# ZyXEL GS1920-24 V4.30(AAOB.0)C0

# Release Note/Manual Supplement

**Date: Sep. 16, 2015**

This document describes the features in the GS1920-24 product for its 4.30(AAOB.0)C0 release.

## *Support Platforms:*

ZyXEL GS1920-24 V4.30(AAOB.0)C0 supports models: ZyXEL GS1920-24.

## *Version:*

OS Version: V4.30(AAOB.0) | 09/16/2015 11:27:32
BootBase Version: V1.00 | 03/21/2014 09:54:17

## *Default Bootbase Setting:*

| | |
|---|---|
| ZyNOS Version | V4.30(AAOB.0) | 09/16/2015 11:27:32 |
| Bootbase Version | V1.00 | 03/21/2014 09:54:17 |
| Serial Number | xxxxxxxxxxxxxx |
| Vendor Name | ZyXEL |
| Product Model | GS1920-24 |
| ZyNOS Code Model | GS1920 |
| ZyNOS ROM address | b40a0000 |
| System Type | 8 |
| First MAC Address | 0019CB000001 |
| Last MAC Address | 0019CB00001D |
| MAC Address Quantity | 29 |
| Default Country Code | FF |
| Boot Module Debug Flag | 00 |
| CPLD Version | N/A |
| RomFile Version | 27 |
| RomFile Checksum | 1bc5 |
| ZyNOS Checksum | d3b9 |
| SNMP MIB level & OID | 060102030405060708091011121314151617181920 |
| Main Feature Bits | C0 |
| Other Feature Bits | |
| 02 52 00 00 00 00 00 00-00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00-00 13 00 00 00 00 | |

## *Enhanced Features:*

1. Consistent look and feel with Gateway and WLAN as One Network
   Embody a polished graphical user interface (GUI) and a set of feature enhancements that optimize user experience and network management efficiency for ZyXEL Network Switches
1. MAC authentication (per-port)
2. ACL 2.0
3. Time Range
4. Auto Port Speed
5. Reload Factory Default
6. Broadcast/Multicast storm control log
7. Default IP setting to DHCP
8. System Log Enhancement (Add Port description)

9. WEB GUI Enhancement
10. System Log Enhancement (Add Port Information)
11. Trunk and mirror co-worked
12. ZyXEL Neighbor Management enhancement
13. WEB add refresh button
14. IPv6 DNS
15. IPv6 trace route
16. WEB – status add SNMP field message
17. ZON support DNS2
18. [Behavior Change] Remove hyperlink in LLDP neighbor page.
19. [Port Setup] In port setup page, the default speed/duplex setting should be "Auto-1000M", not"1000M/Full Duplex"
20. [Log] Restore config fail will record in log.
21. [MSTP] User can check CIST port status via Web.
22. [LLDP] When neighbor device move to other port, the switch will remove old entry information.
23. SSL DH param length from 512 bits to 2048 bits

## *Main Features:*

2. 24 Auto MDI/MDI-X 10Base-T/100Base-TX/1000Base-T
3. 4 dual personality GbE
4. Locator LED
5. 16K layer 2 MAC addresses table
6. Jumbo frame length 9K
7. IEEE 802.1w , RSTP
8. IEEE 802.1s , MSTP
9. ZyXEL MRSTP
10. Rule-based bandwidth control
11. Port-based egress traffic shaping
12. IEEE 802.3x flow control.
13. DSCP to 802.1p priority mapping
14. Port-based VLAN
15. Protocol-based VLAN
16. IP subnet based VLAN
17. IEEE 802.1Q Static VLANs
18. IEEE 802.1Q dynamic VLANs
19. VLAN trunking
20. GVRP
21. IEEE 802.3ad LACP
22. Port mirroring
23. Support rate limiting, minimum step 64K both ingress and egress
24. Broadcast Storm Control
25. Layer 2 MAC filtering
26. Layer 3 IP filtering
27. Layer 4 TCP/UDP socket filtering
28. DHCP snooping
29. DHCP client
30. DHCP relay/DHCP relay per VLAN
31. DHCP option 82
32. IGMP v1/v2/v3 snooping
33. Static multicast forwarding
34. 802.1x port authentication
35. Port Security
36. Static MAC filtering/forwarding
37. Multiple RADIUS servers
38. Multiple TACACS+ servers
39. AAA by RADIUS / TACACS+
40. Intrusion Lock
41. MAC Freeze
42. ARP Inspection

43. Static IP/MAC/Port binding
44. Policy-based security filtering
45. IEEE 802.1Q VLAN port isolation
46. IP Source Guard
47. Guest VLAN
48. ACL packet filtering
49. PPPoE IA and option 82
50. CPU protection
51. Recovery mechanism for Error disable port/reason
52. Loop guard
53. Dual configuration files
54. Dual images
55. IGMP snooping fast leave
56. IGMP snooping statistics
57. IGMP throttling
58. SNMP v1, v2c, v3
59. SNMP trap group
60. Interface related trap can be enable/disable by port
61. ICMP echo/echo reply
62. Syslog
63. DHCPv6 client and relay
64. NDP: host
65. IPv6 address stateless auto-configuration
66. ZyXEL clustering management
67. Management through SNMP or Web management
68. Firmware upgrade by WEB / FTP
69. Configuration saving and retrieving by WEB / FTP
70. Configure Clone
71. Daylight Saving
72. NTP
73. Service Access Control Timeout
74. IEEE 802.1AB LLDP
75. IEEE 802.1AB LLDP-MED
76. Password encryption
77. User access right
78. ZyXEL ESBU common MIB
79. Green Ethernet
80. Cable diagnostics
81. Support PoE Fault Trap
82. MAC aging time
83. MAC-based VLAN
84. Voice VLAN
85. Private VLAN
86. MLD snooping proxy
87. ZyXEL One Network (ZON)
88. ZyXEL Neighbor Management

*Bug Fix:*

1. eITS#150401077
   - [Log] Fix when enter show-techsupport cause switch loss of management.
2. eITS#150500651
   - [STP] Fix switch occur topology change when switch port interface is using SFP.
3. eITS#150100389
   - [LLDP] Fix the incompatibility issue with some IP Phones that will cause the switch loss of management.
4. eITS#150600252
   - [MGMT] Turn off SSH/Telnet terminal directly when SSH/Telnet output not completed will cause device exception.

5.  eITS# 150800602:
    - [MIB] Fix MIB return wrong value for dot3StatsDuplexStatus (OID = 1.3.6.1.2.1.10.7.2.1.19)
    - [MIB] Fix MIB return wrong value for dot3StatsEtherChipSet (OID = 1.3.6.1.2.1.10.7.2.1.17).
6.  eITS# 150601410
    - [LLDP] Fix switch receive LLDP packet then enter show running configuration continuously, device will crash.
    - [LLDP] Fix switch receive non-standard LLDP packet to cause switch crash.
7.  eITS# 150700814
    - [LLDP] Fix when switch receive a lot of LLDP packets will crash.

