

Managing Configuration Files in ROM Monitor

This chapter provides information about managing configuration files in the router.

- Information about Configuration Files, on page 1
- Specifying an Alternative Administration Configuration, on page 2
- Specifying an Alternative SDR Configuration, on page 8
- Specifying an Alternate Storage Location for Configuration Files, on page 14
- Additional References, on page 17

Information about Configuration Files

Cisco IOS XR software creates two types of configuration files—the administration configuration file and the default secure domain router (SDR) configuration files. These configuration files are stored in the following locations:

- There is only one administration configuration file, which is stored on the RSP and contains system-wide configurations for items such as SDR name and node inventory.
- There is only one SDR configuration file in Cisco ASR 9000 Series Router, which is stored on the RSP to specify the parameters for routing, interfaces, SDR usernames, and other SDR-specific configurations.

The Cisco ASR 9000 Series Router contains only one SDR (the default SDR). In Cisco IOS-XR software, SDRs are a means of dividing a single physical system into multiple logically separated routers. Cisco ASR 9000 Series Aggregation Services Routers are single-shelf routers that support only one SDR per shelf.

For more information on SDRs and admin plane configuration, see the *Configuring Secure Domain Routers* on Cisco IOS XR Software module of the System Management Configuration Guide for Cisco ASR 9000 Series Routers.

The following sections describe ways to manage the use of configuration files from ROM Monitor:



Caution

The default configuration should be sufficient for most situations. The options described in the following sections are for rare cases in which an alternative configuration is required. Use of these options can result in system errors or downtime. Consult Cisco technical support before using these options.

Specifying an Alternative Administration Configuration

The administration configuration stores system-wide configurations such as the SDR name and node inventory for the entire system. This is separate from the default-SDR configuration that stores routing and interface configurations.

 Λ

Caution

The default committed administration configuration should be sufficient for most situations. The option described in this section is for rare cases when an alternative admin configuration is required. Use of this method can result in system errors or downtime.

Specifying a Temporary Alternative Administrative Configuration with the -o Boot Option

This mode of administrative configuration with the **-o boot** option is temporary in nature. After this boot option is set, this mode allows the router to boot from this alternative configuration, and the configuration specified in this configuration file becomes part of the running and persistent configuration.



Note

When the router boots with the external configuration specified by the **-o** option, the system loses the default configuration. The default configuration is completely replaced with this alternative configuration.

To specify a temporary administration configuration file with the **-o boot** option, use the following procedure. With this method, the specified configuration file is used for a single router boot. If the RSP is reset again, the permanent configuration file is used.

SUMMARY STEPS

- 1. Place the RSP and the standby RSP in ROM Monitor mode.
- 2. confreg
- **3.** Enter boot type as 0.
- 4. reset
- 5. confreg
- **6.** Enter boot type as 2.
- **7**. set
- **8. boot** *image* **–o** *config-file-path*
- 9. confreg
- **10.** Enter boot type as 2.
- 11. reset

| | Command or Action | Purpose |
|--------|--|---------|
| Step 1 | Place the RSP and the standby RSP in ROM Monitor mode. | |

