



DATA CENTRE

# Infrastructure for the Modern Data Centre.

End-to-end design, build and support for enterprise server rooms and data centres

SAFETY

SECURITY

NETWORKING


















AUTOMATION

IT INFRASTRUCTURE

**IDITRI**<sup>®</sup>  
TECHNO SOLUTIONS PVT LTD

iditri.co

# What's Inside

01	 Welcome	3	10	 CCTV & Surveillance	12
02	 The Challenges	4	11	 Environmental Monitoring & DCIM	13
03	 Server Racks & Structured Cabling	5	12	 Raised Flooring & DC Build	14
04	 Precision Cooling & Airflow	6	13	 Backup, DR & Data Protection	15
05	 UPS, Power & Backup	7	14	 AMC & 24x7 Monitoring	16
06	 Network Core & Connectivity	8	15	 Results & Outcomes	17
07	 Servers, Storage & Virtualisation	9	16	 Why ITSP	18
08	 Fire Detection & Suppression	10	17	 Contact Us	19
09	 Access Control & Physical Security	11			

WELCOME

# Technology That Works as Hard as You Do

A data centre is the engine room of the modern enterprise — everything depends on it staying cool, powered, connected and secure, every second of every day. Getting that right takes far more than racks and servers: it takes precision cooling, clean redundant power, resilient networking, tight physical security and constant monitoring, all engineered to work as one. ITSPS brings 25+ years of technology experience to data-centre projects, delivering reliable, integrated infrastructure — from a single server room to a colocation-ready build.

In this catalogue you will find detailed information on every solution we offer for data centres and enterprise server rooms — from racks, precision cooling and redundant power to networking, physical security, monitoring and disaster recovery. Each solution is described with the specific options and variants we deploy, so you can identify exactly what fits your facility.

We invite you to explore, and we look forward to a conversation about your data centre.

**25+**

Years of Technology  
Experience

**12**

Integrated Solutions  
for Your Facility

**3**

Regional Offices  
Mumbai · Goa · Surat



## The ITSPS Team

Iditri Techno Solutions Pvt Ltd





# The Challenges Facing Today's Data Centres

## Heat & Cooling Stress

Densely packed racks throw off enormous heat; without precision cooling and proper airflow, hotspots form, hardware throttles and lifespans collapse.

## Power You Cannot Trust

A single utility feed, an ageing UPS or an untested generator means one outage away from downtime — and downtime is the one thing a data centre cannot afford.

## Tangled, Fragile Cabling

Unstructured cabling slows every change, hides faults and chokes airflow; a rushed patch today becomes tomorrow's outage that nobody can trace.

## Blind Spots in Monitoring

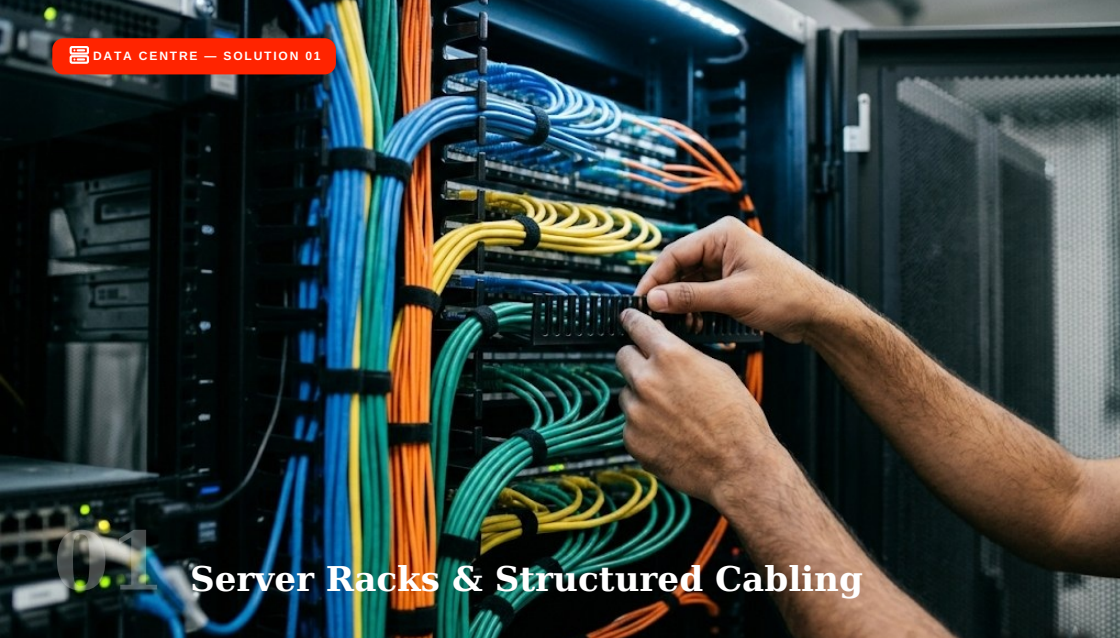
Temperature, humidity, power and access drift out of sight without proper DCIM — and the first sign of trouble becomes the failure itself.

