



TGNet Admin  
User's Guide

version 1.2



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# Contents

<b>Preface</b> .....	<b>5</b>
<b>Chapter 1: Installing and Getting Started</b> .....	<b>7</b>
Installing .....	7
Set Privileges and Passwords .....	8
Configuration .....	10
Start Printer Discovery .....	13
<b>Chapter 2: Features</b> .....	<b>15</b>
The Toolbar Icons .....	15
De-Select Printer .....	16
Delete Printer .....	16
The Menu Bar .....	16
Printer Menu .....	16
Add Printer .....	16
Groups .....	17
Cache .....	19
Exit .....	19
Discovery Menu .....	20
Start .....	20
Configuration .....	21
Tools Menu .....	22
Printer Configuration .....	22
Network Interface Configuration .....	24
Virtual Control Panel .....	25
Figure 1: Control Panel for Tally T6200 series printers .....	25
Figure 2: Control Panel for TallyGenicom 6300 series printers .....	25
Figure 3: Control Panel for Genicom 5100 printer .....	25
Smart Update .....	26
Update Printer Firmware .....	27
Options Menu .....	28
Preferences .....	28
Figure 4: No Alerts To View .....	32
Figure 5: Alerts Detected .....	32
Figure 6: Lower panel printer details showing “Paper Out” .....	33
Security .....	34
Help Menu .....	36
Help .....	36
About .....	36
Non-Menu Features .....	37
Refresh Printers In Cache .....	37
Right Mouse Click on Printer .....	37

## Table of Contents

---

<b>Chapter 3: Using TGN Net Admin .....</b>	<b>39</b>
Monitoring Printers .....	39
Sorting the Display .....	40
Figure 7: Ascending Consumables Sort.....	40
Controlling the Printers .....	42
Figure 8: Printer is in Off-line state. ....	42
Figure 9: Printer is placed in On-line state. ....	42
Changing Printer Configurations .....	43
Updating Printer Firmware .....	44
Security .....	44
<b>Appendix .....</b>	<b>45</b>
Supported Printers .....	45
Status .....	46
Well-Known Printers .....	46
Generic Printers .....	47

# Preface

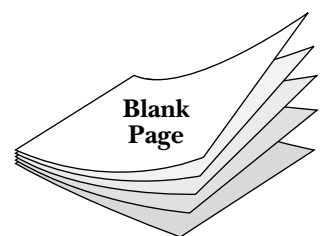
The TallyGenicom TNet Admin program gives a network administrator, or a TallyGenicom printer user, the ability to remotely manage printers over a network.

TNet Admin capabilities (dependent on specific printer) include:

- discovery of printers on networks,
- monitoring of printer status/information,
- grouping of printers for display based on user-defined groups,
- virtual control panels of TallyGenicom printers,
- editing the configuration of single or multiple TallyGenicom printers,
- updating printer firmware individually and in groups,
- updating printers' network interface configuration.

The following hardware and software is recommended or required to run TNet Admin:

- PC with 300 megahertz or higher processor clock speed is recommended; 233 MHz required minimum. An Intel Pentium Celeron family, AMD K6/Athlon Duron family, or compatible processor is recommended.
- Operating System: Windows XP/2000/NT4/Server 2003/Me/98SE/98
- Memory: 256 megabytes (MB) of RAM or higher recommended; 128 MB minimum supported; (may limit performance and some features)
- Disk space: 150 megabytes (MB) of available hard disk space
- Super VGA (800 x 600) or higher resolution video adapter and monitor; 1024 x 768 for optimal viewing.
- CD-ROM or DVD drive
- Keyboard and Microsoft Mouse or compatible pointing device
- Local Area Network Connection with TCP/IP protocol installed

