

## **Division of Computer System Services, Center for Information Technology, National Institutes of Health (NIH/CIT/DCSS)**

Northrop Grumman has continuously supported the NIH's Division of Computer System Services (DCSS) for the past 10 years under task orders under the CIO-SP2, ECS II, CERTAN and GSA 70 schedules.

The Center for Information Technology (CIT) provides and supports a wide range of computer and telecommunication resources to a community of more than 30,000 customers at NIH and other Federal agencies. CIT operates the NIH Computer Center; provides the NIH telecommunications infrastructure; serves as the central systems analysis, design and programming resource for data processing projects; and provides consultation and collaboration in the design and implementation of specialized computer systems for laboratory and clinical applications.

The Division of Computer System Services (DCSS) plans, implements, operates and supports computing resources for enterprise use by the NIH and other Government agencies by providing centralized, integrated computer services to the NIH computing community and to CIT's customers in other Federal agencies. DCSS investigates new and emerging computing requirements of customer programs; and conducts research and development to identify, evaluate and adapt new computer architectures and technologies to meet identified customer requirements and to enhance current service offerings.

We are currently providing support to the following DCSS Branches:

- **Large Systems Services Branch (LSSB)**—LSSB provides the software and hardware systems services for the z/OS systems enterprise computing environments. We provide the planning, configuration management and support for systems planning, software installations, change/problem management, data storage and telecommunications. We evaluate, select and integrate alternative computing systems technologies of potential interest to a broad cross-section of the customer community. This project includes development and implementation of data storage / recovery processes and procedures including the biannual disaster recovery tests.
- **Hosting Services Branch (HSB)**—The NIH Data Center hosts Windows-, HP/UX-, Solaris- and Linux-based applications on HP Enterprise class servers and storage area networks (SANs) that are carefully managed and monitored on a 7x24 basis. The servers provide a computing environment suitable for critical enterprisewide applications in both a shared and dedicated server environments. As a lower cost solution, server virtualization creates operational benefits, such as increased capacity, by allowing multiple operating system instances to pull resources from a pool of physical servers.
- **Applications Services Branch (ASB)**—ASB provides the customer support interface for DCSS hosting on UNIX, Windows and mainframe platforms, as well as collocation services for NIH Institutes and Centers. In addition, it provides central support for user applications, including high-profile Web pages, such as [www.nih.gov](http://www.nih.gov) and [www.hhs.gov](http://www.hhs.gov), and Web-based Google searches for the NIH home page and other NIH customers; ColdFusion servers for user applications; mainframe security, disaster recovery, and user support; central printing from customer desktops or applications; and promotional and informational documentation for DCSS services. In addition, ASB is involved in the development and maintenance of customer support tools, such as the Application Service Request (ASR – a Web front end to the Remedy System) and the Application Information System (AIS- to record, track and bill for customer services).

- **Scientific Computing Branch (SCB)**—SCB manages and supports central high performance and general purpose computers for use by NIH scientists. SCB provides support for and enhances scientific applications, scientific databases and tools on systems managed by the branch. SCB also researches new developments in high performance, scientific, database and Web computing and storage technologies and incorporates them into production work.
- **Data Center Operations Branch (DCOB)**—The NIH Data Center, administered by the NIH CIT, is a multiplatform computer complex that provides Windows, z/OS, Linux and Unix host processing for NIH and approximately 30 other government agencies. Features of the Data center include:
  - Secure
    - SAS 70-validated security
    - Disaster recovery
    - Customer-administered security
    - Firewall and intrusion detection services
  - Carefully Managed
    - Comprehensive change management
    - Automated backup and recovery
  - Highly Available
    - Redundant hardware and software in critical system areas
    - Uninterruptible power supply (UPS)
    - 7x24 availability (for most systems)
    - 7x24 system monitoring and problem resolution
  - Flexibility
    - A choice of operating system environments—z/OS, Unix or Windows—based on the requirements of the application
    - Web hosting and search capabilities
    - Collocation options
    - Access to data on other systems