

Copicode-IP connection to PaperCut MF

Technical Guide

Document Revision 1.6

Copicode-IP Firmware Version 1.2.9

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Copicode-IP Firmware Revision History:

Revision 1.2.9 (13th February 2010)

- Added a new Associate Card function. If enabled, a user will have the ability to either add a new card ID Number or replace their existing Card ID Number.

Revision 1.2.8 (9th November 2009)

- Added a new Device-Type (6). By setting Device Type to 6 you can convert the Copicode-IP into a Print Release only terminal. The default behaviour then becomes:
 - a) A user sends their job or jobs to the Find Me or any printer set up as a hold release queue.
 - b) The user then authenticates at the Copicode-IP (usually with a swipe reader or proximity card)
 - c) All print jobs are then released and the Copicode-IP display returns to the Logon Screen.

This mode is useful if you only require the print release function and ideally suited to swipe or prox release.

Revision 1.2.7 (7th November 2009)

- Added a PAUSE MODE. By pressing the F4 Key it is possible to toggle the Timeout On and Off. When TIME OFF the Copicode will not time out. This is very useful when users often scan large documents but don't want to globally extend the timeout. Pressing F4 again will Set TIME ON.
- Added the Config Editor Field to allow the PAUSE MODE to be set on or off by each device.
- Add a new Reader-Type (5). This reader type converts the HEX value received on the Serial port to a Decimal number. This is particularly useful when reading HID cards with the TCM2 as currently the TCM2 only outputs the HEX Value of HID Cards. Note: The TCM2 can be configured to output HEX or Decimal with Mifare cards)
- Added a new Reader-Data-Width field to allow a set number of characters to be returned when Reader-Type is set to 5. This is particularly useful when reading HID cards as the number printed on the card is usually a 5 digit number with leading zero's. Setting this value to 5 (default) will ensure that after the HEX is converted the number will be returned with the appropriate number of leading zero's.

Version 1.2.6 (9th September 2009)

ADD VALUE STATION IMPROVEMENTS

- When a user logs on we now create a "Coin User" file that will store the users details. Coins then added will increment in the "Coins" File and if a fault or power down occurs the information will be uploaded to PaperCut when the Add Value Station comes back on line. There was a bug in this process where it was possible for the Coins file to have no contents so the Add Value Station would continually display "Connecting to Server (X)"

- Improved the handling of the clearing of existing credit on the coin unit.
- **IMPORTANT NOTE:** On the Coin Unit you must ensure that Price Line four is set to at least the value of the largest coin. Preferably set Price line 4 to 99.99. This will ensure that the value inserted is always cleared back to zero.

COPICODE-IP IMPROVEMENTS

- Added two new fields in the Copicode Device Config Editor to allow customisation of the Copicode Prompts:
acct-type-1-name: "Personal"
acct-type-2-name: "Shared"
This was designed mainly for Legal/Accounting where you could perhaps now customise the "Personal" as "Office" (non-chargeable) Copying and "Shared" as "Client" (chargeable) Copying.
- Improved the error message handling when releasing Print Jobs from the Copicode. All errors were reported as "Insufficient funds" however this would be confusing as a this message would display even if you had funds but tried to release a print job to a queue that was not in the "Find Me" list. Now the appropriate message will display.
- Fixed a bug that allowed the entering of Shared Accounts by PIN on the Copicode Keypad even though in the User Selection "Allow user to Select Shared Account using PIN" was not checked.
- Increased the Error Message Display time to make it easier to read messages.

Version 1.2.5

- Added the following fields to the Copicode Device Config Editor to allow customisation of the Copicode Prompts.

```
acct-enter-prompt(1): "Enter Acct #"
acct-no-prompt(1): "No account match"
acct-enter-sub-prompt(1): "Enter Sub-Acct #"
acct-disabled-prompt(2): "Account      disabled"
acct-list-empty-prompt(2): "Shared account list is empty"
acct-select-prompt(1): "Select account:"
acct-enter-code-prompt(1): "or enter code"
```

Revision 1.2.4

- Fixed bug where under some conditions the STOP Key would not return the user to the previous menu.

Version 1.2.3

- Adds SNMP paper Size and Colour Detection for Kyocera Mita MFD's session.

Version 1.2.2

- Fixed bug in Authentication Mode.

Version 1.2.1

- Implemented the new PaperCut Authentication API, allowing per terminal configuration of Authentication Modes.
- Unused Config Editor Items removed
- Default values for skipping menu on start and finished changed
- Account Selection bug fixed

Version 1.2.0

- Fixes problem connecting to the serial port when running in Debug Mode in a telnet session.
- Added a Device Editor Field [Ignore Characters]. This allows you to add a list of characters to ignore if read in through the serial port with a prox swipe or bar code readers etc. (see page 13)

Version 1.1.9

- Added Feature: The F4 Key can be used as Dot to allow a quick decimal point entry when the Copicode is running as a Disbursement Terminal.

