VRP Operating System Image Management

Foreword

Effective network administration and management within an enterprise network relies on all devices maintaining backup files in the event of system failures or other events that may result in loss of important systems files and data. Remote servers that use the file transfer protocol (FTP) service are often used to ensure files are maintained for backup and retrieval purposes as and when needed. The means for establishing communication with such application services is introduced in this section.
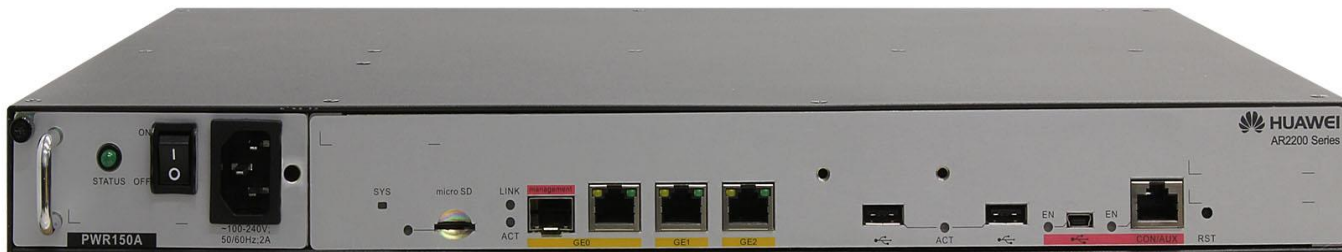
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Objectives

Upon completion of this section, trainees will be able to:

- Explain the importance of maintaining up-to-date versions of VRP.

- Establish a client relationship with an FTP server.

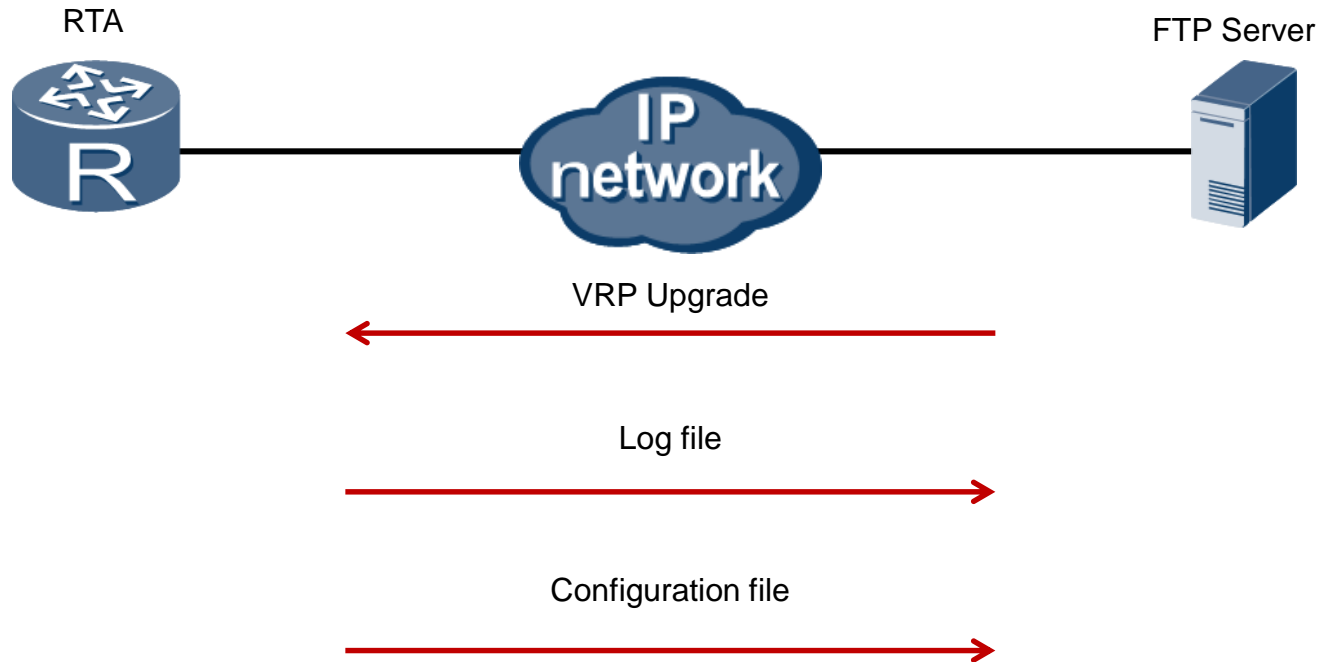- Successfully upgrade a VRP system image.

