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Intelligence Based Cyber Defense

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Agenda

I. DDoS and APT Incidents

II. Security Intelligence System

III. Next Generation Security

IV. Intelligence Based Cyber Defense

OPERATION MALAYSIA

Malaysia Official Government Website [link] – [Down]

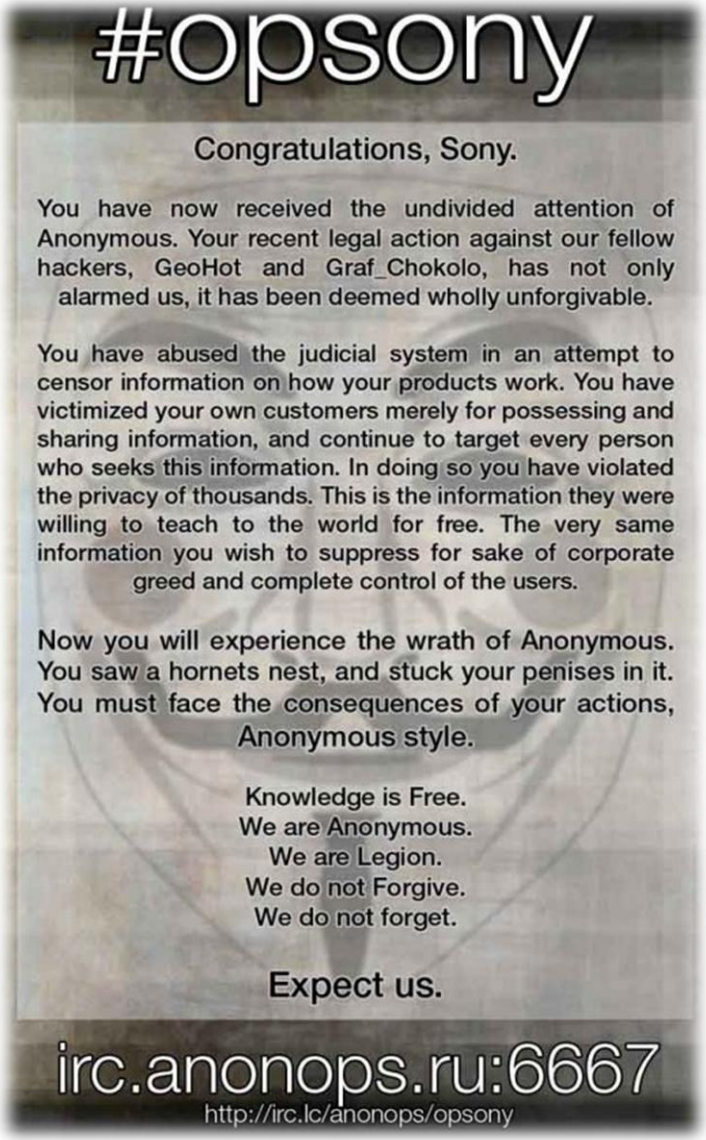
- SabahTourism.com [link] [Hacked][Leaked]
- CIDB [link] [Hacked] [Up]
- Land Public Transport Commision [link] [Suspected]
- Malaysian Meteorological Service [link] [Down]
- ASEANconnect [link] [Suspected]
- Hollywood-Artist.info [link] [Suspected]
- Ministry of Education [link] [Down]

– Suruhanjaya Pilihanraya Malaysia [link] [Down]

- Bomba [link][Down]
- TMNet [link] [Down]
- Perbendaharaan Malaysia [link] [Down]
- Kementerian Kerja Raya Malaysia [link] [Down]
- Parlimen Malaysia [link] [Down]
- JobsMalaysia [link] [Down]
- Kementerian Penerangan, Komunikasi dan Kebudayaan [link] [Down]

DDoS Attacks Strands Traditional Firewall/IPS

Cyber Attacks to Sony PlayStation Network



Cyber Attacks to Sony PlayStation Network -2

[user12] if sony is watching this channel they should know that running an older version of apache on a redhat server with known vulnerabilities is not wise, especially when that server freely reports its version and its the auth server

