Aeon Lighting Technology

Containerized Data Center ALL-IN-ONE Service

ALL-IN-ONE Service

Design

With deep expertise in data center architecture, power distribution, cooling systems, and network cabling, we deliver optimized infrastructure plans using cutting-edge design software—ensuring precision, efficiency, and full compliance with international standards.

Certification

We ensure all designs and construction meet regulatory and industry standards, backed by expertise in global certifications such as Uptime Institute Tier, LEED, and ISO 27001.

Construction

By applying advanced construction tools and techniques, we ensure the reliability of critical infrastructure and enforce strict controls on schedule and quality.

Lay-Out

Through optimized rack arrangement, thermal aisle design, and power/network cabling, we maximize space utilization and cooling efficiency to support both customized and flexible deployments.

Completion Acceptance

The acceptance process involves comprehensive testing of power, cooling, fire safety, and network connectivity to ensure all systems meet design specifications and data center availability standards.

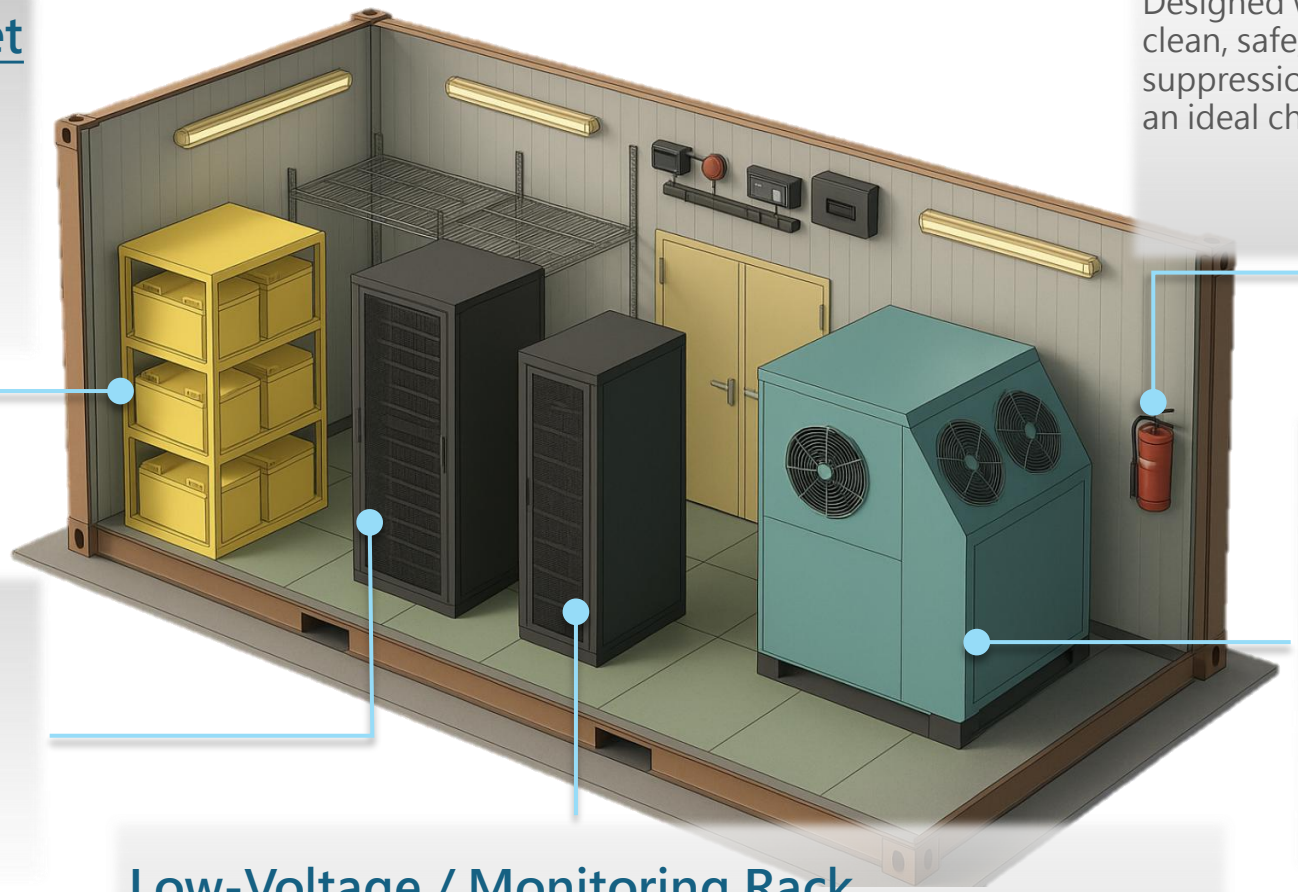
Containerized Data Center Infrastructure

