H3C Core Switch Dual Control Cards

Network Cabinet & Rack

Overview

H3C industrial switches can operate in -40°C - 75°C environments for a long time, and use industrial components to reach IP40 rating.

Key Takeaways

H3C core switches, such as the S7500X series, support dual control cards to provide high availability, redundancy, and seamless network management. Overview of Dual Control Card ArchitectureH3C core switches like the S7500X series adopt a modular design with support for dual control cards, which ensures non-stop forwarding and high availability. The dual control cards operate in a hot standby configuration, where one card actively manages the control plane while the other remains on standby, ready to take over instantly in case of failure.

This eliminates single points of failure and ensures continuous network operation.

Key Benefits

High Availability (HA): Patented hot standby technology allows the standby control card to immediately take over, maintaining uninterrupted data forwarding and control plane operations. Redundancy and Load Distribution: Dual control cards, combined with IRF2 (Intelligent Resilient Framework version 2), enable multi-chassis link aggregation, improving redundancy, load sharing, and link utilization across multiple switches. Simplified Management: The system can be managed via a single IP address for the entire IRF fabric, reducing operational complexity and maintenance costs.

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Service Continuity: MDC (Multitenant Device Context) virtualization allows one physical switch to operate as multiple logical switches, ensuring service isolation and maximizing switch utilization.

Technical Features

Line Card Support: The S7500X series supports high-density 10G, 40G, and 100G line cards, ensuring wire-speed performance for demanding enterprise applications. Virtualization: IRF2 can virtualize up to four S7500X switches into a single logical fabric, enhancing scalability and resilience. Advanced Networking: Supports Layer 2/3 features, VXLAN, EVI, MP-BGP EVPN, and MACsec encryption, providing secure and flexible core network deployment.

Practical Implications

Deploying dual control cards in H3C core switches ensures that critical enterprise networks remain operational even during hardware failures, supports high-density traffic, and simplifies network management. This architecture is ideal for data centers, large enterprise cores, and high-availability campus networks. In summary, H3C core switches with dual control cards provide robust redundancy, high availability, and simplified management, making them suitable for mission-critical network environments.

Article Content

Switches-H3C

H3C industrial switches can operate in -40°C - 75°C environments for a long time, and use industrial components to reach IP40 rating. At the same time, with shockproof, anti-electromagnetic

H3C S7500X-G Series

H3C S7500X-G series includes a variety of Chassis models, S7510X-G/PoE, S7506X-G/PoE, S7503X-G, and S7503X-M-G, coupled with rich service cards and functionalities, the S7500X-G is well-suited

H3C S7500X-G Series High-Performance Converged Multiservice

H3C S7500X-G series includes a variety of Chassis models, S7510X-G/PoE, S7506X-G/PoE, S7503X-G, and S7503X-M-G, coupled with rich service cards and functionalities, the S7500X-G is well-suited

H3C 7503E-M Series Enterprise Core Switches

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These all-new series switches are ideal for enterprise network modernization and provide maximum return on investment and reduced total cost of ownership. The all-new S7500E V7 series switches

H3C S7500X Series Enterprise Core Switch

H3C S7500X switch series is the first of its kinds in the industry to support wire speed performance for high density 10G/40G/100G line cards and can meet the existing and future application requirements

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In H3C open application architecture (OAA), the switch can accommodate high-performance OAP modules to offer dedicated services such as firewall, IPS, or load balancing in addition to

H3C S9800 DataCenter Switches

The H3C S9800 DataCenter Cloud High Density Switch Series is designed for cloud services data centers. It deploys industry leading CLOS architecture, providing highest switching performance and

H3C Products Calalogue (H3C Server, Switch) | PDF

The document is a 2023 product catalogue for H3C products. It provides an overview of H3C''s digital solutions including smart connectivity, cloud computing, intelligent computing, intelligent terminals,

H3C S7503X Series Enterprise Core Switches

H3C''s S7500X series switches are designed for use at the core of next-generation enterprise networks. They feature a modular design, run the proprietary H3C Comware V7 operating system and offer the

Switches-H3C

Switches Campus Network Switches Services integration and intelligent access H3C has been deeply engaged in the campus network for many years with various product levels. It can provide users with

H3C S7500X-G Series High-End Multiservice Routing Switch

H3C S7500X-G series includes a variety of Chassis models, S7510X-G/PoE, S7506X-G/PoE/MF, S7503X-G, and S7503X-M-G, coupled with rich service cards and functionalities, the S7500X-G is

H3C S10500X Series Multiservice Core Switch

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H3C S10500X series switch is designed for the core layer of data centers and next-generation campus networks as well as the distribution layer of MANs. It provides the following features: Advanced

H3C S7500E V7 Series Enterprise Core Switch

H3C S7500E V7 Series Enterprise Core Switch Overview S7500E switch series has been one of the best-selling products since it has been released worldwide nine years ago, with H3C''s proprietary

H3C S12500R Data Center Switch Router

H3C S12500R is currently the industry''s leading switching router product designed for WAN, 5G bearer network and data center DCI interconnection scenarios. It provides higher forwarding performance

H3C S12500X-AF Data Center Cloud Core Series Switches

The H3C S12500X-AF DataCenter Cloud Core Switch Series is designed for cloud services data centers. It provides the following features: CLOS+ multi-grade multi-plane architecture With 768 line

H3C S5560X-EI Series Converged Gigabit Switches

H3C S5560X-EI series switches come with IPv4/IPv6 dual-stack platform which provides sophisticated IPv4/IPv6 solutions by supporting multiple tunnels, IPv4/IPv6 Layer 3 routing protocols, multicasting,

H3C S7500X Series Core Switch Overview

H3C S7500X Switch Series Datasheet - Free download as PDF File (.pdf), Text File (.txt) or read online for free. The document describes the H3C S7500X series enterprise core switches. The S7500X

H3C S5590-EI Series Converged Gigabit Switches-H3C

H3C S5590-EI series switches are a new generation of high-performance, high-port density, high-security Layer 3 Ethernet switches developed by H3C Technology Co., Ltd. (hereinafter referred to

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