How the Office of Innovation Supports Scientists
OI Scientific Computing Team

Introduction

The security and availability of data for scientific research is critical for the workflow of scientists at the FDA. The Office of Innovation engineering team implements standards that meet Federal security guidelines. Constant analysis and evaluation are necessary to improve the tools used to secure and to analyze scientist's data. This approach allows for scientific computing to remain current, modernized, automated and dynamic.

Results

Federal security mandates are continually met to ensure the safety of scientific data, while maintaining and improving the scientist's endpoint and dependent infrastructure and services. In addition, the modernization of analytic and reporting tools supports management decision making.

Service Areas

Security

Ensure the integrity, availability and confidentiality of scientific data

- Endpoint management
- OS security baselines
- Antivirus/antimalware
- Image deployment
- Vulnerability management

Infrastructure

Provide a means to manipulate and analyze scientific data

- Virtualized infrastructure
- Cloud- Forward Initiative – R Shiny
- Backup and storage
- Lifecycle management
- Proactive monitoring
- Future capabilities

Data Analytics

Assist management for strategic planning and decision making

- Dashboards
- Reporting
- Dynamic data calls
- Business intelligence

Service Delivery

Support the scientific mission effectively and transparently

- Communications
- Incident response
- Change management
- Documentation

Overview

Scientific Computing workstations:

- Are connected to the same FDA network as administrative/ regulatory/ERIC managed workstations.
- Are joined to the FDA Active Directory domain.
- Are running current antivirus and antimalware protection with updated definitions.
- Are fully managed and updated with respect to operating systems, middleware, and supported applications.
- Are audited for compliance through management consoles, custom scripts, and COTS scanning applications.
- Are rebooted under user control.
- Comprise more than 2400 workstations: 80% Windows, 18% Macintosh, 2% Linux

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