CHAPTER 3

Performing File System Cleanups

This chapter describes the various file system cleanups performed on the Cisco ASR 1000 Series Aggregation Services Router.

This chapter includes the following sections:

Performing Core File and Trace File Cleanups

Core and trace files are automatically created and saved to the core and tracelogs directories on the harddisk: file system on all Cisco ASR 1000 Series Routers except the Cisco ASR 1001 Router, Cisco ASR 1002 Router and Cisco ASR 1002-F Router, which store core and trace files in the bootflash: file system.

Trace files are automatically created during normal operation of the router and are stored in the tracelogs directory. Normally, the router automatically purges the old tracelogs to provide space for new files.

In case of a process failure, core files may be generated in the core directory. If any core files are detected, contact Cisco TAC for assistance. Normally, the router will automatically purge the old core files to make space for new files.

The user has the option to delete unneeded core and tracelog files to make space for other content. However, such a removal may impact the debuggability of the system.

Note On an Cisco ASR 1001 Router equipped with the HDD IDC option, the ROMMON cannot see the hard disk and therefore the ROMMON has no access to the data stored on the HDD IDC. Though you can copy the Image to a harddisk on Cisco ASR 1001-HDD Router, you cannot boot from the hardisk. The ASR1001 HDD can be used for general storage but cannot be considered a complete filesystem (like bootflash or USB0:) and is only accessible when the box is running IOS. The true intent of the HDD is to support applications that require a harddisk. Therefore the HDD IDC on Cisco ASR 1001 Router should be used for application services such as call manager, etc.

To clean up the contents of the core and tracelogs directories, perform the following steps:

Step 1 Log in to the Cisco ASR 1000 Series Router using a Telnet or Secure Shell (SSH) connection.

Note The core and tracelogs directories can contain large volumes of output. Be sure to use a Telnet or SSH connection instead of the console port to avoid monopolizing the console port.

Step 2 Change to the core or tracelogs directory using the **cd** command.

```
Router# cd harddisk:/tracelogs
```

Step 3 Display the contents of the core or tracelogs directory using the **dir** command.

```
Router# dir
Directory of harddisk:/tracelogs/

753666  -rwx         164  Sep 14 2008 22:06:55 +01:00  inst_cleanup_R0-0.log.145
753667  -rwx         165  Sep 14 2008 21:01:41 +01:00  inst_cleanup_R0-0.log.221
753668  -rwx         165  Sep 14 2008 20:01:29 +01:00  inst_cleanup_R0-0.log.119
753669  -rwx         165  Sep 14 2008 20:06:30 +01:00  inst_cleanup_R0-0.log.110
753670  -rwx         165  Sep 14 2008 20:11:31 +01:00  inst_cleanup_R0-0.log.121
753671  -rwx         165  Sep 14 2008 20:16:32 +01:00  inst_cleanup_R0-0.log.132
753672  -rwx         165  Sep 14 2008 20:21:33 +01:00  inst_cleanup_R0-0.log.143
753673  -rwx         165  Sep 14 2008 20:26:34 +01:00  inst_cleanup_R0-0.log.154
753676  -rwx         165  Sep 14 2008 20:31:35 +01:00  inst_cleanup_R0-0.log.165
753677  -rwx         165  Sep 14 2008 20:36:36 +01:00  inst_cleanup_R0-0.log.176
753678  -rwx         165  Sep 14 2008 20:41:37 +01:00  inst_cleanup_R0-0.log.187
753679  -rwx         165  Sep 14 2008 20:46:38 +01:00  inst_cleanup_R0-0.log.198
753680  -rwx         165  Sep 14 2008 20:51:39 +01:00  inst_cleanup_R0-0.log.199
753681  -rwx         165  Sep 14 2008 20:56:40 +01:00  inst_cleanup_R0-0.log.200
753674  -rwx         165  Sep 14 2008 21:06:42 +01:00  inst_cleanup_R0-0.log.232
753675  -rwx         165  Sep 14 2008 21:11:43 +01:00  inst_cleanup_R0-0.log.233
753682  -rwx         165  Sep 14 2008 21:16:44 +01:00  inst_cleanup_R0-0.log.244
753683  -rwx         165  Sep 14 2008 21:21:45 +01:00  inst_cleanup_R0-0.log.255
753684  -rwx         165  Sep 14 2008 21:26:46 +01:00  inst_cleanup_R0-0.log.266

. . .

39313059840 bytes total (38428729344 bytes free)
```

Step 4 Remove files from the core or tracelogs directory using the **delete** command. Delete files based on their creation date; that is, delete older files first.

```
Router# delete inst_cleanup_R0-0*
```

Caution Core and trace files can be deleted; do not delete the core and tracelogs directories.

