



Implementing Host Services and Applications

Cisco IOS XR software Host Services and Applications features on the router are used primarily for checking network connectivity and the route a packet follows to reach a destination, mapping a hostname to an IP address or an IP address to a hostname, and transferring files between routers and UNIX workstations.

Prerequisites for implementing Host Services and Applications

Ensure to install the relevant optional RPM package before using the host services or applications.

- [HTTP Client Application, on page 1](#)
- [TCP Overview, on page 2](#)

HTTP Client Application

HTTP Client allows files to be transferred from http server to another device over a network using HTTP protocol. You can configure http client and various parameters associated with it by using the **http client** command.

Configure HTTP Client

HTTP Client application is available by default. You can configure http client settings or view and modify the existing settings. To configure the settings, use the **http client** command in XR config mode.

```
Router #configure
Router(config)#http client ?
connection          Configure HTTP Client connection
response            How long HTTP Client waits for a response from the server
                    for a request message before giving up
secure-verify-host  Verify that if server certificate is for the server it is known as
secure-verify-peer  Verify authenticity of the peer's certificate
source-interface    Specify interface for source address
ssl                 SSL configuration to be used for HTTPS requests
tcp-window-scale    Set tcp window-scale factor for High Latency links
version             HTTP Version to be used in HTTP requests
vrf                 Name of vrf
```

Table 1: Commands used to configure HTTP Client settings

Features	Description
connection	Configure HTTP Client connection by using either retry or timeout options.

Features	Description
response	How long HTTP Client waits for a response from the server for a request message before giving up.
secure-verify-host	Verify host in peer's certificate. To disable verifying this, you can use the command http client secure-verify-host disable
secure-verify-peer	Verify authenticity of the peer's certificate.
source-interface	Specifies the interface for source address for all outgoing HTTP connections. You can enter either an ipv4 or ipv6 address or both.
ssl version	SSL version (configuration) to be used for HTTPS requests.
tcp-window-scale scale	Set tcp window-scale factor for high latency links.
version version	HTTP version to be used in HTTP requests. <ul style="list-style-type: none"> • 1.0 - HTTP1.0 will be used for all HTTP requests. • 1.1 - HTTP1.1 will be used for all HTTP requests. • default libcurl - will use HTTP version automatically.
vrf name	Name of vrf.

Examples

Example 1: This example shows how to set the tcp window-scale to 8.

```
Router(config)#http client tcp-window-scale 8
```

Example 2: This example shows how to set the HTTP version to 1.0.

```
Router(config)#http client version 1.0
```



Note HTTP Client uses libcurl version 7.30

TCP Overview

TCP is a connection-oriented protocol that specifies the format of data and acknowledgments that two computer systems exchange to transfer data. TCP also specifies the procedures the computers use to ensure that the data arrives correctly. TCP allows multiple applications on a system to communicate concurrently, because it handles all demultiplexing of the incoming traffic among the application programs.