

# Cisco2500 , 3000 , AS5100和UBR900系列路由器的ROMmon恢复

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## [Introduction](#)

本文解释如何恢复Cisco2500 , 3000 , 在ROMmon滞留的AS5100和UBR900系列路由器 (rommon#>或>prompt)。

## [Prerequisites](#)

### [Requirements](#)

从ROMmon模式要恢复路由器，路由器应该是物理的可访问的，并且应该有终端被连接到控制台端口。恢复路由器从ROMmon通过telneting不是可能的对任何接口。您必须会[从TFTP server复制Cisco IOS软件镜像到路由器](#)。

### [Components Used](#)

本文的信息根据：

- Cisco 2500 Series Router
- Cisco 3000 Series Router
- Cisco AS5100系列通用访问服务器
- Cisco uBR900系列路由器

本文档中的信息都是基于特定实验室环境中的设备创建的。All of the devices used in this document started with a cleared (default) configuration.如果您是在真实网络上操作，请确保您在使用任何命令前已经了解其潜在影响。

### [Conventions](#)

有关文档规则的详细信息，请参阅 [Cisco 技术提示规则](#)。

## 验证配置寄存器值

需要调查的第一件事是路由器为什么在ROMmon模式启动(表示由“rommon- >”或“>”提示)。确定原因是否归结于配置寄存器值的更改，或者一个损坏的Cisco IOS软件镜像。

如果路由器有一个有效的Cisco IOS软件镜像，则更换配置寄存器到0x2102将恢复路由器。此程序如下解释。

1. 如果ROMmon提示是“>”，请键入以下在ROMmon提示：

```
>o/r 0x2102
>i
System Bootstrap, Version 11.0(10c)XB2, RELEASE SOFTWARE
Copyright (c) 1986-2003 by cisco Systems
2500 processor with 16384 Kbytes of main memory

F3: 10021772+2241116+562960 at 0x3000060

Restricted Rights Legend

Use, duplication,.....
```

2. 如果ROMmon提示是“rommon #>”，请键入以下在提示：

```
rommon 1> confreg 0x2102
```

您必须重置或供给循环动力新的配置的路由器能生效：

```
rommon 2> reset
System Bootstrap, Version 12.0(6r)T3, RELEASE SOFTWARE (fcl)
Copyright (c) 1999 by cisco Systems, Inc.
UBR924 platform with 16384 Kbytes of main memory.....
```

如果路由器顺利地启动，则原因是配置寄存器值问题。

如果路由器在ROMmon再启动，[使用从简单文件传输协议\(TFTP\)服务器的启动镜像](#)请进行对[下载Cisco IOS镜像](#)。

## 下载Cisco IOS镜像使用启动镜像从简单文件传输协议(TFTP)服务器

如果主Cisco IOS软件被删除了或毁损了，只有一种方式在2500，3000，AS5100或者UBR900系列路由器上配置镜像。您必须使用其启动镜像。

因为您已经确定启动在ROMmon的路由器的原因不归结于配置寄存器值，唯一选择可用为恢复是从TFTP server重新安装或升级Cisco IOS软件使用内置的启动镜像(Rx-引导)在ROM。

要进入Rx-boot模式或启动镜像，请执行以下：

1. 如果ROMmon提示是“rommon- >”，请键入：

```
rommon 1 > confreg 0x2101
```

您必须重置或供给循环动力新的配置的路由器能生效：

```
rommon 2>reset
System Bootstrap, Version 12.0(6r)T3, RELEASE SOFTWARE (fcl) Copyright (c) 1999 by cisco
Systems, Inc.
UBR924 platform with 16384 Kbytes of main memory.....
```

2. 如果ROMmon提示是“>”，请键入：

```
>o/r 0x2101
>i
System Bootstrap, Version 11.0(10c)XB2, RELEASE SOFTWARE
Copyright (c) 1986-1994 by cisco Systems
2500 processor with 16384 Kbytes of main memory
```

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Use, duplication, or .....

```
!--- Output suppressed .....16384K bytes of processor board System flash
(Read/Write) Press RETURN to get started! hostname(boot)>
```

注意提示当前是“路由器(引导程序)>”，确认使用启动镜像，路由器启动。**Note:** 如果路由器在ROMmon再启动，很可能启动镜像已损坏或丢失，并且恢复的唯一方法是通过更换处理器板系统闪存或硬件。

