

S5800-48T4S Switch Typical Network Solution

Model: S5800-48T4S

Overview

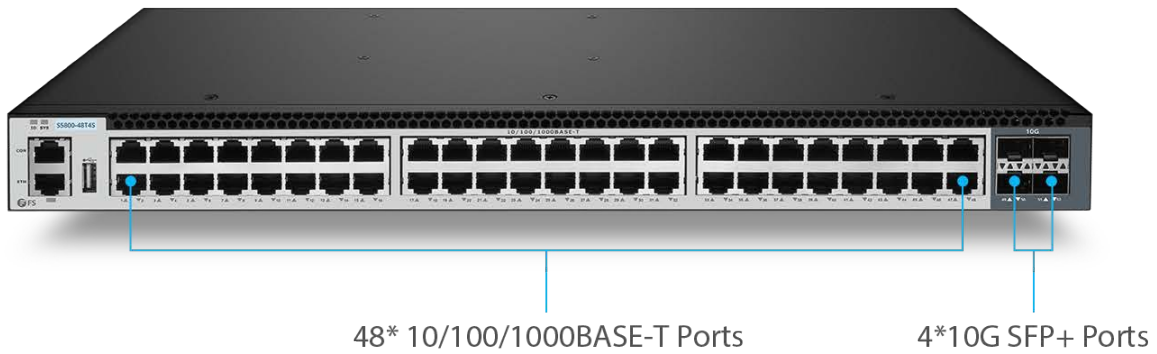
With the popularity of broadband applications, enterprises will continue to deploy high-bandwidth applications and more powerful server and network devices. S5800-48T4S is a type of high-density integrated switch to access more complex bandwidth-intensive applications.

It features 48x 10/100/1000BASE-T ports and 4x 10G SFP+ ports and equips 1+1 redundant, hot-swappable power supplies and 2+1 redundant fans to ensure maximum uptime, which is a good choice for large-scale network layout. For functionality, it supports MLAG to improve network reliability. It's a powerful layer 3 routing solution for next-generation enterprise, data center, Metro and HCI (Hyper Converged Infrastructure) networks.