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Upgrading the VRP Image

VRP Version 5.160
Product V200R007C00

VRP Version 5.90
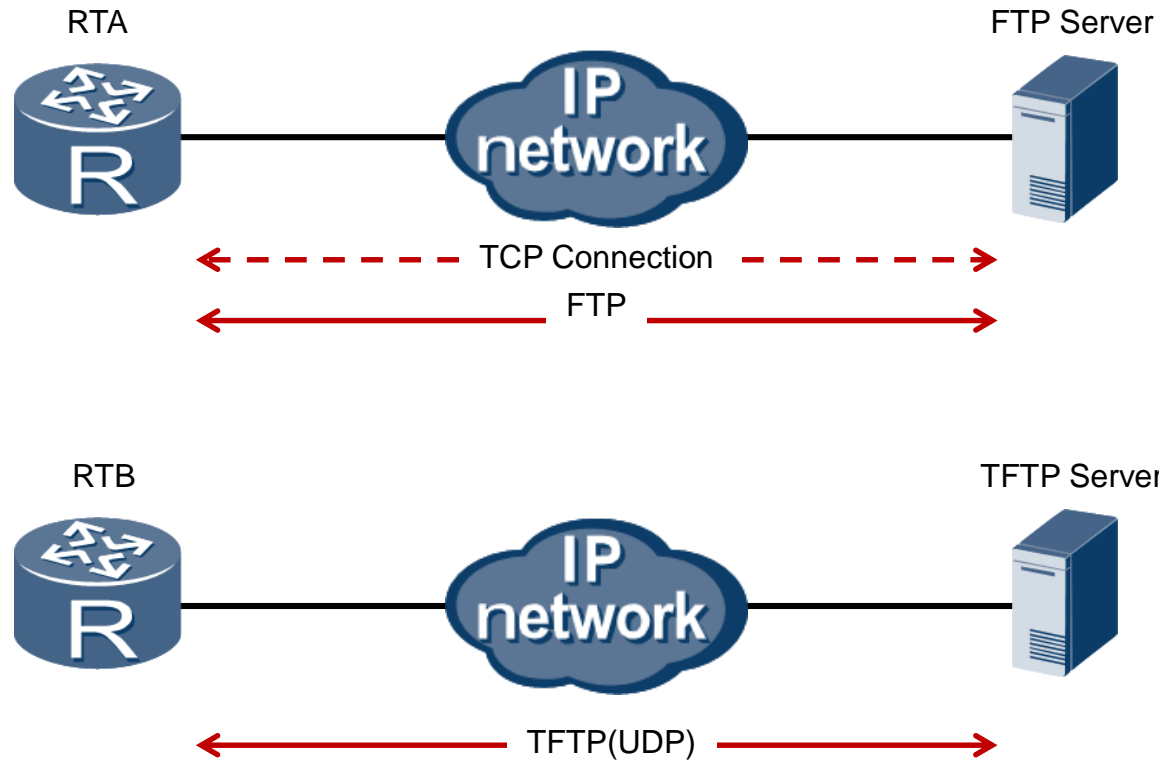**Product V200R001C00**

● New version upgrades may sometimes be required to support new features and updates to the versatile routing platform (VRP).

