

# FHS IT Services: Core Infrastructure Services

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# **EXECUTIVE SUMMARY**

The Faculty of Health Sciences has assessed its IT service needs and developed its service offerings and delivery models to ensure effectiveness, avoid duplication and gaps, and take advantage of synergies with IT groups across McMaster. Based on this assessment, models for FHS IT core service offerings were developed and implemented.

All FHS IT services, core or otherwise, require a robust, reliable, and scalable core infrastructure to develop, host, secure, and deliver the technologies that support them. This core infrastructure represents the hardware and services that underlie all other technologies. It is fundamental to nearly every service offering, data security, and data storage within the FHS.

Additionally, these services are directly responsible for providing connectivity to all users in the FHS. All physical network connections and Wi-Fi services are managed and maintained as part of this infrastructure and are necessary for users to access the public Internet, the campus network, and associated resources.

This document details Core Infrastructure Services (CIS) provided to the FHS via the Computer Services Unit (CSU). These services are provided by CSU as a core service with no cost to the end user in most cases. It outlines operational procedures, accountabilities, support models, and other key details of the service.

# **EXPECTED OUTCOMES & BENEFITS**

- To manage and maintain the mission critical FHS data centres and distributed infrastructure that underlie all FHS connectivity & services.
- To maintain reliable connectivity to the McMaster network & public Internet to ensure business continuity across the FHS.
- To host and provide a robust network infrastructure to support communication, collaboration, and learning technologies.
- To manage and maintain a variety of Wi-Fi networks for FHS users, our partners, learners, and the public.
- To host the FHS web servers, both public and private, to support FHS educational, administrative and research initiatives.
- To provide robust, redundant data storage and recovery for FHS technologies and users.
- To maintain network & data security for FHS technologies and users in accordance with McMaster policies.



# SERVICE DETAILS

#### What are these services?

Core infrastructure services are responsible for managing & maintaining the underlying network and infrastructure that provides connectivity to the McMaster network, the public Internet, hosting, communications & learning technologies, and computing services. Some examples of these services include:

- Infrastructure maintenance (repairs, upgrades, expansion)
- Network maintenance (configuration)
- Server maintenance (provisioning, updating)
- Security services
- Data security & backup services
- Wi-Fi services (repairs, upgrades, expansion)
- Datacentre management (environmental control, security, access)

#### What are the key locations associated with these services?

The FHS datacentres are central to the service and located in the McMaster University Medical Centre (MUMC), rooms 2D11 and 4H16. Other smaller network locations are also included in the service throughout MUMC and the Michael DeGroote Centre for Learning (MDCL). Network equipment and devices may be distributed throughout several other sites, including but not limited to:

- McMaster University Medical Centre (MUMC)
- David Braley Health Sciences Centre
- Niagara Regional Campus
- Waterloo Regional Campus

Some services may be located entirely within the cloud and not have any physical presence at McMaster, though they still require maintenance and services to operate.

Core Infrastructure services will be administered and managed within the FHS CSU within the CSU Infrastructure Management service stream.

#### Who owns the services & their products?

Most services will be owned by CSU, though ownership of hardware may vary depending on purpose and sponsor. Third-party partners may share in the ownership of some of the services depending on agreements. Any data stored on or moving across the network will be owned according to laws and policies, not necessarily by CSU.

## SERVICE SCOPE

#### Who are the intended users of the services?

All faculty and staff working within the FHS, at any site, who access digital resources, or the public Internet, via wired or Wi-Fi connections are within the scope of these services. As many public-facing technologies (e.g., McMaster websites, guest Wi-Fi, video conferencing, desktop telephones) are dependent on this infrastructure, many users external to McMaster and public users are also included



in the service offering.

#### What kind / how many services will the services support?

The mandate of CSU is to support core technologies within the FHS. Any project that affects the infrastructure or services that provide connectivity to our users is within these services' scope. In cases where eligibility is in question, the FHS-ITC will provide a recommendation regarding eligibility.

# SERVICE PROCESSES/PROCEDURES

#### How do users access these services?

Clients will approach CSU with general inquiries/needs. Requests are logged in the CSU tracking system and channelled to appropriate resources.

#### How are the services tracked?

CSU manages all assets through an inventory system. All work efforts are tracked in a separate tracking system. For specific requests, such as new building construction or renovation, CSU will track assets and work in close collaboration with the relevant Facility Services group, and different methods may be used to accommodate the overall project.

#### How are services terminated?

A decommission or continuation plan will be in place for hosted systems as part of the project scope. For network infrastructure, decommissioning (or, more often, updating) of equipment will be determined as part of the FHS overall network strategy, based on recommendations and initiatives between the CSU Infrastructure Management service stream, the FHS director of IT, and the FHS-ITC.

#### Who approves access to and continued use of these services?

The FHS-ITC, the FHS Director of IT, CSU management, and new construction project managers, may be part of a specific project's approvals process. CSU will determine the relevant parties during initial consultations.

### SERVICE AGREEMENTS & ACCOUNTABILITIES

#### What are the supported hours of the services?

Most of the services will be available during regular working hours. Due to the availability requirements of services being as close to 24x7x365 as possible, overtime or irregular hours may often be required. In these cases, CSU will follow standard procedures for approval or cost recovery of time.

#### How is proactive support provided?

Due to the mission-critical nature of the service, CSU has a variety of proactive standard operating procedures (SOPs) and support processes that include:

- Constant monitoring of equipment and systems
- Security updating for network devices
- Updating network infrastructure
- Daily visual inspections



- Environmental maintenance (Fire suppression systems, Air Conditioning)
- Physical security & access controls

#### How is reactive support provided?

Client requests will be submitted via the MyCSU portal as an online service request ticket. CSU will investigate incidents, assess impact, and provide service according to the associated service definition. Where possible, CSU's support will be scheduled in coordination with key stakeholders to minimize downtime of resources and maintain business continuity

#### How are client communications handled?

CSU will send broad communication of changes or events to clients and affected users via email. CSU will also share updates on the CSU website.

#### How are issues prioritized and responded to?

All CSU hosting services operate under CSU service level agreements (SLAs), with response times determined according to impact and severity. CSU will determine responses for other issues on a case-by-case basis based on severity and availability of relevant staff resources.

#### What are the client accountabilities associated with the services?

- Providing an accurate representation of needs, data types, and other requirements
- Requesting changes, customizations, service cancellations, etc.
- Reporting networking issues to CSU when detected
- Responding to project-relevant communications and approvals when requested
- Adhering to the McMaster IT policy framework and acceptable usage policy

#### What are the CSU accountabilities associated with the services?

- Ensuring underlying network connectivity and server infrastructure for campus networks and ensuring associated resources are available to all FHS users
- Maintaining detailed records and project documentation
- Providing clear and responsive communications

## SERVICE COSTS & PAYMENTS

#### Are there costs associated with the services

Costs to the client will vary depending on the request. In some cases, clients are responsible for costs (e.g., installing additional network lines by third-party contractors), although the products become part of the FHS infrastructure. In new construction projects, equipment will be funded as part of the construction project. In some cases, where the service is considered differentiated and not core, there are cost recovered by the client to fund the related infrastructure costs.

#### How are payments for the services to be made?

Payments to CSU for any cost recovery items must be from a McMaster account via a valid McMaster Chartfield. A valid client Chartfield will be required as part of the scope where any cost recovery elements are anticipated. Any special arrangements outside of this will be at the discretion of the FHS Director of IT.