



Netlink GS-7080 Loader

Cash to Account Configuration

*Firmware 1.00.05
GoPrint version 4.0.85*



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Overview

The document guides you through the steps to program a Cash to Account device to accept user authentication and account creation, for copy and print fund cash purchases.

To purchase funds, users are prompt to enter their Quota account ID and password at the terminal keyboard. When authenticated, the user's current balance is displayed at the terminal screen, followed by a prompt to purchase funds using cash.

Additionally, in environments when authentication methods are not present, the device can be programmed to accept account creation directly from the terminal keyboard. The process is referred to as; "Accounts on the Fly". These accounts then exist in the GoPrint database providing unauthenticated users the ability to purchase copy and print funds.



Note: This feature is part of the Self-Service Accounts option, and when enabled, allows unauthenticated users to create Self-Service accounts at a Web Client Popup and a Cash to Account device.



Important: Prior to completing the following steps it is assumed the GoPrint Quota system has been previously configured. For additional information refer the Quota Quick Start Guide.

Configuration Overview

Required Port:

The GTX server needs to communicate to the Netlink device over incoming port 9898

Cash to Account creation is a two-step process:

1. Programming the unit to accept your specific transaction requirements
2. Enabling the unit(s) within GoPrint

Programming the Unit:

1. Network the unit and assign an IP address
2. Enter the IP address of the GoPrint server
3. Enter a unique Unit ID for each device
4. Attached a keyboard to each unit
5. Ensure the receipt printer is attached



GoPrint Configuration:

1. Provide the IP address assigned to each Netlink device
2. Provide the unit ID for each device
3. Assign each unit to the proper PayPoint and Purse!
4. Create inbound rule for port 9898 on Windows Firewall

GS-7080 Loader Programmed Settings



Note: Required settings are highlighted in **Red**

Power the Unit

To power on the unit, open the front cabinet and locate the black On/Off switch located on the base near the back



Step 1- LOGGING INTO COMMAND MODE

With the unit powered on, you must enter the command mode login and password in order to enter command mode.

- 1. Enter Login: D951**
- 2. Press: Enter**
- 3. Enter Password: 7080**
- 4. Press: enter**



Navigating through the Selections

- <A>** Move selection "up" one level; used to move through menus and select options or settings.
- ** Moves the current selection "down" one level; used to move through menus and select options or settings.
- <ENT>** Chooses the current selection or option; used to move through menus and to save options or settings to memory.
- <CLR>** Clears the current value or steps back one-menu item, used to move through menus and to clear values when setting options or settings.
- <C>** Used for Punctuation Entries, press for "Punctuation" characters, press again to advance character until the desired character is displayed then press <ENT>.
- <D>** Used for Punctuation Entries, press for "Punctuation" characters, press again to advance character until the desired character is displayed then press <ENT>.

Step 2 – TERMINAL SETUP

Required settings noted in Red

TIME – No need to change Leave default settings

DATE - No need to change Leave default settings

Enable Coins Acceptor - No need to change Leave default settings - NO

Enable Dispenser - No need to change Leave default settings - NO

Enable Activity log - No need to change Leave default settings - YES

Enable Serial IO - No need to change Leave default settings - NO

Max Account Value: No need to change Leave default settings

Set Offline Timeout: No need to change Leave default settings

Swipe Reader? - No need to change Leave default settings - NO

Bar Code Reader? - No need to change Leave default settings – NO



UNIT ID - Change

Enter a unique Unit ID number for each terminal using the keypad in the format > 0001, 0002, 0003, 0004 <ENT>



Note: the ID number is used for receipt transaction tracking as well GoPrint report gathering



PIN PROMPT - Change REQUIRED!

Disabled by default, use the **B** key followed by <ENT>



Important: The GoPrint user account system requires ALL users to have an account and password, therefore the Pin Prompt setting is required.