## Physical Security Gaps

Server halls hold the crown jewels; unlogged entry, weak access control and patchy CCTV leave them exposed to tampering and theft.

## No Single Accountable Partner

Cooling from one vendor, power from another, network from a third — when something fails, nobody owns the problem and the clock keeps ticking.



# Server Racks & Structured Cabling

The physical backbone done right — sturdy racks, disciplined structured cabling and proper dressing that keep airflow clean, changes fast and faults easy to trace.

## WHAT WE DELIVER

### ✓ Server & Network Racks

Quality floor-standing and wall racks sized for load, depth and cable volume, with proper earthing.

### ✓ Structured Cabling

Combed, labelled copper and fibre dressed into vertical and horizontal managers for a clean, traceable plant.

### ✓ Cable Management

Managers, trays and dressing that protect airflow and make every move, add and change quick and safe.

### ✓ Patch Panels & Fibre

High-density copper and fibre patching planned for capacity and easy, error-free re-patching.

### ✓ Rack PDUs & Earthing

In-rack power distribution and proper bonding and earthing for safe, reliable rack power.

### ✓ Capacity Planning

Racks and pathways sized with headroom so the hall grows without a rebuild.

## BRANDS WE DEPLOY



# 02

## Precision Cooling & Airflow

Keeping the hall in its safe envelope — precision cooling, hot/cold-aisle discipline and containment that hold temperature steady, kill hotspots and cut energy waste.

### WHAT WE DELIVER

#### ✓ Precision AC (CRAC/CRAH)

Floor-standing precision units that hold tight temperature and humidity far better than comfort cooling.

#### ✓ Airflow Management

Blanking panels, brush grommets and floor-tile planning that direct cool air exactly where it is needed.

#### ✓ Redundant Cooling

N+1 cooling design so a single unit can fail or be serviced without risking the hall.

#### ✓ Hot/Cold Aisle Containment

Aisle containment that separates supply and return air, ending hotspots and improving efficiency.

#### ✓ In-Row & Rack Cooling

Close-coupled cooling for high-density racks where room cooling alone cannot keep pace.

#### ✓ Efficiency Tuning

Set-point and airflow tuning that protects hardware while keeping running costs down.

### BRANDS WE DEPLOY





# 03 UPS, Power & Backup

Clean, continuous, redundant power — UPS, distribution and generator backup engineered so the load never sees an outage and maintenance never means downtime.

## WHAT WE DELIVER

### ✓ UPS Systems

Online double-conversion UPS sized for the load, with runtime planned to bridge to generator power.

### ✓ Power Distribution

Distribution boards and rack PDUs that deliver clean, metered power to every rack safely.

### ✓ Generator Integration

Auto-start DG integration and transfer so power rides through extended utility outages.

### ✓ Redundant Feeds (A/B)

Dual A/B power paths to dual-corded equipment so any single path can be serviced live.

### ✓ Battery & Runtime

Battery banks sized and monitored for real runtime, with health alerts before they fail.

### ✓ Power Monitoring

Visibility of load, capacity and power quality so you provision and protect with confidence.

## BRANDS WE DEPLOY



# 04 Network Core & Connectivity

A fast, resilient network core — high-density switching, structured fibre and redundant links engineered for low latency and no single point of failure.

## WHAT WE DELIVER

### ✓ Core & Aggregation Switching

High-throughput core and aggregation switches sized for east-west and north-south traffic.

### ✓ Structured Fibre Backbone

OM4/OS2 fibre backbone linking rows, core and the meet-me room with capacity to grow.

### ✓ Segmentation & VLANs

Clean segmentation that keeps management, storage and production traffic separate and secure.

### ✓ Top-of-Rack Switching

ToR switching with tidy in-rack fibre and copper for fast, clean server connectivity.

