

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

Effective Date  
April 2022

**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) which requires a HIPAA compliant environment (the “Protected VM Farm”) and a second for other projects (the “Standard VM Farm”).

Additional details of the CHPC VM policies is provided at

<https://www.chpc.utah.edu/documentation/policies/2.6VirtualMachinePolicies.php>.

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. The 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 VM including processing, RAM and disk storage. CHPC uses a block sizing system, as outlined at <https://www.chpc.utah.edu/resources/virtualmachines.php>.
  - VMs can purchase additional storage, as available, as outlined on the above link.
  - VMs can mount CHPC storage external to the VM farm (e.g., CHPC group spaces and CHPC PE project spaces).
- OS install and licensing.

- We support linux 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 of the VM, as described in detail in backup section of the VM CHPC Policy manual, section 2.6, <https://www.chpc.utah.edu/documentation/policies/2.6VirtualMachinePolicies.php>.
- The life of a VM will be specified in the FRUA for the specific VM.
  - Typically, agreements are written for 7 years, based on the current VM pricing, however the VM life can be specified to be shorter and the cost will be prorated to reflect the shorter life.
  - At the expiration of a FRUA for a given VM, CHPC will reach out to the VM owner to see if the VM is still needed. If it is, a new agreement will be established at the current VM pricing.

### **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 is 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's [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, VMs are associated with a PE project; for each PE project the PE Needs Assessment process must be completed. IN addition, all users of the PE will complete the CHPC version of the University's HIPAA training on an annual basis. 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's [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](mailto: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.