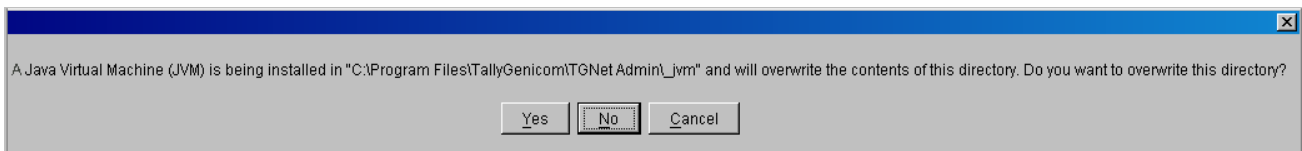


# Chapter 1

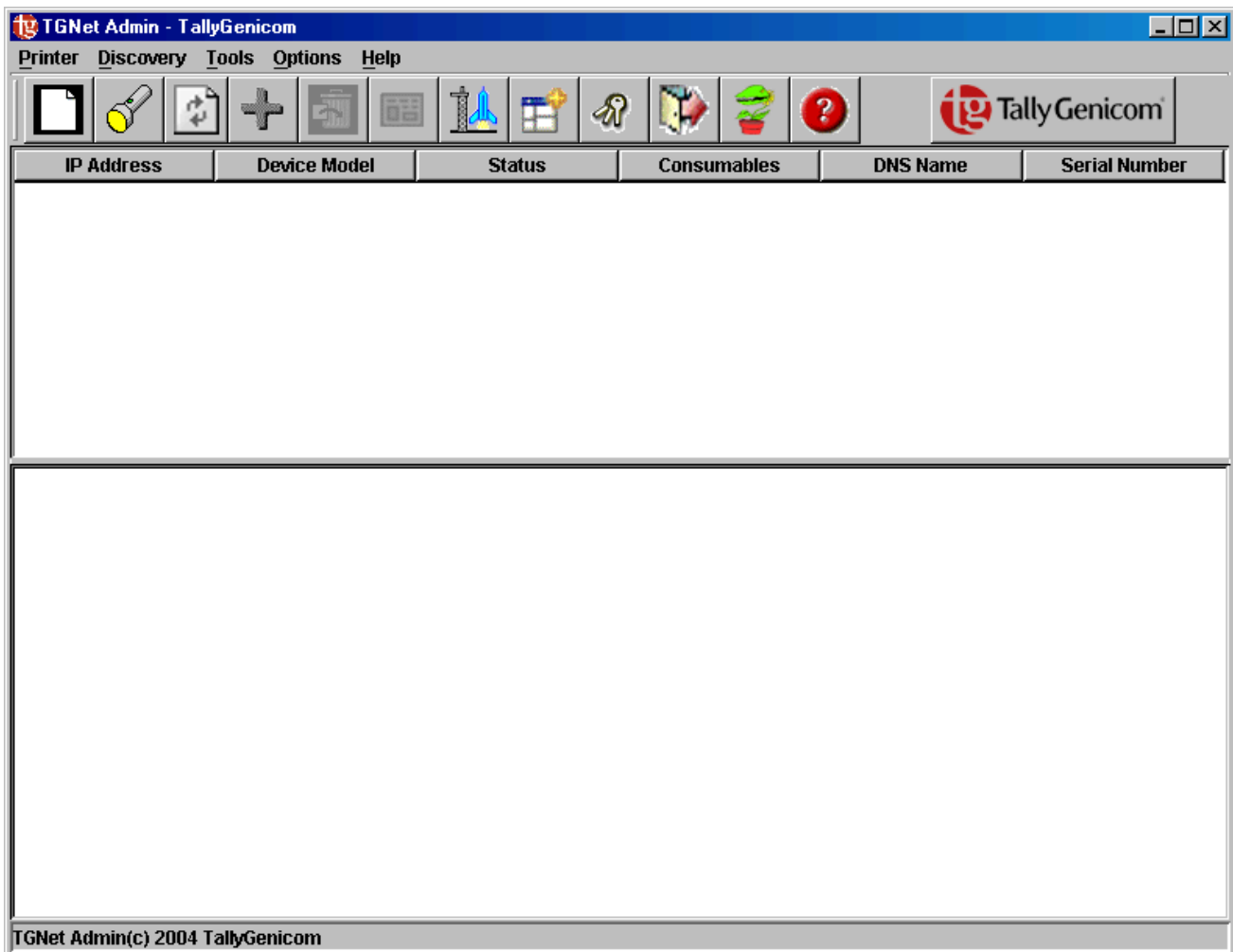
## Installing and Getting Started

### Installing

Insert the CD in the CD drive. When the welcome window appears, click on “I Accept”. Click on “Install TGN Net Admin”. This will bring up the installation wizard. After selecting where on your PC the TGN Net Admin program and supporting files will be installed, a Java Virtual Machine window will appear:



Click “Yes”. When the install is finished, launch TGN Net Admin and after a short wait, its main window will open, displaying empty upper and lower panels.

