

**TCP/IP**  
**FTP**

**Remote Copy**  
**(RMTCPY)**  
**for**  
**OS/2**

**Users**  
**Guide**  
**Version 1.0.1**

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## Component Pricing

### RMTCPY Commercial Version

- Documentation
- RMTCPY.exe
- \$99 (US) per copy

### RMTCPY Commercial Version + Source

- Documentation
- RMTCPY.exe
- Source Code
- \$295 (US)

### RMTCPY Commercial Version Site and Corporate License

- Documentation
- RMTCPY.exe
- Source Code
- \$ Negotiable

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## Abstract

Remote copy "RMTCOPY" is being initially designed and developed for the OS/2 platform. RMTCOPY will be ported to the DOS, VAX, and MVS platforms shortly. Customer input will dictate the next platform for development. Please submit your requirements and wishes to Real Estate Solutions via the IBMOS2 TCP/IP forum on Compuserv.

## Description of Remote Copy

Remote copy is a TCP/IP Application that utilizes the application programmer interface within TCP/IP to allow FTP like commands to be entered from a command shell. Remote copy is based on one command "RMTCOPY" and has several verbs that control its processing. Remote copy has the capability to transfer any file from any remote host in either binary or converted format. Other features include a proxy command which allows a person to initiate a file transfer from one host to another from a third party command shell without passing the data through the third party. Directory which allow the user to obtain information about a remote file. Delete which allows the user to delete a file on the remote host. Remote copy will always terminate with a return code. This return code may be used to determine the success of processing a request. The return code is always returned via text to the command shell but may also be used in a REXX exec to control processing.

## Requirements

The current version of Remote copy requires IBM OS2 1.3 or greater, and TCP/IP Version 1.2.1, or greater running on the Local Host<sup>1</sup> workstation. The Remote Host<sup>2</sup> requires a version of TCP/IP that supports a FTP server requests. To use the proxy command the remote host server must be enabled for third party requests.

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<sup>1</sup>Host workstation refers to the workstation that is initiating the Remote Copy commands.

<sup>2</sup>Remote workstation refers to the workstation that is receiving the Remote Copy commands.

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## Command Verbs

Commands are kept to a minimum to avoid unneeded complexity. There are basically three types of operations within Remote Copy:

### GET

Get will retrieve a file from the remote host and store the file on the Local workstation. The user has the options of specifying the Local file name and transfer type. Transfer type include Binary and ASCII.

### PUT

Put will send a file to the remote host . The user has the options of specifying the remote file name and transfer type. Transfer type include Binary and ASCII.

### Directory

Directory allows the user to obtain information about a file or pattern from the remote host. The pattern supports the "\*" and "?" wild card characters.

### Delete

Delete allows the user to a file on a remote host. If the file does not exist on the host a non zero return code is returned to the user.

### Proxy (Not yet Implemented)

Proxy allows the user to initiate a file transfer from a third party command shell. The third party has no other obligation to the request but to initiate it. The data does not transfer through the third party station. This would be most beneficial used on a scheduling machine. The power of this command allows a central location to control data transfers for an application or beyond.





## Definitions

### RMTCPY

Command name. This is the name of the executable file.

### RemHost1

Remote Host name 1. Host name alias is supported through the `..\etc\hosts` file or the host name may be specified as the full type "A" address. This host in the case of a PROXY request is the target host.

### RemHost2

Remote Host name 2. Host name alias is supported through the `..\etc\hosts` file or the host name may be specified as the full type "A" address. This host in the case of a PROXY request is the source host.

### RemUserid1

Remote userid 1. This is the user id that is requesting the service. If the host is an MVS host, the user id and password must match the ones specified in your security system if you have enabled TCP/IP to use your security system. If the host is not an MVS host the user id must be defined to the TCP/IP system. This can be done through the use of trusers file in `..\etc\trusers`. This userid in the case of a PROXY request is associated with `remhost1`.

### RemUserid2

Remote userid 2. This is the user id that is requesting the service. If the host is an MVS host, the user id and password must match the ones specified in your security system if you have enabled TCP/IP to use your security system. If the host is not an MVS host the user id must be defined to the TCP/IP system. This can be done through the use of trusers

file in ..\etc\trusers. This userid in the case of a PROXY request is associated with remhost2.

## RemPassword1

Remote password 1. This is the password of the user id that is requesting the service. If the host is an MVS host, the user id and password must match the ones specified in your security system if you have enabled TCP/IP to use your security system. If the host is not an MVS host the user id password must be defined to the TCP/IP system. This can be done through the use of trusers file in ..\etc\trusers. This password in the case of a PROXY request is associated with remuserid 1.