176 Gbps
Switching Capacity

132 Mpps
Throughput

Layer 2/3
Layer Type



Server Cluster Data Management Network Solution Case Study

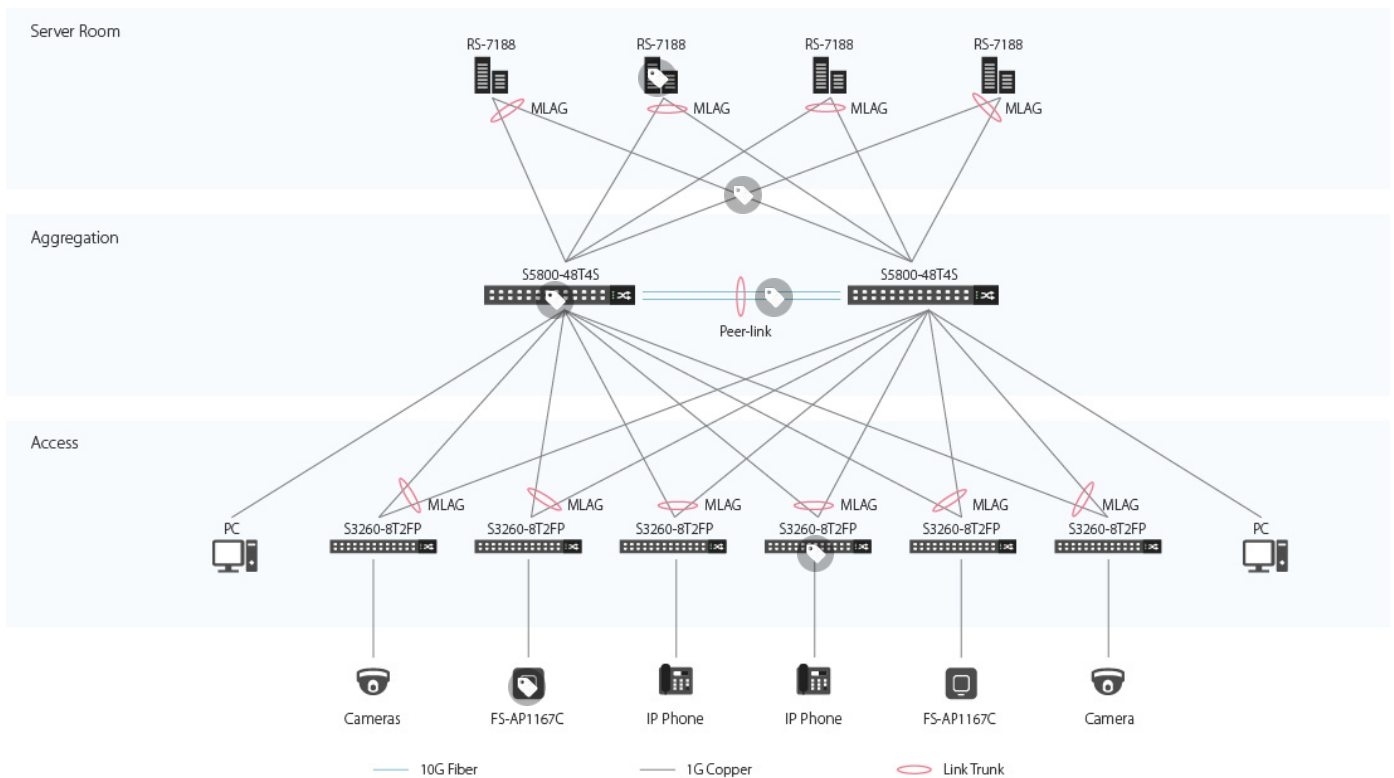
Background

A client needs to set up a campus network that can collect and store the data of the whole campus. The file room needs to analysis and process lots of datas. And offices in different buildings will have access to wireless WIFI signals and also monitoring signals. Centralized data management and convenient maintenance are vital.

Challenge

There are lots of terminal devices, most of which are PoE compliance types. The whole network architecture must secure and reliable. The ports numbers and switches quantity also require attention to save both energy and cost.

Solution Topology



Solution Description

This solution uses a high-performance storage server to establish an efficient cluster network to meet customers' high demand for large amounts of stored data while ensuring network reliability, redundancy and security. More particularly, the entire network is built mainly with copper cables, which can greatly save costs and installation time.

Connection

RS-7188: It is a high-performance storage server. It has 24x DDR4 DIMM slots, up to 2666MT/s, and can support 8x PCIe slots. Its capacity is sufficient to meet high bandwidth requirements and it can be flexibly configured and maintained. Using this server to establish a cluster can achieve efficient data management.

S5800-48T4S: Up to 48x 1G copper links can be established. The large number of RJ45 ports meet the needs of more terminal devices and is widely used in enterprise networks. By configuring MLAG, network reliability can be realized.

S3260-8T2FS: Support IEEE 802.3af/at standard and with max. power consumption of 260W, this switch can both transmit data and support up to 8 devices power supply, saving costs and simplifying installation.

MLAG: The cross-device link aggregation between one S3260-8T2FS switch and two S5800-48T4S switches improves the link reliability from the single board grade to the device grade, forming an active-active system. The ports involved need to be added into a same aggregation group.

Peer-link: A direct link is established between two S5800-48T4S switches where MLAG is deployed, and the link must be link aggregation and configured as a peer link. The peer link is used to negotiate the exchange of messages and the transmission of part of the traffic.

Product List

ID	Description
73997	RS-7188 2U, 2-Socket Rack Server with Two Intel® Xeon® Silver 4112 for Data Base Workloads in SMB
100969	S5800-48T4S 48-Port Gigabit RJ45 L2/L3 Switch with 4 10Gb SFP+ Uplinks
80365	S3260-8T2FP 8-Port Gigabit Managed PoE+ Switch with 2 1Gb SFP Uplinks, 260W
11552	FS for Cisco SFP-10G-SR Compatible, 10GBASE-SR SFP+ 850nm 300m DOM Transceiver Module (Standard)
41730	1m (3ft) LC UPC to LC UPC Duplex OM3 Multimode PVC (OFNR) 2.0mm Fiber Optic Patch Cable
70555	3ft (0.9m) Cat5e Snagless Unshielded (UTP) PVC CM Ethernet Network Patch Cable, Blue
84027	1167Mbps 2x2 MU-MIMO Dual-Band FAT/FIT Gigabit Access Point

Note: If you have any questions or requirements, please contact FS technician team or your Account manager for personalized services :

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