A12500 Migration Guide

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HP A12500 Migration Guide

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Abstract: This document describes hardware and software changes in HP A12500 compared with H3C S12500 and the guidelines for brand migration from H3C S12500 to HP A12500.

Note1: R1728P01 is the first production release for RoW (market outside China). The following discussion is based on this version if not specifying the release explicitly.

Note2: From R1729, the "HP A12500" brand is renamed to "HP 12500".

Acronyms:

Acronym	Full spelling
EoS	End of Service
MIB	Management Information Base
OEM	Original Equipment Manufacturer

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Preface

HP A12500 and H3C S12500 are two brands of HP for the same switch. H3C S12500 will not be sold and will migrate to HP A12500. This document describes hardware and software changes in HP A12500 compared with H3C S12500, the guidelines for brand migration from H3C S12500 to HP A12500.

Hardware compatibility

Except for the brand information on the mark of the cards and software version information, HP A12500 and H3C S12500 are the same in hardware and software specifications, and they are mutually compatible, as detailed in Table 1 . All the cards in the table can be supported by HP A12500 for protecting customer investment, though some old cards are replaced by new ones and cannot be ordered any more. From software version R1728P01, you can enable brand migration for H3C S12500 to migrate to HP A12500.

Hardware replacement guidelines

After the brand migration from H3C S12500 to HP A12500, some cards of H3C S12500 will not be sold. The following table lists the hardware components and their replacements.

Table 1 Hardware components and their replacements

Description	J# (old)	J# (New)	Compatible with Old Chassis	Compatible with New Chassis	Limitation
Chassis					
HP A12518 AC Switch Chassis	JF430B	JF430C			
HP A12508 AC Switch Chassis	JF431B	JF431C			
HP A12508 DC Switch Chassis		JC652A			
HP A12518 DC Switch Chassis		JC653A			
MPU					
HP A12500 Management Module	JC072A	JC072B	✓	✓	**JC072A: Not support V7 Platform**
LPU					
HP 32-port 10-GbE SFP+ LEB A12500 Module	JC064A	JC064B	✓	✓	
HP 48-port Gig-T LEC A12500 Module	JC065A	JC065B	✓	✓	
HP 48-Port Gig-T Module LEB A12500 Module	JC074A	JC074B	✓	✓	
HP 48-Port GbE SFP LEB A12500 Module	JC075A	JC075B	✓	✓	
HP 48-port GbE SFP LEC A12500 Module	JC069A	JC069B	✓	✓	
HP 4-port 10-GbE XFP LEB A12500 Module	JC076A		✓	✓	**EoS.** **Replaced by 8-port LPU JC073B**
HP 8-port 10-GbE XFP LEB A12500 Module	JC073A	JC073B	✓	✓	

