



**DISC
Service
Catalog
2020 - 2021**





Digital Infrastructure Services Center

Partnering for Success



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DISC LEADERSHIP

DISC consists of six service divisions: Data Center Hosting Services Division (DCHSD), Enterprise Application Services Division (EASD), Enterprise Network Services Division (ENSD), Information Technology Services Division (ITSD), Business Operations Division (BOD), and Cloud Architecture and Governance Division (CAGD).

ACIO - David Peters

David Peters defines Business and Operations Strategy for the Digital Infrastructures Services Center (DISC). In addition, David serves the USDA OCIO and Mission Areas through Enterprise Shared IT solutions in Cloud Adoption, Managed Services, Application Development, and Network Services in alignment with USDA OCIO Strategic Initiatives.

Deputy ACIO - Victoria Turley

Victoria Turley provides leadership and direction for the day-to-day operations of the USDA DISC. Victoria's functional responsibilities include cloud adoption, IT modernization, infrastructure optimization, network modernization, systems analysis, software engineering, systems engineering, and the secure hosting of IT infrastructure for the Agencies and Offices of the USDA.

DCHS - Jeff Claunch

Jeff Claunch leads the Data Center Hosting Services Division. Jeff is also the lead for infrastructure optimization - including Enterprise Data Center facilities and critical data center infrastructure (Compute, Storage, Automation and Private Cloud landing zones such as PaaS and Managed Services).

EASD - Chris North

Chris North leads the Enterprise Application Services Division (also known as EAS), and also oversees App/Dev, AgLearn, Enterprise Geospatial Management Office (EGMO), and the Digital Services Center. Additionally, Chris leads the USDA Commercial Cloud Program, which has the mission of accelerating the adoption of commercial cloud offerings within USDA.

ENSD - John Donovan

John Donovan leads the Enterprise Network Services Division (also known as ENS) and oversees the Network Modernization Initiative - USDANet - including transitioning from the current GSA Network Contract to the new Enterprise Infrastructure Solutions (EIS) contract for the Department.

ITSD - Joe Weaver

Joe Weaver maintains and operates the operating systems, databases, and systems software components of servers and mainframe partitions which run Payroll, Personnel, and Insurance. Joe is also responsible for scheduling and executing the large production batch runs that make up those systems, maintaining the print services for payroll operations, and other critical activities.

BOD - Kim Jackson

Kim Jackson leads the Business Operations Division which performs cross-cutting business functions such as financial management, budgeting, contracting, portfolio/program/project management, Robotic Process Automation program management, business relationship management, and HR functions.

CAGD - Chuck Gowans

Chuck Gowans leads the Cloud Architecture and Governance Division which performs system design and service development activities for Cloud Services offered by DISC, both on-premises and in the CSP space, as well as the security governance functions to ensure appropriate certifications are in place, such as FedRAMP, FISMA, and IL-4.

VISION | MISSION

Our Vision

Our vision is to be a preferred business partner by providing world class, innovative technology services and solutions, and to be identified as a “best in class” workplace.

Our Core Missions

- Lead innovation by offering enterprise-class cloud solutions built with market-leading technologies.
- Optimize the delivery of infrastructure, systems, and solutions that can be built and deployed for customers within a very short time span.
- Ensure solutions are secure, including the confidentiality, integrity, and availability (CIA) of systems.
- Provide a full spectrum of innovative business and professional services for developing, maintaining, and supporting enterprise-class business applications to Federal Agencies.
- Plan, implement, manage, and maintain the enterprise telecommunications program.
- Deliver streamlined, secure, and supportable services that are specifically tailored to our customers’ requirements.



DISC STRATEGIC GOALS

As a departmental turnkey solutions provider, DISC offers cloud hosting, network services, and application development services. It has aligned its strategy and operational execution with the objectives outlined in the Strategic Plan to achieve excellence in the OCIO Strategic Initiatives.



Why DISC?

Data Center Services

The DISC Enterprise Solutions are developed utilizing government and industry standards and best practices. Our Level IV data center facilities utilize state-of-the-art, enterprise class infrastructure technologies to deliver optimal yet cost-effective solutions. DISC has a diverse and dedicated staff of Information Technology professionals who are proficient in systems architecture and integration, infrastructure management and operation, and disaster recovery. They work with customers to deliver secure and highly available solutions. The DISC secure IT infrastructure consists of virtualized mainframe and midrange platforms as well as virtualized network and storage infrastructure. The systems and applications managed by DISC are national in scope, mission critical, and essential for the operations of the United States government throughout the Sec/Dev/Ops lifecycle.

EASD offers professional services that include: enterprise application development, Geospatial Information Systems (GIS), web and mobile application development, Software as a Service (SaaS), maintenance and operations, security services, 508 compliance testing, and learning management services (AgLearn).

Infrastructure as a Service (IaaS)

The DISC Infrastructure as a Service provides a virtual machine infrastructure which allows customers the option to maintain control of their operating and general support systems at the system level. IaaS is provided for customers to maintain control of their hosting platform while allowing DISC to control the infrastructure on which it resides. DISC also offers three tiers of IaaS storage that are available to customers on demand.

Platform as a Service (PaaS)

The DISC Platform as a Service builds on the IaaS to provide customers with robust hardware platforms that are virtualized for optimal cost efficiency and flexibility. The underlying hardware is coupled with DISC Network and DISC Storage services to provide a fully managed operating platform up to and including one of the supported operating systems. In addition to the supported operating systems, DISC currently also offers various PaaS services including database, web portal, web server, etc. The PaaS services include software license management and essential professional services for the products included in the service.

Managed Hosting

For extremely large or unique applications that require dedicated hardware, DISC will manage customer provided servers up through the operating system (OS) in a secure operating environment including systems installation, engineering, administration, and support.

SERVING OUR CUSTOMERS

Experience

DISC has provided services as a federated data center since 1973 and has performed data center migrations since the 1980s. DISC cross-services 14 federal departments/bureaus.

Innovation

The DISC-managed Enterprise Data Center is a federally owned Cloud services provider offering agencies enterprise class infrastructure built from the ground up with market leading technologies. DISC continues to innovate with the introduction of new Cloud services and utilizes “green” industry best practices as much as possible to improve energy efficiency and reduce greenhouse gas emissions.

Customer Service

DISC offers 24x7 monitoring and expert technical support to ensure customers can focus on their core business without worrying about IT infrastructure.

CONTACT US

DISC.ServiceDesk@usda.gov

816-926-6660

Why DISC?

DISC Cloud Services

DISC offers a broad range of Cloud services using virtualized, multi-tenant operating environments to offer several Platform as a Service (PaaS) and Infrastructure as a Service (IaaS) services. DISC Cloud Services offers:

- Rapid elasticity
- Scalable, pay-as-you-go pricing
- Monthly billing and predictable cost (PaaS)
- Hourly Metered Billing (IaaS)
- Periodic hardware refresh
- $\geq 99.9\%$ availability
- Independent audits for OIG, A-123, and inheritable controls

Infrastructure as a Service (IaaS)

The DISC Infrastructure as a Service provides a virtual machine infrastructure that allows customers the option to maintain control of their operating and general support systems at the system level. Network, Facility, and Operational Support Services are included with all IaaS offerings.

- **SAN Storage** – Tier 1, Tier 2, Tier 3, Replication
- **NAS Storage** – Direct, Shared, Nearline, and Bulk
- **Backup/Archive Storage** - Onsite, Offsite, Replication

Platform as a Service (PaaS)

DISC PaaS offerings built upon IaaS offerings enables customers to select from secure, standardized operating system images that are configured to meet actual processing requirements. Each PaaS offering is fully managed and maintained by DISC. In addition to the supported operating systems, DISC also provides PaaS offerings that include respective software licensing. By utilizing cost-effective platform solutions that are configured and licensed to meet actual application processing requirements, customers need only focus on the development and deployment of their business applications.

- **Server** - Linux™, Windows™, Solaris™, AIX™,
- **Mainframe** - zOS™
- **Web Application & Web Portal Server** - WebSphere™
- **Database** - MySQL™, MSSQL™, Oracle™
- **Web Content & Document Management** - Oracle UCM™
- **Web Accelerator** - Akamai™
- **Cloudvault** - ownCloud
- **Virtual Application Hosting** - Citrix™

SERVING OUR CUSTOMERS

Rapid Provisioning

The DISC Cloud services offer virtualized instances of software, servers, and storage that can be deployed for the customers within a very short period of time. In addition, the virtualized environment supports rapid elasticity.

Predictable Cost Model

DISC Cloud services helps customers eliminate capital expenditure and improve operating efficiencies by using a multi-tenant hosting environment. Various standard and premium options and templates are offered to meet unique customer demand.

Customer Service

DISC offers 24x7 monitoring and expert technical support to ensure customers can focus on their core business without worrying about IT infrastructure.

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816-926-6660

Why DISC?

Service Desk

The DISC Service Desk is your single Point of Contact (POC) for managing incidents to resolution. The Service Desk facilitates the restoration of normal operational service to minimize business impact to the customer. The Service Desk is available 24 hours a day, 7 days a week, and utilizes Information Technology Service Management (ITSM) best practices to record, route, and manage the timely response to all service requests.

