



A Data Center Solution Company



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About Us

PT. Nestindo Mitratama is an IT solution provider for data centers, IT infrastructure consulting, implementation, and services. Established since year 2002, our company has developed a comprehensive suite of IT infrastructure, electrical and mechanical services, combined with our highly secured and reliable data center solution & services, that allow us to address our customers' critical needs of availability, manageability, disaster recovery, and consolidation.

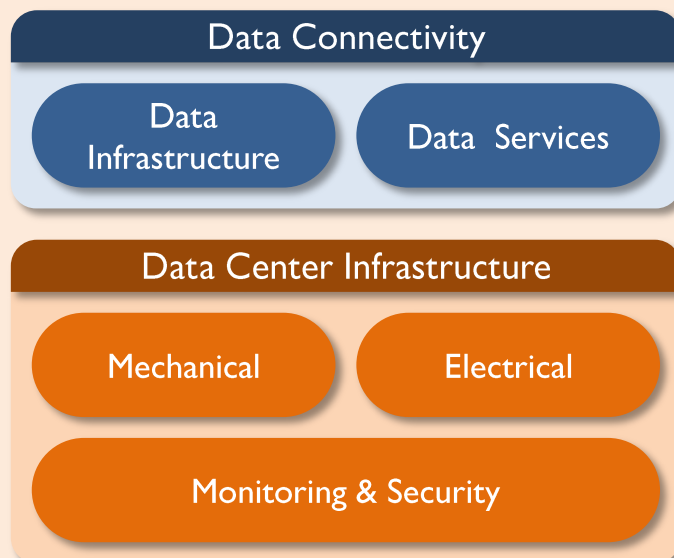
Whether a customer's business needs demand a single, focused solution or a comprehensive blend of managed IT services, our experts can architect, implement, support, and secure your mission-critical data and IT infrastructure by optimizing your environment through virtualization solution, data protection solution, and disaster recovery solution.

We have a large and diverse customer base comprised of more than 50 active customers in the Indonesia. These customers represent a cross-section of industries and sizes, ranging from Internet Service Provider companies to start-ups in which IT is a competitive differentiation. PT. Nestindo Mitratama offers a full arsenal of expertise aimed at advancing the capabilities of our customers' mission-critical computing environments. We utilize complete life cycle approach for data center infrastructure consulting services, starting with needs and design consulting and continuing with solution implementation, complemented by an array of IT operations support including managed services and managed hosting and completed by full 24x7 vendor-authorized support.

Through our vision to provide best solution in IT infrastructure mechanical electrical and network system integration and our mission to combines unequalled expertise in technology with experience in your industry, ability to manage native through complex requirements, our people, technology, and process will enable you to enhancement your business value, to reduce time to market, increase profitability and growth, improve customer service and shareholder value.

Our Portfolio

As part of a group of companies with complementary solutions, PT. Nestindo Mitratama offers as full set solution for IT mechanical & electrical solutions, particularly the area of data center. Our people, knowledge, experiences, and technology delivers a state of art solution for corporation in the area of IT mechanical & electrical.



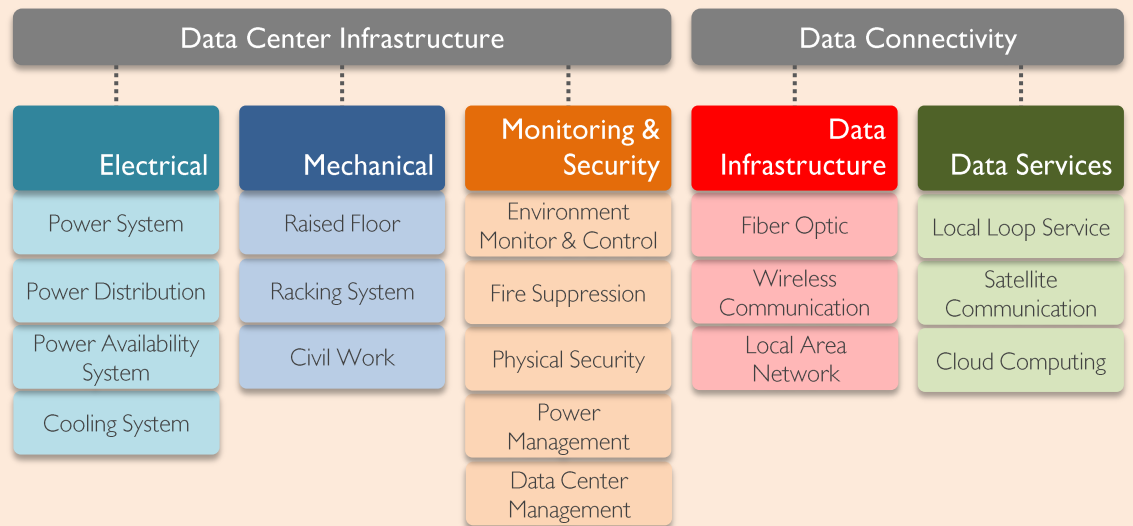
Data Center Infrastructure Portfolio

Our data center infrastructure solution delivers our core expertise of IT Mechanical & Electrical system. Through our full set experiences in data center design, build out, and maintenance, we ensure that our capability to deliver the data center infrastructure with high reliability and availability to meet your business requirement and service level.