Description	J# (old)	J# (New)	Compatible with Old Chassis	Compatible with New Chassis	Limitation
HP 4-port 10-GbE XFP LEC A12500 Module	JC070A		✓	✓	**EoS.** **Replaced by 8-port LPU JC068B**
HP 8-port 10-GbE XFP LEC A12500 Module	JC068A	JC068B	✓	✓	
HP 32-port 10GbE SFP+ LEC Module	JC476A	JC476B	✓	✓	
HP A12500 8-port 10-GbE SFP+ LEF Module		JC659A	✓	✓	
HP A12500 8-port 10-GbE SFP+ LEB Module		JC780A	✓	✓	
HP A12500 8-port 10-GbE SFP+ LEC Module		JC781A	✓	✓	
HP A12500 48-port GbE SFP LEF Module		JC660A	✓	✓	
HP A12500 16-port 10-GbE SFP+ LEB Module		JC782A	✗	✓	**G2 Fabric is also required.**
HP A12500 16-port 10-GbE SFP+ LEC Module		JC783A	✗	✓	**G2 Fabric is also required.**
HP A12500 TAA Main Processing Unit		JC808A	✓	✓	
HP A12500 48-port Gig-T LEC TAA Module		JC809A	✓	✓	
HP A12500 8-port 10-GbE XFP LEC TAA Mod		JC810A	✓	✓	
HP A12500 48-port GbE SFP LEC TAA Module		JC811A	✓	✓	
HP A12500 32p 10-GbE SFP+ REC TAA Module		JC812A	✓	✓	
HP A12500 8-port 10-GbE SFP+ LEC TAA Mod		JC813A	✓	✓	
HP A12500 16p 10-GbE SFP+ LEC TAA Module		JC814A	✗	✓	**G2 Fabric is also required.**
HP A12500 8-port 10-GbE SFP+ LEF TAA Mod		JC817A	✓	✓	
HP A12500 48-port GbE SFP LEF TAA Module		JC818A	✓	✓	
Switching Fabric					
HP A12508 Fabric Module	JC067B		✓	✓	**Not support 16-port 10-GbE SFP+ Module.** **Recommended for old chassis**
HP A12518 Fabric Module	JC066A		✓	✓	**Not support 16-port 10-GbE SFP+ Module.** **Recommended for old chassis**
HP A12518 G2 Fabric Module		JC657A	✓	✓	**New chassis: recommend to use G2 fabric.**
HP A1250x G2 Fabric Module		JC658A	✓	✓	**New chassis: suggest using G2 fabric.**
HP A1250x TAA-compliant G2 Fabric Module		JC815A	✓	✓	
HP A12518 TAA-compliant G2 Fabric Module		JC816A	✓	✓	
HP A12518 TAA-compliant Fabric Module		JC819A	✓	✓	**Not support 16-port 10-GbE SFP+ Module.**
HP A12508 TAA-compliant Fabric Module		JC820A	✓	✓	**Not support 16-port 10-GbE SFP+ Module.**

NOTE:

Old/New chassis: The old chassis does not support G2 fabric and 16-port 10-GbE SFP+ modules (JF430B/JF431B), while the new chassis. J# for the new chassis is JF430C/JF431C/JC652A/JC653A.

R1728P01 or later should be deployed when using the new hardware.

If SF18B1(JC066A) cards are installed in a12518 chassis, and:

1. 8-port 10GbE LPUs are installed in Slot 16 to 19, then only Port 3 to 6 can be used;
2. 32-port 10GbE LPUs are installed in Slot 16 to 19, then only ports of even numbers can be used.

MPU replacement

After the brand migration, MPUs of JC072A will not be sold, and are replaced by JC072B in HP A12500. The following table lists their differences. Features are the same as before.

Table 2 MPU specification differences

Item	**Old MPU**	**Upgrade**
	JC072A	**JC072B**
CPU	Not changed	
Memory	1G(default)/2G(max.)	4G
CF Card	256M(default)/1G(max)	1G

LPU replacement

After the brand migration, memory for cards of 48-port GbE SFP/Gig-T LEB/LEC, 8-port 10GbE XFP LEB/LEC, 32-port 10GbE SFP+ LEB/LEC will be updated from 512MB to 1GB. And 4-port 10GbE XFP LEB/LEC cards are replaced by 8-port 10GbE XFP LEB/LEC ones. Except for these differences, the new cards are the same in hardware and software features with these before brand migration.

The new LPUs have the same features and performance as the old ones.

Table 3 LPU specification differences

Item	**Old LPU**	**Upgrade**
	JC074A **JC065A** **JC075A** **JC069A** **JC073A** **JC068A** **JC064A**	**JC074B** **JC065B** **JC075B** **JC069B** **JC073B** **JC068B** **JC064B**
Memory	512M	1024M

Item	**Old LPU** **JC076A** **JC070A**	**Replacement** **JC073B** **JC068B**
Memory	512M	1024M
Port	4*10GbE	8*10GbE

Software compatibility

Brand ID

HP A12500 and H3C S12500 use the same software version but they are distinguished by different OEM flags (i.e. Brand ID from Code R1729). They support the same features and share the same documentation set including the configuration guide, command reference, and release notes.

OEM flag is used to distinguish brands between H3C, HP and other manufactures. For A125 switches, the system's OEM attributes are determined by the OEM flag stored in MPUs. Though each board other than MPU like LPU and SF (Switch Fabric) Card has its OEM flag, they will NOT affect the whole system's OEM flag and are not supposed to be changed by users.

