

The logo for CGS, consisting of the letters 'C', 'G', and 'S' in a white, sans-serif font, each enclosed in a thin white square border. The three squares are arranged horizontally and slightly overlap.

CGS

A 3D rendering of server racks in a data center. The racks are arranged in several rows and are illuminated with a blue glow. A network of glowing blue lines connects various points across the scene, suggesting a data network or connectivity. The background is dark blue with some faint light effects.

CoralTech Data Center Services Overview

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CGS Enabling Infrastructure Innovation

Since 2010

Audits

Consulting

Construction

Managment Services

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Approach Towards Data Centers

CONSULTING

Thorough and comprehensive, resulting in a plan that provides options and technical alternatives to meet your timeframes, philosophies, short-term and long-term strategic objectives, as well as budgetary guidelines.

- Data Center “Hybrid” Assessments
- Site Evaluation, Selection, & Planning
- Reliability Studies
- Single Point of Failure Analysis
- Data Center Facility Audits
- DR Facility Requirement Studies
- TIA 942 Certification Analysis
- Uptime Certification Analysis
- Container/Pod Studies
- Relocation Evaluations
- Merger/Consolidation Studies
- Space Planning
- Computer Equipment Planning
- Requirements Analysis
- Thermal Air Flow Analysis
- Energy Efficiency Audits
- IT/Data Center Strategic Planning

DESIGN

Drawings and specifications that reflect creative, state-of-the-art design solutions.

- Architectural Design
- Site/Civil Engineering
- Communications Engineering
- Electrical Engineering
- Mechanical/HVAC Engineering
- Structural Engineering
- BMS/DCIM Modeling
- Fire Protection Engineering
- Raised Floor Engineering
- Security Design
- Voice and Data Integration
- Design for Sustainability
- 3-D Revit Modeling
- Network Design
- Cloud Requirements
- Low Voltage
- BIM Modeling
- Design Validation TIA 942-B & C

CONSTRUCTION

A fully integrated approach to the creation of technical facilities that gives you a single source of responsibility from start to finish. This unique methodology eliminates traditional construction delays, enhances responsiveness to design modifications, and guarantees necessary technical expertise – throughout the project. Construction Management

- Construction Administration
- General Contracting
- Project Management
- Project Planning & Scheduling
- Turnkey Planning, Implementation
- Commissioning
- Colo Deployment
- Electrical Wire & Cable
- Network
- Electrotonic Wire & Cable
- Voice & Data Cable

DATA CENTER DESIGN & SERVICES AREAS

CGS Expertise

Civil Works

- Spaces demarcation (partitions, doors, raised floor, ramps etc.)
- Collocation Cages
- Support structures (steel, concrete)
- Anti-seismic structures
- Shelters
- Technical furniture

Power System

- High Voltage (HV) System
- Transformers
- Low Voltage (LV) System
- UPS systems (AC and/or DC) with associated batteries
- Backup power supply systems (Diesel Generators, Fuel Cells)
- Electrical Switchgear / panels

Cabling

- Power Cabling (*)
- Power bus ducts
- UTP cabling (*)
- Fiber cabling (*)

(*) including associated support structures (cable trays, baskets, Fiber runners etc.)

Air Conditioning & Ventilation

- High Precision Air Conditioning (HPAC)
- Ventilation systems
- Environmental Monitoring system
- Water leakage detection system



- Access Control
- Intrusion Alarm
- CCTV

Physical Security

- Early Warning Aspirating systems
- Fire Alarm Installation
- Fire Suppression Installation
- Smoke removal / ventilation systems

