Critical Infrastructure Protection in the USA: Where are we after 8 years?

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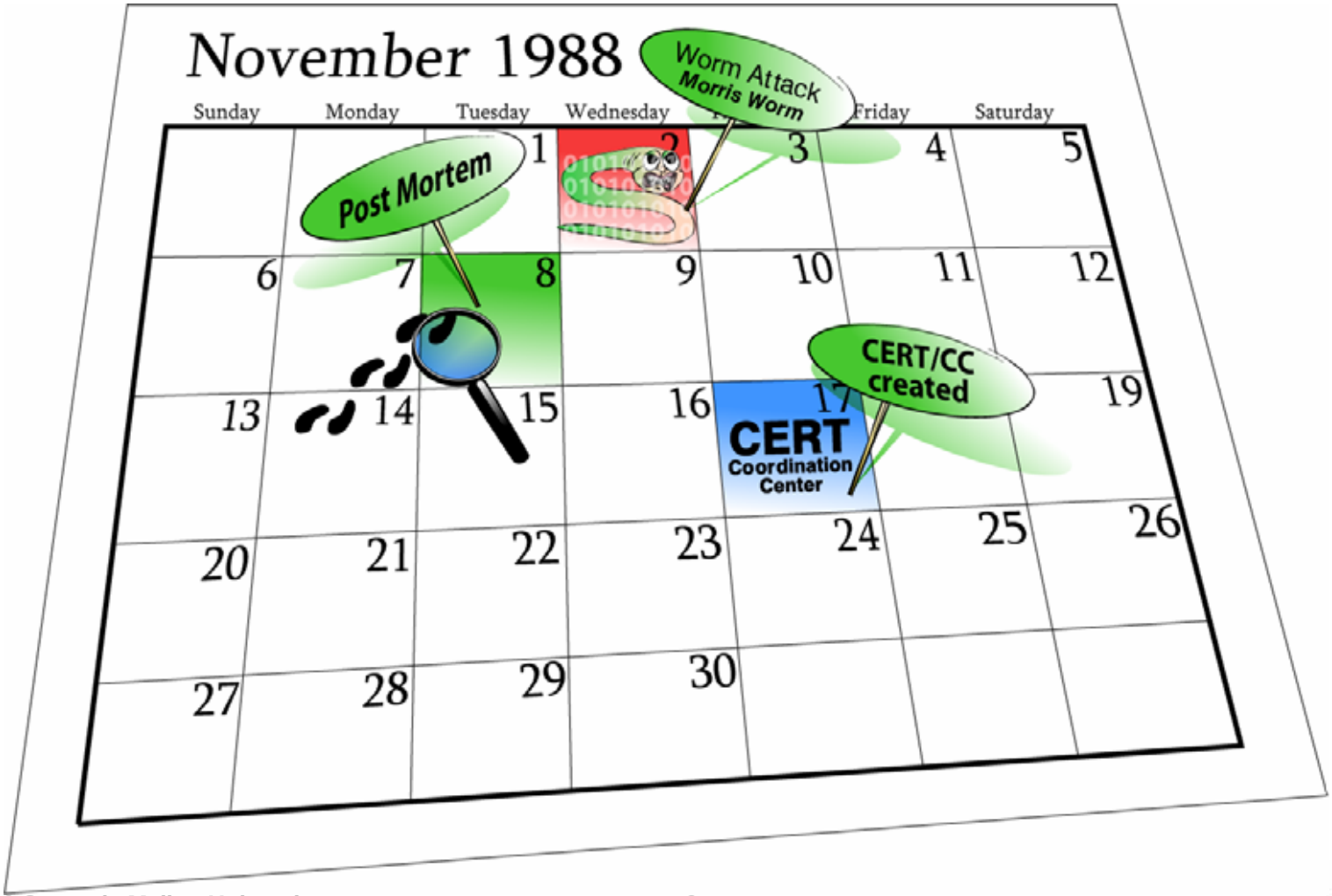
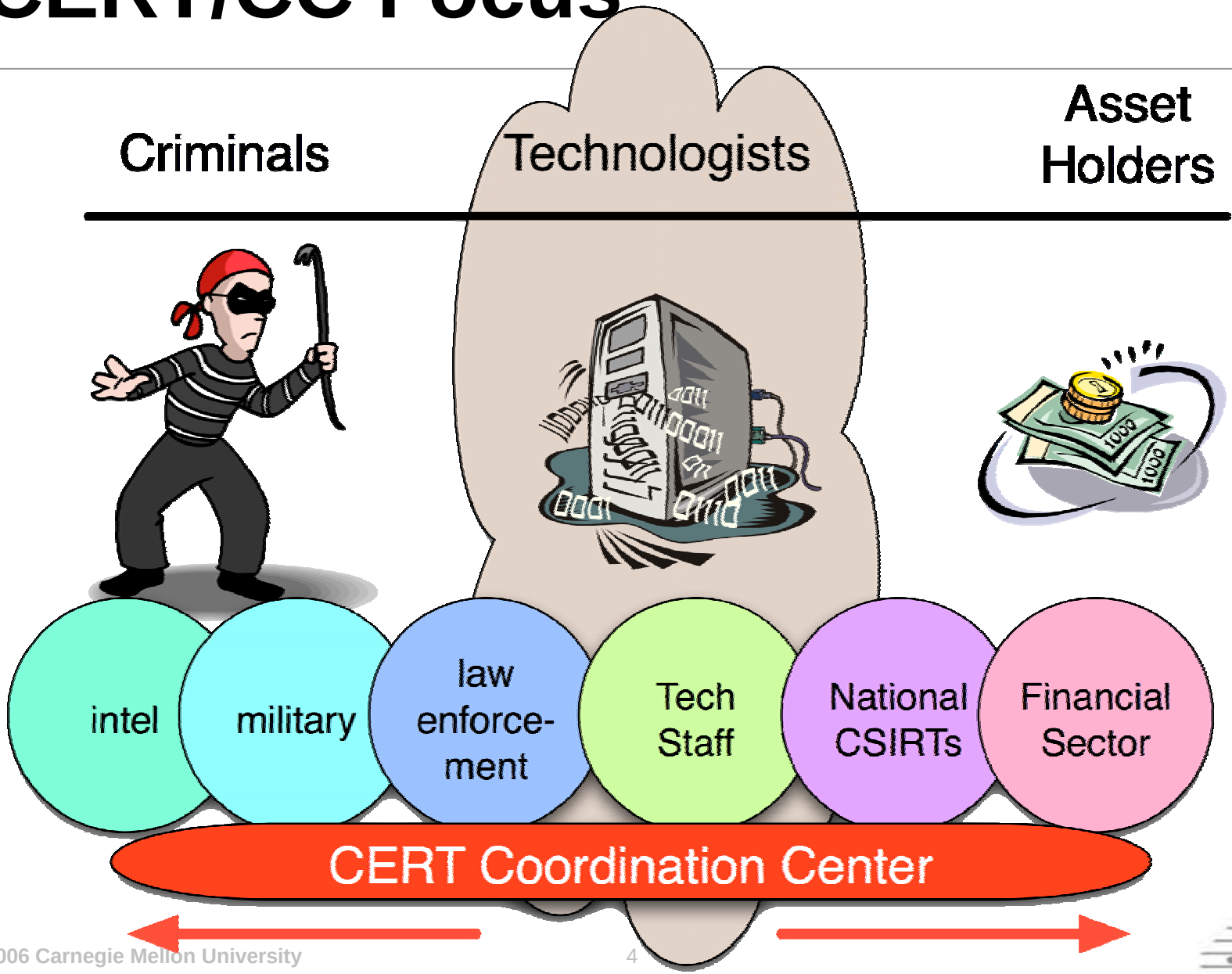
Agenda