Press "A" Until you get to Enable Pin Prompt and set it to YES:



ENABLE KEYPAD ACCT - Change

Disabled by Default use the **B** key followed by <ENT>



Note: enabling this setting prompts users to enter their Quota account ID

Press "A" Until you get to Enable Keypad Account and set it to YES





ENABLE KEY BEEPS – (Optional) change if desired for quiet zones

The loud beeping sound is enabled by default, to Disable use the **B** key followed by **<ENT>**

- **Set OK Response Beeps** – leave default
- **Set Fail Response Beeps** – leave default

CREDIT/NEW ACNT – Self-Service Accounts "Accounts on the Fly"

This is an optional setting and used when it's desired to allow users to create Quota accounts directly from the terminal ("Accounts on the Fly"). These are internally created accounts directly into the GoPrint database and aren't related to LDAP generated account; ideal for unauthenticated lab environments.

- **Set password** – leave default

If you plan to allow users to create accounts directly from the device then, Press "A" Until you get to Credit/New Account Keys and set it to YES. If not, skip this step.



- ✓ **Important:** to use this feature, the Allow Self- Service Accounts setting must be enabled under the corresponding PayPoint:

General

PayPoint Name

Use of Web Client Optional Required

Note: The 'Required' setting means that no jobs are seen on the PayStation until they are cleared at the web client.

Editable User Attributes Allow editing of E-mail address Allow Password Change

These settings are automatically disabled if Always Authenticate is enabled.

Self-Serve User Accounts

Allow Self-Serve Accounts

Self-Serve User Class

[See requirements and limitations in help](#)



Step 3 – NETWORK SETUP

While in the Command Menu “Network Setup” the following options are accessed by using the **A** and **B** keys to scroll to the item, then the **ENT** key to select that item.

✓ **Important:** Write down the assigned IP address as it will be needed later while configuring the unit in GoPrint.

Use DHCP for IP?

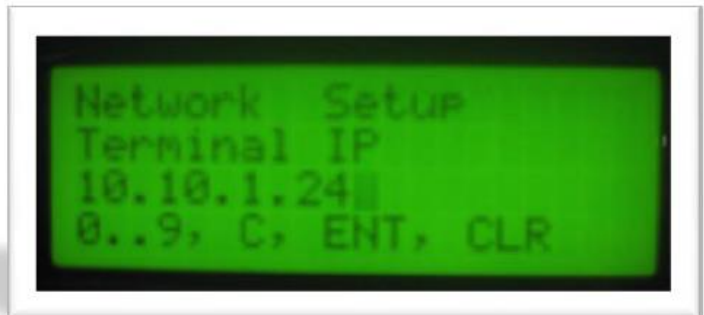
Note: DHCP is disabled by default. To enable, press the **B** key followed by **<ENT>**

(Optional) if selecting DHCP



Hint: When obtaining a DHCP IP address, you will need to reboot the device, (Shut off the power switch) in order for it to connect to the DHCP server and obtain an IP address. During the initial start-up, the device screen will display connecting to DHCP server, and finally display that it was successful in obtaining an assigned address.

TERMINAL IP - (Optional) skip if using DHCP



GATEWAY IP – Skip if using DCHP

Enter the Gateway IP Address using the keypad, in the format: **### . ### . ### . ### .**

<ENT> The **.'** (Decimal) is entered with the **C** key. **(Optional) – used when configuring a static IP Address.**



NETMASK – Skip if using DHCP

Enter the Netmask Address using the keypad, in the format: **### . ### . ### . ### . <ENT>**
The '.' (Decimal) is entered with the **C** key.

SERVER IP – Required!

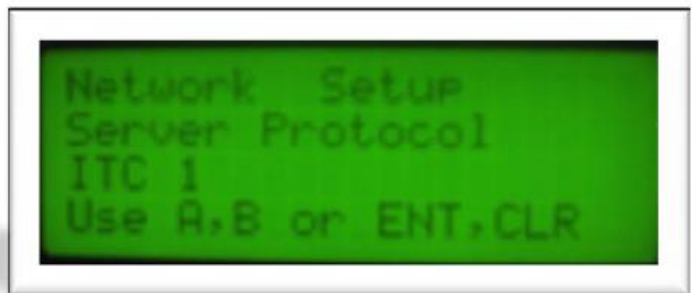
This must be the IP Address of the GoPrint GTX server!



Enter the Server IP Address using the keypad, in the format: **### . ### . ### . ### . <ENT>**
The "." (Decimal) is entered with the **C** key.

SERVER PROTOCOL – Change to ITC 1

Select ITC 1 using the **A** or **B** key followed by **<ENT>**



ENCRYPTION TYPE FOR ITC - Change to AES2

ITC PORT # - No need to change, leave default settings. Default port is 1024

MAC ADDRESS – Embedded by default cannot be changed.