Fire Protection

- DCIM /BMS

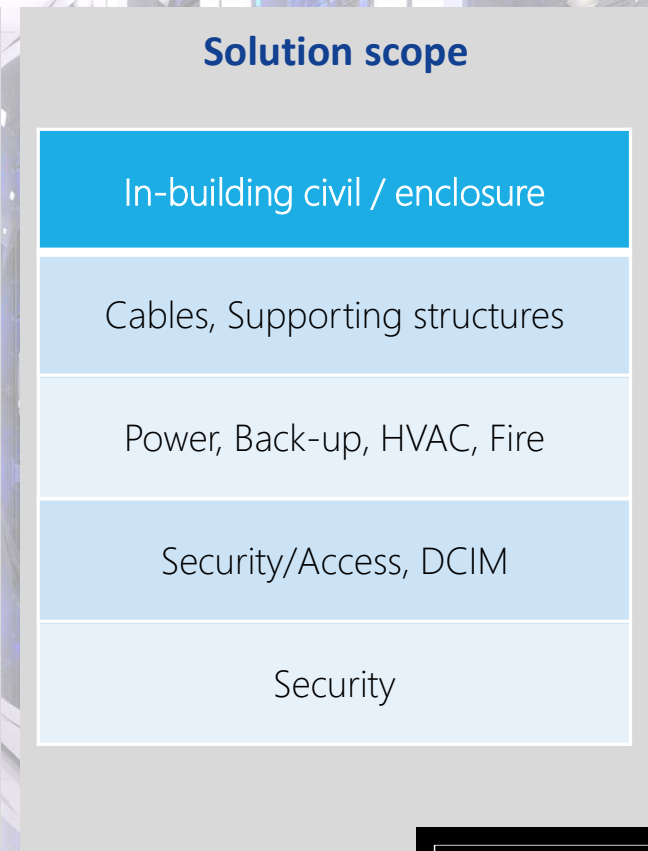
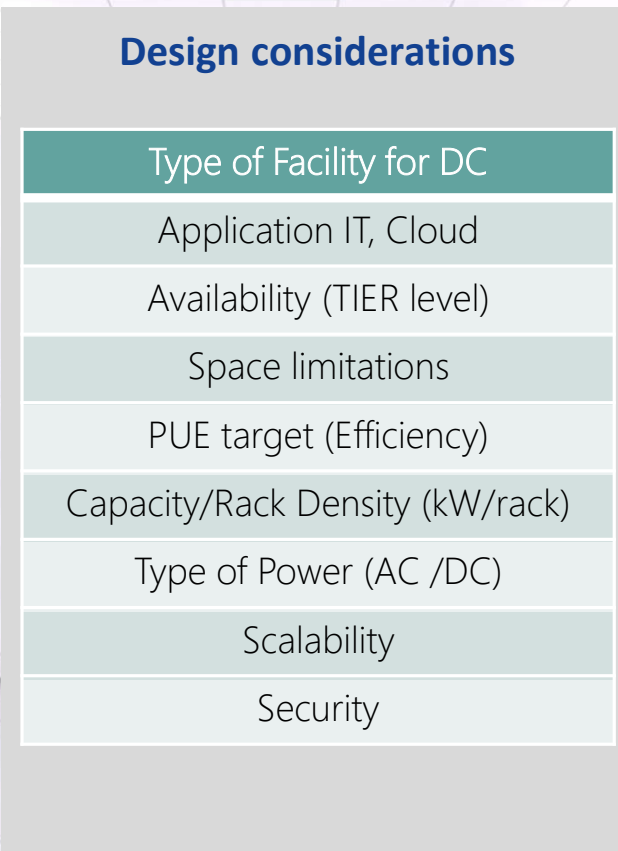
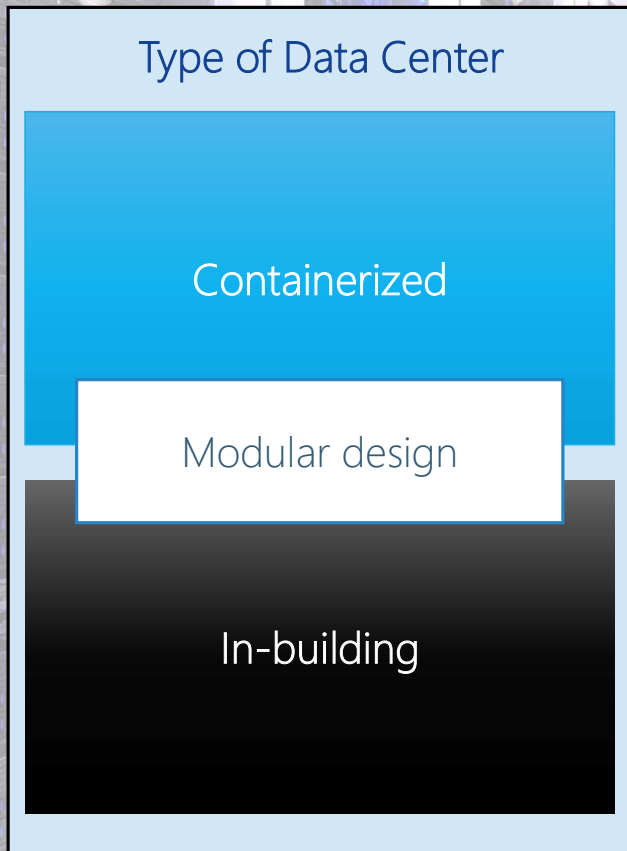
Data Center Infrastructure Management (DCIM)