UPS with Battery Cabinet

To meet customer-specific server demands, we provide 96 kW of total power capacity with full redundancy, aligned with Tier II standards.

Fire Protection System

Designed with FM200, the system provides clean, safe, and environmentally friendly fire suppression for precision equipment, making it an ideal choice for data centers.



Server Rack

Racks are installed according to cabinet dimensions to ensure proper ventilation and maintenance access.

Cooling System

With advanced air or chilled water-cooling wall design, the system ensures optimal thermal and humidity control—delivering energy efficiency with a PUE between 1.3 and 1.5.

Low-Voltage / Monitoring Rack

Provides an integrated platform for environmental and server monitoring, with cross-container data aggregation to support a centralized operations control room.

Select the Best-Fit CDC Solution

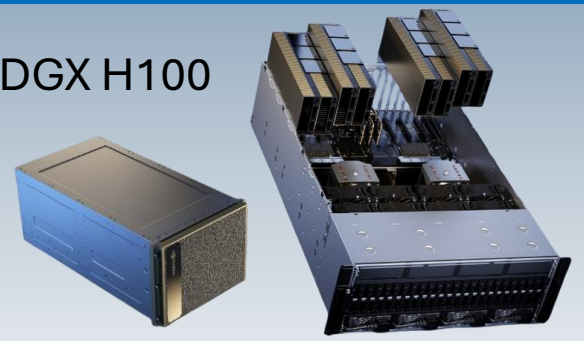
	Containerized Data Center	Traditional Data Center
Portability and Durability	High mobility and low cost; features dustproofing, waterproofing, and earthquake resistance. Suitable for various harsh environments.	Built at a fixed location, making relocation difficult. High construction costs and long timelines are required. Additional protective designs such as for earthquakes, water, and dust are also needed.
Deployment	Requires only on-site connection to water, power, and network. Enables rapid deployment within 2 to 3 months.	Deployment is constrained by building space, on-site conditions, and construction schedules. The process is complex and often delayed for several months.
Energy Efficiency	Power and cooling capacities are precisely managed, saving space and energy costs while lowering PUE.	Dispersed server room layouts lead to low cooling efficiency. This typically results in higher PUE and increased operating costs.
Scalability	Modular architecture enables rapid scaling to meet enterprise computing needs, optimizing IT resource deployment.	Scaling requires redesigning space and electrical systems, incurring high costs and causing construction disruption. Cannot quickly adapt to growing demands.
Security	A centralized platform provides unified management and monitoring of all containerized systems, enabling fast detection and resolves abnormal events.	With decentralized data and system management, significant manpower is needed for monitoring and maintenance. Real-time anomaly detection is challenging.

Supports Deployment of Various AI Server Models

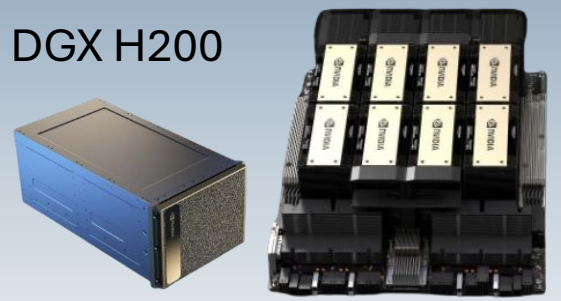
Can support usage scenarios for 1-4 AI servers, with N+1 redundancy planning based on customer requirements, and allows customers to choose from various container designs, including generators and servers.