| | Command or Action | Purpose | |
|--------|--|---|--|
| Step 2 | <pre>confreg Example: rommon B1 > confreg Configuration Summary (Virtual Configuration Register: 0x1920) enabled are: console baud: 9600 boot: the ROM Monitor do you wish to change the configuration? y/n [n]: y enable "diagnostic mode"? y/n [n]: n change console baud rate? y/n [n]: n change the boot characteristics? y/n [n]: y enter boot type: 0 = ROM Monitor 2 = MBI Validation Boot Mode [0]: 0</pre> | Sets the configuration register of the standby RSP to ROM Monitor mode so that the standby RSP does not take control. Enter the confreg command at the ROM Monitor mode prompt to set the configuration register to ROM Monitor mode. You can also change the console baud rate, boot characteristics, boot type configuration settings, and enable diagnostic mode at the ROM Monitor mode. Note The configuration register is not an environment variable like TURBOBOOT. Do not enter an equal sign when entering the confreg command. | |
| Step 3 | Enter boot type as 0. Example: enter boot type: 0 = ROM Monitor 2 = MBI Validation Boot Mode [0]: 0 | Sets the boot type as 0 to enable ROM Monitor mode during the next system boot. | |
| Step 4 | reset Example: rommon B2> reset | Makes the configuration register settings for the standby RSP card effective. | |
| Step 5 | <pre>confreg Example: Configuration Summary (Virtual Configuration Register: 0x1920) enabled are: console baud: 9600 boot: the ROM Monitor do you wish to change the configuration? y/n [n]: y enable "diagnostic mode"? y/n [n]: n change console baud rate? y/n [n]: n change the boot characteristics? y/n [n]: y enter boot type: 0 = ROM Monitor 2 = MBI Validation Boot Mode [0]: 2</pre> | Sets the active RSP configuration register to EXEC mode. You can also change the console baud rate, boot characteristics, boot type configuration settings, and enable diagnostic mode at the ROM Monitor mode. | |
| Step 6 | Enter boot type as 2. Example: enter boot type: | Sets the boot type as 2 to enable MBI validation mode or the EXEC mode during the next system boot. | |

| | Command or Action | Purpose | | |
|---------|--|--|--|--|
| | 0 = ROM Monitor 2 = MBI Validation Boot Mode [0]: 2 | | | |
| Step 7 | set | Displays the current environment variable settings. | | |
| | Example: | Note The filename is set in the BOOT variable. | | |
| | rommon B2> set | | | |
| Step 8 | boot image -o config-file-path | Boots the router. Replace image with the filename listed | | |
| | Example: | in the boot variable, and replace configuration file nath and filename for the configuration file | | |
| | rommon B3> boot | Note The nother should be a valid UNIV | | |
| | <pre>tftp://223.255.254.254/images/comp-asr9k-mini.vm -o /disk1:/cfgarchives/admingold.conf</pre> | pathname (a slash [/] must be included after the device: "disk1:/"). | | |
| Step 9 | confreg | Sets the configuration register of the standby RSP to EXEC | | |
| | Example: | mode. You can also change the console baud rate, boot characteristics boot type configuration settings and enable. | | |
| | rommon B3> confreg | diagnostic mode at the ROM Monitor mode. | | |
| | <pre>Configuration Summary (Virtual Configuration Register: 0x1920) enabled are: console baud: 9600 boot: the ROM Monitor do you wish to change the configuration? y/n [n]: y enable "diagnostic mode"? y/n [n]: n change console baud rate? y/n [n]: n change the boot characteristics? y/n [n]: y enter boot type: 0 = ROM Monitor 2 = MBI Validation Boot Mode [0]: 2</pre> | | | |
| Step 10 | Enter boot type as 2. | Set the boot type as 2 for standy RSP to enable MBI | | |
| | Example: | validation mode or the EXEC mode during the next system boot. | | |
| | <pre>enter boot type: 0 = ROM Monitor 2 = MBI Validation Boot Mode [0]: 2</pre> | | | |
| Step 11 | reset | Resets the standby RSP so that the new setting can take | | |
| | Example: | effect and the standby RSP card becomes operational. | | |
| | rommon B5 >reset | | | |

Specifying a Permanent Alternative Administrative Configuration File with the IOX_ADMIN_CONFIG_FILE= Variable

This mode of alternative administrative configuration with the IOX_ADMIN_CONFIG_FILE= variable is permanent in nature. After this variable is set, this mode allows the router to always boot from this alternative configuration, and the system does not revert to the default committed configuration on the next system reload.



Note When the router boots with the external configuration specified by the IOX_ADMIN_CONFIG_FILE= variable, the system loses the default configuration. The default configuration is completely replaced with this alternative configuration.

