How to transfer a file over network

Contents

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Stable: 16.01.2020 - 14:51 / Revision: 16.01.2020 - 14:49

A quality version of this page, accepted on *16 January 2020*, was based off this revision.

Contents

1 Article purpose

The article aims to give some information useful to start with the ***scp*** Linux command.

2 Introduction

The *scp*[1] copies files between hosts on a network. It uses *ssh*[2] (remote login program) for data transfer, uses the same authentication and provides the same security as *ssh*.

This article focuses on the file transfer between a host PC and a STMicroelectronics board over a network connection.

3 Installation on your target

The *scp* is installed on the STMicroelectronics images via the package **openssh**.

4 Installation on your PC

The package **openssh-client** must be installed on your host PC to perform a file transfer over network with the *scp*.

On Ubuntu:

```
PC $> sudo apt-get install openssh-client
```

5 Getting started

- Your host PC and your board are connected to your local network through
  - the STM32MP157C-EV1 Evaluation board CN3 Ethernet connector
  - the STM32MP157X-DKX Discovery kit CN8 Ethernet connector
- The board IP address (*<board ip address>*) has been retrieved thanks to the *ip* Linux command line
- **Upload a file** (*<host file path>/<example.txt>*) **from your host PC to your board:**

```
PC $> scp <host file path>/<example.txt> root@<board ip address>:/<board file path>/
```

```
Example (assuming that <board ip address> is a.b.c.d):
 Copy the example.txt host PC file in the /home/root/ board directory
 PC $> echo "scp example: from host PC to board" > ./example.txt
 PC $> scp ./example.txt root@a.b.c.d:/home/root

 Check the result on the board
 Board $> cat /home/root/example.txt
 scp example
```

- Download a file (*/<board file path>/<example.txt>*) from your board to your host PC:

```
PC $> scp root@<board ip address>:/<board file path>/<example.txt> <host file path>/
```

```
Example (assuming that <board ip address> is a.b.c.d):
 Copy the example.txt board file in the current directory of the host PC
 Board $> echo "scp example: from board to host PC" > /home/root/example.txt
 PC $> scp root@a.b.c.d:/home/root/example.txt ./

 Check the result on the host PC
 Board $> cat ./example.txt
 scp example: from board to host PC
```

6 References

- scp - Linux man page
- ssh - Linux man page

How to transfer a file over network

Stable: 09.10.2019 - 15:29 / Revision: 04.09.2019 - 07:41

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```

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- ssh - Linux man page