Version 1.1.8

- Added the Coin Unit Add Value Functionality.
- Added a start up menu for first time log in. When the Copicode first logs in to PaperCut it will prompt the installer to select the device type and card reader type. (see page 6)

COPICODE-IP NETWORK CONFIGURATION.

SETTING UP THE COPICODE-IP NETWORK PARAMETERS AT THE COPICODE.

Once the Copicode-IP is connected to the Photocopier we need to set the network addresses so the Copicode-IP can connect to the server.

Ask the System Administrator for the following information.

IP Address for the Copicode-IP ___ . ___ . ___ . ___
 The System Net Mask ___ . ___ . ___ . ___
 The Server IP Address ___ . ___ . ___ . ___
 The Default Gateway (if any) ___ . ___ . ___ . ___

You can set the Copicode-IP IP Address, network mask and Server IP Address directly at the Copicode with the following procedure..

Turn on the Copicode-IP, it will go through a boot-up sequence then display Ready for 5 seconds. During this time enter the Admin PIN followed by the Green (E) key.

Copicode-IP Display	Action	Result	Navigation
Ready■	Enter PIN then validate with E	Ready ***** E (Contact Support for PIN)	
Copicode-IP Address 192.168.1.25	Press C then type new IP. Press E for a	Copicode-IP Address 192E168E	↓ Press the Down Arrow
Copicode-IP Mask 255.255.255.0	Press C then type new Mask. Press E for a	Copicode-IP Mask 255E255E (etc)	↓ Press the Down Arrow
Appli-Server Address 192.168.1.1	Press C then type new Server IP. Press E for a	Appli-Server Address 192E168E (etc)	↓ Press the Left Arrow to Exit
Host Name Tini123	Press C then type new Host Name. Press E to	Host Name 1st Floor DC123	← Press the Left Arrow to Exit

Copicode-IP Configuration Keys






- Scrolls Down to the Next Setting
- Scrolls Up to the Previous Setting
- Exits the IP Configuration Menu
- Clears the Current setting so you can set a new value
- Validates the Setting. Also acts as a dot for IP Settings

Copicode-IP Menu

The following is a full list of the Parameters within the Copicode-IP menu.

IP Address	Required. Identifies the Copicode on the Network.
Network Mask	Required.
Gateway IP Address	
Appli-Server Address (the Server)	Required. Allows the Copicode to locate the Server.
Primary DNS Address	
Secondary DNS Address	
Host Name	Required. Identifies the Copicode on the Network by Name.
Domain Name	

Full Copicode-IP Menu

Copicode-IP Configuration Keys	 Scrolls Down to the Next Setting  Scrolls Up to the Previous Setting  Exits the IP Configuration Menu  Clears the Current setting so you can set a new value  Validates the Setting. Also acts as a dot for IP Settings
--------------------------------	---

COPICODE-IP AND PAPER CUT MF

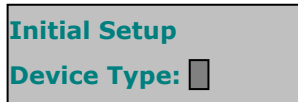
INITIAL SET UP.

From Copicode-IP Revision 1.1.8 a new Initial Setup Menu has been created. This menu will allow the installer to select between a Copicode connected to an MFD and a Copicode connected to an Add Value Station. You can also select they type of card reader attached.

As there is currently no Device Template in PaperCut MF Software this new Menu allows the installer to set up the unit and test without having to access the Software for Configuration of these parameters.

When the Copicode-IP is first connected to PaperCut MF it will display the following prompts.

Copicode Display



This value defines the Copier Interface Type.

Value	Description
1	All Copy Pulse models
2	Konica Vendor Mode 2 Serial Connection
3	Canon Special HTTP Page Count
4	Add Value Station (Version 1.1.8 or later)
5	Kyocera SNMP Detection (Version 1.2.3 or later)
6	Release All Mode (Version 1.2.8 or later)

Copicode Display



This value sets the type of card reader that is connected to the Copicode-IP serial port

Value	Description
0	No Card Reader attached
1	Swipe Card Reader. Standard track 2 swipe card reader attached.
2	Proximity Reader. Uses the ICT 9600 proximity card reader settings and the Cartadis TCM2 – outputs the RAW Data received from the Prox Reader
3	Proximity Reader. Uses the Indala 19200 proximity card reader settings with parsed data
4	Proximity Reader. Uses the Indala 19200 proximity card reader settings with raw data
5	Proximity Reader. Uses the ICT 9600 proximity card reader settings and the Cartadis TCM2 – converts the HEX Data received from the Prox Reader to Decimal

