NWIS

Just Like Prego, It's In There

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NWIS Project Lead

Outline

- **NWIS defined**
- **What it tracks**
- **Integration with our cyber environment**
- **Benefits**
- **On going projects**
- **Boring statistics**

What is NWIS?

- **Network Information System**
- **Started in 1996**
- **More than just a database**

What does NWIS track?

Computing Devices
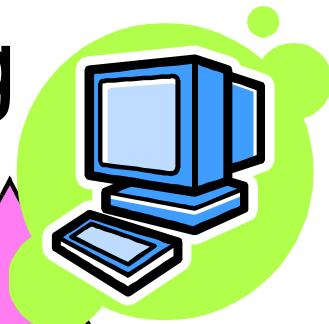
People

Cyber Security

Connections

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Computing Devices

- **Records all computing devices**
  - **Desktops (28K); laptops (12K); servers (3.5K)**
  - **Thin clients (2.6K); hard drives (800)**
  - **Printers (3K)**
  - **Handhelds (2K)**
  - **Network equipment (3K)**
- **Records who is responsible**
 - **Owner & location**
  - **System Administrator**

Connections

- **Our network environment**

  - **17 networks; 1K subnets; 239K node addresses**

- **Computing device connectivity recorded**

- **DHCP registration**

- **Association triggers DNS entry**

People

- **Sandia's population**
  - **15K people; 1K organizations; 32 worksites**
- **NWIS manages cyber resources**
  - **Account/Service Provisioning (97K accounts)**
  - **CryptoCard/Kerberos**
  - **Email accounts (14K)**
  - **Elevated rights**
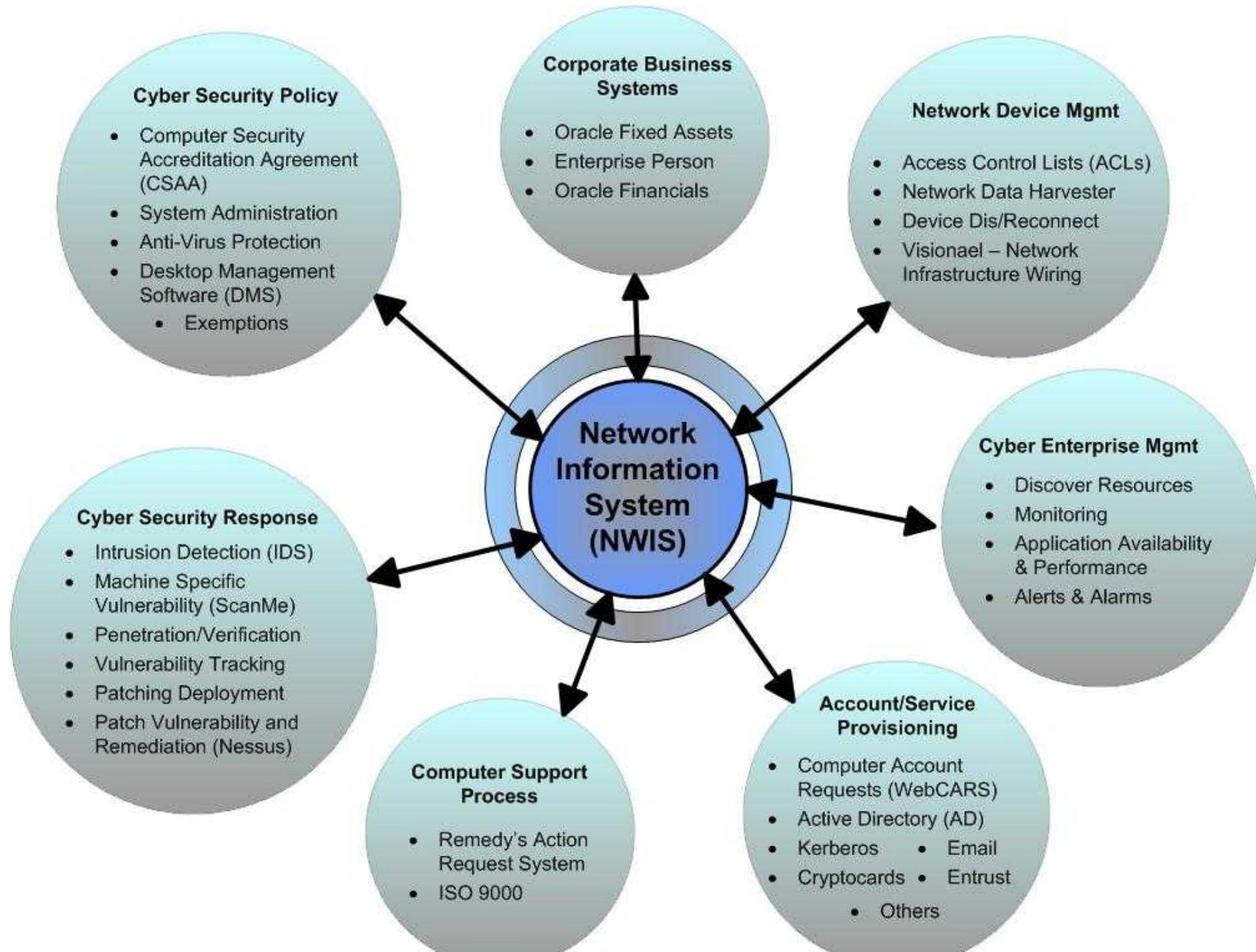
Corporate Business Systems

