



NATIONAL INSTITUTES OF HEALTH
enterpriseARCHITECTURE

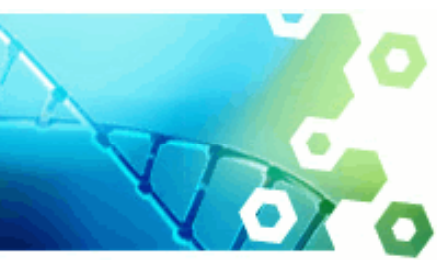
Federal Networks 2011 Conference

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Chief IT Architect (Acting)

February 15, 2011

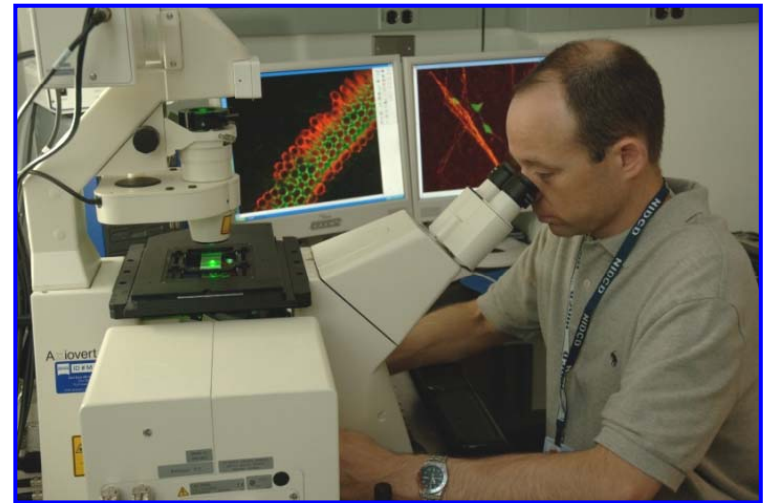




NIH: The National Medical Research Agency

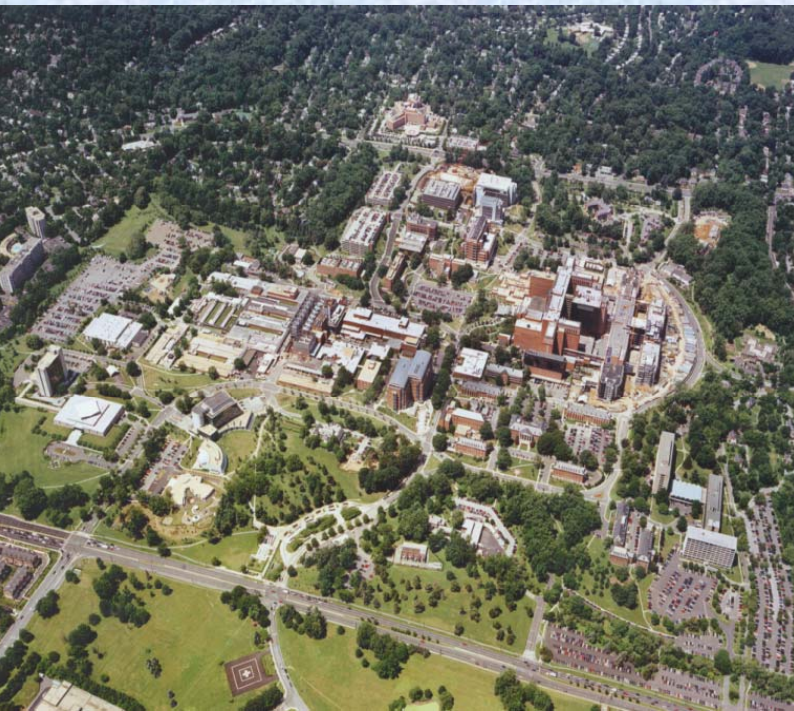


“Science in pursuit of fundamental knowledge about the nature and behavior of living systems and the application of that knowledge to extend healthy life and reduce the burdens of illness and disability.”



Dual Nature of NIH.