Data Connectivity Portfolio

Our data connectivity solution provides the end-to-end data interconnection without boundary limits through our various deliver channels technology. Corporation that need to stay connected with their data center, branches, remote site, partners, and public Internet will take the advantages from our value added services.

Our Solution



Data Center Infrastructure Solution

Our long expertise in data center infrastructure area have been proven on our various customer based around this country for more than 20 data centers & server rooms with more than 4,000 racks at customers premises.

Our experienced engineers will assist our customers from the early stage of planning & design to the construction and maintenance stage.

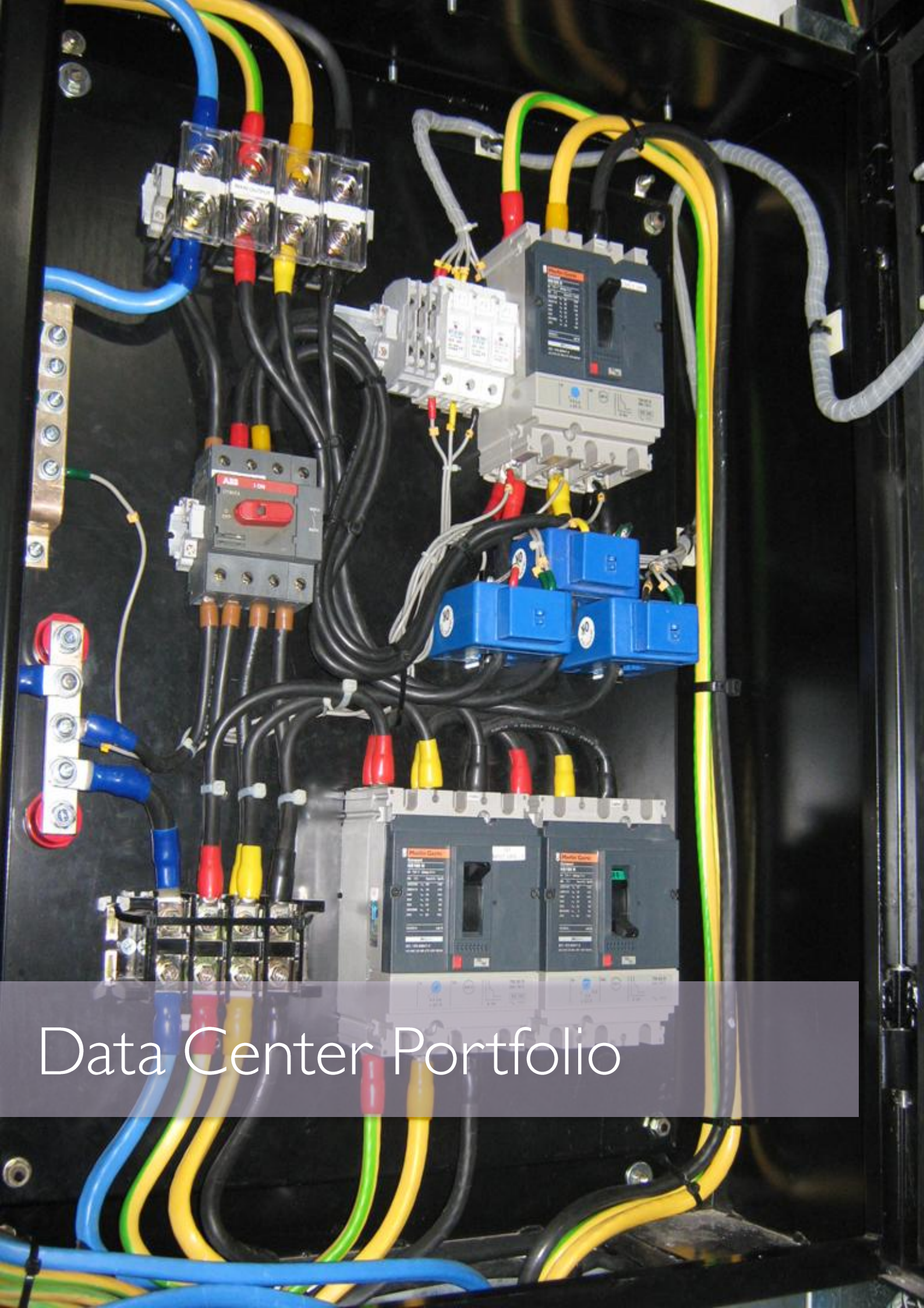
Nestindo offers a wide array of data center management solutions specifically tailored to your IT environment together with its supporting physical infrastructure with high flexibility and scalability.