Step 5 Repeat Step 2 through Step 4 for all the core and tracelogs directories on the router as follows:

- For Cisco ASR 1006 Routers, perform the file cleanup on the harddisk: file system on both RPs.
- For Cisco ASR 1004 Routers, perform the file cleanup on the harddisk: file system on the single RP.
- For Cisco ASR 1002 Routers and Cisco ASR 1002-F Routers, perform the file cleanup on the bootflash: file system. (The harddisk: file system is not available.)

Performing Crashinfo File Cleanups

Crashinfo files are automatically created and saved to the bootflash: or harddisk: file systems on all Cisco ASR 1000 Series Routers. Delete unneeded crashinfo files at least once a week to maintain optimal router operation.

To delete crashinfo files, perform the following steps:

Step 1 Log in to the Cisco ASR 1000 Series Router using a Telnet or Secure Shell (SSH) connection.

Note Crashinfo files may generate large volumes of output. Be sure to use a Telnet or SSH connection instead of the console port to avoid monopolizing the console port.

Step 2 Change to the bootflash: or harddisk: directory using the **cd** command.

```
Router# cd harddisk:
```

Step 3 Display the contents of the directory using the **dir** command.

```
Router# dir
Directory of harddisk:/

   11  drwx       16384   Dec 4 2007 12:23:10 +00:00  lost+found
557057  drwx        4096   Aug 4 2008 23:10:46 +01:00  core
   12  -rw-           0   Dec 4 2007 12:24:35 +00:00  tracelogs.780
753665  drwx      167936  Sep 14 2008 22:27:00 +01:00  tracelogs
   13  -rw-      234250   Feb 1 2008 05:56:59 +00:00  crashinfo_SIP_01_00_20080C
   14  -rw-       46853  Apr 10 2008 00:50:12 +01:00  tech_support_ouput.tgz.tgz
   15  -rw-   225308932  Aug 13 2008 22:50:29 +01:00  2008-08-10_14.32.rp_supern
   16  -rw-   208904396  Aug 20 2008 21:20:33 +01:00  asr1000rp1-adventerprisekn

39313059840 bytes total (38428712960 bytes free)
```

Step 4 Delete crashinfo files using the **delete** command.

```
Router# delete crashinfo_SIP_01_00_20080C
```

Step 5 Repeat Step 2 through Step 4 for the other file system.
For Cisco ASR 1006 Routers, purge the crashinfo files on both RPs.

Performing Sub-Package File Cleanups

A consolidated package file can be stored in the bootflash: file system, on a USB Flash disk, or on any TFTP or other network server. Individual sub-package files and provisioning files must be stored in the bootflash: file system.

A sub-package file is no longer in use when it is no longer referenced by the booted or specified provisioning manager. Remove sub-package files and provisioning files that are no longer in use to maintain optimal router operation.

To delete sub-package files and provisioning files that are no longer in use, use the **request platform software package clean** command. This command checks to see which sub-package files and provisioning files are in use and deletes only those files that are *not* in use.