To permanently change the location of the default administration configuration file, specify the filename and directory path in the IOX_ADMIN_CONFIG_FILE= environment variable while in ROM Monitor mode. Specifying the environment variable forces the use of the specified file for all boots while this variable is set.

SUMMARY STEPS

- 1. Place the RSP and the standby RSP in ROM Monitor mode.
- 2. confreg
- **3.** Enter the boot type as 0.
- 4. reset
- 5. confreg
- **6.** Enter the boot type as 2.
- **7**. set
- 8. IOX_ADMIN_CONFIG_FILE=drive:path/file
- 9. sync
- 10. boot
- 11. confreg
- **12.** Enter boot type as 2.
- 13. reset

| | Command or Action | Purpose |
|--------|---|---|
| Step 1 | Place the RSP and the standby RSP in ROM Monitor mode. | |
| Step 2 | <pre>confreg Example: rommon B1 > confreg Configuration Summary (Virtual Configuration Register: 0x1920) enabled are: console baud: 9600</pre> | Sets the configuration register of the standby RSP to ROM Monitor mode so that the standby RSP does not take control. Enter the confreg command at the ROM Monitor mode prompt to set the configuration register to ROM Monitor mode. You can also change the console baud rate, boot characteristics, boot type configuration settings, and enable diagnostic mode at the ROM Monitor mode. |

| | Command or Action | Purpose | |
|--------|--|---|--|
| | <pre>boot: the ROM Monitor do you wish to change the configuration? y/n [n]: y enable "diagnostic mode"? y/n [n]: n change console baud rate? y/n [n]: n change the boot characteristics? y/n [n]: y enter boot type: 0 = ROM Monitor 2 = MBI Validation Boot Mode [0]: 0</pre> | Note The configuration register is not an environment variable like TURBOBOOT. Do not enter an equal sign when entering the confreg command. | |
| Step 3 | Enter the boot type as 0. Example: <pre> enter boot type: 0 = ROM Monitor 2 = MBI Validation Boot Mode [0]: 0 </pre> | Sets the boot type as 0 to enable ROM Monitor mode during the next system boot. | |
| Step 4 | reset Example: rommon B3> reset | Makes the configuration register settings for the standby RSP card effective. | |
| Step 5 | <pre>confreg Example: rommon B1 > confreg Configuration Summary (Virtual Configuration Register: 0x1920) enabled are: console baud: 9600 boot: the ROM Monitor do you wish to change the configuration? y/n [n]: y enable "diagnostic mode"? y/n [n]: n change console baud rate? y/n [n]: n change the boot characteristics? y/n [n]: y enter boot type: 0 = ROM Monitor 2 = MBI Validation Boot Mode [0]: 2</pre> | Sets the active RSP configuration register to EXEC mode. You can also change the console baud rate, boot characteristics, boot type configuration settings and enable diagnostic mode at the ROM Monitor mode. | |
| Step 6 | Enter the boot type as 2. Example: <pre> enter boot type: 0 = ROM Monitor 2 = MBI Validation Boot Mode [0]: 2 </pre> | Sets the boot type as 2 for the active RSP to enable MBI validation mode or the EXEC mode during the next system boot. | |
| Step 7 | set Example: | Displays the current environment variable settings. Note The filename is set in the IOX_ADMIN_CONFIG_FILE variable. | |