Our engineers can design, install, and support the infrastructure from industry leading vendors for data center solution.

Data Connectivity Solution

The growth of data connectivity requirements as part of our data center solution for our customers has reached the scale for us to diversify our portfolio.

Our highly experience and knowledgeable resources in the industry will able to provide the best solution for our customers covering data infrastructure plan, design, installation, management, and support with the industrial standard quality and service level through multiple methods of communication protocols, devices, and access.



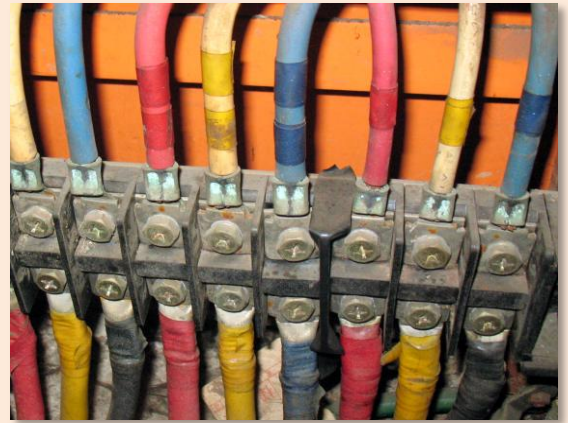
Data Center Portfolio

Data Center Solution

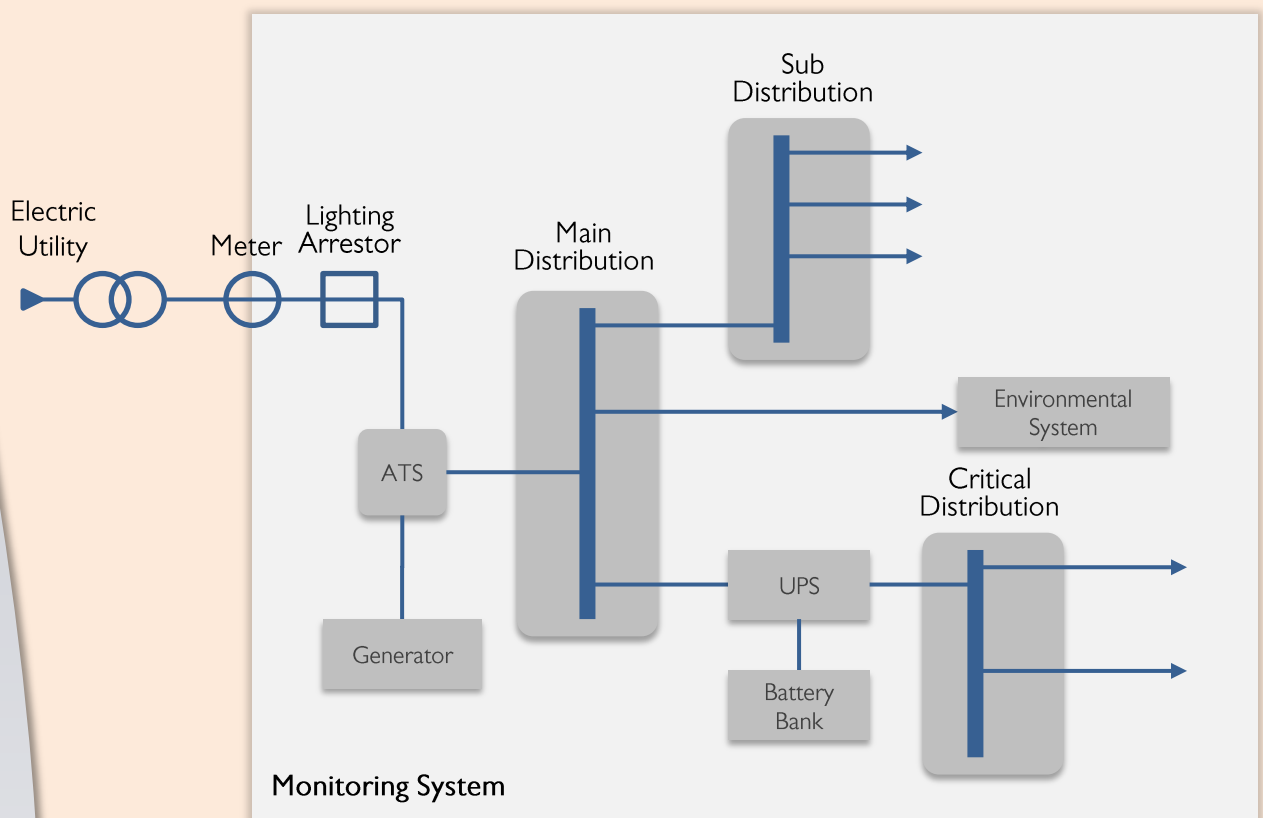
Electrical System

Power System

The power system plays the main role in a data center where every data center owner requires extra caution and careful plan & design on the electrical system to secure and protect the data center assets. Improper electrical system plan and design will impact the future power availability, stability and quality.



Our electrical engineers will be able to help your organization to plan, design, implement, fine-tune, and maintain your electrical system that is not limited to the data center environment only. We provide services to improve your electrical cable management, power distribution, boost the power quality, and enhance the power reliability and availability. Additionally, our power management products will be able to help you monitor the energy consumption, costs and trends across all levels within the data center and remote locations.



Data Center Solution

Electrical System

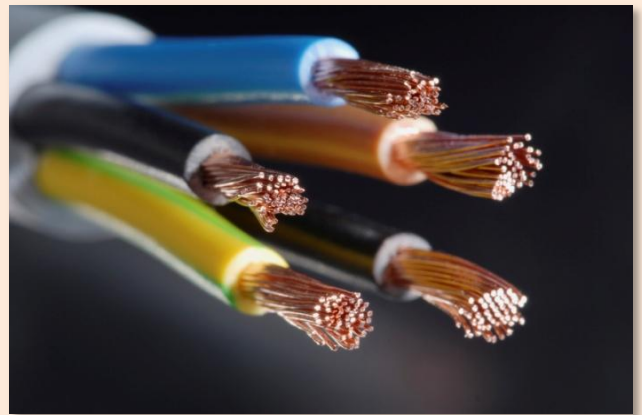
Power Distribution System

Distributing power in the data center requires vigilant plan and design to eliminate power shortage and imbalance within racks. Poor power distribution system will lead to poor power quality and may result the worst condition of power outage and equipments damage. Proper planning and design on the power grounding with result on longer life time of the equipments.

