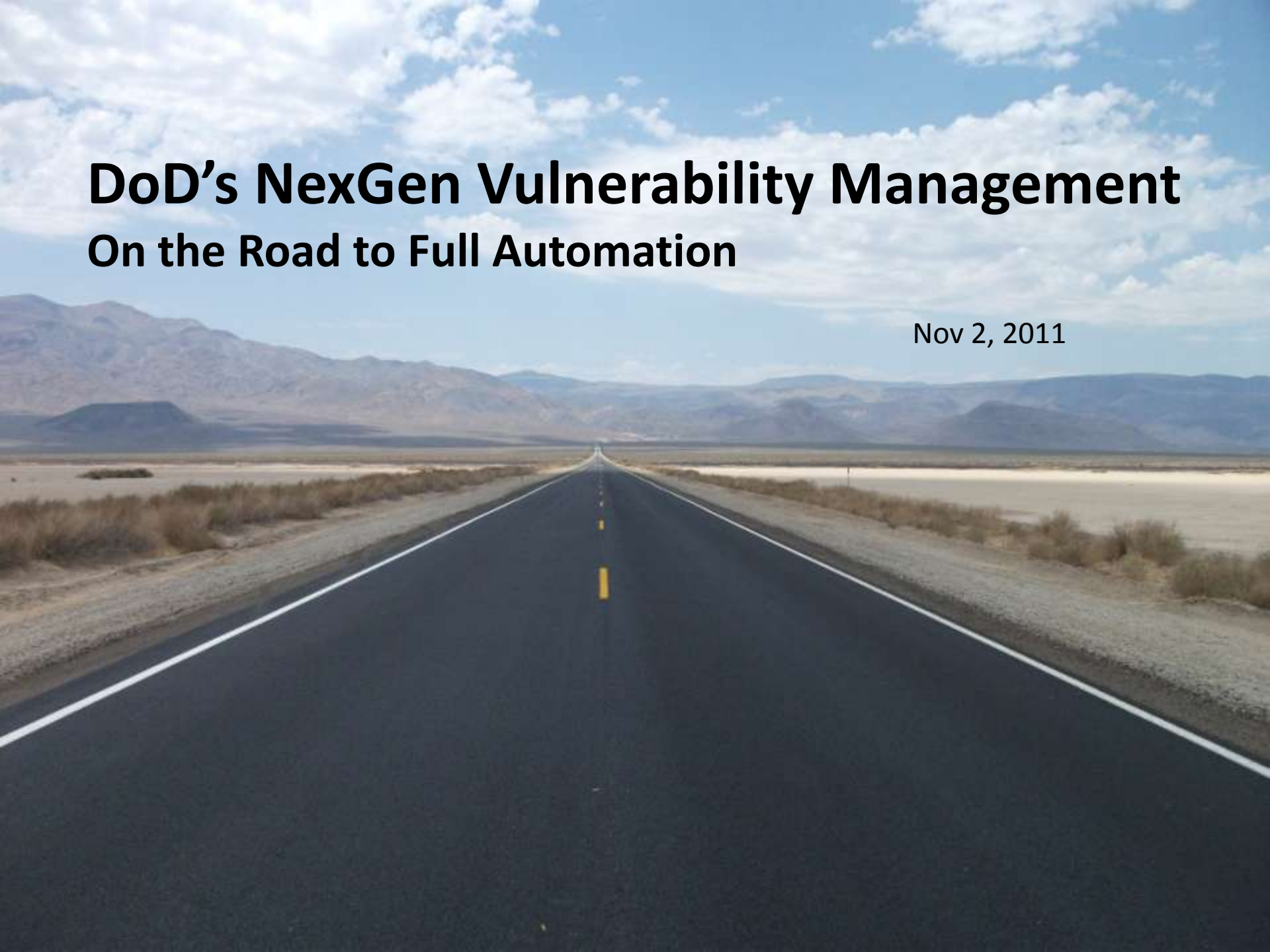


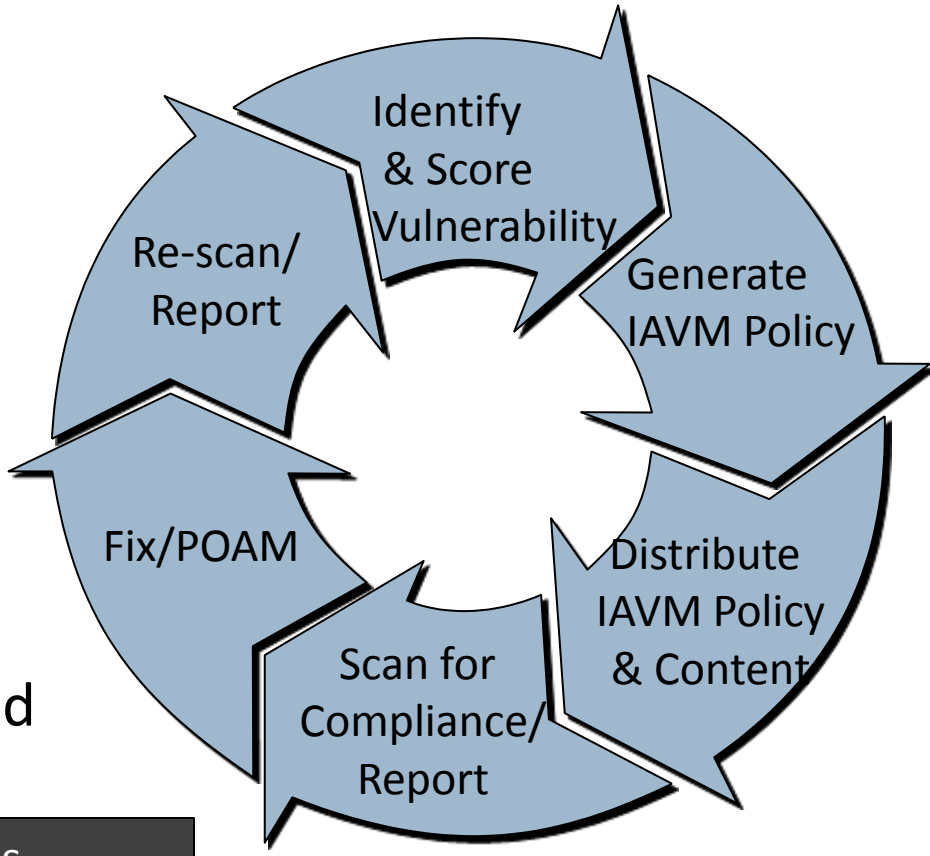
DoD's NexGen Vulnerability Management

On the Road to Full Automation

Nov 2, 2011

We know that 80%+ of successful Cyber attacks are related to known vulnerabilities and misconfigurations however…

- DoD process for scoring vulnerabilities is subjective
- IAVM compliance reporting procedures are manual, resource intensive, slow and inaccurate