| | Command or Action | Purpose | |
|---------|--|---|--|
| | rommon B2> set | | |
| Step 8 | IOX_ADMIN_CONFIG_FILE=drive:path/file Example: | Sets the IOX_ADMIN_CONFIG_FILE variable to specify the absolute path of a different admin configuration file. Note The IOX ADMIN CONFIG FILE variable is | |
| | <pre>rommon B3> IOX_ADMIN_CONFIG_FILE=/disk2:/cfgarchives/ admingold.conf</pre> | overridden by the boot command when it is entered with the -o option. | |
| Step 9 | sync | Saves the changes. | |
| | Example: | | |
| | rommon B4> sync | | |
| Step 10 | boot | Boots the router. | |
| | Example: | | |
| | rommon B5> boot | | |
| Step 11 | confreg | Sets the configuration register of the standby RSP to EXEC | |
| | Example: | characteristics, boot type configuration settings and enable | |
| | rommon B2 > confreg | diagnostic mode at the ROM Monitor mode. | |
| | Configuration Summary (Virtual Configuration Register: 0x1920) enabled are: console baud: 9600 boot: the ROM Monitor do you wish to change the configuration? y/n [n]: y enable "diagnostic mode"? y/n [n]: n change console baud rate? y/n [n]: n change the boot characteristics? y/n [n]: y enter boot type: 0 = ROM Monitor 2 = MBI Validation Boot Mode [0]: 2 | | |
| Step 12 | Enter boot type as 2. | Sets the boot type as 2 for the standy RSP to enable MBI validation mode or the EXEC mode during the next system | |
| | Example: | boot. | |
| | <pre>enter boot type: 0 = ROM Monitor 2 = MBI Validation Boot Mode [0]: 2</pre> | | |
| Step 13 | reset | Resets the standby RSP so that the new setting takes effect and the standby RSP becomes operational | |
| | Example: | | |
| | rommon B2 > reset | | |

Specifying an Alternative SDR Configuration

You can specify an alternative configuration for the default-SDR from ROM Monitor mode, using the methods described in the following sections. These procedures are run from the RSP card for the default-SDR.



Note

For more information on SDR, see the *Configuring Secure Domain Routers on Cisco IOS XR Software* module of *System Management Configuration Guide for Cisco ASR 9000 Series Routers*.



The default committed SDR configuration should be sufficient for most situations. The option described in this section is for rare cases when an alternative SDR configuration is required. Use of this method can result in system errors or downtime.

Specifying a Temporary SDR Configuration File with the -a Boot Option

This mode of SDR configuration with the **-a** boot option is temporary in nature. Once this boot option is set, this mode allows the router to boot from this alternative configuration and the configuration specified in this configuration file becomes part of the running and persistent configuration.

Note

When the router boots with the external configuration specified by the **-a** option, the system loses the default configuration. The default configuration is completely replaced with this alternative configuration.

To specify a temporary SDR configuration file with the -a boot option, use the following procedure. With this method, the specified configuration file is used for a single router boot. If the DSC is reset again, the permanent configuration file is used.

SUMMARY STEPS

- 1. Place the RSP and the standby RSP in ROM Monitor mode.
- 2. confreg
- **3.** Enter boot type as 0.
- 4. reset
- 5. confreg
- **6**. Enter boot type as 2.
- **7**. set
- **8. boot** *image* –**a** *config-file-path*
- 9. confreg
- **10.** Enter boot type as 2.
- 11. reset

