ESRL Information Systems Theme
IT Consolidation

• Overview

• ESRL Network Transition

• Challenges to Secure Collaboration

• Questions
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IT Consolidation

Changing Regulatory Landscape
- ESRL Consolidated Certification & Accreditation (C&A)
- Federal Desktop Core Configuration (FDCC)
- Federal Information Security Management Act (FISMA 2009)?
- Trusted Internet Connections Initiative (TIC)

Changing Security Landscape
- Government information and "gov" network presence are marketable commodities
- Government-related security incidents are perceived as failures of the public trust
- Inevitable legislative and executive response calls for more oversight, increased reporting
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ESRL Network Transition

Impetus:
- DSRC IT Architecture Group formed in October 2006
  - Recommended moving from organizationally-segmented to functionally-segmented network architecture

- ESRL Consolidated Certification & Accreditation (C&A):
  - Common network perimeter
  - Eliminate or minimize redundant infrastructure (authenticators, remote access, data duplication) across ESRL
  - Standardize practices and configurations
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To this:

External Servers
Internal Servers
Data
Users
Collaboration Extranets

ESRL Integrating Theme Presentation on Information Systems, 8 January 2009
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Transition Timeline

1. Move all ESRL networks “as-is” behind central firewall cluster
   • 3 of 4 Divisions moved so far
   • Expected completion: end of January 2009

2. Migrate Division perimeter router/firewall rulesets up to central firewall cluster: February 2009

3. Transition to final (functionally-segmented) network architecture: 2010?
Challenges to collaboration

• Sharing resources across NOAA, Government, and University boundaries is becoming more difficult as campus perimeters continue to harden
• Mandates for enabling scientific IT collaboration are not clearly articulated
• Mandates for higher IT Security are very clearly articulated and progress is regularly reviewed
• OAR/ESRL needs an advocate for scientific IT collaboration