Otomatica Professional Services

DC Infrastructure Design Fundamentals

Training for Data Center Professionals

TRAINING TITLE: DC Infrastructure Design Fundamentals (3 days)

Training Objective

Data Center Infrastructure consists of the integration of 15 to 18 different electro-mechanical systems. The interaction between systems is structured in a way that fulfills the goal of high availability (business continuity) and maintains the capacity in use. Each system has dependencies on other systems and all activities by the data center management team are aimed to be carried out concurrently in a way that does not cause disruption to critical IT devices.

In the formation of the infrastructure that meets the data center service provider and end-user business objectives, the stages of feasibility, planning, design and implementation are passed, respectively. At these stages, the investor needs external consultants, designers, project management companies, main and subcontractors, as well as different corporate departments within the company. Investment management has to coordinate these internal and external teams to work together and value engineering.

Awareness of different issues specific to the center such as from business continuity level to energy efficiency, from system requirements to components, from determining selection criteria to comparison methods, from current standards and best practices to which subject to refer to, from topology to system selection, from site selection to white space layout, from testing and commissioning to sustainable operation becomes important.

The aim of this training is to provide a holistic view to investors, end users, main contractors, project design and management companies who are planning to take part in the feasibility, planning, design, implementation, or holistic coordination processes for the data center infrastructure facility and support the completion of the project on time and within budget by meeting their business objectives at the maximum level. is to provide information.

Training Scope and Gains:

The training covers the main subjects as

1. Issuing end-user and investor project requirements,
2. Standard and Best Practices and application areas,
3. White Space layout planning,
4. Electrical systems and infrastructure components,
5. Mechanical systems and infrastructure components,
6. Data Center Efficiency methods,
7. Operation management system,

where the information will be provided on the methods to be followed in order to achieve significant gains in data center infrastructure systems.

Who Should Participate?

The training was prepared for technical teams of

1. Investor,
2. End User,
3. Main Contractor,
4. Project Design,
5. Project Management,
6. Data Center Operation Management,

working in the physical infrastructure business of the Data Center.

Training Program:

1. Data Center and Lifecycle
2. DC Infrastructure Key Performance Metrics
3. IT Hardware Requirements
4. DC Infrastructure Standards
5. Location Selection
6. Resource Accesses
7. Architectural Layout
8. Structuring of Gray Areas
9. White Space Structuring
10. DC Electrical Infrastructure Components
11. Projecting
12. Low Current Systems
13. Cooling and Thermodynamic Fundamentals
14. Cooling Systems
15. Efficient Design in Critical Cooling
16. Other Mechanical Systems
17. Operation Management System Usage and Needs
18. Operation Management System Components