MENU 3: Meters and Log Mngmt - No need to change, leave default settings and skip to Step 4.

The Meters and log Management settings allows you to collect a total of cash funds deposited, and is presented in the form of a listing of individual "dollar types" collected along with a grand total. For information on running a Meters report, refer to the Meters Reporting on page 10.



Step 4 - Menu 4 Set Currency

Ensure the following currency amounts are enabled:

Accept \$1.00

No **Yes** <ENT> Sets Acceptance of \$1.00

Accept \$5.00

No **Yes** <ENT> Sets Acceptance of \$5.00

Accept \$10.00

No **Yes** <ENT> Sets Acceptance of \$10.00

Accept \$20.00

No **Yes** <ENT> Sets Acceptance of \$20.00

Accept \$50.00

No Yes <ENT> Sets Acceptance of \$50.00

Menu 5 Set Coins – Not applicable

Menu 6 Dispenser Setup – Not Applicable

Step 5 - Menu 7 Printer Setup

When accepting cash transactions the GS-4 7080 is shipped with a receipt printer. Each successful cash transaction includes a detailed printed receipt displaying the dollar amount of the transaction, date, transaction number, and unit ID.

Receipt Printer

No Yes <ENT> Select Yes to enable

Always Print Receipt

No **Yes** <ENT>

If set to No, user is prompted before printing receipt



Receipt line 1

TEXT ENTRY 1 <ENT> Customize the Text to be printed on receipt Line 1

Receipt line 2

TEXT ENTRY 2 <ENT> Customize the Text to be printed on receipt Line 2

Receipt line 3

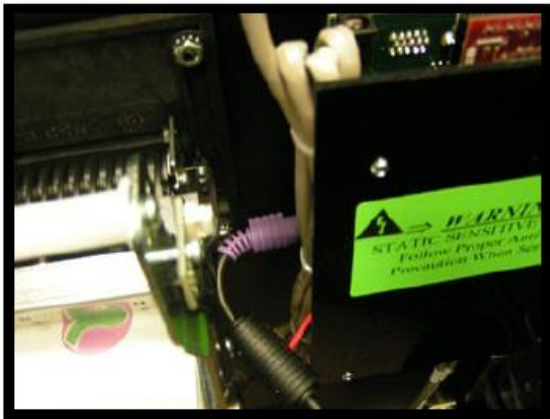
TEXT ENTRY 3 <ENT> Customize the Text to be printed on receipt Line 3

MENU 8: Diagnostics

No need to change, leave default settings At this time the Diagnostics routine is being developed for Production and Q-A use.

Step 6 -Adding a Keyboard

To add funds to an account using alpha-numeric authentication, a keyboard is required. The PS2 connection is attached to the main board as illustrated in the photo:



Step 7 – GoPrint Configuration

Prerequisites

The cash to account device(s) must be assigned to a previously configured Quota Pay Method and associated with Quota user accounts as defined in the appropriate User Class. For complete details on Quota Pay Methods and Quota user configuration refer to the Quota Quick Start configuration document or the Control Center Help section.

1. – Ensure a Quota Pay Method is configured

Class Name

Pay Methods
Mark the Pay Methods that you want to allow for this class and assign names for the purses. The purse names will be shown to users when they are

Type	Purse Name
<input checked="" type="checkbox"/> Quota	<input type="text" value="University Print Funds"/>
<input type="checkbox"/> Allowance	<input type="text" value="Allowance"/>
<input type="checkbox"/> Value Card	<input type="text" value="Cash Card"/>
<input type="checkbox"/> Cash/Coin	<input type="text" value="Cash/Coin"/>