8.  [ZON] ZON Utility V2.0.0 still shows firmware 1 information when using firmware 2 to bootup switch.
9.  [LACP] When RSTP is enabled with ring topology, LACP can't be activated at the same ports.
10. [LLDP] Fix the switch crash when switch receive LLDP packets and check the LLDP statistic.
11. [LLDP] Fix LLDP MED cannot enter Location coordinates via WebGUI.

## *Known Issue:*

1.  Ingress rate limit of TCP traffic might have inaccuracy with some criteria.
2.  Fake IP traffic cannot be filtered when a static IP binding existed.
3.  The cable length resolution of Cable Diagnostic is about +-15 meter.
4.  The fault distance of Cable Diagnostic is less than 1 meter without cable inserted.
5.  [MGMT] GS1920 is cluster manager and the cluster member won't upgrade firmware via FTP if firmware size over than 4.8MB.

## *Limitation of Settings:*

| | | |
|---|---|---|
| 1. | 802.1Q Static VLANs | 1K |
| 2. | Static MAC forwarding entry | 256 |
| 3. | MAC filtering entry | 256 |
| 4. | Cluster member | 24 |
| 5. | Protocol based VLAN entries per port | 7 |
| 6. | Port-security max address-limit number | 16K |
| 7. | Syslog server entry | 4 |
| 8. | IP source guard entry | 512 |
| 9. | IP subnet based VLAN entry | 16 |
| 10. | DHCP snooping binding table | 16K |
| 11. | Multicast group | 1024 |
| 12. | ACL | 256 |
| 13. | DHCP relay Entry | 16 |
| 14. | Trunk groups | 8 |
| 15. | Per trunk group port number | 8 |
| 16. | MSTP instance | 0-15 |
| 17. | MAC-based VLAN | 28 |
| 18. | Voice VLAN OUI entry | 6 |
| 19. | ZON neighbor per-port maximum clients | 10 |

## *Firmware Upgrade:*

The GS1920-24 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 GS1920-24. The upgrade procedure is as follows:

## Upgrade GS1920-24 Firmware:

```
C:\> ftp <GS1920-24 IP address>
User : admin
```

```
Password: 1234
230 Logged in
ftp> put 430AAOB0C0.bin ras-0
ftp> bye
```

Where
- User name: the management user name, admin by default.
- Password: the management password, 1234 by default.
- 430AAOB0C0.bin: the name of firmware file you want to upgrade.
- ras-0: the internal firmware name in GS1920-24 (store at first flash).
- ras-1: the internal firmware name in GS1920-24 (store at second flash).

## *Configuration Upgrade:*

The GS1920-24 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 GS1920-24. The upgrade procedure is as follows:

### Upgrade GS1920-24 Configuration:

```
C:\> ftp <GS1920-24 IP address>
User name: admin
Password: 1234
230 Logged in
ftp> put 430AAOB0C0.rom rom-0
ftp> bye
```

Where
- User name: the management user name, admin by default.
- Password: the management password, 1234 by default.
- 430AAOB0C0.rom: the name of configuration file you want to upgrade.
- rom-0: the internal configuration name in GS1920-24.

# ZyXEL GS1920-24 V4.10(AAOB.5)C0

# Release Note/Manual Supplement

**Date: May. 5, 2015**

This document describes the features in the GS1920-24 product for its 4.10(AAOB.5)C0 release.

## *Support Platforms:*

ZyXEL GS1920-24 V4.10(AAOB.5)C0 supports models: ZyXEL GS1920-24.

## *Version:*

OS Version: V4.10(AAOB.5) | 05/05/2015 16:46:07
BootBase Version: V1.00 | 03/21/2014 09:54:17

## *Default Bootbase Setting:*

| | |
|---|---|
| ZyNOS Version | V4.10(AAOB.5) | 05/05/2015 16:46:07 |
| Bootbase Version | V1.00 | 03/21/2014 09:54:17 |
| Serial Number | xxxxxxxxxxxxxx |
| Vendor Name | ZyXEL |
| Product Model | GS1920-24 |
| ZyNOS Code Model | GS1920 |
| ZyNOS ROM address | b40a0000 |
| System Type | 8 |
| First MAC Address | 0019CB000001 |
| Last MAC Address | 0019CB00001D |
| MAC Address Quantity | 29 |
| Default Country Code | FF |
| Boot Module Debug Flag | 00 |
| CPLD Version | N/A |
| RomFile Version | 27 |
| RomFile Checksum | 1bc5 |
| ZyNOS Checksum | bfe2 |
| SNMP MIB level & OID | 060102030405060708091011121314151617181920 |
| Main Feature Bits | C0 |
| Other Feature Bits | |
| 02 52 00 00 00 00 00 00-00 00 00 00 00 00 00 00<br>00 00 00 00 00 00 00 00-00 13 00 00 00 00 | |

## *Main Features:*

89. 24 Auto MDI/MDI-X 10Base-T/100Base-TX/1000Base-T
90. 4 dual personality GbE
91. Locator LED
92. 16K layer 2 MAC addresses table
93. Jumbo frame length 9K
94. IEEE 802.1w , RSTP
95. IEEE 802.1s , MSTP
96. ZyXEL MRSTP
97. Rule-based bandwidth control
98. Port-based egress traffic shaping
99. IEEE 802.3x flow control.
100. DSCP to 802.1p priority mapping

101. Port-based VLAN
102. Protocol-based VLAN
103. IP subnet based VLAN
104. IEEE 802.1Q Static VLANs
105. IEEE 802.1Q dynamic VLANs
106. VLAN trunking
107. GVRP
108. IEEE 802.3ad LACP
109. Port mirroring
110. Support rate limiting, minimum step 64K both ingress and egress
111. Broadcast Storm Control
112. Layer 2 MAC filtering
113. Layer 3 IP filtering
114. Layer 4 TCP/UDP socket filtering
115. DHCP snooping
116. DHCP client
117. DHCP relay/DHCP relay per VLAN
118. DHCP option 82
119. IGMP v1/v2/v3 snooping
120. Static multicast forwarding
121. 802.1x port authentication
122. Port Security
123. Static MAC filtering/forwarding
124. Multiple RADIUS servers
125. Multiple TACACS+ servers
126. AAA by RADIUS / TACACS+
127. Intrusion Lock
128. MAC Freeze
129. ARP Inspection
130. Static IP/MAC/Port binding
131. Policy-based security filtering
132. IEEE 802.1Q VLAN port isolation
133. IP Source Guard
134. Guest VLAN
135. ACL packet filtering
136. PPPoE IA and option 82
137. CPU protection
138. Recovery mechanism for Error disable port/reason
139. Loop guard
140. Dual configuration files
141. Dual images
142. IGMP snooping fast leave
143. IGMP snooping statistics
144. IGMP throttling
145. SNMP v1, v2c, v3
146. SNMP trap group
147. Interface related trap can be enable/disable by port
148. ICMP echo/echo reply
149. Syslog
150. DHCPv6 client and relay
151. NDP: host
152. IPv6 address stateless auto-configuration
153. ZyXEL clustering management
154. Management through SNMP or Web management
155. Firmware upgrade by WEB / FTP
156. Configuration saving and retrieving by WEB / FTP
157. Configure Clone
158. Daylight Saving
159. NTP
160. Service Access Control Timeout