The DISC Service Desk supports customers daily with:

- Incident management
- Problem management
- Information requests
- Service requests
- Password resets
- Account permissions
- Connectivity issues
- Remote access
- Lost equipment notification

The DISC ITIL-based ITSM practices provide:

- Configuration Management Database (CMDB)
- Asset Management
- Configuration Management
- Release Management
- Change Management
- Incident Management

SERVING OUR CUSTOMERS



DISC offers dedicated account teams and 24x7 monitoring and expert technical support to ensure customers can focus on their core business without worrying about IT infrastructure.

When contacting the Service Desk for assistance:

- Be prepared to provide required information
 - » Contact information
 - » Relevant agency and system information
 - » Information related to request
- Provide appropriate authorization for service requests
- Utilize optional email template

CONTACT the SNCC via the Service Desk
DISC.ServiceDesk@usda.gov
816-926-6660

Why DISC?

System and Network Control Center

The DISC System and Network Control Center (SNCC) monitors the performance and availability of DISC managed systems and networks 24 hours a day, 7 days a week.

The DISC SNCC performs:

- System and network monitoring
- 2nd Tier Systems Administration support
 - » Mainframe Initial Program Loads (IPLs)
 - » System Reboots
 - » Hardware Resets
 - » Hardware Support
 - » Software Support
- Production control functions
- Facility monitoring and management
 - » Power and environmental equipment support and incident management
 - » Data Center Security and Access Control
- Tape management
 - » Physical tape handling
 - » Offsite tape rotation and retrieval
 - » Coordination and deployment of media for disaster recovery
- Data component disposal
- 2nd Tier Incident and Problem Management support
- Certification of hardware/software changes

SERVING OUR CUSTOMERS



DISC offers dedicated account teams and 24x7 monitoring and expert technical support to ensure customers can focus on their core business without worrying about IT infrastructure.

When contacting the SNCC for assistance:

- Be prepared to provide required information
 - » Contact information
 - » Relevant agency and system information
 - » Information related to request
- Provide appropriate authorization for service requests
- Utilize optional email template

CONTACT the SNCC via the Service Desk
DISC.ServiceDesk@usda.gov
816-926-6660

Infrastructure as a Service

SAN Storage



Service Description

The DISC Storage Area Network (SAN) provides a robust disk storage infrastructure for Collocation, Managed Hosting, and Cloud Service customers. DISC exploits storage virtualization technologies, strict standards, and economies of scale to enable rapid delivery of cost-effective, fully managed disk storage cost/performance options.

What is Included

- Enterprise-class virtualized disk storage controllers
 - » High scalability
 - » High performance
 - » High availability
 - » Three virtualized disk storage options
 - » Robust data replication and migration features
 - ◊ Local disk cloning
 - ◊ Remote replication for disaster recovery
 - Primary Disk – Continuous
 - Backup Disk – Manual or Scripted
- Redundant SAN architecture
 - » Dual-fabric architecture
 - » Enterprise-class directors and switches
- Security of mission-critical data provided through management of access rights
- Periodic technology refresh
- Fully secured data access and inheritable controls
- Proper disposal of failed data components
- Disaster recovery support for replicated data
- Dynamic load balancing path management software
- Recommended Backup/Archive services are also available

Disk Storage Options

Option	Performance	Purpose
Tier 1	High	Performance Sensitive
Tier 2	Medium	Typical Applications
Tier 3	Low	Backup and Archive

How We Charge

Charges are based on connectivity requirements and actual disk allocations by tier.

Price Drivers

- Number of SAN ports utilized
- Storage Allocation in Gigabytes
- Additional charges may apply for storage allocation associated with any local or remote replication

Cost Saving Tips

- Utilize disk storage tiers appropriately
- Utilize provided path management software or native Operating System capabilities
- Proactively inform DISC of disk storage requirements

Additional Information

File system and database recovery procedures are typically required for Disaster Recovery

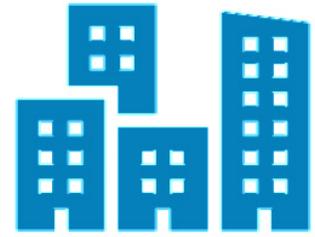
Service Level Metrics

Measure	Service Level Targets
Infrastructure Monitoring	24 x 7
Incident Response	24 x 7
Infrastructure Availability	≥ 99.9%*

*Target availability does not include any scheduled downtime and requires dual SAN/NAS connectivity to the storage infrastructure.

Infrastructure as a Service

NAS Storage



Service Description

The DISC Network Attached Storage (NAS) service provides a robust disk storage infrastructure for Collocation, Managed Hosting, and Cloud Service customers. DISC exploits storage virtualization technologies, strict standards, and economies of scale to enable rapid delivery of cost-effective, fully managed disk storage cost/performance options.

What is Included

- Enterprise-class virtualized disk storage controllers
 - » High scalability
 - » High performance
 - » High availability
 - » Four virtualized disk storage options (Direct, Shared, Nearline, Bulk)
 - » Robust data replication and migration features
 - ◊ Local disk cloning
 - ◊ Remote replication for disaster recovery
 - Primary Disk – Continuous
 - Backup Disk – Manual or Scripted
- Highly available SAN architecture
 - » Utilizes same virtualized disk architecture
 - » Supports both NFS and CIFS file sharing
 - » Robust data snapshot/replication technology
- Security of mission-critical data provided through management of access rights
- Periodic technology refresh
- Fully secured data access and inheritable controls
- Proper disposal of failed data components
- Disaster recovery support for replicated data
- Dynamic load balancing path management software
- Recommended Backup/Archive services are also available

Disk Storage Options

Option	Performance	Purpose
Flash (SSD)	Ultra High	High Performance Applications
Direct	High	PaaS Server Linux/Windows
Shared	High	General Server Infrastructure
Nearline	Medium	Low Performance Applications
Bulk	Low	Data with little to no change

How We Charge

Charges are based on connectivity requirements and actual disk allocations by tier.

Price Drivers

- Storage Allocation in Gigabytes
- Additional charges may apply for storage allocation associated with any local or remote replication

Cost Saving Tips

- Utilize disk storage tiers appropriately
- Utilize provided path management software or native Operating System capabilities
- Proactively inform DISC of disk storage
- Utilize NAS solutions for highly available file sharing

Additional Information

File system and database recovery procedures are typically required for Disaster Recovery.

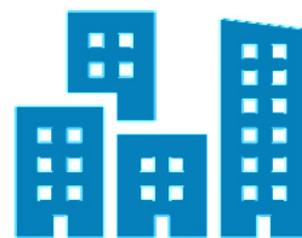
Service Level Metrics

Measure	Service Level Targets
Infrastructure Monitoring	24 x 7
Incident Response	24 x 7
Infrastructure Availability	≥ 99.9%*

*Target availability does not include any scheduled downtime and requires dual SAN/NAS connectivity to the storage infrastructure.

Infrastructure as a Service

Backup



Service Description

The DISC Backup Storage service provides a robust combination of hardware and software technologies for Collocation, Managed Hosting, and Cloud Service customers' data protection and archive requirements. DISC exploits tape virtualization and automation technologies to enable the delivery of cost-effective, fully managed data protection and data lifecycle storage solutions.

What is Included

- Both onsite and offsite data storage available
- Fully managed data protection and archive solutions
- Enterprise-class virtual tape technology
 - » High scalability
 - » High performance
 - » Remote data replication features
- Automated real tape technology
 - » High-capacity tape drives
 - » Fully automated tape libraries
- Automated data protection software
 - » Network and SAN client software
 - » Optional database client software
- Automated archive management software
 - » Automated archiving from disk to tape
 - » SAN/NAS disk storage required
- Fully secured data access and inheritable controls
- Proper disposal of failed data components
- Disaster recovery support for replicated data

How We Charge

Charges are based on actual backup/archive data stored.

Price Drivers

- Total amount of data protected
- Change rate of data protected
- Required backup schedule
- Type of archive storage required
- Data retention periods

Cost Saving Tips

- Follow information lifecycle management best practices
 - » Purge unused data
 - » Retain only required data

Additional Information

- Customers are responsible for communicating any special backup schedule or retention requirements
- Customer provided equipment utilizing DISC Backup Services must provide additional network connectivity to the EDC Backup

Standard Backup Schedule and Retention Periods

Backup Type	Frequency	Onsite Retention	Offsite Retention
Full	Weekly	60 days	60 days
Incremental	Daily	14 days	14 days

*Backup schedule and retention periods are customizable.

Service Level Metrics

Measure	Service Level Targets
Infrastructure Monitoring	24 x 7
Incident Response	24 x 7
Infrastructure Availability	≥ 99.9%*

*The DISC Backup/Archive solutions are designed to balance availability and control costs.

Infrastructure as a Service

Network



Service Description

The DISC Network Services include Local Area Network (LAN) connectivity for hosted systems and applications as well as connectivity to the USDA Wide Area Network (WAN) and the Internet.

What is Included

- Fully managed LAN infrastructure in each DISC Enterprise Data Center (EDC)
- Connectivity to the USDA Universal Telecommunications Network (UTN) WAN and Internet
- Network engineering and design consultation
- Network utilization monitoring and capacity planning
- Network cabling as required by DISC EDC standards

Hosting Services that include Network Services

- Platform as a Service
- Infrastructure as a Service
- Managed Hosting services

Additional Information

- Customer provided equipment utilizing DISC Network Services must provide dual network connectivity to the EDC Highly Available Network.
- If optional Backup/Archive services are utilized, network connectivity to the EDC Backup network is also required.