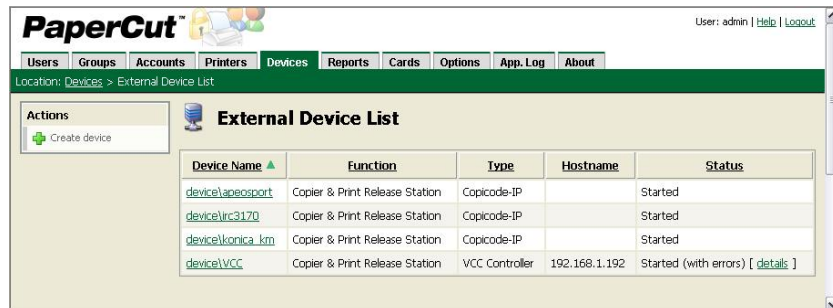
Copicode Display

Entry D=1, R=1
C: no E: yes

Confirm your selections

DEVICES TABLE.

Once the Copicode-IP network parameters have been set correctly the Copicode-IP will automatically log into PaperCut MF using the system defaults. This sections explains how to customise the Copicode-IP settings using the External Device Config Editor (Advanced)



PaperCut MF External Device List

CONFIG EDITOR (ADVANCED)

To configure the Copicode-IP, select the required device by clicking on the Device Name then select Config Editor (Advanced).

The following table lists the default settings for all makes and models of Device Type.

ext-device-msg.card-new-pin-prompt	Enter new pin	Update	Remove
ext-device-msg.card-pin-prompt	Enter your pin	Update	Remove
ext-device-msg.login-prompt	Enter login name	Update	Remove
ext-device-msg.password-prompt	Enter passw ord	Update	Remove
ext-device-msg.welcome-line-1	WELCOME	Update	Remove
ext-device-msg.welcome-line-2	Type or sw ipe	Update	Remove
ext-device.price-line.count	8	Update	Remove
ext-device.vendor.account-page-size	10	Update	Remove
ext-device.vendor.copier-make	1	Update	Remove
ext-device.vendor.device.ip-address	192.168.1.201	Update	Remove
ext-device.vendor.disbursement-terminal	off	Update	Remove

ext-device.vendor.end-cycle-wait	<input type="text" value="5000"/>	<input type="button" value="Update"/>	<input type="button" value="Remove"/>
ext-device.vendor.keypad-card-id-entry	<input type="text" value="off"/>	<input type="button" value="Update"/>	<input type="button" value="Remove"/>
ext-device.vendor.reader-data-length	<input type="text" value="6"/>	<input type="button" value="Update"/>	<input type="button" value="Remove"/>
ext-device.vendor.reader-data-start	<input type="text" value="0"/>	<input type="button" value="Update"/>	<input type="button" value="Remove"/>
ext-device.vendor.reader-type	<input type="text" value="1"/>	<input type="button" value="Update"/>	<input type="button" value="Remove"/>
ext-device.vendor.skip-main-menu-on-finish	<input type="text" value="off"/>	<input type="button" value="Update"/>	<input type="button" value="Remove"/>
ext-device.vendor.skip-main-menu-on-start	<input type="text" value="off"/>	<input type="button" value="Update"/>	<input type="button" value="Remove"/>
ext-device.vendor.submit-card-id-as-pin	<input type="text" value="off"/>	<input type="button" value="Update"/>	<input type="button" value="Remove"/>
ext-device.vendor.time-out-copier	<input type="text" value="180"/>	<input type="button" value="Update"/>	<input type="button" value="Remove"/>
ext-device.vendor.time-out-menu	<input type="text" value="60"/>	<input type="button" value="Update"/>	<input type="button" value="Remove"/>
ext-device.vendor.reader-ignor-chars	<input type="text" value="off"/>	<input type="button" value="Update"/>	<input type="button" value="Remove"/>

Config Editor Default Settings

ext-device.vendor.mode3-code-f1	<input type="text" value="228"/>	<input type="button" value="Update"/>	<input type="button" value="Remove"/>
ext-device.vendor.mode3-code-f2	<input type="text" value="227"/>	<input type="button" value="Update"/>	<input type="button" value="Remove"/>
ext-device.vendor.mode3-code-f3	<input type="text" value="230"/>	<input type="button" value="Update"/>	<input type="button" value="Remove"/>
ext-device.vendor.mode3-code-f4	<input type="text" value="229"/>	<input type="button" value="Update"/>	<input type="button" value="Remove"/>
ext-device.vendor.mode3-ip-address	<input type="text" value="192.168.1.211"/>	<input type="button" value="Update"/>	<input type="button" value="Remove"/>
ext-device.vendor.mode3-parse-end	<input type="text" value="37106"/>	<input type="button" value="Update"/>	<input type="button" value="Remove"/>
ext-device.vendor.mode3-parse-start	<input type="text" value="34837"/>	<input type="button" value="Update"/>	<input type="button" value="Remove"/>

Config Editor Special Settings

The next section gives detailed information for each of these settings.

