

NTTA PREMIER DATA CENTER INFRASTRUCTURE

The benefits of NTTA Enterprise Hosting Services start with our superior Premiere Data Center infrastructure. All NTTA Enterprise Hosting clients are provided the necessary rack space, network connectivity and facilities management within our state-of-the-art Premier Data Centers. All of our Premier Data Center facilities offer the following features and capabilities:

- Available Rack Space
- Redundant Power Sources
- Redundant Fiber Connectivity
- OC12 & OC48 Connectivity
- HVAC Environmental Monitoring
- Secure Physical Access Control
- Physical Escort for Onsite Visitors
- Multiple Diesel Fuel Generators
- Active Fire Prevention & Suppression
- 24 X 7 Monitoring and Operational Support
- Onsite System Administrators
- Onsite Network Administrators/Engineers

COMPETENT STAFFING

Technical staff will be on hand 24 x 7 at the Premier Data Centers, allowing you access to your servers at all times. Each facility has approximately 30 people on staff and there is always more than one qualified technician available on site at all times. In 2001, a multi-million dollar Management System will also be deployed at each Premier Data Center, allowing NTTA support staff to better monitor the facility, network and client servers from a central control center. NTTA Enterprise Hosting clients can also monitor their servers remotely using the NTTA Managed Services System via a Web interface that is available 24 x 7.

NTTA DATA CENTER MANAGED SERVICES

A key component of the NTTA Premier Data Center that sets us apart from the competition is our extensive and growing suite of productivity enhancing Data Center Managed Services. NTTA Enterprise Hosting clients have peace of mind knowing that their business critical applications are secure and are enjoying the highest level of performance and availability under the watchful direction of our corporate multi-million dollar Management System.

FIRE PREVENTION/SUPPRESSION

All NTTA Premier Data Centers were designed with the highest fire safety standards in mind. NTTA Premier Data Center facilities have been planned from the start to prevent any threat of fire to our clients' www environments. For example, each NTTA Premier Data Center facility has been designed to utilize an Early Warning System that samples air molecules that can detect potential pre-ignition conditions for fire as much as two days in advance. Should any flame ever ignite within our facilities, the facility fire alarm system triggers a double, pre-action dry pipe sprinkler system that fills up, but will not release until a set sensor temperature level is exceeded.

Our fire suppression system also includes the FM-200 gas system, which is designed to instantly smother any ignited flames without harming the environment, our employees, or our clients' hosted website servers. Within each computer room in a Premier Data Center facility, there is a similar configuration for emergency power off buttons and manual pull fire alarms. Every facility is split into at least two or more fire suppression zones. Multiple Early Warning System and standard temperature detectors are located both above and below the raised floor space within each data center facility.

PHYSICAL SECURITY

Modern mission-critical WWW sites demand a safe and secure environment for disseminating information and conducting business. NTTA will provide this same physically secure hosting environment for your websites. The servers and other equipment hosted by NTTA are always stored in state-of-the-art secure facilities. Security personnel are stationed at the front door and on the premises 24 x 7 x 365. NTTA has built its Premier Data Center facilities such that physical access to each Center is protected and restricted only to authorized personnel. A biometric hand scan lock leading into a secure Man Trap is used for main entrance controlled access and multiple video cameras are located throughout the facility for monitoring. A

physical security escort is required at all times for any visitors to our hosting centers. At NTTA, security is addressed on multiple levels including physical, network, data and system-level capabilities.

CONSTANT POWER

NTTA has deployed redundant MGE Model EPS 6000 UPS Systems in all of our North American Premier Data centers. There are three 500 KVA UPS systems wired in parallel. Each unit has an output of 800 amps and three-phase 480 volts. Enunciators located in the control room provide NTTA Managed Services Operations with live, real-time status.

In each Premier Data center, NTTA uses United Power Distribution Units (PDUs). There are at least eight PDUs within each hosting center. Each unit has three electrical panels with space for 120 circuit breakers. The input power to the PDUs is 480 volts 3-phase. The output power is 208/120 volts 3-phase, which provided 20 amps of power to each rack. Each PDU unit is rated at 125 KVA. The PDUs are configured with redundant components to guard against failures.

NTTA data centers use redundant UPS for initial power backup. The batteries are wet cell, acid-filled batteries with an expected life of 20 years. Although the facility power generators are designed to be at full power within 10 seconds of a power grid disconnect, each set of batteries can provide power at 1.5 times full data center load for a minimum of five minutes.