How We Charge

The cost of this service is included with other hosting services that rely on this service.

Cost Saving Tips

- Utilize DISC Network Services instead of hosting a private networking solution
- Provide at least 180 days' notice for growth or retraction of processing requirements
- Communicate projected networking requirements on a quarterly basis
- Limit internet usage to business related activities

Service Level Metrics

Measure	Service Level Targets
Infrastructure Monitoring	24 x 7
Incident Response	24 x 7
Infrastructure Availability	≥ 99.9%*

*DISC reserves the option to schedule its routine infrastructure maintenance activities on Sundays between 1800 to 2400 hours Central Time. **NOTE:** DISC utilizes the USDA Universal Telecommunication Network (UTN) for Wide Area Network services. The USDA is contractually guaranteed to be 99.9% available but has historically delivered over 99.99% availability.

Infrastructure as a Service

Facility Services



Service Description

DISC Facility Services provides an optimal Enterprise Data Center (EDC) operating environment for production customer application hosting. All DISC-managed EDCs adhere to USDA EDC standards and include key fault-tolerant characteristics equivalent to Uptime Institute Tier standards.

What is Included

Production Enterprise Data Centers

Kansas City, Missouri (Production) Tier IV

Fault Tolerant Site Infrastructure - A Fault Tolerant data center has multiple, independent, physically isolated systems that have redundant capacity components and multiple, independent, diverse, active distribution paths simultaneously serving the computer equipment.

Saint Louis, Missouri (Disaster Recovery) Tier III

Concurrently Maintainable Site Infrastructure - A concurrently maintainable data center with redundant capacity components and multiple, independent distribution paths serving the computer equipment.

Development, Test, and Disaster Recovery Center

Beltsville, Maryland Tier 1 – Basic Site Infrastructure

A basic data center with non-redundant capacity components and a single, non-redundant distribution path serving the computer equipment.

Hosting Services that include Network Services

- Platform as a Service
- Infrastructure as a Service
- Managed Hosting services

How We Charge

The cost of this service is included with other hosting services that rely on this service.

Cost Saving Tips

- Utilize DISC Enterprise Data Centers to obtain optimal business application availability
- Kansas City for production applications
- St. Louis for disaster recovery

Additional Information

- Escorted access to the data center for authorized customer personnel can be scheduled to perform necessary operational tasks
- Certified DOJ Level IV Secure Facility
- USDA DM 3510-01 Physical Security Standards for Information Technology Compliant
- Security measures include:
 - » Guard stations
 - » Parking lot and exterior building surveillance
- Computer room entry and egress surveillance
- Computer room entry and egress secured with buffer zone and biometric access control

Service Level Metrics

Measure	Service Level Targets
System Monitoring	24 x 7
Incident Response	24 x 7
Facility Availability*	Beltsville (Tier 1) Saint Louis (Tier III)

*DISC reserves the right to schedule occasional infrastructure downtime and maintenance activities to accommodate growth and ensure optimal availability.

Infrastructure as a Service

Rack Reservation Service



Service Description

Rack Reservation Service is designed to provide customers the opportunity to reserve rack space within DISC's data center environment prior to equipment deployment. This is an excellent option for customers that have large deployment plans and need the ability to precisely plan and deploy large scale operations within a defined timeframe.

What is Included

Kansas City, Missouri (Production) Tier IV Fault Tolerant Site Infrastructure

A Fault Tolerant data center has multiple, independent, physically isolated systems that have redundant capacity components and multiple, independent, diverse, active distribution paths simultaneously serving the computer equipment.

How We Charge

DISC Rack Reservation Service customers are billed a flat fee subscription monthly for participation.

Price Drivers

\$1,000/monthly per Rack

Additional Information

- Escorted access to the data center for authorized customer personnel can be scheduled to perform necessary operational tasks
- Certified DOJ Level IV Secure Facility
- USDA DM 3510-01 Physical Security Standards for Information Technology Compliant
- Security measures include:
 - » Guard stations
 - » Parking lot and exterior building surveillance
- Computer room entry and egress surveillance
- Computer room entry and egress secured with buffer zone and biometric access control

Service Level Metrics

Measure	Service Level Targets
System Monitoring	24 x 7 x 365
Incident Response	24 x 7 x 365
Facility Availability	Kansas City (Tier IV)

Infrastructure as a Service

Object Storage



Service Description

Object Storage Service is a service that provides storage through a web service interface. Object Storage uses the same scalable storage infrastructure that .com uses to run its global e-commerce network. S3 protocol included. 2 Geographically dispersed zones are available. Object Storage can be employed to store any type of Object which allows for uses like storage for Internet applications, backup and recovery, disaster recovery, data archives, data lakes for analytics, and hybrid

What is Included

- Enterprise-class virtualized disk storage controllers
 - » Unlimited data ingest and retrieval at no additional charge
 - » Multi-zone / global zone support
 - » High scalability
 - » High availability
- Redundant architecture - Erasure coding architecture
- Security of mission-critical data provided through management of access rights
- Periodic technology refresh
- Fully secured data access and inheritable controls
- Proper disposal of failed data components
- Multi-region support
- Dynamic load balancing
- Multi-region copies of data to assure continuity of operations services are also available

How We Charge

Charges are based on actual disk space used.

Price Drivers

- Disk space used in gigabytes
- Additional charges may apply for storage allocation associated with any local or remote data copies

Platform Options

Platform	Region	Purpose
S3	Kansas City - West Region	Object Storage
S3	St. Louis - East Region	Object Storage
S3	Global	Object Storage

Service Level Metrics

Measure	Service Level Targets
System Monitoring	24 x 7
Incident Response	24 x 7
System Availability	≥ 99.9%*

*DISC reserves the option to schedule routine infrastructure maintenance activities on Sundays from 1800 to 2400 hours Central Time.

Platform as a Service

PaaS - Server



Service Description

The DISC Platform as a Service (PaaS) Server offering provides standard virtualized operating platforms to securely host customer applications. DISC utilizes advanced server virtualization technologies, strict standards, and economies of scale to enable rapid delivery of cost-effective, fully managed operating platforms with expanded inheritable security controls.

What is Included

- Fully managed operating platform infrastructure
 - » State-of-the-art server hardware
 - » Standardized operating systems
 - » SAN/NAS disk storage as required
 - » Backup/Archive services as required
 - » Highly available network services
 - » Redundant server hardware
 - » Periodic technology refresh
- Full platform administration services
 - » Virtual server configuration
 - » Virtual OS installation
 - » Virtual OS upgrades and patching
 - » Security hardening per NIST standards
 - » User management and audit log review
 - » Virus protection and vulnerability mitigation
 - » Disaster recovery support
 - » Incident and problem resolution
- Systems engineering based on application requirements
- Related inheritable management controls
- Optional Virtual Desktop Platform as a Service
- Optional Professional Services such as
 - » Database Management
 - » Application Integration

How We Charge

Hosting charges are based on the number of virtual servers provided and actual allocated resources.

Price Drivers

- Number and type of virtual servers
- Amount of actual CPU and memory required
- Amount of actual Backup/Archive data retained
- Amount of actual SAN/NAS disk storage required
- Any RSA token requirements for Remote Access
- Additional charges may apply for optional Professional Services

Cost Saving Tips

Be prepared to provide key hosting requirements to expedite the planning process.

Additional Information

- Customers must allow DISC to maintain/update the Operating System to ensure vendor supportability
- Transitional IaaS is also available for application development and as a temporary solution to support Enterprise Data Center Consolidation

Platform Options

Platform	Windows	Linux	AIX	Solaris
x86	X	X		
Series			X	
Sparks				X

Service Level Metrics

Measure	Service Level Targets
System Monitoring	24 x 7
Incident Response	24 x 7
System Availability	≥ 99.9%*

*DISC reserves the option to schedule routine infrastructure maintenance activities on Sundays from 1800 to 2400 hours Central Time. **NOTE:** DISC utilizes the USDA Universal Telecommunication Network (UTN) for Wide Area Network services. The UTN is contractually guaranteed to be 99.9% available but has historically delivered over 99.99% availability.

Platform as a Service

Mainframe



Service Description

The DISC Mainframe Platform as a Service includes a fully managed operating platform for mainframe-based applications. This fully managed service includes systems engineering services, software tools, storage services, technology refresh, and disaster recovery.

What is Included

- Fully managed DISC Network Services and infrastructure
- Fully managed zOS™ operational environment
- Third party software tools, utilities, and support
- System security administration and support
- Capacity planning and performance tuning
- 24x7 system and network monitoring and support
- Fully managed disk and tape storage services
- Fully managed Disaster Recovery of the operating platform
- Application data recovery support
- Customer certification testing support
- Job scheduling and related monitoring
- Standard database administration activities
- Related inheritable management controls
- Systems engineering and consulting services
 - » Install, configure, customize, and maintain the Operating System and system utilities
 - » Research, coordinate, and apply OS maintenance
 - » Management, analysis, and review of OS system audit logging
 - » Troubleshoot and resolve OS-related problems
 - » Disk and Tape storage administration
 - » Perform system tuning within the limits of DISC configuration standards

How We Charge

Hosting charges are based on actual usage measurements.

