

DATA CENTER SPECIFICATIONS

TR1: Toronto, Canada



Savvis Data Centers offer world-class facilities for Power Management, Heating/Ventilation/Air Conditioning (HVAC), Fire Suppression, Physical Security and Tier 1 Internet connectivity. Through these premier facilities, Savvis customers can select from a comprehensive suite of IT services including Colocation, Managed Hosting, Managed Security and Managed Network solutions; all designed to meet the operational requirements and financial objectives of our customers.

The Savvis TR1 Data Center, located near Toronto, Canada offers over 35,500 square feet of premier data center space designed to meet the stringent demands of Enterprise customers. Savvis offers a wide range of managed services in the TR1 Data Center from simple Colocation to fully Managed IT Infrastructure Hosting.

The Savvis TR1 Data Center is located 23 kilometers (14 miles) from Toronto Pearson International Airport (YYZ) and 40 kilometers (25 miles) from downtown Toronto, and can be reached via car along major highways. The facility is conveniently located near a number of hotel and restaurant options in and around the Mississauga and Toronto area. Hotels within a 5 mile radius of the Savvis TR1 Data Center include the Courtyard Marriott, Delta Meadowvale and Holiday Inn.

Real Estate Description

The property is a purpose built data center and a former banking and e-commerce hub for a major national financial institution.

Electrical Description

The data center is outfitted with diversely routed, dual inbound electrical feeds with diverse routing of 13,800 volts at 4,000 amps each from Enersource Hydro Mississauga. Double-ended main switchgear with independent, step-down transformers are provisioned at both ends of the switch board.

Two UPS' of 3000 kVA and 2250 kVA support an N+1 configuration with multiple independent delivery infrastructures to the power platform. A redundant UPS power distribution source (A & B configuration) provides every cabinet redundant power backup as a standard.

An N+1 backup is provided by 4 diesel generators for a total of 7.5 MW of stand-by power. Fuel storage allows for uninterrupted generator operation. Savvis has multiple supplier agreements for refueling within 2 hours.

Real Estate Summary (Total Building)

- Total Building Interior (sf) = 85,000
- Single story building
- Revenue Raised floor = 35,500 square feet

Electrical Summary

- Raised floor power density = 73 - 140 Watts/SF
- Primary UPS1 Power = 3,000 kVA through 4 UPS modules for an N+1 configuration with multiple independent delivery infrastructures to the platform
- Primary UPS2 Power = 2,250 kVA through 3 UPS models for an N+1 configuration with multiple independent delivery infrastructures to the platform
- Generator Quantity = 4 diesel generators for a total of 7.5 MW total stand-by
- UPS Battery Backup = 25 minutes
- Load Bank = on-site and built into design for scheduled tests

HVAC Description

The central cooling plant consists of 4 x 300-ton open drive centrifugal chillers in conjunction with 4 x 300-ton cooling towers supporting an independent two-pipe chilled water delivery system with 3 closed loops to the air handling units. Savvis supports an N+1 configuration for pumps, towers, chillers and air handling units. Temperature and Humidity ranges are in compliance with the ASHRAE standard.

Telco Description

There are multiple fibre conduits into the building via physically diverse paths. Bandwidth capacity consists of multiple provider access for IP transport including Savvis' global Tier 1 network. The core switching infrastructure connects to the Savvis Data Center with redundant fibre that is scalable from 1 Gbps to 500 Gbps and beyond.

Customer hosting solutions are connected to an internal infrastructure providing high availability and redundant switching. Savvis' IP network infrastructure has no single point of failure between the Savvis backbone and the customer system in the data center provided the customer is configured to two redundant distribution switches.

Savvis' network topology is a multi-layer design to enable bandwidth expansion based on current and future requirements. The cable plant is NORDX certified on CAT5E and CAT6.

Fire Detection and Suppression

Siemens FireFinder detectors provide very early detection of actual fires and distinguish them from deceptive conditions based upon "fingerprints" of different types of fire. Any detection is reported instantly to the Facilities staff and to the Operations Center through the site automation system. Additional monitoring is provided by a third party remote security monitoring firm. This system supports a standard interlocked dry pipe two-state pre-action sprinkler system activated by ionization type smoke detector heads at the ceiling and below the floor. Under normal operation, sprinkler pipes do not contain water.

Building Monitoring System

The Operations Center provides centralized 24/7 monitoring of our infrastructure switching equipment, physical security, electrical systems, HVAC, fire detection and closed circuit TV.

Physical Security

The building entrance and security areas are protected with bullet-proof glass and the data center walls are reinforced with a non-combustible construction material. The building is monitored 24/7 and there is a single point of entry via mantraps, biometrics and card access control that assures no unsolicited visitors. Surveillance cameras are strategically located throughout the premises.

Ground Description

Building grounding system exceeds NEC and IEEE standards. A separate zero reference ground system is installed.

Information contained herein is subject to change without notice.

Mechanical Summary

- Cooling System =
4 x 300-ton open drive centrifugal chillers with 4 x 300 ton cooling towers, 3 closed loops
- Raised Floor (inches) =
24 and 30 inches
- Humidity Control = Yes
- Design Temp (F) =
ASHRAE TC-9.9 Standard

**For more information
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