Nestindo offers the capability to deliver power distribution plan, design, installation, and support. Our services cover:

- Low voltage distribution panel setup & installation
- Sub distribution panel, distribution & lighting power outlets design & installation
- Lightning protection system design and installation
- Electrical grounding system
- Manual & automatic metering reading system
- Power quality analysis & monitoring

We offer services for additional utility power increment, panel assembling and installation according to the requirements.



Power Availability System

Nestindo offers power availability design & installation services that cover the setup of UPS and power generator system to guarantee the power service level of the data center and to avoid single point of failure. Our services cover:

- Low voltage power generator system planning, design & installation, including synchronization and Automatic Transfer Switching system
- Zero downtime dual source transfer system (Utility - Generator set)
- Power source redundancy
- Uninterruptible Power Supply planning & installation through Change Over Switch and/or Bypass module
- Lightning protection system design and installation.

Data Center Solution

Electrical System



Cooling System

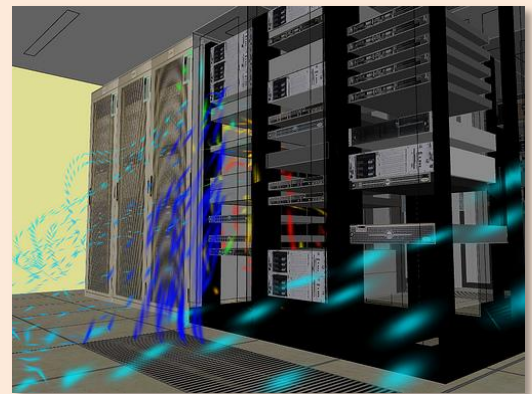
IT equipments generated huge amount of heat accumulated in the data center. The high-density/blade servers are getting popular recently, offer a significant performance per watt benefit. However, depending on the deployment, they can present a significant cooling challenge.

Vendors are now designing servers that can demand over 40 kW of cooling per rack. With most data centers designed to cool an average of no more than 2 kW per rack, innovative strategies must be used for proper cooling of high-density equipment.