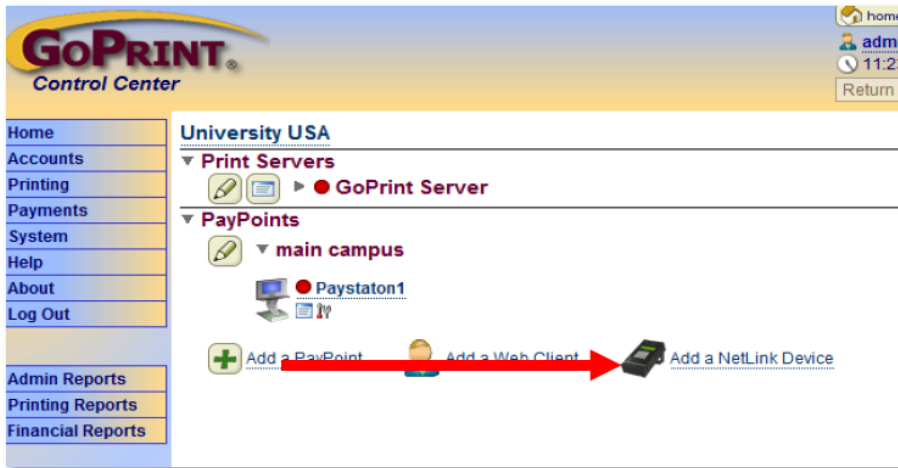
2. Ensure the Pay Method is enabled at a PayPoint

Demo PayPoint Properties

Allowed Purses
When presented to end-users, purses are sorted by their Sort Order numeric value. Purses with the same sort values are sorted by the purse name.

<input checked="" type="checkbox"/> Default User Class - University Print Funds (Quota)	
Sort Order	<input type="text" value="10"/>
Payment Connector	<input type="text" value="Quota Connector is Automatic"/>
Add Value Option	<input type="text" value="Not Allowed"/>
Add Value Instructions	<input type="text"/>
Partial Payment Option	<input type="text" value="Allow"/>
CC Gateway Acct No	<input type="text"/>

3. Select Add a Netlink Device



4. Enter the required Device Settings

ACCOUNT

ID: Create a user-friendly ID to help identify the device. A short name based on the physical location the most effective. The ID is captured under GoPrint reports to provide individual results by device.

PayPoint: select the proper PayPoint

Ref No: (optional)

DEVICE SETTINGS

Terminal ID: enter the Unit ID

IP address: enter the assigned IP address

Model: Select Netlink Loader 7080

Encryption: AES2

Account

ID	<input type="text" value="Room 2"/>
PayPoint	<input type="text" value="Greeley"/>
Ref No	<input type="text"/>

The external accounting reference number

Device Settings

Terminal ID	<input type="text" value="0002"/>
IP Address	<input type="text" value="10.2.2.105"/>
Model	<input type="text" value="NetLink Loader 7080"/>
Encryption	<input type="text" value="AES2"/>

PAYMENT SETTINGS

Pay Method: Select Quota

Allow Credit:

(Optional, is used with a credit limit system)

Click: Save Repeat for each device



Important: this setting MUST match the setting at your User Class Pay Methods. If not, users will not be able to authenticate to their Quota account. Refer to the troubleshooting section for additional information.

Payment Settings

Pay Method

Quota

Allowance

Allow Credit

Allow use of Credit Limit on Quota/Allowance purses

NetLink devices support display of only one amount, so balance plus if this option is used. If you are using both normal balances and credit the user the appearance of having more funds than they should.

Testing the Configuration

Cash to Account Testing

Return back to one of the units:

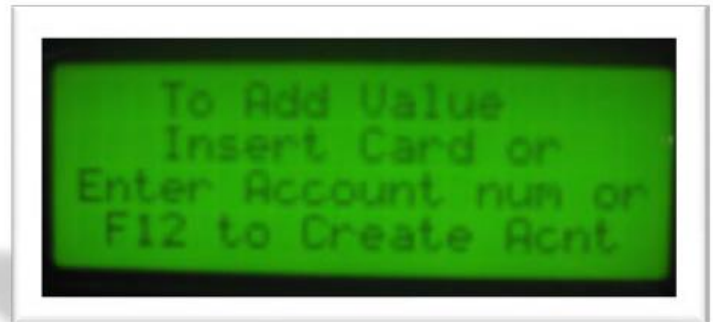
To ADD Value Select:

1. Enter Account num

- Enter Quota ID
- Enter password
- Press F5 for Cash
- Enter Cash
- Print receipt



Note: F8 for Credit does not apply here and cannot be removed from the display screen due to firmware limitations.