MESSAGES AND PROMPTS

These settings enable you to fully customise the Copicode-IP greeting messages.

Card PIN Prompt.

This Setting allows the "Enter your PIN" Prompt to be changed.

Setting Name: ext-device-msg.card-pin-prompt

Possible Setting: Any text

Card New PIN Prompt.

This Setting allows the "Enter new PIN" Prompt to be changed.

Setting Name: ext-device-msg.card-new-pin-prompt

Possible Setting: Any text

Enter Login Name Prompt.

This Setting allows the "Enter Login Name" Prompt to be changed.

Setting Name: ext-device-msg.login-prompt

Possible Setting: Any text

Password Prompt.

This Setting allows the "Enter Password" Prompt to be changed.

Setting Name: ext-device-msg.password-prompt

Possible Setting: Any text

Welcome Line 1 Prompt.

This Setting allows the "Welcome" Prompt to be changed.

Setting Name: ext-device-msg.welcome-line-1

Possible Setting: Any text

Welcome Line 2 Prompt.

This Setting allows the "Please Type or Swipe" Prompt to be changed.

Setting Name: ext-device-msg.welcome-line-2

Possible Setting: Any text

Additional Prompts.

The following fields were added to the Config Editor to allow additional customisation were necessary.

```
acct-enter-prompt(1): "Enter Acct #"
acct-no-prompt(1): "No account match"
acct-enter-sub-prompt(1): "Enter Sub-Acct #"
acct-disabled-prompt(2): "Account disabled"
acct-list-empty-prompt(2): "Shared account list is empty"
acct-select-prompt(1): "Select account:"
acct-enter-code-prompt(1): "or enter code"
```

Special Prompts.

The modification of the following two fields is designed mainly for Legal/Accounting where you could perhaps now customise the "Personal" as "Office" (non-chargeable) Copying and "Shared" as "Client" (chargeable) Copying.

```
acct-type-1-name: "Personal"
acct-type-2-name: "Shared"
```

VENDOR SETTINGS.

Copier Make.

This value defines the copier Interface Type.

Setting Name: ext-device.vendor.copier-make

Possible Settings:

Value	Description
1	All Copy Pulse models
2	Konica Vendor Mode 2 Serial Connection
3	Canon Special HTTP Page Count
4	Add Value Station (Version 1.1.8 or later)
5	Kyocera SNMP Detection (Version 1.2.3 or later)
6	Release All Mode (Version 1.2.8 or later)

End of Cycle Wait Period.

This value sets the period of time to wait for additional copy pulses after the Copicode-IP stop button has been pressed and the copier disabled.

Setting Name: ext-device.vendor.end-cycle-wait

Possible Settings: Numeric, 0 - 9999 milliseconds

Copier Timeout.

This value sets the period of time to keep the copier enabled if no copy pulses are detected.

Setting Name: ext-device.vendor.time-out-copier

Possible Settings: Numeric, 0 - 9999 milliseconds

Skip Main Menu on Start.

This value allows the configuration of the main menus to be set. This can be useful when trying to reduce the number of key presses for the user.

Setting Name: ext-device.vendor.skip-main-menu-on-start

Possible Settings:

Value	Copicode-IP Display
Off	The Copicode-IP will display the following menu even if there are no Print Jobs available F1: Print F2: Copy F3: Log Off
On (Changed to Default on at version 1.2.2)	The Copicode-IP will check to see if the user has any print jobs available and if yes it will display the following menu. F1: Print F2: Copy F3: Log Off If there are no current print jobs for this user then the Copicode-IP will skip this menu and go directly to the next available menu. For example if the user had a choice of Personal and Shared account selection then they would be prompted with the following menu. F1: Personal F2: Shared

Skip Main Menu on Finish.

This value allows the configuration of the main menu at the end of a transaction to be set.

Setting Name: ext-device.vendor.skip-main-menu-on-finish

Possible Settings:

Value	Copicode-IP Display
Off	The Copicode-IP will display the following menu after the copy or print release session has been completed. F1: Print F2: Copy F3: Log Off
On (Changed to Default on at version 1.2.2)	The Copicode-IP will revert to the main WELCOME prompt after the user completes a copy or print session.

Disbursement Terminal.

This value allows the prompting of a disbursement entry at the end of a transaction to be set.

Setting Name: ext-device.vendor.disbursement-terminal

Possible Settings:

Value	Copicode-IP Display
Off	The Copicode-IP will not allow the entry of disbursements after a completed transaction.
On	The Copicode-IP will allow the entry of disbursements after a completed transaction
Prompt	The Copicode-IP will first prompt if the user would like to enter a disbursement after a completed transaction

The following table illustrates the prompts and display for a Disbursement transaction.