Nestindo provides approaches for increasing cooling efficiency, cooling capacity, and power density in new and existing data centers. Our team will assist you to size, design, and calculate your data center cooling requirement based on our experiences to achieve greener environment.

We provide air conditioning system plan, design, installation, and support that comply with the best practice and industrial standard to optimize the cooling capacity, each through a preset environment parameters or automatic sensor-based monitoring & controlling system. We can analyze and design the data center requirement, improve the airflow through various airflow management technique such as heat segregation and stratification to improve the cooling efficiency.

Furthermore, to optimize the data center cooling, we can offer data center thermal modeling using Computational Fluid Dynamics (CFD) that is gaining its popularity as a tool for analyzing the effectiveness of cooling within the racks and aisles. CFD provides companies with a detailed 3-D analysis of how cold air is moving through a data center, identifying potential “hot spots” where equipment is receiving too little airflow. Thermal mapping can also find areas in a data center that are receiving more cold air than needed, wasting cooling and energy.



Data Center Solution

Mechanical

Mechanical Solution

The standard data center require proper design and tools to support the entire equipments and devices installed. A massive system can comprise of extreme masses that require extra supporting system to prevent the structure from damage.



Proper design of the supporting mechanical system is an essential through proper planning and design, supporting structure material selection, raised flooring system, and racking system to host the computing devices.

Nestindo will work with your team to find the best piping system, rack, enclosure or cabinet to fit the needs of your mission critical equipments. We understand the rack or enclosure is the basic platform that houses the equipment your company relies on to be successful. Selecting the correct rack or enclosure for your servers and networking equipment is important so the equipment is effectively and efficiently cooled, protected, and powered.

Our company provides services for raised floor planning & design to anticipate the weight load of each rack, particularly the data center the host high-density servers.

Additionally, for some circumstances, we can deliver civil work to office and data center reconstruction, partitioning and fitting out. Our team will work closely with building management to deliver the activities.

Data Center Solution

Monitoring & Security

Environmental Monitor & Control

Managing complex data center with mission critical applications require extra efforts to maintain the operating condition and to make sure the entire data center environment condition is monitored and controlled.

The operational risk of the mission critical data center demands continuous monitoring on the entire data centers environment and devices.

Nestindo provides the end-to-end solution for data center environment monitoring and security system to ensure any potential failures are anticipated prior to the disaster. Our standard environmental solution comprises of but not limited to temperature, humidity, and power monitoring.

Physical Security Solution

Protecting the data center valuable assets requires comprehensive physical security deployment to prevent and audit the resource movement to and from the location. Convergence of the physical and logical security enable a better level of security performance and lower price, lower risk and improve the data center abilities to prevent events.

Our physical security solution for data center offers:

- Video Surveillance System to watch and record the physical events in the surveillance system coverage through analog or IP-based system.
- Access Control System to protect and limit unauthorized access to the private facilities. All access activities are logged and kept for future evidence.
- RFID Asset Tracking for data center assets movement and prevent unauthorized assets displacement.



Our environment monitoring & control solution delivers monitoring and control system of critical environmental conditions, such as temperature, humidity, liquid water presence, motion, intrusion, and vibration and delivers the alert via email, LEDs, alarm beacon, web page, network management (SNMP), voice phone calls, and SMS messages.