Air-Cooled Server

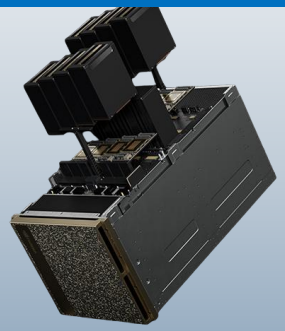
DGX H100



DGX H200



DGX B200

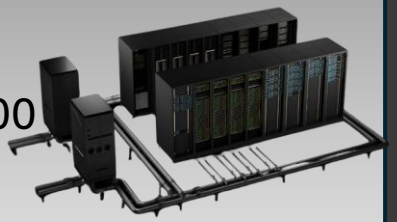


Liquid-Cooled Server

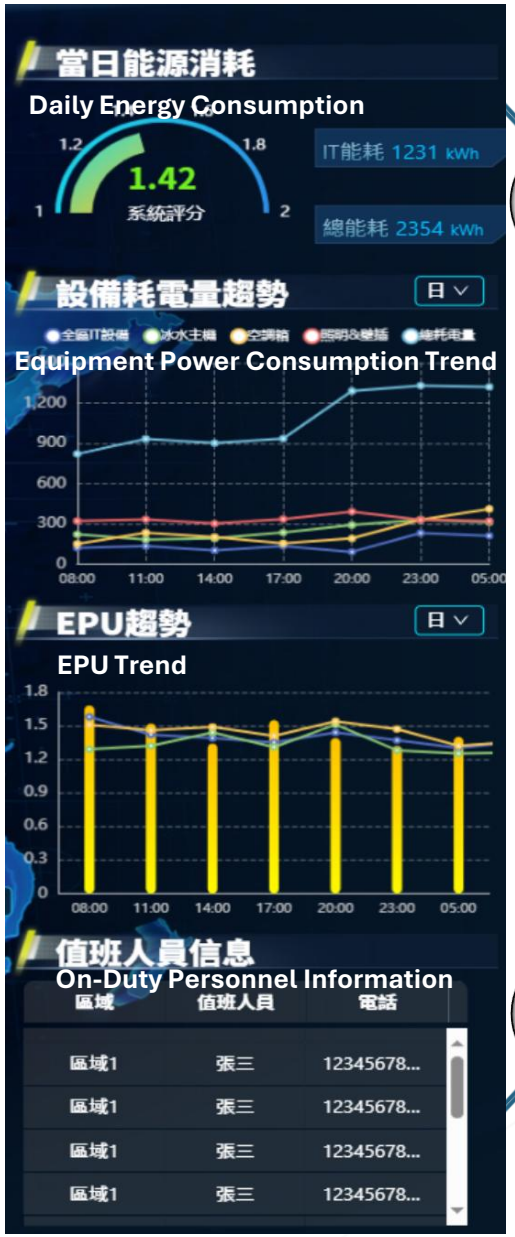
GB200 NVL36

GB200 NVL72

DGX GB200



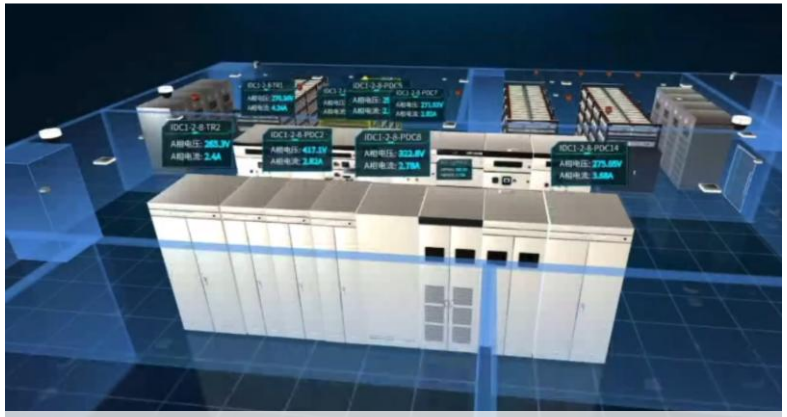
CDC Command & Control Platform



1. 3D Visualized Intelligent Operation and Maintenance Management System
2. Monitoring from Equipment Operation to Data Center Environment
3. Data Comparison for Anomaly Detection and Alerts
4. Optimized Resource Allocation for Maximum Utilization
5. Comprehensive Monitoring from Cross-Data Center to Cross-Country