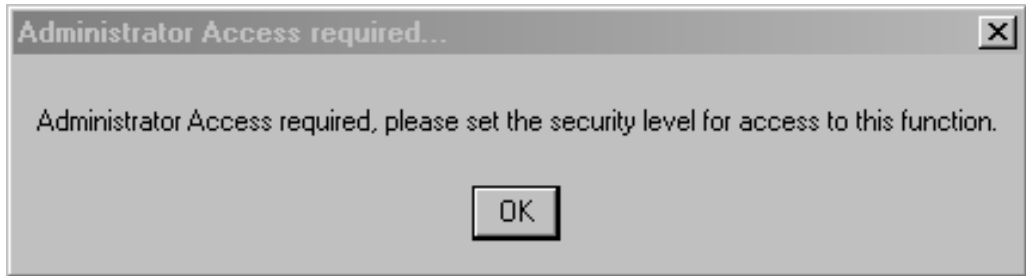


## Set Privileges and Passwords

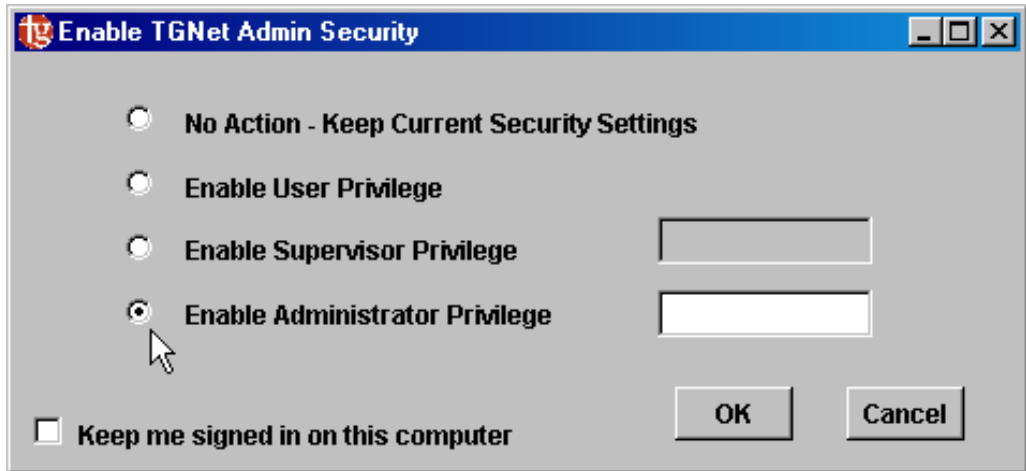
Certain features of TGN Net Admin require Supervisor or Administrator privilege. To log-in, you may click on the “Enable/Disable TGN Net Admin Security Toolbar icon.



Selecting any of the privilege protected features, before log-in, will cause the following warning to appear.



Click OK to bring up the Log-in window:

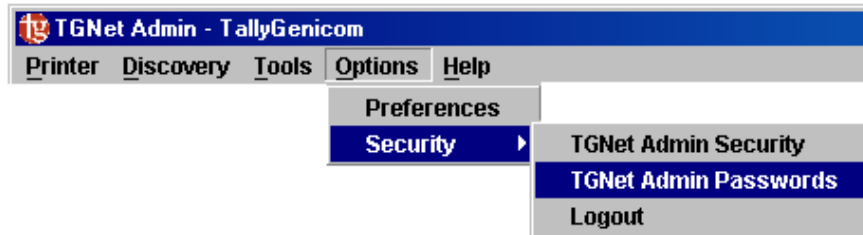


TGN Net Admin provides three privilege levels: User, Supervisor and Administrator. By default, TGN Net Admin installs with the User level enabled. The default Supervisor password is *super*, and the default Administrator password is *adm*. For any installation of TGN Net Admin that is not for an Administrator, it is recommended to immediately change the Administrator password and the Supervisor password.

See chapter 2 **Options** => **Security** => **TGN Net Admin Security** for an explanation of the privilege levels within TGN Net Admin, and changing the passwords.

Selecting “Keep me signed in on this computer” will maintain the privilege level that has been enabled when TGNNet Admin is closed and subsequently relaunched, without the need to re-enter a password. If this option is unchecked, TGNNet Admin reverts to the User privilege level when closed..

Select “Enable Administrator Privilege” and enter the password in the box then click OK.