From R1728P01, A12500 supports OEM of both H3C and HP; the OEM information for the whole system (for instance, when displaying version, copyright, headers for CLI and web) depends on the first powered-on MPU, and remains unchanged after hot-swap or IRF partition and merge. Before it, HP brand MPU/LPU/SFC hardware can be inserted into H3C brand chassis, recognized as H3C and work normally. Users can change and show the OEM flag via CLI. In most cases the OEM flags of all MPUs should be kept the same, otherwise after rebooting, the OEM information of the whole system may change and bring confusion to users.

Please note that from Code R1729, the concept of "OEM flag" is replaced by "brand information".

Table 4 Interoperability of different brand hardware

Item	H3C Active MPU	HP Active MPU
H3C Standby MPU	Booting up OK; displayed as H3C brand	Booting up OK; displayed as HP brand
H3C LPU	Booting up OK; displayed as H3C brand	Booting up OK; displayed as HP brand
HP Standby MPU	Booting up OK; displayed as H3C brand	Booting up OK; displayed as HP brand
HP LPU	Booting up OK; displayed as H3C brand	Booting up OK; displayed as HP brand

NOTE:

SFC's OEM behavior is the same as LPU.

OEM flag is used to indicate the brand of the device. Meanwhile, electric label information of the cards and transceivers are also used to fulfill this purpose. But there's some difference. Electric label information is also called permanent configuration data or archive information, which is written to the storage component of a card during switch debugging or testing. The information includes name of the card, device serial number, and vendor name or name of the vendor who customizes the transceiver. When users view the electric labels of cards using **display device manuinfo**, they are shown as they are stored in these devices, including the vendor name. But when users view the electric labels of transceivers, the vendor name is the same as the OEM flag.

Migration procedure

From the code of 1728P01, A125's OEM flag can be changed by the following method:

1. To change OEM to HP: under user view, run the hidden CLI **oem hp**;
2. To display oem: under any view, run the hidden CLI **display oem**;

Please note that from Code R1729 the string "**oem**" in the CLIs above is replaced by "**brand**".

Here comes the example for these commands:

```
<12518>display oem
Current OEMs:
 Chassis 2 Slot 0: H3C.
New OEMs:
 Chassis 2 Slot 0: H3C.
<12518>oem hp
 Configuration will take effect after next reboot, and can't be rolled back.
 Do you want to continue? [Y/N]:y
 Configuration is successful.
<12518>display oem
Current OEMs:
 Chassis 2 Slot 0: H3C.
New OEMs:
 Chassis 2 Slot 0: HP.
! Must reboot the system to take effect
<12518>reboot
```

Software compatibility after brand migration

When the OEM flag is changed, there are some software effects after the brand migration. In general, most “H3C S125” strings in H3C S12500 are replaced by “HP A125” in HP A12500. Below is the detailed compatibility matrix during the brand migration. Note that below are just some examples; actual value may vary.