161. IEEE 802.1AB LLDP
162. IEEE 802.1AB LLDP-MED
163. Password encryption
164. User access right
165. ZyXEL ESBU common MIB
166. Green Ethernet
167. Cable diagnostics
168. Support PoE Fault Trap
169. MAC aging time
170. MAC-based VLAN
171. Voice VLAN
172. Private VLAN
173. MLD snooping proxy
174. ZyXEL One Network (ZON)
175. ZyXEL Neighbor Management

## *Enhanced Features:*

None

## *Bug Fix:*

1. Copy running-config cause DUT CPU high and records lots of port link down/up logs.
2. Show tech-support that will make switch crash (memory overwrite).
3. Show tech-suport" or "show tech-support memory" via ssh (uses putty) will cause DUT crash.
4. Upgrading the firmware via tftp, during the switch was writing the flash, they could not ping to the switch.
5. When enable igmp-snooping, ping would failed on port 28. ARP reply will hit IGMP ACL and trap to CPU port.
6. Device CPU High every hours, if issue happens the complete network is affected. (When all port's transceiver-ddmi inserts)
7. On WEB GUI of VLAN Port Setting, selecting one of acceptable frame types on the web GUI for all ports which marked with *, the selected item cannot be applied for all ports.
8. Switch cannot access via HTTPs by Chrome.
9. Memory leak when receive LLDP packet with chassis ID==network address.
10. User can not set cpu threshold over 20.
11. Dynamic VLAN Assignment approved for VLAN10 in the server. VLAN100 approved in the switch
12. Enter "show tech-support" command that will make switch hang.
13. System crash with exception on eventCmdProc or Memory cookies destroyed.
14. System will encounter socket error, when socket leakage
15. Fix switch may drop BPDU packets while the cpu utilization is normal (cpu: 2-4%)
16. [Web] Tech support cannot display show run config via web
17. Run RompagerPOCCookie, RompagerPOCCookies2 will cause DUT crash.

## *Known Issue:*

6. Ingress rate limit of TCP traffic might have inaccuracy with some criteria.
7. Fake IP traffic cannot be filtered when a static IP binding existed.
8. The cable length resolution of Cable Diagnostic is about +-15 meter.
9. The fault distance of Cable Diagnostic is less than 1 meter without cable inserted.
10. When RSTP is enabled with ring topology, LACP can't be activated at the same ports.

## *Limitation of Settings:*

| | | |
|---|---|---|
| 20. | 802.1Q Static VLANs | 1K |
| 21. | Static MAC forwarding entry | 256 |
| 22. | MAC filtering entry | 256 |
| 23. | Cluster member | 24 |

| 24. | Protocol based VLAN entries per port | 7 |
|---|---|---|
| 25. | Port-security max address-limit number | 16K |
| 26. | Syslog server entry | 4 |
| 27. | IP source guard entry | 512 |
| 28. | IP subnet based VLAN entry | 16 |
| 29. | DHCP snooping binding table | 16K |
| 30. | Multicast group | 1024 |
| 31. | ACL | 256 |
| 32. | DHCP relay Entry | 16 |
| 33. | Trunk groups | 8 |
| 34. | Per trunk group port number | 8 |
| 35. | MSTP instance | 0-15 |
| 36. | MAC-based VLAN | 28 |
| 37. | Voice VLAN OUI entry | 6 |
| 38. | ZON neighbor per-port maximum clients | 10 |

*Firmware Upgrade:*

The GS1920-24 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 GS1920-24. The upgrade procedure is as follows:

## Upgrade GS1920-24 Firmware:

```
C:\> ftp <GS1920-24 IP address>
User : admin
Password: 1234
230 Logged in
ftp> put 410AAOB5C0.bin ras-0
ftp> bye


Where
```
- User name: the management user name, admin by default.
- Password: the management password, 1234 by default.
- 410AAOB5C0.bin: the name of firmware file you want to upgrade.
- ras-0: the internal firmware name in GS1920-24 (store at first flash).
- ras-1: the internal firmware name in GS1920-24 (store at second flash).

## *Configuration Upgrade:*

The GS1920-24 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 GS1920-24. The upgrade procedure is as follows:

## Upgrade GS1920-24 Configuration:

```
C:\> ftp <GS1920-24 IP address>
User name: admin
Password: 1234
230 Logged in
ftp> put 410AAOB5C0.rom rom-0
ftp> bye


Where
```

- User name: the management user name, admin by default.
- Password: the management password, 1234 by default.
- 410AAOB5C0.rom: the name of configuration file you want to upgrade.
- rom-0: the internal configuration name in GS1920-24.

# ZyXEL GS1920-24 V4.10(AAOB.4)C0

# Release Note/Manual Supplement

**Date:    Sep. 16, 2014**

This document describes the features in the GS1920-24 product for its 4.10(AAOB.4)C0 release.

### *Support Platforms:*

ZyXEL GS1920-24 V4.10(AAOB.4)C0 supports models: ZyXEL GS1920-24.

### *Version:*

OS Version: V4.10(AAOB.4) | 09/16/2014 16:04:59
BootBase Version: V1.00 | 03/21/2014 09:54:17

### *Default Bootbase Setting:*

| | |
|---|---|
| ZyNOS Version | V4.10(AAOB.4) | 09/16/2014 16:04:59 |
| Bootbase Version | V1.00 | 03/21/2014 09:54:17 |
| Serial Number | xxxxxxxxxxxxxx |
| Vendor Name | ZyXEL |
| Product Model | GS1920-24 |
| ZyNOS Code Model | GS1920 |
| ZyNOS ROM address | b40a0000 |
| System Type | 8 |
| First MAC Address | 0019CB000001 |
| Last MAC Address | 0019CB00001D |
| MAC Address Quantity | 29 |
| Default Country Code | FF |
| Boot Module Debug Flag | 00 |
| CPLD Version | N/A |
| RomFile Version | 27 |
| RomFile Checksum | 1bc5 |
| ZyNOS Checksum | 32e8 |
| SNMP MIB level & OID | 060102030405060708091011121314151617181920 |
| Main Feature Bits | C0 |
| Other Feature Bits | |
| 02 52 00 00 00 00 00 00-00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00-00 13 00 00 00 00 | |

### *Main Features:*

176.  24 Auto MDI/MDI-X 10Base-T/100Base-TX/1000Base-T
177.  4 dual personality GbE
178.  Locator LED
179.  16K layer 2 MAC addresses table
180.  Jumbo frame length 9K
181.  IEEE 802.1w , RSTP
182.  IEEE 802.1s , MSTP
183.  ZyXEL MRSTP
184.  Rule-based bandwidth control
185.  Port-based egress traffic shaping
186.  IEEE 802.3x flow control.
187.  DSCP to 802.1p priority mapping

