

Systems Overview

Regal Technologies provides IVR and Web hosting services to its clients for a variety of applications. The equipment and processes in place have been created to ensure reliability, uptime and security.

Facility Information

Regal Technologies utilizes hosted facilities for web application products and separate facilities for IVR telephony Internet.

Web Applications Facility

The web hosted data center resides on San Diego's military power grid, ensuring uninterrupted operation even if the city's power goes down. All servers are powered by 150kVA UPS (uninterruptible Power Supply) systems that provide additional protection from disturbances on the power grid. If utility power fails, they allow ample time to seamlessly switch operations to our diesel generator.

All systems inside the data center are monitored 24 hours a day 365 days a year by more than 50 certified engineers at the Network Operations Center (NOC). With

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enterprise-level experience, the engineers provide networking and security to help maintain our systems uptime. The NOC resembles the NASA command center with four giant screens (8x6 feet) displaying the status of servers and network. The precision monitoring system allows the facility staff to take immediate action and

provide critical real-time information to our customers. This facility is a Multi-Honed Backbone Connection Facility

that was engineered to provide the highest levels of connectivity. The datacenter provides access to backbone providers such as AT&T, Time Warner, Level 3, Verizon, XO Communications, SBC, Williams, and ICG. This diversity of backbone providers allows the facility to provide multihomed bandwidth for continuous connectivity.

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System and Data Security

All of the Hosted Servers are running Windows 2003 Server or higher. Each server is updated with the appropriate security and update patches on a regular basis. The servers are all kept locked and are located in a secured hosted facility. The following is a list of items in place to ensure for data integrity and security.

- All servers are protected by a Firewall. The Firewall is utilized to restrict outside access.
- Servers are setup utilizing Windows Authentication.
- Each customer is given a unique User Name and Password to gain access to view any report information.



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- No customer is allowed to directly access data from any server.
- All output files are encrypted and sent to Regal Technologies at the end of the day.
- Data is only maintained for the period specified by Regal Technologies. Currently this is approx 90 days. None of the customer data is backed up or stored outside of the hosted servers.
- All customers are given unique IP addresses. No IP sharing is performed.
- Each IP address can be setup with its own policies for Firewall security. Some may allow HTTP traffic while others may allow HTTP and FTP both.
- All servers are tested daily for external and internal penetration. This testing is performed by an outside third party company to guarantee PCI (Payment Card Industry) Compliance.

IVR Facility

Our IVR hosted facility consists of a bank of T-1 circuits that are connected to a group of IVR servers. With each customer that we add to our facility we ensure that we have or add additional capacity to our facility. Our modular



design allows us to bring online additional servers and T1 circuits when necessary to accommodate call volume spikes.

The facility is manned 24 hours a day, 365 days a year. The technicians monitor the hardware, network and environmental aspects of the site. Our network monitoring and redundant high-speed connections to the Internet backbone ensure complete dependability. Our facility resides directly on the telecommunications SONET fiber ring. This location allows us redundant access to the telephony environment. In the event of a telecom failure the T1 circuits can be re-routed with minimal interruption of service. Our servers are all setup with dual power supplies and employ Raid hard drive configurations. In the event of a single server failure a backup server would be available to take calls until such time as a failed server was repaired. The hosted facility utilizes a combination of UPS battery backup and diesel generator power when normal electrical power is interrupted.

Additionally, our facility offers;

- Environmentally controlled server room
- Scalable Rack space
- Direct, redundant connections to the Internet through diverse providers and paths
- Alarmed facility
- Biometric restricted access to data center
- 24/7 technical support
- Real-time usage reports

System capacity is not an issue. The hosted facility is configured using a bank of PRI circuits and IVR servers. Additional PRI's and servers can be easily added for new customers or call volume spikes. Currently the hosted facility is capable of handling in excess of 200,000 calls/day.



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Redundant IVR Facility

Based on client requirements, Regal Technologies does provide a stand-by second facility that is setup to provide the same functionality and features as the Primary facility. This Facility would only be used in the event of a total failure of the Primary location. The Backup facility would take then take all calls while the Primary facility was down.

System Processes

TELECOM

DNIS

Our hosted solution is setup so that we utilize the DNIS provided to activate the proper application for each caller. This eliminates the need for each customer to have a defined number of phone lines associated for their phone number. Instead they are given access to all of our available capacity. Regal Technologies monitors



incoming traffic and we add capacity anytime we reach a 80% load. This ensures that our customers do not receive busy signals.

Circuitry

Our environment is setup so that in the event we have an issue with a particular T-1 circuit, we can take it out of

service until it is repaired. During this time we utilize additional spare T-1's to handle incoming traffic. This allows us to minimize impact to our customers.

DATA

Data Retention

Regal Technologies has setup algorithms for data storage and retention. Based on these processes we continually archive or remove data based on our client's requirements.

Database Redundancy

Regal Technologies utilizes database redundancy and replication. This allows us to ensure that data is not lost as well as provide a backup server in the event there is any database issue.

ALARM NOTIFICATION

Regal Technologies has two monitoring packages. The first monitors all calls that come into our hosted environment. If for any reason calls are not received for a pre-set period of time the Alarm center will notify our 24/7 support center so that the issue can be corrected. The second is a software program that monitors the error logs on the hosted servers. If any of the pre-determined errors occur the software package will notify our 24/7 support center so it can be addresses.

DATAPROBE

Regal Technologies has developed a DataProbe server. This server will allow us to utilize built in monitoring and software to automatically switchover web traffic



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or calls from primary servers to Backup Redundant Servers should there be a database error. This proprietary process

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allows Regal Technologies to minimize downtime in the event any server failures.

POWER

Regal Technologies's hosted facilities utilize a power configuration that has multiple phases of power from multiple UPS's. This helps to ensure that in the event of an issue with one of the facility UPS's we will still receive power via a second phase from a second UPS. All facilities are also equipped with a Diesel Generators that

will supply power to the facility in the event that power is lost. This generator can run indefinitely.



LOAD BALANCING

Regal Technologies's Load Balancer works as a proxy device between two or more servers. It receives information from the Internet prior to the traffic entering the server farm, analyzes it, determines the services scheduling method, and then decides where to send the request. The Load Balancer distributes the information evenly across all our servers, preventing server load failures, ensuring constant resource availability, and maximizing overall system performance.



scan the QR code with your smartphone to learn more about Regal's System.



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