

ZyXEL ES-31244F V3.80(AIS.1)C0

Release Note/Manual Supplement

Date: May 15, 2008

This document describes the features in the ES-31244F product for its 3.80(AIS.1)C0 release.

Support Platforms:

ZyXEL ES-31244F V3.80(AIS.1)C0 supports models: ZyXEL ES-31244F

Version:

ZyNOS Version: V3.80(AIS.1) | 5/15/2008 13:40:1
BootBase Version: V1.0 | 07/06/2007 16:27:04

Enhanced Features

1. 802.1s MSTP
2. SNMPv3
3. enlarge syslog buffer
4. 802.3ah OAM
5. Multilevel CLI
6. SNMP trap group
7. configurable multicast VLAN
8. independent IGMP snooping and MVR setting
9. enlarge concurrent telnet session
10. IP source guard(Static binding, DHCP snooping, ARP inspection)
11. Two rate three color marking
12. IP subnet VLAN
13. RADIUS MAC login
14. RADIUS accounting
15. TACACS+ authentication
16. TACACS+ accounting
17. IGMPv3 snooping
18. Loop guard
19. Daylight saving
20. Bootbase changes to v1.0 for manufacturer only
21. There is no effect upon present products of changed Bootbase

Default Bootbase Setting:

ZyNOS Version	V3.80(AIS.1) 5/15/2008 13:40:1
Bootbase Version	V1.0 07/06/2007 16:27:04
Vendor Name	ZyXEL Communications Corp.
Product Model	ES-3124-4F
ZyNOS Code Model	ES-3000
HTP Code Model	Unknown
ZyNOS ROM address	50080000
System Type	10
MAC Address	0019CB000001
Default Country Code	FF

Boot Module Debug Flag	01
RomFile Version	8A
RomFile Checksum	a506
ZyNOS Checksum	ddd4
SNMP MIB level & OID	060102030405060708091011121314151617181920
Main Feature Bits	C0
Other Feature Bits	
	01 11 00 00 00 00 00 00-00 00 00 00 00 00 00 00
	00 00 00 00 00 00 00 00-00 41 13 00 00 00

Features:

1. MAC address learning
2. Support IEEE 802.1D transparent bridge
3. Support IEEE 802.1Q tagged VLAN
4. Support Port-based VLAN
5. Support IEEE 802.1X
6. Support IEEE 802.1W
7. Support IEEE 802.3AD
8. Support GVRP
9. IGMP snooping
10. Support IEEE 802.1p
11. Automatic age out
12. Specific MAC addresses forwarding per port
13. MAC Filtering
14. Port Trunking
15. Port Mirroring
16. Bandwidth Control
17. Broadcast Storm Control
18. Support Strict Priority and WRR queuing method
19. Static IP management or dynamic IP(DHCP client)
20. Multiple IP address management
21. Firmware upgrade and configuration backup/restore.
22. Remote manageable.
23. Cluster Management
24. WEB manageable
25. Support RFC-1213 MIB II
26. Support RFC-1493 Bridge MIB
27. Support RFC-1643 Ethernet MIB
28. Support RFC-1757 Four group of RMON
29. Support RFC-2674 VLAN MIB
30. NEW CLI supported
31. System configuration backup / restore in text-mode
32. Multiple login supported
33. Radius management authentication
34. SSH/SSL support
35. Syslog
36. Protocol based VLAN support
37. DiffServ feature (DSCP – 802.1p priority mapping)
38. MRSTP
39. RADIUS enhancement(for 802.1X enhancement and multiple radius servers)
40. Administration user management
41. IGMP enhancement
42. Web enhancement (Select all, Clone)
43. Reserve multicast group support
44. Support high speed fan module. (Up to 7000 RPM).

Known Issues:

1. Management port test fail in 100M long cable.
2. Management port has compatible issue with Cnet Pro 2000 network interface card.
3. The packets which destination address is marked in the filter setting will always send to port 1.
4. Symbol and dribble error packets will count into FCS error counter.
5. Filtering: In some special cases, setting one MAC with discard-source will cause device filter all packets with this MAC, ether source MAC or destination MAC.
6. Do not suggest cooperate LACP with RSTP more than ten ports.
7. Do not support tagged frame forwarding in the Port-Based VLAN.
8. If the contact between RJ45 and wire cable or the wire cable is unstable, the cable diagnostics maybe fail.
9. The system-wide rule entries are shared with CIR rate control and policy rules. So you may fail to load max policy rules while enabling CIR rate control on all ports.
10. Ports configured to run RSTP will not synchronize with peers if the port is in BLOCK mode.
11. Packets' MAC with tagged vlan id which is not configured in device will be learned.
12. Port configured in fixed-speed mode (AN is disable) for change may not link up. It could be linked up with operation SOP (link down then link up manually)

Bug Fix:

1. Fix the bug that too many topology changes in STP.
2. Fix the bug that the fiber port status display link down, even if it links on.
3. Fix the bug that received IGMP queries will exhaust our hardware table.
4. Fix the bug that memory leak problem under log-in attack.
5. Fix the bug that IGMP queries packets come from trunk ports will send back to trunk active port.
6. Fix the bug that device can't get correct "port status detail" of member when using cluster manager from WEB.
7. Classifier precedence will not follow longest prefix match.

Limitation of Settings:

1. VLAN 1Q static entry 1024
2. Static MAC forwarding entry 256
3. MAC filtering entry 256
4. Cluster member 24
5. Management IP address 64
6. Protocol based VLAN entries per port 7
7. The number of dhcp snooping can learn is 4094.
8. The subnet based vlan can support up to 48 rules.

Firmware Upgrade:

The ES-31244F uses FTP to upgrade firmware in run-time through its built-in FTP server. You can use any FTP client (for example, [ftp.exe](#) in Windows) to upgrade ES-31244F. The upgrade procedure is as follows:

Upgrade ES-31244F FW:

```
C:\> ftp <ES-31244F IP address>
User : admin
Password: 1234
230 Logged in
ftp> put 380AIS1C0.bin ras
ftp> bye
```

Where

- User name : the management user name, admin by default
- Password : the management password, 1234 by default
- 380AIS1C0.bin : the name of firmware file you want to upgrade
- ras : the internal firmware name in ES-31244F

Configuration Upgrade:

The ES-31244F uses FTP to upgrade configuration in run-time through its built-in FTP server. You can use any FTP client (for example, [ftp.exe](#) in Windows) to upgrade ES-31244F. The upgrade procedure is as follows:

Upgrade ES-31244F configuration:

```
C:\> ftp <ES-31244F IP address>
User : admin
Password: 1234
230 Logged in
ftp> put 380AIS1C0.rom rom-0
ftp> bye
```

Where

- User name : the management user name, admin by default
- Password : the management password, 1234 by default
- 380AIS1C0.rom : the name of configuration file you want to upgrade
- rom-0 : the internal configuration name in ES-31244F