- DoD systems for tracking vulnerability compliance are siloed and lack standard interfaces



VMS
eEye Retina
eMASS

DoD's first step toward automation – IAVM System 1.0

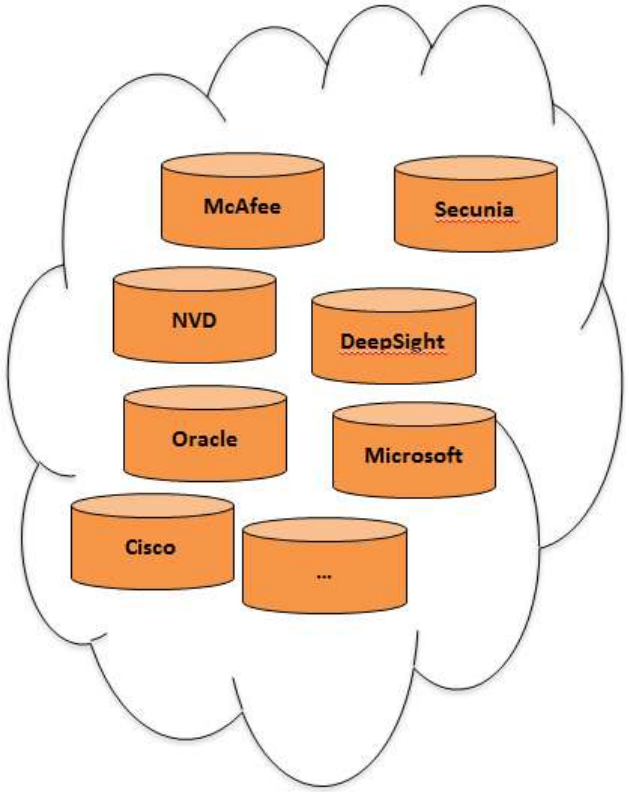
- Automates USCYBERCOM vulnerability scoring process
- Includes CVSS-compliant scoring engine
- Provides real-time interfaces with Symantec DeepSight, NVD, and VMS
- Supports SCAP standards including CVE, CVSS, and CPE

