

# ZyXEL ES-2024PWR V3.90(AII.1)C0

## Release Note/Manual Supplement

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**Date:** Nov. 24, 2009

This document describes the features in the ES-2024PWR product for its 3.90(AII.1)C0 release.

### **Support Platforms:**

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ZyXEL ES-2024PWR V3.90(AII.1)C0 supports models: ZyXEL ES-2024PWR

### **Version:**

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OS Version: V3.90(AII.1) | 11/23/2009  
BootBase Version: V 1.02 | 10/14/2008

### **Default Bootbase Setting:**

ZyNOS Version	V3.90(AII.1)   11/23/2009 19:44:01
Bootbase Version	V1.02   10/14/2008 14:29:44
Vendor Name	ZyXEL
Product Model	ES-2024PWR
ZyNOS Code Model	
HTP Code Model	Unknown
ZyNOS ROM address	bfc10000
System Type	8
First MAC Address	0019CB000001
Last MAC Address	0019CB000001
MAC Address Quantity	01
Default Country Code	FF
Boot Module Debug Flag	01
RomFile Version	5C
RomFile Checksum	c775
ZyNOS Checksum	58eb
SNMP MIB level & OID	060102030405060708091011121314151617181920
Main Feature Bits	C0
Other Feature Bits	
	01 10 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

### **Enhanced Features:**

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1. Support new MAC prefix

### **Known Issue:**

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1. For the same ports, LACP and RSTP cannot be activated at the same time

2. The counter of packets whose length is between 1519 and 1522 (without VLAN tag but including FCS) will be counted both in the range of 1024 to 1518 and Giant.
3. It may cause CPU overload when create too many MSTP instance or join too many ports of each MSTP instance.

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

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None.

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

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1. VLAN 1Q static entry 256
2. Static MAC forwarding entry 256
3. MAC filtering entry 256
4. Cluster member 24
5. Management IP address 64
6. IGMP MVR entry 256
7. IGMP Filtering profile 256
8. Syslog server entry 4
9. IP source guard entry 128
10. MSTP MSTI 16
11. IGMP multicast VLAN entry 16
12. DHCP Entry 16

### ***Change History:***

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V3.90(AII.1) (11/24/2009)

Support new features

V3.90(AII.0) (04/10/2009)

Support new features and fix bugs

V3.80(AII.1) (07/11/2007)

Fix bugs

V3.80(AII.0) (06/18/2007)

Support new features and fix bugs

V3.70(AII.0)C1 (11/27/2006)

Change the prefix of MAC address

V3.70(AII.0) (07/31/2006)

First Public Version

## **ZyXEL ES-2024PWR V3.90(AII.0)C0**

### **Release Note/Manual Supplement**

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**Date: Apr 10, 2009**

This document describes the features in the ES-2024PWR product for its 3.90(AII.0)C0 release.

### **Support Platforms:**

ZyXEL ES-2024PWR V3.90(AII.0)C0 supports models: ZyXEL ES-2024PWR

### **Version:**

OS Version: V3.90(AII.0) | 04/10/2009  
BootBase Version: V 1.02 | 10/14/2008

### **Default Bootbase Setting:**

ZyNOS Version	V3.90(AII.0)   04/10/2009 17:33:27
Bootbase Version	V1.02   10/14/2008 14:29:44
Vendor Name	ZyXEL
Product Model	ES-2024PWR
ZyNOS Code Model	
HTP Code Model	Unknown
ZyNOS ROM address	bfc10000
System Type	8
First MAC Address	0019CB000001
Last MAC Address	0019CB000001
MAC Address Quantity	01
Default Country Code	FF
Boot Module Debug Flag	01
RomFile Version	5C
RomFile Checksum	c775
ZyNOS Checksum	0d5c
SNMP MIB level & OID	060102030405060708091011121314151617181920
Main Feature Bits	C0
Other Feature Bits	
	01 10 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 00 13 00 00 00

### **Enhanced Features:**

2. MAC search
3. VLAN search
4. Support transceiver DDMI information
5. Authorization on TACACS+
6. IGMP throttling
7. Static multicast
8. Support IGMP snooping fast leave
9. Support IGMP snooping statistics
10. Support DDM MIB (private MIB)
11. Extend MVR to 5 multicast VLANs
12. 802.1AB LLDP
13. Support POE
14. Support 802.3ah standard MIB
15. Support CPUUsage MIB
16. Support MAC quantity

### **Known Issue:**

4. For the same ports, LACP and RSTP cannot be activated at the same time

5. The counter of packets whose length is between 1519 and 1522 (without VLAN tag but including FCS) will be counted both in the range of 1024 to 1518 and Giant.
6. It may cause CPU overload when create too many MSTP instance or join too many ports of each MSTP instance.

