

**Holyoke Community College**  
**IT Department**  
**Disaster Plan Overview**

Updated 10/1/2018

**Purpose:** The purpose of this document is to provide a general overview of the College's position in the event of a disaster that may cause interruption of IT services to the employees and students of the College. This is not a detailed instruction on "How to recover" but an overview to provide enough information that the reader understands the preparedness of the IT department in the event of a disaster.

**Definition:** A disaster in the IT Department is any interruption of service that could affect multiple users for more than a brief period of time. This could be loss of Internet connectivity, loss of database functionality, loss of access to data files or a number of other issues that may cause interruption.

**Systems in Place:** Holyoke Community College (HCC) currently has built in redundancy across all systems to prevent interruption of service. There are two datacenters that each house a copy of all the data and each contain their own individual copies of the backups. The backups are also stored externally at a cloud provider and that data is updated on a daily basis.

The primary datacenter is located three stories underground, locked behind two doors with limited access for almost all employees. The datacenter has battery backup and an emergency generator. The racks sit on a raised floor so in the event of a water issue, there is sufficient space under the floor to carry hundreds of gallons of water. Dual air conditioners on generator also provide sufficient cooling and humidification to keep all the equipment easily within all manufacturer specification.

The College also maintains a second datacenter with SAN and host redundancy so in the unlikely event of an issue all data is hosted on site and easily accessed. Both datacenters are monitored on video to prevent a physical attack that could occur.

Within the scope of the datacenter, all critical systems are running on current hardware with active service contracts with a four hour response time. The servers are running in a redundant VMware environment with failover tested on a regular basis. There are multiple hosts that provide redundancy and the College is prepared to run at full capacity on half the hosts with no impact on the users. The SAN technology is also redundant to itself and the other datacenter, the College would need to sustain multiple failures to impact data on the campus.

The network is redundant to the primary datacenter including redundant firewalls and switches. There is no single point of failure in the data center. The internet connection to the College comes from two different carriers each providing enough bandwidth to keep the College operating. On campus hosted solutions would require a manual DNS change but all outbound traffic would failover automatically. Due to cost factors there is only one fiber network and if that were damaged it would take some time to

bring all College operations back online, but we could operate and maintain data access through a manual process.

The network is segmented into multiple segments securing data from segment to segment. There are multiple closets across campus and offsite locations that all have redundant fiber to ensure no loss of connectivity. These closet switches are all power protected with UPS and dual power source. Dual firewalls are kept current to the hour with malware protection and offers proactive protection for the clients and network.

There is continuous monitoring of all key systems. This ensures quick response when a problem arises. 7x24 support is available for all key components. Alarm conditions are constantly monitored and key personnel are dispatched as required.

**Summary:** System availability is a priority for Holyoke Community College and systems are in place to keep processes running for the entire student population and employees.