Scheduled Go Live Jan, 2012

Wouldn't it be nice if…

- IAVMs were directly actionable – "apply this patch" or "upgrade this application"
- You could quickly identify your most vulnerable assets
- You could easily determine the priority for patching and remediation actions

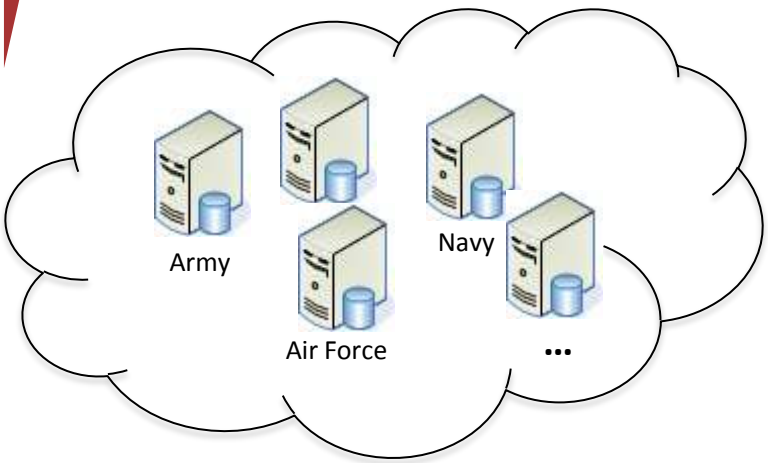
NexGen IAVM will make life easier…



