



Westlin Data Center Specifications

Physical & Geographical:	Specifications: <ol style="list-style-type: none">1. 40 miles from metro Houston2. 100 Miles from Gulf Coast3. 300 Feet above sea level4. 40 feet underground5. 33,000 Sq Ft (two underground levels)6. Elevator access
Internet Access & Infrastructure:	Partners: <ol style="list-style-type: none">1. AboveNet, Time Warner Telecom, Skyport, Cisco Systems, Rackable Systems, VM Ware Bandwidth: <ol style="list-style-type: none">2. Shared fast Ethernet/Gigabit Ethernet. BGP protected uplinks. CIR and Burstable options available.3. AboveNet: Gigabit and private 100 MB VLANS4. Time Warner Telecom: Gigabit and private 100 MB VLANS5. Skyport: 100MB up to a Gigabit of fixed satellite communications.6. Phonoscope: Will have a 100 MB link Dedicated circuits: <ol style="list-style-type: none">7. DS1-OC12 or Ethernet VLAN from our Houston POP's. Current peering includes: <ol style="list-style-type: none">8. AboveNet, Time Warner, and Phonoscope for Metro Ethernet VLAN's. Equipment & Redundancy: <ol style="list-style-type: none">9. Cisco 6509 Switches located on the backbone with redundant GBIC's, power supplies and controller cards. VoIP System components: <ol style="list-style-type: none">10. Cisco AVVID Call Managers. Call Managers are mirrored and running ver. 4.1 software. Also, Gateways are located in Conroe, Houston, and Austin and handle routing in the event of one gateway failure. Switchboards: <ol style="list-style-type: none">11. Switchboards are custom built Cutler-hammer equipment. We can handle a maximum of 3000A on the current switchgear. The Cutler Hammer switch gear is custom built as is each one of those installed in various locations. Yes, it functions as the main input switch, has bypass modules, and breakers for the PDU feeds on the downstream side of the UPS. Cable Infrastructure: <ol style="list-style-type: none">12. CAT5e. Patch panels and cross connects are located in secure rooms not available to the public. Flooring: <ol style="list-style-type: none">13. Both raised and special on-ground plans available. Regarding raised floor, the cabling is suspended.

<p>Power Availability & Generation</p>	<p>Generators:</p> <ol style="list-style-type: none"> 1. We have a total of three generators on-site 2. Cummins 16cyl Diesel 1375KVA 480V 3 phase with Onan Gen package 3. Two Diesel Cummins VT1710G engines with Kohler 450R0774 generators @ 575KVA each <p>Maintenance routine:</p> <ol style="list-style-type: none"> 4. Weekly load test. <p>Fuel Capacity:</p> <ol style="list-style-type: none"> 5. 57,000 Gallons of diesel in 4 tanks <p>Fuel reservoirs architecture & pump redundancy:</p> <ol style="list-style-type: none"> 6. 500 Gallon day tank with pumps in parallel <p>UPS Systems:</p> <ol style="list-style-type: none"> 7. Powerware 9315 500KVa in bunker <p>PDU Infrastructure:</p> <ol style="list-style-type: none"> 8. Liebert PPC125 behind powerware <p>Lightning prevention:</p> <ol style="list-style-type: none"> 9. Surge protectors on power feeds as well as UPS and PDU equipment. All transformers have integrated lightning suppression. All feeds into the facility are underground. All electrical and plumbing are earth grounded in multiple locations. All above ground structures have lightning suppression equipment and grounding. <p>Power Transformers:</p> <ol style="list-style-type: none"> 10. We have two transformers from Entergy. They are connected in parallel so if one goes out the other can carry the load. We also go to generator in the event of a failure on this equipment. We have 24x7 response from Entergy on this equipment. <p>Energy Feeds:</p> <ol style="list-style-type: none"> 11. Data Center has two feeds from Entergy, one from the Cape Conroe substation and the other from the April Sound substation. These are fed from two different power generation plants.
<p>Data Center Office Complex Amenities:</p>	<p>Campus Facilities:</p> <ol style="list-style-type: none"> 1. 100,000 Sq. Ft. Office complex with datacenter ops center facilities, restaurant and conference rooms. 2. Free wireless in all areas. <p>Hotel Location and Relationship:</p> <ol style="list-style-type: none"> 3. Del Lago Resort, located approx 2 miles from datacenter. All suite hotel with dedicated 100MB connection to the underground data center. Telephony equipment is Cisco AVVID, wireless 802.11b internet access and wireless IP telephony via Cisco 7920 portable telephones. Special room rate through Gray Hat for datacenter customers. <p>Restaurants:</p> <ol style="list-style-type: none"> 4. Campus office complex offers a full service restaurant in office building including many restaurants within a five mile radius of datacenter. <p>Recreational Facilities:</p> <ol style="list-style-type: none"> 5. Del Lago offers all the recreational facilities of a first class resort including a 36 hole golf course, approximately 3 miles from the Data Center. <p>Security:</p> <ol style="list-style-type: none"> 1. Video monitoring 24/7 of exterior and interior spaces. <p>All glass in entry and windows are ballistic resistant glass.</p>