- E2E engineering
- Standard Data Centre reference designs (CAD site models)
- Detailed BOQ (Material & Services)

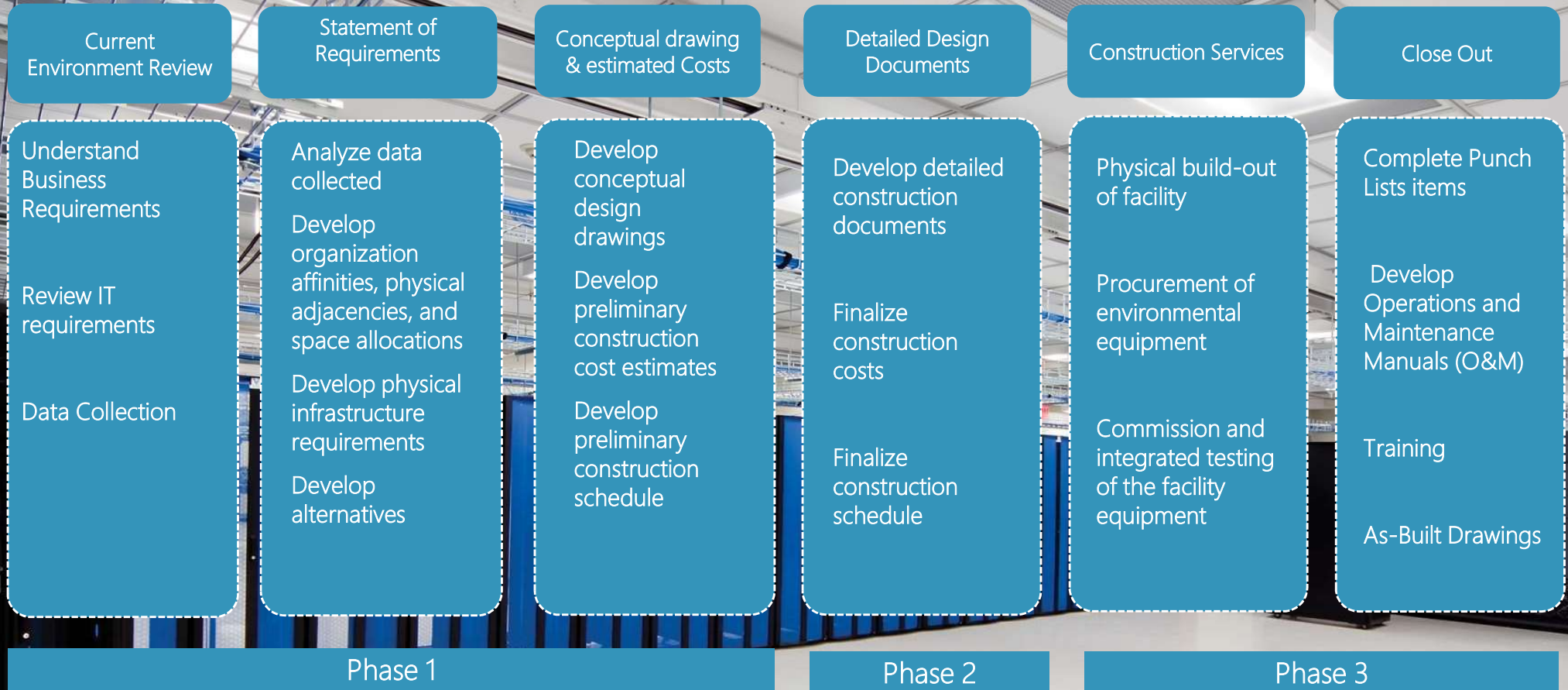
Cost optimized, Standard solutions & Best practices

Data Center Solution

Dependencies, design considerations and scope



CGS Planning, Design & Construction Cycle



EQUIPMENT READY FOR START-UP

After testing & commissioning of Micro Datacenter Equipment, its ready for mounting compute.



CERTIFICATE OF PROJECT COMPLETION



DIGITEL INTEGRATED SOLUTIONS (PVT.) LTD.

This is to certify that

CORALTECH GLOBAL SERVICES PVT LTD (CGS)

have successfully completed SEFAM MDC PROJECT and provided excellent services.