Table 5 CLI compatibility

Item	H3C Brand	HP Brand	Comment
default CLI prompt	<H3C>	<HP>	display current-configuration | include sysname
version information	H3C Comware Platform Software Comware Software, Version 5.20, Release 1728 Copyright (c) 2004-2012 Hangzhou H3C Tech. Co., Ltd. All rights reserved. H3C S12518 uptime is 2 weeks, 3 days, 23 hours, 25 minutes LST1MRPNC1 1/0: uptime is 2 weeks, 3 days, 23 hours, 25 minutes 1024 Mbytes SDRAM 1024 Kbytes NVRAM Memory Type : LST1MRPNC1 BootRom : 1.19 Software : S12500-CMW520-R1728 ...	HP Comware Platform Software Comware Software, Version 5.20.101, Release 1728 Copyright (c) 2010-2012 Hewlett-Packard Development Company, L.P. HP A12518 uptime is 1 week, 6 days, 1 hour, 34 minutes LST1MRPNC1 2/0: uptime is 1 week, 6 days, 1 hour, 34 minutes 1024 Mbytes SDRAM 1024 Kbytes NVRAM Memory Type : LST1MRPNC1 BootRom : 1.19 Software : A12500-CMW520-R1728 ...	display version
inner version information	H3C Comware Platform Software Comware Software, Version 5.20, Release 1728 Comware Platform Software Version COMWAREV500R002B101D007SP01 H3C S12518 Software Version V100R007B01D007SP03 Copyright (c) 2004-2012 Hangzhou H3C Tech. Co., Ltd. All rights reserved. Compiled Jan 17 2012 20:05:44, RELEASE SOFTWARE H3C S12518 uptime is 2 weeks, 3 days, 23 hours, 30 minutes LST1MRPNC1 1/0: uptime is 2 weeks, 3 days, 23 hours, 30 minutes 1024 Mbytes SDRAM 1024 Kbytes NVRAM Memory Type : LST1MRPNC1 BootRom : 1.19 Software : S12500-CMW520-R1728	HP Comware Platform Software Comware Software, Version 5.20.101, Release 1728 Comware Platform Software Version COMWAREV500R002B101D007SP01 HP A12518 Software Version V100R007B01D007SP03 Copyright (c) 2010-2012 Hewlett-Packard Development Company, L.P. Compiled Jan 17 2012 20:05:44, RELEASE SOFTWARE HP A12518 uptime is 1 week, 6 days, 1 hour, 38 minutes LST1MRPNC1 2/0: uptime is 1 week, 6 days, 1 hour, 38 minutes 1024 Mbytes SDRAM 1024 Kbytes NVRAM Memory Type : LST1MRPNC1 BootRom : 1.19 Software : A12500-CMW520-R1728	_display version
default snmp sys-info: contact & location	The contact person for this managed node: Hangzhou H3C Technologies Co., Ltd. The physical location of this node: Hangzhou, China	The contact person for this managed node: The physical location of this node:	display snmp-agent sys-info {contact | location} Information for HP brand is null.

copyright	*** *************************************** * Copyright (c) 2004-2012 Hangzhou H3C Tech. Co., Ltd. All rights reserved. * * Without the owner's prior written consent, * * no decompiling or reverse-engineering shall be allowed. * *** ***************************************	*** ************************************* * Copyright (c) 2010-2012 Hewlett-Packard Development Company, L.P. * * Without the owner's prior written consent, * * no decompiling or reverse-engineering shall be allowed. * *** *************************************	When: users login
default log buffer style	Logging buffer configuration and contents:enabled Allowed max buffer size : 1024 Actual buffer size : 512 Channel number : 4 , Channel name : logbuffer Dropped messages : 0 Overwritten messages : 1963 Current messages : 512 %Feb 14 05:39:14:182 2012 H3C DEVM/3/FAN_ABSENT: Chassis 1 Fan 1 is absent.	Logging buffer configuration and contents:enabled Allowed max buffer size : 1024 Actual buffer size : 512 Channel number : 4 , Channel name : logbuffer Dropped messages : 0 Overwritten messages : 1384 Current messages : 512 %Feb 14 04:49:36:107 2012 HP DEVM/3/FAN_ABSENT: Chassis 2 Fan 1 is absent.	When: reboot and run "display logbuffer" with the default sysname
bootware version	*** ******* * H3C S12500 BootWare, Version 1.19 *	*** ***** * HP A12500 BootWare, Version 1.19 *	When: reboot
traps	#Feb 14 15:49:20:169 2012 H3C DEVM/1/FAN STATE CHANGES TO FAILURE: Trap 1.3.6.1.4.1.25506.8.35.12.1.6<hh3cfanfailure>: fan ID is 1	#Feb 14 15:45:29:563 2012 HP DEVM/1/FAN STATE CHANGES TO FAILURE: Trap 1.3.6.1.4.1.25506.8.35.12.1.6: fan ID is 3	traps for HP show no name for OIDs
mib-style	[H3C]dis mib-style Current MIB style: new Next reboot MIB style: new [H3C]mib-style ? compatible Compatible style MIB new New style MIB	N/A	HP doesn't support the mib-style customization, working under the new mib-style.
device information	Slot No. Brd Type Brd Status Software Version 2/0 LST1MRPNC1 Master S12500-CMW520-R1728 2/1 LST1MRPNC1 Slave S12500-CMW520-R1728 2/2 LST1XP8LEC1 Normal S12500-CMW520-R1728	Slot No. Brd Type Brd Status Software Version 2/0 LST1MRPNC1 Master A12500-CMW520-R1728 2/1 LST1MRPNC1 Slave A12500-CMW520-R1728 2/2 LST1XP8LEC1 Normal A12500-CMW520-R1728	display device
transceiver's manuinfo	Ten-GigabitEthernet2/2/0/1 transceiver manufacture information: Manu. Serial Number : 210231A494X101001111 Manufacturing Date : 2010-01-25 Vendor Name : H3C	Ten-GigabitEthernet2/2/0/1 transceiver manufacture information: Manu. Serial Number : 210231A494X101001111 Manufacturing Date : 2010-01-25 Vendor Name : HP	display transceiver manuinfo interface
RADIUS Vendor-Specific Attribute	Send RADIUS packets in which VendorID is 2011	Send RADIUS packets in which VendorID is 25506	Can accept RADIUS packets with VendorID of both 2011 and 25506. Thus no need to change RADIUS server when OEM flag is changed