Price Drivers

- Prime time and non-prime time CPU usage
- High, Normal, Medium, or Deferred Priority
- Amount of disk storage utilized
- Amount of tape storage utilized
- Additional charges may apply for
 - » Specialized software
 - » Database administration
 - » Application support

Cost Saving Tips

- Adhere to the scheduled maintenance window
- Provide at least 180 days notice for growth or retraction of processing requirements
- Communicate project processing requirements on a quarterly basis
- Participate in scheduled disaster recovery testing
- Archive data only when necessary
- Delete any unnecessary data
- Utilize standard tools and applications

Service Level Metrics

Measure	Service Level Targets
System Monitoring	24 x 7
Incident Response	24 x 7
System Availability	≥ 99.9%*

*DISC reserves the option to schedule routine infrastructure maintenance activities on Sundays from 1800 to 2400 hours Central Time. **NOTE:** DISC utilizes the USDA Universal Telecommunication Network (UTN) for Wide Area Network services. The UTN is contractually guaranteed to be 99.9% available but has historically delivered over 99.99% availability.

Platform as a Service

Cloud Access Security Platform



Service Description

The DISC General Support Systems (GSS) are FISMA required services that provide centralized and shared support services for Federal Information Systems. Cloud Access Security Platform (CASP) was designed and implemented to extend DISC security and services boundaries out into commercial cloud spaces. By enforcing strict standards that streamline management efforts, the DISC CASP offering provides a balance between using the commercial cloud and having a secured environment.

What is Included

Customer opting to participate in CASP offering receive the benefits of full server administration, certification and accreditation (up to and including the Operating System), security controls, as well as many other benefits.

Cloud Security

Inherited controls with full FISMA compliant Risk Management Framework and ATO

Cloud Authentication

Access, Identity Management, Automated compliance and configuration management

Cloud Technical Services

Operating System, Network/Security, Support, Certification, and Accreditation.

How We Charge

Hosting charges are based on the number of virtual servers deployed and actual allocated resources in the cloud platform.

Price Drivers

- Cloud Infrastructure Costs - Cost of the compute resources deployed onto the cloud platform. It is based on actual usage of cloud compute as reported to DISC- by USDA's Cloud Integrator This will also include network costs (which is approximately 3% of cloud infrastructure costs)
- CASP costs - This is a flat fee based on number of VMs (regardless of size) on the cloud platform

Cost Saving Tips

Be prepared to provide key hosting requirements to expedite the planning process.

Additional Information

Customers must allow DISC to maintain/update the Operating System to ensure vendor supportability.

Platform Options

Cloud Platform	Windows 2012/2016	RHEL 7
MS Azure GovCloud	X	X
MS Azure GovCloud	X	X

Service Level Metrics

Measure	Service Level Targets
System Monitoring	24 x 7
Incident Response	24 x 7
System Availability	See Cloud Provider Availability Metrics

Platform as a Service

Enterprise Container Platform



Service Description

Multi-tenant container service built using RedHat's OpenShift Container Platform (OCP). Provides Docker based container hosting as well as DevOps workflow tools. Containers package software in a format that can run isolated on a shared operating system; they do not bundle a full operating system - only libraries and settings required to make the software work are needed. This makes for efficient, lightweight, self-contained systems and guarantees that software will run uniformly, regardless of where it's deployed.

- **Lightweight:** Docker containers running on a single machine share that machine's operating system kernel; they start instantly and use less compute and RAM. Images are constructed from file system layers and share common files, minimizing disk usage and increasing image download speed.
- **Standard:** Docker containers are based on open standards and run on Linux distributions.
- **Secure:** Containers isolate applications from one another and from the underlying infrastructure. Docker provides the strongest default isolation to limit application issues to a single container instead of the entire machine.

What is Included

- Fully managed Enterprise Container platform provided on DISC PaaS (CPU/RAM)
- Docker Image registry
- Git source code repository
- F5 load balancers
- Persistent volume storage

How We Charge

DISC Enterprise Container Platform customers are billed a flat fee subscription per project per month. The hosting charges are billed hourly based on memory (RAM) resource consumption (usage) Persistent storage is billed based on allocated volume requested with standard NAS rates.

Price Drivers

- Number of container projects (subscription)
- Memory usage billed per GB per hour of usage (rounded to the next GB / hour increment) aggregated and billed monthly
- Amount of persistent disk storage allocation requested
- Additional charges may apply for optional professional services

Cost Saving Tips

- Leverage multiple server application instances running on the least amount of hardware
- Increase developer code collaboration
- Efficiently and safely deploy applications

Service Level Metrics

Measure	Service Level Targets
System Monitoring	24 x 7
Incident Response	24 x 7
System Availability	≥ 99.9%*

*DISC reserves the option to schedule routine infrastructure maintenance activities on Sundays from 1800 to 2400 hours Central Time.

Platform as a Service

Database



Service Description

The DISC Database Platform as a Service offering provides a fully managed platform solution for use as an integral part of an overall customer application hosting environment. The offering provides scalable database services that provide required performance, reliability, and functionality while also providing cost savings associated with the overall ease of management and the economies of scale associated with a common, standardized solution.

What is Included

- Fully managed database server
- Fully managed virtual server
- Standardized storage configurations
 - » Data Files
 - » Transaction Logs
 - » Database Backups
- Database software licensing and maintenance
- Database software installation and configuration
- Database operations, patching, and maintenance
- Operating System and Database Administration
 - » Software installation and maintenance
 - » System-level patching and support
- Full database and transaction log backups for Point-In-Time database recovery
- System and database monitoring service

How We Charge

Hosting charges are based on the number of virtual servers provided and actual allocated resources.

Price Drivers

- Number of Database virtual servers required
 - » Optional High Availability
 - » Optional Disaster Recovery
- Amount of actual CPU and memory required
- Amount of data storage required in 10GB increments
- Additional charges for optional data retention periods
- Additional charges for optional Professional Services

Cost Saving Tips

- Engage DISC early in the scoping phase of a new project to identify all business and technical requirements
- Utilize other OCIO service offerings to minimize application integration efforts and reduce costs through economies of scale

Database Offerings

Database	Platform
DB2	Linux / zOS
MYSQL	Windows / Linux
MSSQL	Windows
Oracle	Solaris / AIX
Oracle Exadata	Exadata

Service Level Metrics

Measure	Service Level Targets
System Monitoring	24 x 7
Incident Response	24 x 7
System Availability	≥ 99.9%*
Notification Service	Available upon request

*DISC reserves the option to schedule routine infrastructure maintenance activities on Sundays between 1800 to 2400 hours Central Time. **NOTE:** DISC utilizes the USDA Universal Telecommunication Network (UTN) for Wide Area Network services. The UTN is contractually guaranteed to be 99.9% available.

Platform as a Service

Enterprise Content Management



Service Description

The DISC Enterprise Content Management solution enables all authorized users within an organization to create, capture, store, manage, publish, view, search, and archive all types of documents, as well as providing the ability to support the entire content management lifecycle.

What is Included

- Midrange Platform as a Service virtual server
- Oracle™ WebCenter Content Management software licensing and maintenance
- Key DISC Technical Services to install, patch, and upgrade software components
- Additional virtual CPU, memory, and storage resources as required
- Optional Fault Tolerant and Disaster Recovery capabilities
- Optional Planning and Integration services
- Optional Application Integration services

How We Charge

Hosting charges are based on actual number of virtual servers and resources utilized.

Price Drivers

- Number of Enterprise Content Management servers required
- Additional virtual server resources required (CPU, Memory, Storage)
- Optional Fault Tolerance requirements
- Optional Disaster Recovery requirements
- Optional Professional Services

Cost Saving Tips

- Engage DISC early in the scoping phase of a new project to identify all business and technical requirements
- Forecast response time and load expectations
- Utilize other OCIO service offerings to minimize application integration efforts and reduce costs through economies of scale

Service Level Metrics

Measure	Service Level Targets
System Monitoring	24 x 7
Incident Response	24 x 7
System Availability	≥ 99.9%*
Notification Service	Available upon request

*DISC reserves the option to schedule routine infrastructure maintenance activities on Sundays between 1800 to 2400 hours Central Time. **NOTE:** DISC utilizes the USDA Universal Telecommunication Network (UTN) for Wide Area Network services. The UTN is contractually guaranteed to be 99.9% available.

Platform as a Service

Web Accelerator



Service Description

DISC can provide 3rd party Akamai Web Accelerator service to further enhance web application performance and availability as well as deliver static websites. Front end redundancy and geographically dispersed nodes for last loop efficiency are included.

Built upon Akamai's Edge Advantage™ platform, Akamai's Dynamic Site Accelerator™ solution introduces intelligent content generation and comprehensive site delivery at the edge and provides E-businesses with the optimal solution for dynamic website availability, scalability, and performance.