<p>Logistics</p>	<p>Airport Access:</p> <ol style="list-style-type: none"> 1. Access to Bush International utilizing Beltway 8 to Woodlands and I45 to Hwy 105. <p>Road access routes:</p> <ol style="list-style-type: none"> 2. From metro Houston, I 45 North to Hwy 105 (approx. 40 miles) From Hwy 290 to Beltway 8 to Hwy 249 through Tomball to Montgomery. 3. Helicopter pad access
<p>Security</p>	<p>Internal building security:</p> <ol style="list-style-type: none"> 1. 24X7 Monitoring of internal datacenter as well as external building monitoring. Card key and Biometric monitoring all entry points. <p>Equipment Cabinets:</p> <ol style="list-style-type: none"> 1. Individual 23" locked cabinets <p>Perimeter Security:</p> <ol style="list-style-type: none"> 2. Property fence line is monitored with motion detectors 24/7. Outside of data center is monitored with camera surveillance equipment. <p>Staff Qualifications:</p> <ol style="list-style-type: none"> 3. All data employees and those of customers needing access will undergo appropriate screening and background checking. <p>Data Center access or denial process:</p> <ol style="list-style-type: none"> 4. If there is an employee change or termination, the center office is available 24/7 to allow access or denial. <p>Biometrics on entrances:</p> <ol style="list-style-type: none"> 5. Handkey II from IR Recognition systems. The facial recognition system is a beta system so we're running with industry solutions for the basic biometrics. We will phase in the facial system over a few months as it gets tested, interfaced, etc. <p>Gray Hat Research Cyber Security Consulting Services:</p> <ol style="list-style-type: none"> 6. Advanced Cyber Security Consulting 7. Security Education & Training Services 8. Contract Research & Development 9. Identity Theft Risk Mitigation & Restoration Services
<p>Facilities</p>	<p>Parking:</p> <ol style="list-style-type: none"> 1. Private parking for datacenter personnel is located outside the main elevator entrance and equipment receiving area. Parking and entry have 24/7 video monitoring. <p>Water Supply:</p> <ol style="list-style-type: none"> 2. Two 700 foot wells below datacenter provide water for drinking as well as fire protection. <p>Loading Dock:</p> <ol style="list-style-type: none"> 3. A loading dock, adjacent to the datacenter elevator, is monitored 24/7. This facility has a two stage inspection process where two loading doors are utilized to properly inspect all equipment and personnel prior to their access to center <p>Operational Work Space:</p> <ol style="list-style-type: none"> 4. Work space is available in three areas, Del Lago facilities, special ops space in the campus office complex and possible office space in the bunker. The bunker ops space is limited. <p>Phone Service and Redundancy:</p> <ol style="list-style-type: none"> 5. VoIP telephony using state of the art Cisco equipment. Remote call forward lines to our gateway located in Conroe, Houston and Austin.

	<p>Temperature and Humidity:</p> <p>6. We maintain a constant temperature in the bunker between 60-70 degrees. RH is between 25 and 50%</p>
<p>Fire Prevention & Suppression:</p>	<p>HVAC:</p> <p>1. Smoke and fire detection in all HVAC systems and rooms</p> <p>Fire Suppression:</p> <p>2. FM200 in collocation areas. There is also a dry pipe backup.</p> <p>Water lead detection:</p> <p>Integrated into NOC software platform utilizing sensaphone IMS-400 units. The Sensaphone system is network based and has internal notifications via SMS and email as well as SNMP connectivity to our NOC monitoring platform. It is sensor based and will show the area where the leak occurs.</p> <p>Fire station and hydrant locations</p> <p>3. Site has ample water reserves for firefighting. Two stations are located approximately 3 miles East and West for response. Local fire departments have several water trunks and we have 2-20,000 gal. storage tanks here as well as the pool, fountains, and 4 wells for additional water reserves. We're in a rural area. The closest fire hydrant is approx 1 mile away off hwy 105. We have a total of 40,000 gallons a tank based water storage and another 120,000 gallons in the pool and fountains tied into the sprinkler system.</p> <p>Fire Extinguishers:</p> <p>4. Yes, hand canisters. We have 12 located in various areas of the bunker. These are dry chem. type for computer use.</p> <p>Smoke Detectors:</p> <p>5. D1-3 smoke detectors, Simplex Grinnel.</p>

**Westlin Underground Data Center,
(located adjacent to office complex)**