### 3. 下一步是升级Cisco IOS软件如下：

```
hostname(boot)>enable
hostname(boot)#copy tftp flash
System flash directory:
File Length Name/status

1 2416128 c2500-is-1.123-1a.bin [invalid checksum]

[2416192 bytes used, 14361024 available, 16777216 total]
Address or name of remote host [255.255.255.255]? 172.16.1.2
Source file name? c2500-is-1.123-1a.bin
Destination file name [c2500-is-1.123-1a.bin]?
Accessing file 'c2500-is-1.123-1a.bin' on 172.16.1.2...
Loading c2500-is-1.123-1a.bin from 172.16.1.2 (via Ethernet0): ! [OK]
```

Erase flash device before writing? [confirm]

```
!--- Press Enter to confirm Flash contains files. Are you sure you want to erase? [confirm]
!--- Press Enter to confirm Copy 'c2500-is-1.123-1a.bin' from server as 'c2500-is-1.123-1a.bin' into Flash WITH erase? [yes/no]yes
Erasing device... eeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeee
ee ...erased
Loading c2500-is-1.123-1a.bin from 172.16.1.2 (via Ethernet0): !!!!!!!!!!!!!!!!!!!!!
!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
```

```
!--- Output suppressed
!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!! [OK - 16294764/16777216 bytes] Verifying
checksum... OK (0x96AA) Flash copy took 0:08:23 [hh:mm:ss] hostname(boot)#
```

### 4. 请使用show flash命令验证加载Cisco IOS镜像版本。

```
hostname(boot)#show flash

System flash directory:
File Length Name/status
1 16294764 c2500-is-1.123-1a.bin
[16294828 bytes used, 482388 available, 16777216 total]
16384K bytes of processor board System flash (Read/Write)
hostname(boot)#
```

### 5. 在成功复制对路由器的Cisco IOS镜像以后，请切记您更改配置寄存器回到0x2102并且重新载入路由器从Cisco IOS镜像引导。

```
hostname(boot)(config)#config-register 0x2102
hostname(boot)#reload
System configuration has been modified. Save? [yes/no]: no
Proceed with reload? [confirm]
```

```
!--- Press Enter to confirm *Mar 1 00:12:58.463: %SYS-5-RELOAD: Reload requested System
```

```
Bootstrap, Version 11.0(10c)XB2, PLATFORM SPECIFIC RELEASE SOFTWARE (fc1) Copyright (c)
1986-2003 by cisco Systems 2500 processor with 14336 Kbytes of main memory F3:
15405292+889440+952984 at 0x3000060 !--- Output suppressed Press RETURN to get started!
hostname>
```

## 6. 请使用show version命令验证配置寄存器值和加载Cisco IOS镜像版本。

```
hostname>show version
Cisco Internetwork Operating System Software
IOS (tm) 2500 Software (C2500-IS-L), Version 12.3(1a), RELEASE SOFTWARE (fc1)
Copyright (c) 1986-2003 by cisco Systems, Inc.
Compiled Fri 06-Jun-03 07:46 by dchih
Image text-base: 0x0307F6E8, data-base: 0x00001000

ROM: System Bootstrap, Version 11.0(10c)XB2, PLATFORM SPECIFIC RELEASE SOFTWARE
(fc1)
BOOTLDR: 3000 Bootstrap Software (IGS-BOOT-R), Version 11.0(10c)XB2, PLATFORM SP
ECIFIC RELEASE SOFTWARE (fc1)

Router uptime is 2 minutes
System returned to ROM by reload
System image file is "flash:c2500-is-l.123-1a.bin"

cisco 2500 (68030) processor (revision L) with 14336K/2048K bytes of memory.
Processor board ID 13587050, with hardware revision 00000000
Bridging software.
X.25 software, Version 3.0.0.
2 Ethernet/IEEE 802.3 interface(s)
2 Serial network interface(s)
32K bytes of non-volatile configuration memory.
16384K bytes of processor board System flash (Read ONLY)

Configuration register is 0x2102
```

以上的show version命令的输出表示，路由器装载了新的Cisco IOS镜像，并且配置寄存器值是0x2102。

请参阅[软件安装和升级流程关于1600，2000，2500，3000，AS5100和AS5200](#)欲知更多信息。

## [Related Information](#)

- [装载Cisco IOS软件使用TFTP或RCP](#)
- [配置寄存器](#)
- [Technical Support - Cisco Systems](#)