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

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1. VID for a specified switch port of ES-2024 will be changed by SNMP SET that destined to other devices.
2. Arp packets from untrusted port is discarded initially, but is accepted after aging out from ARP inspection database.
3. Windows Vista will send Gratuitous ARP with the source IP 0.0.0.0, it is different from Gratuitous ARP defined before. On our switch, a static binding has been configured for this Vista (with static IP). The PC will send Gratuitous ARP to detect if any IP conflicts, ARP inspection on our switch will block this MAC because no matched binding in the static binding table.
4. MVR function does not work.

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

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13. VLAN 1Q static entry 256
14. Static MAC forwarding entry 256
15. MAC filtering entry 256
16. Cluster member 24
17. Management IP address 64
18. IGMP MVR entry 256
19. IGMP Filtering profile 256
20. Syslog server entry 4
21. IP source guard entry 128
22. MSTP MSTI 16
23. IGMP multicast VLAN entry 16
24. DHCP Entry 16

### ***Change History:***

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- V3.90(AII.0) (04/10/2009)  
Support new features and fix bugs
- V3.80(AII.1) (07/11/2007)  
Fix bugs
- V3.80(AII.0) (06/18/2007)  
Support new features and fix bugs
- V3.70(AII.0)C1 (11/27/2006)  
Change the prefix of MAC address
- V3.70(AII.0) (07/31/2006)  
First Public Version

# ZyXEL ES-2024PWR V3.80(AII.1)C0

## Release Note/Manual Supplement

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**Date:** July 11, 2007

This document describes the features in the ES-2024PWR product for its 3.80(AII.1)C0 release.

### **Support Platforms:**

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ZyXEL ES-2024PWR V3.80(AII.1)C0 supports models: ZyXEL ES-2024PWR

### **Version:**

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OS Version: V3.80(AII.1) | 07/11/2007  
BootBase Version: V 1.01 | 11/27/2006

### **Default Bootbase Setting:**

ZyNOS Version	V3.80(AII.1)   07/11/2007 10:36:11
Bootbase Version	V1.01   11/27/2006 14:04:59
Vendor Name	ZyXEL
Product Model	ES-2024PWR
ZyNOS Code Model	
HTP Code Model	Unknown
ZyNOS ROM address	bfc10000
System Type	8
MAC Address	0019CB000001
Default Country Code	FF
Boot Module Debug Flag	01
RomFile Version	5C
RomFile Checksum	c775
ZyNOS Checksum	6475
SNMP MIB level & OID	060102030405060708091011121314151617181920
Main Feature Bits	C0
Other Feature Bits	
	01 10 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

### **Enhanced Features:**

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None

### **Known Issue:**

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1. For the same ports, LACP and RSTP cannot be activated at the same time
2. The counter of packets whose length is between 1519 and 1522 (without VLAN tag but including FCS) will be counted both in the range of 1024 to 1518 and Giant.

### **Bug Fix:**

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1. When reboot with fiber connected, the DUT will crash.

### **Limitation of Settings:**

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1. VLAN 1Q static entry 256
2. Static MAC forwarding entry 256
3. MAC filtering entry 256
4. Cluster member 24
5. Management IP address 64
6. IGMP MVR entry 256
7. IGMP Filtering profile 256
8. Syslog server entry 4
9. IP source guard entry 128
10. MSTP MSTI 16
11. IGMP multicast VLAN entry 16
12. DHCP Entry 16

### **Change History:**

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V3.80(AII.1) (07/11/2007)

Fix bugs

V3.80(AII.0) (06/18/2007)

Support new features and fix bugs

V3.70(AII.0)C1 (11/27/2006)

Change the prefix of MAC address

V3.70(AII.0) (07/31/2006)

First Public Version

# **ZyXEL ES-2024PWR V3.80(AII.0)C0**

## **Release Note/Manual Supplement**

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**Date:** June 18, 2007

This document describes the features in the ES-2024PWR product for its 3.80(AII.0)C0 release.