### ✓ Redundant Links

Dual uplinks and redundant paths so a link or device failure never takes the fabric down.

### ✓ ISP & Meet-Me Readiness

Carrier-neutral pathways and patching ready for multiple ISPs and colocation cross-connects.

## BRANDS WE DEPLOY





# 05 Servers, Storage & Virtualisation

The compute and storage layer, built to consolidate and scale — right-sized servers, resilient storage and virtualisation that lift utilisation and simplify management.

## WHAT WE DELIVER

### ✓ Rack & Blade Servers

Right-sized servers from leading OEMs, specified for the workload and built for serviceability.

### ✓ Centralised Storage (SAN/NAS)

Shared SAN and NAS storage with capacity and performance planned for growth.

### ✓ Virtualisation

Hypervisor platforms that consolidate workloads, raise utilisation and ease management.

### ✓ Hyperconverged (HCI)

HCI options that fold compute, storage and networking into one scalable, simple platform.

### ✓ High Availability

Clustering and failover so a node or component failure does not stop the service.

### ✓ Lifecycle & Right-Sizing

Sizing, refresh and lifecycle planning that match capacity to need without overspend.

## BRANDS WE DEPLOY



Lenovo

Synology

QNAP

WD Western Digital

Microsoft

VEEAM

# 06 Fire Detection & Suppression

Protecting the hall without harming the hardware — very early smoke detection and clean-agent suppression that catch a problem long before it becomes a fire.

## WHAT WE DELIVER

### ✓ Aspirating Smoke Detection

VESDA-style aspirating detection that senses smoke at the earliest, pre-visible stage.

### ✓ Addressable Fire Panels

Loop-based panels that pinpoint the exact zone and device in alarm for a fast response.

### ✓ Suppression Interlocks

Interlocks that coordinate detection, suppression, cooling and power on activation.

### ✓ Clean-Agent Suppression

Inert-gas / clean-agent systems that extinguish without water damage to live equipment.

### ✓ Detection Across Zones

Detection planned for ceiling, underfloor and in-rack voids where smoke can hide.

### ✓ Compliance Support

Installation and documentation aligned to fire-safety norms, supporting approvals and audits.

## BRANDS WE DEPLOY

Honeywell

BOSCH  
Security Systems

AGNi

DSC

legrand



# 07 Access Control & Physical Security

Only the right people, only the right places — multi-factor access control, mantraps and full audit trails that lock down the hall and prove who went where.

## WHAT WE DELIVER

### ✓ Biometric & Card Access

Fingerprint and card access on the hall, cages and critical rooms, with a full entry log.

### ✓ Multi-Factor Entry

Card-plus-biometric on the most sensitive doors for layered, defensible access.

### ✓ Mantraps & Turnstiles

Mantrap and turnstile control at the perimeter to stop tailgating into the secure zone.

### ✓ Cage & Rack-Level Security

Access control down to colocation cages and individual racks where tenants share a hall.

### ✓ Audit Trails

Complete, time-stamped records of every door event for security review and compliance.

### ✓ Central Management

Issue, change and revoke access for any door from one console, instantly when staff change.

## BRANDS WE DEPLOY





# 08 CCTV & Surveillance

Eyes on every aisle and entry — high-resolution surveillance with long retention and quick retrieval that deter tampering and settle any question after the fact.

## WHAT WE DELIVER

### ✓ IP Camera Coverage

High-resolution cameras over aisles, entries, cages and the power and cooling rooms.

### ✓ Network Video Recorders

Reliable NVRs with storage sized for the retention period your policy and clients require.

### ✓ Access-Linked Footage

CCTV tied to access events so an entry and its video are reviewed together.

### ✓ Perimeter & Entry Cameras

Cameras at every door and the perimeter to record who approaches and enters the facility.

### ✓ Camera Health Monitoring

Automatic alerts when a camera goes offline or is tampered with, so blind spots are caught fast.

### ✓ Remote & Mobile Access

Secure live and recorded footage for authorised operators and managers.

## BRANDS WE DEPLOY





# 09 Environmental Monitoring & DCIM

Full visibility of the hall in real time — temperature, humidity, power, cooling and access on one DCIM view, with alerts that warn you before anything becomes a failure.

## WHAT WE DELIVER

### ✓ Temperature & Humidity

Sensors across racks and aisles that keep the hall inside its safe environmental envelope.