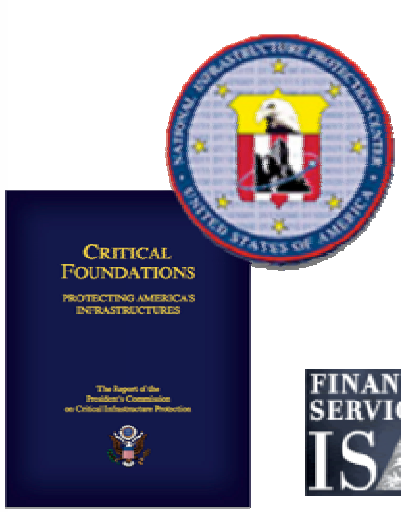
- CERT/CC Overview
- The Last Ten Years
- ISACs
- Homeland Security
- Security Industry
- Business Motivators
- Conclusions

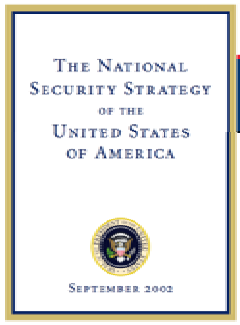

November 1988
Sunday
Monday
Tuesday
Wednesday
Friday
Saturday
Worm Attack
Morris Worm
Post Mortem
CERT/CC
created
CERT
Coordination
Center

CERT/CC Focus



The Last Ten Years

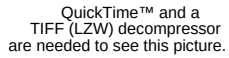




1997 1998 1999 2000 2001 2002 2003 2004 2005 2006

CERT

October 1997



Critical Infrastructure Protection before 1997

National Security Telecommunications Advisory Committee (NSTAC)

QuickTime™ and a
TIFF (LZW) decompressor
are needed to see this picture.

CERT

ISACs

- Financial Services ISAC
  - VeriSign
- Chemical Sector ISAC
  - Chemical Transportation Emergency Center
- Emergency Management and Response ISAC
  - U.S. Fire Administration, DHS
- Electricity Sector ISAC
  - North American Electric Reliability Council
- Energy ISAC
- Food and Agriculture ISAC
  - Food Marketing Institute
- Multi-State ISAC
- Telecommunications ISAC
  - National Communications System (DHS)
- Real Estate ISAC
  - The Real Estate Roundtable
- Surface Transportation ISAC
  - EWA IIT; sponsored by American Association of Railroads and American Public Transportation Association
- Water ISAC
  - Association of Metropolitan Water Agencies
- IT ISAC
  - ISS

Homeland Security

- support for federal, state, local governments has made real progress
- critical infrastructure protection is a hard problem
- information sharing
  - PCII

Security Industry Maturation

- MSSPs
- anti-virus updates
- vendor vulnerability handling

Motivators

- Healthcare Insurance Portability and Accountability Act (HIPAA)
- Sarbanes-Oxley
- Graham-Leach-Bliley

Business Problem

- we need to focus on the business case for security
  - demonstrate those investments bring operational benefits
  - often provides side benefits
    - attack prevention is also accident prevention
    - customer confidence
    - reliability
    - continuity of operations

Better understanding of the threat

- evidence of real threats
- how we know what vulnerabilities we need to worry about
- better information from law enforcement and intelligence agencies

- National Computer Security Survey (NCSS)
  - http://www.ojp.usdoj.gov/bjs/survey/ncss/ncss.htm

Conclusion

- Critical Infrastructure has been an issue for more than 25 years
- Operators have much better support from vendors and service providers
- Homeland Security is making progress; still has far to go
- We need to do a better job of building a business case
- We need a better understanding of the threat