# 從Crashinfo檔案捕獲資訊

## 目錄



## 簡介

本檔案將說明 crashinfo 檔案的內容、包含的內容以及如何從檔案中擷取資訊。

## 必要條件

### 需求

本文件沒有特定需求。

### 採用元件

本文中的資訊係根據以下軟體和硬體版本：

- Cisco 1700、3600、7000、7200、7500和7500系12000路由器
- Cisco IOS®軟體版本11.1及更新版本

本文中的資訊是根據特定實驗室環境內的裝置所建立。文中使用到的所有裝置皆從已清除（預設）的組態來啟動。如果您的網路運作中，請確保您瞭解任何指令可能造成的影響。您瞭解任何指令可能造成的影響。

### 慣例

如需文件慣例的詳細資訊，請參閱思科技術提示慣例。

## 背景資訊

crashinfo 檔案是儲存在引導快閃記憶體或快閃記憶體中的與當前崩潰相關的有用資訊的集合。

當路由器由於資料或堆疊損壞而崩潰時，需要更多的重新載入資訊來調試此型別的崩潰，而不僅僅是正常情況下的輸出 **show stacks** 指令。

根據預設，重新載入的資訊會寫在 Cisco 12000 Gigabit Router Processor (GRP)、Cisco 7000 和 7500 Route Switch Processor (RSP) 以及 Cisco 7200 系列路由器上的 bootflash:crashinfo。

對於Cisco 7500多功能介面處理器2(VIP2)，該檔案預設儲存為 bootflash:vip2_slot_no_crashinfo，其中slot_no是VIP2插槽編號。

針對 Cisco 7000 Route Processor (RP)，檔案預設儲存在 flash:crashinfo。

預設crashinfo 檔案的產生最初是在以下Cisco IOS軟體版本中匯入：

- 對於RSP和RP：
    - 11.1(13)CA1
    - 11.1(19)CC
    - 11.2(10)P
    - 11.3(1)
    - 11.3(1)T
- 對於Cisco 7200:
    - 11.1(18)CA
    - 11.2(15)P
    - 11.3(6)
    - 11.3(6)AA
    - 11.3(6)NA
    - 11.3(6)T
- 對於Cisco 12000 GRP:
    - 11.2(11)GS2.1
    - 11.2(9)GS7.2
    - 11.2(14)GS2.5

Cisco IOS軟體版本12.0、12.1和12.2中適用於以下平台的 crashinfo 收集機制：

- 對於Cisco 1700:

    - 12.1(2)
    - 12.1(2)T
    - 12.2(1)
- 對於Cisco 2600:
    - 12.1(13)
    - 12.2(7)T
    - 12.2(7)
- 對於Cisco 3600:
    - 12.2.(12)DA
    - 12.2(11)T
    - 12.2(11)

# Crashinfo檔案的內容

crashinfo 檔案包含以下資訊：

- 有限錯誤消息（日誌）和命令歷史記錄
- 崩潰時運行的映像的說明
- 顯示對齊方式
- malloc和空閒跟蹤
- 進程級堆疊跟蹤
- 進程級上下文
- 進程級堆疊轉儲
- 中斷級堆疊轉儲
- 進程級別資訊
- 進程級暫存器記憶體轉儲

# 從 Crashinfo 檔案中擷取資訊

當引導快閃記憶體中存在 crashinfo時，該資訊會顯示在 **show stack** 命令輸出：

```
************************************************
******* Information of Last System Crash **********
************************************************

Using bootflash:crashinfo_20000323-061850. 2000
CMD: 'sh int fas' 03:23:41 UTC Thu Mar 2 2000
CMD: 'sh int fastEthernet 6/0/0' 03:23:44 UTC Thu Mar 2 2000
CMD: 'conf t' 03:23:56 UTC Thu Mar 2 2000
CMD: 'no ip cef di' 03:23:58 UTC Thu Mar 2 2000
CMD: 'no ip cef distributed ' 03:23:58 UTC Thu Mar 2 2000
...
```

發出以下命令，以檢索 crashinfo 檔案：

```
<#root>

Router#

dir bootflash:

Directory of bootflash:/

  1  -rw-     4088008   Oct 07 1999 04:51:29  rsp-boot-mz.120-6.6
  2  -rw-      178619   Mar 23 2000 06:18:50  crashinfo_20000323-061850

7602176 bytes total (3335292 bytes free)
Router#
Router#

more bootflash:crashinfo_20000323-061850


 2000
CMD: 'sh int fas' 03:23:41 UTC Thu Mar 2 2000
CMD: 'sh int fastEthernet 6/0/0' 03:23:44 UTC Thu Mar 2 2000
CMD: 'conf t' 03:23:56 UTC Thu Mar 2 2000
CMD: 'no ip cef DI 03:23:58 UTC Thu Mar 2 2000
CMD: 'no ip cef distributed ' 03:23:58 UTC Thu Mar 2 2000
CMD: 'ip cef' 03:24:01 UTC Thu Mar 2 2000
...
```

# 將Crashinfo檔案複製到TFTP伺服器

核發以下命令，以便將 crashinfo 檔案複製到簡單式檔案傳輸通訊協定(TFTP)伺服器：

```
<#root>

Router#

dir bootflash:


 1  -rw-     4088008   Oct 07 1999 04:51:29  rsp-boot-mz.120-6.6
  2  -rw-      178619   Mar 23 2000 06:18:50  crashinfo_20000323-061850
```

```
Router#copy bootflash:crashinfo_20000323-061850  tftp
Address or name of remote host []? 10.1.1.1
Destination filename [crashinfo_20000323-061850 ]?
!!
```