188. Port-based VLAN
189. Protocol-based VLAN
190. IP subnet based VLAN
191. IEEE 802.1Q Static VLANs
192. IEEE 802.1Q dynamic VLANs
193. VLAN trunking
194. GVRP
195. IEEE 802.3ad LACP
196. Port mirroring
197. Support rate limiting, minimum step 64K both ingress and egress
198. Broadcast Storm Control
199. Layer 2 MAC filtering
200. Layer 3 IP filtering
201. Layer 4 TCP/UDP socket filtering
202. DHCP snooping
203. DHCP client
204. DHCP relay/DHCP relay per VLAN
205. DHCP option 82
206. IGMP v1/v2/v3 snooping
207. Static multicast forwarding
208. 802.1x port authentication
209. Port Security
210. Static MAC filtering/forwarding
211. Multiple RADIUS servers
212. Multiple TACACS+ servers
213. AAA by RADIUS / TACACS+
214. Intrusion Lock
215. MAC Freeze
216. ARP Inspection
217. Static IP/MAC/Port binding
218. Policy-based security filtering
219. IEEE 802.1Q VLAN port isolation
220. IP Source Guard
221. Guest VLAN
222. ACL packet filtering
223. PPPoE IA and option 82
224. CPU protection
225. Recovery mechanism for Error disable port/reason
226. Loop guard
227. Dual configuration files
228. Dual images
229. IGMP snooping fast leave
230. IGMP snooping statistics
231. IGMP throttling
232. SNMP v1, v2c, v3
233. SNMP trap group
234. Interface related trap can be enable/disable by port
235. ICMP echo/echo reply
236. Syslog
237. DHCPv6 client and relay
238. NDP: host
239. IPv6 address stateless auto-configuration
240. ZyXEL clustering management
241. Management through SNMP or Web management
242. Firmware upgrade by WEB / FTP
243. Configuration saving and retrieving by WEB / FTP
244. Configure Clone
245. Daylight Saving
246. NTP
247. Service Access Control Timeout

248.  IEEE 802.1AB LLDP
249.  IEEE 802.1AB LLDP-MED
250.  Password encryption
251.  User access right
252.  ZyXEL ESBU common MIB
253.  Green Ethernet
254.  Cable diagnostics
255.  Support PoE Fault Trap
256.  MAC aging time
257.  MAC-based VLAN
258.  Voice VLAN
259.  Private VLAN
260.  MLD snooping proxy
261.  ZyXEL One Network (ZON)
262.  ZyXEL Neighbor Management

## Enhanced Features:

None

## Bug Fix:

18.  [MGMT] The switch crashes when getting the IPv6 address with max length and clicking IPv6 index via the web GUI.
19.  [MGMT] Fix the incompatibility issue with Microsoft Windows OS 8.1 LLDP that will cause the switch loss of management.
20.  [MGMT] Fix the web loss of management on the switch.

## Known Issue:

11.  Ingress rate limit of TCP traffic might have inaccuracy with some criteria.
12.  Fake IP traffic cannot be filtered when a static IP binding existed.
13.  The cable length resolution of Cable Diagnostic is about +-15 meter.
14.  The fault distance of Cable Diagnostic is less than 1 meter without cable inserted.
15.  When RSTP is enabled with ring topology, LACP can't be activated at the same ports.

## Limitation of Settings:

| | | |
|---|---|---|
| 39. | 802.1Q Static VLANs | 1K |
| 40. | Static MAC forwarding entry | 256 |
| 41. | MAC filtering entry | 256 |
| 42. | Cluster member | 24 |
| 43. | Protocol based VLAN entries per port | 7 |
| 44. | Port-security max address-limit number | 16K |
| 45. | Syslog server entry | 4 |
| 46. | IP source guard entry | 512 |
| 47. | IP subnet based VLAN entry | 16 |
| 48. | DHCP snooping binding table | 16K |
| 49. | Multicast group | 1024 |
| 50. | ACL | 256 |
| 51. | DHCP relay Entry | 16 |
| 52. | Trunk groups | 8 |
| 53. | Per trunk group port number | 8 |
| 54. | MSTP instance | 0-15 |
| 55. | MAC-based VLAN | 28 |
| 56. | Voice VLAN OUI entry | 6 |
| 57. | ZON neighbor per-port maximum clients | 10 |

The GS1920-24 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 GS1920-24. The upgrade procedure is as follows:

## Upgrade GS1920-24 Firmware:

```
C:\> ftp <GS1920-24 IP address>
User : admin
Password: 1234
230 Logged in
ftp> put 410AAOB4C0.bin ras-0
ftp> bye
```

```
Where
   ● User name: the management user name, admin by default.
   ● Password: the management password, 1234 by default.
   ● 410AAOB4C0.bin: the name of firmware file you want to upgrade.
   ● ras-0: the internal firmware name in GS1920-24 (store at first
      flash).
   ● ras-1: the internal firmware name in GS1920-24 (store at second
      flash).
```

## *Configuration Upgrade:*

The GS1920-24 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 GS1920-24. The upgrade procedure is as follows:

## Upgrade GS1920-24 Configuration:

```
C:\> ftp <GS1920-24 IP address>
User name: admin
Password: 1234
230 Logged in
ftp> put 410AAOB4C0.rom rom-0
ftp> bye
```

```
Where
   ● User name: the management user name, admin by default.
   ● Password: the management password, 1234 by default.
   ● 410AAOB4C0.rom: the name of configuration file you want to upgrade.
   ● rom-0: the internal configuration name in GS1920-24.
```

# ZyXEL GS1920-24 V4.10(AAOB.3)C0

# Release Note/Manual Supplement

**Date:   Aug. 20, 2014**

This document describes the features in the GS1920-24 product for its 4.10(AAOB.3)C0 release.


*Support Platforms:*

ZyXEL GS1920-24 V4.10(AAOB.3)C0 supports models: ZyXEL GS1920-24.


*Version:*

OS Version: V4.10(AAOB.3) | 08/20/2014 10:50:09
BootBase Version: V1.00 | 03/21/2014 09:54:17


*Default Bootbase Setting:*

| | |
|---|---|
| ZyNOS Version | V4.10(AAOB.3) | 08/20/2014 10:50:09 |
| Bootbase Version | V1.00 | 03/21/2014 09:54:17 |
| Serial Number | xxxxxxxxxxxxxx |
| Vendor Name | ZyXEL |
| Product Model | GS1920-24 |
| ZyNOS Code Model | GS1920 |
| ZyNOS ROM address | b40a0000 |
| System Type | 8 |
| First MAC Address | 0019CB000001 |
| Last MAC Address | 0019CB00001D |
| MAC Address Quantity | 29 |
| Default Country Code | FF |
| Boot Module Debug Flag | 00 |
| CPLD Version | N/A |
| RomFile Version | 27 |
| RomFile Checksum | 1bc5 |
| ZyNOS Checksum | 3af5 |
| SNMP MIB level & OID | 0601020304050607080910111213141516171819 20 |
| Main Feature Bits | C0 |
| Other Feature Bits | |
| 02 52 00 00 00 00 00 00-00 00 00 00 00 00 00 00<br>00 00 00 00 00 00 00 00-00 13 00 00 00 00 | |

*Main Features:*

1.   24 Auto MDI/MDI-X 10Base-T/100Base-TX/1000Base-T
2.   4 dual personality GbE
3.   Locator LED
4.   16K layer 2 MAC addresses table
5.   Jumbo frame length 9K
6.   IEEE 802.1w , RSTP
7.   IEEE 802.1s , MSTP
8.   ZyXEL MRSTP
9.   Rule-based bandwidth control
10.   Port-based egress traffic shaping
11.   IEEE 802.3x flow control.