What is Included

- Akamai's global Content Delivery Network (CDN)
- Basic and Encrypted (SSL) content acceleration
- Live and on-Demand streaming
- Net Storage for online storage
- Management Console to manage content
- Optional Akamai professional services support

How We Charge

Hosting charges are based on the following factors:

- Actual usage of licensed service based on bandwidth and storage consumption
- Actual number of optional Akamai professional service hours

Cost Saving Tips

- Engage DISC early in the scoping phase of a new project to identify all business and technical requirements
- Forecast response time and load expectations
- Utilize other OCIO service offerings to minimize application integration efforts and reduce costs through economies of scale

Service Level Metrics

Measure	Service Level Targets
System Monitoring	24 x 7
Incident Response	24 x 7
System Availability	≥ 99.9%*

*DISC reserves the option to schedule routine infrastructure maintenance activities on Sundays between 1800 to 2400 hours Central Time. **NOTE:** DISC utilizes the USDA Universal Telecommunication Network (UTN) for Wide Area Network services. The UTN is contractually guaranteed to be 99.9% available.

Platform as a Service

CloudVault



Service Description

DISC can provide collaboration on the cloud through its secured cloud-based storage service. This cloud based remote storage capability is accessible from the Internet through mobile device, browser, or thick client which will provide agencies/organizations the capability to have their own private cloud storage. Users of cloud storage can share content with other cloud storage users within that domain.

What is Included

- DISC PaaS and Storage Services
- Web-based interface to securely upload and download files
- Version control
- Sharing of files with both registered and non-registered users
- Secure file sharing with password and expiration date
- Downloadable sync clients to sync from your desktop, laptop, or mobile devices

How We Charge

Hosting charges are based on the following factors:

- Number of registered users within CloudVault
- Actual storage used within CloudVault

Cost Saving Tips

- Engage DISC early in the scoping phase of a new project to identify all business and technical requirements
- Forecast response time and load expectations
- Utilize other OCIO service offerings to minimize application integration efforts and reduce costs through economies of scale

Service Level Metrics

Measure	Service Level Targets
System Monitoring	24 x 7
Incident Response	24 x 7
System Availability	≥ 99.9%*

*DISC reserves the option to schedule routine infrastructure maintenance activities on Sundays between 1800 to 2400 hours Central Time. **NOTE:** DISC utilizes the USDA Universal Telecommunication Network (UTN) for Wide Area Network services. The UTN is contractually guaranteed to be 99.9% available.

Platform as a Service

Virtual Application Hosting



Service Description

The DISC Virtual Application Hosting service provides the technology necessary to enable the hosting of business applications remotely in the DISC Enterprise Data Center. Combined with other key enabling DISC cloud services, the Virtual Application Hosting service can provide a traditional end user experience for business applications.

What is Included

- Fully managed and maintained infrastructure
 - » State-of-the-art server hardware and software
 - » Periodic technology refresh
- Managed solutions available
- Citrix™ XenApp™
 - » Virtual presentation of business applications
 - » Secure Telework capabilities
- Citrix™ XenDesktop™
 - » Virtual presentation of complete desktop
 - » Provides users with desktop functionality

How We Charge

Costs are based on actual application hosting requirements and virtual application integration services required.

Price Drivers

- Actual dedicated hosting requirements
- Number of concurrent users of XenApp™ integrated applications
- Number of XenDesktop™ integrated desktops
- Application integration services as required (Professional Services)

Cost Saving Tips

Utilize other OCIO service offerings to minimize application integration efforts and reduce costs through economies of scale.

Service Level Metrics

Measure	Service Level Targets
System Monitoring	24 x 7
Incident Response	24 x 7
System Availability	≥ 99.9%*

*DISC reserves the option to schedule routine infrastructure maintenance activities on Sundays between 1800 to 2400 hours Central Time. **NOTE:** DISC utilizes the USDA Universal Telecommunication Network (UTN) for Wide Area Network services. The UTN is contractually guaranteed to be 99.9% available.

Professional Services

Application Integration



Service Description

DISC can provide the professional services required for integrating and administering enterprise-class business applications.

What is Included

- Application architecture planning
- Application integration expertise and consultation
- Application software installation, maintenance, and support
- Supported Applications Services include, but are not limited to:
 - » Web Application Servers such as IBM WebSphere, Oracle WebLogic, Bossed Tomcat
 - » Content Management solutions such as Oracle WebCenter Content and IBM Web Content Manager
 - » Web Servers such as IBM HTTP Server, Oracle HTTP Server, and Apache
 - » LAP based solutions such as WordPress, Drupal
 - » Business intelligence suites such as IBM Cognos, Tableau, and Oracle Business Intelligence
 - » Many other Commercial-Off-The-Shelf (COTS) products

How We Charge

Charges are based on actual numbers of professional services hours.

Price Drivers

- Scope and timeframe of integration project
- Required software licenses
- Additional charges may apply for:
 - » Platform as a Service
 - » Infrastructure as a Service
 - » Other Professional Services

Cost Saving Tips

- Avoid greater costs associated with high priority service
- Engage project team early to document requirements
- Minimize changes during project delivery

Additional Information

- Customer acceptance of deliverables is required
- Administration and support for other application software is considered on a case-by-case basis

Service Level Metrics

Measure	Service Level Targets
Incident Response	24 x 7

Professional Services

Database Management



Service Description

DISC Database Management services can provide the necessary professional expertise to install, configure, operate, and maintain industry standard database software.

What is Included

- Database engineering and architecture design
- Database software installation and configuration
- Database operations, patching, and maintenance
- Initial database installation and integration
- Database backup and recovery
- Pre-production and testing support
- Management of privileged user accounts to manage tables, indexes, and other data structures
- Problem and incident management
- Performance tuning and troubleshooting

How We Charge

Charges are based on actual numbers of professional services hours.

Price Drivers

- Size and number of database instances
- Number and frequency of database refreshes
- Actual software licensing and maintenance
- Additional charges may apply for:
 - » Platform as a Service
 - » Infrastructure as a Service
 - » Other Professional Services

Cost Saving Tips

- Utilize standard software platforms
- Establish archive and purge criteria to minimize storage requirements

Standard Offerings

Database	Platform
DB2	Midrange, z/OS, z/Linux
Oracle™	Midrange, z/Linux
MySQL	Midrange
MSSQL	Midrange
Oracle Exadata™	Exadata Appliance

Additional Information

Support for non-standard Database requests will be evaluated on a case-by-case basis.

Service Level Metrics

Measure	Service Level Targets
Incident Response	24 x 7

Professional Services

Project Management



Service Description

Project managers work closely with customers, vendors, and DISC functional areas to coordinate efforts and provide necessary project management functions to ensure timely project success.

What is Included

- Development of Project Charter
- Development of project plan and schedule
- Coordination and scheduling of project activities across customer and DISC functional areas
- Consultation on operational and infrastructure requirements, standards, and configurations
- Assistance with standard requests for service
- Facilitate project status meetings
- Timely project status reporting
- Address project issues with DISC functional areas and management
- Escalation of significant issues to customers and DISC executive management
- Manage project scope and deliverable requirements
- Document changes to project scope and schedule
- Facilitate and document project closeout
- Access to the Project Management Resource Center

How We Charge

Current pricing is based on time and materials. Customer will only be billed for actual hours worked.

Price Drivers

- Complexity and scope of the project
- Number of functional areas involved

Cost Saving Tips

- Avoid higher costs associated with high priority service
- Engage project team early to document requirements
- Minimize changes during project delivery
- Avoid historical project cost estimation
- Ensure that all requirements are documented

Additional Information

- Customer signoff of deliverables and releases is required
- Utilize other OCIO service offerings to minimize application integration efforts and reduce costs through economies of scale

Professional Services

Disaster Recovery



Service Description

DISC can provide assistance to customers with their Disaster Recovery (DR) planning, coordination, and execution based on the Customer's Business Impact Analysis (BIA), Recover Point Objectives (RPO), Recovery Time Objectives (RTO), and overall recovery priority.

What is Included

- Facilitation, planning, and coordination with DISC and Customer technical staff and coordinators to:
 - » Assist with customer application Business Impact Analysis
 - » Co-develop customer application Disaster Recovery Plans and recovery procedures
 - » Participate in table-top Disaster Recovery Exercises
 - » Participate in functional Disaster Recovery Exercises
 - » Assist with documenting customer Test, Training, and Exercise (TT&E) programs and After-Action Reports

How We Charge

Charges are based on actual numbers of professional services hours.

Price Drivers

- Frequency and complexity of DR planning
- Frequency and complexity of DR testing

Cost Saving Tips

- Purge or archive unused data
- Perform a Business Impact Analysis to determine application RTO and RPO requirements
- Ensure the appropriate data protection solution is utilized to meet actual RTO and RPO requirements

Service Level Metrics

DR Options	RTO	RPO*
Database Replication	2 hours	2 hours
Disk Replication	4 hours	2 hours
Tape Replication	24 hours	24 hours
Offsite Tape Rotation	72 hours	72 hours

*Actual RPO is dependent on critical component availability for the timely replication of data.

Additional Information

Typical Recovery Options and Relative Costs

Technology	Recovery Scenario	Recovery Time	Potential Data Loss	Cost
Redundancy / Clustering Remote Replication	Hardware Failure	Very fast	None	\$\$\$\$\$
Remote Replication	Hardware Failure/ Disaster	Very fast but application dependent	Minimal	\$\$\$\$
Continuous Data Protection	Hardware Failure Application Corruption User Error	Fast but depends on the error	Minimal/None	\$\$\$
Point-in-Time Copy	Hardware Failure Application Corruption User Error	Fast but depends on the error	Data after PIT copy is made may not be recovered. Recovery not guaranteed.	\$\$
Backup Disk/Tape	Hardware Failure Disaster Application Corruption User Error	Bit faster/Slow	Data after backup may not be recovered	\$\$/\$

Professional Services

Planning and Integration



Service Description

DISC can provide key professional services to assist customers in the design, planning, and integration of enterprise-class solutions. These key services help eliminate project risk and deliver robust technology solutions based on industry best practices.

