FS

FS S3900-R Series and S3900 Series Switches Competitive Comparison

S3900-R Series Switches

S3900 Series Switches

Product Comparison

Models

- S3900 Series Switches:

  S3900-24T4S; S3900-24F4S; S3900-48T4S

- S3900-R Series Switches:

  S3900-24T4S-R; S3900-24F4S-R; S3900-48T6S-R

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Product Software Function

Compared with S3900 series switches, the S3900-R series switches have a great improvement in function. The L3 layer equipment network will be more flexible, which can do more strategies, software control and software linkage, etc.; it has been further improved in terms of ipv6, security, and management. The improvement of DHCP server provides customers with more possibilities; at the same time, the DHCP server increases the scope of use of the equipment, allowing customers to reduce the cost of reinvesting another set of DHCP server.

S3900-R Series Switches Features

*   Support diversified security features to ensure network stable and meet more choices for users.

*   The operation and maintenance methods are more abundant to meet the various operation and maintenance requirements of technical experts and technical novices.

*   The Stacking[2] method is more intelligent, and different models of the same series can be stacked. For example, S3900-24T4S-R and S3900-24F4S-R can be stacked.

*   The ipv6 function is more comprehensive to meet more users' needs for ipv6 functions.

Models	S3900-24T4S/S3900-48T4S/S3900-24F4S	S3900-24T4S-R/S3900-48T6S-R/S3900-24F4S-R
Stackability	6 Units	6 or 8 Units
Security	• Port security • IP Source Guard • Dynamic Arp Inspection	• Radius • The perfect loop detection mechanism can ensure the stable operation of the network for a long time. • Port isolation, port security and "IP+MAC+port" binding, MAC stickyDAI and IP source code protection, PPPoE+ • IEEE 802.1x, AAA, Radius and BDTACACS+ • L2/L3/L4 ACL flow identification and filtering, anti-attack and other broadcast/multicast/unknown unicast control
DHCP Server	NO	YES
Operation and Maintenance Method	SNMP, RMON, HTTP, Telnet, SSH	Console, Telnet, SSH v1/2, HTTP, HTTPS, SNMP v1/v2/v3, RMON, TFTP, FTP, SFTP, NTP, ZTP, SPAN, RSPAN
Layer 3 Feature	Support Static route	Support IPv4/IPv6 Static route, RIP, OSPF
ipv6	IPv6 addressing, Neighbor Discovery (ND), ICMPv6, IPv6 ping, IPv6 Tracert	ICMPv6, DHCPv6, ACLv6 and IPv6Telnet,IPv6 neighbor discovery, PathMTU discovery,MLD V1, MLD snooping

Product Performance

Compared with S3900, the S3900-R series switches have a certain improvement in Switching Capacity and Forwarding Rate.The routing table capacity has been increased to 2040, and it supports rich IPv4 and IPv6 routing attributes. So it is more cost-effective when the S3910 series are deployed as a small core for small and mediumsized enterprises.

Models	S3900-24T4S	S3900-48T4S	S3900-24F4S	S3900-24T4S-R	S3900-48T6S-R	S3900-24F4S-R
1G RJ45 Port	24	48	4	24	48	8
1G SFP Port	-	-	24	-	-	24
10G SFP+ Port	4	4	4	4	6	4
Layer Type	Layer 2+	Layer 2+	Layer 2+	Layer 2+	Layer 2+	Layer 2+
Switching Capacity	128	176	128	128	216	128
Forwarding Rate	95	130	95	96	162	96
Routing Table	256	256	256	2040	2040	2040
Packet Buffer	1.5MB	1.5MB	1.5MB	1.5MB	1.5MB	1.5MB
MAC Address	16K	16K	16K	16K	16K	16K

Product Reliability

- Support VRRP[6] to effectively ensure network stability.

- Innovative BVSS : Virtualize multiple physical devices into one. The performance, reliability and management of virtual systems are better than physical systems.

- Provide a more complete Ethernet OAM mechanism, real-time monitoring of network operation status, rapid location and detection of faults.

Models	S3900-24T4S/S3900-48T4S/S3900-24F4S			3900-24T4S-R/S3900-48T6S-R/S3900-24F4S-R		
BVSS	YES	YES	YES	YES	YES	YES
VRRP	NO	NO	NO	YES	YES	YES
OAM	YES	YES	YES	YES	YES	YES

Features Explanation

Stacking[1] : The switch has the ability to be connected to other switches and operate together as a single unit, which is useful for quickly increasing the capacity of a network.

 LACP[2]: Combining multiple network connections in parallel in order to increase throughput beyond what a single connection could sustain, and to provide redundancy in case one of the links should fail.

RSTP[3]: The Spanning Tree Protocol (STP) is a network protocol that builds a loop-free logical topology for Ethernet networks. The basic function of STP is to prevent bridge loops and the broadcast radiation that results from them. Spanning tree also allows a network design to include backup links to provide fault tolerance if an active link fails.

Voice VLAN[4]: The Voice VLAN feature enables access ports to carry IP voice traffic from an IP phone. When the switch is connected to an IP Phone, the phone sends voice traffic with Layer 3 IP precedence and Layer 2 class of service (CoS) values.

DHCP Snooping[5]: DHCP snooping is a security feature that acts like a firewall between untrusted hosts and trusted DHCP servers. The fundamental use case for DHCP snooping is to prevent unauthorized (rogue) DHCP servers offering IP addresses to DHCP clients.

SNMP[6] :Simple Network Management Protocol (SNMP) is an Internet Standard protocol for collecting and organizing information about managed devices on IP networks and for modifying that information to change device behavior. Devices that typically support SNMP include cable modems, routers, switches, servers, workstations, printers, and more.

Online Resources

S3900 Series Switches Datasheet: https: //img-en.fs.com/file/datasheet/s3900-series-switches-datasheet.pdf

S3900 Series Alternative Switches: https: //img-en.fs.com/file/datasheet/s3900-series-datasheet.pdf