如果輔助RSP崩潰，請檢視slavebootflash: 。對於Cisco 12000 GSR，請檢視sec-bootflash:。使用Boot Flash中的 **dir bootflash:** 指令。若要刪除舊的 crashinfo 檔案以釋放空間，請發出 **delete bootflash:filename** 指令。其 **delete bootflash:filename** 命令將該檔案標籤為已刪除，但該檔案仍位於記憶體中，可以恢復。若要以物理方式將其從記憶體中刪除，請發出 **squeeze bootflash:** 指令。

如果路由器多次崩潰，crashinfo檔案只能堆疊最後一個可檢視檔案。舉例來說：

<#root>

```
Router#

dir /all bootflash:

-#- ED --type-- --crc--- -seek-- nlen -length- -----date/time------ name
1   .. unknown  FD38E5C7  3FD81C   25  3921820 Oct 02 1998 14:43:56
rsp-boot-mz.112-15a.P.bin
2   .D config   AF12EF9F  41C308    9   125547 Oct 16 1998 11:10:10 crashinfo
3   .. config   33DEAF65  43A950    9   124360 Oct 16 1998 11:15:50 crashinfo

3430064 bytes available (4172112 bytes used)
```

請注意，一個檔案被刪除，一個檔案可檢視：

<#root>

```
Router#

show file bootflash:crashinfo


Compliance with U.S. Export Laws and Regulations - Encryption

This product performs encryption and is regulated for export
by the US Government.

.....  file continues here....


Router#

dir /all bootflash:


-#- ED --type-- --crc--- -seek-- nlen -length- -----date/time------ name
1   .. unknown  FD38E5C7  3FD81C   25  3921820 Oct 02 1998 14:43:56
rsp-boot-mz.112-15a.P.bin
2   .D config   AF12EF9F  41C308    9   125547 Oct 16 1998 11:10:10 crashinfo
```

```
3   .. config   33DEAF65  43A950    9   124360 Oct 16 1998 11:15:50 crashinfo

3430064 bytes available (4172112 bytes used)
```

刪除您剛才檢視的檔案：

<#root>

```
Router#

delete bootflash:crashinfo



Router#

dir /all bootflash:


-#- ED --type-- --crc--- -seek-- nlen -length- -----date/time------ name
1   .. unknown  FD38E5C7  3FD81C   25  3921820 Oct 02 1998 14:43:56
rsp-boot-mz.112-15a.P.bin
2   .D config   AF12EF9F  41C308    9   125547 Oct 16 1998 11:10:10 crashinfo
3   .D config   33DEAF65  43A950    9   124360 Oct 16 1998 11:15:50 crashinfo

3430064 bytes available (4172112 bytes used)
```

還原舊檔案：

<#root>

```
Router#

undelete ?


<0-700000>  File index

Router#

undelete 2


File undelete error (file not found)
Router#

undelete 2 ?


  WORD  Device name

Router#

undelete 2 bootflash:


Router#
```

```
dir /all bootflash:

-#- ED --type-- --crc--- -seek-- nlen -length- -----date/time------ name
1   .. unknown  FD38E5C7  3FD81C   25  3921820 Oct 02 1998 14:43:56
rsp-boot-mz.112-15a.P.bin
2   .. config   AF12EF9F  41C308    9   125547 Oct 16 1998 11:10:10 crashinfo
3   .D config   33DEAF65  43A950    9   124360 Oct 16 1998 11:15:50 crashinfo

3430064 bytes available (4172112 bytes used)
```

