

**Enterprise Technology Services and Support
Hosted Systems Services
Service Level Agreement – FY2008**

Application Name: **Application**

Agreement Start Date: **07/01/07**

Customer Name: **Customer**

Agreement Renewal Date: **06/30/08**

SLA Number: **HSSxxxFY08A**

Service Description:

This document describes the technical support and services provided for XXXX (the customer) for the operation of their XXXXX server.

Document Contents:

Pages 1-2 contain customer-specific information, unique customer requirements, charges, and *Helpdesk/Emergency contact information (Page 2)*.

Pages 3-6 of this Service Level Agreement describe the responsibilities of both the Customer and ETSS with respect to computing hardware and software, application support and the computing services and support provided.

Special Requirements:

N/A

Customer Charges:

Server Support Charges

Server 1 -----	\$	X.XX
Server 2 -----	\$	X.XX
Server 3 -----	\$	X.XX

Software & Media Costs

-----	\$	X.XX
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Total Charge for Fiscal Year 2007 - 2008 -----	\$	X.XX
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Parties to Agreement

Authorized Signature / Date

(1) The Customer

(2) Enterprise Technology Support & Services (ETSS)

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ETSS Support:

ETSS support is available during regular business hours Monday - Friday, 7:00AM - 6:00 PM except on University holidays. Calls for assistance should be placed to the ETSS Helpdesk at: **513-1178** or **515-3110**. Provide the name of your application and state that you are a customer of Hosted Systems Services. After describing your problem, the Helpdesk will contact the appropriate group to assist you. After regular business hours or during weekends or holidays, customers should call the ETSS Helpdesk and leave a message with the same information provided above, and the appropriate contact information for follow up. E-mail can always be sent to **ETSS_HSS@ncsu.edu** for system issues.

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I. Environment

A. Computing Equipment Used / Required (Includes Physical or Virtual servers):

Supplied by the Customer

1. Server hardware (virtual server customers skip to Item 3) appropriate for running the customer's application software, plus a hardware maintenance contract providing the level of response required for the customer's business needs. Server specifications should be supplied by the application vendor, and quotes can be provided by ETSS. Resource requirements to be considered include:
 - a. Disk storage with enough capacity to run fault-tolerant RAID configurations for the operating system, application and data, with sufficient room for growth.
 - b. Sufficient memory for the application and number of users.
 - c. Processor(s) capable of handling the application requirements.
 - d. Network interface cards (NICs) sufficient for required network bandwidth (traffic).
2. Additional server(s) as needed for testing and development, and for organizational resilience (OR) or disaster recovery (DR) in accordance with the customer's business continuity plan (BCP). *Customers who have not provided for a standby server for organizational resilience or disaster recovery may experience a longer outage in the event of a major service interruption.*
3. For customer applications running entirely on virtual servers, items 1 and 2 above do not apply. Instead, the customer agrees to pay an annual service and support charge which includes the hardware cost of the virtual environment selected. The charge itself is based upon the resources required to support the customer's application combined with the service and support charges. In most cases, OR and DR server requirements are satisfied by the virtual server configuration. (Operating System and application licenses are still required, as specified in section I-B below).

Supplied by Enterprise Technology Services and Support

4. Power safe environment that includes an uninterruptible power supply (UPS) and in-line automated backup generator for power outages.
5. Standard network connectivity appropriate for customer's server traffic.
6. Scheduled system backups of the customer's system using tapes or disks, with the ability to restore data from the most recent backup.
7. Automatic temperature and climate controls to detect unsafe conditions and to reduce equipment failure.
8. Network security tools, anti-virus server, and firewall system to protect customer's server.
9. Local and remote system administration capability to provide support for customer's server during and after normal operational hours.
10. Secure data centers at two locations have been established to provide organizational resilience for systems requiring high availability, disaster recovery or fail-over solutions. The data centers are located in the Hillsborough Building, and the Administrative Services III building.
11. For customers running virtual servers, organizational resilience and disaster recovery is provided due to the co-location of Virtual Server hardware and data storage in each data center. After a service interruption, applications running on virtual servers will be made available from the unaffected data center within a short time. However, response times may be slower than normal until full service is restored.

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B. Software/Configuration Used/Required (Applies to both Physical and Virtual servers)

Supplied/Purchased by Customer

1. Appropriate operating system and software licenses plus required annual maintenance for all servers running customer's application (production, development, QA, DR for both physical and virtual servers).
2. Database software (e.g. Microsoft SQL Server, etc.) if needed by customer's application, plus annual maintenance if required.
3. Customer's application software as supplied by vendor, plus annual maintenance.
4. Backup agents for backup system, plus annual maintenance.
5. Monitoring and security agents as required for customer's servers, plus annual maintenance.

Supplied/Purchased by ETSS

6. Backup software and operating system for server(s) supplying tape/disk backup of customer server(s), plus annual maintenance.
7. Network security and firewall management software, plus annual maintenance.
8. Anti-virus software, plus annual software maintenance.