- Oracle Fixed Assets
- Enterprise Person
- Oracle Financials

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Network Device Management

- **Access Control Lists (ACLs)**
- **Network Data Harvester**
- **Device Dis/Reconnect**
- **Visionael – Network Infrastructure Wiring**

Cyber Enterprise Management

- **Discover Resources**
- **Monitoring**
- **Application Availability & Performance**
- **Alerts & Alarms**

Account/Service Provisioning

- **Computer Account Requests (WebCARS)**
- **Active Directory**
- **Kerberos**
- **CryptoCard**
- **Email**
- **Entrust**
- **Others (Red Storm, IMS, Reddish)**

Computer Support Process

- **Remedy's Action Request System**
- **ISO 9000**

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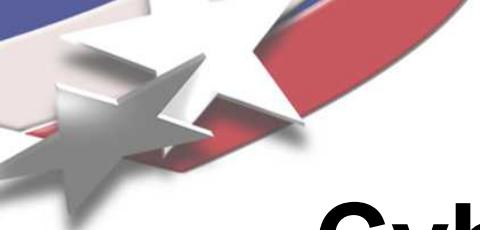
Cyber Security Response

- **Intrusion Detection**
- **Machine Specific Vulnerability (ScanMe)**
- **Penetration/Verification**
- **Vulnerability Tracking**
- **Patching Deployment**
- **Patch Vulnerability and Remediation**

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Cyber Security Policy

- **Computer Security Accreditation Agreement (CSAA)**
- **System Administration**
- **Anti-Virus Protection**
- **Desktop Management Software (DMS)**
- **Exceptions**
- **Two-Factor Authentication**
- **Security Plans**

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Benefits

- ## Single authoritative source
  - **Quick response to DOE datacalls**
  - **One action provides trigger to integrating systems**
  - **Consequences of non-compliance can be enforced**

On Going Projects

- **Laptop On Foreign Travel (LOFT)**
- **Software Assets Management System (SAMS)**
- **Web Computer Account Request System (WebCARS)**
- **Assets Inventory**
- **Skies the limit**

Boring Statistics

- **SQL Server 2005 Database**
  - **195 tables**
  - **710 stored procedures**
- **Batch processing**
  - **Windows Scripting using javascript**
  - **203 daily/weekly/monthly jobs**
  - **67 majordomo files created for Outlook**
- **On-line processing**
  - **625 ColdFusion pages using javascript**
- **700 users with update capability**

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