

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

## Release Note/Manual Supplement

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**Date:** July. 18, 2014

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

### ***Support Platforms:***

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

### ***Version:***

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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:***

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ZyNOS Version	V4.10(AAOB.2)   07/18/2014 16:13:31
Bootbase Version	V1.00   03/21/2014 09:54:17
Serial Number	xxxxxxxxxxxxxxxx
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 00-00 13 00 00 00 00

### ***Main Features:***

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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

### ***Enhanced Features:***

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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:***

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1. LACP sync fail but still can ping to device from LACP port.
2. Set MIB traceroute IP address entry, the IP address could not set successfully.
3. In web page, when setting ipv6 and dhcpv6 client information refresh minimum to 4294967295 seconds, it could not apply successfully.
4. In spanning tree and static trunk environment, the host's mac will be learned to wrong port.
5. Send two LLDP packets (with system description length = 255) to an LLDP enabled port will cause DUT crash.
6. User can't be authorized when privilege of account is Cisco attribute and privilege level is 15.
7. LLDP-MED doesn't work with some IP phones.
8. 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.
9. If subtype of remote Port ID is mac-address. It can't be showed on LLDP remote device information.
10. 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.
11. When enabled IGMP snooping, IGMP general query received by DUT will be replaced with its own source mac.
12. Fix IGMP snooping group-specific queries(GSQ) with source MAC address 00: 00: 00: 00: 00: 00.

### ***Known Issue:***

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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.

### ***Limitation of Settings:***

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- |   |     |
|---|-----|
| 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:***

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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:***

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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

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**Date:** May. 21, 2014

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

### ***Support Platforms:***

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

### ***Version:***

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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:***

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ZyNOS Version	V4.10(AAOB.1)   05/21/2014 10:44:52
Bootbase Version	V1.00   03/21/2014 09:54:17
Serial Number	xxxxxxxxxxxxxxxx
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 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
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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:***

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None

### ***Bug Fix:***

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1. Improve the manufacturing efficiency, no feature changed.

### ***Known Issue:***

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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:***

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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:***

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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

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**Date:** Mar. 28, 2014

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

### ***Support Platforms:***

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

### ***Version:***

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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:***

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ZyNOS Version	V4.10(AAOB.0)   03/27/2014 17:01:19
Bootbase Version	V1.00   03/21/2014 09:54:17
Serial Number	xxxxxxxxxxxxxxxx
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 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
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6. IEEE 802.1w Rapid Spanning Tree Protocol, RSTP
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- 63. Configure Clone
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- 70. User access right
- 71. ZyXEL ESBU common MIB
- 72. Green Ethernet
- 73. Cable diagnostics
- 74. Support PoE Fault Trap
- 75. MAC aging time

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### ***Enhanced Features:***

None

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### ***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.
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### ***Limitation of Settings:***

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2.	Static MAC forwarding entry	256
3.	MAC filtering entry	256
4.	Cluster member	24
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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:***

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```
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Where

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- Password: the management password, 1234 by default.
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