[user2] its not old version, they just didnt update the banner

[user12] I consider apache 2.2.15 old

[user2] which server

[user12] it also has known vulnerabilities

[user12] auth.np.ac.playstation.net

[user2] ya the displayed version u see via banner is not the real version

[user12] unless they updated it in the last couple weeks

[user12] I doubt that since its not trivial to change that

[user12] its a bit more invasive than just setting it to Prod like they do on their other servers

[user11] you know, watching this conversation makes me think about whether it was a good idea after all to buy a couple of games from psn using a visa card

[user2] its just backported security patches

[user11] i did remove all my info after downloading the games though

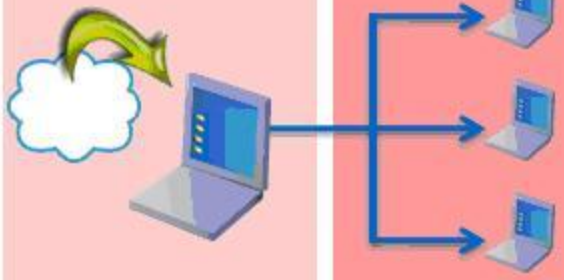
[user12] that is just psn not the store

[user12] they are running linux 2.6.9-2.6.24 on that box too

[user12] that too is old

APT Attack to RSA SecurID

1	2	3	4	5
Phishing and Zero day attack	Back door	Lateral movement	Data gathering	Exfiltrate
A handful of users are targeted by two phishing attacks; one user opens Zero day payload (CVE-02011-0609)	*The user machine is accessed remotely by Poison Ivy tool*	*Attacker elevates access to important user, service and admin accounts, and specific systems*	*Data is acquired from target servers and staged for exfiltration*	*Data is exfiltrated via encrypted files over ftp to external, compromised machine at a hosting provider*



APT Attacks Worldwide

General commercial security devices can't help on those APT and other sort of advanced targeted attacks!

Data Source: Revealed - Operation Shady RAT, By Dmitri Alperovitch, McAfee

Picture of Security Today

- Clear perimeter between security zone and insecurity zone (and DMZ)
- Security policy mostly based on IP addresses, ports, etc.

- Silos of various security devices
- Mission impossible for signatures update to catch up with zero-day threats
- Infidelity of communications from users to vendors
- …