Table 6 MIB compatibility

MIB Name	Syntax	H3C	HP
sysName.0	octet string	H3C	HP
sysDescr.0	octet string	H3C Comware software. H3C S12518 Product Version S12500-CMW520-R1728. Copyright (c) 2004-2012 Hangzhou H3C Tech. Co., Ltd. All rights reserved.	HP Comware software. HP A12518 Product Version A12500-CMW520-R1728. Copyright (c) 2010-2012 Hewlett-Packard Development Company, L.P.
sysObjectID.0	object identifier	hh3c-s12518	hpA12518AC(or hpA12518DC)
sysContact.0	octet string	Hangzhou H3C Technologies Co., Ltd.	(zero-length)
sysLocation.0	octet string	Hangzhou, China	(zero-length)
entPhysicalDescr.XXX	octet string	S12518	A12518
entPhysicalVendorType.XXX	object identifier	hh3c-s12518	hpA12518AC
entPhysicalName.XXX	octet string	S12518	A12518
entPhysicalSoftwareRev.XXX	octet string	S12500-CMW520-R1728	A12500-CMW520-R1728
entPhysicalMfgName.XXX	octet string	H3C	HP
entPhysicalModelName.XXX	octet string	S12518	A12518
sFlowVersion.0	octet string	1.3;H3C;1.0.0	1.3;HP;1.0.0
hh3cTransceiverVendorName.XXX	octet string	H3C	HP
hh3cLswSysVersion.0	octet string	5.20	5.20.101
hh3cLswSlotSoftwareVersion.XXX	octet string	S12500-CMW520-R1728	A12500-CMW520-R1728

NOTE:

The values of nodes with the type of Object Identifier have been translated into readable strings. See the following chapter for more details.

Baseline of MIB files

It is suggested that the MIB files be updated to the latest baseline which by now is 1.46, published on Sep. 8, 2011. Below is the reason:

From the MIB Compatibility Table, we can conclude that only minor modifications are made during the brand migration. But please pay attention to sysObjectID node: if the MIB files are out of date, you may not get explicit Get/GetNext result, say, “hpA12518AC”; instead, you only get “hpSwitch.112”. This is normal since your MIB software doesn’t know what “hpSwitch.112” means in the MIB tree. To solve this issue, you’d better update your MIB files. They can be downloaded from the HP website or TFSP (https://doc.h3c.com/). Among these files there’s a MIB named “h3c-product-id.mib”, which covers the relationship between OID and H3C/HP products. Without loading the latest version of this file, your MIB Browser may not be able to interpret the OID into readable product names.

Since h3c-product-id.mib is under constant changes for updating the names of the existing products and recruiting new members of H3C/HP products, the simplest way is to check if your MIB Browser can interpret the value of sysObjectID node; if not, try updating your MIB files to the latest.

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