Copicode-IP Display	Action
Modify Page Cost? C:no E:yes	If Disbursement terminal is set to Prompt then you will be prompted with this message.
Add page cost? +0	Add or deduct this value from each page completed. Use up and down arrows to toggle the plus and minus. Press E to confirm.
Add job cost? +0	Add or deduct this value from the total job cost. Use up and down arrows to toggle the plus and minus. Press E to confirm.
TOTAL: \$1.00 C:no E:yes	Confirm Total Disbursement.

Account Page Size.

This value sets the number of records that will be returned to the Copicode-IP from the PaperCut MF server. Reducing the number of records speeds the search process.

Setting Name: ext-device.vendor.account-page-size

Possible Settings: Numeric, 1 - 20

Menu Timeout.

This value sets the period of time the menu will stay active if no keypad activity is detected.

Setting Name: ext-device.vendor.time-out-menu

Possible Settings: Numeric, 0 - 99999 milliseconds

Card Reader Type.

This value sets the type of card reader that is connected to the Copicode-IP serial port.

Setting Name: ext-device.vendor.reader-type

Possible Settings:

Value	Description
0	No Card Reader attached
1	Swipe Card Reader. Standard track 2 swipe card reader attached.
2	Proximity Reader or Bar Code Reader Uses the ICT 9600 proximity card reader settings.
3	Proximity Reader. Uses the Indala 19200 proximity card reader settings with parsed data
4	Proximity Reader. Uses the Indala 19200 proximity card reader settings with raw data
5	Proximity Reader. Ideally suited to TCM2 when reading HID cards so the data can be converted to Decimal.

Card Data Start Position.

This value sets the position of the first character to be read from the card.

Setting Name: ext-device.vendor.reader-data-start

Possible Settings: Numeric, 0 - 99

Card Data Length.

This value sets the number of characters to be read from the card starting from the Start Position as set above.

Setting Name: ext-device.vendor.reader-data-length

Possible Settings: Numeric, 0 - 99

Ignore Characters.

This value sets the number of characters to be read from the card starting from the Start Position as set above.

Setting Name: ext-device.vendor.reader-ignore-chars

Possible Settings: Off, or any character read through the serial port that you want to ignore.

Data Width.

This value sets the number of characters to be returned when Reader Type is set to 5. Ideally suited to HID cards with Leading Zero's.

Setting Name: ext-device.vendor.reader-data-width

Possible Settings: By Default set to 5. Maximum value is 10.

Price Line Debug.

This value sets the debug flag on. This allows all Copicode-IP output to be displayed in a telnet window for debug purposes.

Setting Name: ext-device.price-line-debug

Possible Settings: off, on

Copicode-IP IP Address.

This field displays the Copicode-IP IP Address. .

Setting Name: ext-device.vendor.device.ip-address

Possible Settings: Set at Copicode-IP

Keypad Card ID Entry.

This value will allow the PaperCut MF Card ID to be entered on the Copicode-IP keypad. Typically this Card ID is only read through the card reader.

Setting Name: ext-device.vendor.keypad-card-id-entry

Possible Settings:

Value	Description
Off	The Card ID field in the PaperCut MF can only be read through the card reader.
On	The Card ID field in the PaperCut MF can be read through the card reader or entered on the keypad.
Hide	The same as On except the characters will be masked with ****.

Pause Mode.

This value allows the Copicode-IP to enable the F4 Key to toggle between Timeout on and Timeout off.

Setting Name: ext-device.vendor.permit-timeout-disable

Possible Settings: On or Off. By Default set to off.

Submit Card ID as PIN.

If you have PIN's set to true but you don't want to enter the PIN after a swipe then set this to On.

Setting Name: ext-device.vendor.submit-card-id-as-pin

Possible Settings:

Copicode-IP Display	Action
Off	A unique PIN must be entered after the card is read
On	The Copicode-IP automatically validates the user account with the Card ID as PIN.

Associate Card.

This value will allow the a User to add a card ID number against their account through the Copicode IP.

Setting Name: Check Box

Possible Settings:

Value	Description
Unchecked	The user cannot associate card.
Checked	<p>The user can associate a card against their Card ID Field.</p> <p>When a new card is detected the user will be prompted as follows.</p> <p>Associate Card? C: no E: yes</p> <p>If Y then</p> <p>Enter User Name: (User enters user name and presses E)</p> <p>Enter Password: (User enters their password and presses E)</p> <p>The new card is then registered against the users CardID Field, replacing their existing card number or adding a new one if blank.</p> <p>The Copicode will respond with:</p> <p>On Success: Short beep and “Association Succeeded”</p> <p>On Failure: Long beep and “Association Failed”</p> <p>The WELCOME Screen is then displayed and the user can now swipe their new card to access their account.</p>

SPECIAL COPIER MODE 3 SETTINGS.

Mode 3 Format 1.

This value sets the number that corresponds with the Format 1 Copy Type.

Setting Name: ext ext-device.vendor.mode3-code-f1

Possible Settings: See Appendix 1.