File Transfer

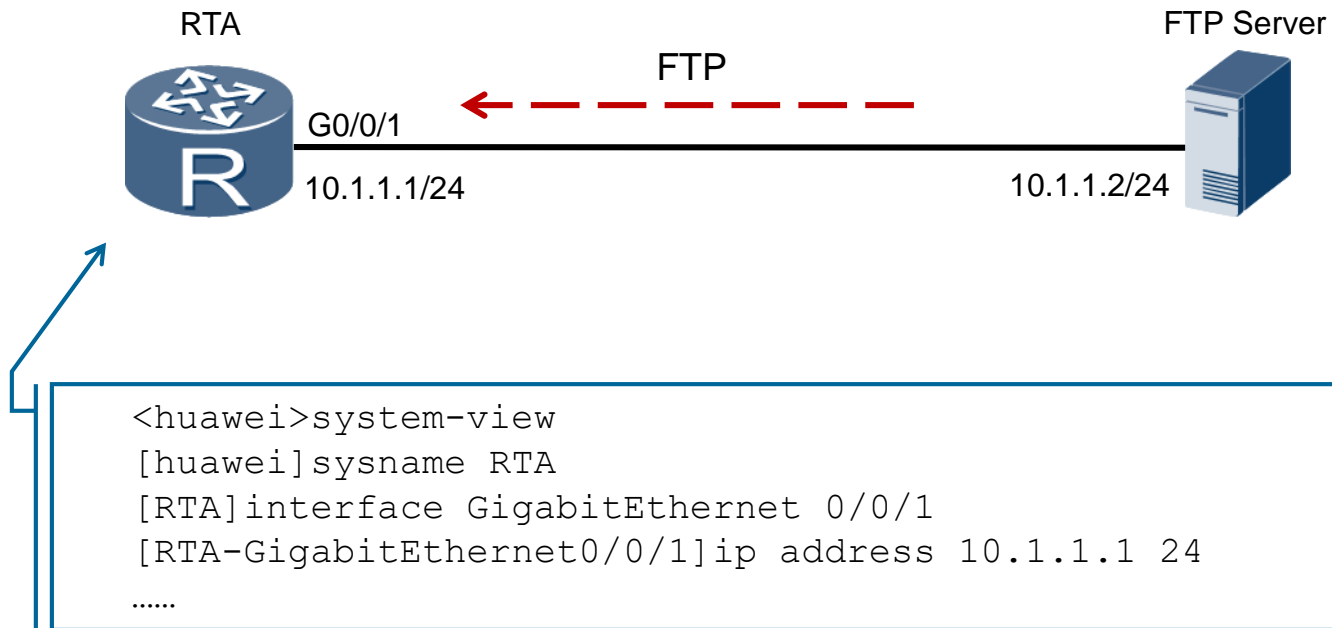- File transfer may be used to retrieve VRP image files, as well as backup log and configuration files.