What is Included

- Insight into industry and department
 - » Technology roadmaps
 - » Strategic plans
 - » Best Practices
 - » Lessons learned
- Integration and project planning support
- Business requirements analysis
- Technical requirements identification
- Technical architecture solution design
- Project risk identification and prioritization
- Definition of Enterprise Data Center (EDC) standards
- Standard architecture governance
- Technical disaster recovery planning
- Capital investment analysis
- Technology and system integration cost estimation

How We Charge

Charges are based on actual numbers of professional services hours.

Price Drivers

- Scope and timeframe of technology project
- Additional charges may apply for
 - » Platform as a Service
 - » Infrastructure as a Service
 - » Other Professional Services

Cost Saving Tips

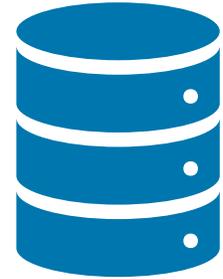
- Avoid greater costs associated with high priority service
- Engage project team early to document requirements
- Minimize changes during project delivery
- Avoid historical project cost estimation
- Ensure that all requirements are documented

Additional Information

- Customer acceptance of deliverables and releases is required
- Utilize other OCIO service offerings to minimize application integration efforts and reduce costs through economies of scale

Other Hosting Services

Customer Access Network (CAN)



Service Description

DISC Database Management services can provide the necessary professional expertise to install, configure, operate, and maintain industry standard database software.

What is Included

DISC will be responsible for all network and security hardware, software, maintenance, and support on the DISC side of the Level 3 Minimum Points of Presence at the KC and St. Louis data centers.

ASOC will be responsible for the establishment and ongoing maintenance and support of any DISC CAN service monitoring they may require. DISC provided the ASOC a server to host the ASOC monitoring tool(s).

DISC support will encompass

- Customer circuit setup and test
- Customer circuit troubleshooting
- Customer service-provisioning
- Security establishment and monitoring
- Establishment of Interagency Security Agreements
- Interface with Level 3 on behalf of customer

How We Charge

A flexible cost structure based on bandwidth utilization that allows customers to pay only for what they use.

- Monthly L3 service line costs along with maintenance costs charged by bandwidth utilization
- One-time circuit setup fee

Cost Saving Tips

- Engage DISC early in the scoping phase of a new project to identify all business and technical requirements
- Forecast response time and load expectations
- Utilize other OCIO service offerings to minimize application integration efforts and reduce costs through economies of scale

Service Level Metrics

Measure	Service Level Targets
System Monitoring	24 x 7
Incident Response	24 x 7
System Availability	≥ 99.9%*

*DISC reserves the option to schedule routine infrastructure maintenance activities on Sundays between 1800 to 2400 hours Central Time. **NOTE:** DISC utilizes Level 3 Network for CAN services. The Level 3 is contractually guaranteed to be 99.5% available but with dual site/DR connectivity, it can be better than 99.5%.

Other Hosting Services

Colocation Services



Service Description

DISC's Midrange Colocation Service provides customers with facilities and physical security. The customer is responsible for all network cabling within their rack(s). DISC will not provide any OS administration services to colocation customers.

What is Included

- Facilities planning
- Standard rack
- Two L6-30 power whips to rack with PDUs
- 4Kw power for rack
- DISC will provide power to the rack. Standard power takes full advantage of computer room power redundancies. Additional power outside of what is provided to the rack will be an additional charge to install the power whips.
- Physical system resets upon customer request
- Customer notification of facility related incidents
- Physical equipment installation assistance (funding may be required)
- External rack cabling services to DISC shared services (see Network Cabling)
- Optional customer asset disposal
- Physical security monitoring

How We Charge

Charges are based on a per rack usage and power in excess of 4Kw.

Price Drivers

- Number of racks
- Power usage in excess of 4Kw per rack
- Additional charges may apply for power whips beyond the base two L6-30 per rack
- Other Professional Services

Cost Saving Tips

- Engage project team early to document requirements
- Ensure that all requirements are documented

Additional Information

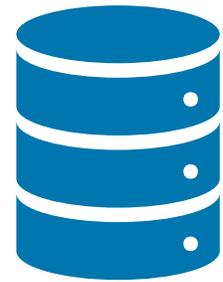
- Customer acceptance of deliverables is required
- All equipment must be dual corded. If this is not an option, the customer is responsible for providing appropriate rack-mounted Automatic Transfer Switches (ATSs) to power single corded devices.
- The customer must submit a DISC Service Desk Request for any hardware activity such as adding, removing, and relocating hardware (SD-0030).
- Customer-provided networks only. The customer is responsible for all copper and fiber network cabling within their rack(s). For all network connections outside the customer racks, the agency must submit a DISC Service Desk Request detailing the requirements. Only DISC authorized cable installers may install copper or fiber cabling from agency racks to any DISC shared services. The customer must coordinate all other external rack cable installations with all involved service providers.

Service Level Metrics

Measure	Service Level Targets
Incident Response	24 x 7

Other Hosting Services

Managed Hosting



Service Description

DISC will manage customer-provided servers up through the Operating System (OS) in a secure operating environment including systems installation, engineering, administration, and support.

What is Included

- DISC enterprise class Facility services
- Availability and utilization monitoring
- Customer notification of related incidents
- Physical equipment installation assistance
- Cabling services per Enterprise Data Center standards
- Optional customer asset disposal
- Full Operating Systems administration services
 - » Limited systems engineering
 - » OS installation and customization
 - » OS upgrades and patching
 - » Security hardening per NIST standards
 - » Application software installation assistance
 - » User management and audit log review
 - » Virus protection and vulnerability mitigation
 - » Disaster recovery support
 - » Incident and problem resolution
- Optional SAN/NAS disk storage services
- Backup/Archive services with customizable retention
 - » Network services
 - » Local and Wide Area Networking
- Network Security Services
- Related inheritable management controls
- Optional Professional Services such as:
 - » Planning and Integration
 - » Application Integration
 - » Database Management
 - » Project Management

Supported Operating System	Server Platform
VMWare™	x86
Windows™	x86
Redhat™	x86
Solaris™	x86, Sparc
AIX™	pSeries

How We Charge

Hosting charges are based on the number of physical and virtual servers managed.

Price Drivers

- Amount of actual cabling and rack space required
- Amount of actual Backup/Archive data retained
- Additional charges may apply for:
 - » Optional SAN/NAS disk storage
 - » Optional Professional Service

Cost Saving Tips

- Utilize DISC Network services
- Utilize DISC SAN/NAS and Backup/Archive services
- Utilize server virtualization to reduce hosting costs

Additional Information

- Customers are required to adhere to DISC Enterprise Data Center power, racking, and cabling standards
- Customers are required to adhere to DISC Network vulnerability mitigation policy
- Customers must allow DISC to maintain/update the Operating System to ensure vendor supportability

Service Level Metrics

Measure	Service Level Targets
System Monitoring	24 x 7
Incident Response	24 x 7
System Availability	Varies by customer environment

NOTE: DISC utilizes the USDA Universal Telecommunication Network (UTN) for Wide Area Network services. The UTN is contractually guaranteed to be 99.9% available but has historically delivered over 99.99% availability.

Security Services

Information Systems and Network Security



Service Description

DISC provides Information Systems and Network Security services that provide safe network access, security administration, monitoring, and assessment to meet data security management requirements.

What is Included

DISC performs the following system security tasks for systems physically and/or logically located within the DISC Enterprise Network boundaries:

- Enterprise Network Firewall and Access Control List administration
- Enterprise Network Remote Access and Admission Controls administration
- Enterprise Network Intrusion Detection System (IDS) monitoring
- Enterprise Operating System (OS) vulnerability scanning and reporting to the Customer System Security Officer
- Enterprise compliance scanning to ensure the systems are maintained with proper baseline configuration standards and patch management
- Identity and Access Management administration which includes:
 - » OS level security in the form of User ID/Password verification
 - » Enforcement of strict security policies regarding system access
- Optional Application Scanning is available for an additional cost

How We Charge

With the exception of Application Scanning, the cost of this service is included when DISC Network Services are utilized.

Hosting services that include Network Security Services:

- Platform as a Service
- Infrastructure as a Service
- Managed Hosting services

Costs associated with optional Application Scanning services are based on software license fees and amount of actual professional services hours incurred.

Cost Saving Tips

- Utilize DISC Network Services instead of hosting a private networking solution
- Provide at least 180 days' notice for growth or retraction of processing requirements
- Communicate projected networking requirements on a quarterly basis
- Limit internet usage to business related activities
- Provide at least 180 days' notice for growth or retraction of processing requirements

Additional Information

DISC also provides Security Governance Services that include limited control documentation, control inheritance, and audit support.

Service Level Metrics

Measure	Service Level Targets
System Monitoring	24 x 7
Incident Response	24 x 7

Security Services

Role-Based Access Controls Service



Service Description

The Central Authentication service uses a Microsoft Active Directory domain installed on Windows 2012 R2 servers leveraging virtual machine infrastructure dispersed among multiple data center locations for high availability and fault tolerance. The Central Authentication System (CAS) provides a highly available authentication and directory services solution for PaaS, IaaS, and Managed Hosting customers.