12. DSCP to 802.1p priority mapping
13. Port-based VLAN
14. Protocol-based VLAN
15. IP subnet based VLAN
16. IEEE 802.1Q Static VLANs
17. IEEE 802.1Q dynamic VLANs
18. VLAN trunking
19. GVRP
20. IEEE 802.3ad LACP
21. Port mirroring
22. Support rate limiting, minimum step 64K both ingress and egress
23. Broadcast Storm Control
24. Layer 2 MAC filtering
25. Layer 3 IP filtering
26. Layer 4 TCP/UDP socket filtering
27. DHCP snooping
28. DHCP client
29. DHCP relay/DHCP relay per VLAN
30. DHCP option 82
31. IGMP v1/v2/v3 snooping
32. Static multicast forwarding
33. 802.1x port authentication
34. Port Security
35. Static MAC filtering/forwarding
36. Multiple RADIUS servers
37. Multiple TACACS+ servers
38. AAA by RADIUS / TACACS+
39. Intrusion Lock
40. MAC Freeze
41. ARP Inspection
42. Static IP/MAC/Port binding
43. Policy-based security filtering
44. IEEE 802.1Q VLAN port isolation
45. IP Source Guard
46. Guest VLAN
47. ACL packet filtering
48. PPPoE IA and option 82
49. CPU protection
50. Recovery mechanism for Error disable port/reason
51. Loop guard
52. Dual configuration files
53. Dual images
54. IGMP snooping fast leave
55. IGMP snooping statistics
56. IGMP throttling
57. SNMP v1, v2c, v3
58. SNMP trap group
59. Interface related trap can be enable/disable by port
60. ICMP echo/echo reply
61. Syslog
62. DHCPv6 client and relay
63. NDP: host
64. IPv6 address stateless auto-configuration
65. ZyXEL clustering management
66. Management through SNMP or Web management
67. Firmware upgrade by WEB / FTP
68. Configuration saving and retrieving by WEB / FTP
69. Configure Clone
70. Daylight Saving
71. NTP

72. Service Access Control Timeout
73. IEEE 802.1AB LLDP
74. IEEE 802.1AB LLDP-MED
75. Password encryption
76. User access right
77. ZyXEL ESBU common MIB
78. Green Ethernet
79. Cable diagnostics
80. Support PoE Fault Trap
81. MAC aging time
82. MAC-based VLAN
83. Voice VLAN
84. Private VLAN
85. MLD snooping proxy
86. ZyXEL One Network (ZON)
87. ZyXEL Neighbor Management

## Enhanced Features:

None

## Bug Fix:

1. Download tech-support all cause DUT crash.

## Known Issue:

1. Ingress rate limit of TCP traffic might have inaccuracy with some criteria.
2. Fake IP traffic cannot be filtered when a static IP binding existed.
3. The cable length resolution of Cable Diagnostic is about +-15 meter.
4. The fault distance of Cable Diagnostic is less than 1 meter without cable inserted.
5. When RSTP is enabled with ring topology, LACP can't be activated at the same ports.

## Limitation of Settings:

| | | |
|---|---|---|
| 1. | 802.1Q Static VLANs | 1K |
| 2. | Static MAC forwarding entry | 256 |
| 3. | MAC filtering entry | 256 |
| 4. | Cluster member | 24 |
| 5. | Protocol based VLAN entries per port | 7 |
| 6. | Port-security max address-limit number | 16K |
| 7. | Syslog server entry | 4 |
| 8. | IP source guard entry | 512 |
| 9. | IP subnet based VLAN entry | 16 |
| 10. | DHCP snooping binding table | 16K |
| 11. | Multicast group | 1024 |
| 12. | ACL | 256 |
| 13. | DHCP relay Entry | 16 |
| 14. | Trunk groups | 8 |
| 15. | Per trunk group port number | 8 |
| 16. | MSTP instance | 0-15 |
| 17. | MAC-based VLAN | 28 |
| 18. | Voice VLAN OUI entry | 6 |
| 19. | ZON neighbor per-port maximum clients | 10 |

The GS1920-24 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 GS1920-24. The upgrade procedure is as follows:

## Upgrade GS1920-24 Firmware:

```
C:\> ftp <GS1920-24 IP address>
User : admin
Password: 1234
230 Logged in
ftp> put 410AAOB3C0.bin ras-0
ftp> bye


Where
```

- User name: the management user name, admin by default.
- Password: the management password, 1234 by default.
- 410AAOB3C0.bin: the name of firmware file you want to upgrade.
- ras-0: the internal firmware name in GS1920-24 (store at first flash).
- ras-1: the internal firmware name in GS1920-24 (store at second flash).

## *Configuration Upgrade:*

The GS1920-24 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 GS1920-24. The upgrade procedure is as follows:

## Upgrade GS1920-24 Configuration:

```
C:\> ftp <GS1920-24 IP address>
User name: admin
Password: 1234
230 Logged in
ftp> put 410AAOB3C0.rom rom-0
ftp> bye


Where
```

- User name: the management user name, admin by default.
- Password: the management password, 1234 by default.
- 410AAOB3C0.rom: the name of configuration file you want to upgrade.
- rom-0: the internal configuration name in GS1920-24.

# ZyXEL GS1920-24 V4.10(AAOB.2)C0

# Release Note/Manual Supplement

**Date:    July. 18, 2014**

This document describes the features in the GS1920-24 product for its 4.10(AAOB.2)C0 release.

*Support Platforms:*

ZyXEL GS1920-24 V4.10(AAOB.2)C0 supports models: ZyXEL GS1920-24.

*Version:*

OS Version: V4.10(AAOB.2) | 07/18/2014 16:13:31
BootBase Version: V1.00 | 03/21/2014 09:54:17

*Default Bootbase Setting:*

| | |
|---|---|
| ZyNOS Version | V4.10(AAOB.2) | 07/18/2014 16:13:31 |
| Bootbase Version | V1.00 | 03/21/2014 09:54:17 |
| Serial Number | xxxxxxxxxxxxxx |
| Vendor Name | ZyXEL |
| Product Model | GS1920-24 |
| ZyNOS Code Model | GS1920 |
| ZyNOS ROM address | b40a0000 |
| System Type | 8 |
| First MAC Address | 0019CB000001 |
| Last MAC Address | 0019CB00001D |
| MAC Address Quantity | 29 |
| Default Country Code | FF |
| Boot Module Debug Flag | 00 |
| CPLD Version | N/A |
| RomFile Version | 27 |
| RomFile Checksum | 1bc5 |
| ZyNOS Checksum | 63cb |
| SNMP MIB level & OID | 060102030405060708091011121314151617181920 |
| Main Feature Bits | C0 |
| Other Feature Bits | |
| 02 52 00 00 00 00 00 00-00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00-00 13 00 00 00 00 | |

*Main Features:*

88.    24 Auto MDI/MDI-X 10Base-T/100Base-TX/1000Base-T
89.    4 dual personality GbE
90.    Locator LED
91.    16K layer 2 MAC addresses table
92.    Jumbo frame length 9K
93.    IEEE 802.1w , RSTP
94.    IEEE 802.1s , MSTP
95.    ZyXEL MRSTP
96.    Rule-based bandwidth control
97.    Port-based egress traffic shaping
98.    IEEE 802.3x flow control.