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File Transfer Methods
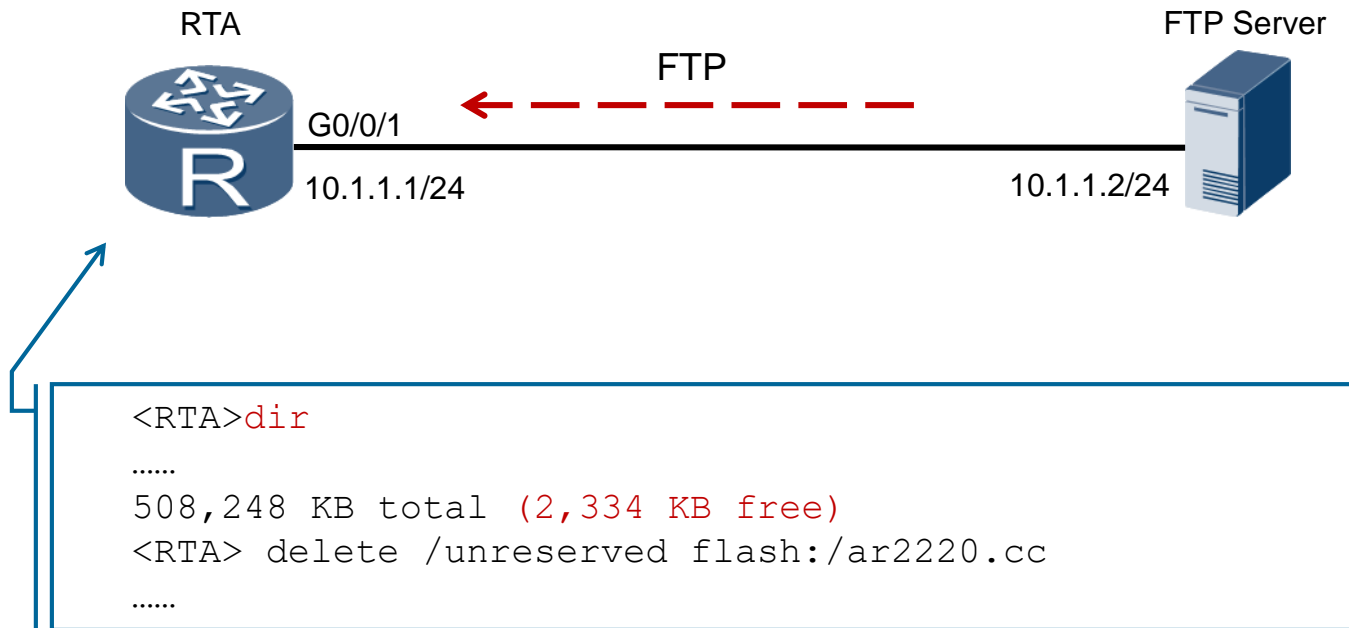

- Common forms of file transfer include FTP and TFTP, that respectively vary in the transport layer protocols used.
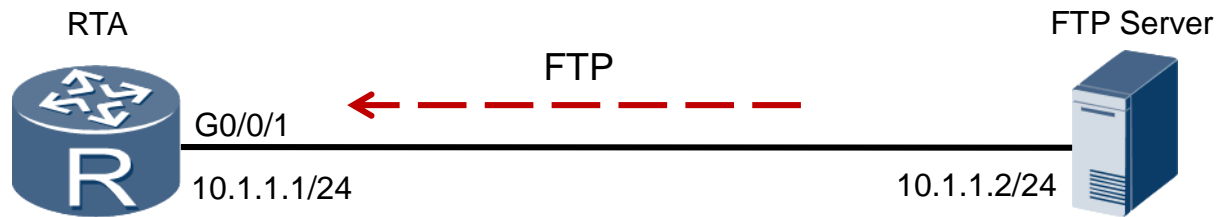
VRP Upgrade Process

RTA

FTP Server

FTP

G0/0/1

10.1.1.1/24

10.1.1.2/24

```
<huawei>system-view
[huawei]sysname RTA
[RTA]interface GigabitEthernet 0/0/1
[RTA-GigabitEthernet0/0/1]ip address 10.1.1.1 24
……
```

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Storage Space Availability

RTA   FTP Server

G0/0/1   FTP
10.1.1.1/24   10.1.1.2/24

```
<RTA>dir
……
508,248 KB total (2,334 KB free)
<RTA> delete /unreserved flash:/ar2220.cc
……
```

● Where the storage capacity is inadequate for image transfer, older images and files can be removed.

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Retrieving Files from an FTP Server