使用 **show file bootflash:crashinfo** 指令。重複此過程以檢查較早的崩潰。

# Crashinfo檔案示例

以下是crashinfo檔案的範例：

```
=== Flushing messages (07:12:39 UTC Tue Jul 18 2000) ===

Buffered messages:

00:00:35: %RSP-3-NOSTART: No microcode for Unknown card, slot 4
00:00:43: %SYS-4-CONFIG_NEWER: Configuration from version 12.1 may not be correctly
understood
00:00:44: %SYS-5-CONFIG_I: Configured from memory by console
00:00:44: %LINEPROTO-5-UPDOWN: Line protocol on Interface Ethernet0/1, changed state
to down
00:00:44: %LINEPROTO-5-UPDOWN: Line protocol on Interface Ethernet0/2, changed state
to down
00:00:44: %LINEPROTO-5-UPDOWN: Line protocol on Interface Ethernet0/3, changed state
to down
00:00:44: %LINEPROTO-5-UPDOWN: Line protocol on Interface Ethernet0/4, changed state
to down
00:00:44: %LINEPROTO-5-UPDOWN: Line protocol on Interface Ethernet0/5, changed state
to down
00:00:44: %LINEPROTO-5-UPDOWN: Line protocol on Interface Hssi9/0/0, changed state
to down
00:00:44: %LINEPROTO-5-UPDOWN: Line protocol on Interface Hssi9/0/1, changed state
to down
00:00:48: %SYS-5-RESTART: System restarted --
Cisco Internetwork Operating System Software
Cisco IOS (r) RSP Software (RSP-PV-M), Version 12.0(10.6)ST, EARLY DEPLOYMENT MAINTENANCE
INTERIM SOFTWARE
Copyright (c) 1986-2000 by cisco Systems, Inc.
Compiled Fri 23-Jun-00 16:02 by richv
00:00:53: %LINK-5-CHANGED: Interface Ethernet0/2, changed state to administratively down
00:00:53: %LINK-5-CHANGED: Interface Ethernet0/3, changed state to administratively down
00:00:53: %LINK-5-CHANGED: Interface Ethernet0/4, changed state to administratively down
00:00:53: %LINK-5-CHANGED: Interface Ethernet0/5, changed state to administratively down
00:00:53: %LINK-5-CHANGED: Interface FastEthernet9/1/0, changed state to administratively
down
00:00:53: %LINK-3-UPDOWN: Interface Ethernet0/0, changed state to up
00:00:53: %LINK-3-UPDOWN: Interface Ethernet0/1, changed state to up
00:00:53: %LINK-3-UPDOWN: Interface Hssi9/0/1, changed state to up
00:00:54: %LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet9/1/0, changed
state to down
00:00:54: %LINEPROTO-5-UPDOWN: Line protocol on Interface Ethernet0/0, changed state
```

```
to up
00:00:54: %LINEPROTO-5-UPDOWN: Line protocol on Interface Ethernet0/1, changed state
to up
00:01:01: %LINEPROTO-5-UPDOWN: Line protocol on Interface Hssi9/0/1, changed state to up
00:10:36: %LINK-3-UPDOWN: Interface FastEthernet9/1/0, changed state to up
00:10:37: %LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet9/1/0, changed
state to up
00:12:26: %SYS-5-CONFIG_I: Configured from console by console
00:36:42: %LINK-3-UPDOWN: Interface Hssi9/0/1, changed state to down
00:36:43: %LINEPROTO-5-UPDOWN: Line protocol on Interface Hssi9/0/1, changed state to down
00:37:40: %LINK-3-UPDOWN: Interface Hssi9/0/1, changed state to up
00:37:49: %LINEPROTO-5-UPDOWN: Line protocol on Interface Hssi9/0/1, changed state to up
00:38:19: %LINK-3-UPDOWN: Interface Hssi9/0/1, changed state to down
00:38:20: %LINEPROTO-5-UPDOWN: Line protocol on Interface Hssi9/0/1, changed state to down
00:39:27: %LINK-3-UPDOWN: Interface Hssi9/0/1, changed state to up
00:39:36: %LINEPROTO-5-UPDOWN: Line protocol on Interface Hssi9/0/1, changed state to up
14:20:06: %LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet9/1/0, changed state
to down
14:21:09: %LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet9/1/0, changed
state to up
14:22:54: %LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet9/1/0, changed
state to down
14:26:39: %LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet9/1/0, changed
state to up
16:00:16: %CLEAR-5-COUNTERS: Clear counter on all interfaces by console
16:10:09: %SYS-5-CONFIG_I: Configured from console by console
16:10:28: %SYS-5-CONFIG_I: Configured from console by console
16:10:58: %LINK-5-CHANGED: Interface Hssi9/0/1, changed state to administratively down
16:10:59: %LINEPROTO-5-UPDOWN: Line protocol on Interface Hssi9/0/1, changed state to down
16:11:03: %SYS-5-CONFIG_I: Configured from console by console
16:11:03: %LINK-3-UPDOWN: Interface Hssi9/0/1, changed state to up
16:11:15: %LINEPROTO-5-UPDOWN: Line protocol on Interface Hssi9/0/1, changed state to up
16:12:56: %RSP-3-NOSTART: No microcode for Unknown card, slot 4
16:13:03: %LINEPROTO-5-UPDOWN: Line protocol on Interface Hssi9/0/1, changed state to down
16:13:16: %LINEPROTO-5-UPDOWN: Line protocol on Interface Hssi9/0/1, changed state to up
16:14:01: %SYS-5-CONFIG_I: Configured from console by console
16:14:13: %CLEAR-5-COUNTERS: Clear counter on all interfaces by console
18:00:11: %SYS-5-CONFIG_I: Configured from console by vty0 (IPv4 address)