DETAILED STEPS

| | Command or Action | Purpose |
|--------|--|---|
| Step 1 | Place the RSP and the standby RSP in ROM Monitor mode. | |
| Step 2 | confreg | Sets the configuration register of the standby RSP to ROM |
| | <pre>Example: rommon B1 > confreg Configuration Summary (Virtual Configuration Register: 0x1920) enabled are: console baud: 9600 boot: the ROM Monitor do you wish to change the configuration? y/n [n]: y enable "diagnostic mode"? y/n [n]: n change console baud rate? y/n [n]: n change the boot characteristics? y/n [n]: y enter boot type: 0 = ROM Monitor 2 = MBI Validation Boot Mode [0]: 0</pre> | Monitor mode so that the standby RSP does not take control. Enter the confreg command at the ROM Monitor mode prompt to set the configuration register to ROM Monitor mode. You can also change the console baud rate, boot characteristics, boot type configuration settings and enable diagnostic mode at the ROM Monitor mode. Note The configuration register is not an environment variable like TURBOBOOT. Do not enter an equal sign when entering the confreg command. |
| Step 3 | Enter boot type as 0. Example: <pre> enter boot type: 0 = ROM Monitor 2 = MBI Validation Boot Mode [0]: 0 </pre> | Sets the boot type as 0 to enable ROM Monitor mode during the next system boot. |
| Step 4 | <pre>reset Example: rommon B2> reset</pre> | Makes the configuration register settings for the standby RSP card effective. |
| Step 5 | confreg | Sets the active RSP configuration register to EXEC mode. |
| | Example: rommon B1 > confreg | You can also change the console baud rate, boot characteristics, boot type configuration settings, and enable diagnostic mode at the ROM Monitor mode. |
| | Configuration Summary (Virtual Configuration Register: 0x1920) enabled are: console baud: 9600 boot: the ROM Monitor do you wish to change the configuration? y/n [n]: y enable "diagnostic mode"? y/n [n]: n change console baud rate? y/n [n]: n change the boot characteristics? y/n [n]: y enter boot type: 0 = ROM Monitor | |

| | Command or Action | Purpose |
|---------|---|--|
| | 2 = MBI Validation Boot Mode [0]: 2 | |
| Step 6 | Enter boot type as 2. Example: <pre> enter boot type: 0 = ROM Monitor 2 = MBI Validation Boot Mode [0]: 2 </pre> | Sets the boot type as 2 to enable MBI validation mode or the EXEC mode during the next system boot. |
| Step 7 | set Example: | Displays the current environment variable settings.NoteThe filename is set in the BOOT variable. |
| | rommon B2> set | |
| Step 8 | boot image –a config-file-path Example: | Boots the router. Replace <i>image</i> with the filename listed in the boot variable, and replace <i>config-file-path</i> with the path and filename for the configuration file. |
| | <pre>rommon B3> boot tftp://223.255.254.254/images/comp-asr9k-mini.vm -a /disk1:/cfgarchives/SDRgold.conf</pre> | The pathname should be a valid UNIX pathname (a slash [/] must be included after the device: "disk1:/"). |
| Step 9 | <pre>confreg Example: rommon B3> confreg Configuration Summary (Virtual Configuration Register: 0x1920) enabled are: console baud: 9600 boot: the ROM Monitor do you wish to change the configuration? y/n [n]: y enable "diagnostic mode"? y/n [n]: n change console baud rate? y/n [n]: n change the boot characteristics? y/n [n]: y enter boot type: 0 = ROM Monitor 2 = MBI Validation Boot Mode [0]: 2</pre> | Sets the configuration register of the standby RSP to EXEC mode. You can also change the console baud rate, boot characteristics, boot type configuration settings, and enable diagnostic mode at the ROM Monitor mode. |
| Step 10 | Enter boot type as 2. Example: <pre> enter boot type: 0 = ROM Monitor 2 = MBI Validation Boot Mode [0]: 2 </pre> | Sets the boot type as 2 for standy RSP to enable MBI validation mode or the EXEC mode during the next system boot. |
| Step 11 | reset Example: | Resets the standby RSP card so that the new setting can take effect and the standby RSP card becomes operational. |

| Command or Action | Purpose |
|-----------------------|---------|
| rommon B5 > reset | |

Specifying a Permanent SDR Configuration File with the IOX_CONFIG_FILE= Variable

This mode of alternative SDR configuration with the IOX_CONFIG_FILE= variable is permanent in nature. Once this variable is set, this mode allows the router to always boot from this alternative configuration. The system does not revert to the default committed configuration on the next system reload.



Note When the router boots with the external configuration specified by the IOX_CONFIG_FILE= variable, the system loses the default configuration. The default configuration is completely replaced with this alternative configuration.