99. DSCP to 802.1p priority mapping
100. Port-based VLAN
101. Protocol-based VLAN
102. IP subnet based VLAN
103. IEEE 802.1Q Static VLANs
104. IEEE 802.1Q dynamic VLANs
105. VLAN trunking
106. GVRP
107. IEEE 802.3ad LACP
108. Port mirroring
109. Support rate limiting, minimum step 64K both ingress and egress
110. Broadcast Storm Control
111. Layer 2 MAC filtering
112. Layer 3 IP filtering
113. Layer 4 TCP/UDP socket filtering
114. DHCP snooping
115. DHCP client
116. DHCP relay/DHCP relay per VLAN
117. DHCP option 82
118. IGMP v1/v2/v3 snooping
119. Static multicast forwarding
120. 802.1x port authentication
121. Port Security
122. Static MAC filtering/forwarding
123. Multiple RADIUS servers
124. Multiple TACACS+ servers
125. AAA by RADIUS / TACACS+
126. Intrusion Lock
127. MAC Freeze
128. ARP Inspection
129. Static IP/MAC/Port binding
130. Policy-based security filtering
131. IEEE 802.1Q VLAN port isolation
132. IP Source Guard
133. Guest VLAN
134. ACL packet filtering
135. PPPoE IA and option 82
136. CPU protection
137. Recovery mechanism for Error disable port/reason
138. Loop guard
139. Dual configuration files
140. Dual images
141. IGMP snooping fast leave
142. IGMP snooping statistics
143. IGMP throttling
144. SNMP v1, v2c, v3
145. SNMP trap group
146. Interface related trap can be enable/disable by port
147. ICMP echo/echo reply
148. Syslog
149. DHCPv6 client and relay
150. NDP: host
151. IPv6 address stateless auto-configuration
152. ZyXEL clustering management
153. Management through SNMP or Web management
154. Firmware upgrade by WEB / FTP
155. Configuration saving and retrieving by WEB / FTP
156. Configure Clone
157. Daylight Saving
158. NTP

159. Service Access Control Timeout
160. IEEE 802.1AB LLDP
161. IEEE 802.1AB LLDP-MED
162. Password encryption
163. User access right
164. ZyXEL ESBU common MIB
165. Green Ethernet
166. Cable diagnostics
167. Support PoE Fault Trap
168. MAC aging time

## Enhanced Features:

1. MAC-based VLAN
2. Voice VLAN
3. Private VLAN
4. MLD snooping proxy
5. ZyXEL One Network (ZON)
6. ZyXEL Neighbor Management
7. LLDP enabled by default

## Bug Fix:

2. LACP sync fail but still can ping to device from LACP port.
3. Set MIB traceroute IP address entry, the IP address could not set successfully.
4. In web page, when setting ipv6 and dhcpv6 client information refresh minimum to 4294967295 seconds, it could not apply successfully.
5. In spanning tree and static trunk environment, the host's mac will be learned to wrong port.
6. Send two LLDP packets (with system description length = 255) to an LLDP enabled port will cause DUT crash.
7. User can't be authorized when privilege of account is Cisco attribute and privilege level is 15.
8. LLDP-MED doesn't work with some IP phones.
9. When enable trunk and group two or more ports, and then just link up one of these ports, DUT sends out those LLDP packets which is in the trunk group from the link-up port.
10. If subtype of remote Port ID is mac-address. It can't be showed on LLDP remote device information.
11. When we use ipv6 link-local URL to access the switch web UI on windows XP, pages with indirect URL are inaccessible. User cannot access the error.html when configuration is wrong.
12. When enabled IGMP snooping, IGMP general query received by DUT will be replaced with its own source mac.
13. Fix IGMP snooping group-specific queries(GSQ) with source MAC address 00: 00: 00: 00: 00: 00.

## Known Issue:

6. Ingress rate limit of TCP traffic might have inaccuracy with some criteria.
7. Fake IP traffic cannot be filtered when a static IP binding existed.
8. The cable length resolution of Cable Diagnostic is about +-15 meter.
9. The fault distance of Cable Diagnostic is less than 1 meter without cable inserted.

## Limitation of Settings:

| | | |
|---|---|---|
| 20. | 802.1Q Static VLANs | 1K |
| 21. | Static MAC forwarding entry | 256 |
| 22. | MAC filtering entry | 256 |
| 23. | Cluster member | 24 |
| 24. | Protocol based VLAN entries per port | 7 |
| 25. | Port-security max address-limit number | 16K |
| 26. | Syslog server entry | 4 |

| 27. | IP source guard entry | 512 |
| 28. | IP subnet based VLAN entry | 16 |
| 29. | DHCP snooping binding table | 16K |
| 30. | Multicast group | 1024 |
| 31. | ACL | 256 |
| 32. | DHCP relay Entry | 16 |
| 33. | Trunk groups | 8 |
| 34. | Per trunk group port number | 8 |
| 35. | MSTP instance | 0-15 |
| 36. | MAC-based VLAN | 28 |
| 37. | Voice VLAN OUI entry | 6 |
| 38. | ZON neighbor per-port maximum clients | 10 |

### *Firmware Upgrade:*

The GS1920-24 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 GS1920-24. The upgrade procedure is as follows:

## Upgrade GS1920-24 Firmware:

```
C:\> ftp <GS1920-24 IP address>
User : admin
Password: 1234
230 Logged in
ftp> put 410AAOB2C0.bin ras-0
ftp> bye


Where
  • User name: the management user name, admin by default.
  • Password: the management password, 1234 by default.
  • 410AAOB2C0.bin: the name of firmware file you want to upgrade.
  • ras-0: the internal firmware name in GS1920-24 (store at first
      flash).
  • ras-1: the internal firmware name in GS1920-24 (store at second
      flash).
```

# *Configuration Upgrade:*

The GS1920-24 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 GS1920-24. The upgrade procedure is as follows:

## Upgrade GS1920-24 Configuration:

```
C:\> ftp <GS1920-24 IP address>
User name: admin
Password: 1234
230 Logged in
ftp> put 410AAOB2C0.rom rom-0
ftp> bye


Where
  • User name: the management user name, admin by default.
  • Password: the management password, 1234 by default.
```

- 410AAOB2C0.rom: the name of configuration file you want to upgrade.
- rom-0: the internal configuration name in GS1920-24.

# ZyXEL GS1920-24 V4.10(AAOB.1)C0

# Release Note/Manual Supplement

**Date:   May. 21, 2014**

This document describes the features in the GS1920-24 product for its 4.10(AAOB.1)C0 release.

*Support Platforms:*

ZyXEL GS1920-24 V4.10(AAOB.1)C0 supports models: ZyXEL GS1920-24.

