#### RSACONFERENCE 2013

Real Time Forensics:
Uncover the culprit while the body is still warm

Bruce Snell

Security in knowledge

Session ID: SPO2-W23B

Session Classification: General Interest

- Find out what was damaged/stolen
- Find out what attack was used
- Find out where data was sent
- Recovery of compromised systems



- Find out what was damaged/stolen
  - Know who we need to notify
  - Recover lost/damaged systems
  - Better prepare defense for next time





- Find out what was attack was used
  - Reporting
  - Otaku factor





- Find out where the data was sent
  - Aid in investigation by authorities
  - Strengthen defense against future attacks





- Recovery of compromised systems
  - Identify which systems are impacted
  - Costly physical recovery typically needed

Roll out the emergency response team!



#### What would it take...

...to provide real time forensics?



# Can you grab data from...

- Every machine?
  - In your entire Enterprise
    - ▶ With the exact state information?
- ► Go!







#### Scenario...

- Multiple vulnerabilities exposed in Adobe Flash
  - CVE-2013-0633
    - Used in targeted attacks, disguised as Word email attachment
    - Contains malicious Flash content
    - Buffer overflow
  - CVE-2013-0634
    - Exploit reported by Lockheed Martin, MITRE and others, suggesting targeted industrial espionage
    - Memory corruption



## How do you react?

#### **National Cyber-Alert System**

#### Vulnerability Summary for CVE-2013-0634

Original release date: 02/08/2013

Last revised: 02/12/2013 Source: US-CERT/NIST

#### Overview

Adobe Flash Player before 10.3.183.51 and 11.x before 11.5.502.149 on Windows and Mac OS X, before 10.3.183.51 and 11.x before Linux, before 11.1.111.32 on Android 2.x and 3.x, and before 11.1.115.37 on Android 4.x allows remote attackers to execute arbitrar denial of service (memory corruption) via crafted SWF content, as exploited in the wild in February 2013.

#### **Impact**

CVSS Severity (version 2.0):

CVSS v2 Base Score: 9.3 (HIGH) (AV:N/AC:M/Au:N/C:C/I:C/A:C) (legend)

Impact Subscore: 10.0

Exploitability Subscore: 8.6

CVSS Version 2 Metrics:

Access Vector: Network exploitable; Victim must voluntarily interact with attack mechanism

Access Complexity: Medium

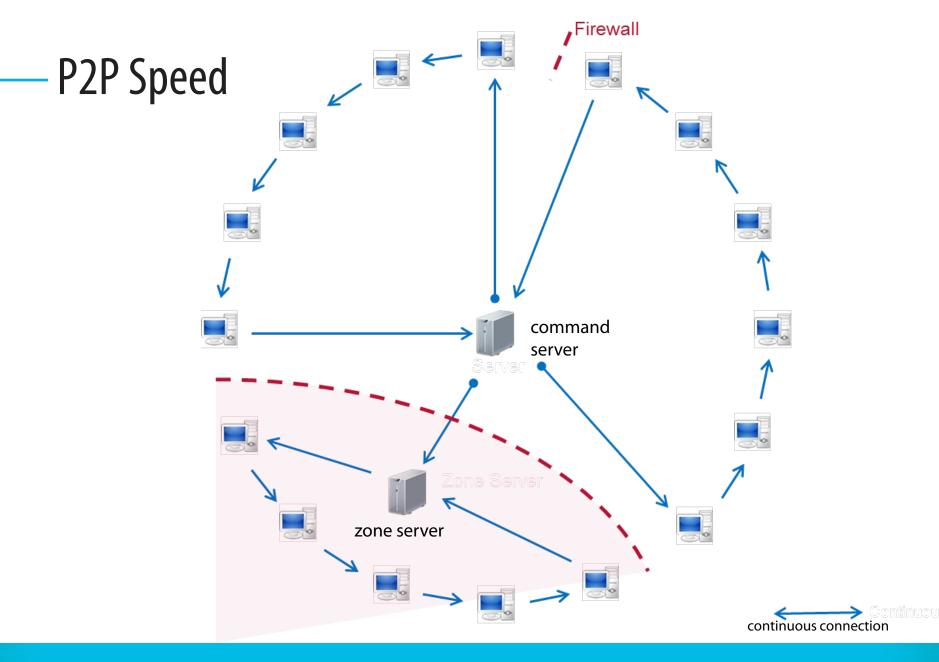
Authentication: Not required to exploit

Impact Type: Allows unauthorized disclosure of information; Allows unauthorized modification; Allows disruption of service



#### Demo







# Questions?



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