Completion Date: July 21, 2021

Sajid
SAJID M. QURESHI
COUNTRY GM



Jahanzeb
JAHANZEB AFZAL
DIRECTOR

Executed Contracts

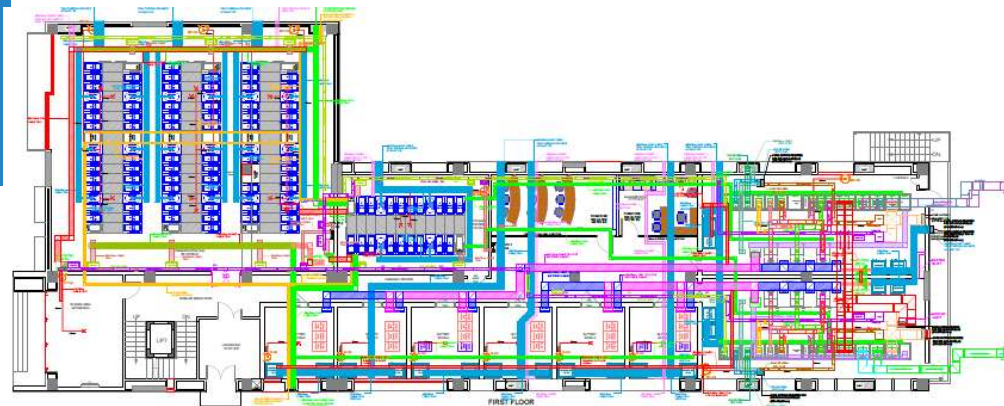
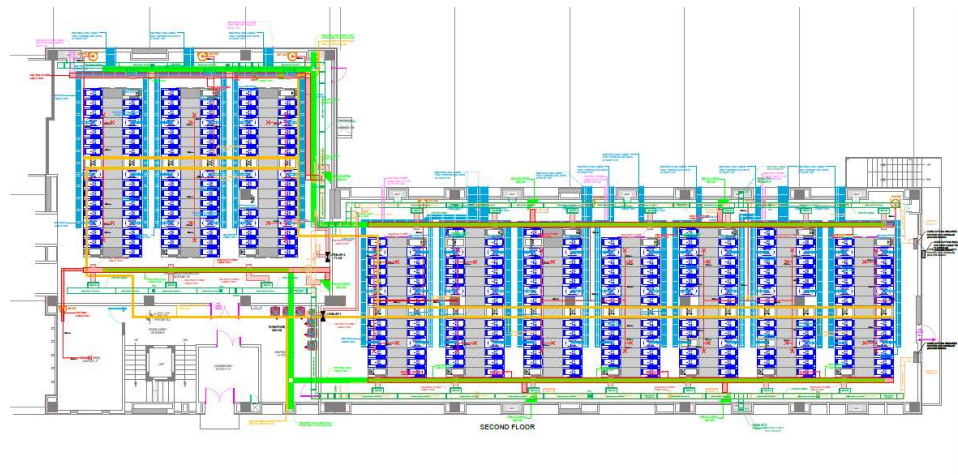
Jazz Data Center

KLP Commercial Data Center

Project Overview: End to End Design of 600 Racks data center for commercialization of facility

Solution Description: It includes

- ETAP analysis for switchgear design
- HVAC and mechanical drawings
- General arrangement layout & drawings
- Busbar, Genest, fuel tanks design
- TIA 942-C Design Validation
- Fire system & Plumbing
- Civil & Partitioning works
- 3MW Power Design & Distribution
- Containment & Racks with Rated-3 Design
- Certification & Project Management.



Rated- 3 Design
management & Project
management on JIRA
software for 600 Racks
Commercial DC Facility

Timeline
2025
In Prog



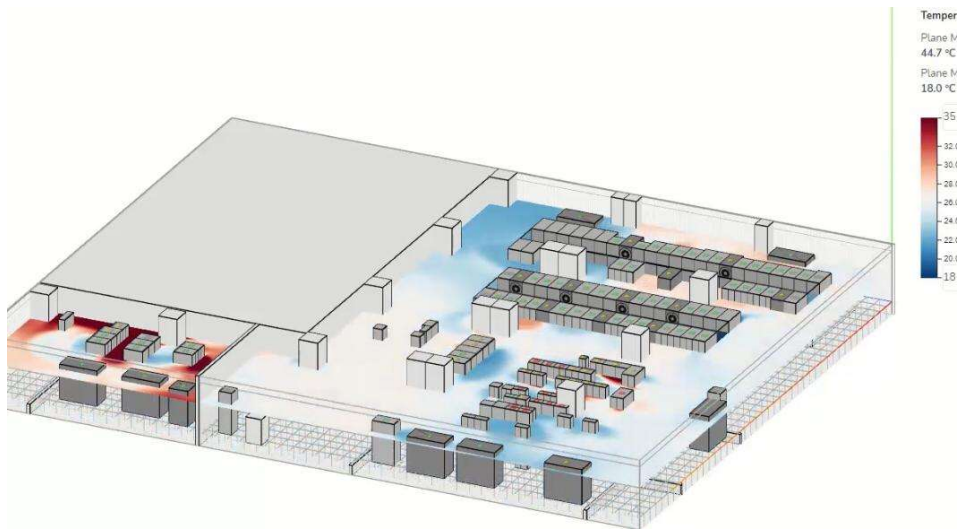
Jazz Data Center

Cooling Optimization Project at Zia Town Faisalabad Data Center

Project Overview: This top tier operator had OPEX related issues at Zia Town Faisalabad, CGS has developed detail optimization plan with target energy saving of unto 78kW thereby ROI of 4.5 Months

