

# Distributed Hosting

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Release: 1.5 Date: 3/29/12

Owner: Production Engineering group

## Service Description

AITS provides centrally managed hosting solutions for customers' applications. Through the use of advanced technology, AITS provides multiple platforms geared to meet customers' computing needs. This service provides customers with a reliable, monitored, secure, and managed solution with the flexibility and performance of distributed computing solutions.

*For further information or to request this service, please contact the AITS Service Desk at:*

[servicedeskait@uillinois.edu](mailto:servicedeskait@uillinois.edu)

217-333-3102 (Urbana)

312-996-4806 (Chicago)

The distributed hosting service design includes multiple, redundant, and diverse high-speed Internet connections, security systems and procedures, cooling and environmental systems, and redundant power at our production datacenter. Business continuity is established by maintaining off-site data storage and recovery in a fully staffed and environmentally sound facility. Secured customer access is available 24 x 7.

Physical site security at both of our AITS data centers includes: coded key cards and zoned access to different areas of the building; surveillance cameras located throughout the facility and the grounds; and, a database of individuals authorized to access the facility. All visitors must be escorted.

AITS offers distributed computing solutions on multiple platforms, such as Solaris, Windows, and Linux. AITS provides installation, upgrades and monitoring support for the infrastructure, hardware and software.

AITS offers a wide variety of storage capabilities including tape, virtual tape, and multiple tiers of disk storage for distributed systems environments including fiber channel disk arrays that support both fiber disk as well as SATA disks and various levels of RAID protection on those storage devices. AITS distributed offerings also come with standard reporting capabilities that provide utilization, performance and trending information.

The following services are included:

### Tape Backup / Recovery

- Standard tape rotation / retention schedule
- Daily incremental backups
- Weekly full backups

- Weekly full backup for specific servers– retained off-site for 1-2 weeks depending on the service (1 copy)
- Standard backups run weekdays between 6:00 p.m. to 7:00 a.m.

#### **Hardware support and maintenance**

- AITS engineers install and set up all server hardware in accordance with industry best practices. Also, in conjunction with the hardware OS vendors, AITS engineers will apply firmware patches to systems in accordance with best practices.
- AITS will also repair or replace any hardware component shown to be detrimental to the continued operation of a system

#### **Operating system (OS) support and maintenance**

- AITS engineers, in conjunction with the OS Vendors, will apply patches to operating systems in accordance with best practices.

**Capacity, performance and system monitoring:** AITS monitors several key items for all servers. Standard monitoring of the servers will include:

- “What’s Up” monitor is used to watch for servers/services that aren’t functioning properly as well as the following resources on the server:
  - File System usage
  - Memory
  - CPU
  - Processes (Monitored as requested)
  - Log files (Monitored as requested)
  - SWAP space
  - Health at a Glance
  - Service Reporting (httpd, Oracle listener, file sharing)
  - Server network interface
- Orca
  - Keeps real time and historical data for 41 different Solaris metrics used for troubleshooting and capacity management
- Unimon (SNMP monitor)
  - File System threshold notification
  - Also used to track resources and monitor alert threshold violations on other system resources (Monitored as requested)
- SAR data on Solaris/Linux (system accounting records)
- Sitescope
  - Response Time monitor for Banner applications
- Syslog collection, storage and analysis

Notifications from these monitors are sent via e-mail and also to pagers or via text to cell phones.

## How You Can Help

- Consolidate servers where applicable
- Utilize database services
- Take advantage of tiered storage
- Determine amount of storage needed to minimize costs
- Take advantage of virtual tape and virtual server environments
- Review tape data retention policies
- Utilize shared web services
- Take advantage of capacity and performance planning for efficiencies and performance improvement

## Hours of Availability

This service is available to customers 24 x 7, excluding planned outages, maintenance windows and unavoidable events. Maintenance windows are used only when needed for planned changes that have gone through the AITS Change Control Process. In addition to the standard AITS maintenance windows, site-specific and service-specific changes may be coordinated with customers at non-standard times.

Standard maintenance windows are defined as:

- 6:00 a.m. to 12:00 p.m. each Sunday when application usage is at its lowest
- After 5:00 p.m. every Tuesday and Thursday, unless business needs to make a change during business hours
- The second Wednesday of the month from 5:00 p.m. to 8:00 p.m. for patching development and test Microsoft servers
- 6:00 a.m. to 6:00 p.m. three Sundays a year for routine Windows and Linux maintenance

## Customer Responsibilities

- Provide a list of approved customer contacts who can request changes to the application environment to the AITS Service Desk. This list should include contacts for both standard business hours and, if applicable, 24 X 7 support.
- Move to shared program products, eliminating redundant products
- Eliminate usage of tools and products older than N-1
- Determine amount of storage needed to minimize costs
- Plan ahead to ensure that required storage is available as needed

## How Do We Charge?

Service Level Agreements and prices will be worked out with each customer depending on the desired level of support. The cost of Distributed Hosting platforms (Windows, UNIX, and Linux) is comprised of the following:

Initial server purchase - Purchasing funds will need to be identified (ITPC, Enterprise, Departmental)

- Business requirements analysis, configurations and cost proposal analysis with the customer
- Security analysis
- Setup of all components
- Installation of the server, OS and monitoring tools

Yearly charges for servers include:

- FTE support costs per server
- Software maintenance

Server hardware refresh (typically 5 year cycle)

- Review of business requirements
- Adjustments to hardware based on new requirements
- Development of cost proposal/revision of monthly charges

Life cycle hardware upgrades required by a customer (additional processors, memory, etc.)

- Review of business requirements
- Adjustments to hardware based on new requirements

Administrative Information Technology Services – Distributed Hosting Service Catalog

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*\*\*Our Service Catalog is based on material that was developed by The State of North Carolina's Operational Excellence Program's Service Catalog and adapted with their permission. \*\**

DOCUMENT OWNER/APPROVAL

Service Catalog Owner: Marty McLain

Concurrence: \_\_\_\_\_  
Service Catalog Owner Date

\_\_\_\_\_  
Computer Operations Engineering Date

Approval: \_\_\_\_\_  
Associate Vice President - AITS Date

REVISION CONTROL

Document title	Distributed Hosting
Author	Marty McLain
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Date	By	Action	Pages
12-9-09	Rita Bates	Acknowledging North Carolina's work	2
1-4-10	Rita Bates	Removing COE from front cover and revising OLA's to SLA's	1-4
1-7-10	Rita Bates	Revise layout	1-4

REVIEW/APPROVAL HISTORY

This service catalog shall be subject to a review on an annual basis.

Date	By	Action	Pages
3-29-12	Marty McLain	Change the Release Date to 1.5 and the date to 3/29/12	1
6-3-13	Marty McLain	No changes	