To permanently change the location of the default configuration file for an SDR, specify the filename and directory path in the IOX_CONFIG_FILE= environment variable while in ROM Monitor mode. Specifying the environment variable forces the use of the specified file for all boots while this variable is set.

SUMMARY STEPS

- 1. Place the RSP and the standby RSP in ROM Monitor mode.
- **2**. confreg
- **3.** Enter the boot type as 0.
- 4. reset
- 5. confreg
- **6.** Enter the boot type as 2.
- **7**. set
- 8. IOX_CONFIG_FILE=drive:path/file
- 9. sync
- 10. boot
- **11**. confreg
- **12.** Enter boot type as 2.
- 13. reset

| | Command or Action | Purpose |
|--------|--|--|
| Step 1 | Place the RSP and the standby RSP in ROM Monitor mode. | |
| Step 2 | confreg | Sets the configuration register of the standby RSP to ROM |
| - | Example: | Monitor mode so that the standby RSP does not take control. Enter the confreg command at the ROM Monitor |
| | rommon B1 > confreg | mode prompt to set the configuration register to ROM Monitor mode. You can also change the console baud rate, |

| | Command or Action | Purpose | |
|--------|--|---|--|
| | Configuration Summary (Virtual Configuration Register: 0x1920) enabled are: console baud: 9600 boot: the ROM Monitor do you wish to change the configuration? y/n [n]: y enable "diagnostic mode"? y/n [n]: n change console baud rate? y/n [n]: n change the boot characteristics? y/n [n]: y enter boot type: 0 = ROM Monitor 2 = MBI Validation Boot Mode [0]: 0 | boot characteristics, boot type configuration settings, and enable diagnostic mode at the ROM Monitor mode. Note The configuration register is not an environment variable like TURBOBOOT. Do not enter an equal sign when entering the confreg command. | |
| Step 3 | Enter the boot type as 0. Example: enter boot type: 0 = ROM Monitor 2 = MBI Validation Boot Mode [0]: 0 | Sets the boot type as 0 to enable ROM Monitor mode during the next system boot. | |
| Step 4 | reset Example: rommon B3> reset | Makes the configuration register settings for the standby RSP card effective. | |
| Step 5 | <pre>confreg Example: rommon B1 > confreg Configuration Summary (Virtual Configuration Register: 0x1920) enabled are: console baud: 9600 boot: the ROM Monitor do you wish to change the configuration? y/n [n]: y enable "diagnostic mode"? y/n [n]: n change console baud rate? y/n [n]: n change the boot characteristics? y/n [n]: y enter boot type: 0 = ROM Monitor 2 = MBI Validation Boot Mode [0]: 2</pre> | Sets the active RSP configuration register to EXEC mode. You can also change the console baud rate, boot characteristics, boot type configuration settings and enable diagnostic mode at the ROM Monitor mode. | |
| Step 6 | Enter the boot type as 2. Example: <pre> enter boot type: 0 = ROM Monitor 2 = MBI Validation Boot Mode [0]: 2</pre> | Sets the boot type as 2 for the active RSP to enable MBI validation mode or the EXEC mode during the next system boot. | |