Self-Service Accounts Testing

CREDIT/NEW ACNT – "Accounts on the Fly"

This is an optional setting and used when it's desired to allow users to create Quota accounts directly from the terminal ("Accounts on the Fly"). These are internally created accounts directly into the GoPrint database and aren't related to LDAP generated accounts: ideal for unauthenticated lab environments.

TO enable, refer to the Terminal Setup section on page 5

✓ **Important:** to use this feature the Self Service Accounts option must be enabled under the corresponding GoPrint PayPoint.

Select F12 to Create Acnt



Enter the New Acct

Enter the New Password



Follow prompts to purchase funds



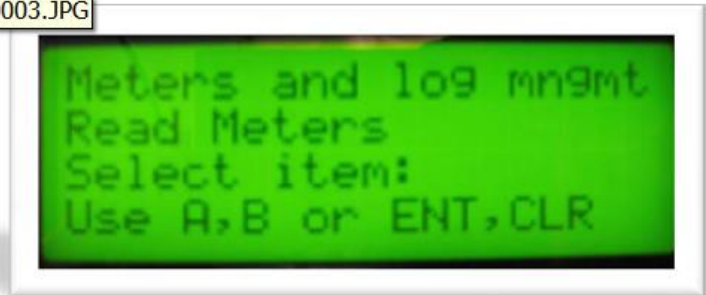


Meters Reporting

Run a meters report to obtain a total of all cash

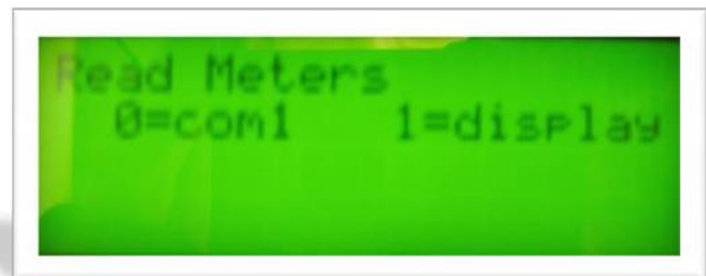
IMG_0003.JPG

Meters Report– allows you to run a report to total cash taken to date.



0=Com1 – Pressing 0 prints out a detailed dollar listing and total

1=display - Displays the total number of bills on the unit screen



Printed Meter Results

Totals number of bills stacked in dispenser

Displays Value of current bills stacked in dispenser
Individually lists types of bills accepted

Dollars are listed in \$1, \$5, \$10, \$20

Clear Meters

To ensure future accuracy, after the report is completed and all monies collected, use the Clear Meters function to clear previous totals.

Scroll to select Clear Meters and press ENT to accept





Meter Software Reporting

GoPrint provides the meters reporting application which can be installed on a computer and configured with a network connection to any device and produce the following HTML formatted report. Contact GoPrint Support to obtain the software or download it at:

<http://www.goprintsupport.com/support.html>

Meters Report

Date: 03/Jun/2011 01:11 pm
 Address: One Annabel Ln Suite 105
 City, Province: San Ramon, CA
 Computer: GoPrint Server

Summary Totals

Loaders:

Bills and Coins Accepted: \$40.000
 Added by Credit Cards: \$0.000
 Added to Cards: \$0.000
 Not Issued: \$0.000
 Cost of Cards Dispensed: \$0.000
 Number of Cards Dispensed: 0

Report Details

Loader: 0001 Cash to Account Loader

Bills and Coins Accepted		.05 coins	\$0.000	\$5 bills	\$0.000
		.10 coins	\$0.000	\$10 bills	\$0.000
		.25 coins	\$0.000	\$20 bills	\$40.000
		\$1 coins	\$0.000	\$50 bills	\$0.000
		\$2 coins	\$0.000	\$100 bills	\$0.000
		Total coins	\$0.000	Total bills	\$40.000
Total bills and coins accepted				\$40.000	
Added by Credit Cards				\$0.000	
Total added to cards				\$0.000	
Cards Dispensed				\$0.000	
Value not issued				\$0.000	
Date	Trans. #	Amount		Trans. Type	



Collecting Money

Deposits made into the system are stored in a bill collector located just inside the unit and is clearly visible as seen in the following picture.

There are two methods of removing money from the unit:

- 1) Is to leave the unit in place and open the lid and pull the money out.
- 2) The recommended method is to remove the collector completely from the unit and take it to a secure place where money can safely be removed and counted.