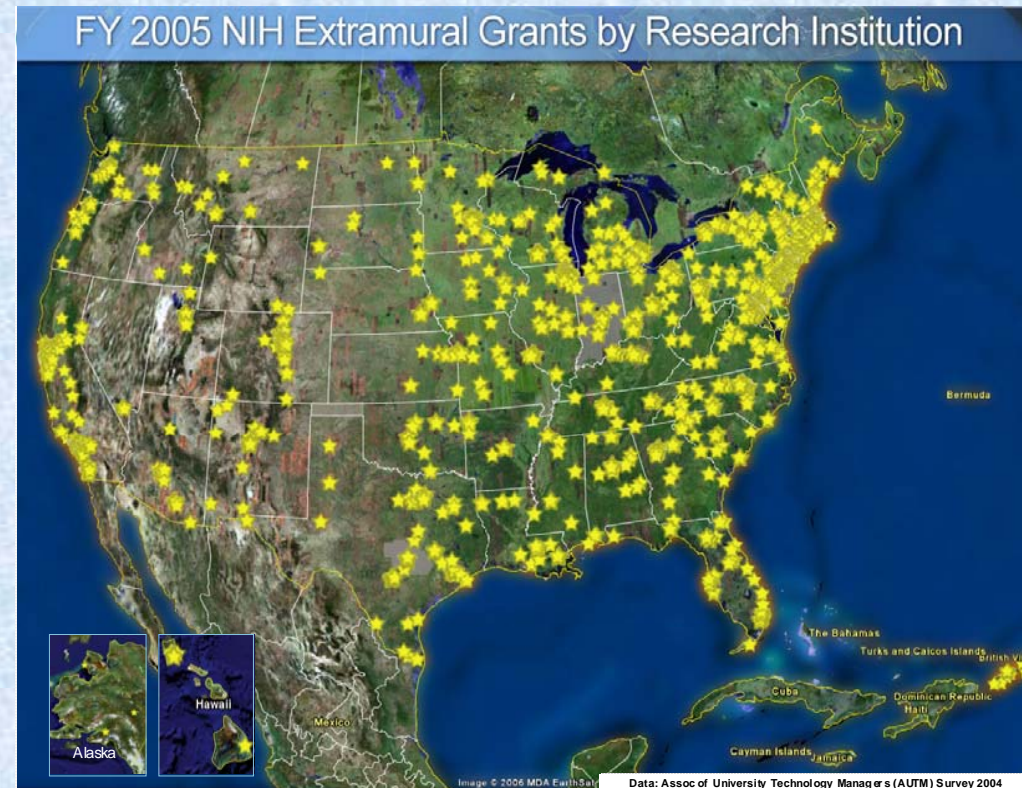
NIH INTRAMURAL RESEARCH



Supports:

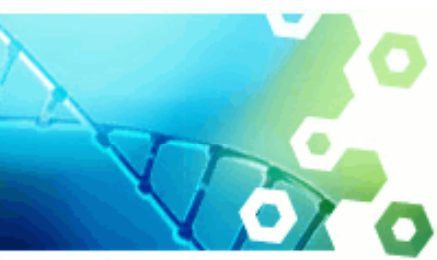
- Over 10,000 scientists and research personnel
- 10% of NIH budget
- Primary location: Bethesda, MD
- Labs throughout U.S. and the world

NIH EXTRAMURAL RESEARCH



Supports:

- Over 3,000 institutions worldwide
- Over 325,000 scientists & research personnel
- Awards issued to over 100 countries
- Clinical, Basic, & Translational Research
- 85% of the NIH budget



Summary Position Network Through the Cloud

Cloud Services and Capabilities

Consideration being made on services available in the Cloud or NIH's own internal cloud needs

Transition from internally created services to externally provided services

SOA Services

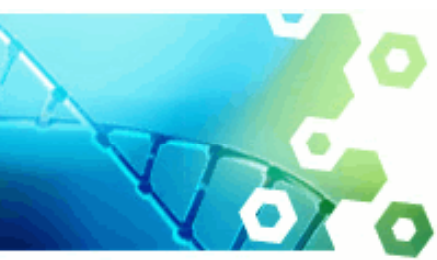
Internal business services are being deployed with SOA maturity increasing

Security Capabilities

iTrust (Federated Authentication) are the foundation for security at NIH

Network Capabilities

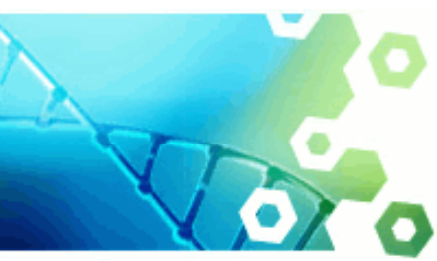
Maturing our NIH network to support our unique needs and bulk data movement



Network – Overview and Needs

- **Current State**
 - Difficult to integrate tools from different vendors with different roles
- **Target State / Planned**
 - Planning for consolidation of data centers (*“25 Point Memo” Requirement*) – unsure of the impact it will have on our networks
 - Major need to support the unique requirement of bulk data transfer
 - Moving to NAC
- **Guidance from the Market**
 - We need better interoperability between tools
 - We need solutions and analysis tools to support the consolidation of data centers.
 - We need a solution for a network that can process our genomic data quicker / cheaper with storage either internal or external.

Watch for an RFI or RFP regarding NAC



Security – Overview and Needs

- **Current State**
 - NIH Login (single sign-on)
 - Federated Authentication
- **Target State / Planned**
 - Remote access 2-factor authorization
 - Expansion of iTrust – Level 2 Authentication
- **Guidance from the Market**
 - What are additional 2nd factors for remote login?
 - Are there provisioning and authorization services in the market?
 - What are additional authentication sources we can use through SAML?



From Internal Services to the Cloud

- **Current State**

- Robust SOA development platform in place
- Deployment of internally created business services
- Internal PaaS in its infancy – SOA platform available for NIH to use to develop services

- **Target State / Planned**

- Evaluating external services to consume
- Business needs are more effectively addressed

- **Guidance from the Market**

- What are external services we should be considering?
- Help us understand how cloud services could **fully** meet our business needs

Where can you help us?

- Consortia for authentication
- 2nd factor for remote access
- Tools for monitoring and analysis
- Services to meet our business needs more fully
- Take advantage of knowledge of private industry



Contact Information

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