| | Command or Action | Purpose | |
|--|---|---|---|
| Step 7 | set | Displays the current environment variable settings. | |
| | Example: | Note | The filename is set in the IOX_CONFIG_FILE variable. |
| | rommon B3> set | | |
| Step 8 IOX_CONFIG_FILE=drive:path/file S | | Sets the IOX_CONFIG_FILE variable to specify the absolute path of a different SDR configuration file. | |
| | <pre>rommon B1> IOX_CONFIG_FILE=/disk2:/cfgarchives/ admingold.conf</pre> | Note | The IOX_CONFIG_FILE variable is overridden by the boot command when it is entered with the -a option. |
| Step 9 | sync | Saves the | e changes. |
| | Example: | | |
| | rommon B1> sync | | |
| Step 10 | boot | Boots the | e router. |
| | Example: | | |
| | rommon B1> boot | | |
| Step 11 | confreg | Sets the o | configuration register of the standby RSP to exec |
| | Example: | character | ristics, boot type configuration settings and enable |
| | rommon B2 > confreg | diagnost | ic mode at the ROM Monitor mode. |
| | Configuration Summary (Virtual Configuration Register: 0x1920) | | |
| | enabled are: | | |
| | boot: the ROM Monitor | | |
| | y | | |
| | change console baud rate? y/n [n]: n | | |
| | change the boot characteristics? y/n [n]: y enter boot type: | | |
| | 0 = ROM Monitor 2 = MBI Validation Boot Mode | | |
| | [0]: 2 | | |
| Step 12 | Enter boot type as 2. | Sets the | boot type as 2 for the standy RSP to enable MBI |
| | Example: | boot. | n mode of the EXEC mode during the next system |
| | <pre>enter boot type: 0 = ROM Monitor 2 = MBI Validation Boot Mode [0]: 2</pre> | | |

| | Command or Action | Purpose |
|---------|-------------------|---|
| Step 13 | reset | Resets the standby RSP so that the new setting takes effe |
| | Example: | and the standby RSP becomes operational. |
| | rommon B2 > reset | |

Specifying an Alternate Storage Location for Configuration Files

To change the default location where the configuration files for an SDR are saved (committed), specify the location and directory path in the IOX_CONFIG_MEDIUM= environment variable while in ROM Monitor mode. Specifying the environment variable forces the use of the specified location while this variable is set.

SUMMARY STEPS

- 1. Place the RSP and the standby RSP in ROM Monitor mode.
- 2. confreg
- **3.** Enter the boot type as 0.
- 4. reset
- 5. confreg
- **6.** Enter the boot type as 2.
- **7**. set
- 8. IOX_CONFIG_MEDIUM=location:/path
- 9. sync
- 10. boot
- **11.** confreg
- **12**. Enter boot type as 2.
- 13. reset

| | Command or Action | Purpose |
|--------|--|---|
| Step 1 | Place the RSP and the standby RSP in ROM Monitor mode. | |
| Step 2 | confreg Example: | Sets the configuration register of the standby RSP to R Monitor mode so that the standby RSP does not take control. Enter the confreg command at the ROM Mon |
| | <pre>rommon B1 > confreg Configuration Summary (Virtual Configuration Register: 0x1920)</pre> | mode prompt to set the configuration register to ROM Monitor mode. You can also change the console baud rate, boot characteristics, boot type configuration settings and enable diagnostic mode at the ROM Monitor mode. |
| | <pre>enabled are: console baud: 9600 boot: the ROM Monitor do you wish to change the configuration? y/n [n y enable "diagnostic mode"? y/n [n]: n change console baud rate? y/n [n]: n</pre> | The configuration register is not an environment variable like TURBOBOOT. Do not enter an equal sign when entering the confreg command. |

| | Command or Action | Purpose | |
|--------|--|--|--|
| | <pre>change the boot characteristics? y/n [n]: y enter boot type: 0 = ROM Monitor 2 = MBI Validation Boot Mode [0]: 0</pre> | | |
| Step 3 | Enter the boot type as 0. Example: | Sets the boot type as 0 to enable ROM Monitor mode during the next system boot. | |
| | <pre>enter boot type: 0 = ROM Monitor 2 = MBI Validation Boot Mode [0]: 0</pre> | | |
| Step 4 | reset | Makes the configuration register settings for the standby RSP card effective. | |
| | Example: | | |
| | rommon B3> reset | | |
| Step 5 | confreg | Sets the active RSP configuration register to EXEC mod | |
| | Example: | You can also change the console baud rate, boot characteristics, boot type configuration settings, and en | |
| | rommon B1 > confreg | diagnostic mode at the ROM Monitor mode. | |
| | <pre>Configuration Summary (Virtual Configuration Register: 0x1920) enabled are: console baud: 9600 boot: the ROM Monitor do you wish to change the configuration? y/n [n]: y enable "diagnostic mode"? y/n [n]: n change console baud rate? y/n [n]: n change the boot characteristics? y/n [n]: y enter boot type: 0 = ROM Monitor 2 = MBI Validation Boot Mode [0]: 2</pre> | | |
| Step 6 | Enter the boot type as 2. | Sets the boot type as 2 for the active RSP to enable MBI | |
| | Example: | boot. | |
| | <pre>enter boot type: 0 = ROM Monitor 2 = MBI Validation Boot Mode [0]: 2</pre> | | |
| Step 7 | set | Displays the current environment variable settings. | |
| | Example: | Note The filename is set in the IOX_CONFIG_MEDIUM variable. | |
| | | | |