[Removing the Bill Collector](#)

1. Locate the gray tab at the top of the collector, and with your index figure, press it away from you. This will release the collector; as shown in the picture at the right.
2. Simply slide the connector upward to release it from its connecting points.

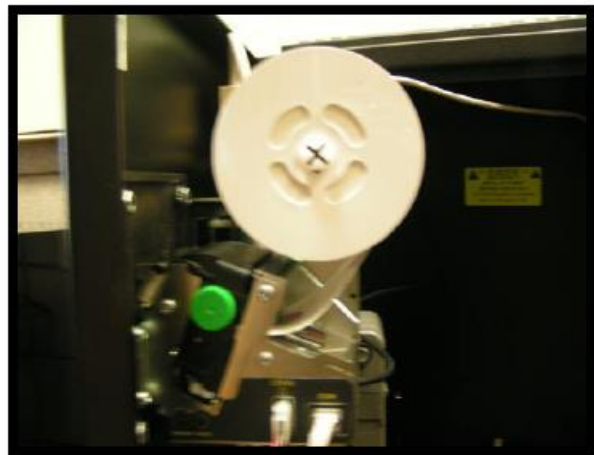
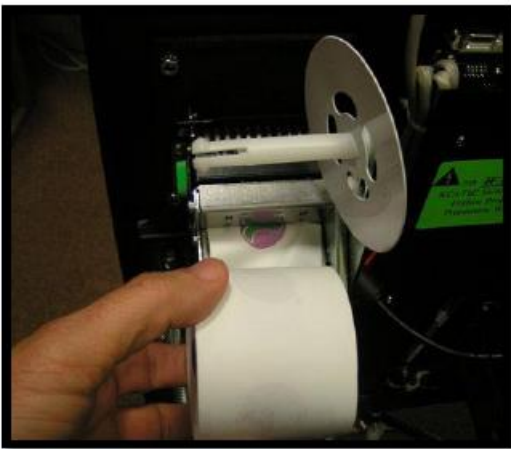
[Replacing the Bill Collector](#)

To replace the collector, simply reverse the process by sliding the four connecting points back down into its connecting points.

Adding Receipt Paper

Paper can be fed by pressing the Feed button. The report button generates an internal printer report that is not useful to the GS-7080 user.

Add the roll of paper (shiny side down) to the spindle located on the inside door. Ensure that the paper feed mechanism is in the locked position or the printing will be very faint and the paper will not feed properly.





Troubleshooting

The Netlink user interface offers a limited degree of error messaging, displaying such generic error messages as;

- Transaction Rejected
- Account not Found
- Server Timeout
- Host is Offline

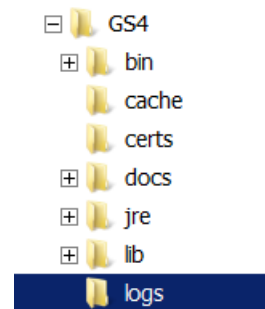
[GoPrint Log Files](#)

To obtain specific error messaging feedback, it's necessary to review the GoPrint log files.

These files are located under the GoPrint installation directory under the path: C:\GS4\Logs

or other driver if installed on a data drive.

The GTX server log file is called the RUN.log and can be opened in Windows Notepad or other text editing software.



[Resolving Issues](#)

Review the log and compare to the sample error messages to resolve.

Example #1 - A successful account login and transaction

```
[NetLink@10.10.1.115:netlink.NetLinkMessageHandler ]
```

```
Get Authorization (1I) request with data  
'N,12345,0,0,2,20,15/10/2008,16:20:59,0,Y,6789'
```

```
INFO NetLink@10.10.1.115: authentication.AuthenticationManager]
```

```
Authenticating user 12345 with internal authentication
```



Example #2 – New LDAP-driven Quota account Transaction

2008-10-15 15:36:31,531 DEBUG[NetLink@10.10.1.115:netlink.NetLinkMessageHandler
<< NetLink Terminal 0001 at 10.10.1.115

**Get Authorization (1I) request with data
'N,191122,0,0,2,22,15/10/2008,17:38:34,0,Y,12345'**

[NetLink@10.10.1.115:authentication.AuthenticationManager]

Authenticating user 191122 with internal authentication.