Please refer to :
http://www.nsfocus.com/images/6_about/journal/6_10_014_j.pdf

Security Intelligence System

General Logs
DNS Query | Login/Auth | Firewall /Router/Switch | Web proxy

Security Alerts
IDS/IPS | Firewall | AntiVirus | UTM | …

HoneyNet

Web Resources
Vulnerability and Patches | Attacks | Tools | …

Security Intelligence

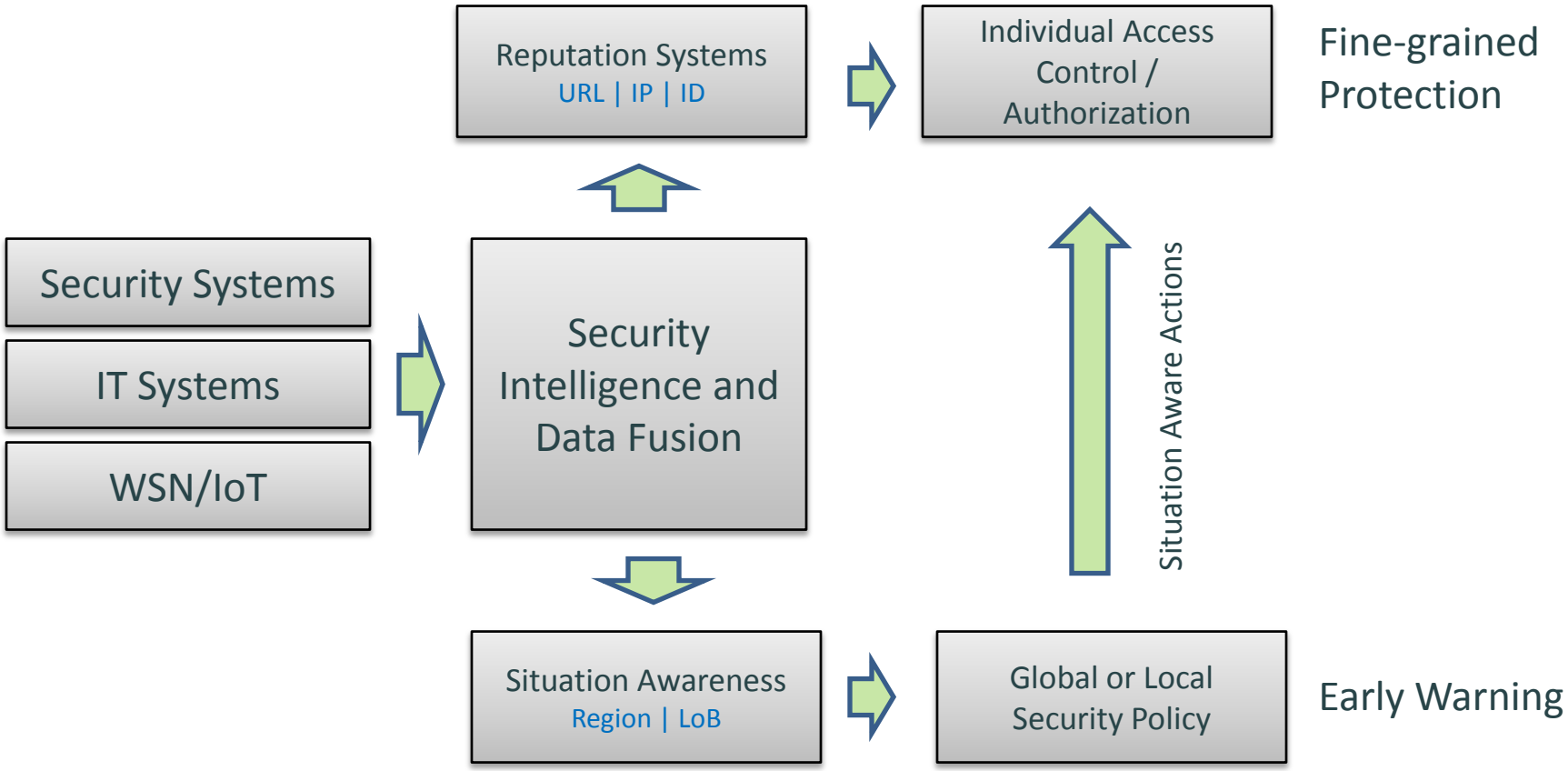
Log Correlation | Malware Analysis | Forensics Reporting | Data Mining Reputation | Situational Awareness | …

Security Policy Update

Ruleset /Knowledgebase /Configuration Update

Communications and Training

Security Intelligence Enables Advanced Features



Talking About Next Generation Security

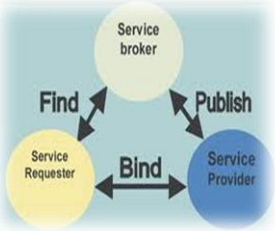
Business

- Intimate Partnership between customer and providers

Knowledge

- Cloud Intelligence

Architecture



- Service Oriented
- Open Plugin-enabled

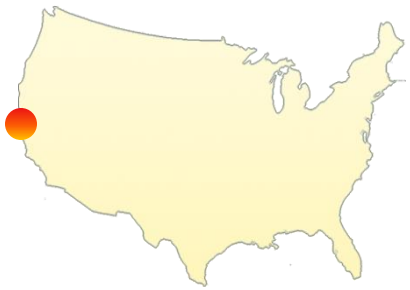
Team

- Real Time Response
- Global Operated

Intelligence Based Cyber Defense

	Technology	Policy
Government	• Develop nation-level security intelligence system, including monitoring, collecting, analyzing, sharing, distributing, covering vulnerability, reputation, honeynet and malware, etc. • Early warning & emergency response system	• Laws/Regulations • Public/private sector collaboration, identifying a few trustworthy providers and develop deep collaborations • Awareness education • International collaboration and agreements
Enterprise	• Choose security devices with adequate dynamic update capability • Enable logging and build correlation/data mining capability or purchase MSS. • Be open to share security data with authority and MSSP	• Regular self check on compliance • Awareness education

谢谢 Thank You 謝謝 Vielen Dank Gracias Merci Beaucoup
ありがと 감사합니다 Obrigado ขอบคุณ Terima kasih



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