### ✓ Leak & Smoke Sensors

Underfloor water-leak and early-smoke sensors that flag a threat before it spreads.

### ✓ Threshold Alerts

Configurable alerts by SMS, email and console so the right person knows the moment a limit is crossed.

### ✓ Power & Capacity Monitoring

Real-time load, capacity and power-quality data for confident provisioning and protection.

### ✓ DCIM Dashboards

A single dashboard for environment, power, cooling and space across the whole facility.

### ✓ Trending & Reporting

Historical trends and reports for capacity planning, audits and efficiency improvement.

## BRANDS WE DEPLOY





10

## Raised Flooring & DC Build

The room itself, engineered for purpose — raised access flooring, containment and the civil and electrical build that turn a bare shell into a working data hall.

### WHAT WE DELIVER

#### ✓ Raised Access Flooring

Load-rated raised floor with a clean pedestal grid for cabling, cooling and serviceability.

#### ✓ Containment & Partitioning

Aisle containment, partitions and secure cages that shape the hall for efficiency and security.

#### ✓ Rack Layout & Planning

Floor and rack layout planned for airflow, capacity, weight and future expansion.

#### ✓ Underfloor & Overhead Pathways

Planned trays and pathways underfloor and overhead that keep power and data tidy and separate.

#### ✓ Electrical & Civil Works

The DB boards, earthing, lighting and civil works that bring the room up to data-centre standard.

#### ✓ Turnkey Build

A single team taking the room from bare shell to ready-to-energise, on one accountable contract.

#### BRANDS WE DEPLOY





## Backup, DR & Data Protection

Resilience beyond the primary hall — tested backups, replication and disaster-recovery design so data survives and services come back fast, whatever happens.

### WHAT WE DELIVER

#### ✓ Backup Systems

Automated, scheduled backup of servers, storage and critical data, removing reliance on any one machine.

#### ✓ Off-Site Replication

Replication to a secondary site or DR rack so a current copy always survives a primary failure.

#### ✓ Disaster Recovery Design

A documented DR plan and recovery targets so systems restore quickly and predictably.

#### ✓ Backup Appliances

Purpose-built backup appliances and immutable copies that resist ransomware and corruption.

#### ✓ Secondary DR Site

A compact secondary server room or DR rack engineered to take over when the primary cannot.

#### ✓ Recovery Testing

Regular restore and failover testing so the plan works on the day it is actually needed.

#### BRANDS WE DEPLOY





## AMC & 24x7 Monitoring

A single accountable partner keeping it all running — proactive maintenance, round-the-clock monitoring and fast response that protect uptime without finger-pointing.

### WHAT WE DELIVER

#### ✓ Preventive Maintenance

Scheduled inspections and health checks across power, cooling, network and security systems.

#### ✓ 24x7 Monitoring (NOC)

Round-the-clock remote monitoring of critical systems, with issues flagged before they bite.

#### ✓ Priority Response SLAs

Guaranteed response times for critical faults in power, cooling or network — minimising downtime.

#### ✓ Single Point of Contact

One partner and one number for the entire facility — no more vendor finger-pointing.

#### ✓ Spare Management

Stocked critical spares for rapid swap-out and restoration of essential infrastructure.

#### ✓ Escalation Path

A defined escalation matrix from on-site engineer through to senior management.

### BRANDS WE DEPLOY





# What Enterprises Achieve with ITSPL

## Uptime You Can Trust

Redundant power, precision cooling and constant monitoring keep critical systems running around the clock

## Cooler, More Efficient

Containment and tuned cooling end hotspots and cut energy waste across the whole hall

## One Connected Facility

Power, cooling, network, security and environment on one monitored view, in real time

## One Trusted Partner

A single point of accountability for the entire data centre — from design and build through to 24x7 support

# Why ITSPL?



## 25+ Years

Decades of hands-on experience deploying technology in Indian industry

## End-to-End

Design, supply, installation, integration and ongoing support — one partner

## Multi-Sector

Deep expertise across manufacturing, education, healthcare, hospitality, retail and more

## Local Presence

Offices in Mumbai, Goa and Surat; fast on-site response wherever you are

## TECHNOLOGY BRANDS WE DEPLOY



# Let's build the right technology for **your data centre.**

---



CALL US

+91 77208 20333



EMAIL

[info@iditri.co](mailto:info@iditri.co)



OFFICES

Mumbai · Goa · Surat



[iditri.co](http://iditri.co)