Solution Description: It includes

- CFD analysis(pre & post scenario),
- Identified two major areas for potential saving
- 4 new Inrow Cooling units installed,
- 17 existing units relocated for cooling optimization
- PUE improved from 1.9 to 1.75
- Local customized containment solution deployed.



Modular solution allowing the customer to install 52 racks with AC & DC power and scalable to 65 racks Tier III design.

Timeline
2024



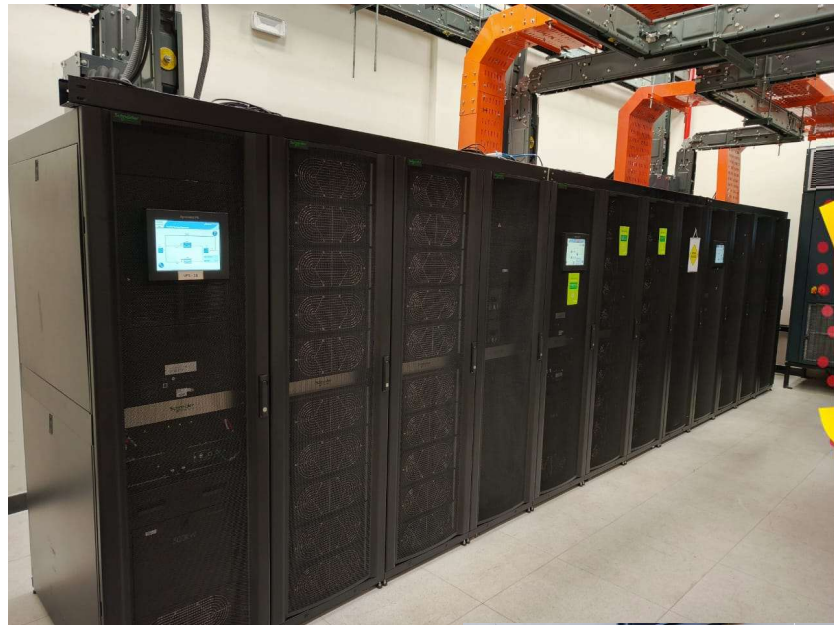
Jazz Data Center

Symmetra PX UPS Repair testing and Installation

Project: Symmetra 500 UPS – Dismantling, Repairing, Testing, Installation & Commissioning

The scope of work includes complete handling and restoration of the existing **APC** :

- Safe shutdown and isolation of the Symmetra UPS from live circuits.
- Dismantling of UPS modules, power frames, battery cabinets, and communication links.
- Detailed visual and electrical inspection of all UPS components.
- Testing of power modules, control boards, fans, and bypass assemblies.
- Repair or replacement of defective modules, connectors, or cabling as required.
- Cleaning, terminal tightening, and preventive maintenance.
- Reinstallation of the repaired UPS and battery cabinets at designated site location.
- Connection of power, control, and communication cables as per OEM standards.
- Integration with upstream and downstream panels and SNMP/BMS monitoring system.
- Functional testing in normal, bypass, and battery modes.
- Verification of alarm, indication, and monitoring signals.
- Load testing and performance validation to confirm system readiness.



Sefam NDC Project

04 – Racks Data Center at Sefam Facility Lahore

Project Overview: This top tier operator is developing Rated -3 TIA 942-C compliant data center to attract commercial customers as facility will be 1st of largest in the country with space & infrastructure up to 3MW

Solution Description: It includes

- TIA 942 B),
- 2 UPS at 80KW each,
- and a 300KW UPS loaded at 150KW
- with Li-ion batteries.
- Additionally, there is 9 CRAC units of 52KW each, DX front Discharge.
- 65 Racks
- Busways
- DCIM & CCTV



Modular solution allowing the customer to install 52 racks with AC & DC power and scalable to 65 racks Tier III design.