| | Command or Action | Purpose | |
|---------|--|--|---|
| Step 8 | IOX_CONFIG_MEDIUM=location:/path Example: | Sets the different | IOX_CONFIG_MEDIUM variable to specify a location. |
| | rommon B1> IOX_CONFIG_FILE=/disk2:/cfgarchives/ admingold.conf | For the C with disk directory | Cisco ASR 9000 Series Router, replace <i>location</i> to or disk1. Replace <i>path</i> with the path to the r in which you want to store the configuration files. |
| | | Note | By default, the directory /disk0:/usr is available for storing alternative configurations and other user files. We recommend that you do not use a directory path starting with /disk0:/config because that path is used to store system files. |
| Step 9 | sync | Saves the | e changes. |
| | Example: | | |
| | rommon B1> sync | | |
| Step 10 | boot | Boots the | e router. |
| | Example: | | |
| | rommon B1> boot | | |
| Step 11 | confreg | Sets the configuration register of the standby RSP to | |
| | Example: | mode. You can also change the console baud rate characteristics, boot type configuration settings, an | ristics, boot type configuration settings, and enable |
| | rommon B2 > confreg | diagnost | ic mode at the ROM Monitor mode. |
| | Configuration Summary (Virtual Configuration Register: 0x1920) enabled are: console baud: 9600 boot: the ROM Monitor do you wish to change the configuration? y/n [n]: y enable "diagnostic mode"? y/n [n]: n change console baud rate? y/n [n]: n change the boot characteristics? y/n [n]: y enter boot type: 0 = ROM Monitor 2 = MBI Validation Boot Mode [0]: 2 | | |
| Step 12 | Enter boot type as 2. | Sets the validation | boot type as 2 for the standy RSP to enable MBI n mode or the EXEC mode during the next system |
| | Example: | boot. | in mode of the EALC mode during the next system |
| | <pre>enter boot type: 0 = ROM Monitor 2 = MBI Validation Boot Mode [0]: 2</pre> | | |

| | Command or Action | Purpose |
|-----------------------------|---|---|
| Step 13 | reset | Resets the standby RSP so that the new setting takes effect |
| Example: and the sta | nd the standby RSP becomes operational. | |
| | rommon B2 > reset | |

Additional References

The following sections provide references related to the ROM Monitor.

Related Documents

| Related Topic | Document Title |
|------------------------------------|---|
| SDRs and admin plane configuration | Configuring Secure Domain Routers on Cisco IOS XR Software module of System Management Configuration Guide for Cisco ASR 9000 Series Routers |

Technical Assistance

| Description | Link |
|---|------------------------------|
| The Cisco Support website provides extensive online resources, including documentation and tools for troubleshooting and resolving technical issues with Cisco products and technologies. | http://www.cisco.com/support |
| To receive security and technical information about your products, you can subscribe to various services, such as the Product Alert Tool (accessed from Field Notices), the Cisco Technical Services Newsletter, and Really Simple Syndication (RSS) Feeds. | |
| Access to most tools on the Cisco Support website requires a Cisco.com user ID and password. | |