Vulnerability Data Sources

NexGen IAVM

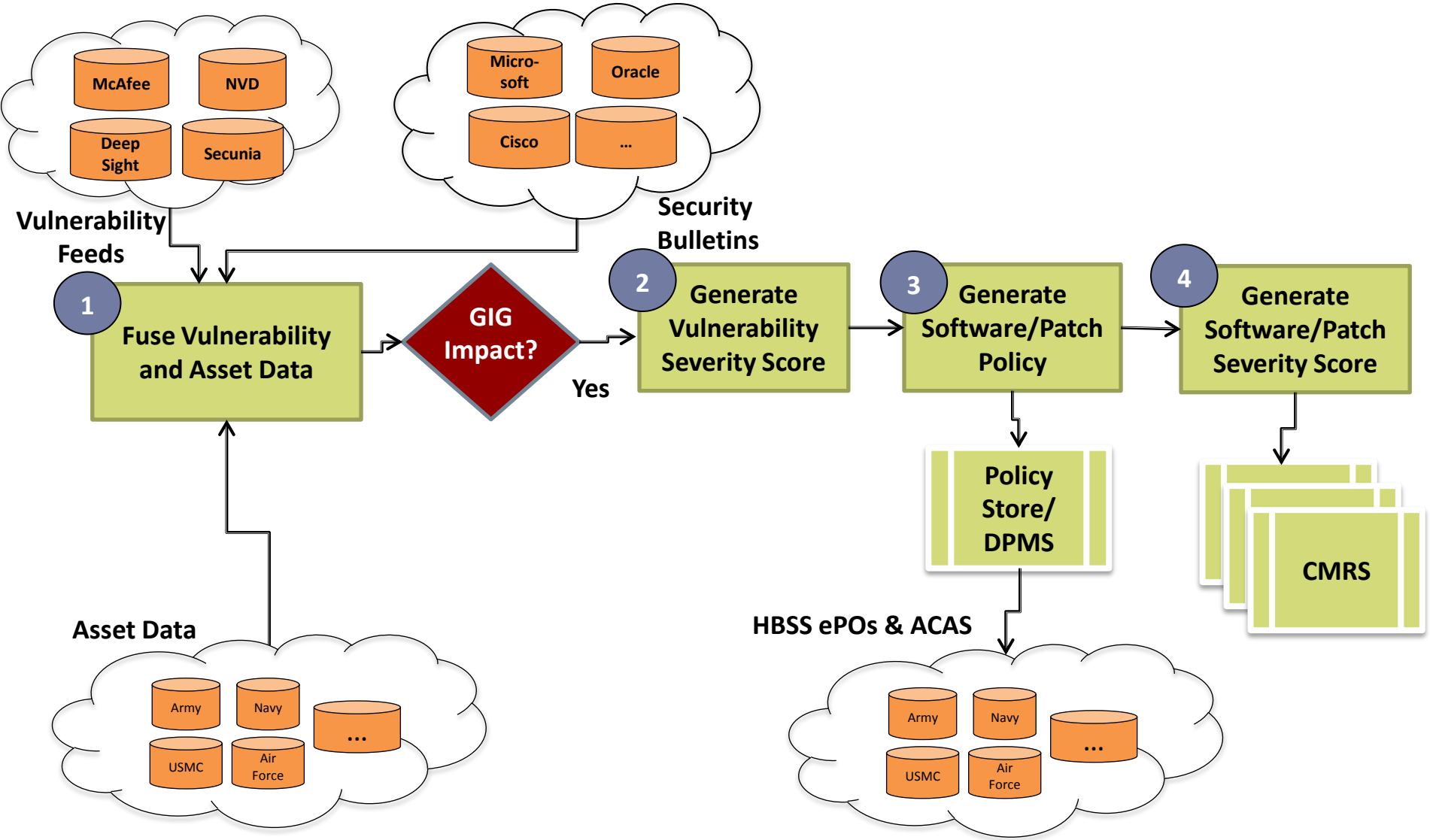
Continuous Monitoring System



DoD Vulnerability Scanners (HBSS/ACAS)

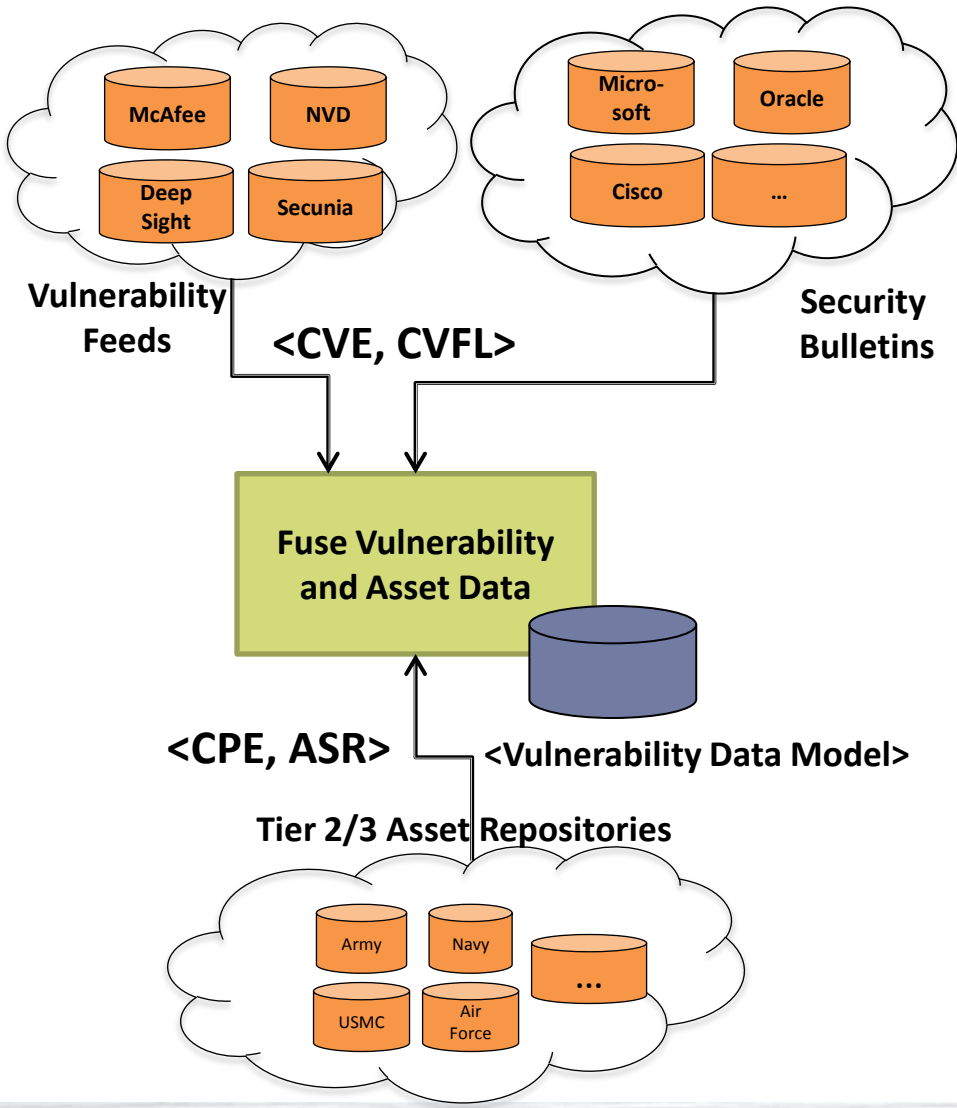
- One IAVM Policy Per Software Platform or Patch
- Automated Compliance Checking
- Prioritized List of Remediation Actions