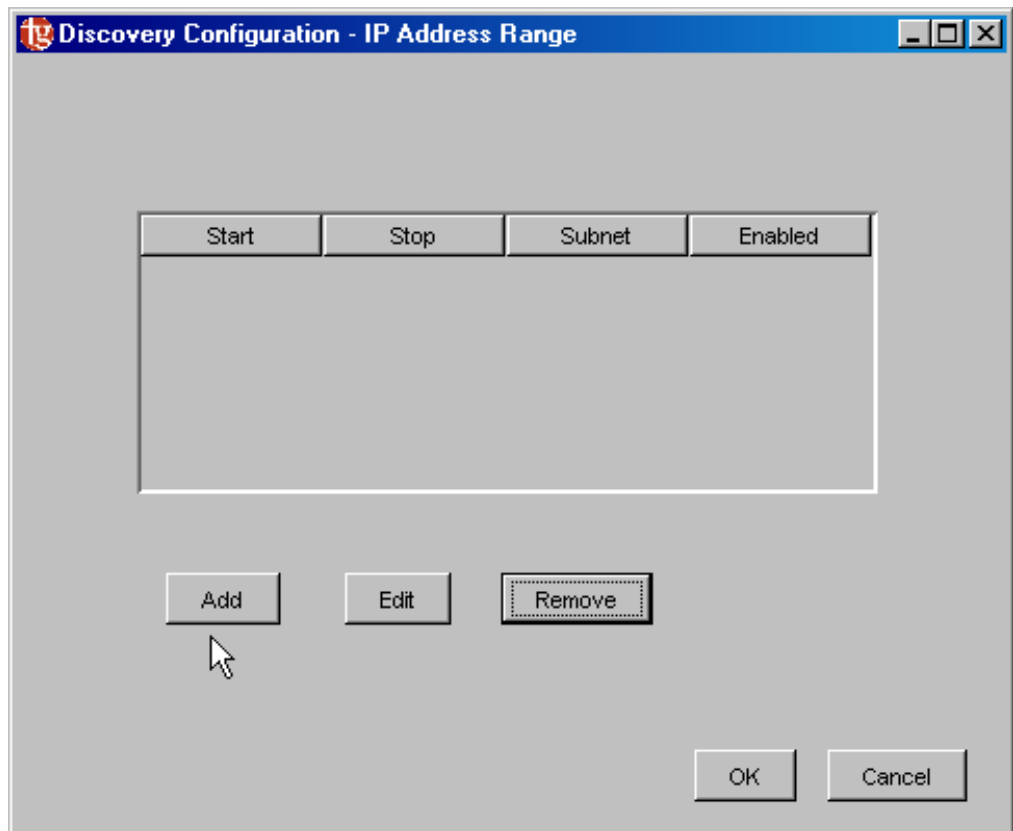


Instead of clicking on the Toolbar Icon for “Enable/Disable TGNNet Admin Security”, you can also reach this window by clicking on the “Options” menu at the top of the window, selecting “Security,” and then clicking on “TGNNet Admin Passwords.”

## Configuration



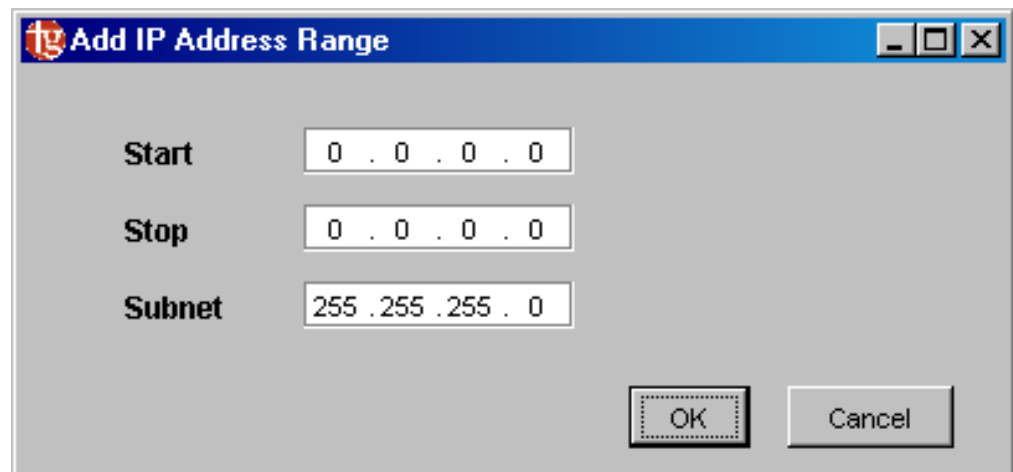
Once you have logged in as Administrator, click on the “Discovery” menu and then on “Configuration”. This brings up the IP Address Range window:



Here is where the network administrator may specify a list of IP addresses, which TGN Net Admin will use to discover printers on the network. Initially the list is empty. Click on “Add” to enter a range of IP addresses.

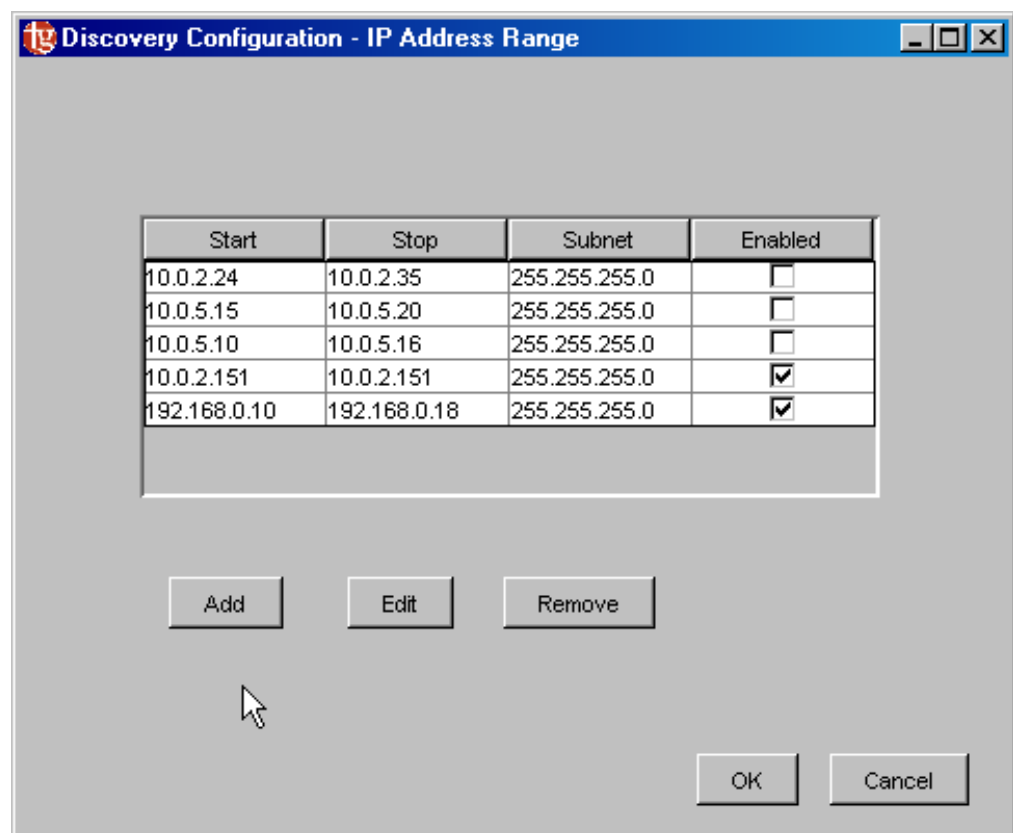
A range of inclusive IP addresses (the “Start” and “Stop” columns contain different values) or a single IP address (the “Start” and “Stop” columns contain the same value) may be entered.