Mode 3 Format 2.

This value sets the number that corresponds with the Format 1 Copy Type.

Setting Name: ext ext-device.vendor.mode3-code-f2

Possible Settings: See Appendix 1.

Mode 3 Format 3.

This value sets the number that corresponds with the Format 1 Copy Type.

Setting Name: ext ext-device.vendor.mode3-code-f3

Possible Settings: See Appendix 1.

Mode 3 Format 4.

This value sets the number that corresponds with the Format 1 Copy Type.

Setting Name: ext ext-device.vendor.mode3-code-f4

Possible Settings: See Appendix 1.

Mode 3 MFD IP Address.

This value sets the IP Address of the MFD connected to the Copicode-IP

Setting Name: ext-device.vendor.mode3-ip-address

Possible Settings: Enter the IP address of the MFD.
(This is Not the Copicode-IP IP Address)

Mode 3 Data Start.

This value sets the start position of the data search.

Setting Name: ext-device.vendor.mode3-parse-end

Possible Settings: Only change when instructed by CMS.

Mode 3 Data End.

This value sets the end position of the data search.

Setting Name: ext-device.vendor.mode3-parse-start

Possible Settings: Only change when instructed by CMS.

SPECIAL COPIER MODE 5 SETTINGS.

By setting **ext-device.vendor.copier-make** to 5 you will enable the Kyocera Mita SNMP Copy Detection Mode.

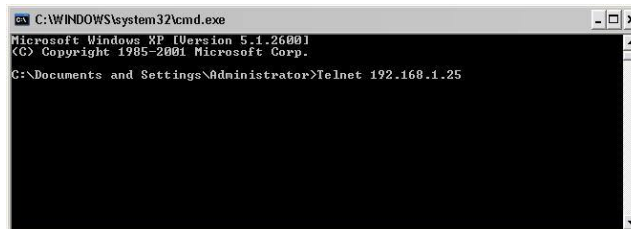
This will enable a new field **ext-device.vendor.device.ip-address** to be created where you will enter the IP Address of the MFD. This tells PaperCut where to look on the network for the page size and ink type when a pulse is detected on the Copicode-IP.

ADDITIONAL INFORMATION.

SETTING UP THE COPICODE-IP NETWORK PARAMETERS FROM THE COMPUTER.

If you need to remotely set any of the Copicode-IP parameters then this can be done with a Telnet session. From the Start Menu select Run and type [cmd] then Click OK. This will bring up a Command Window as illustrated below.

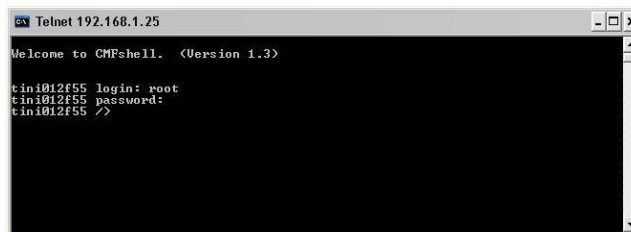
Type [Telnet] a space then the [IP Address] of the Copicode-IP



```
C:\WINDOWS\system32\cmd.exe
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.
C:\Documents and Settings\Administrator>Telnet 192.168.1.25
```

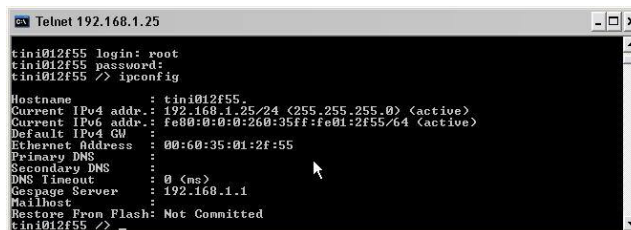
NOTE: Only type what is inside the [square brackets]

Login with [root] then Enter and password [tini] then Enter



```
Telnet 192.168.1.25
Welcome to CMFshell. (Version 1.3)
tini012f55 login: root
tini012f55 password:
tini012f55 >
```

Now Type [ipconfig] followed by Enter and the current settings will be displayed.

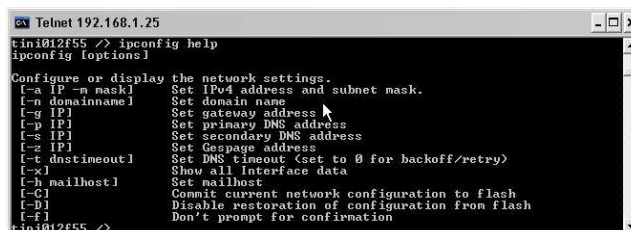


```
Telnet 192.168.1.25
tini012f55 login: root
tini012f55 password:
tini012f55 > ipconfig
Hostame           : tini012f55.
Current IPv4 addr.: 192.168.1.25/24 (255.255.255.0) (active)
Current IPv6 addr.: fe80:0:0:260:35ff:fe01:2f55/64 (active)
Default IPv4 Gd   :
Ethernet Address  : 00:60:35:01:2f:55
Primary DNS       :
Secondary DNS     :
DNS Timeout       : 0 (ms)
Gespape Server    : 192.168.1.1
Mailhost          :
Restore From Flash: Not Committed
tini012f55 >
```

