

Par Avance Data Center Facilities

Par Avance operates, administers, supports and monitors our own Internet hosting and co-location services, with 24x7x365 telephone and on-site technical support, at a first class data center facility.

The data center provides multiple OC3 and Gigabit Ethernet connections to many upstream providers. Through peering relationships there is access to more than 90% of the world's IP routes, allowing them to avoid congested points on the Internet that cause poor network performance. Multiple fiber providers deliver network connectivity to the facility. By using diverse entrance points, service is sustained even if one carrier or access point is compromised.

The upstream IP network has:

- Full OC3 and Gigabit Ethernet connections to 10 upstream providers in four regions.
- Private peering relationships that encourage Internet traffic to travel over the least congested routes available.
- Multiple providers to ensure instant data rerouting if one of the connections should ever fail.

The data center has power, climate, privacy, security and fire protection controls, as well as human technical support on-site:

- The power infrastructure meets the most stringent requirements for redundancy, including multiple fiber entrances, full UPS systems, and backup diesel generators. The power supply plugs directly into the power company's commercial grid. Automatic Transfer Switches direct incoming power to the UPS system, seamlessly transferring between available power sources as necessary. All power is fed into a high capacity UPS before being distributed to the facility. The power is conditioned here, and stored in batteries to eliminate the possibility of spikes and brownouts. Dual power delivery units take conditioned power from the UPS and distribute it to the facility. These units isolate customer equipment on individual electrical breakers. Commercial power is backed up by a standalone diesel generator with the capacity to deliver power to the entire data center for an unlimited period of time. Abundant refueling and maintenance contracts support the viability of the generators to power the network as long as is necessary.
- Multiple load-balanced HVAC systems keep the climate at the optimum temperature and humidity levels. Cooling is delivered directly to the cabinets through the raised floor plenum, delivering air exactly where it is needed. Double the necessary HVAC systems remain on standby to ensure full redundancy.

- Cabinets (where we install your servers) are individually climate-controlled and fully secure with key and combination locks. Cabling is delivered under raised flooring. The facility is protected by picture ID/card key access, supported by an intercom system and multiple surveillance cameras to insure that anyone who enters is authorized to do so. Only our employees (and the data center technicians) have access to cabinets and servers. If one of our clients needs access to a server owned by them, they must be personally escorted by us.
- FM200 dry-chemical fire suppression systems are used to detect and stop fires before they can start by using a harmless, breathable gas to prevent water damage.

The first tier of technical support is provided by telephone 24 hours per day by Par Avance technical experts. The data center is also staffed 24 hours per day by network and telecom specialists for immediate on-site technical assistance when remote access is not a viable means of issue resolution. Sub-systems, servers and security are constantly monitored.