18:00:29: %SYS-5-CONFIG_I: Configured from console by vty0 (IPv4 address)
19:36:09: %SYS-5-CONFIG_I: Configured from console by vty0 (IPv4 address)
21:06:20: %SYS-5-CONFIG_I: Configured from console by console
21:10:28: %LINK-3-UPDOWN: Interface Hssi9/0/1, changed state to down
21:10:29: %LINEPROTO-5-UPDOWN: Line protocol on Interface Hssi9/0/1, changed state to down
21:11:30: %LINK-3-UPDOWN: Interface Hssi9/0/1, changed state to up
21:11:31: %LINEPROTO-5-UPDOWN: Line protocol on Interface Hssi9/0/1, changed state to up
21:12:01: %LINEPROTO-5-UPDOWN: Line protocol on Interface Hssi9/0/1, changed state to down
21:12:09: %LINK-3-UPDOWN: Interface Hssi9/0/1, changed state to down
21:13:22: %LINK-3-UPDOWN: Interface Hssi9/0/1, changed state to up
21:13:38: %LINEPROTO-5-UPDOWN: Line protocol on Interface Hssi9/0/1, changed state to up
21:14:08: %LINEPROTO-5-UPDOWN: Line protocol on Interface Hssi9/0/1, changed state to down
21:37:24: %LINK-3-UPDOWN: Interface Hssi9/0/1, changed state to down
21:45:03: %LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet9/1/0, changed
state to down
Queued messages:
22:13:19: %SYS-3-LOGGER_FLUSHING: System pausing to ensure console debugging output.

22:13:19: %SYS-3-LOGGER_FLUSHED: System was paused for 00:00:00 to ensure console
debugging output.
=== Start of Crashinfo Collection (07:12:39 UTC Tue Jul 18 2000) ===

For image:
Cisco Internetwork Operating System Software
```

```
Cisco IOS (r) RSP Software (RSP-PV-M), Version 12.0(10.6)ST, EARLY DEPLOYMENT MAINTENANCE
INTERIM SOFTWARE
Copyright (c) 1986-2000 by cisco Systems, Inc.
Compiled Fri 23-Jun-00 16:02 by richv
========= Show Alignment ============================

No alignment data has been recorded.
No spurious memory references have been recorded.
========= Malloc and Free Traces ====================
MallocFree Trace: ixmallocfree=0x30 ptr=0x6121E5D0 6121E450: 619510A4 6026ED7C
61955EC0 6026ED7C 6196FDD8 6026ED7C 6197FDD4 6026ED7C 6121E470: 619A0D1C 6026ED7C
619B0DE8 6026ED7C 619D6A18 6026ED7C 619E6A14 6026ED7C 6121E490: 619F6A10 6026ED7C
61A06A0C 6026ED7C 61A16A08 6026ED7C 61A26A04 6026ED7C 6121E4B0: 61A39B20 6026ED7C
61A3D46C 6026ED7C 61A52900 6026ED7C 61A68B74 6026ED7C 6121E4D0: 61A5B358 6026ED7C
61AD9600 6026ED7C 61AD9E40 6026ED7C 61AE9E3C 6026ED7C 6121E4F0: 61AF9E38 6026ED7C
61B09E34 6026ED7C 61B211A0 6026ED7C 61A8E6BC 6026ED7C 6121E510: 61AA201C 6026ED7C
61B209E8 6044EEA8 61B20A40 6044EEA8 61B20A98 6044EEA8 6121E530: 61B20AF0 6044EEA8
61B20B48 6044EEA8 61B20BA0 6044EEA8 61AB5450 603FBE50 6121E550: 61AB5450 603FBE50
61AB25F8 60212C2C 61AB265C 60000164 61A7EC5C 30000020 6121E570: 61A7EC5C 602120DC
61A8839C 3000001E 61A8839C 60474D38 6150FBB4 60474FC4 6121E590: 612AF924 60284B40
61B46488 6023E360 61B4ABB8 6325AA24 61A3CCD8 6023E378 6121E5B0: 6150FB68 60212C2C
6150FBB4 60000016 612B29B4 3000001E 612B29B4 602120DC 6121E5D0: 613CA880 601FC4F8
616F8DA0 6026ED7C 61708D9C 6026ED7C 61718D98 6026ED7C 6121E5F0: 61728D94 6026ED7C
617440C4 6026ED7C 61744308 6026ED7C 61759038 6026ED7C 6121E610: 61770034 6026ED7C
6178AD60 6026ED7C 6179AD5C 6026ED7C 617AAD58 6026ED7C 6121E630: 617BAD54 6026ED7C
61912A5C 6026ED7C 6192C004 6026ED7C 61940974 6026ED7C
========== Stack Trace ========
-Traceback= 60287EE8 602B8D5C 6021CAF4 6022834C 6026BC4C 6026BC38
========= Context ======================

RSP Software (RSP-PV-M), Version 12.0(10.6)ST, EARLY DEPLOYMENT MAINTENANCE INTERIM
SOFTWARE
Compiled Fri 23-Jun-00 16:02 by richv
Signal = 23, Code = 0x24, Uptime 22:13:19
$0 : 00000000, AT : 61220000, v0 : 00000032, v1 : 61222AF0
a0 : 60227BDC, a1 : 6129B958, a2 : 61AD82F8, a3 : 00000000
t0 : 61A3BA34, t1 : 8000FDA0, t2 : 34008700, t3 : FFFF00FF
t4 : 00000083, t5 : 3E840024, t6 : 00000000, t7 : 00000000
s0 : 0000003C, s1 : 00000036, s2 : 00000000, s3 : 61B33FF8
s4 : 00000000, s5 : 6121E840, s6 : 61209A30, s7 : 00000000
t8 : 602895EC, t9 : 00000000, k0 : 616DD144, k1 : 60290920
gp : 610AEDC0, sp : 61B33FE0, s8 : 6120FB00, ra : 602B8D5C
EPC : 60287EE8, SREG : 3400E703, Cause : 00000024
Error EPC : EFF5BFE7, BadVaddr : 403208D9
========= Stack Dump ============================

Stack Frame Pointer in Context is 0x61B33FE0, at process level

61B33BE0:        3        0        8        1 602086F0 60209F0C        0        1
61B33C00: 7FFFFFFD        2        0        3 61B312F0 60209F0C 616E48B4 60208E1C
61B33C20: 616E48B4 FFFFFFFF 61B33BDF    20000 614CA664        0        0        1
61B33C40: 7FFFFFFA        5        0        5 61537304 60209F0C        0        1
61B33C60: 7FFFFFFA        5        0        5 61537304 60209F0C        0        F
61B33C80:        A 60209A78 61B312F2        1 30B33CD8        0 7FFFFFFF        1
