



Field Notice: Cisco IAD2430 Series Requires Software Upgrade Because of Replacement of End-of-Sale Parts

PRODUCTS AFFECTED

Product Part Number	Top Assembly		Printed Circuit Assembly	
	Part No.	Rev.	Part No.	Rev.
IAD2430-24FXS	800-23164-08	-A0	73-8510-09	-A0
IAD2431-8FXS	800-21619-08	-A0	73-8075-09	-A0
IAD2431-16FXS	800-21616-08	-A0	73-8076-09	-A0
IAD2431-1T1E1	800-21617-08	-A0	73-8078-09	-A0
IAD2432-24FXS	800-21618-08	-A0	73-8077-10	-A0

PROBLEM DESCRIPTION

Because of the end of sale of components on the Cisco® IAD2430 Series boards, the Cisco IAD2430 integrated access devices manufactured beginning July 1, 2006, will require software upgrades for Cisco IOS® Software releases. Customers running Cisco IOS Software releases older than the following are affected:

- 12.3(11)T10
- 12.3(14)T6
- 12.4(2)T3
- 12.4(4)T1
- 12.4(5a)

BACKGROUND

Because of the end of sale of parts by Cisco Systems® component vendors, components of the Cisco IAD2430 Series integrated access devices manufactured beginning July 1, 2006, need to be replaced with next-generation components by the same vendors. The two components affected are the Subscribe Line Interface Chip (SLIC) and the T1 controller.

The Cisco IAD2430 Series platforms with the new components will require upgrade of Cisco IOS Software releases that provide coefficients to tune the new components to behave the same as previous components. There is no change in feature function. Usually component changes do not require software upgrades; these new components are pin-for-pin compatible but need firmware changes that are integrated in Cisco IOS Software. The new software is compatible with both the old and new set of components. Platforms with old and new components are completely interoperable with each other.

Beginning on July 1, 2006, Cisco IAD2430 Series platforms will be orderable only with new software.

For the Cisco IAD2430 Series with the new components, customers must upgrade to one of the following Cisco IOS Software release branches or later:

- 12.3(11)T branch (12.3(11)T10 rebuild has the new component changes)
- 12.3(14)T branch (12.3(14)T6 rebuild has the new component changes)
- 12.4(2)T branch (12.4(2)T3 rebuild has the new component changes)
- 12.4(4)T branch (12.4(4)T1 rebuild has the new component changes)
- 12.4(5a)

PROBLEM SYMPTOMS

The Cisco IAD2430 Series with new components is not backward-compatible with Cisco IOS Software releases older than the release trains specified previously. The Cisco IAD2430 Series with new components loaded with Cisco IOS Software releases older than the trains specified will exhibit the following behaviors:

The new SLIC can be checked in detail also at bootup. The bootup will show Version 1.3. A sample of bootup shown with the SLIC version highlighted in bold follows:

```
Router#show version
Cisco IOS Software, 2400 Software (C2400-IS-M)
ROM: System Bootstrap, Version 12.4(4)T2, RELEASE SOFTWARE (fc1)
Router uptime is 4 days, 17 hours, 15 minutes System returned to ROM by reload System image file is
"slot0:c2430-is-mz"
Cisco IAD2432 (R527x) processor (revision 2.2) with 119808K/11264K bytes of memory.
Processor board ID
R527x CPU at 225MHz, Implementation 40, Rev 3.1
1 On-Board Twenty-Four FXS Analog Voice Module V1.3
2 FastEthernet interfaces
2 Channelized T1/PRI ports
2 Voice FXO interfaces
DRAM configuration is 64 bits wide with parity disabled.
63K bytes of non-volatile configuration memory.
System fpga version is 250027
System readonly fpga version is 15001C
Option for system fpga is 'system'.
0K bytes of ATA System CompactFlash (Read/Write) 31360K bytes of ATA Slot0 CompactFlash (Read/Write)
Configuration register is 0x0
```

Platform problems will result in the following bootup error message using old Cisco IOS Software with new SLIC components:

```
voice-port 2/0
^
% Invalid input detected at '^' marker.
ring dc-offset 30-volts
^
% Invalid input detected at '^' marker.
loss-plan plan5
```

```

^
% Invalid input detected at '^' marker.
idle-voltage low
^
% Invalid input detected at '^' marker.
compand-type a-law
^
% Invalid input detected at '^' marker.
impedance complex1
^
% Invalid input detected at '^' marker.
      :
      :

voice-port 2/23
^
% Invalid input detected at '^' marker.
ring dc-offset 30-volts
^
% Invalid input detected at '^' marker.
loss-plan plan5
^
% Invalid input detected at '^' marker.
idle-voltage low
^
% Invalid input detected at '^' marker.
compand-type a-law
^
% Invalid input detected at '^' marker.
impedance complex1
^
% Invalid input detected at '^' marker.

```

Platform problems will result in the following bootup error message using old Cisco IOS Software with the new T1 controller component (please note that the IAD2430-24FXS model in the IAD2430 series will not have this issue since there is no T1 on the platform):

```
Falc56 - no frame sync T1 line
```

The Cisco IAD2430 Series with old components is compatible with any Cisco IOS Software release.

WORKAROUND OR SOLUTION

Identify if the hardware platform revision or version contains the old or the new chip set. If the platform contains the new components, upgrade Cisco IOS Software to specified releases or later releases on same branch.

Customers have the following deployment options:

- Customers with existing Cisco IAD2430 Series platforms can:
 - Maintain Cisco IAD2430 platforms with old components running any software release while deploying Cisco IAD2430 platforms with new components running new software releases.
 - Upgrade all Cisco IAD2430 platforms with old components onto the same software that Cisco IAD2430 platforms with new components are running.
- New customers of Cisco IAD2430 Series platforms can:
 - Order platforms with software branches indicated previously. Downgrade of software will cause the platform to have bootup error messages as listed in the section “Problem Symptoms.”

HOW TO IDENTIFY HARDWARE LEVELS

Example:

```
Router#sh diag
IAD2431 Backplane EEPROM:
  PCB Serial Number      : XXXXXXXXXXXX
  Processor type         : XX
  Top Assy. Part Number : 800-XXXXX-08
  Board Revision        : A0
  Fab Part Number       : XX-XXXX-XX
  Deviation Number      : XXXXX-XXXX
  Manufacturing Test Data : XX XX XX XX XX XX XX XX
  RMA Number            : 0-0-0-0
  RMA Test History      : 00
  RMA History           : 00
  Chassis Serial Number :
  Chassis MAC Address   :
  MAC Address block size :
  Field Diagnostics Data :
  Hardware Revision     :
  Number of Slots       :
  EEPROM format version 4
```

Verify that the Top Assy. Part Number field has 800-XXXXX-08 under the Cisco IAD2430 Series Backplane EEPROM: The number after the second “-” should be 08 or higher.

Engineering Change Orders (ECO) will be issued when the new components are implemented in manufacturing which is targeted for early July 2006.

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