CHPC Virtual Server [CHPC-VM]
Faculty Resource User Agreement

Effective Date
November 2018

Purpose/Objective

This document outlines the general terms, support provided and acceptable usage of any Virtual Machine (VM) hosted by the Center for High Performance Computing (CHPC) at the University of Utah. Note that CHPC runs two VM environments – one for projects that involve data that is regulated and/or sensitive such as Protected Health Information (PHI) and require a HIPAA compliant environment ("Protected VM Farm") and a second for other projects (the "Standard VM Farm").

The purpose of this document is to establish:

1. A clear representation of the capabilities of the service.
2. The acceptable use of the VM.
3. A shared set of expectations regarding the provisioning, operation, and support of the VM.
4. A framework for bidirectional communication regarding operational issues and overall satisfaction with the service.

This document is to be used in conjunction with a Faculty Research User Agreement (FRUA) specific to each individual VM request.

Service Cost

CHPC has a published cost for VMs in the Protected VM farm and will be establishing a cost for VMs in the Standard VM Farm in early 2018. Prices, which are based on the cost of the hardware of the VM farm, are published on the CHPC website at https://www.chpc.utah.edu/resources/virtualmachines.php.

Note that a VM that requires CHPC staff time for customization beyond the base VM installation will incur additional charges at a rate of $75/hour.

Service Description

Virtual Machines allow for maximized use of infrastructure and are an attractive alternative to managing physical servers.

CHPC provides:

- Hardware infrastructure for your server including processing, RAM and disk storage.
    - A typical VM is 2 cores, 4GB RAM, and 500GB disk storage.
    - Larger amounts should be justified in the VM request.
- OS install and licensing.
    - We support CentOS and MS Windows Server versions.
    - We only support operating systems as long as the vendors are keeping them patched. Once an OS has reached the end of life, either the VM is upgraded to a new version, or the VM will be retired.
- Additional software installation as per agreement with VM owner.

- Secure physical infrastructure located at the campus data center.
- Redundant network connectivity in the VM farm itself (not for individual VM images).
- Redundant power for the VM farm hardware.
- Static IP address(es).
- Firewall protection.
- Administration of accounts with shell access.
- Dynamic server fail-over for the hypervisors that host VMs.
- Backups (weekly full with a two week retention cycle) of entire VM.
- The life of a VM depends upon many factors, but will be reviewed between 1-5 years.
    - Each VM's life may be extended beyond 5 years as determined by negotiation between CHPC and the PI.
    - If a VM is not being used, CHPC will contact the PI to discuss possible decommissioning.

Acceptable Use of VM

The CHPC VM farms are available for research purposes, typically when the application does not fit well within the other HPC resources provided by CHPC or standard VM services provided by other units of University Information Technology.

All VM requests must come from a PI/Faculty advisor for the research project. The PI and all users with shell access must have valid CHPC accounts. The PI will meet with CHPC personnel to discuss the project in order to determine if the project is a good fit for the CHPC VM farm. If it is found that the project is a good fit, the PI will provide the desired VM specifications and desired server name. CHPC will work with the PI to determine the appropriate security model: CHPC administered, shared administration, or self-administered – the latter choice in not available for the protected VM farm.

It is the customer's responsibility to protect private sensitive information in accordance with the University Of Utah Acceptable Use Policy as well as Policy 4-004 (University Information Technology Resource Security Policy). Under NO circumstances will any protected data be placed on a VM in the standard VM farm.

Customer/User Responsibilities

- Provide updated contact information.
- Provide necessary network information.
- Provide a list of software required for the VM.
- Prompt reporting of issues and/or changes to services via the CHPC issue tracking system.
- Provide account maintenance for any application level user accounts.
- Respond in a timely manner to all security concerns.
- Negotiate further backup requirements (backups of data within VM).
- For self-administered VMs (not allowed in the Protected VM Farm), customers are responsible for all system administration of their Virtual Servers and ensuring all available updates are installed.
- For VMs in the protected farm, all users will complete the University's HIPAA training, and keep this training up to date. Users will also agree to any other compliance requirements for the pertinent data.
- The PI is expected to acknowledge CHPC in their publications, presentations, technical reports and dissertations. The PI is expected to provide (annually) a list of their current & pending or other record of supported project(s). For each project please include the name of the project, the grant or contract number, the amount of the award, and the beginning and ending dates of the award.

CHPC responsibilities

- Provide key contacts to coordinate communication, manage incidents and problem management processes.
- Protect private sensitive information in accordance with the University Of Utah Acceptable Use Policy as well as Policy 4-004 (University Information Technology Resource Security Policy).
- Adhere to maintenance windows for infrastructure changes (have a link to published maintenance windows).
- Maintain data center physical and virtual security.
- Provide appropriate notification to customer for all scheduled maintenance and unscheduled down times or service degradation. Typical planned downtimes are twice a year during Fall semester break and Spring semester break.
- Provide an estimated timeline for the provisioning of the VM. This timeline is dependent on the software requested for the VM.

CHPC Hours of Operation and contact information

E-mail (preferred): helpdesk@chpc.utah.edu

Phone: 801-581-6440 (during normal University Working Hours)

Normal CHPC business hours are Monday-Friday 8AM-5PM, except on University holidays and University closed days. CHPC personnel strive to acknowledge the receipt of messages submitted to the issue tracking system within three hours during these business hours.