61B33CA0:        0        9 6038DD10       EF        1       F3        0        C
61B33CC0: 61B33CC0        9 61153CC8 61B33FE8 61B34054 FFFFFFF8        0        0
61B33CE0: 6129B958        0 601EE388 6129B958    20220       65 60283F98       20
61B33D00:       4A 60208E1C 6129B958 602B66C4 601EE1D0        4 6129B958        0
61B33D20: 601EE1D8 601EE1C8 603981A4 60208E1C FFFFFFFF        1       3C 6129B958
61B33D40:        0 61B33FF8        A        1 602086F0 6129C2CC       36        1
61B33D60: 602086F0 B0B0B0B0 B0B0B0B0 B0B0B0B0 B0B0B0B0 B0B0B0B0        0 B0B0B0B0
61B33D80:        0 6129C3CD 7FFFFFFE        0        0        1 60E10000 60209BB8
```

```
61B33DA0:        0 7FFFFFFF 7FFFFFE3       1C        0       1C 61B33FA8 60209F0C
61B33DC0: 6129C1BC 6129B958 61B33FD0 61B33FF8        A        1 602086F0 6038DB78
61B33DE0: 61B34120 6129B958 602087AC       2D        A        1 602086F0        1
61B33E00: 616DBEB0   98967D        0        0        0        4 602086F0 FFFFFF30
61B33E20: 616DBE8C        0 602204DC        0 61B33FC4 60E0F5DA      7D0        0
61B33E40:        4 610A7CD6 60E0F5D8 61B33EE0        0 60208ABC 61B33FC4        1
61B33E60: 60E0F601 61B33E88        0        1       3C       36        0 61B33FF8
61B33E80:        0       23 61209A30 60208E1C 612B2990        0 602120DC        0
61B33EA0:        0        0 6129C668 61B33EF0        0 602120DC 61116268        2
61B33EC0: FFFFFFFD        D 10000000 60272480        1      100 60212C2C 6129C41C
61B33EE0:        0 6129C3CD 602120DC 61B33FF8       64        A 6129C668 6129C3CD
61B33F00: 61B33FD0 61B33FF8 610A7E80        A FFFFFFFD 602120E4 61B33FD0 61B33FF8
61B33F20: 610A7E80        A 6129C1BC 6129C3CD 602106E0 602103FC 61209A30        0
61B33F40: 6120FB00 60208A04 61B33FC8        1        0  4C4B0E4        0        0
61B33F60: 61A3BB9C       36        0 61B33FF8        0 6121E840 61209A30        0
61B33F80: 6027A0F8       36 60213150 61B33FC8 FFFFFFFD FFFFFFFF 6027A1EC 6027A1E0
61B33FA0:       4A 61B33FF8       64       36        0  4C4B0E4       64 6027E2F8
61B33FC0:       3C 60208CCC 60E4C2C8 61B33FE4 602B8D4C FFFFFFFF       3C 602B8D54
61B33FE0: 60E4C2A4 FFFFFFFD        0 FFFFFFFE        5 60E3B024 36008935 61537A18
61B34000: 602677B4 61B3408C 60260394   400000        0        0        0 FFFFFFFF
61B34020: 60E23C4C 61B34020        0        0        0 FFFFFFFF 61B340B0 61537A20
61B34040:        0        0        0        0 FFFFFFFD        1 61537A18        0
61B34060:        0        0        0        0        0 60208980        0 601F2698
61B34080: 60E163C6 61B340B0        0 FFFFFFFF 61537A18 61537A18 6021C068 6021C040
61B340A0:        0 60E163B8 6153892B 61B340B0 30373A31 313A3534 20555443 20547565
61B340C0: 204A756C 20313820 32303030   FFFFFF        0        0  2400000 61537A18
61B340E0: 60E23C78 60E23C4C 6021B744 FFFFFFFF 61537A18 614D2EE4        5        0
61B34100: 6021B74C 6021B63C        1 6129BAE8        0 61537A18        0        1
61B34120:        0 6121E840 61209A30        0        0 6021CAF4 61B34140        0
61B34140:       4A        1        0        0        0        5        0 6129B958
61B34160: 61537A18        0        0        1        0 6129BAE8 61209A30 6022834C
61B34180: FFFFFFFF FFFFFFFF FFFFFFFF FFFFFFFF        1 610A8124 6153890C FFFFFFFF
61B341A0:        1  DFFFFFF FFFFFFFF 6129C3CD        0        0        0        0
61B341C0:        0        0        0        0        0 6026BC4C FFFFFFFF FFFFFFFF
61B341E0: FFFFFFFF FFFFFFFF 6026BC38 FFFFFFFF FFFFFFFF FFFFFFFF FFFFFFFF FFFFFFFF
61B34200: FFFFFFFF FFFFFFFF FFFFFFFF FFFFFFFF FFFFFFFF FD0110DF AB1234CD       19
61B34220: 614F3BF8 60E34110 6023E098 61B38948 61B31320 80002384        1 6023E360
61B34240: AFACEFAD        0        0        0        0        0        0        0
61B34260:        0        0        0        0        0        0        0        0
61B34280:        0        0        0        0        0        0        0        0
61B342A0:        0        0        0        0        0        0        0        0
61B342C0:        0        0        0        0        0        0        0        0
61B342E0:        0        0        0        0        0        0        0        0
61B34300:        0        0        0        0        0        0        0        0
61B34320:        0        0        0        0        0        0        0        0
61B34340:        0        0        0        0        0        0        0        0
61B34360:        0        0        0        0        0        0        0        0
61B34380:        0        0        0        0        0        0        0        0
61B343A0:        0        0        0        0        0        0        0        0