In the “Add IP Address Range” window, one enters a single IP Address Range. Use the tab key to move from field to field. Enter the subnet mask and click OK.



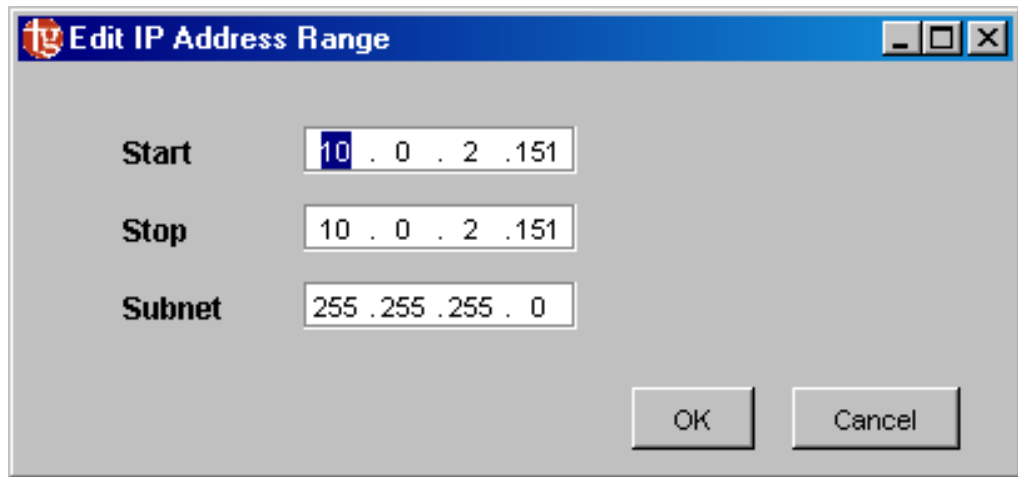
Continue to click “Add” to create additional IP address ranges.

When finished Adding addresses, the window will look something like this:



The fourth column now has boxes indicating whether a particular printer or range of printers is enabled for Discovery. This state can be toggled by clicking in the box. Only printers that are “Enabled” will be Discovered. This allows the administrator to list all the network printers here, but selectively Discover printers. Note: the “current” changes to this list are not saved until the OK button is clicked.

To edit an address entry, select the desired row and then click the “Edit” button. Doing so brings up a similar window as seen when “Add”ing IP addresses. Tab through the fields and change where desired.



The screenshot shows a dialog box titled "Edit IP Address Range". It has a blue title bar with a logo on the left and standard window controls on the right. The main area is light gray and contains three rows of text with corresponding input boxes. The first row is labeled "Start" and the box contains "10 . 0 . 2 . 151". The second row is labeled "Stop" and the box contains "10 . 0 . 2 . 151". The third row is labeled "Subnet" and the box contains "255 . 255 . 255 . 0". At the bottom right, there are two buttons: "OK" and "Cancel".

To remove an address entry, select the desired row and then click the “Remove” button. This might become necessary if a printer is no longer part of the network, or if a range of addresses are no longer valid.

Once this window has been populated with the IP addresses of the printers in your network, the information is stored and will still be there when TGNet Admin is closed and relaunched.

Click OK when you’re through here.

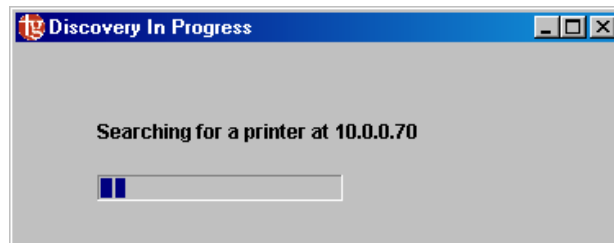
You are now ready to let TGNet Admin search the network for printers by beginning the **Discovery => Start**.