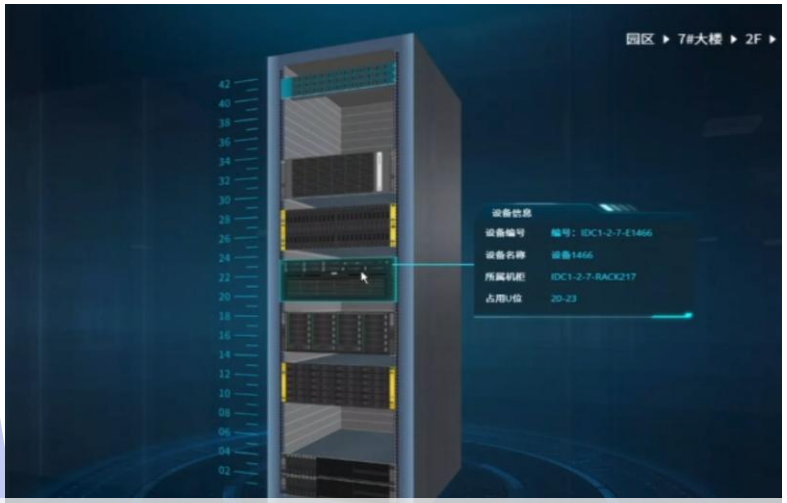
CDC Operations Command Center Capabilities

Environmental control data, rack usage, low-voltage systems, and access control status are all clearly displayed on the platform, allowing for quick and comprehensive insight into on-site conditions.