61B343C0:        0        0        0        0        0        0        0        0
========= Process Level Info ==================

---- Current Process Block (at 0x61A3BA34) ----

61A3BA0C: AB1234CD       4A 61A3BA34 60E432B4 60290684 61A3BC50 61A3B88C 8000010E
61A3BA2C:        1 606FB390 61B31334 8000FDA0 60227BDC 6129B958       64       36
61A3BA4C:        0 61B33FF8        0 6121E840 61209A30        0 6120FB00 61B341F0
61A3BA6C:        0 6027E32C        0        0        0        0    10100        1
61A3BA8C:        0        0        0       4A        0        0  10492E8  1040BB8
61A3BAAC:        0        0        0     ED58        0 6129B958    F084C        0
61A3BACC:        0  4C4B0E4        0  4C4B0E4   435CC9    AA0EE 60E0EEE4        3
61A3BAEC:        0        0       73       52     2EE0     2EE0 6129B958        0
```

```
61A3BB0C:        0        0        0        0        0        0        0 61B1A00C
61A3BB2C: 61A3BA34 6121E800        0        0 61222C80        0        0        0
61A3BB4C:     4230        0        0        0 61A3BB34        0        0        0
61A3BB6C:     4280 61A3BA34        0        0        0        0 61A3BB34 61A3BA34
61A3BB8C:        0        0    142D0        0        0        0 61A3BB34 61A3BA34
61A3BBAC:        0        0    242F0        0        0        0        0        0
61A3BBCC:        0 61754D5C        0        0        0        0        0        0
61A3BBEC:        0        0        0 61754DB8 61A3BBE4 61754D64        0 61223950
61A3BC0C:        0        0        0  FFFFFFF  FFFFFFF        0        0        0
61A3BC2C:        0        0        0        0        0 61AA1F10        0 BEEFCAFE

---- Partial decode of process block ----

Pid 74: Process "Exec" stack 0x61B31334 savedsp 0x8000FDA0
Flags: analyze crashblock on_old_queue
Regs s0-s8,ra at last suspend; a0,a1,sp from proc creation, PC unused:
     a0: 60227BDC  a1: 6129B958  s0: 00000064  s1: 00000036  s2: 00000000
     s3: 61B33FF8  s4: 00000000  s5: 6121E840  s6: 61209A30  s7: 00000000
     s8: 6120FB00  sp: 61B341F0  PC: 00000000  ra: 6027E32C
Status     0x00000000 Orig_ra   0x00000000 Routine    0x00000000 Signal 0
Caller_pc  0x00000000 Callee_pc 0x00000000 Dbg_events 0x00000000 State  0
Totmalloc  17076968   Totfree   17042360   Totgetbuf  0
Totretbuf  0          Edisms    0x0        Eparm      0x6129B958
Elapsed    0xF084C    Ncalls    0x435CC9   Ngiveups   0xAA0EE
Priority_q 3          Ticks_5s  0          Cpu_5sec   0          Cpu_1min 115
Cpu_5min   82         Stacksize 0x2EE0     Lowstack   0x2EE0
Ttyptr     0x6129B958 Mem_holding 0x0        Thrash_count 0
Wakeup_reasons      0x0FFFFFFF  Default_wakeup_reasons 0x0FFFFFFF
Direct_wakeup_major 0x00000000  Direct_wakeup_minor    0x00000000


---- Current Process Stack (0xB44 bytes used, out of 0x2EE0 available) ----

Current SP = 0x61B33FE0, saved SP = 0x8000FDA0

61B33E14:        4 602086F0 FFFFFF30 616DBE8C        0 602204DC        0 61B33FC4
61B33E34: 60E0F5DA      7D0        0        4 610A7CD6 60E0F5D8 61B33EE0        0
61B33E54: 60208ABC 61B33FC4        1 60E0F601 61B33E88        0        1       3C
61B33E74:       36        0 61B33FF8        0       23 61209A30 60208E1C 612B2990
61B33E94:        0 602120DC        0        0        0 6129C668 61B33EF0        0
61B33EB4: 602120DC 61116268        2 FFFFFFFD        D 10000000 60272480        1
61B33ED4:      100 60212C2C 6129C41C        0 6129C3CD 602120DC 61B33FF8       64
61B33EF4:        A 6129C668 6129C3CD 61B33FD0 61B33FF8 610A7E80        A FFFFFFFD
61B33F14: 602120E4 61B33FD0 61B33FF8 610A7E80        A 6129C1BC 6129C3CD 602106E0
61B33F34: 602103FC 61209A30        0 6120FB00 60208A04 61B33FC8        1        0
61B33F54:  4C4B0E4        0        0 61A3BB9C       36        0 61B33FF8        0
61B33F74: 6121E840 61209A30        0 6027A0F8       36 60213150 61B33FC8 FFFFFFFD
61B33F94: FFFFFFFF 6027A1EC 6027A1E0       4A 61B33FF8       64       36        0
61B33FB4:  4C4B0E4       64 6027E2F8       3C 60208CCC 60E4C2C8 61B33FE4 602B8D4C
61B33FD4: FFFFFFFF       3C 602B8D54 60E4C2A4 FFFFFFFD        0 FFFFFFFE        5
61B33FF4: 60E3B024 36008935 61537A18 602677B4 61B3408C 60260394   400000        0
61B34014:        0        0 FFFFFFFF 60E23C4C 61B34020        0        0        0
61B34034: FFFFFFFF 61B340B0 61537A20        0        0        0        0 FFFFFFFD
61B34054:        1 61537A18        0        0        0        0        0        0
61B34074: 60208980        0 601F2698 60E163C6 61B340B0        0 FFFFFFFF 61537A18
61B34094: 61537A18 6021C068 6021C040        0 60E163B8 6153892B 61B340B0 30373A31
61B340B4: 313A3534 20555443 20547565 204A756C 20313820 32303030   FFFFFF        0