II. Computing Services and Support Provided by Parties

Supplied by Customer

1. Communication and troubleshooting with the vendor concerning program errors discovered in the customer's application system.
2. Determining when the application should be upgraded to a new version, and when appropriate, coordinating and managing the upgrade of the system in concert with ETSS. Scheduling the upgrades at a mutually agreeable time with appropriate notice to all parties.
3. Due to the Customer's role as Data Steward for their application, their data retention requirements must be defined and communicated to ETSS. Retention periods longer than those covered by standard backup procedures may require additional charges.
4. Coordination with ETSS and customer's vendor to purchase organizational resilience/disaster recovery hardware and software if a standby server is deemed a business requirement. (Those applications running in a virtual server environment already have a "standby server" provided, due to the way the virtual environment is configured).
5. Communication to ETSS of the customer's business requirements for organizational resiliency and disaster recovery (i.e. acceptable times for system recovery, maximum amount of allowed downtime, and list of contacts for notifications), for their applications running on hosted systems servers.
6. Assurance that mutual agreements are made with customer's application vendor and ETSS for technical support during a service interruption in accordance with the ORP and/or BCP.

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Supplied by ETSS

7. Technical assistance provided to the customer during initial product evaluation.
8. System implementation services and support to customer's system administrator.
9. Assists customer's administrator to assess system requirements for upgrades.
10. Schedules and provides backup of customer's server(s) operating system, customer application, database software, and databases if present. The standard schedule for server backups is a full system backup on Friday evenings, with cumulative (differential) backups on Monday through Thursday evenings. The backup media is kept for 30 days before being recycled.
11. Performs routine maintenance for server hardware, operating system, and standard databases (i.e. service packs, patches, fixes, and upgrades), at a mutually agreeable time.
12. Monitors the performance of the servers and discusses any potential system problems with customer's administrators and vendors.
13. Uses anti-virus software (if installed) and central console to monitor the customer's system for vulnerabilities and viruses.
14. Ensures the customer's system is available to users from their offices on campus.
15. After hours and weekend technical support (as noted elsewhere in this document).

Note: Items 16 thru 22 are optional services, which are available if an organizational resiliency plan or business continuity plan requires them. *Customers who have not provided for a standby server for organizational resilience or disaster recovery may experience a longer outage in the event of a major service interruption.*

16. Works with customer's administrator and vendor to set up a standby system for organizational resilience or disaster recovery.
17. Provides configuration and support across multiple data centers to configure fault tolerance, data replication, and standby servers for fail-over during a major service interruption, per customer request.
18. Provides technical assistance to the customer to align the ETSS ORP and BCP with the Customer's ORP and/or BCP within the technical and financial limits of each organization.
19. Performs disaster preparedness testing annually to evaluate the disaster recovery system, per customer request.
20. Provides network security analysis, vulnerability scans, and protects data using the firewall management system.
21. Coordinates with ComTech to ensure the customer's system and software are distributed and accessible via the campus network.
22. Provides annual reports to customer's administrators for system upgrades, notifications, updates, and changes.

Note: Items 23 thru 29 are services provided if Payment Card Industry (PCI) compliance is deemed necessary.

23. Enhanced protection of data and systems according to the PCI Data Security Standard (DSS).
24. Enhanced network security, including firewalling and network intrusion detection.
25. External and internal vulnerability management: ongoing internal vulnerability assessments and vulnerability assessments of Internet-facing servers by internal or PCI-approved third-party vendors and mitigation coordination.
26. Ongoing monitoring and analysis of security logs.
27. First-line contact for internal auditors, state auditors, and PCI enforcement agencies responsible for conducting post-breach forensic analysis and auditing.
28. Ongoing monitoring and implementation of new PCI DSS mandates.
29. Compliance reporting to the University CFO.

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III. Summary of Services and Support Provided to ETSS Customers

Core Technical Support

- Backup and Recovery of Servers
- Server Anti-Virus Support
- Network Security
- Firmware and Bios Upgrades
- Operating System Service Packs and Patches
- Scheduling of Hardware Repairs with Customer's Vendor
- Reboots, Emergency Repair Disk Maintenance
- System Monitoring
- Network Coordination Activities
- UPS Power System
- Network Connectivity
- Physical Security of Server Environment (Data Centers)
- Troubleshooting
- Technical Configuration Consulting
- VMware Failover Server in Alternate Data Center (if applicable)

Optional Database /Application Support (as necessary)

- Database Administration Support
- Database Service Packs and Other Patches
- Database Security Support
- Interfacing with 3rd Party Vendors for Application Support
- Troubleshooting Assistance (with Vendor and/or Customer Participation)

IV. Software and Media Charges to Customers

- Backup Software Agent Licenses and Media
- Monitoring Software Agents
- SSL Certificates (if required)
- Citrix User Licenses and Application Installation (if utilized)

V. Support Items Not Included Under This Agreement

- Major Upgrades or Changes to the Customer's Application or Database.
- Conversion or Migration to New Hardware or Virtual Environment.
- Data Retention Beyond Standard ETSS Backup Practices.

VI. Server Maintenance and Availability

Servers may not be available due to system or network maintenance during ETSS and/or ComTech Maintenance times (usually scheduled between 1:00 am to 1:00 pm Sundays). Citrix Maintenance is currently performed on Friday evenings. All server maintenance will be coordinated with the customer.

VII. Re-Negotiation of Service Level Agreement (SLA)

This SLA is subject to re-negotiation once a year or upon mutual agreement by both parties.

Revised: April, 2007 - MAS