

**IBM Global Services** 

# Securing your IT with open source

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## Agenda

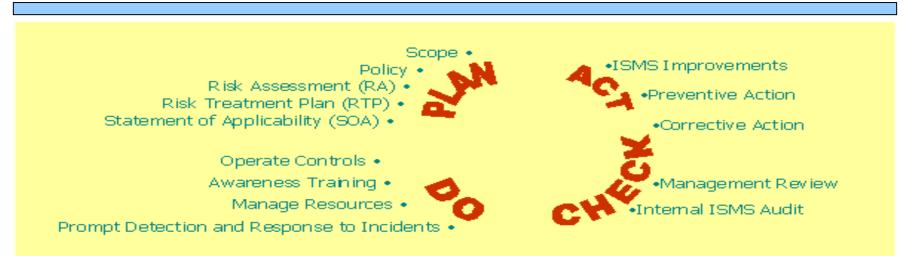
- Hardening and Tightening
- Monitoring and preventing
- Forensic
- Future

TOTAL:

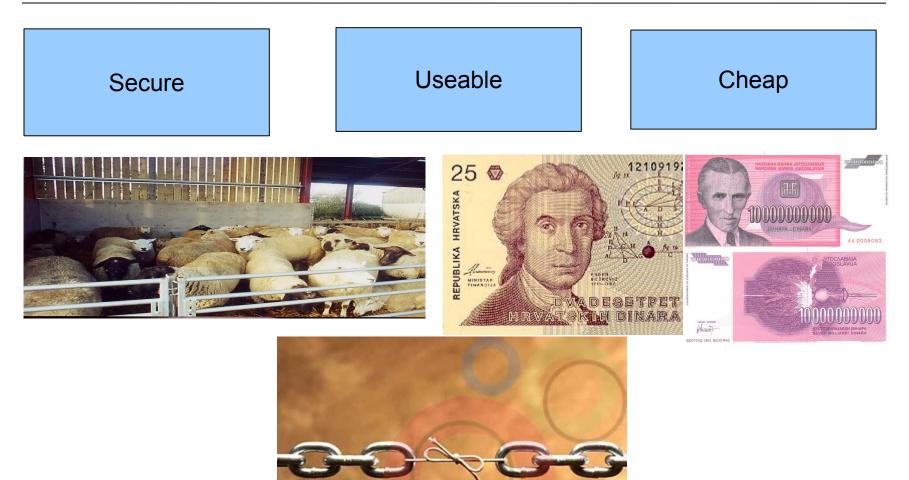
#### Security policy Security standards Security procedurs Physical security

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30 minutes



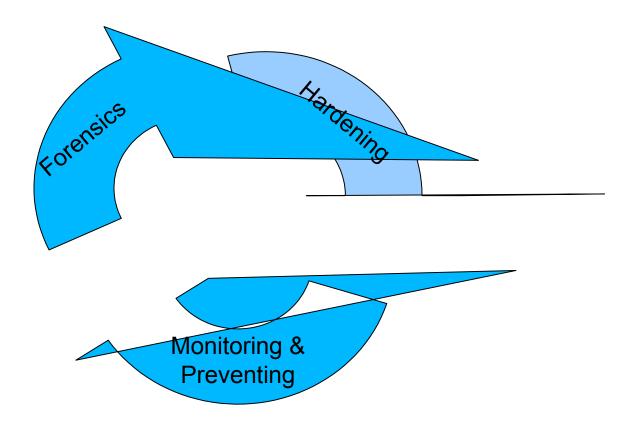
### Security



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### Security





## Tightening your system

- Tightening according to organization policies and standards
- Basic stuff
  - Update/Patch
  - Remove unneeded services
  - Remove unneeded components
  - Least privilege principle
  - Implement strong passwords
  - Deny all, allow specific

## Hardening

Bastille

## Linux

- SELinux
- Grsecurity
- Openwall project
- Hardened debian
- Firewalls
  - Shorewall
  - FWbuilder
  - Falcon firewall project

## Backup

- Amanda
  - www.amanda.org
  - Advanced Maryland Automatic Network Disk Archiver
- Bacula
  - www.bacula.org
  - Multiplatform network backup tool
- BackupPC
  - backuppc.sourceforge.net
  - High-performance backup of workstations to server's disk
- Dirvish
  - www.dirvish.org
  - Fast, disk based, rotating network backup system



### Monitoring

- Multi Router Traffic Grapher (MRTG)
- SmokePing
- Big Brother
- Ntop
- Mon
- OpenNMS
- Nagios
- rrdtool

## E-mail

- Amavis
- Spamassasin
- pop3proxy
- postprox
- Proxsmtp
- Anti-Spam SMTP Proxy
- Mailstore
- smtpfilter
- Clamav



## **Intrusion and Prevention**

- Host Intrusion Detection Systems (HIDS)
  - Tripwire
  - AIDE
- Network Intrusion Detection Systems (NIDS)
  - Snort
  - Argus
  - BroIDS
- Hybrid Intrusion Detection Systems (HyIDS)
  - Prelude
- Prevention
  - Blockit
  - Snort2pf

Integration: OS-SIM Demarc

## Wireless

- WIDZ
- Kismet
- FakeAP

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## Test yourself

- Nmap
- Amap
- Hping2
- Nessus
- Nikto
- Paros
- Ike-scan
- Fragrouter
- Firewalk

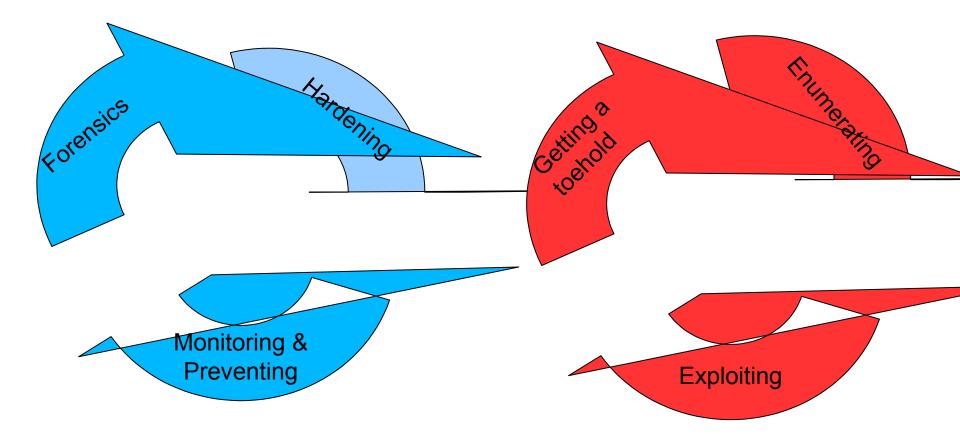
### Forensic

- Coroner's Toolkit
- Sleuth
- File System Investigator
- FLAG
- Bootable CD's
  - DMSZ-Fire
  - Freesbie
  - Knoppix

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#### Attacker and Defender methodology



## **Open standards**

### Open standards

- IDMEF
- Common Base Event format
- ANML
- SIML
- SDML

"An autonomic computing system cannot exist in a hermetic environment. While independent in its ability to manage itself, it must function in a heterogeneous world and implement open standards -- in other words, an autonomic computing system cannot, by definition, be a proprietary solution."

- Autonimic Computing manifesto



#### The end

### QUESTIONS

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