

# ZyXEL ES-2024A V3.90(TX.1)C0

## Release Note/Manual Supplement

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**Date:** May 20, 2009

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

### **Support Platforms:**

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ZyXEL ES-2024A V3.90(TX.1)C0 supports models: ZyXEL ES-2024A

### **Version:**

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OS Version: V3.90(TX.1) | 05/20/2009

BootBase Version: V1.09 | 10/14/2008

### **Default Bootbase Setting:**

OS Version	V3.90(TX.1)   05/20/2009 09:59:10
Bootbase Version	V1.09   10/14/2008 13:30:11
Vendor Name	ZyXEL
Product Model	ES-2024A
OS Code Model	ES-2024A
HTP Code Model	Unknown
OS 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	23
RomFile Checksum	d6d9
OS Checksum	4481
SNMP MIB level & OID	060102030405060708091011121314151617181920
Main Feature Bits	C0
Other Feature Bits	
DD 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 Memory Usage

### **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(TX.1)C0 (05/20/2009)  
Support new feature

V3.90(TX.0)C0 (04/10/2009)  
Support new features and fix bugs

V3.80(TX.0)C0 (06/18/2007)  
Support new features and fix bugs

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

V3.70(TX.0)C0 (07/06/2006)  
Support new features and fix bugs

V3.60(TX.2)C0 (04/26/2006)  
Support new hardware chipset

V3.60(TX.1)C0 (09/29/2005)  
Support EMS and fix bugs

V3.60(TX.0)C0 (06/28/2005)  
First Public Version

# ZyXEL ES-2024A V3.90(TX.0)C0

## Release Note/Manual Supplement

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**Date:** Apr 10, 2009

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

### **Support Platforms:**

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ZyXEL ES-2024A V3.90(TX.0)C0 supports models: ZyXEL ES-2024A

### **Version:**

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OS Version: V3.90(TX.0) | 04/10/2009

BootBase Version: V1.09 | 10/14/2008

### **Default Bootbase Setting:**

OS Version	V3.90(TX.0)   04/10/2009 17:31:32
Bootbase Version	V1.09   10/14/2008 13:30:11
Vendor Name	ZyXEL
Product Model	ES-2024A
OS Code Model	
HTP Code Model	Unknown
OS 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	23
RomFile Checksum	d6d9
OS Checksum	1bb5
SNMP MIB level & OID	060102030405060708091011121314151617181920
Main Feature Bits	C0
Other Feature Bits	
DD 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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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 802.3ah standard MIB
14. Support CPUUsage MIB
15. Support MAC quantity

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**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.

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**Bug Fix:**

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.

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**Limitation of Settings:**

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

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**Change History:**

- V3.90(TX.0)C0 (04/10/2009)  
Support new features and fix bugs
- V3.80(TX.0)C0 (06/18/2007)  
Support new features and fix bugs
- V3.70(TX.0)C1 (11/27/2006)  
Change the prefix of MAC address
- V3.70(TX.0)C0 (07/06/2006)  
Support new features and fix bugs
- V3.60(TX.2)C0 (04/26/2006)  
Support new hardware chipset

V3.60(TX.1)C0 (09/29/2005)  
Support EMS and fix bugs

V3.60(TX.0)C0 (06/28/2005)  
First Public Version

# ZyXEL ES-2024A V3.80(TX.0)C0

## Release Note/Manual Supplement

Date: June 18, 2007

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

**Support Platforms:**

ZyXEL ES-2024A V3.80(TX.0)C0 supports models: ZyXEL ES-2024A

**Version:**

OS Version: V3.80(TX.0) | 06/18/2007  
BootBase Version: V1.08 | 11/27/2006

**Default Bootbase Setting:**

OS Version	V3.80(TX.0)   06/18/2007 16:58:29
Bootbase Version	V1.08   11/27/2006 13:30:31
Vendor Name	ZyXEL
Product Model	ES-2024A
OS Code Model	
HTP Code Model	Unknown
OS ROM address	bfc10000
System Type	8
MAC Address	0019CB000001
Default Country Code	FF
Boot Module Debug Flag	01
RomFile Version	23
RomFile Checksum	d6d9
OS Checksum	8692
SNMP MIB level & OID	060102030405060708091011121314151617181920
Main Feature Bits	C0
Other Feature Bits	
DD 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:**

- 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:***

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7. For the same ports, LACP and RSTP cannot be activated at the same time
8. 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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5. GVRP causes system crash in ring topology.
6. Show error messages when only use no command under config-interface mode.
7. Management traffic will flood to all ports.
8. CPU can't be set or removed for egress ports via CLI.
9. Can't get correct static MAC forwarding value of the DUT with MIB browser.
10. 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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25. VLAN 1Q static entry 256
26. Static MAC forwarding entry 256
27. MAC filtering entry 256
28. Cluster member 24
29. Management IP address 64
30. IGMP MVR entry 256
31. IGMP Filtering profile 256
32. Syslog server entry 4
33. IP source guard entry 128
34. MSTP MSTI 16
35. IGMP multicast VLAN entry 16
36. DHCP Entry 16