Timeline
2022



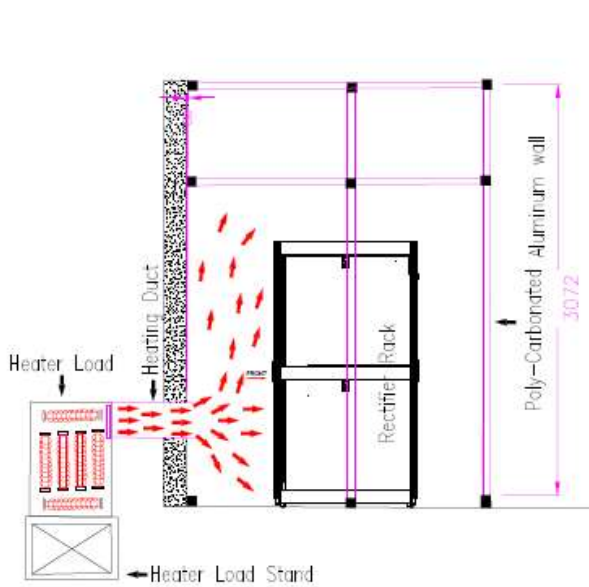
Data Center Test Lab

State-of-the Art Test Lab for Testing environment for Data Center

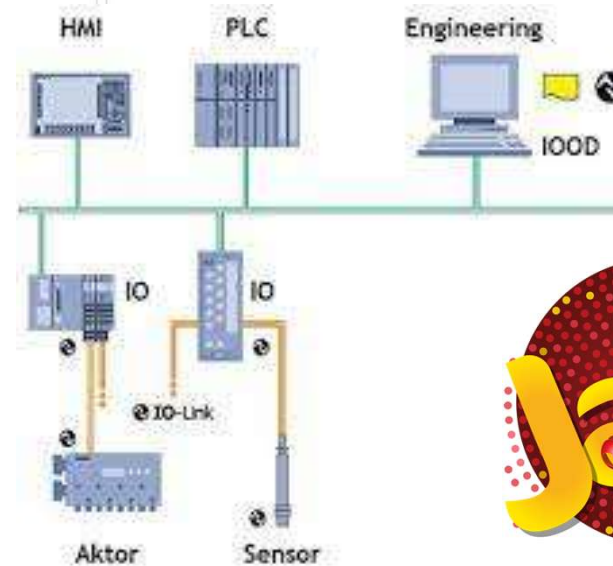
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Timeline
2024



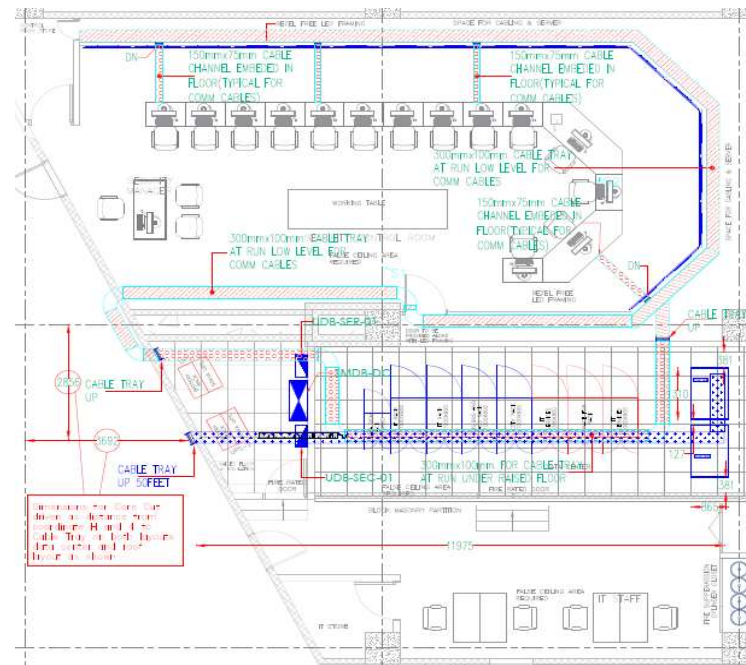
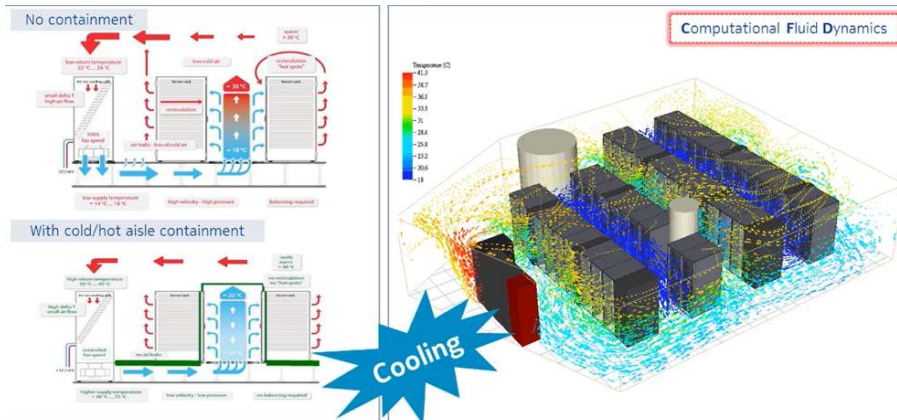
Dolman Mall

