

# Virtual Server

## Service Level Agreement

### Agreement

This agreement is to define Virtual Server services provided to a Customer. Service definitions include hours, availability, support or duration and restrictions on support. This Service Agreement (hereafter Agreement) is effective between Information Services (IS) (hereafter referred to as Service Provider) and departments that have purchased this service (hereafter referred to as Customer) and establishes a commitment for providing virtual machines (hereafter Service) as detailed herein. This document clarifies both parties' responsibilities and procedures to ensure Customer needs are met in a timely manner.

### Services Provided

The following service(s) are provided to the Customer:

- The Customer is provided a virtual server (VM) in a VMware ESX Server environment.
  - A. Virtual Server(VM) service consists of;
    - One VCPU
    - up to 8GB ram, additional charges for every 2GB increment above base ram.
    - Operating system license ( Windows and Redhat Linux)
  - B. VMware Server environment consists of;
    - ESX Server farm
      - VM's are hosted on a virtual server farm, providing high availability. If a physical server fails, we use Vmotion technology to seamlessly move the virtual machine to another physical server *without service interruption*.
      - Dual network switches with automatic failover for SAN connectivity
    - Accessibility via remote console including system power control
    - Snapshots
      - Service Provider will take snapshots which will be available for rollback. "Snapshot" service for virtual machines provides a copy of the operating system (OS) running on your virtual machine. The snapshot takes place while the virtual machine is running and does not require any type of reboot. A snapshot is invaluable in restoring the disk to a fully functional state to correct problems from a bad install or system error.
    - SAN data replication
      - Service Provider will replicate data on SAN at WSEC data center to a SAN at East Campus data center daily at 12:00 a.m. with 1 past replications available for roll back.

- Data Center hosted
  - Dual power feeds to servers and SAN
  - UPS for long term power outages.
  - Climate controlled environment
  - Protected physical access 24/7
  - Basic monitoring of server functionality (e.g., server heartbeat)
  
- The Service Provider will monitor the VM for the Customer and provide notifications on resource utilization.
  
- Service Availability
  - The Service Provider will make the service available 24 hours per day every day of the year.
  - Scheduled Maintenance; expecting necessary planned interruptions for service, upgrades, and reconfiguration. The Service Provider will minimize the number and duration of these interruptions. The Service Provider will attempt to coordinate with all affected customers to schedule the interruptions for times least disruptive to the customers. In general, scheduled maintenance should not affect customers with virtual servers having the ability to Vmotion.
  - *Planned Outages*; The Service Provider will communicate planned outages to customers by email or by phone 3 business days before the outage. If a planned outage becomes necessary in cases of great urgency, the Service Provider will communicate soon after the outage necessity is determined.
  - *Unplanned Outages*; The Service Provider will communicate unplanned outages as time permits, to the first available Customer contact by phone or, if unavailable, email.

## Incident Management and Service Goals

- The Service Provider's staff will respond by email or telephone to the Customer's incident within:
  - 4 hours for urgent issues 24X7 (see criteria below)
  - One business day; normal priority issue, service request, or business inquiry (see criteria below).

<b>Impact</b>	<b>Criteria</b>	<b>Escalation and Procedure</b>
Urgent	A component, application or critical feature is down and, as a result, no work can be performed.	Contact IS Network Operation Center @ 472-5653.
Non-urgent	Abnormal or inconsistent system behavior or a system problem that does not prevent work on the system. Report during normal business hours.	Contact via email at: govirtual@unl.edu
Service Request	Routine request for maintenance.	Contact via email at: govirtual@unl.edu
Business Inquiry	A question regarding a change to (new, increased/decreased, disconnected) the contracted service.	Contact via email at: govirtual@unl.edu

## Service Provider will

- Maintain appropriately trained staff
- Communicate in writing issues regarding service levels, change management, etc.
- Meet response times
- Maintain server hardware within standard life-cycle
- Maintain ESX software according to vendor recommendation

## Customer Responsibilities

- Backups; Customers are responsible for backup and recovery of any data on a virtual machine. The Service Provider is not responsible for a Customer's failure to implement a working backup and recovery plan.
- Administration of the operating system and applications; The Customer is responsible for maintaining current patch levels on the operating system and on applications
- Responsible for upgrading the VM tools version in concert with Service Provider when an ESX upgrade or patch recommends updating.
- Provide accurate contact information to Service Provider and update that information as necessary.
- Contact the service provider to decommission a VM. The time and date for decommission will be arranged at that time.
- Comply with UNL server security requirements. Ensuring data integrity.

The Service Provider cannot guarantee timeframes for the following situations:

- Issues referred to a third party service provider
- Systems in a disaster recovery state
- Issues that involve troubleshooting the operating system, applications, or content on the virtual server

## Cost To the Customer

### Pricing

Windows Virtual Server with 40GB disk space	\$650.00 annually	\$54.17 monthly
Redhat Linux Virtual Server with 20GB disk space	\$650.00 annually	\$54.17 monthly
Additional Disk Space with snapshots	\$3.00 GB annually	\$0.25 GB monthly
Cost for additional RAM (max 8) in 2gb increments	\$50 per GB annually	\$4.16 GB monthly
Each additional processor	\$100 per proc annually	\$8.34 GB monthly

\*\* Billing for services will occur on a monthly basis, computed annual costs/12

\*\* price is subject to change on an annual basis; based on service center review.

This Service Level Agreement between [Customer] and the Service Provider establishes a commitment for a Virtual Server as detailed in this Agreement.

<b>Virtual Server to be hosted:</b>		
<b>Operating System:</b>		
<b>Additional Disk:</b>		
<b>Annual Cost for Server:</b>	<b>Monthly Billing:</b>	
<b>Annual Cost for additional disk:</b>	<b>Monthly Billing:</b>	
<b>Annual cost for additional RAM</b>	<b>Monthly Billing:</b>	
<b>Annual cost for additional PROC</b>	<b>Monthly Billing:</b>	

<b>Department:</b>	
<b>Department Billing Contact:</b>	
<b>Billing Contact email:</b>	

<b>Cost Object to be billed:</b>	
<b>Authorized Cost Object purchase approver:</b>	
<b>Approver email address:</b>	

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Approver signature

This Agreement's primary goal is to obtain mutual agreement on procedures and requirements, and ensure that service levels are in place for the Service Provider(s) to provide consistent service delivery and support to the Customer. Agreement objectives are to:

- Clarify service ownership, accountability, roles and/or responsibilities.
- Present a clear, concise and measurable description of services offered to the Customer.
- Match perceptions of expected service offerings with actual service support and delivery.

### Service Level Reviews

- This agreement will be reviewed annually by the Service Provider and Customer

Mail signed form to: Dave Spanel  
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 Attn: GoVirtual