NexGen IAVM Process Flow – Overview



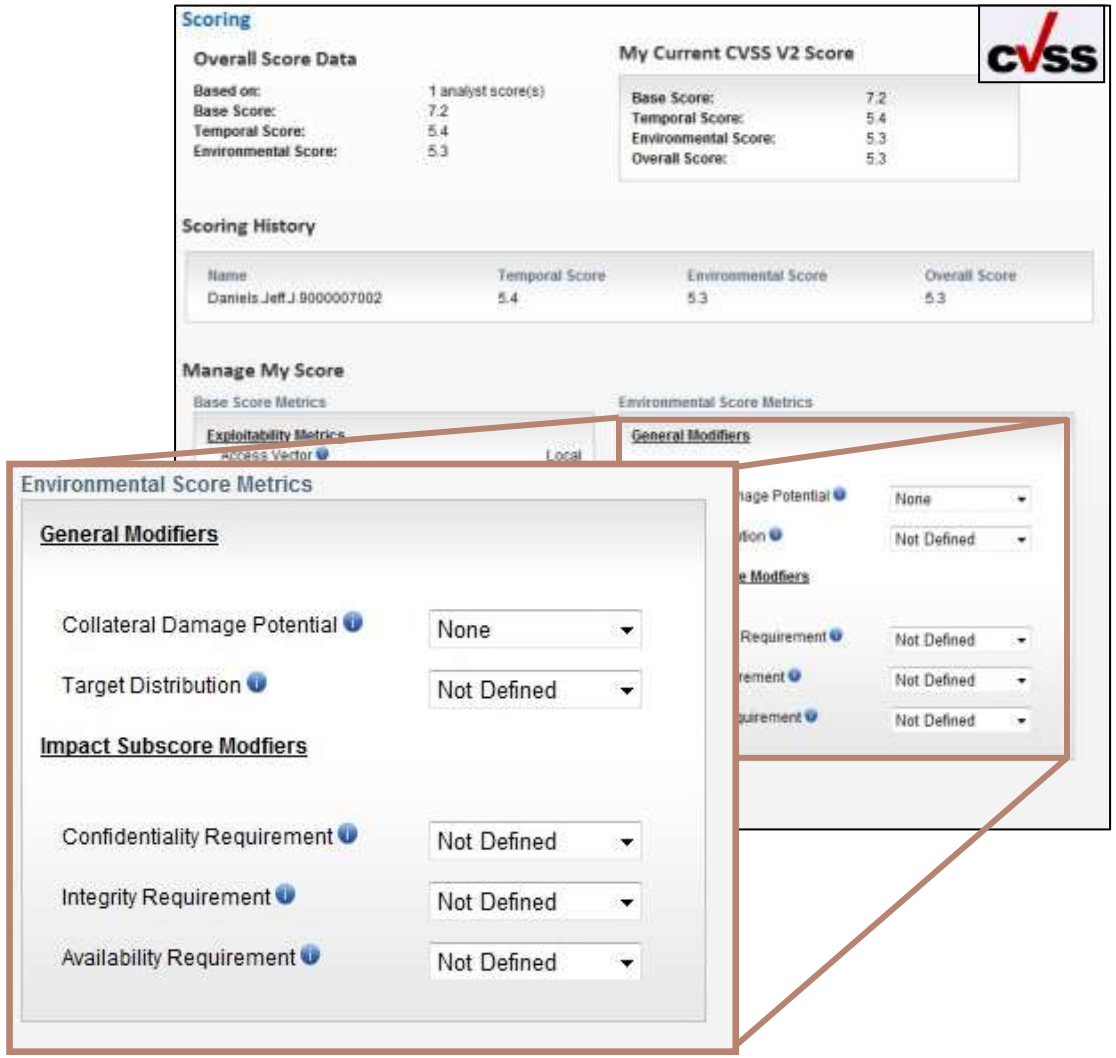
Do I have the latest vulnerability information and how does it impact the GIG?