Data Center Solution

Monitoring & Security

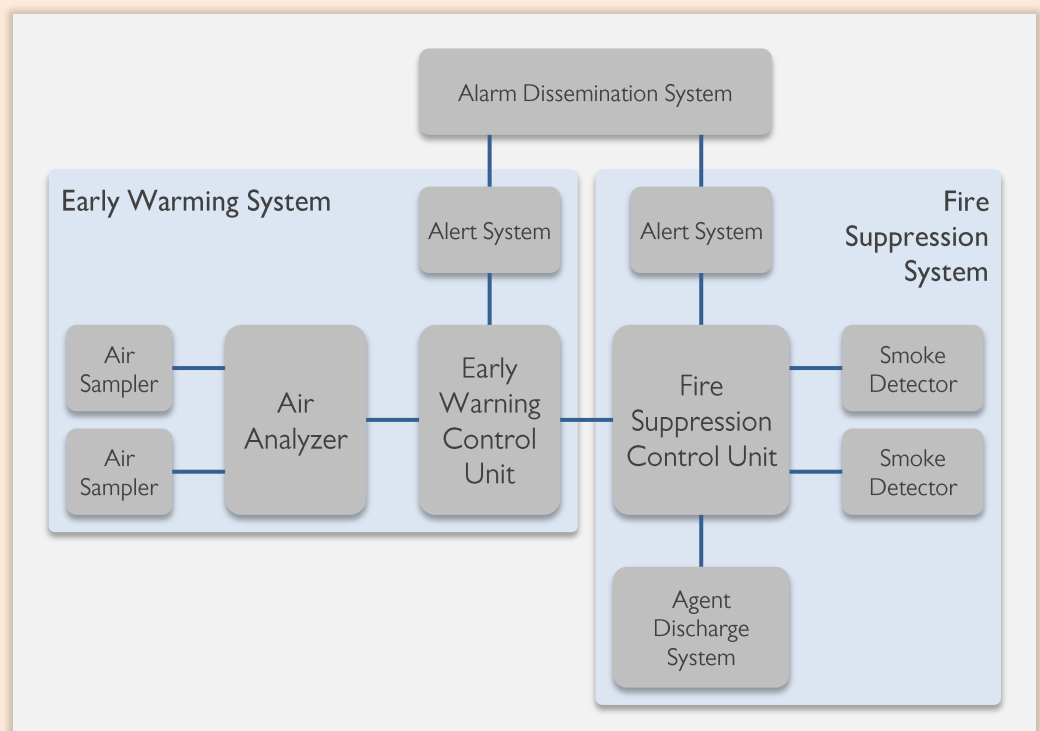
Fire Suppression System

Apart from natural disasters which can not be controlled by humans, fire was greatly feared by the data center manager. To prevent fires in the area data center that massively occupied by a variety of active devices that have a high potential to cause fires, fire prevention system becomes a mandatory requirement of a data center.



Our fire suppression solution delivers environmental friendly agents that composed of atmospheric gases and does not pose the problems of toxicity associated with the other chemically derived agents.

Combined with our ultra sensitive air sampling fire detection system that detects the invisible by-products of materials as they degrade during the pre-combustion stages of an incipient fire, our fire suppression solution provides the state-of-the-art fire protection system for your valuable assets.



Data Center Solution

Monitoring & Security

Power Management System

Proper management of power in a data center will enable data center manager to improve its Power Utilization Efficiency (PUE) and DCIE (Data Center Infrastructure Efficiency), the widely accepted benchmarking standards proposed by the Green Grid to determine how energy efficient data centers are, and to monitor the impact of their efficiency efforts.

Our power management solution provide the tools to monitor energy consumption, costs and trends across all levels within the data center and remote locations. We help organizations to realize greater efficiencies in the data center through:

Monitor Usage – Individual assets to company-wide. Power consumption can be monitored and reported at any level of granularity needed, from individual PDUs and racks to rows of racks, the data center, even the entire company.

Control Power Remotely – Manage from anywhere, anytime. Out-of-band, remote management for all power-controlled devices, selected 3rd party PDUs and power management of Intelligent Platform Management Interface (IPMI) enabled servers.

Control Capacity – Use power more efficiently. Real-time and historical data give you insight into how to best set thresholds and alerts, plus plan for growth.

Pinpoint Problem Areas – Get tighter command over the power guzzlers. By identifying the highest users of power, from the rack to the center to the company, you can calculate and compare expenses by area and trend.

Chargeback Power Costs – Make power a tangible part of budget considerations. With detailed monitoring down to the individual outlet and device, you can understand how many data center resources a particular department is using and what percentage of the total power they should be responsible for funding.

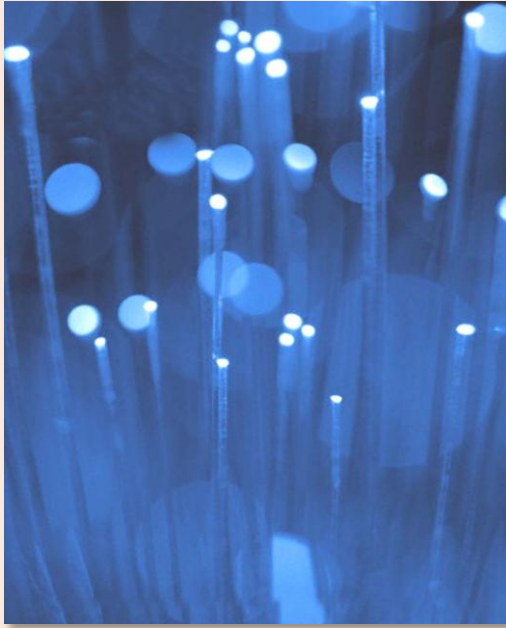
Optimize Uptime – Ensure service levels are maintained. It could be as simple as automatically disabling unused outlets on a power strip to control usage on a rack. Or as detailed as setting power thresholds on racks and centers that produce online notifications for management reaction.