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

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- V3.80(TX.0)C0 (06/18/2007)  
Support new features and fix bugs
- V3.70(TX.0)C1 (11/27/2006)  
Change the prefix of MAC address
- V3.70(TX.0)C0 (07/06/2006)  
Support new features and fix bugs

- V3.60(TX.2)C0 (04/26/2006)  
Support new hardware chipset
- V3.60(TX.1)C0 (09/29/2005)  
Support EMS and fix bugs
- V3.60(TX.0)C0 (06/28/2005)  
First Public Version

# ZyXEL ES-2024A V3.70(TX.0)C1

## Release Note/Manual Supplement

**Date:** November 27, 2006

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

**Support Platforms:**

ZyXEL ES-2024A V3.70(TX.0)C1 supports models: ZyXEL ES-2024A

**Version:**

OS Version: V3.70(TX.0) | 07/06/2006  
BootBase Version: V1.08 | 11/27/2006

**Default Bootbase Setting:**

OS Version	V3.70(TX.0)   07/06/2006 20:03:31
Bootbase Version	V1.08   11/27/2006 13:30:31
Vendor Name	ZyXEL
Product Model	ES-2024A
OS Code Model	
HTP Code Model	Unknown
OS ROM address	bfc10000
System Type	8
MAC Address	0019CB000001
Default Country Code	FF
Boot Module Debug Flag	01
RomFile Version	04
RomFile Checksum	0672
OS Checksum	6276
SNMP MIB level & OID	060102030405060708091011121314151617181920
Main Feature Bits	C0
Other Feature Bits	
DD 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:**

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(TX.0)C1 (11/27/2006)  
Change the prefix of MAC address

V3.70(TX.0)C0 (07/06/2006)  
Support new features and fix bugs

V3.60(TX.2)C0 (04/26/2006)  
Support new hardware chipset

V3.60(TX.1)C0 (09/29/2005)  
Support EMS and fix bugs

V3.60(TX.0)C0 (06/28/2005)  
First Public Version

## **ZyXEL ES-2024A V3.70(TX.0)C0**

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

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**Date:** July 6, 2006

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



### **Support Platforms:**

ZyXEL ES-2024A V3.70(TX.0)C0 supports models: ZyXEL ES-2024A

### **Version:**

OS Version: V3.70(TX.0) | 07/06/2006

BootBase Version: V1.07 | 04/20/2005

### **Default Bootbase Setting:**

OS Version	V3.70(TX.0)   07/06/2006 20:03:31
Bootbase Version	V1.07   04/20/2005 13:38:02
Vendor Name	ZyXEL
Product Model	ES-2024A
OS Code Model	
HTP Code Model	Unknown
OS ROM address	bfc10000
System Type	8
MAC Address	001349000001
Default Country Code	FF
Boot Module Debug Flag	01
RomFile Version	04
RomFile Checksum	0672
OS Checksum	6276
SNMP MIB level & OID	060102030405060708091011121314151617181920
Main Feature Bits	C0
Other Feature Bits	
DD 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:**

1. Multicast
2. MVR
3. IGMP Filtering
4. Syslog
5. Administration user management
6. RADIUS enhancement(for 802.1X enhancement and multiple radius servers)
7. IGMP enhancement
8. Web enhancement (Select all, Clone)
9. TFTP server and TFTP client

### **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. BPDU loop will make DUT unreachable.
2. The passwords of logins accounts are shown in config file.
3. When configuring force speed, DUT can't link up with straight through cable.
4. BPDU packets are always tagged out.
5. Packets will be forwarded between VLANs after reboot.

6. PC can ping the IP of default management VLAN even not inside the VLAN domain.
7. The DUT will crash when scanned by MaxPatrol.
8. TCP session won't be reset after restore configuration.

### ***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(TX.0)C0 (07/06/2006)  
Support new features and fix bugs

V3.60(TX.2)C0 (04/26/2006)  
Support new hardware chipset

V3.60(TX.1)C0 (09/29/2005)  
Support EMS and fix bugs

V3.60(TX.0)C0 (06/28/2005)  
First Public Version

## **ZyXEL ES-2024A V3.60(TX.2)C0**

## **Release Note/Manual Supplement**

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**Date:** May 24, 2006

This document describes the features in the ES-2024A product for its 3.60(TX.2)C0 release.