## Start Printer Discovery

After the Network Administrator has configured TGNNet Admin with the IP addresses of the network printers, the next step is to have TGNNet Admin query those IP addresses and obtain a list of printers to be managed, (only printers will be listed, not other devices whose IP addresses might happen to lie within the specified ranges). This is called “Printer Discovery” and it is accessed three different ways: (1) from the “Discovery” menu click “Start”; or (2) type “Alt-d” and click on “Start”; or (3) click on the “Start Printer Discovery” icon:









Once “Start Printer Discovery” has been launched, this progress box will appear. If a large number of IP addresses have been configured for Discovery, then please be patient while TGNNet Admin discovers printers in the list.



When Discovery is complete, a list of Discovered printers will appear in the upper panel, each with its IP Address, Device Model name, Status, Consumables status, DNS Name, and Serial Number.

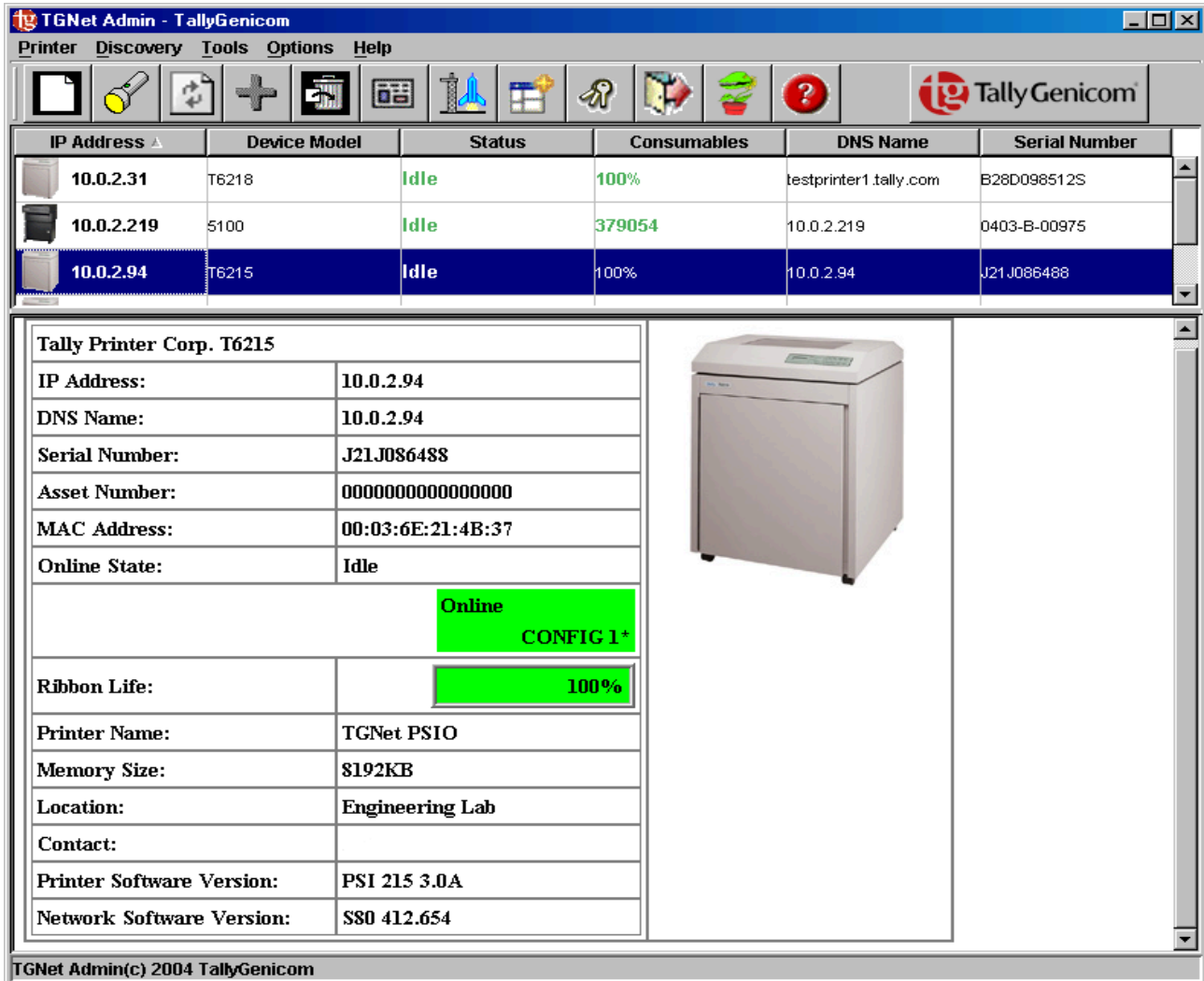
TGNNet Admin “knows” about certain TallyGenicom printers and displays an appropriate icon for these printers. For printers which TGNNet Admin does not “know” about, but which have some portion of the Printer MIB, a “generic” icon will be displayed.