*Version:*

OS Version: V4.10(AAOB.1) | 05/21/2014 10:44:52
BootBase Version: V1.00 | 03/21/2014 09:54:17

*Default Bootbase Setting:*

| | |
|---|---|
| ZyNOS Version | V4.10(AAOB.1) | 05/21/2014 10:44:52 |
| Bootbase Version | V1.00 | 03/21/2014 09:54:17 |
| Serial Number | xxxxxxxxxxxxxx |
| Vendor Name | ZyXEL |
| Product Model | GS1920-24 |
| ZyNOS Code Model | GS1920 |
| ZyNOS ROM address | b40a0000 |
| System Type | 8 |
| First MAC Address | 0019CB000001 |
| Last MAC Address | 0019CB00001D |
| MAC Address Quantity | 29 |
| Default Country Code | FF |
| Boot Module Debug Flag | 00 |
| CPLD Version | N/A |
| RomFile Version | 27 |
| RomFile Checksum | 1bc5 |
| ZyNOS Checksum | a851 |
| SNMP MIB level & OID | 060102030405060708091011121314151617181920 |
| Main Feature Bits | C0 |
| Other Feature Bits | |
| 02 52 00 00 00 00 00 00-00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00-00 13 00 00 00 00 | |

*Main Features:*

1.   24 Auto MDI/MDI-X 10Base-T/100Base-TX/1000Base-T
2.   4 dual personality GbE
3.   Locator LED
4.   16K layer 2 MAC addresses table
5.   Jumbo frame length 9K
6.   IEEE 802.1w Rapid Spanning Tree Protocol, RSTP
7.   IEEE 802.1s Multiple Spanning Tree Protocol, MSTP
8.   ZyXEL MRSTP
9.   Rule-based bandwidth control
10.   Port-based egress traffic shaping
11.   IEEE 802.3x flow control.

12. DSCP to 802.1p priority mapping
13. Port-based VLAN
14. Protocol-based VLAN
15. IP subnet based VLAN
16. IEEE 802.1Q Static VLANs
17. IEEE 802.1Q dynamic VLANs
18. GVRP
19. IEEE 802.3ad LACP
20. Port mirroring
21. Support rate limiting, minimum step 64K both ingress and egress
22. Broadcast Storm Control
23. Layer 2 MAC filtering
24. Layer 3 IP filtering
25. Layer 4 TCP/UDP socket filtering
26. Support rate limit per IP/TCP/UDP per port
27. DHCP client
28. DHCP relay/DHCP relay per VLAN
29. DHCP option 82
33. IGMP v1/v2/v3 snooping
34. Static multicast forwarding
35. 802.1x port authentication
36. Port Security
37. Static MAC filtering/forwarding
38. Multiple RADIUS servers
39. Multiple TACACS+ servers
40. AAA by RADIUS / TACACS+
30. 802.1x VLAN and bandwidth assignment by RADIUS
31. Intrusion Lock
32. MAC Freeze
33. DHCP snooping
34. ARP Inspection
35. Static IP/MAC/Port binding
36. Policy-based security filtering
37. IEEE 802.1Q VLAN port isolation
38. IP Source Guard
39. Guest VLAN
40. ACL packet filtering
41. PPPoE IA and option 82
42. CPU protection
43. Recovery mechanism for Error disable port/reason
44. Loop guard
45. Dual configuration files
46. Dual images
47. VLAN trunking
48. IGMP snooping fast leave
49. IGMP snooping statistics
50. IGMP throttling
51. SNMP v1, v2c, v3
52. SNMP trap group
53. Interface related trap can be enable/disable by port
54. ICMP echo/echo reply
55. Syslog
56. DHCPv6 client and relay
57. NDP: host
58. IPv6 address stateless auto-configuration
59. ZyXEL clustering management
60. Management through SNMP or Web management
61. Firmware upgrade by WEB / FTP
62. Configuration saving and retrieving by WEB / FTP
63. Configure Clone

64. Daylight Saving
65. NTP
66. Service Access Control Timeout
67. IEEE 802.1AB LLDP
68. IEEE 802.1AB LLDP-MED
69. Password encryption
70. User access right
71. ZyXEL ESBU common MIB
72. Green Ethernet
73. Cable diagnostics
74. Support PoE Fault Trap
75. MAC aging time

## *Enhanced Features:*

None

## *Bug Fix:*

1. Improve the manufacturing efficiency, no feature changed.

## *Known Issue:*

1. Policy rule: for the ARP/RARP packet, policy rule qualifies the sender MAC address, not the source MAC address.
2. IP source guard: creates a legal static IP source binding first, and then send illegal IP traffic (the same MAC address but different IP address). DUT cannot filter the illegal IP traffic.
3. Green Ethernet: short reach does not support display short reach status.
4. Cable diagnostic: the accuracy of cable diagnostic is +15m ~ -15m. And plug out the cable line, the value of distance to fault would not be 0.00.

## *Limitation of Settings:*

| | | |
|---|---|---|
| 1. | 802.1Q Static VLANs | 1K |
| 2. | Static MAC forwarding entry | 256 |
| 3. | MAC filtering entry | 256 |
| 4. | Cluster member | 24 |
| 5. | Protocol based VLAN entries per port | 7 |
| 6. | Port-security max address-limit number | 16K |
| 7. | Syslog server entry | 4 |
| 8. | IP source guard entry | 512 |
| 9. | IP subnet based VLAN entry | 16 |
| 10. | DHCP snooping binding table | 16K |
| 11. | Multicast group | 1024 |
| 12. | ACL | 256 |
| 13. | DHCP relay Entry | 16 |
| 14. | Trunk groups | 8 |
| 15. | Per trunk group port number | 8 |
| 16. | MSTP instance | 0-15 |

## *Firmware Upgrade:*

The GS1920-24 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 GS1920-24. The upgrade procedure is as follows:

## Upgrade GS1920-24 Firmware:

```
C:\> ftp <GS1920-24 IP address>
User : admin
Password: 1234
230 Logged in
ftp> put 410AAOB1C0.bin ras-0
ftp> bye
```

Where
- User name: the management user name, admin by default.
- Password: the management password, 1234 by default.
- 410AAOB1C0.bin: the name of firmware file you want to upgrade.
- ras-0: the internal firmware name in GS1920-24 (store at first flash).
- ras-1: the internal firmware name in GS1920-24 (store at second flash).

## *Configuration Upgrade:*

The GS1920-24 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 GS1920-24. The upgrade procedure is as follows:

### Upgrade GS1920-24 Configuration:

```
C:\> ftp <GS1920-24 IP address>
User name: admin
Password: 1234
230 Logged in
ftp> put 410AAOB1C0.rom rom-0
ftp> bye
```

Where
- User name: the management user name, admin by default.
- Password: the management password, 1234 by default.
- 410AAOB1C0.rom: the name of configuration file you want to upgrade.
- rom-0: the internal configuration name in GS1920-24.

# ZyXEL GS1920-24 V4.10(AAOB.0)C0

# Release Note/Manual Supplement

**Date:    Mar. 28, 2014**

This document describes the features in the GS1920-24 product for its 4.10(AAOB.0)C0 release.