61B340D4:        0  2400000 61537A18 60E23C78 60E23C4C 6021B744 FFFFFFFF 61537A18
61B340F4: 614D2EE4        5        0 6021B74C 6021B63C        1 6129BAE8        0
61B34114: 61537A18        0        1        0 6121E840 61209A30        0        0
61B34134: 6021CAF4 61B34140        0       4A        1        0        0        0
61B34154:        5        0 6129B958 61537A18        0        0        1        0
```

```
61B34174: 6129BAE8 61209A30 6022834C FFFFFFFF FFFFFFFF FFFFFFFF FFFFFFFF        1
61B34194: 610A8124 6153890C FFFFFFFF        1  DFFFFFF FFFFFFFF 6129C3CD        0
61B341B4:        0        0        0        0        0        0        0        0
61B341D4: 6026BC4C FFFFFFFF FFFFFFFF FFFFFFFF FFFFFFFF 6026BC38 FFFFFFFF FFFFFFFF
61B341F4: FFFFFFFF FFFFFFFF FFFFFFFF FFFFFFFF FFFFFFFF FFFFFFFF FFFFFFFF FFFFFFFF
========== Interrupt Level Stack Dump ==========
WARNING: Interrupt stack dumps are consistent ONLY for interrupts which
are blocked during exception handling.  Also register output is valid
ONLY for interrupts which store an r4k_context block on the stack.

---- Level 1 Interrupt stack (0x3BC bytes used, out of 0x2328 available) ----

intstacks[1]: base 0x61502F44 stack 0x61505268 routine 0x602CB5A4 count 0x15B17FD
              size 0x2328     low   0x2328     desc    0x60E49E58

61504EB0:        0 6019F318 FFFFFFFF FFFFFFFF FFFFFFFF FFFFFFFF   FFFFFF FFFFFFFF
61504ED0: 6129B958 612581A0 612581A0 48009CE0  AC82817 4061E5E8        0 61207AB0
61504EF0: 612581A0 601BADFC 61758CA4 61758B5C        0 6125F280        0  4ADB38C
61504F10:        0  4ADB388 61222C80        1        8 60E40000       5A        5A
61504F30: 61A3BB24        0 61758CA4 61758B5C        0 612581A0 6027A968 6027F4C0
61504F50: 6176B108 6176AFC0        0 612581A0 6027A968 61758B5C 6023E628 6027EEE0
61504F70:        8 6176AFC0        8 6176AFC0        8 6027EEE0        8 614F0630
61504F90:        8 614F0630        8 6027EEE0        1 6027F4C0 61812740 612581A0
61504FB0: 614F40AC 614BEE54        1 6027F4C0 615076E0 6027FB80 614BEE54 612581A0
61504FD0: 614BEE54 612581A0 615076E0 6027FB80       3C       3C 602BF0C4        0
61504FF0: 61869450 6024DE78 615076E0 602BF0C4 61869450 612581A0 6024DE44        0
61505010: 615076E0 612581A0       EE 61869450 615076E0 612581A0       EE 602BF360
61505030:      200 6111E828 61A3BB24        0        7 612581A0 405BBA5A        7
61505050:      200 6111E828 602C15B0 602C136C 615076E0        7 405BBA68       E0
61505070: 61A8C144 612581A0 612581A0 4800AC10 585BBA5A 602CE360 FFFFFFFF FFFFFFFF
61505090: FFFFFFFF FFFFFFFF FFFFFFFF FFFFFFFF FFFFFFFF FFFFFFFF FFFFFFFF FFFFFFFF
615050B0: FFFFFFFF FFFFFFFF FFFFFFFF FFFFFFFF FFFFFFFF FFFFFFFF FFFFFFFF FFFFFFFF
615050D0:        0 2AB60919   FFFFFF        0       60  1000C00        0 FFFFFFFF
615050F0: FFFFFFFF FFFFFFFF FFFFFFFF FFFFFFFF FFFFFFFF FFFFFFFF 61A8C144 61222CB0
61505110: 8000FE30        0        1        0 61B1A00C        0 61220000 6028BEE8
61505130: FFFFFFFF FFFFFFFF        0 61220000        0        1        0 61A8C234
61505150:        0        0        0  4C4A138        0        0        0        0
61505170:        0 61222FA0        0 61AA07A8        0        1 FFFFFFFF FFFF00FF
61505190:        0       83        0 3E840024        0      400        0        0
615051B0: FFFFFFFF FFFFFFFF FFFFFFFF FFFFFFFF FFFFFFFF FFFFFFFF FFFFFFFF FFFFFFFF
615051D0: FFFFFFFF FFFFFFFF FFFFFFFF FFFFFFFF FFFFFFFF FFFFFFFF FFFFFFFF FFFFFFFF
615051F0:        0 602895EC        0        0        0 616DD144        0 60290920
61505210: FFFFFFFF FFFFFFFF FFFFFFFF 8000FE20 FFFFFFFF FFFFFFFF        0 60294680
61505230: 3400E703 FFFFFFFF FFFFFFFF 932D9556 FFFFFFFF FD40711A FFFFFFFF FFFFFFFF
61505250: FFFFFFFF FFFFFFFF        0 60292830 FFFFFFFF FFFFFFFF FFFFFFFF
 $0 : FFFFFFFF, AT : 61220000, v0 : 00000001, v1 : 61A8C234
 a0 : 00000000, a1 : 04C4A138, a2 : 00000000, a3 : 00000000
 t0 : 61222FA0, t1 : 61AA07A8, t2 : 00000001, t3 : FFFF00FF
 t4 : 00000083, t5 : 3E840024, t6 : 00000400, t7 : 00000000
 s0 : FFFFFFFF, s1 : FFFFFFFF, s2 : FFFFFFFF, s3 : FFFFFFFF
 s4 : FFFFFFFF, s5 : FFFFFFFF, s6 : FFFFFFFF, s7 : FFFFFFFF
 t8 : 602895EC, t9 : 00000000, k0 : 616DD144, k1 : 60290920
 gp : FFFFFFFF, sp : 8000FE20, s8 : FFFFFFFF, ra : 60294680
 EPC : 60292830, ErrorEPC : FFFFFFFF, SREG : 3400E703

---- Level 2 Interrupt stack (0x3C8 bytes used, out of 0x2328 available) ----

...
...
...

---- Level 7 Interrupt stack (0x190 bytes used, out of 0x2328 available) ----
```

```
intstacks[7]: base 0x61297120 stack 0x61299440 routine 0x6028B3D8 count 0x1313314
              size 0x2328     low   0x2328     desc    0x60E40D18

612992B8:        0     AF5C        0  4C4B0E4 FFFFFFFF FFFFFFFF FFFFFFFF FFFFFFFF