- Vulnerability info will be aggregated in Common Vulnerability Reporting Format (CVRF) from multiple sources
- Vulnerability info will be processed and stored in standard format - Vulnerability Data Model (VDM)
- GIG-wide software/patch metrics data will be aggregated and correlated with vulnerability data to identify potential impact



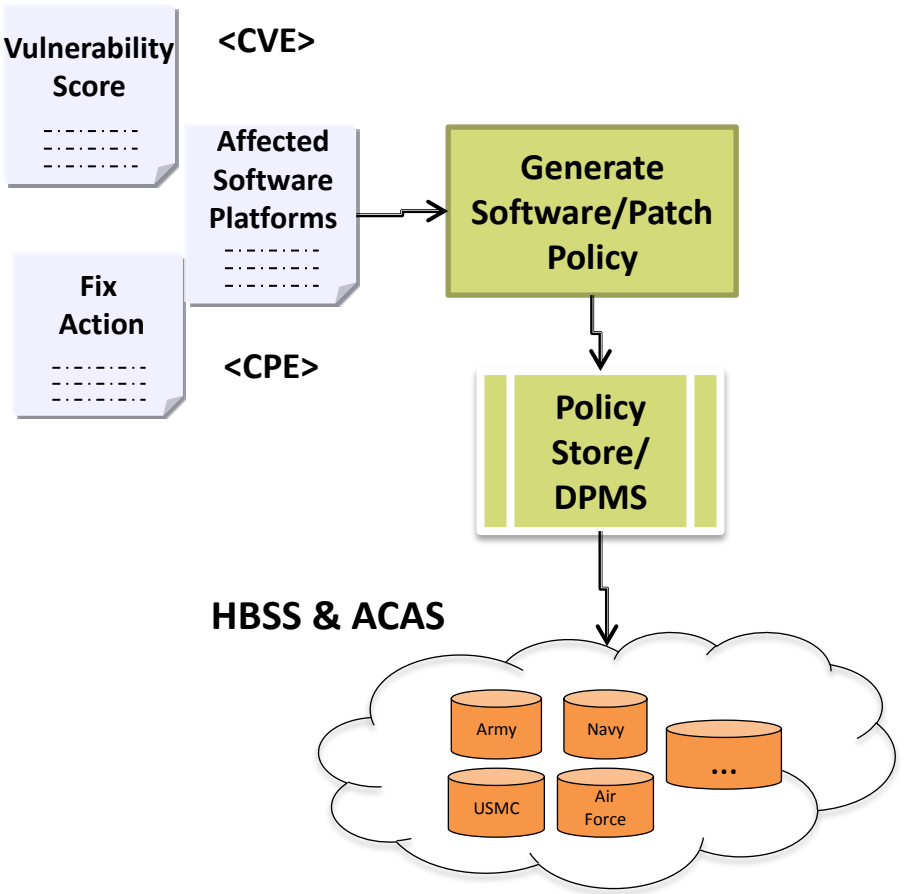
How do I quantify the risk this vulnerability present to the GIG?

