

DATACENTER DOSSIER

SONIC.NET

ENTER

DATA CENTER DOSSIER

Company Name: Sonic.net, Inc.

Headquarters: Santa Rosa, CA

About Sonic.net

Sonic.net, Inc. is one of the largest Internet co-location facilities north of San Francisco, offering state-of-the-art facilities and experienced network engineers. The Data Center is served by multiple-fiber carriers for diverse connectivity, as well as redundant systems for maximum availability.

Facilities

Sonic.net built its 36,000 sq. ft. facility in the second quarter of 2002 and relocated there from its previous office of nine years in June 2002. The new facility houses its ISP services and co-location customers. The Data Center features redundant power and cooling for safe and efficient operation. The raised floor environment allows for controlled air flow, which guarantees all equipment operates at the correct temperature. The 750KVa diesel generator will keep the facility powered indefinitely in the event of a power failure. Biometric access controls, key card access, and video surveillance ensure a secure, monitored environment.

Network Infrastructure

Sonic.net is connected via multiple dual-entrance SONET OC-12 fiber rings, as well as by a gigabit fiber connection from a major metropolitan carrier. Upstream bandwidth is routed between multiple Tier 1 and Tier 2 transit providers, including UUNet, Cable & Wireless, Layer42 and UnitedLayer, as well as multiple peering points within their network. The providers are served by three different Sonic.net POP locations. These locations in San Francisco and San Jose are provisioned with different fiber carriers.

The network is designed so that there is no single point of failure. Multiple backbone routers maintain dual connections to the network core, preventing equipment failure from affecting service. Customers can uplink to multiple distribution switches to provide end-to-end path and equipment redundancy.

Power Plant

The power plant facilities consist of utility power backed by a 24 liter V-12 twin turbocharged Detroit Diesel generator, which generates 1024 horsepower and 750,000 watts of power. The fueling contract allows Sonic.net to run indefinitely on generator power. The Leibert UPS systems provide power conditioning during normal operations, as well as during power transfer situations.

Environmental Controls

Cooling and air conditioning is maintained by a Leibert air handling system. The unique cooling management system allows Sonic.net to monitor the temperature of each customer's cabinet space. These tools give Sonic.net a 3-dimensional view of the temperature distribution and allow Sonic.net to inject more or less cooling to each customer as needed.

Front and rear perforated cabinets provide even air flow across all equipment. Rather than injecting air under each cabinet, the system injects the air in front of the cabinet, allowing equipment and servers to draw air in from the front and expel it out the back.

Security

Sonic.net has multiple security features in place. Key card entry combined with biometric identification (hand recognition scanning) is required for entry. Each cabinet is individually keyed with Medico lock cores, and cabinets are re-keyed for each new customer. This system allows the customers 24x7 access to the facility without fear of unauthorized access.

In addition to biometric controls, Sonic.net has employed a mantrap that regulates access to the Data Center. This portal accepts a single person and uses biometric security, combined with key card verification, prior to allowing access to the Data Center. This guarantees that only authorized personnel are granted access and prohibits "tailgating" by non-authorized persons.

24x7 video surveillance keeps a visual record of all activity. Each cabinet door is outfitted with magnetic sensors, which are triggered when the door to the cabinet is opened. Through the online tools in place, a security contact can be configured to receive an email when a cabinet is accessed. IP cameras allow authorized customers to view the activity at their cabinet if they receive an alert that their space was accessed.

Conclusion

Today, Sonic.net, Inc. serves more than 34,000 customers with sixty employees. Customers can depend on Sonic.net's redundant T3 connection to both major Internet backbones and an extensive, high-performance network. Current design goals include propagating redundant design throughout the network. This goal has already been met with Sonic.net's high-performance web and email server farms, as well as with their redundant dialup pools.



SONIC.NET, INC