Design & Installation Services for Data Center

Project Overview: Dolman Mall constructed a rated 3 compliant facility with up to 6 racks, Network architecture to indicate its main server room for their IT requirements.

Solution Description:

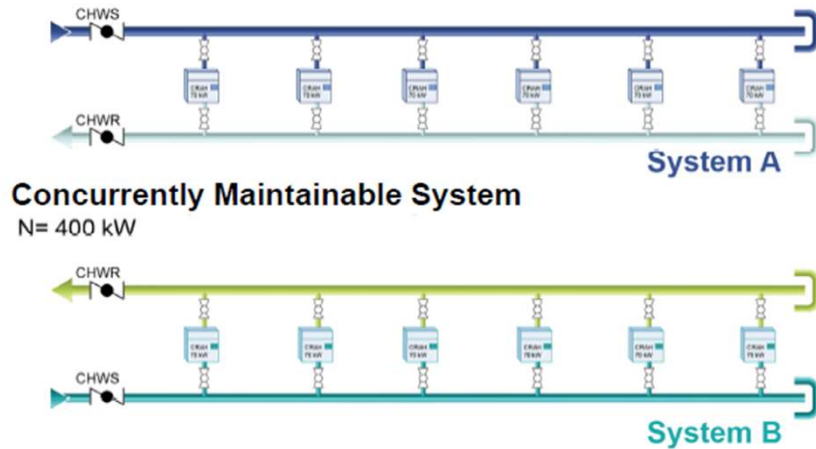
- CFD analysis(pre & post scenario),
- Design & deployment of various services within Server room space
- Supply of racks
- 2 x 40KVa UPS System
- Schneider Electric HVAC System
- BMS system



Timeline
2025

Design & Installation of HVAC units in Dolman Mall Server room compliant with N+1 Design & Rated 3 Power Infrastructure.

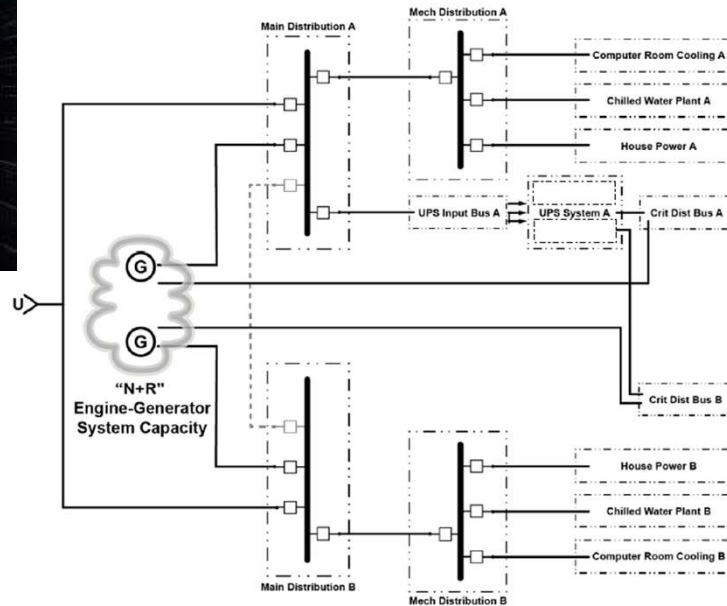




- **Project Type:** Data Center Design Review
- **Scope:** Uptime Institute Certification (Tier III)
- **Client:** AI-IMAM ENTERPRISES
- **Services Provided:** Comprehensive design review, gap analysis, and compliance advisory

Project Description

- Reviewed MEP and infrastructure drawings for Uptime compliance
- Identified design gaps and provided corrective recommendations
- Assessed power and cooling systems for redundancy and maintainability
- Coordinated with client teams to align on Tier certification requirements
- Prepared compliance reports and documentation for Uptime submission



Timeline
2025



TIA-942



Telecom Data Center



NADRA DATA CENTER

Prepared data center design drawings aligned with **TIA-942-C** standards to support certification readiness.