- Asset data will be used to auto-populate CVSS target distribution, collateral damage and security metrics
- Analyst will use incident and indicator/event data to populate temporal metrics
- **All** vulnerabilities will be scored if GIG impact identified



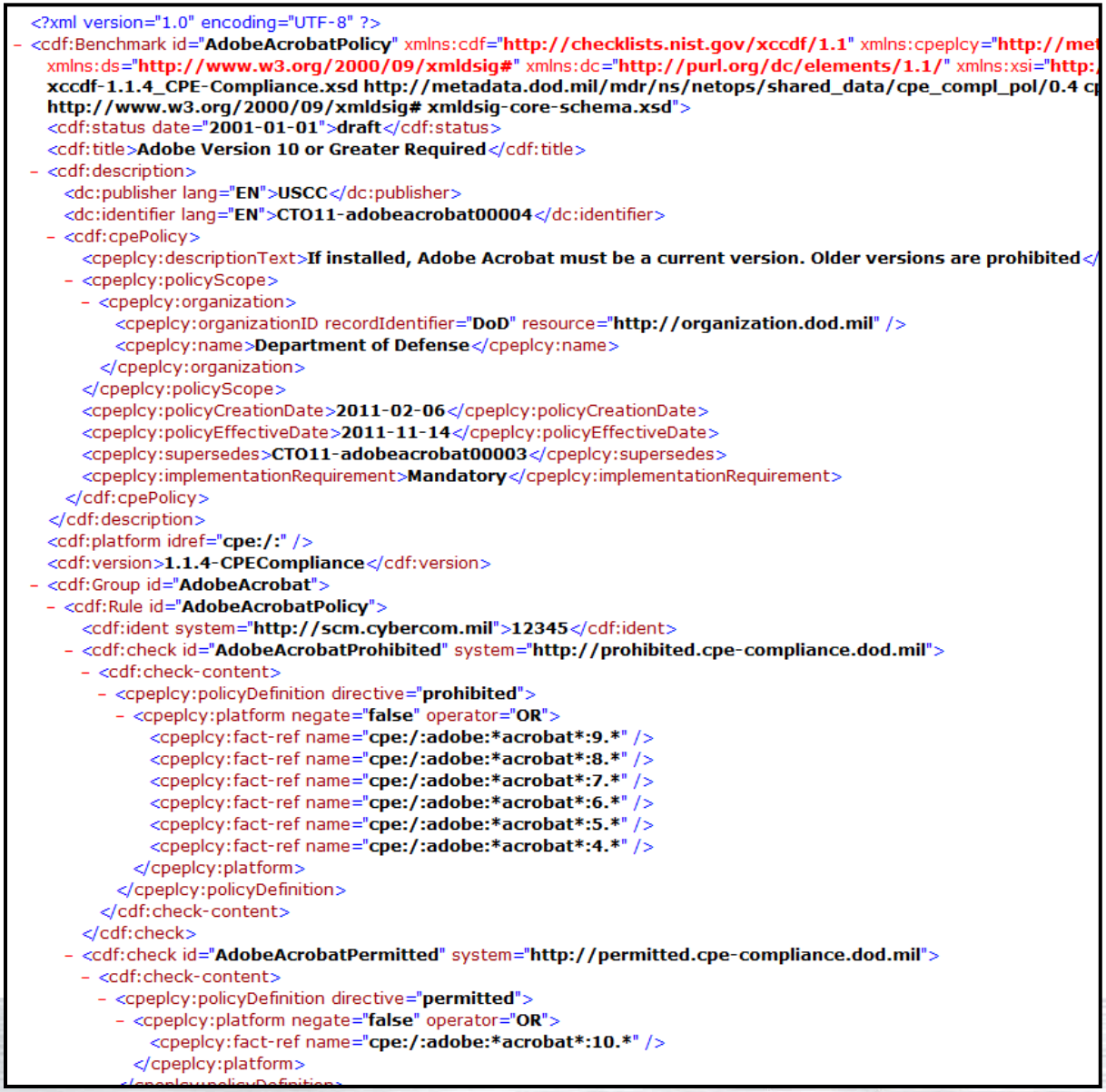
How do I determine by vulnerability posture?

