![SHI logo]

Data Center Factory at Ridge

Data center and hardware solutions to reduce
your build cost and risk

Start your project with the right data center reference design.

Building a data center architecture in a distributed IT environment is complex and can be daunting for any IT team. SHI's Data Center Factory at Ridge offers data center manufacturing and integration for the most complex data center deployments and reduces build costs by 30%. Our services include pre-configured, pre-tested, and hybrid cloud architecture, providing a low-risk approach to rapid data center hardware configuration and global deployment. Our cutting-edge AI and cybersecurity labs form part of the Data Center Factory at Ridge, allowing you to prototype with top large language models and push the boundaries of what AI can do. You'll work alongside certified experts in AI, machine learning, and cyber resilience to ensure your innovations are truly groundbreaking.

Our team can help you design, build, configure, test, and validate your data center rack configurations. We provide an extensive range of integration and configuration services, from setting up individual racks to deploying thousands of configured ones for global data center rollouts. Even better, we'll ship the fully configured racks directly to you for easy installation, ensuring a hassle-free experience. For customers with data center infrastructure deployment needs in Europe and Asia, our Data Center Factories in the U.K. and Singapore can facilitate those requirements.

Benefits

- Reduce your build costs by 30%.
- Provision your data center 3x faster.
- Minimize "empty cage cost" by 50%.
- Design, procure, build, validate, and deploy in 9 to 16 days with comprehensive integration services.
- Work closely with our data scientists, ML engineers, and AI and cyber solution architects.
- Seamlessly scale from advanced AI and cyber labs proof of concept to full deployment.
- Comply with sustainability requirements with waste disposal/recycling.

Checklist

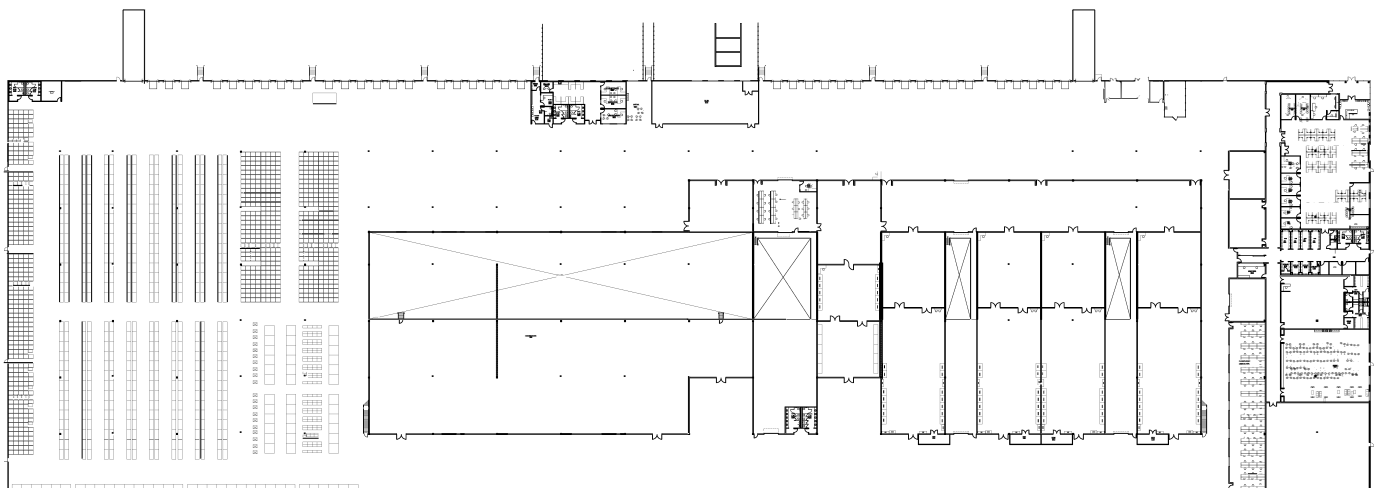|			
Design and validation	☑	Server assembly	☑
Equipment logistics and staging	☑	Operating system	☑
Supply chain management	☑	Cables and labels	☑
Project management	☑	Burn in time and stress testing	☑
Rack and stack	☑	Licensing for switches	☑
Bios and/or firmware	☑	Component integration and configuration	☑

Achieve a faster, more reliable, fully predictable deployment.

SHI provides custom-integrated rack solutions for organizations that need the expertise of OEM-certified data center infrastructure architects and engineers. Working with hundreds of customers, we have a repository of engineer-validated reference architectures for both small and large data center infrastructure projects to help you avoid design and planning pitfalls. Our team has designed and built thousands of racks with expert precision, helping you realize a faster time to market.

IDCS Flex is a pre-configured and validated solution ideal for organizations with less complex requirements. Our certified engineers can recommend the best server, storage, and networking options to suit your needs. You will receive all the necessary enclosures, power distribution units (PDUs), cabling, and accessories for a complete setup.

IDCS Max is an all-encompassing solution that covers planning, supply chain management, design, architecture, and operational support. We offer dedicated project design teams - as well as OEM-certified engineers and technicians - to meet your program requirements, guaranteeing a smooth and tailored experience.

Data Center Factory at Ridge

- State-of-the-art, ground-up custom build
- Approx. 8,000 sq. ft. office space
- 349,000 sq. ft. configuration space and storage
- 800+ racked pallet locations
- Data center configuration services
- 24/7 on-site security

- Fully monitored security systems
- Customer Innovation Center
- ISO Certified: 9001, 27001, 14001, and 45001 - by 2024
- 72 rack and stack build bays
- 128 cold room rack test bays (17kW power per bay)

Rack and stack services

- Order consolidation
- Receiving and unpacking
- Inventory check and serial number recording
- Custom assembly and rack mounting
- Custom power failover testing
- Power and cooling

- Custom pre-installation testing/config
- Hardware validation
- System updates
- Firmware and BIOS upgrades
- Full diagnostic
- Quality assurance inspection

- Asset tagging/labeling
- Power/network/intra-cabinet cabling
- Final confirmation (Digital photo QA)
- Delivery and deployment coordination
- Equipment storage

Pre-installation testing

- Server configuration
- Basic input/output system (BIOS) installation
- Firmware upgrades
- Hardware-level checks
- Image deployment (all major formats supported)

Pre-installation activities

- Hard drive swap/upgrades
- Custom card install
- Card layout swap
- Integrated Lights-Out (iLO) or similar configuration

Installation activities

- Power testing before delivery
- Asset tagging and data capture (including radio frequency identification)
- Hardware validation before delivery
- Rack and stack services (including cable management)
- Server builds, storage array, and networking device configurations
- Soak testing
- Return marchandise authorization (RMA) and warranty replacement management
- Hot spare pool for service support
- Remote customer testing and validation
- Customer stress testing and performance benchmarking
- Production certification by customer

SHI has Data Center Factories servicing customers in the U.S., Canada, Latin America, U.K., EU, and Asia. Our shipping and logistics team is well-versed in working alongside vetted carriers with guaranteed delivery SLAs and custom agencies worldwide. We ensure you receive your data center and hardware solutions at the right location, on time, fully configured, and ready to plug and play.

Contact your SHI account executive to learn more about the Data Center Factory at Ridge, or email IDCS_Presales@SHI.com.