



## The Transformyx Data Center

The Transformyx Data Center is a free standing and purpose built industrial Data Center.

The Transformyx Data Center is built from the ground up as a 32,000 Sq. Ft. freestanding industrial grade data center similar to military, financial, airline, and other critical service facilities around the country. Only Transformyx customers with critical loads located within the machine room spaces are allowed in secure spaces. All entries are logged, and two-factor identification is required. A dedicated Man-Trap onsite facilitates entry into the critical load spaces.



**Sole Cisco Cloud  
Powered Data Center  
in Louisiana, Mississippi  
and Arkansas**

### *Purpose Built. People Driven.*

Discrete mechanical rooms isolate power generation systems from electrical systems, UPS systems, battery systems, air handlers, and networking equipment. Our chilled water plant has over 500 tons of capability and is autonomous and separated from the main facility by over 100 yards.

As a free standing data center on private property, access to ample grounds around the Data Center is controlled. Heavy equipment and construction crews can be controlled and spotted, helping control outages.

There are multiple entrance points staggered around the building for telecommunications, internet, and fiber circuits. No single physical cut can compromise service into and out of the facility.

The Data Center is located outside of the 150 year flood zone. During Hurricane Gustav which was a direct hit to Baton Rouge, the Data Center experienced ZERO disruption and generated power for our customers while providing many services to several State Agencies.

The facility is built to withstand severe wind storms. There are no windows along the exterior of the building facing south, east and west. Windows along the front are small and vertical designed to handle high wind loads. The grounds are clear in order to minimize damage from trees or debris.

Transformyx is in complete control of all electrical, cooling, network, and other critical support systems.

## Network Operations:

Approximately 5000 Sq. ft. of the 32,000 Sq. Ft. facility is dedicated to network operations and 16,000 Sq. ft. is dedicated to engineering resources. The NOC monitors the facility and the network 7x24x365. In addition we also monitor hundreds of networks external to the facility.

## Data / Voice Networks:

Transformyx operates a dedicated MPLS cloud separate and apart from the Internet services to provide QOS based Voice and Data services as needed from customers.

## Multi Homed / Diverse Network:

Data and voice services are delivered through the various telecommunications providers staggered throughout and around the facility. Redundant power with multiple handoffs guarantees network availability.

## Network Backbone:

Terabit Performance, 99.999% uptime, Cisco Nexus 9k & Nortel Active/Active

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## Rackspace:

Over 300 Rack positions available in three machine rooms.

## Hosted Services:

Web, Citrix, VMWare, Exchange, Archival, SQL, Off Site Backup and Replication, Veeam, NetApp and many others

## Standby Power Generators:

Transformyx has two 400KW generators in service for redundancy. Each Generator ties into a Tap for facility growth. Systems can be scaled as load increases. This is scalable to 2.8MW for capacity.

- 1 - Each Generator has a dedicated fuel tank.
- 2 - Low hours on each generator
- 3 - Generators come up in parallel and then drop off to conserve fuel
- 4 - During prolonged outages we stagger run generators
- 5 - Re-Fueling contracts are in place

The facility is located on the same power grid as the Baton Rouge General and Neurological Center.



TRANSFORMYX DATA CENTER

## Connectivity:

- At&t – 10G – (OC192)
- Cox – 10G – (OC192)
- CenturyTel – 10G – 1G Optical
- Level 3 West Coast – 10G (OC192)
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- Time Warner

## Physical Security:

- 24x7 Monitoring
- Video Surveillance Cameras Throughout facility
- Security Guard on Duty at all times
- Biometric Entry and Magnetic Locks – Two Factor Authentication Required – Facial, Pin, Biometric and Card Available.
- 12" Concrete Reinforced exterior walls
- All data center computer rooms limited to interior rooms slab to slab sealed with restricted access. (12,000 sq. ft. raised floor)
- Man Trap controlled entrance to machine rooms
- 32,000 Sq. Ft Free Standing, purpose built data center.

## Environments Control and Fire Prevention:

- Non-Water Based Fire Suppression FM200 and/or pre-action dry pipe for raised floor secure areas.
- Fully redundant air handling systems
- 500 Ton Chiller facility and condenser based systems – N+1 redundant

## Power:

- Fully redundant power circuits to each rack
- Two fully redundant separate UPS battery backup systems plus in cabinet UPS systems available on customer request.
- Two fully redundant dedicated Generators with 7 days of fuel onsite
- Generators connected via Generac Tap box scalable to 10 generators
- In state and out of state contracted fuel supplies
- Weekly testing of generators
- Diesel fuel testing program

## Network Infrastructure - Redundant Network:

- Network Edge – Brocade Vyatta and Cisco ASR Redundant BGP Edge
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- Network Core – Nortel and Cisco Nexus 9k – Full mesh 40GB connectivity to Machine Rooms
- Network Core – Cisco Nexus 9k – Full mesh 160GB connectivity to Machine Rooms
- Machine Room – Nortel and Cisco Nexus 9k – Redundant Multi-1Gb Ethernet handoff to cabinets if needed
- Machine Room – Cisco Nexus 9k – Redundant Multi-1Gb Ethernet handoff to cabinets Available
- 7 physical points of entry staggered for Telecom, Internet, and Fiber circuits.
- Managed VPN Capabilities
- Fully Redundant Enterprise Firewalls – Fortinet and Cisco Available
- Fully Redundant Enterprise Firewalls – Cisco ASA, Sourcefire Available

## Internet and Fiber Circuits:

- Network Security Firewall technology
- Fully Redundant Managed Enterprise Class Firewall
- Real Time Intrusion Detection and Notification
- Anomaly Detection
- Managed VPN Capabilities

## Electronic Vaulting Platform for Backup and Recovery:

- Enterprise Backup solutions
- Multi-Vendor capable target
- Redundant platform
- Local Copy Options
- Agent and Agentless options
- Fully VM aware

## Storage and Archiving:

- Redundant Storage Area Networks with Replication Technology – NetApp
- 10gb Connectivity:

## System Monitoring and Notification:

- Multiple and Redundant Monitoring Systems – Network
- RMM for OS and Security Patch management
- 24x7 NOC Staff monitoring