At our Premier Data Center in Sterling, Va. (Dulles Data Center), USA, NTTA has provisioned eight 2000KW diesel generators, which can provide more than 100% required power load for the entire facility when running at full capacity. A Spectrum Transfer Switch with bypass isolation transfer rated at 2500 amps, for 480 volts 3-phase power is used to switch power feed from utility grid to generator power when required. Power is automatically switched to generator power anytime utility power drops by 15%. The total capacity of the eight generators and related power switch equipment are sized at 1.5 times the actual full capacity requirement of the Dulles data center. The in addition to stocking significant fuel stores on site, the generator power system can be refueled while in continuous operation. In addition, NTTA has local fuel contracts for the Sterling Data Center in place that will dispatch fuel trucks on demand. The backup power and UPS configuration at our planned worldwide Premier Data Centers will follow this same model, with capacities equal to or greater than those of our Sterling, Virginia facility.

CONTROLLED ENVIRONMENT

NTTA Premier Data centers use Automated Logic Temperature Monitoring and Temperature Control systems to ensure a constant, correct temperature range for our hosting customers. For humidity control we utilize Datatrac Forseeer monitoring and for water leakage, the Permalert Underfloor detection system. All environmental systems are continuously monitored and alarmed if sensor inputs for temperature, humidity and water detection are not within the desired ranges.

INTERNET AND CUSTOMER CONNECTIVITY

NTTA Data Centers are connected directly to the NTT backbone, and enjoy direct, high-speed, multiply – linked connections. Because NTT maintains its own network backbone and infrastructure, we do not need to purchase connectivity from other providers. Customer traffic, once on the NTT backbone, will be routed across the backbone to its destination, or, if the destination is on another ISP's network, routed to the nearest geographic peering point. Because of NTT's very robust peering relationships with Tier 1 and other networks, our Data Center customers enjoy the full benefits of our network and interconnectivity.

With regards to alternate network providers, in the collocation environment, NTTA customers are allowed to bring in whatever Telco or ISP connectivity they require to fulfill their particular mission. The costs of such connections, demarcation extensions, etc. are considered to be the aegis of the customer, and such connections must be overseen by NTTA during their planning and implementation to ensure no potential impact to our facilities and services arise as a result.

Our data center networks feature wire-speed switching and routing and multi-gigabit capacities. Data centers are connected to the backbone via at least 2 redundant Gigabit Ethernet uplinks from each of the redundant core routers.

24 x 7 SUPPORT

NTTA provides full 24 x 7 x 365 operations and maintenance for the equipment and network connections supporting any WWW environment within our facilities. When a problem or outage is identified, NTTA personnel immediately initiate defined procedures to bring the site back on-line to minimize downtime. If requested, your company will also be notified and be kept up to date throughout the resolution process

TIER 1 SUPPORT CAPABILITIES

Our Tier 1 Technical Telephone Support, 24/7/365, includes:

- Initial install of standard OS distributions and supported preinstalled software
- Basic configuration of preinstalled software
- Basic assistance with familiarization of standard OS distributions and preinstalled software
- Basic troubleshooting in an attempt to establish the cause of problems
- Regular notification of known security issues and software vulnerabilities where they could potentially impact a large portion of your customer base
- Install standard hardware configuration
- DNS additions for new domains registered to our name servers within 24 hours
- DNS troubleshooting within 24 hours
- DNS additions/modifications within 24 hours
- Full support of our NTT/VERIO Global Tier 1 network
- Customer Reboots (4 per server per month)
 - Verio-supported non-incident based server reboots requested by you are completed by Verio physically going to the server and hard rebooting the machine
 - If there is an incident in which your server is impaired and/or our response is a reboot, that reboot will not be charged or count against the monthly reboot allotment
 - In addition, you can perform any unlimited reboots remotely
 - Additional non-incident based server reboots will be charged at (\$75) per reboot

TROUBLE TICKET MANAGEMENT

Customer support will manage trouble ticketing for the customer including, opening, escalating, and closing both Administrative and Technical Trouble Tickets.

Tier 1 troubleshooting includes:

- OS
- Hardware
- Software
- DNS
- Network
- System administration, and/or customer issue validation and call routing to the appropriate party including, Sales, Billing (Tier 2), Tier 2 Support, 3rd Party Support, Managed Service Provider Partners, Storage vendors, Security