Example: Deleting All Unused Sub-Package Files and Provisioning Files From a Boot Directory

The following example shows how to delete all unused sub-package files and provisioning files from a boot directory:

```
Router# request platform software package clean
Cleaning up unnecessary package files
No path specified, will use booted path harddisk:packages.conf
Cleaning harddisk:
  Scanning boot directory for packages ... done.
  Preparing packages list to delete ...
    asr1000rp1-espbase.02.03.00.122-33.XNC.pkg
      File is in use, will not delete.
    asr1000rp1-rpaccess.02.03.00.122-33.XNC.pkg
      File is in use, will not delete.
    asr1000rp1-rpbase.02.03.00.122-33.XNC.pkg
      File is in use, will not delete.
    asr1000rp1-rpcontrol.02.03.00.122-33.XNC.pkg
      File is in use, will not delete.
    asr1000rp1-rpios-adventerprisek9.02.03.00.122-33.XNC.pkg
      File is in use, will not delete.
    asr1000rp1-sipbase.02.03.00.122-33.XNC.pkg
      File is in use, will not delete.
    asr1000rp1-sipspa.02.03.00.122-33.XNC.pkg
      File is in use, will not delete.
    packages.conf
      File is in use, will not delete.
  done.

Files that will be deleted:
  packages.con.00
  packages.conf.copy
  testing1,pkg
  testing1.pkg

Do you want to proceed? [confirm]y
  Deleting file harddisk:packages.con.00 ... done.
  Deleting file harddisk:packages.conf.copy ... done.
  Deleting file harddisk:testing1,pkg ... done.
  Deleting file harddisk:testing1.pkg ... done.
SUCCESS: Files deleted.
```

The following example shows all sub-package files and provisioning files in a boot directory. If they are in use, they cannot be deleted:

```
Router# request platform software package clean
Cleaning up unnecessary package files
No path specified, will use booted path harddisk:packages.conf
Cleaning harddisk:
  Scanning boot directory for packages ... done.
  Preparing packages list to delete ...
    asr1000rp1-espbase.02.03.00.122-33.XNC.pkg
      File is in use, will not delete.
    asr1000rp1-rpaccess.02.03.00.122-33.XNC.pkg
      File is in use, will not delete.
    asr1000rp1-rpbase.02.03.00.122-33.XNC.pkg
      File is in use, will not delete.
    asr1000rp1-rpcontrol.02.03.00.122-33.XNC.pkg
      File is in use, will not delete.
    asr1000rp1-rpios-adventerprisek9.02.03.00.122-33.XNC.pkg
      File is in use, will not delete.
    asr1000rp1-sipbase.02.03.00.122-33.XNC.pkg
      File is in use, will not delete.
    asr1000rp1-sipspa.02.03.00.122-33.XNC.pkg
```

```
      File is in use, will not delete.
    packages.conf
      File is in use, will not delete.
  done.

SUCCESS: No extra package or provisioning files found on media. Nothing to clean.
```

Example: Deleting a Specific Sub-Package File from a Boot Directory

The following example shows how to delete a specific sub-package file from a boot directory:

```
Router# request platform software package clean file harddisk:testing1.pkg
Cleaning up unnecessary package files
  Scanning boot directory for packages ... ^./testing1.pkg$ /harddisk/
done.
  Preparing packages list to delete ...
  done.

Files that will be deleted:
  testing1.pkg

Do you want to proceed? [confirm]y
  Deleting file harddisk:testing1.pkg ... done.
SUCCESS: Files deleted.
```

The following example shows that a specific sub-package file cannot be deleted if it is in use:

```
Router# request platform software package clean file harddisk:packages.conf
Cleaning up unnecessary package files
  Scanning boot directory for packages ... done.
  Preparing packages list to delete ...
    packages.conf
      File is in use, will not delete.
  done.

SUCCESS: No extra package or provisioning files found on media. Nothing to clean.
```

Example: Deleting a Duplicate Sub-Package File on Different Media

The following example shows how to delete a sub-package file that was copied and has the same name as the file that was used to boot, but the duplicate file is on different media:

```
Router# request platform software package clean file bootflash:packages.conf
Cleaning up unnecessary package files
  Scanning boot directory for packages ... done.
  Preparing packages list to delete ...
  done.

Files that will be deleted:
  packages.conf

Do you want to proceed? [confirm]y
  Deleting file bootflash:packages.conf ... done.
SUCCESS: Files deleted.
```

For More Information

For more information about the topics discussed in this chapter, see the following documents:

Topic	Document
Command descriptions	Cisco IOS Master Command List, All Releases Command Lookup Tool (Requires Cisco.com user ID and password)