IP Address	Device Model	Status	Consumables	DNS Name	Serial Number
 10.0.2.31	T6218	Idle	100%	testprinter1.tally.com	B28D098512S
 10.0.2.219	5100	Idle	379054	10.0.2.219	0403-B-00975
 10.0.2.33	T6215	Offline	100%	10.0.2.33	J21J086490
 10.0.2.252	Printer	idle	0%	10.0.2.252	
 10.0.2.94	T6215	Idle	100%	10.0.2.94	J21J086488
 10.0.1.43	2280	Idle	0%	10.0.1.43	

## Printer Details

If the list of printers is greater than can fit in the window, a scroll bar will appear on the right side of the upper panel. The boundary bar between the upper and lower panels, as well as the outer window boundaries, can be moved using typical click and drag technique.

Clicking on one of the printers will select it. Details of the selected printer will appear in the lower panel.



The screenshot displays the TGNNet Admin interface. At the top, there is a menu bar with 'Printer', 'Discovery', 'Tools', 'Options', and 'Help'. Below the menu is a toolbar with various icons. The main area is divided into two panels. The upper panel is a table listing printers with columns for IP Address, Device Model, Status, Consumables, DNS Name, and Serial Number. The lower panel shows detailed configuration for the selected printer, including fields for IP Address, DNS Name, Serial Number, Asset Number, MAC Address, Online State, Ribbon Life, Printer Name, Memory Size, Location, Contact, Printer Software Version, and Network Software Version. A photograph of the printer is also visible in the lower panel.

IP Address	Device Model	Status	Consumables	DNS Name	Serial Number
10.0.2.31	T6218	Idle	100%	testprinter1.tally.com	B28D098512S
10.0.2.219	5100	Idle	379054	10.0.2.219	0403-B-00975
10.0.2.94	T6215	Idle	100%	10.0.2.94	J21J086488

<b>Tally Printer Corp. T6215</b>	
IP Address:	10.0.2.94
DNS Name:	10.0.2.94
Serial Number:	J21J086488
Asset Number:	0000000000000000
MAC Address:	00:03:6E:21:4B:37
Online State:	Idle
	Online CONFIG 1*
Ribbon Life:	100%
Printer Name:	TGNNet PSIO
Memory Size:	8192KB
Location:	Engineering Lab
Contact:	
Printer Software Version:	PSI 215 3.0A
Network Software Version:	S80 412.654

From the list of “cached” printers, you may configure individual printers, upload configurations to printers, monitor various printers, and tell TGNNet Admin to let you know whenever any of the printers generate an alert. Chapter 2 goes through all of the functions of TGNNet Admin.

# Chapter 2

## Features

This chapter describes the individual features of the TGNNet Admin Software Product. There are usually two ways to initiate different features of TGNNet Admin: click on an icon, or use the Menu Bar which consists of Printer, Discovery, Tools, Options and Help menus.

### The Toolbar Icons



Clear Cache



Start Printer Discovery



Refresh Printers In Cache  
*There is no Menu Bar command for this*



Add Printer To Cache



Delete Printer From Cache



Virtual Control Panel



Launch Custom Application  
*There is no Menu Bar command for this*



Filter View of Printers



Enable/Disable TGNNet Admin Security



Logout of Current Security Level



No Alerts To View



Alerts Detected - click to view  
*There is no Menu Bar command for this*



TGNNet Admin Help Topics



Go To TallyGenicom Website  
*There is no Menu Bar command for this*

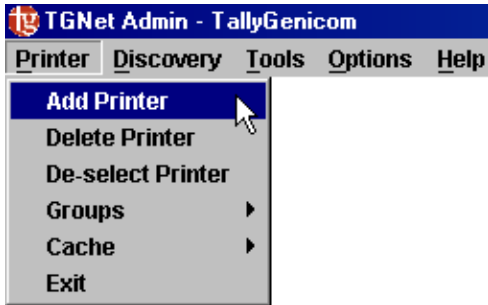
Passing the tip of the cursor over all but the last of the icons will cause a text box to pop up giving the function of the button. This text is repeated at the bottom of the TGNNet Admin window.

