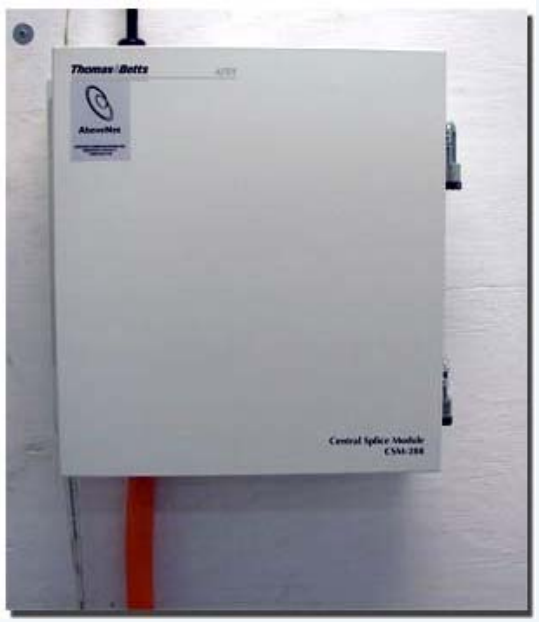
Data Center Overview

STANDARDS

- ANSI/TIA-942 Data Center Standard
- Procedures and guidelines for working safely in an active data center
- PCI Security Standard
- ANSI/TIA/EIA-568 A/B Standard
- ANSI/TIA-569 Standard
- NFPA-75 Fire Standard
- Strict City Code Compliance
- Documented Security Policies
- Can support user organizations with other standards such as SAS-70, HIPAA, PCI, etc.

PERFORMANCE

- 1 Gbit/s Internet backbone connection
  - Cisco 7200 NPE/400 router
  - Fiber connection (PA-GE interface)
- 100 Mbit/s customer connections
- Configured speed connections
- Network monitored for low latency and packet loss (<1% packet loss)
- 96 fiber pairs for unlimited growth (more can be added later)



RELIABILITY

- N+1 redundancy throughout, or better
  - Power with N+1 UPS and generator backup
  - Multiple Internet connections with BGP4 routing
  - N+1 air conditioning with generator power backup
  - FM200 fire suppression plus dry-pipe preaction
- Concurrent maintainability
  - Systems can be taken down for maintenance without affecting data center operations.
  - UPS with N+1 redundancy with bypasses
  - Any air conditioner can be turned off for repair

SECURITY

- Two locked doors for data center entry
  - KeyCard or KeyFOB on one door
  - Key Code on second door
  - Only authorized personnel allowed
- Video surveillance at entries and data center
  - 30 to 90 day digital video storage
  - Video server in high security area
- Locked cabinets
- Motion & entry detection with alarms
- PCI standards compliant
- Security alarms to police

FEATURES

- Contains cabinets, UPS, HVAC, fire suppression tanks, cable management, main distribution area (MDA)
- Raised flooring – 2 feet, perforated tiles
- Ceiling height is 10 feet from finished floor
- Cabling under the floor, power distribution over the cabinets
- Smoke detectors, heat detectors
- Gasketed doors to prevent gas leakage
- Signage: warning, exits, emergency lights
- Ramp entry/exit and back exit
- NOC windows
- Direct entry to NOC, locked

NETWORK DESIGN

- 1Gbit/s fiber Internet connection
- 96 fiber pairs available for growth
- DS3 XO Internet connection
- BGP4 routed to Internet with internal OSPF
- /20 portable IP space (16 class C networks)
- No single point of failures in backbone
- Concurrently maintainable
- Diverse physical paths inside and outside
- Main distribution area for centralized cable management - pre-wired to EDAs
- Equipment distribution areas for local cable management

FIRE SUPPRESSION

- Redundant and independent fire systems
- Three stage FM200 gas system
  - Stage 1, one smoke detector, rings alarm
  - Stage 2, two smoke detectors, strobe alarm and 30 second countdown
  - Stage 3, gas system discharges
  - Includes override and reset buttons
  - Detects at ceiling and below raised floor
- Two stage pre-action sprinkler system
  - Stage 1: two smoke detectors or one heat detector (135 F), fills water pipes
  - Stage 2: Heat (155 F) discharges water
- Tampering will alert fire department
- Trouble alerts & alarms bring fire department

POWER CONTINGENCIES

- UPS has built-in N+1 redundancy
  - Power control modules configured N+1
  - Battery supply works if any batteries fail
  - PDUs with circuit breakers to each rack
  - Remote monitoring of UPS and PDUs
  - Remote power control of each outlet
  - Automatic bypass if components fail
- 350 KW Generator backup
  - Generator starts in < 10 seconds
  - 500 gallon gas tank
  - Refueling scheduled every 12 hours
  - ATS allows automatic fail over and testing
- – Periodic self testing
- – Secured with locked fence, video

WHY CHOOSE WEBSOLUTIONS HOSTING?

- Data center designed to ANSI/TIA 942 standard
- WebSolutions provides a high performance hosting environment
- WebSolutions provides a reliable hosting environment
- WebSolutions provides a secure hosting environment
- WebSolutions provides a safe hosting environment
- WebSolutions provides exceptional client support