Connectivity Portfolio

Connectivity Solution

Data Infrastructure



Fiber Optic

The emerging of rich media streaming, cloud computing environment, and other rich content business is driving the increase of high speed and reliable data transport media. Fiber optic has been the best solution for those purposes for years and will be remain for the next decade.

Nestindo offers a range of fiber optic solution, from intra-building to inter-building fiber optic connection. Working closing with the industry leading vendors, our solution will ensure our customers to stay connected with its business units and public network with matchless speed, reliability, and availability.

Wireless Communication

Wireless data communication offers cost effective short to midrange connectivity for intra and inter company. Wireless can take form of licensed and unlicensed data radio or microwave radio, rely on the technical requirements and specification.

We provide wireless network design, installation, and maintenance for point-to-point, point-to-multipoint, or mesh network topology. Our government relation officer will able to assist your organization to process the utilized frequency license and accelerate the certification processes.

Local Area Network

Nestindo delivers Local Area Network planning and installation for new setup office or re-cabling of operational office. Through proper network design, our team will able to lay the data cable properly and aesthetically.

We provide products and services designed to build and manage local area networks and wide area network infrastructures for customers large and small alike. Our engineers and installation technicians are highly trained and take responsibility of your network project from design to implementation. Our services include premise wiring, hardware installation, testing, network monitoring and management.

Connectivity Solution

Data Services



Local Loop Services

Nestindo with its partners delivers high quality broadband over fiber optic services for corporation that need to interconnect its offices in different locations. This solution enable our valuable customers to deliver their business application and multimedia communication to their branches or partners without the constraints of bandwidth limitations.

Our local loop services guarantee the availability of your data communication with the highest quality to support your business and communication.

For organization that require additional Internet access, working closely with our partners, Nestindo will able to deliver the access requirement based the expected service level.

Very Small Aperture Terminal

The remote area without other data connectivity, VSAT will be the only solution for corporation that need to stay connected with their operation sites. Our VSAT solution offers an efficient and scalable IP network to deliver data transfer, video conference, voice, as well as broadband internet access.

A range of business model we offered to ensure the flexibility of choice for our customers to fit with their business requirements and purposes.

Additionally, Nestindo offers portable satellite communication for data and voice for quick deployment in the remote area. Our portable satellite communication solution enable rapid deployment for users located in the remote area that beyond the voice and data communication coverage service. We also offer the freedom of choice for our customers through the variety of devices and service plan.





Consulting Portfolio

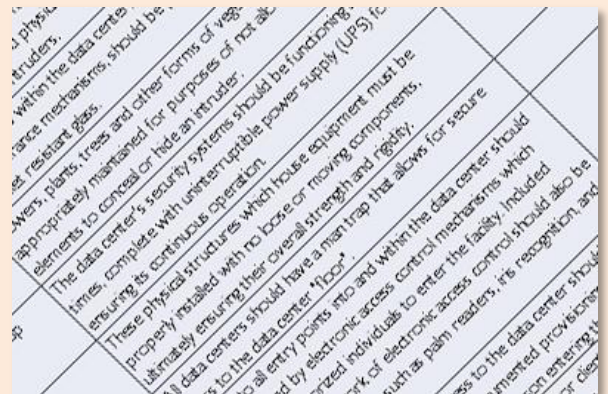
Consulting Services

Data Center Audit

Our long experience in data center design and build-out has equipped our resources with the knowledge on the proper data center design and management. Through our data center audit service, you can benefit the clarity of the data center design, configuration, operating procedure, and support. The information collected as the result of this audit forms the framework for a potential or eventual gap analysis to determine what is missing or what can be improved.

In addition, a yearly audit program is an excellent idea for achieving and maintaining an operational efficiency and cost efficient operation. The audit report shall include an outline that provides a high-level overview and detailed coverage on the following areas:

- Organizational structure/system overview, documentation, & training
- Program change control management
- Data center operations
- Physical security/environmental controls
- Backup/restore
- Contingency planning
- Hardware backup
- Testing
- Emergency procedures
- Vendor support.



IT Disaster Recovery Planning

Maintaining business continuity involves proper planning for IT disaster recovery before it happens. IT Disaster Recovery Planning (DRP) requires detail design and map of the existing current IT configuration, architecture, operation, and priority to develop the disaster recovery organization, mitigation policies & processes, and technology.