*Support Platforms:*

ZyXEL GS1920-24 V4.10(AAOB.0)C0 supports models: ZyXEL GS1920-24.

*Version:*

OS Version: V4.10(AAOB.0) | 03/27/2014 17:01:19
BootBase Version: V1.00 | 03/21/2014 09:54:17

*Default Bootbase Setting:*

| | |
|---|---|
| ZyNOS Version | V4.10(AAOB.0) | 03/27/2014 17:01:19 |
| Bootbase Version | V1.00 | 03/21/2014 09:54:17 |
| Serial Number | xxxxxxxxxxxxxx |
| Vendor Name | ZyXEL |
| Product Model | GS1920-24 |
| ZyNOS Code Model | GS1920 |
| ZyNOS ROM address | b40a0000 |
| System Type | 8 |
| First MAC Address | 0019CB000001 |
| Last MAC Address | 0019CB00001D |
| MAC Address Quantity | 29 |
| Default Country Code | FF |
| Boot Module Debug Flag | 00 |
| CPLD Version | N/A |
| RomFile Version | 27 |
| RomFile Checksum | 1bc5 |
| ZyNOS Checksum | 205a |
| SNMP MIB level & OID | 060102030405060708091011121314151617181920 |
| Main Feature Bits | C0 |
| Other Feature Bits | |
| 02 52 00 00 00 00 00 00-00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00-00 13 00 00 00 00 | |

*Main Features:*

1.    24 Auto MDI/MDI-X 10Base-T/100Base-TX/1000Base-T
2.    4 dual personality GbE
3.    Locator LED
4.    16K layer 2 MAC addresses table
5.    Jumbo frame length 9K
6.    IEEE 802.1w Rapid Spanning Tree Protocol, RSTP
7.    IEEE 802.1s Multiple Spanning Tree Protocol, MSTP
8.    ZyXEL MRSTP
9.    Rule-based bandwidth control
10.    Port-based egress traffic shaping
11.    IEEE 802.3x flow control.

12. DSCP to 802.1p priority mapping
13. Port-based VLAN
14. Protocol-based VLAN
15. IP subnet based VLAN
16. IEEE 802.1Q Static VLANs
17. IEEE 802.1Q dynamic VLANs
18. GVRP
19. IEEE 802.3ad LACP
20. Port mirroring
21. Support rate limiting, minimum step 64K both ingress and egress
22. Broadcast Storm Control
23. Layer 2 MAC filtering
24. Layer 3 IP filtering
25. Layer 4 TCP/UDP socket filtering
26. Support rate limit per IP/TCP/UDP per port
27. DHCP client
28. DHCP relay/DHCP relay per VLAN
29. DHCP option 82
33. IGMP v1/v2/v3 snooping
34. Static multicast forwarding
35. 802.1x port authentication
36. Port Security
37. Static MAC filtering/forwarding
38. Multiple RADIUS servers
39. Multiple TACACS+ servers
40. AAA by RADIUS / TACACS+
30. 802.1x VLAN and bandwidth assignment by RADIUS
31. Intrusion Lock
32. MAC Freeze
33. DHCP snooping
34. ARP Inspection
35. Static IP/MAC/Port binding
36. Policy-based security filtering
37. IEEE 802.1Q VLAN port isolation
38. IP Source Guard
39. Guest VLAN
40. ACL packet filtering
41. PPPoE IA and option 82
42. CPU protection
43. Recovery mechanism for Error disable port/reason
44. Loop guard
45. Dual configuration files
46. Dual images
47. VLAN trunking
48. IGMP snooping fast leave
49. IGMP snooping statistics
50. IGMP throttling
51. SNMP v1, v2c, v3
52. SNMP trap group
53. Interface related trap can be enable/disable by port
54. ICMP echo/echo reply
55. Syslog
56. DHCPv6 client and relay
57. NDP: host
58. IPv6 address stateless auto-configuration
59. ZyXEL clustering management
60. Management through SNMP or Web management
61. Firmware upgrade by WEB / FTP
62. Configuration saving and retrieving by WEB / FTP
63. Configure Clone

64. Daylight Saving
65. NTP
66. Service Access Control Timeout
67. IEEE 802.1AB LLDP
68. IEEE 802.1AB LLDP-MED
69. Password encryption
70. User access right
71. ZyXEL ESBU common MIB
72. Green Ethernet
73. Cable diagnostics
74. Support PoE Fault Trap
75. MAC aging time

## *Enhanced Features:*

None

## *Bug Fix:*

None

## *Known Issue:*

1. Policy rule: for the ARP/RARP packet, policy rule qualifies the sender MAC address, not the source MAC address.
2. IP source guard: creates a legal static IP source binding first, and then send illegal IP traffic (the same MAC address but different IP address). DUT cannot filter the illegal IP traffic.
3. Green Ethernet: short reach does not support display short reach status.
4. Cable diagnostic: the accuracy of cable diagnostic is +15m ~ -15m. And plug out the cable line, the value of distance to fault would not be 0.00.

## *Limitation of Settings:*

| | | |
|---|---|---|
| 1. | 802.1Q Static VLANs | 1K |
| 2. | Static MAC forwarding entry | 256 |
| 3. | MAC filtering entry | 256 |
| 4. | Cluster member | 24 |
| 5. | Protocol based VLAN entries per port | 7 |
| 6. | Port-security max address-limit number | 16K |
| 7. | Syslog server entry | 4 |
| 8. | IP source guard entry | 512 |
| 9. | IP subnet based VLAN entry | 16 |
| 10. | DHCP snooping binding table | 16K |
| 11. | Multicast group | 1024 |
| 12. | ACL | 256 |
| 13. | DHCP relay Entry | 16 |
| 14. | Trunk groups | 8 |
| 15. | Per trunk group port number | 8 |
| 16. | MSTP instance | 0-15 |

## *Firmware Upgrade:*

The GS1920-24 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 GS1920-24. The upgrade procedure is as follows:

## Upgrade GS1920-24 Firmware:

```
C:\> ftp <GS1920-24 IP address>
User : admin
Password: 1234
230 Logged in
ftp> put 410AAOB0C0.bin ras-0
ftp> bye
```

Where
- User name: the management user name, admin by default.
- Password: the management password, 1234 by default.
- 410AAOB0C0.bin: the name of firmware file you want to upgrade.
- ras-0: the internal firmware name in GS1920-24 (store at first flash).
- ras-1: the internal firmware name in GS1920-24 (store at second flash).

## *Configuration Upgrade:*

The GS1920-24 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 GS1920-24. The upgrade procedure is as follows:

### Upgrade GS1920-24 Configuration:

```
C:\> ftp <GS1920-24 IP address>
User name: admin
Password: 1234
230 Logged in
ftp> put 410AAOB0C0.rom rom-0
ftp> bye
```

Where
- User name: the management user name, admin by default.
- Password: the management password, 1234 by default.
- 410AAOB0C0.rom: the name of configuration file you want to upgrade.
- rom-0: the internal configuration name in GS1920-24.