Datacenter Security Summary

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Introduction

This summary outlines the current levels of security The National Charter School Institute employs to protect its datacenter. These measures are broken down in to 4 sections: physical security, electronic security, redundancy & reliability, and access.

Physical Security

All Client servers are hosted in a world class, **Tier 3 Datacenter** in Mid-Michigan. The datacenter features multiple layers of physical security including physical location and keycard access to the facility. The datacenter has the following features to ensure physical security:

- All critical equipment is N+1 with full redundancy across core network and security systems
- Dual-stage dry pipe sprinkler system with double interlock pre-action zoned valve control
- Biometric and electronic card door access controls with two-factor authentication
- Client restricted and controlled access to the datacenter
- Power equipment, network infrastructure and network operations equipment are segregated in locked rooms or cages with no customer access
- Exterior and Interior digital video surveillance with 24x7 recording activity

Compliance

The datacenter is independently audited on an ongoing basis with annual reporting by UHY LLP for the following standards:

- SOX Compliance (SAS 70, SSAE 16/SOC 1, SOC 2)
- HIPAA Compliance (OCR HIPAA Audit Protocol)
- PCI DSS Compliance
- Safe Harbor Compliance

Electronic Security

Our datacenter is protected by a carrier-grade, hardware-based firewall with Intrusion Detection, Intrusion Prevention, and Redundancy.

Backup Approach

Backup jobs are run each night. The backups are encrypted (at-rest and in-transit) and stored offsite at another tier 3 datacenter in Southeast Michigan more

than 50 miles away. Daily backups are retained for two weeks, weekly backups are retained for four weeks, and monthly backups are retained for three months.

Redundancy and Reliability

Facility

- Single story, concrete and steel stand-alone building with loading docks
- 24" raised floor area with 1,200 pounds per square foot capacity
- Spare parts and maintenance contracts in place for all critical infrastructure
- All critical equipment is N+1, or fully redundant
- Spare parts and maintenance contracts in place for all critical infrastructure

Network & Connectivity

- Multiple Internet Service Providers (ISPs) with diverse fiber feeds into the data center
- Redundant Gigabit network provides capacity on-demand
- 10GB capable connection for data replication to remote data centers
- 100% Redundancy - core routers, switches and paths to the Internet are fully redundant with automatic failover to multiple Internet Service Providers

Power Protection

- Dual utility power feeds into the data center from diverse routes
- Dual synchronized 1,300 KVA Detroit Diesel generators
- Pooled UPS system provides over 1,600 KVA of conditioned power to the data center floor
- High availability power with diverse paths to each server or rack

Electrical

- (2) 2,000 KVA, 8,000 volt utility feeds from separate substations via diverse paths
- (3) pooled APC MGE 555 KVA UPS
- (2) Detroit Diesel 1300 KVA synchronized generators, with 5,000 gallons of onsite fuel
- Redundant DC Power Plant with 240 wet cell lead-acid batteries
- All generators are tested and maintained on a regular weekly and monthly schedule

Environmental Control

- Over 400 tons of cooling capacity, using Datac and Liebert System Air Handlers and Liebert CRAC chillers with full N+1 redundancy
- Commercial HVAC/Heat Pumps control environment for office and common areas

Fire Suppression

The datacenter is monitored by multiple zone fire detectors. In the event of a fire, an alarm is tripped, and Inergen gas is expelled into the room extinguishing the fire.

Water/Flood Control

The datacenter has a raised floor to keep systems away from any potential water. Underneath the raised floor, drains and water sensors are placed throughout the facility to detect any water pooling.

Conclusion

Security is a determining factor in choosing a datacenter. The National Charter Schools Institute values the integrity of the datacenter and has invested heavily in and maintains the systems that protect data and computer systems.