## RemPassword2

Remote password 2. This is the password of the user id that is requesting the service. If the host is an MVS host, the user id and password must match the ones specified in your security system if you have enabled TCP/IP to use your security system. If the host is not an MVS host the user id password must be defined to the TCP/IP system. This can be done through the use of trusers file in ..\etc\trusers. This password in the case of a PROXY request is associated with remuserid 2.

## LocalFile

Local file name. This is the file name on the local disk. In the case of a GET operation this is the target file name. In the case of a PUT operation it is the source file name.

## RemFile

Remote file name. This is the file name on the remote disk. In the case of a GET operation this is the source file name. In the case of a PUT operation it is the target file name.

---

## Xfertype

This is the type of transfer to be performed, the two options are /b and /a. The /b option is a binary transfer request and the /a options is an ASCII request. There is no translation that takes place with the /b option.

## Syntax

### GET

RMTCPY GET RemHost1 RemUserid1 RemPassword1 LocalFile RemFile Xfertype

This command will log the remuserid 1 into the remhost1 and initiate a file transfer from remhost1 to the local host transmitting the remfile to the localfile with xfer conversion.

### PUT

RMTCPY PUT RemHost1 RemUserid1 RemPassword1 LocalFile RemFile Xfertype

This command will log the remuserid 1 into the remhost1 and initiate a file transfer from the local host to the remhost transmitting the localfile to the remfile with xfer conversion.

### Directory

RMTCPY DIR RemHost1 RemUserid1 RemPassword1 LocalFile (RemFile or Pattern)

This command will log the remuserid 1 into the remhost1 and return a directory listing for the file or pattern specified.

### Delete

RMTCPY DELETE RemHost1 RemUserid1 RemPassword1 RemFile

This command will log the remuserid 1 into the remhost1 and delete the file from the remote host.

### Proxy (Not yet Implemented)

RMTCPY PROXY RemHost1 RemUserid1 RemPassword1 +  
RemHost2 RemUserid2 RemPassword2 +  
LocalFile RemFile Xfertype

This command will log the remuserid 1 into the remhost1 and remuserid 2 into remhost2 and initiate a file transfer from remhost2 to remhost1 the remfile to localfile with xfer conversion.

## Examples

### GET

```
RMTCOPY GET RES Dean Password c:\local.doc c:\remote.doc /a
```

This will transfer c:\config.sys on host RES to the local host into file c:\remote.doc.

### PUT

```
RMTCOPY PUT RES Dean Password c:\local.doc c:\config.sys /a
```

This will transfer c:\local.doc on the local host to host RES into file c:\remote.doc.

### Directory

```
RMTCOPY DIR RES Dean c:\local.doc c:\*.*
```

This will obtain a directory listing of c:\\*.\* on host RES .

### Delete

```
RMTCOPY DELETE RES Dean c:\remote.doc
```

This will delete c:\remote.doc on remote host RES.

### Proxy (Not yet Implemented)

```
RMTCOPY PROXY RemHost1 RemUserid1 RemPassword1 +  
RemHost2 RemUserid2 RemPassword2 +  
LocalFile RemFile Xfertype
```

This command will log the remuserid 1 into the remhost1 and remuserid 2 into remhost2 and initiate a file transfer from remhost2 to remhost1 the remfile to localfile with xfer

conversion.

## Return Codes

RMTCPY is designed give a return code upon the completion of the requested process. A zero return code indicates that TCP/IP has completed the request successfully. A non zero return code indicates an error. Return codes are as follows:

FTPERRORSERVICE	1	ftp: ftp/tcp: unknown service
FTPERRORHOST	2	unknown host
FTPERRORSOCKET	3	unable to obtain socket
FTPERRORCONNECT	4	unable to connect to server
FTPERRORLOGIN	5	login failed
FTPERRORABORT	6	transfer aborted
FTPERRORLOCALFILE	7	problem opening local file
FTPERRORDATACONN	8	problem initializing data connection
FTPERRORCOMMAND	9	command failed
FTPERRORPROXYTHIRD	10	proxy server does not support third party transfers
FTPERRORNOPRIMARY	11	No primary connection for proxy transfer
PINGRRORREPLY	-1	host does not reply
PINGRRORSOCKET	-3	unable to obtain socket
PINGRRORPROTO	-4	unknown protocol ICMP
PINGRRORSEND	-5	send failed
PINGRRORRECV	-6	recv failed
PINGRRORHOST	-7	unable to resolve host given in ftping()
INVALID_OP_TEXT	99	Unknown operation code for rmtcpy TCP/IP Services