612992D8: 61A4F0CC     1680 61220000 6028B4E8 FFFFFFFF FFFFFFFF FFFFFFFF FFFFFFFF
612992F8: 6028A2BC       38 6028B2DC FFFFFFFF FFFFFFFF FFFFFFFF        0       24
61299318:        0    121A3        0        3        0 7CDEBEBE        0      3E8
61299338:        0      3E8        0        8        0    F4240        0 34008001
61299358:        0 34008000 FFFFFFFF FFFF00FF        0 6107EEF0        0       FF
61299378:        0 6107EC98        0   8B4CEA FFFFFFFF FFFFFFFF FFFFFFFF FFFFFFFF
61299398: FFFFFFFF FFFFFFFF FFFFFFFF FFFFFFFF FFFFFFFF FFFFFFFF FFFFFFFF FFFFFFFF
612993B8: FFFFFFFF FFFFFFFF FFFFFFFF FFFFFFFF        0     39AF        0        0
612993D8:        0 61221940        0        0 FFFFFFFF FFFFFFFF        0 6107EA20
612993F8: FFFFFFFF FFFFFFFF        0 6028B170 34008003 FFFFFFFF        0    1E848
61299418:        0        0 FFFFFFFF FFFFFFFF FFFFFFFF FFFFFFFF        0 6028B2DC
61299438: FFFFFFFF FFFFFFFF FFFFFFFF FFFFFFFF
 $0 : FFFFFFFF, AT : 00000024, v0 : 00000000, v1 : 80808080
 a0 : 00004DC0, a1 : 0053348C, a2 : 6107EA40, a3 : 00000004
 t0 : 29292929, t1 : 34008001, t2 : 34008000, t3 : FFFF00FF
 t4 : 6107EEF0, t5 : 000000FF, t6 : 6107EC98, t7 : 008B4CEA
 s0 : FFFFFFFF, s1 : FFFFFFFF, s2 : FFFFFFFF, s3 : FFFFFFFF
 s4 : FFFFFFFF, s5 : FFFFFFFF, s6 : FFFFFFFF, s7 : FFFFFFFF
 t8 : 000039AF, t9 : 00000000, k0 : 61221940, k1 : 00000000
 gp : FFFFFFFF, sp : 6107EA30, s8 : FFFFFFFF, ra : 60395FBC
 EPC : 60395FB4, ErrorEPC : FFFFFFFF, SREG : 34008003
========= Register Memory Dump ================

Reg00($0):        0 [Not RAM Addr]
Reg01(AT): 61220000
Reg02(v0):       32 [Not RAM Addr]
Reg03(v1): 61222AF0
Reg04(a0): 60227BDC
Reg05(a1): 6129B958 [In malloc Block 0x6129B930] [Last malloc Block 0x6129B850]
Reg06(a2): 61AD82F8 [In malloc Block 0x61AD82D0]
Reg07(a3):        0 [Not RAM Addr]
Reg08(t0): 61A3BA34 [In malloc Block 0x61A3BA0C] [Last malloc Block 0x61A3B878]
Reg09(t1): 8000FDA0
Reg10(t2): 34008700 [Not RAM Addr]
Reg11(t3): FFFF00FF [Not RAM Addr]
Reg12(t4):       83 [Not RAM Addr]
Reg13(t5): 3E840024 [Not RAM Addr]
Reg14(t6):        0 [Not RAM Addr]
Reg15(t7):        0 [Not RAM Addr]
Reg16(s0):       3C [Not RAM Addr]
Reg17(s1):       36 [Not RAM Addr]
Reg18(s2):        0 [Not RAM Addr]
Reg19(s3): 61B33FF8
Reg20(s4):        0 [Not RAM Addr]
Reg21(s5): 6121E840
Reg22(s6): 61209A30
Reg23(s7):        0 [Not RAM Addr]
Reg24(t8): 602895EC
Reg25(t9):        0 [Not RAM Addr]
Reg26(k0): 616DD144 [In malloc Block 0x616DD0FC] [Last malloc Block 0x616DCFD0]
Reg27(k1): 60290920
Reg28(gp): 610AEDC0
Reg29(sp): 61B33FE0
Reg30(s8): 6120FB00
Reg31(ra): 602B8D5C
---- block0  ptr=61220000  is_malloc=0 ----
```

```
6121FFC0:        0        0        0        0        0        0        0        0
6121FFE0:        0        0        0        0        0        0        0        0
61220000:        0        0        0        0        0        0        0        0
61220020:        0        0        0        0        0        0        0        0
61220040:        0        0        0        0        0        0        0        0
61220060:        0        0        0        0        0        0        0        0
61220080:        0        0 602833AC        0        0 602833AC        0        0
612200A0: 602833AC        0        0 602833AC        0        0 602833AC        0
612200C0:        0 602833AC        0        0 602833AC       68        0 602833AC
612200E0:        0        0        0        0        0        0        0 603F0E50
---- block1  ptr=61222AF0  is_malloc=0 ----
     ...
     ...
     ...

---- block95  ptr=66682064  is_malloc=0 ----

66682024:        0        0        0        0        0        0        0        0
66682044:        0        0        0        0        0        0        0        0
66682064:        0        0        0        0        0        0        0        0
66682084:        0        0        0        0        0        0        0        0
666820A4:        0        0        0        0        0        0        0        0
666820C4:        0        0        0        0        0        0        0        0
666820E4:        0        0        0        0        0        0        0        0
66682104:        0        0        0        0        0        0        0        0
66682124:        0        0        0        0        0        0        0        0
66682144:        0        0        0        0        0        0        0        0


========= End of Crashinfo Collection ================
```

# 相關資訊

- 路由器崩潰故障排除
- 技術支援與文件 - Cisco Systems

關於此翻譯

思科已使用電腦和人工技術翻譯本文件，讓全世界的使用者能夠以自己的語言理解支援內容。請注意，即使是最佳機器翻譯，也不如專業譯者翻譯的內容準確。Cisco Systems, Inc. 對這些翻譯的準確度概不負責，並建議一律查看原始英文文件（提供連結）。