Nestindo has the capability to deliver the DRP to our customers through the following services:

- Risk Assessment
- Impact Analysis
- Improvement Recommendation
- Plan Development
- Plan Test & Maintenance
- Periodic Plan Review

Our Team

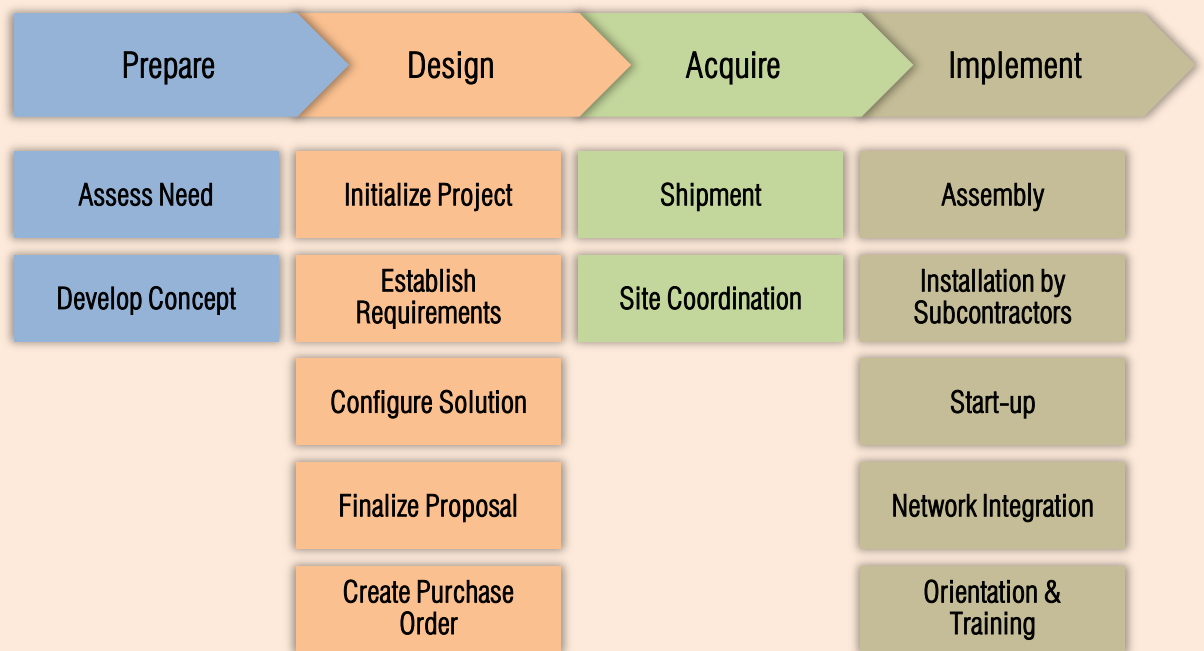
Our management and staff are highly qualified, professional, and proven at that each field, experiences and dedicated to their works. We are very concern of the services and satisfying our customers. We always bring the best solution to meet our client needs and give the best performances they will get.

To help you plan, design and implement your business initiatives, Nestindo provides business innovation services and integrated technology services for the subject matters.

We help you to transform your people, processes and technology, as well as implement change initiatives and bridge the gap between your current capabilities and future business requirements.

Project Management

We understand that the key success factor for a project implementation is a proper project management to manage the project scope, timeline, cost, and quality. Our project management approach has been derived from our long experiences in manage various projects in the industry that simplified without sacrificing the project deliverables. Depend the complexity of the project, the following diagram represents our project management methods, particularly for data center development.



References

No	Customer
1	IDC Indonesia
2	IDC Batam
3	IDC Bandung
4	PT. Mobile-8 Telecom Tbk
5	PT. Satata NekaTama
6	PT. Cyberindo Adhitama
7	PT. First Media Tbk
8	PT. Indo Internet
9	PT. Tangara Mitrakom
10	PT. ACE Life Insurance
11	PT. Trikonsel Multimedia
12	PT. Asia Broadband Satellite
13	PT. Jaringan Intech
14	PT. Orion Cyber Indonesia
15	PT. Dwi Tunggal Putra
16	PT. Graha Sarana Data
17	Kangean Energy Indonesia Ltd.
18	PT. Mensa Bina Sukses
19	Others

Products

Electrical System



Cooling System



Infrastructure Monitoring System



Fire Suppression System



Raised Floor & Racking System



Physical Security System



Lighting Protection System



Standards

Our works refer to industry standards and best practices for our design, work process and compliance. These standards are widely acknowledge and accepted by the industry.

1. PUIL – Persyaratan Umum Instalasi Listrik (PUIL 2000)
2. Standar National Indonesia (SNI) for cable standard
3. TIA-942.2005 – Data center standard
4. TIA-568 – Commercial Building Telecommunication Wiring Standard
5. TIA-607 – Commercial Building Grounding and Bonding Requirements for Telecommunications
6. BS -25999-2 – Business Continuity Management
7. ASHREA – HVAC Application
8. ISO-17799-27001 – Information Security Management Standards