[NetLink@10.10.1.115:authentication.AuthenticationManager]

Authenticating user 191122 via auth type: LDAP

DEBUG[NetLink@10.10.1.115:ldap.LDAPConnector

LDAP Auth for CN=goprintldap,OU=ITS,DC=goprintcorp,DC=local

DEBUG[NetLink@10.10.1.115:ldap.LDAPConnector]

LDAP Auth for CN=191122,CN=Users,DC=goprintcorp,DC=local

[NetLink@10.10.1.115:authentication.AuthenticationManager]

Adding user 191122 to Default User Class based on external authentication source

2008-10-15 15:36:31,859 INFO [NetLink@10.10.1.115:databean.PurseBalanceDataBean

Retrieving all balances for purse Netlink Quota

2008-10-15 15:36:31,937 DEBUG[NetLink@10.10.1.115:accounting.TransactionBuilder]

Recording 2 general ledger transactions with tranKey 145

2008-10-15 15:36:31,953 INFO

[NetLink@10.10.1.115:accounting.ScheduledQuotaManager]

Reset/Accrue Quota For Purse 45 completed.



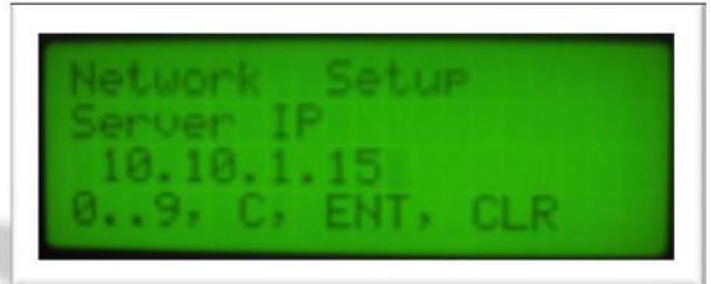
COMMON ERROR MESSAGES

When attempting a transaction you receive the following error messages at the Netlink device:

HOST IS OFFLINE OPERATION NOW ALLOWED

GoPrint GTX server IP address has not been entered or is incorrect.

Navigate to the Network ID settings, and using the A and B buttons scroll to "Server IP" and enter the correct IP address of the GoPrint GTX server.



SERVER TIMEOUT

The Encryption Type must be set to AES2:

1. Navigate to the Network ID settings, and using the A and B buttons and scroll to "Encryption Type for ITC" and select AES2

ENCRYPTION TYPE FOR ITC - Change to AES2

The encryption must also match in GoPrint under the configured Cash to Account device properties:

2. From the Device Properties "Encryption" drop down menu, select AES2

Device Settings	
Terminal ID	0001
IP Address	10.10.1.1
Model	NetLink Loader 7080
Encryption	AES2
Payment Setting	
Pay Method	<input checked="" type="radio"/> Quota

ACCOUNT DOES NOT HAVE ACCESS TO THE CONFIGURED PAY METHOD

Application error for request from NetLink Terminal 0001 at 10.10.1.115

Account does not have access to the configured Pay Method Negative Response for Get Authorization request with data '301,User is not allowed to use this application'

The error is an indication that the incorrect Pay Method was selected at the device properties page:

Payment Settings

Pay Method

Quota

Allowance

Or

The user account is not a member of the User Class associated with the Pay Method:

Class Name

Pay Methods	Type	Purse Name
Mark the Pay Methods that you want to allow for this class and assign names for the purses. The purse names will be shown to users when they are	<input checked="" type="checkbox"/> Quota	<input type="text" value="University Print Funds"/>
	<input type="checkbox"/> Allowance	<input type="text" value="Allowance"/>
	<input type="checkbox"/> Value Card	<input type="text" value="Cash Card"/>
	<input type="checkbox"/> Cash/Coin	<input type="text" value="Cash/Coin"/>

or

The Cash to Account Device is not associated with the correct PayPoint containing the necessary Pay Method.

▼ PayPoints

- ▼ Demo PayPoint
 - Demo Station
 - Demo Web Client
 - Cash to Account 1

To solve: from the cash to account device properties select the correct PayPoint from the PayPoint Drop down menu.



Note: most commonly this error would only occur if multiple PayPoints are used.

Cash to Account 1 Properties

Account

ID

PayPoint

Ref No

The external accounting reference num