### **Support Platforms:**

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ZyXEL ES-2024PWR V3.80(AII.0)C0 supports models: ZyXEL ES-2024PWR

### **Version:**

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OS Version: V3.80(AII.0) | 06/18/2007

BootBase Version: V 1.01 | 11/27/2006

### **Default Bootbase Setting:**

ZyNOS Version	V3.80(All.0)   06/18/2007 16:24:17
Bootbase Version	V1.01   11/27/2006 14:04:59
Vendor Name	ZyXEL
Product Model	ES-2024PWR
ZyNOS Code Model	
HTP Code Model	Unknown
ZyNOS ROM address	bfc10000
System Type	8
MAC Address	0019CB000001
Default Country Code	FF
Boot Module Debug Flag	01
RomFile Version	5C
RomFile Checksum	c775
ZyNOS Checksum	c397
SNMP MIB level & OID	060102030405060708091011121314151617181920
Main Feature Bits	C0
Other Feature Bits	
	01 10 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

### **Enhanced Features:**

1. 802.1s MSTP
2. 802.3ah OAM
3. SNMPv3
4. Multilevel CLI
5. SNMP trap group
6. configurable multicast VLAN
7. independent IGMP snooping and MVR setting
8. enlarge concurrent telnet session
9. IP source guard(Static binding, ARP inspection)
10. RADIUS accounting
11. TACACS+ authentication
12. TACACS+ accounting
13. IGMPv3 snooping
14. Loop guard
15. Daylight saving time
16. DHCP relay
17. IEEE 802.1X enhancement: add NAS-Port-Type attribute for Access-Request packet.

### **Known Issue:**

1. For the same ports, LACP and RSTP cannot be activated at the same time
2. The counter of packets whose length is between 1519 and 1522 (without VLAN tag but including FCS) will be counted both in the range of 1024 to 1518 and Giant.

### **Bug Fix:**

1. GVRP causes system crash in ring topology.
2. Show error messages when only use no command under config-interface mode.
3. Management traffic will flood to all ports.
4. CPU can't be set or removed for egress ports via CLI.
5. Can't get correct static MAC forwarding value of the DUT with MIB browser.
6. When the DUT is set as a DHCP client, the DUT will generate a strange ip route entry 0.0.0.0

### **Limitation of Settings:**

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1. VLAN 1Q static entry 256
2. Static MAC forwarding entry 256
3. MAC filtering entry 256
4. Cluster member 24
5. Management IP address 64
6. IGMP MVR entry 256
7. IGMP Filtering profile 256
8. Syslog server entry 4
9. IP source guard entry 128
10. MSTP MSTI 16
11. IGMP multicast VLAN entry 16
12. DHCP Entry 16

### **Change History:**

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- V3.80(AII.0) (06/18/2007)  
Support new features and fix bugs
- V3.70(AII.0)C1 (11/27/2006)  
Change the prefix of MAC address
- V3.70(AII.0) (07/31/2006)  
First Public Version

# **ZyXEL ES-2024PWR V3.70(AII.0)C1**

## **Release Note/Manual Supplement**

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**Date:** Nov. 27, 2006

This document describes the features in the ES-2024PWR product for its 3.70(AII.0)C1 release.

### **Support Platforms:**

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ZyXEL ES-2024PWR V3.70(AII.0)C1 supports models: ZyXEL ES-2024PWR

### **Version:**

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OS Version: V3.70(AII.0) | 08/01/2006  
BootBase Version: V1.01 | 11/27/2006

### **Default Bootbase Setting:**

ZyNOS Version	V3.70(AII.0)   08/01/2006 19:03:02
Bootbase Version	V1.01   11/27/2006 14:04:59
Vendor Name	ZyXEL
Product Model	ES-2024PWR
ZyNOS Code Model	

HTP Code Model	Unknown
ZyNOS ROM address	bfc10000
System Type	8
MAC Address	0019CB000001
Default Country Code	FF
Boot Module Debug Flag	01
RomFile Version	3D
RomFile Checksum	936c
ZyNOS Checksum	8012
SNMP MIB level & OID	060102030405060708091011121314151617181920
Main Feature Bits	C0
Other Feature Bits	
	01 10 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 00 13 00 00 00

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

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None

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

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1. For the same ports, LACP and RSTP cannot be activated at the same time
2. The counter of packets whose length is between 1519 and 1522 (without VLAN tag but including FCS) will be counted both in the range of 1024 to 1518 and Giant.

