



Electronics

Client

Telecarrier

Location

Panama City, Panama

Telecarrier Data Center

Project Highlights

- Co-location floor
- Secure Suites
- Lease Labs
- Networking Operating Center
- Communication Room
- Meet-Me Room
- Offices
- HVAC and Electrical Systems

Project Description



CH2M HILL IDC (IDC) provided full architecture and engineering design, procurement, logistics, startup and commissioning services for this 30,000 SF greenfield facility located in the tropical area of Panama City. The center provides around-the-clock (7x24) operations with onsite personnel trained in the areas of network, internet and systems management for Telecarrier, Panama's first company licensed to offer national, long distance and international long distance phone service.

Telecarrier offers carrier-neutral web hosting to help companies that need an internet presence in Latin America and require web hosting for an e-commerce site. This is available whether they are internet service providers (ISP), application service providers (ASP), network service providers (NSP), internet content providers (ICP) or enterprise firms.

During Phase One, IDC evaluated the existing facility for conversion to an internet data center and programming of a new internet data center. The facility was reviewed to meet Tier IV redundancy in accordance with the Uptime Institute's requirements. The facility systems were analyzed for fault tolerance. Results determine the system could maintain critical loads upon any unplanned failure.

For Phase Two, IDC conducted programming, preparation of the project definition report and conceptual design for a two-story, 32,290 SF data center facility. We provided technical input to the local architect and engineers and served as the senior architectural/engineering reviewer for the preparation of construction drawings and specifications.

Paramount to the success of data centers and any critical environment are the reliability, durability and hardness of the electrical and security systems. The innovative design solutions provided by IDC for these systems were extremely effective, and provided for the anticipated future facility expansion and the challenges of changing technology.



The two story 80,000 SF data center was designed to respond to the vernacular of Central American buildings. Clay roof tile and projected eaves provide a local flavor to the concrete data vault. The first floor houses the electrical rooms, mechanical equipment, employee areas, offices, shipping and receiving, while the second floor accommodates the network operations center, communication room, meet-me room, secure suites and the co-location area. The facility also utilizes high technology egress, security and intrusion control devices.

IDC's integrated approach efficiently coordinates data center systems hardware requirements with all other design aspects of the facility. The internet data center has been custom designed and built with comprehensive security systems to protect data, stringent environmental controls, fully redundant (n+1) subsystems with no single point of failure, and high-speed networks with end-to-end monitoring for superior connectivity.

IDC also provided a computer-generated animation facility for the client's marketing purposes.