What is Included

The primary focus of the Central Authentication and Role-Based Access Controls (CA-RBAC) service is to establish Elevated Privilege (EP) controlled access into hosted resources.

All data center infrastructure and hosted customer systems inside the data center's logical security boundaries use the system today. For servers and various other forms of resources which reside within the USDA UTN TIC, such as IaaS or Managed Hosting, the CA-RBAC service can be extended into other boundaries for customers. If a domain trust is required to establish pass-through authentication services from a different credential store or identity provider, the DISC's CA-RBAC system can support that type of interconnectivity.

How We Charge

- A flexible cost structure that allows customers to pay only for the devices that are connected to the Central Authentication System
- All maintenance is inclusive in the monthly utilization fee

Cost Saving Tips

If device no longer used, make sure to request decommission so that device is no longer billed for CA-RBAC service.

Additional Information

If external authentication or RBAC systems need to interface with the CA-RBAC service, an Interconnection Security Agreement (ISA) will be established between organizations. The ISA will define how the interconnectivity will be used, any risks, and what security controls are associated with the interconnectivity for both parties.

Service Level Metrics

Measure	Service Level Targets
Authentication Service	24 x 7
System Monitoring	24 x 7
Incident Response	24 x 7

NOTE: DISC reserves the option to schedule routine infrastructure maintenance activities on Sundays between 1800 to 2400 hours Central Time.

Security Services

Remote Access VPN



Service Description

The Remote Access Virtual Private Network (RA VPN) service securely connects customer Elevated Privilege (EP) users to their server and applications in DISC's PaaS, IaaS, Managed Hosting, and other cloud and hosting services. For flexibility and security, the RA VPN service can reverse proxy a remote session or allow full packet pass-through from end user systems to servers. A host checking feature, network policy-based access controls, and multi-factor authentication reinforces least privilege access to customer systems. The RA VPN service is integrated with DISC's Central Authentication & Role Based Access Controls (CA- RBAC) service. This tightly coupled integration enables customers to provision remote access for their EP users through a self-service interface and offers RA VPN users the ability to reset their passwords.

What is Included

The Remote Access VPN service offers a browser-based access or thick client for end user connectivity. As users establish remote access sessions, they are inspected at the machine level and required to use approved credentials before login. The RA VPN appliances, known as the Network Access Gateways (NAG), are built to be highly available as clusters per city and span multiple cities in support of disaster recovery services.

In support of federal government remote access requirements, all remote access traffic is encrypted and routed through the VPN tunnel. This ensures customer data in transit is appropriately inspected and protected.

Additional Information

- Each customer is provided a separate remote access IP address pool which is filtered through firewall policies control access into their hosted networks and systems.
- To compliment the RA VPN Service network access controls, DISC offers a server-level Role Based Access Controls (RBAC) integrated solution. Customers who purchase a PaaS server automatically get the best of both network and system role-based access control solutions as a value-add
- For customers subscribing to the Disaster Recovery service, the Remote Access VPN service integrates to meet customers DR and DR testing

How We Charge

- Customers are billed using a daily usage-based rate per server. This service charge may be bundled in other DISC service offerings, check with your account manager for further details
- Customers pay for the remote access VPN service to provide them a secure connection into their hosted server while using an Elevated Privilege (EP) account
- Billing starts when a customer server is built and stops when a server is decommissioned.
- All licensing, software upgrades, and maintenance to the RA VPN infrastructure is included in the rate

Cost Saving Tips

If a server is no longer required, make sure to decommission the asset so it stops the billing.

Service Level Metrics

Measure	Service Level Targets
Remote Access VPN	24 x 7
System Monitoring	24 x 7
Incident Response	24 x 7

Security Services

Federation Services



Service Description

DISC's Federation Services (FDS) provides Microsoft or Open System users with credential access to web systems and applications located across organizational boundaries. It uses a claims-based access control authorization model to maintain application security and implement federated identity authentication into hosted applications. The solution provides a gateway for all hosted web service systems to use their preferred identity provider credential.

What is Included

DISC's federation gateway supports customers who want to use eAuthentication, their federal desktop domain, or other identity provider credentials with their hosted systems and applications within the PaaS and IaaS environments for Single Sign On (SSO).

- Web Application and System Integration
 - » One-time initial setup of customer application system with credential attributes with DISC's FDS solution
- URL Connector Management and Monitoring
 - » Update claims, proxy rules, and directory services interface in FDS system based on customer requirements
 - » FDS monitoring, troubleshooting URL issues, infrastructure management, maintenance and incident management
- High availability clusters support COOP/DR needs

Additional Information

- As large departments seek to expand and interconnect systems, federation services will be a viable technology to address future requirements
- DISC's Federation Services Hosting Provider Gateway solution supports the native Security Assertion Markup Language (SAML) protocol without server agents to achieve SSO for customers who desire web service authentication transparency

How We Charge

- A flexible cost structure for federation services that allows customers to pay only for integrated URLs. Each URL is billed as a per URL per month fee
- Once integrated, access rule updates, enhancements, system maintenance and federation infrastructure monitoring are inclusive in the monthly utilization fee

Cost Saving Tips

- Engage DISC early in the scoping phase of a new project to identify all business and technical requirements
- Utilize other OCIO service offerings to minimize application integration efforts and reduce costs through economies of scale
- Get in early with federation services to receive future enhancements as the technology use cases rapidly expand

Service Level Metrics

Measure	Service Level Targets
Authentication Service	24 x 7
System Monitoring	24 x 7
Incident Response	24 x 7

Security Services

Digital Certification for PKI Services



Service Description

DISC's digital certificate issuing service offers customers the ability to leverage Public Key Infrastructure (PKI) and establish trustworthy connections for their application requirements. This service can be used throughout DISC's PaaS, IaaS, and Managed Hosting offerings as well as with special requests. DISC can issue digital certificates to support: web services, client authentication, code signing, and domain controllers. Certificates are issued from a private certificate authority for internal systems or a public trust certificate authority for customers with internet-facing systems. DISC's issued digital certificates support HTTPS and TLS using PKI V2 infrastructure. This service enables the use of encryption and digital signature services across a wide variety of systems and applications.

What is Included

DISC can issue the following digital certificate types:

- Internal Private PKI Digital Certificates
 - Web Server TLS/SSL
 - Client Authentication
 - Code Signing
- External Public PKI Digital Certificates
 - Web Server TLS/SSL
 - Client Authentication
 - Wild Card
 - Multi-Domain EV/UC/SAN

Additional Information

- For security and authenticity, certificates are only issued from a Certificate Signing Request (CSR). Certificates are issued rapidly once a CSR is received
- Once issued, certificates can be installed and managed by DISC or customer application administrators
- To initiate the renewal process, notifications are established between 30 - 60 days prior to expiration
- DISC can register public domains on the customer's behalf through an authorization process.
- See DISC's rate sheet for all certificate pricing

How We Charge

- A flexible cost structure for digital certificates where customers pay only for certificates they are issued
- Digital certificates are billed as a one-time fee for the lifespan of that certificate
- Certificates are typically issued for a 2-year period and remain valid through their expiration date

Cost Saving Tips

- Internal private certificates can be issued if your system is not internet accessible (meaning only accessed by internal systems or users)
- Multi-domain certificates may cost less and have a longer lifecycle than a Wild Card certificate

Service Level Metrics

Measure	Service Level Targets
PKI Service	24 x 7
System Monitoring	24 x 7
Incident Response	24 x 7

Security Services

Token Services



Service Description

The DISC Token service can integrate with data center infrastructure, DISC hosted servers or applications, and external systems or applications in which multi-factor authentication is desired.

What is Included

DISC would like to support customers who want to consolidate their token solutions, reduce infrastructure costs, and provide a flexible alternative in establishing multi-factor authentication capabilities to complement their HSPD-12 smartcard solutions.

- Token solution capabilities
 - » Hard (fobs) tokens have 6-8-year battery
 - » Soft tokens for Smartphones
 - » Emergency Temp tokens can be issued
 - » Self-Service PIN reset capabilities using challenge questions for verification
- Integration with the DISC Token solution for each system / application
- Integration costs cover interconnection documentation, connectivity token system configuration, and technical service hours
- High availability between DISC's Kansas City and St. Louis data centers

Additional Information

- For security and authenticity, certificates are only issued from a Certificate Signing Request (CSR). Certificates are issued rapidly once a CSR is received
- Once issued, certificates can be installed and managed by DISC or customer application administrators
- To initiate the renewal process, notifications are established between 30 - 60 days prior to expiration
- DISC can register public domains on the customer's behalf through an authorization process
- See DISC's rate sheet for all certificate pricing

How We Charge

- A flexible cost structure for digital certificates which customers pay only for certificates they are issued
- A flexible cost structure for token utilization that allows customers to pay only for what they use. Tokens are billed as a per token / per month fee.
- No maintenance or fob replacement costs; it's inclusive in the monthly utilization fee
- For external systems or any application, a One-Time Fee (OTF) is charged for integrating with the DISC Token solution
- For token services associated with remote access into PaaS and Managed Hosting environments, the token integration fee is included, utilization token fees still apply

Cost Saving Tips

If a user is finished with the token, turn it in to reduce token utilization charges.