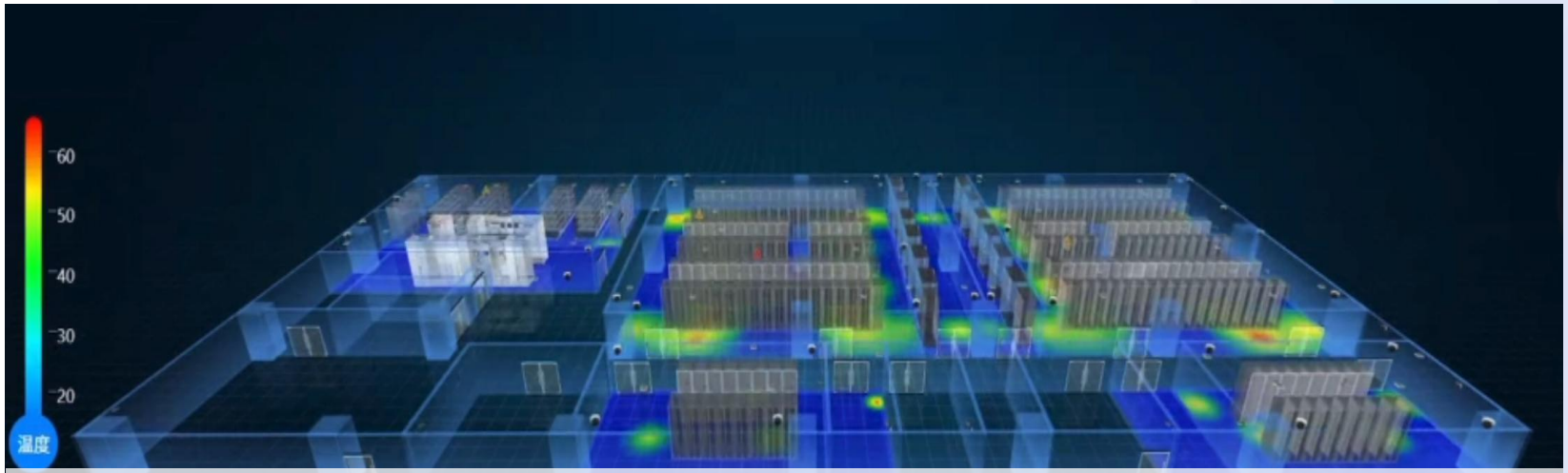


Power consumption and electrical equipment monitoring

Access control and surveillance point monitoring



Intuitive display of server layout and operational status



Temperature distribution across the entire data center

From the Application Perspective

1 Rapid Growth in Enterprise AI Demand

Enterprise transformation and AI adoption

2 Building Internal IT Rooms in Industrial Sites

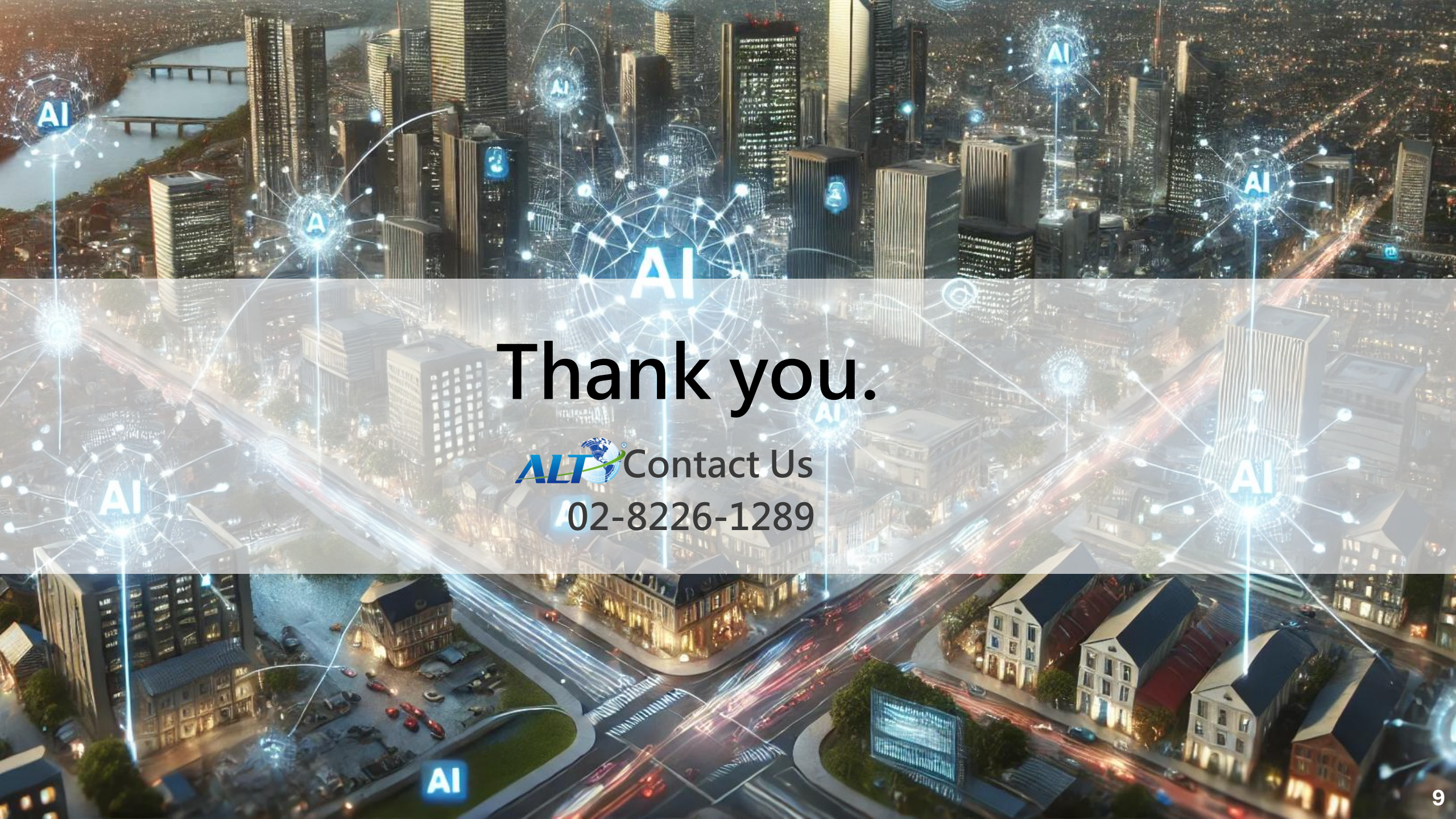
AI software development for general enterprises and on-site AI deployment for small businesses

3 DR Site / Emergency Recovery

For data and computing power redundancy

4 Edge Computing Nodes

Smart city applications



Thank you.

Contact Us

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