- Vulnerability scores used to generate Platform or Patch specific severity score
- Benchmark content will be **auto-generated** in XCCDF/CPE format and distributed down to host and network scanners
- Most vulnerability compliance scans will be performed at the asset repository level and not on the end points



Platform-based policies will significantly simplify vulnerability management across the DoD

- DOD will have one vulnerability policy per software platform or patch
- Policies will be generated for prohibited, permitted, and required software
- Policies can be run against asset repositories and Host/Network scanners for near real-time results



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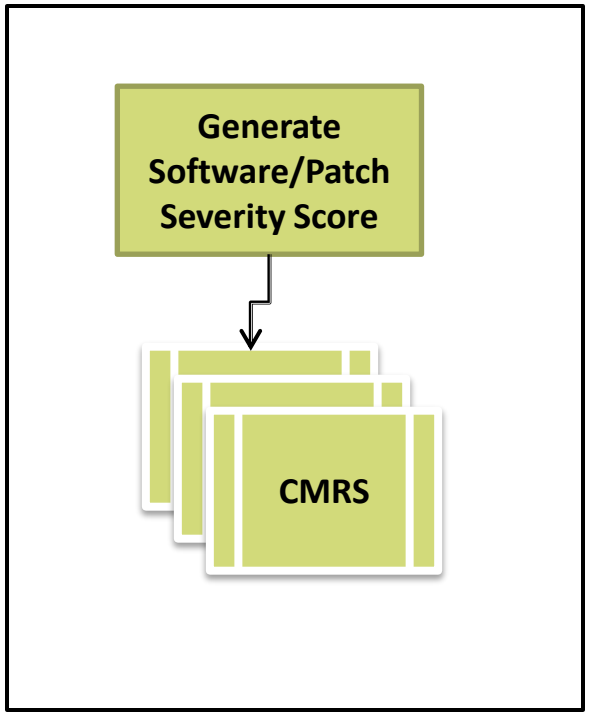
How do I determine my vulnerability risk posture?

- Platform/Patch severity scores will be calculated based on underlying vulnerability scores and distributed to CMRS at Tier 1, 2, and 3 levels
- Severity scores will be uncoupled from policy directives to enable dynamic updates to scores as threat posture changes
- Local administrators can use platform/patch severity scores and CMRS to prioritize remediation activities



Key Takeaways

- All vulnerabilities will be assessed and scored
- Platform and patch-specific compliance policy will replace vulnerability-specific policies
- Vulnerability severity score (0.0 - 10.0) will replace IAVM A/B
- Machine-readable compliance policies (XCCDF/CPE) will be auto-generated and distributed
- Severity scores will be uncoupled from the policy to support dynamic updates based on changes in threat posture

How long is it going to take to get there?

- We're actively working a phased implementation plan
- Asset visibility is our first priority
- Most of the NexGen capabilities will be deployed in FY12/13

IAVM System Points of Contact

- Rob Hyatt: IAVM System Functional Lead (CYBERCOM J34)
  - (443) 479-5722
  - rehyatt@nsa.gov
- Michael Hayes: IAVM System Program Lead (DISA PEO-MA)
  - (717) 267-9295/DSN:570
  - michael.hayes@disa.mil
- Jim Shelton: NexGen IAVM System Program Lead (NSA)
  - (240) 373-2616
  - j.shelto@radium.ncsc.mil
- Greg Decker: IAVM System Contractor Program Manager (Booz Allen Hamilton)
  - (703) 902-4607
  - decker_greg@bah.com