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

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None

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

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1. VLAN 1Q static entry 256
2. Static MAC forwarding entry 256
3. MAC filtering entry 256
4. Cluster member 24
5. Management IP address 64
6. IGMP MVR entry 256
7. IGMP Filtering profile 256
8. Syslog server entry 4

### ***Change History:***

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V3.70(AII.0)C1 (11/27/2006)  
Change the prefix of MAC address

V3.70(AII.0) (07/31/2006)  
First Public Version

# ZyXEL ES-2024PWR V3.70(All.0)C0

## Release Note/Manual Supplement

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**Date:** Aug 1, 2006

This document describes the features in the ES-2024PWR product for its 3.70(All.0)C0 release.

### **Support Platforms:**

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ZyXEL ES-2024PWR V3.70(All.0)C0 supports models: ZyXEL ES-2024PWR

### **Version:**

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OS Version: V3.70(All.0) | 08/01/2006  
BootBase Version: V1.0 | 07/07/2006

### **Default Bootbase Setting:**

ZyNOS Version	V3.70(All.0)   08/01/2006 19:03:02
Bootbase Version	V1.0   07/07/2006 16:49:24
Vendor Name	ZyXEL
Product Model	ES-2024PWR
ZyNOS Code Model	
HTP Code Model	Unknown
ZyNOS ROM address	bfc10000
System Type	8
MAC Address	001349000001
Default Country Code	FF
Boot Module Debug Flag	01
RomFile Version	3D
RomFile Checksum	936c
ZyNOS Checksum	8012
SNMP MIB level & OID	060102030405060708091011121314151617181920
Main Feature Bits	C0
Other Feature Bits	
	01 10 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

### **Features:**

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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. DiffServ feature (DSCP – 802.1p priority mapping)
36. Multicast
37. MVR
38. IGMP Filtering
39. Syslog
40. Administration user management
41. RADIUS enhancement(for 802.1X enhancement and multiple radius servers)
42. IGMP enhancement
43. Web enhancement (Select all, Clone)
44. Support IEEE 802.3af
45. Support RFC-3621 Power Ethernet MIB

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

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1. For the same ports, LACP and RSTP cannot be activated at the same time
2. The counter of packets whose length is between 1519 and 1522 (without VLAN tag but including FCS) will be counted both in the range of 1024 to 1518 and Giant.

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

---

1. VLAN 1Q static entry 256
2. Static MAC forwarding entry 256
3. MAC filtering entry 256
4. Cluster member 24
5. Management IP address 64
6. IGMP MVR entry 256
7. IGMP Filtering profile 256
8. Syslog server entry 4

## ***Change History:***

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V3.70(All.0) (07/31/2006)  
First Public Version

## ***Firmware Upgrade:***

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The ES-2024PWR 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-2024PWR. The upgrade procedure is as follows:

### **Upgrade ES-2024PWR FW:**

```
C:\> ftp <ES-2024PWR IP address>
User : admin
Password: 1234
230 Logged in
ftp> put 370AII0c0.bin ras
ftp> bye
```

Where

- User name : the management user name, admin by default
- Password : the management password, 1234 by default
- 370AII0c0.bin : the name of firmware file you want to upgrade
- ras : the internal firmware name in ES-2024PWR

## ***Configuration Upgrade:***

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The ES-2024PWR 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-2024PWR. The upgrade procedure is as follows:

### **Upgrade ES-2024PWR configuration:**

```
C:\> ftp <ES-2024PWR IP address>
User : admin
Password: 1234
230 Logged in
ftp> put 370AII0c0.rom rom-0
ftp> bye
```

Where

- User name : the management user name, admin by default
- Password : the management password, 1234 by default
- 370AII0c0.rom : the name of configuration file you want to upgrade
- rom-0 : the internal configuration name in ES-2024PWR