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

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ZyXEL ES-2024A V3.60(TX.2)C0 supports models: ZyXEL ES-2024A

### ***Version:***

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OS Version: V3.60(TX.2) | 04/26/2006  
BootBase Version: V1.07 | 04/20/2005

### ***Default Bootbase Setting:***

ZyNOS Version	V3.60(TX.2)   04/26/2006 17:35:00
Bootbase Version	V1.07   04/20/2005 13:38:02

Vendor Name	ZyXEL
Product Model	ES-2024A
ZyNOS Code Model	ES2024A
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	E2
RomFile Checksum	2ecd
ZyNOS Checksum	a986
SNMP MIB level & OID	060102030405060708091011121314151617181920
Main Feature Bits	C0
Other Feature Bits	
DD 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	

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

None

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### ***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.
3. The device will be too busy to responding if it is still learning VLAN from GVRP and configuring the VLAN table especially for 4094 VLANs. After the process of configuring VLAN table is done, the device will still work well.

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

None

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### ***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

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

V3.60(TX.2)C0 (04/26/2006)  
Support new hardware chipset

V3.60(TX.1)C0 (09/29/2005)  
Support EMS and fix bugs

V3.60(TX.0)C0 (06/28/2005)  
First Public Version

# ZyXEL ES-2024A V3.60(TX.1)C0

## Release Note/Manual Supplement

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**Date:** Sep 29, 2005

This document describes the features in the ES-2024A product for its 3.60(TX.1)C0 release.

### **Support Platforms:**

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ZyXEL ES-2024A V3.60(TX.1)C0 supports models: ZyXEL ES-2024A

### **Version:**

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OS Version: V3.60(TX.1) | 09/29/2005  
BootBase Version: V1.07 | 04/20/2005

### **Default Bootbase Setting:**

OS Version	V3.60(TX.1)   09/29/2005 17:47:11
Bootbase Version	V1.07   04/20/2005 13:38:02
Vendor Name	ZyXEL
Product Model	ES-2024A
OS Code Model	ES2024A
HTP Code Model	Unknown
OS ROM address	bfc10000
System Type	8
MAC Address	001349000001
Default Country Code	FF
Boot Module Debug Flag	01
RomFile Version	E2
RomFile Checksum	2ecd
OS Checksum	7042
SNMP MIB level & OID	060102030405060708091011121314151617181920
Main Feature Bits	C0
Other Feature Bits	
DD 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. EMS supported.

### **Bug Fix:**

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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.
3. The device will be too busy to responding if it is still learning VLAN from GVRP and configuring the VLAN table especially for 4094 VLANs. After the process of configuring VLAN table is done, the device will still work well.

### ***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

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

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V3.60(TX.0)C0 (09/29/2005)  
Support EMS

V3.60(TX.0)C0 (06/28/2005)  
First Public Version

## **ZyXEL ES-2024A V3.60(TX.0)C0**

## **Release Note/Manual Supplement**

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**Date:** Jun 28, 2005

This document describes the features in the ES-2024A product for its 3.60(TX.0)C0 release.

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

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ZyXEL ES-2024A V3.60(TX.0)C0 supports models: ZyXEL ES-2024A

### ***Version:***

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OS Version: V3.60(TX.0) | 06/28/2005  
BootBase Version: V1.07 | 04/20/2005

### ***Default Bootbase Setting:***

OS Version	V3.60(TX.0)   06/28/2005 09:58:14
Bootbase Version	V1.07   04/20/2005 13:38:02
Vendor Name	ZyXEL
Product Model	ES-2024A
OS Code Model	ES2024A

HTP Code Model	Unknown
OS ROM address	bfc10000
System Type	8
MAC Address	001349000001
Default Country Code	FF
Boot Module Debug Flag	01
RomFile Version	E2
RomFile Checksum	2ecd
OS Checksum	2962
SNMP MIB level & OID	060102030405060708091011121314151617181920
Main Feature Bits	C0
Other Feature Bits	
DD 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	

### **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. DiffServ feature (DSCP – 802.1p priority mapping)

### **Known Issue:**

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

2. If RSTP and VLAN-trunking are enabled at the same time, plugging/unplugging the port will cost about 20 seconds to apply the settings.

### ***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

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

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V3.60(TX.0)C0 (06/28/2005)  
First Public Version

### ***Firmware Upgrade:***

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

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

```
C:\> ftp <ES-2024A IP address>
User : admin
Password: 1234
230 Logged in
ftp> put 360TX0C0.bin ras
ftp> bye
```

Where

- User name : the management user name, admin by default
- Password : the management password, 1234 by default
- 360TX0C0.bin : the name of firmware file you want to upgrade
- ras : the internal firmware name in ES-2024A

### ***Configuration Upgrade:***

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

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

```
C:\> ftp <ES-2024A IP address>
User : admin
Password: 1234
230 Logged in
ftp> put 360TX0C0.rom rom-0
ftp> bye
```

Where

- User name : the management user name, admin by default
- Password : the management password, 1234 by default
- 360TXC0.rom : the name of configuration file you want to upgrade
- rom-0 : the internal configuration name in ES-2024A