RTA   FTP Server

                                    FTP
                        ← ─ ─ ─ ─ ─ ─ ─ ─ ─

G0/0/1
10.1.1.1/24   10.1.1.2/24

```
<RTA>ftp 10.1.1.2

Trying 10.1.1.2 ...

Press CTRL+K to abort

Connected to 10.1.1.2.

220 FTP service ready.

User(10.1.1.2:(none)):huawei

331 Password required for huawei.

Enter password:

230 User logged in.

[ftp]get vrp.cc
```
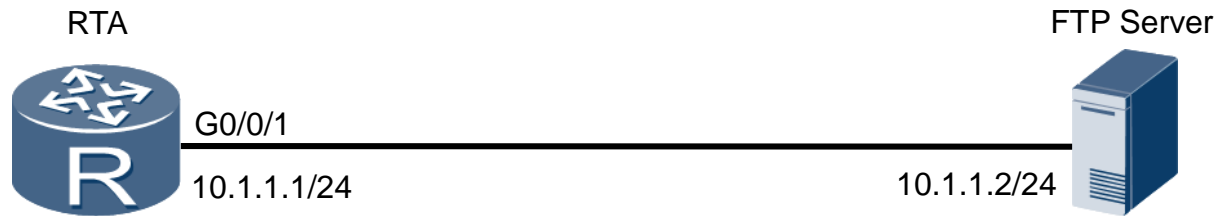
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Retrieving Files from a TFTP Server

RTA   TFTP Server

TFTP

G0/0/1

10.1.1.1/24   10.1.1.2/24
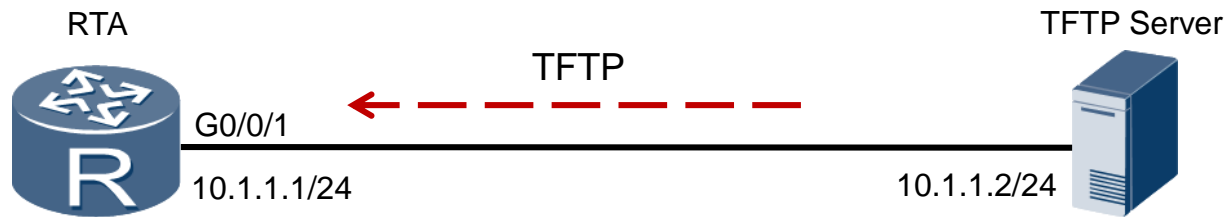
```
<RTA>tftp 10.1.1.2 get AR2220E-V200R007C00SPC600.cc
```

● A single command including the destination IP address is used to retrieve files from a TFTP server.

VRP Boot Management Process

RTA

FTP Server

G0/0/1

10.1.1.1/24

10.1.1.2/24

```
<RTA>startup system-software vrp.cc
Info: Succeeded in setting the software for booting system
<RTA>display startup
MainBoard:
  Configured startup system software:      flash:/ar2220.cc
  Startup system software:                 flash:/ar2220.cc
  Next startup system software:            vrp.cc
  Startup saved-configuration file:        NULL
  Next startup saved-configuration file:   NULL
  ……
```

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Applying the Changes

RTA

G0/0/1
10.1.1.1/24

FTP Server

10.1.1.2/24
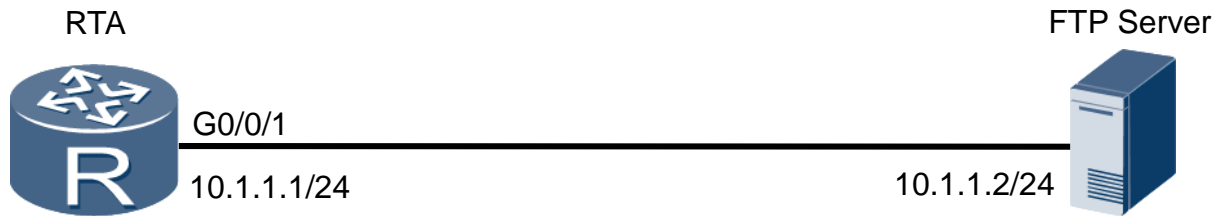
```
<RTA>reboot
Info: The system is now comparing the configuration, please
wait.
Warning: All the configuration will be saved to the
configuration file for the next startup, Continue?[Y/N]:n
System will reboot! Continue?[Y/N]:y
```

● The system must be restarted before the new image can take effect.

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Summary

- What should be configured on the client in order to establish a connection with an FTP server?

- How can a user confirm that changes to the startup software have taken effect after a reboot of the device?

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Thank you

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