Service Level Metrics

Measure	Service Level Targets
Authentication Service	24 x 7
System Monitoring	24 x 7
Incident Response	24 x 7

Security Services

Security Governance



Service Description

DISC provides information and assurance that DISC services comply with mandatory security controls.

What is Included

- FISMA compliance for DISC-provided services
- Standards and guidelines, including minimum requirements, for providing adequate information security for all agency operations and assets
- Supervision and oversight of DISC activity to ensure enforcement and monitor usage of information system access controls
- Security controls review to enable more consistent, comparable, and repeatable assessments
- Annual internal and third party audits and assessments of security controls to determine overall control effectiveness
- Risk Management Framework for security categorization, security control selection and implementation, control assessment, information system authorization, and control monitoring
- More complete, reliable, and trustworthy information for organizational officials, to support security accreditation decisions, information sharing, and FISMA compliance

How We Charge

This critical value-added service is included with DISC Hosting Services.

Hosting services that include Security Governance

- Platform as a Service (PaaS)
- Infrastructure as a Service (IaaS)
- Managed Hosting services

Cost Saving Tips

Utilize a full complement of DISC services to obtain the most inheritable management controls.

Additional Information

A full matrix of inheritable management controls that identifies which controls are potentially inheritable as part of DISC’s other hosting services is available upon request.

Service Level Metrics

DISC Service	DISC Network	DISC Storage	Inheritable Controls
Managed Hosting	No	No	4
Managed Hosting	Yes	No	5
Managed Hosting	Yes	Yes	6
IaaS	Yes	Yes	7
PaaS	Yes	Yes	8

Measure	Service Level Targets
Inquiry Response	8 x 5
Audit Results	Annual
Control Inheritance Matrix	Upon Request*
Control Descriptions	Upon Request*

*Documentation provided is controlled and For Official Use Only (FOUO).

Business Services

Business Management



Service Description

Account Managers dramatically enhance the overall DISC customer experience by assisting with the translation of business application needs into technical hosting requirements and by providing an escalation point for customer services issues.

What is Included

- Ongoing customer relationship management
 - » Develop an understanding of customer business functions
 - » Identify customer business requirements
 - » Assist with the definition of technical requirements
 - » Represent DISC functional areas and the overall service delivery process
 - » Provide an escalation point to customer service delivery issues
 - » Ensure that key issues are escalated to DISC executive management
 - » Provide information about available DISC services and related costs
- Facilitate customer meetings regarding new projects with DISC functional areas
- Provide information regarding planned changes to DISC services for strategic planning purposes
- Collect planned capacity and technical requirements and ensures information is included in DISC strategic planning and capacity forecasts
- Provide pricing estimates for new projects and changes to existing services
 - » Establish and maintain formal customer service agreements
 - » Financial analysis to forecast usage and growth/retraction requirements
 - » Monitor actual billing and make changes to agreements as necessary
 - » Monitor the overall Service Management lifecycle from establishment through retirement

How We Charge

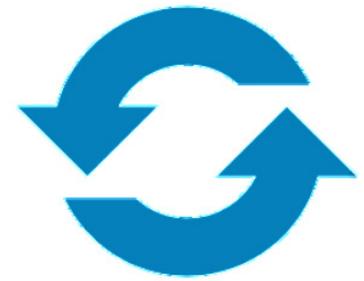
This key value-added service is included with other DISC services at no extra cost.

Cost Saving Tips

- Provide thorough business and technical requirements
- Utilize Planning and Integration Services to architect the hosting solution and identify all potential costs
- Utilize DISC Project Management Services to ensure timely project delivery
- Utilize Disaster Recovery Services to plan and coordinate DR testing
- Minimize changes during project delivery
- Avoid historical project cost estimation
- Keep Account Managers informed of planning changes and capacity requirements

Automation Services

Robotic Process Automation (RPA)



Service Description

Robotic Process Automation (RPA) is a platform designed to integrate with business systems and applications to automate work processes reducing efforts consumed by tedious, manual tasks. The implementation of RPA can allow an organization to configure software -- a "bot" -- to capture and interpret applications for processing a transaction, manipulating data, triggering responses, and communicating with other digital systems. RPA scenarios range from something as simple as generating an automatic response to an email to deploying thousands of bots, each programmed to automate specific processes within an application. Types of Bots:

- Attended Bots – Usually utilized when an end-to-end process cannot be fully automated, attended bots work alongside personnel to complete tasks
- Unattended Bots – Operate independent of personnel interaction – unattended bots are scheduled to complete frequent and consistent end-to-end processes

What is Included

- A multi-tenant, highly available (HA) orchestration bot environment for the management and scheduling of agency bots
- Dedicated agency attended/unattended bot licensing
- Pass-through bot development resources
- Centralized Service Management Office (SMO) of three full-time resources to leverage best-practices (code review/reuse and efficient resource utilization)

How We Charge

RPA Services are provided via a base subscription (\$1,800/month) model, which allows customers access to multi-tenant orchestration environment. Bot licensing and bot development resources can be procured based on agency unique requirements. Agencies will work with DISC resources to stand up the PaaS Server VMs to host their own bot servers. DISC will configure networks to communicate with the RPA management plan.

Price Drivers

- RPA Service (subscription \$1,800/month)
- Bot Development (\$/Hour) varies by resource
- Bot license (unattended/attended)
- PaaS Server Hosting fees (\$/VM/month + storage)
- Additional charges may apply for optional Professional Services
- Multiple processes can be automated utilizing the same bot.
- Additional bots are only required if processes must be run in concurrence

Cost Saving Tips

- The more you automate the more you save. Server (HW) and license (SW) costs only increase if concurrent processes are run
- Quantify the labor hours saved vs the cost of the automation to determine payback
- Leverage existing code bases for similar process automations to save development time
- Leverage DISC's centralized development resources as opposed to requisitioning independent federated resources

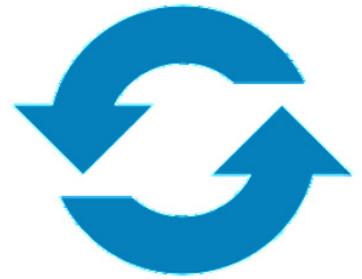
Service Level Metrics

Measure	Service Level Targets
System Monitoring	24 x 7
Incident Response	24 x 7
System Availability	≥ 99.9%*

*DISC reserves the option to schedule routine infrastructure maintenance activities on Sundays from 1800 to 2400 hours Central Time.

Automation Services

Enterprise Application Integration (EAI)



Service Description

Enterprise Application Integration (EAI) is a platform designed to help businesses connect data, applications, and devices across computing environments. EAI offers an on-premise option and a cloud computing environment option. DISC provides this service utilizing the most advanced FedRAMP security options as well as a fully managed customer experience. Organizations rely on EAI to provide a seamless integration between their computing environments that helps impact the bottom line. Secure containers isolate applications from one another and from the underlying infrastructure. Docker provides the strongest default isolation to limit app issues to a single container instead of the entire machine.

What is Included

Enterprise Application Integration (EAI) offers an entire support team dedicated to providing a world-class customer experience. The EAI Team can support discussions on sizing options for integration requirements, assist in defining project requirements, and provide full management options. EAI also offers:

- Inheritable Platform ATO (Gov Cloud & On-Prem)
- Custom Integration URLs based on EAI.USDA.Gov
- Customizable Dashboard
- AnyPoint Management Plane
- AnyPoint Design Center
- API Performance Metrics
- API Manager
- Secure API Gateway
- Built-in Support for Maven & Jenkins integration tools
- USDA eAuth Open ID Connect (OIDC) Integration for Access Control API Client Management may include OIDC as available through eAuth
- Three Environments Development, Pre-production, Post-production, Dev-Test

Service Level Metrics

Measure	Service Level Targets
System Monitoring	24 x 7
Incident Response	24 x 7
System Availability	≥ 99.9%*

*DISC reserves the option to schedule routine infrastructure maintenance activities on Sundays between 1800 to 2400 hours Central Time.

How We Charge

DISC EAI customers are billed a monthly subscription for participation in EAI Service either On-premise or Gov Cloud.

Price Drivers

- Monthly subscription
- Development resources
- AnyPoint Base Subscription
- API Manager Subscription
- Operational Support Requirements
- Number of On-premise Environments

Additional Information

- Secure: Compliance for ISO 27001, SOC 2, PCI DSS, and GDPR (out of the box), and secure automatically with prebuilt and custom policies to meet USDA and Agency requirements. Protect sensitive data through format-preserving tokenization using policies, and establish secure perimeters around data, APIs, microservices, and integrations
- The AnyPoint Management Plane is protected by USDA's eAuthentication Service leveraging Open ID Connect (OIDC) allowing customers to leverage AnyPoint Management Plane API's to meet CI/CD requirements. Providing all the tools and access needed to enable customer application integration efforts
- AnyPoint Government Cloud based on AWS GovCloud and On-premise based on DISC Mid-Range Platform as a Service. EAI included full API Life-cycle management capabilities through AnyPoint Management Plane, API Manager, API Security Policy Engine, API Monitoring, and Private USDA AnyPoint Exchange, and MuleSoft's extensive Public Exchange for reusable assets within the EAI Service AnyPoint Platform