Project Description:

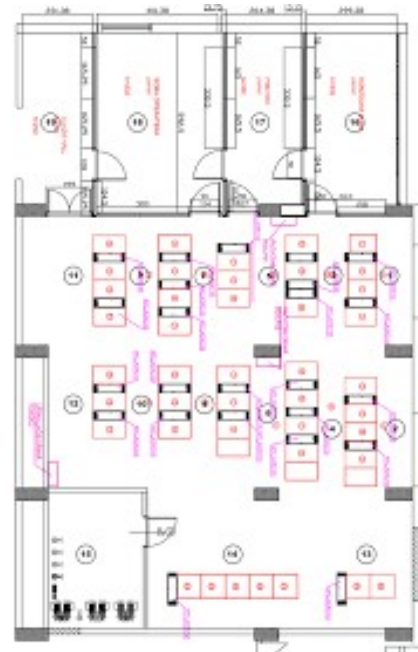
Developed detailed layout for telecom and equipment rooms

Designed structured cabling and pathway systems (copper & fiber)

Incorporated grounding and bonding details per standard

Illustrated redundancy and fault-tolerant topologies

Coordinated U-space allocation and rack-level documentation

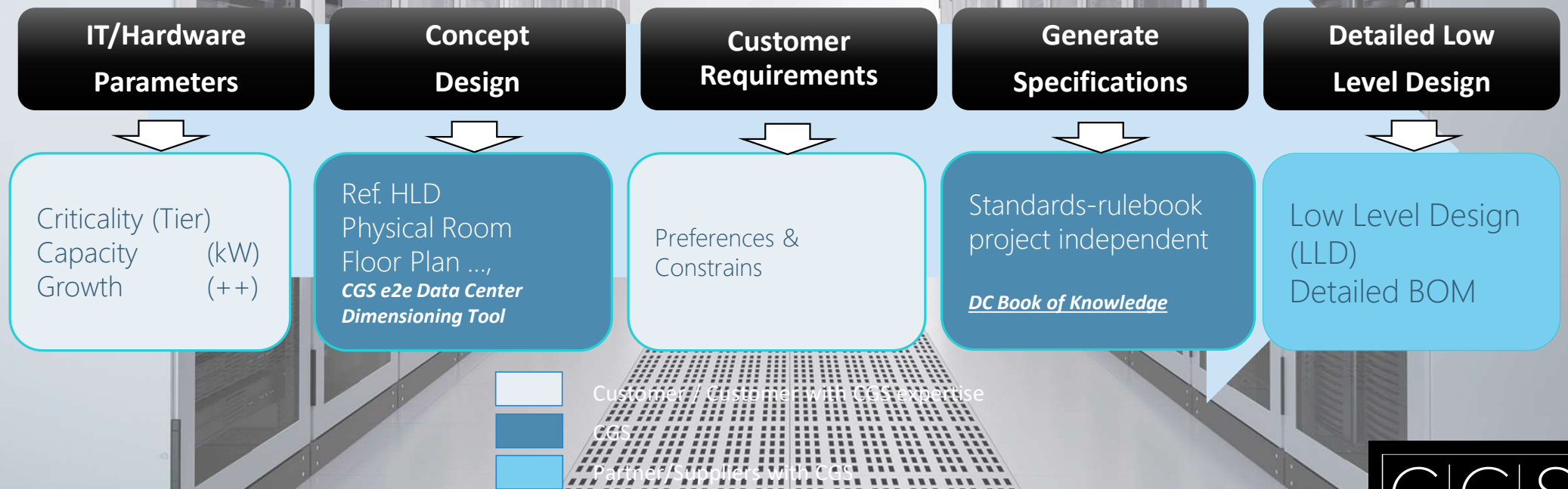


Timeline
2025



Data Center Solution Infrastructure Design process

Data Center Infrastructure Design Process



Product Partner

Coraltech Global Services Pvt. Ltd. is the authorized Data Center Partner of Delta Electronics MEA DMCC in Pakistan for Supply of Delta Data Center solutions, products, spare parts, and after-sales support services.



A black and white photograph of a server room aisle. The aisle is lined with server racks on both sides, each filled with server units. The floor is highly reflective, mirroring the racks and the ceiling. The ceiling has a grid pattern with recessed lighting. In the distance, there are signs hanging from the ceiling labeled 'A 3', 'B 3', 'A 4', and 'B 4'. A teal banner with the text 'THANK YOU' in white, bold, sans-serif font is centered across the middle of the image.

THANK YOU