 Billion
Annual spending in support of network infrastructure in the United States by 2008.
(Source: Internet World Stats)

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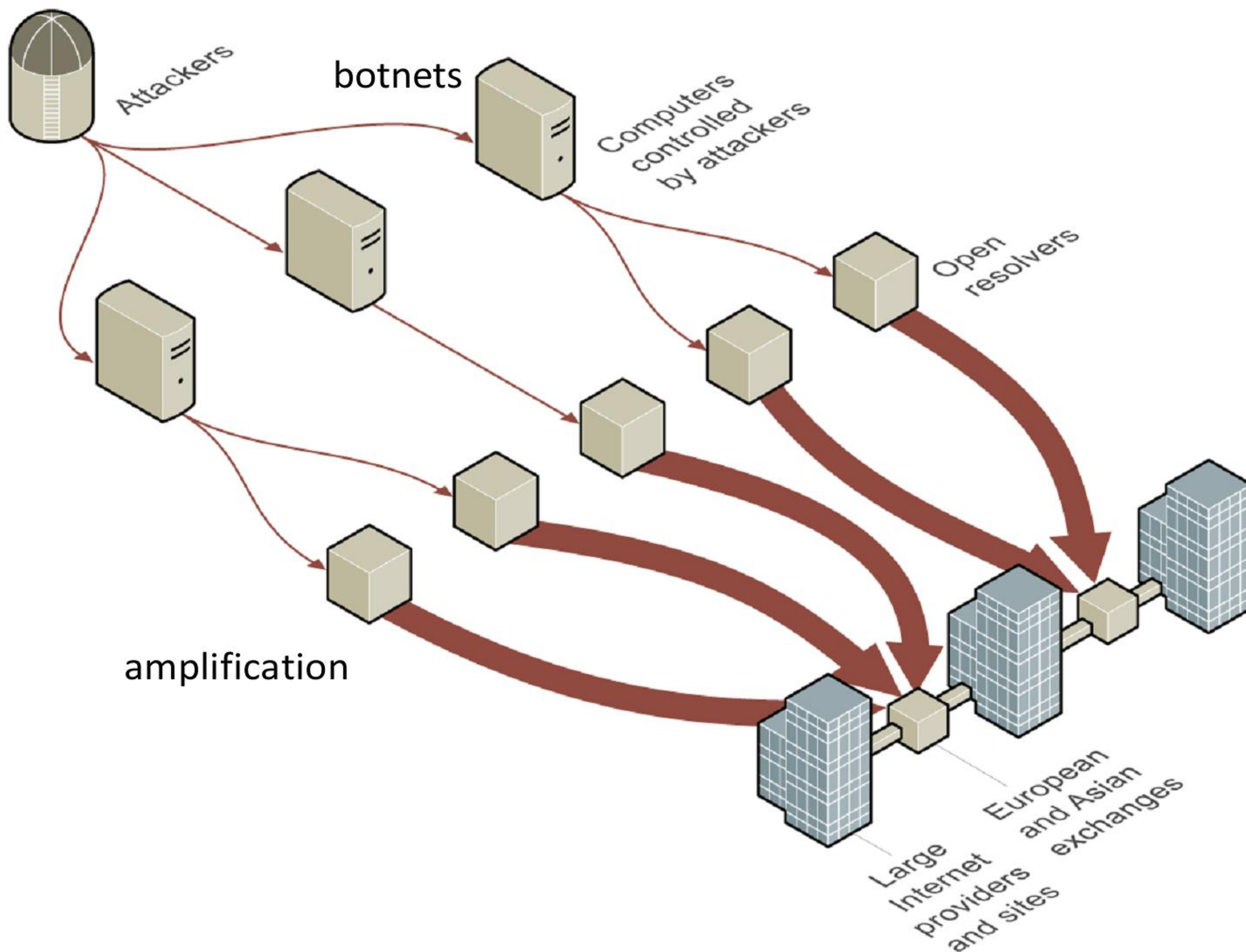
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Spamhaus case



IXPs



Challenges

Cyber-war Challenges:

- Attribution
- Distinction and “dual-use” technology
- Proportionality

Politics



Questions



Thank you for your time

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