To change the Default Gateway type:

[ipconfig -g 192.168.1.2] then Enter, the Gateway will now be set to 192.168.1.2

You can type [ipconfig help] to see the parameters for setting IP Addresses as illustrated below.



```
Telnet 192.168.1.25
tini012f55 > ipconfig help
ipconfig loptions!
Configure or display the network settings.
[-a IP -p mask] Set IPv4 address and subnet mask.
[-n domainname] Set domain name
[-g IP] Set gateway address
[-p IP] Set primary DNS address
[-s IP] Set secondary DNS address
[-z IP] Set Gespape address
[-t dnstimeout] Set DNS timeout (set to 0 for backoff/retry)
[-i] Show all interface data
[-h mailhost] Set mailhost
[-C] Commit current network configuration to flash
[-D] Disable restoration of configuration from flash
[-F] Don't prompt for confirmation
tini012f55 >
```

NOTE: To change the IP Address or Network mask you must enter BOTH values. For example to change the IP Address from 192.168.1.25 to 192.168.1.26 type:

[ipconfig -a 192.168.1.26 -m 255.255.255.0] then Enter

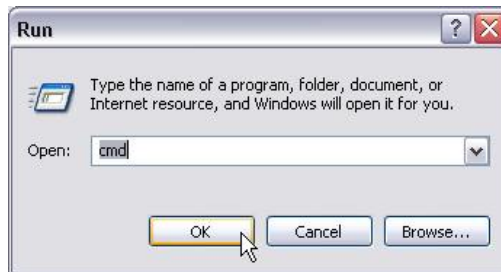
To exit the Telnet session type [bye] followed by Enter. Now restart the Copicode-IP for the changes to take effect.

Note: You can type [help] to get a list of available commands.

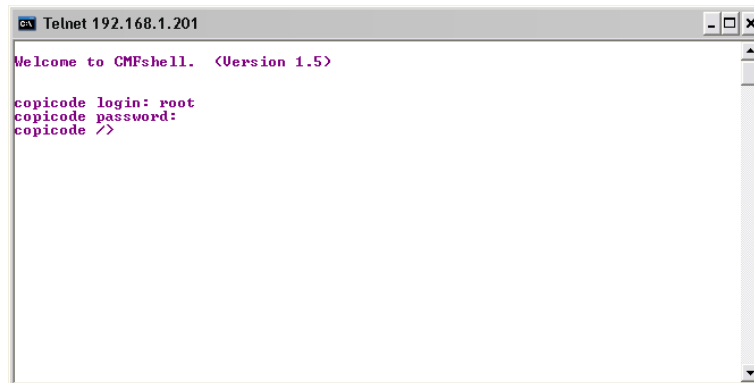
RUNNING THE COPICODE-IP IN DEBUG MODE

To run the Copicode-IP in Debug Mode and watch the communication between the Copicode-IP and the PaperCut MF Service you need to Telnet to the Copicode-IP..

From the Windows Start Menu, Select Start - Run and type cmd and click OK



This will now bring up a Command Window. Type [Telnet ip address of Copicode]



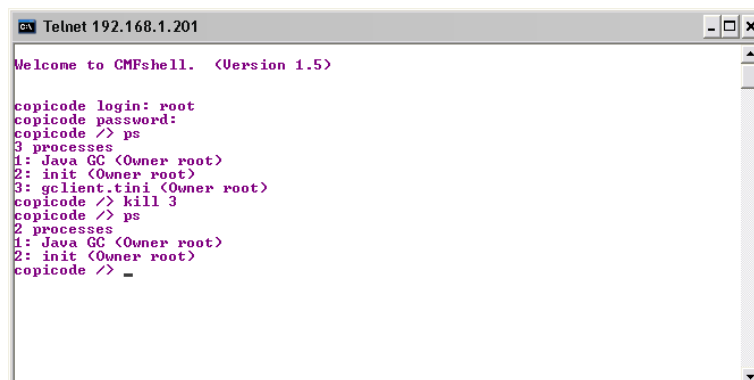
[Note: After each line press Enter]

Login: root

Password: tini

Now we need to check the processes and terminate the existing Copicode process.

Type ps to see the process then terminate it with kill 3.



As illustrated above we have now terminated the gclient.tini process.

