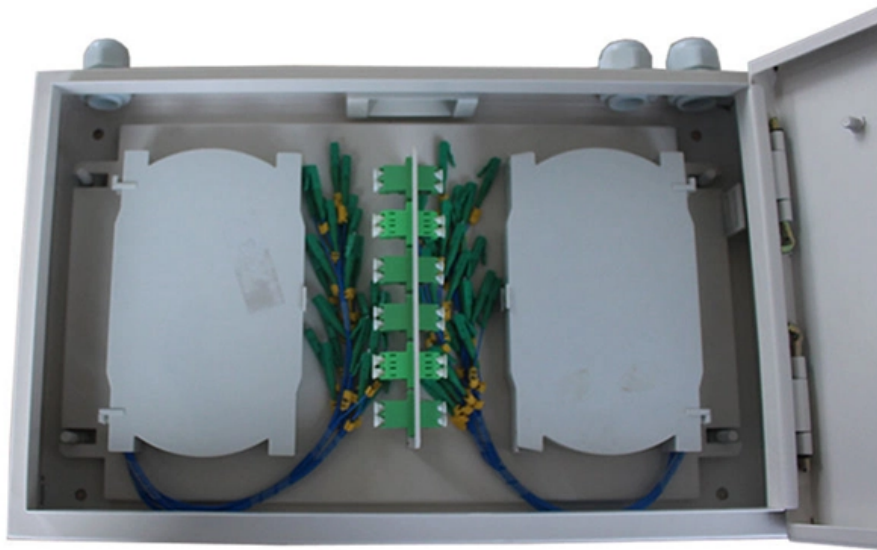


Qinq Data Center Interconnection





Qinq Data Center Interconnection

Configuring Q-in-Q Tunneling and VLAN Q-in-Q Tunneling and VLAN

Q-in-Q tunneling and VLAN translation allow service providers to create a Layer 2 Ethernet connection between two customer sites. Providers can segregate different customers' VLAN traffic on a link (for

Dell Enterprise SONiC Flexible and Robust VLAN QinQ, VXLAN, and

To help customers meet these network transport requirements, Dell Enterprise SONiC has built the new IEEE 802.1ad VLAN QinQ feature. This feature adds another VLAN tag in the



QinQ Fundamentals

This encapsulation mode is also called QinQ tunneling. It encapsulates packets arriving at the same interface with the same outer VLAN tag, and therefore cannot distinguish users and services at the

Grid Interconnection Delays 2026: A Threat to US Energy

Project Risks Escalate as Grid Interconnection Delays Become the Primary Barrier to Deployment Grid interconnection delay has transitioned from a manageable

What is data center interconnect (DCI)?



Learn how data center interconnect technology links multiple data center facilities together to share resources efficiently and securely.

Cisco Nexus 7000 Series NX-OS Interfaces

This chapter describes how to configure IEEE 802.1Q-in-Q (Q-in-Q) VLAN tunnels and Layer 2 protocol tunneling on Cisco Nexus 7000 Series

Configuring Q-in-Q VLAN Tunnels

This chapter describes how to configure IEEE 802.1Q-in-Q (Q-in-Q) VLAN tunnels and Layer 2 protocol tunneling on Cisco NX-OS devices.



Support

Basic QinQ is a port-based feature, which is implemented through VLAN VPN. With the VLAN VPN feature enabled on a port, when a frame arrives at the port, the

QinQ for Data Center Networks: VLAN Simplification & Scalability

As data center networks continue to scale and evolve, QinQ has become a key technology for secure isolation, efficient traffic management, and seamless Layer 2 VPN connectivity.

Ohio regulators approve AEP data center

Ohio regulators approve AEP data center interconnection rules The Ohio PUC ordered the utility to file updated tariffs and lift a moratorium on



NVIDIA Enterprise Support Portal , QinQ Considerations

This post explains how to configure QinQ (802.1ad) on Mellanox Switches. QinQ (802.1ad) allows multiple C-VLANs to be tunneled via a new S-VLAN tag on the

Canada's First Liquid-Cooled Interconnection Hub Arrives at

The deployment supports organizations colocating AI infrastructure within Telehouse facilities, with cabinet densities of up to 120 kW per rack. This marks a first-of-its-kind deployment of

Colocation and connectivity in global, AI-ready data



Colocation with multicloud access, locality control and global reach Expand globally with digital infrastructure in more than 270 AI-ready data centers in the world's

Texas Senate Bill 6 Update: What Data Centers and Large Load

This GT Alert summarizes the key provisions of the draft rule and highlights important considerations for data centers and other large load customers. Applicability: Which Data Centers

Understanding QinQ (802.1Q-in-802.1Q) or VLAN Stacking.

In multi-tenant data centers, QinQ can be used to extend VLANs between geographically dispersed data centers.



FERC Issues Order Clarifying Data Center and Large Load Interconnection

Mark R. Haskell, Brett A. Snyder, Lamiya N. Rahman, and Emily S. Childress The Federal Energy Regulatory Commission ("FERC" or the "Commission") issued an order on

Texas utility Oncor reports 186GW of interconnection

Oncor Electric Delivery, Texas's largest transmission and distribution electric utility, has reported more than 200GW of interconnection requests, with

PJM trims near-term load forecast on stricter data center



PJM trims near-term load forecast on stricter data center vetting, economic outlook
However, the PJM Interconnection expects long-term load

Texas Governor approves bill mandating data centers to

Texas Governor Greg Abbott has approved a bill that looks to make large load customers like data centers contribute to interconnection costs when

PJM proposes adding 14.9 GW with bilateral contracts, central

Data center development in Loudoun County, Virginia. The PJM Interconnection on April 10, 2026, proposed holding a one-time, two phase backstop procurement for 14.9 GW of new



Configuring Q-in-Q VLAN Tunnels

Configuring Q-in-Q VLAN Tunnels This chapter describes how to configure IEEE 802.1Q-in-Q (Q-in-Q) VLAN tunnels and Layer 2 protocol tunneling on Cisco NX-OS devices.

2025: Global Data Centre Colocation & Interconnection

Access the 2025 Global Report for insights on data center colocation, interconnection trends, market share and growth across global digital infrastructure.

PJM reports peak load growth of 30GW through 2030



PJM Interconnection, the largest Regional Transmission Organization (RTO) in the US, has reported a peak load growth of 32GW from 2024 to 2030,

Introduction to QinQ

The following figure shows a sample QinQ topology and use model. Customer A has LANs spread across multiple site locations and may want to link them together in

Load Interconnection Queues: The Key to Data Center

Traditionally, energy developers and utilities have focused on generation interconnection queues, which track new power supply projects



Configuring Q-in-Q VLAN Tunnels

Using the 802.1Q tunneling feature, service providers can use a single VLAN to support customers who have multiple VLANs. Customer VLAN IDs are preserved and the traffic from different customers is

QinQ for Data Center Networks: VLAN Simplification & Scalability

As modern data center architectures grow in complexity, supporting multi-tenant environments and high-bandwidth workloads, operators face the challenge of ensuring isolation while

AI scale and climate commitments: A 2026 outlook

The AI and climate execution challenge Data center energy capacity in the US is projected to increase from 25 GW to 120 GW by 2030--a fivefold increase. Hyperscalers are



Contact Us

For datasheets, pricing, or custom optical networking solutions, please visit:
<https://entrenamientointeligente.es>