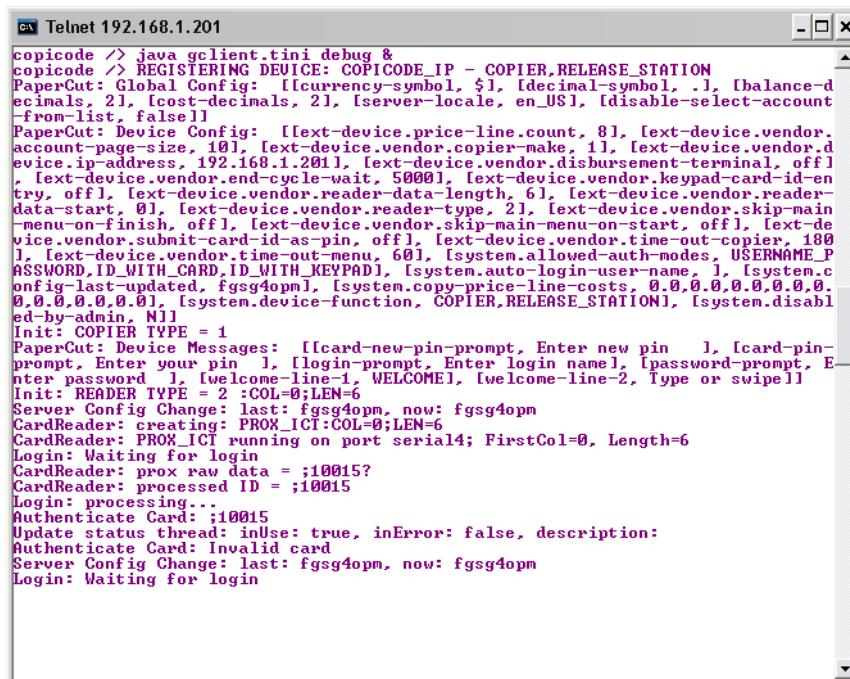
Now we are ready to restart the Copicode Firmware with the Debug Switch.

Available Commands and Switches.

```
java gclient.tini debug &
```

Runs the Copicode-IP in Debug mode, displaying the communications in the telnet window as illustrated below.

Note 1: Typing the ampersand (&) at the end of the line allows you to stop the display by pressing the Enter Key and type another command in the same window if required.



```

Telnet 192.168.1.201
copicode /> java gclient.tini debug &
copicode /> REGISTERING DEVICE: COPICODE_IP - COPIER.RELEASE_STATION
PaperCut: Global Config: [[currency-symbol, $], [decimal-symbol, .], [balance-d
ecimals, 2], [cost-decimals, 2], [server-locale, en_US], [disable-select-account
-from-list, false]]
PaperCut: Device Config: [[text-device.price-line.count, 8], [text-device.vendor.
account-page-size, 10], [text-device.vendor.copier-make, 1], [text-device.vendor.d
evice.ip-address, 192.168.1.201], [text-device.vendor.disbursement-terminal, off]
, [text-device.vendor.end-cycle-wait, 5000], [text-device.vendor.keypad-card-id-en
try, off], [text-device.vendor.reader-data-length, 6], [text-device.vendor.reader-
data-start, 0], [text-device.vendor.reader-type, 2], [text-device.vendor.skip-main
-menu-on-finish, off], [text-device.vendor.skip-main-menu-on-start, off], [text-de
vice.vendor.submit-card-id-as-pin, off], [text-device.vendor.time-out-copier, 180
], [text-device.vendor.time-out-menu, 60], [system.allowed-auth-modes, USERNAME_P
ASSWORD,ID_WITH_CARD,ID_WITH_KEYPAD], [system.auto-login-user-name, 1], [system.c
onfig-last-updated, fgsg4opm], [system.copy-price-line-costs, 0.0,0.0,0.0,0.0,0.
0,0.0,0.0,0.0], [system.device-function, COPIER.RELEASE_STATION], [system.disabl
ed-by-admin, N]]
Init: COPIER TYPE = 1
PaperCut: Device Messages: [[card-new-pin-prompt, Enter new pin ], [card-pin-
prompt, Enter your pin ], [login-prompt, Enter login name], [password-prompt, E
nter password ], [welcome-line-1, WELCOME], [welcome-line-2, Type or swipe]]
Init: READER TYPE = 2 :COL=0;LEN=6
Server Config Change: last: fgsg4opm, now: fgsg4opm
CardReader: creating: PROX_ICI:COL=0;LEN=6
CardReader: PROX_ICI running on port serial4; FirstCol=0, Length=6
Login: Waiting for login
CardReader: prox raw data = ;10015?
CardReader: processed ID = ;10015
Login: processing...
Authenticate Card: ;10015
Update status thread: inUse: true, inError: false, description:
Authenticate Card: Invalid card
Server Config Change: last: fgsg4opm, now: fgsg4opm
Login: Waiting for login

```

As illustrated above, debug mode displays all communication between Copicode and PaperCut Server.