## The Menu Bar

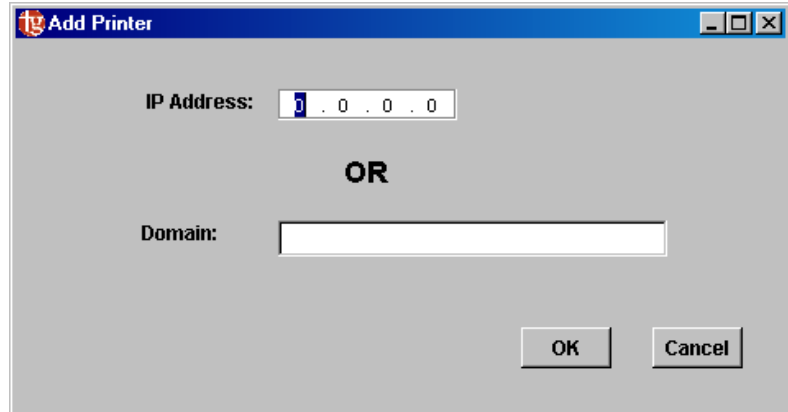


### Printer Menu

#### Add Printer

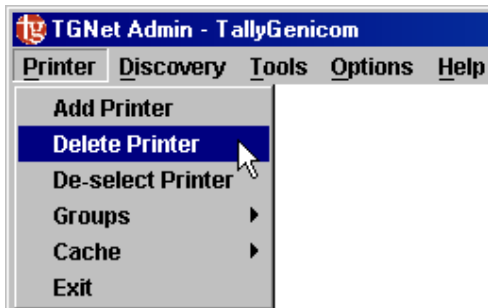


This menu item adds a single printer to the Cache. You may use either an IP address or the Domain Name of a printer. These are obtained from your Network Administrator.



A Toolbar Icon is available for this function, .

#### Delete Printer

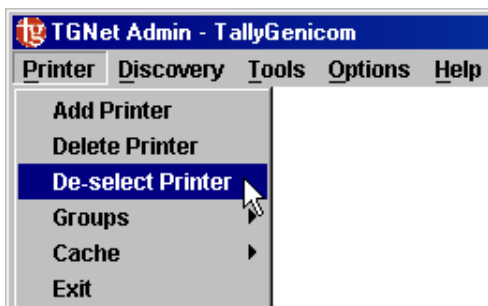


This menu item deletes a single printer from the Cache. One of the printers shown in the upper panel must first be selected in order to delete it. If you have not highlighted a printer, a warning message will appear.

Once you have selected a printer by highlighting the printer row you wish to delete, a window will appear in which you will be given a chance to change your mind and cancel. If you choose OK, the printer will be deleted from the Cache.

A Toolbar Icon is available for this function, .

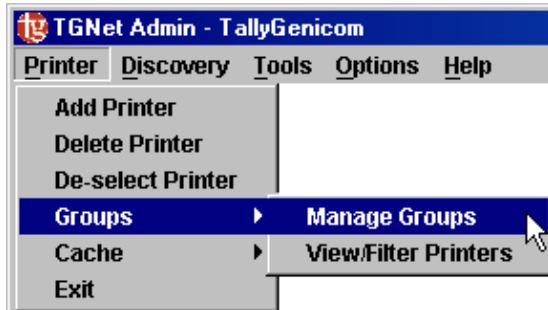
#### De-Select Printer



TGN Net Admin periodically refreshes the information displayed in the lower panel for a highlighted printer. To ease the load this imposes on the network, you may wish to De-Select the printer. Once clicked, the information in the lower panel will disappear.

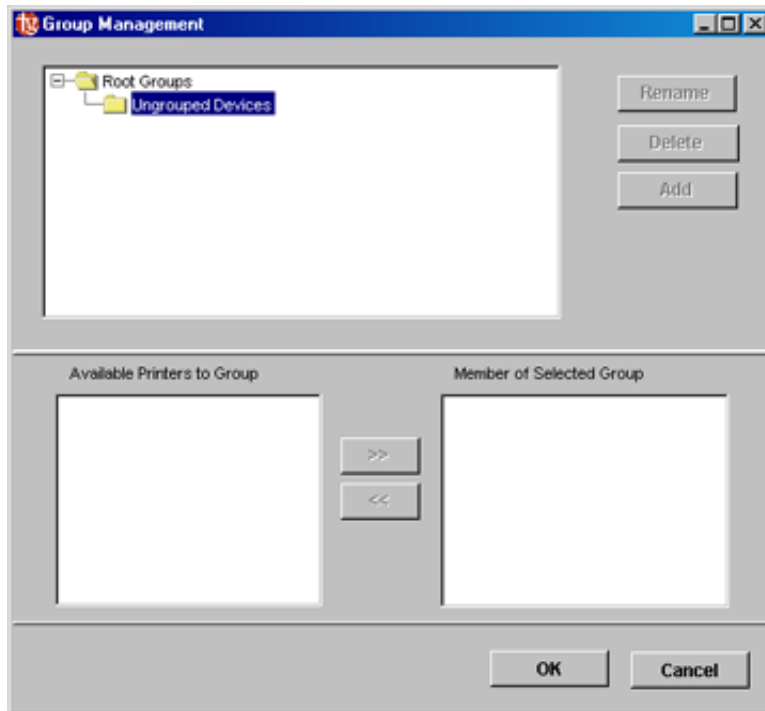
## Groups

### Manage Groups



This dialog box enables you to set up different groups of printers. There is an obvious advantage to group printers by their firmware, drivers, or other characteristics. You may create (Add) new groups, Rename or Delete groups. After creating groups, you may view the printers in any of the groups.

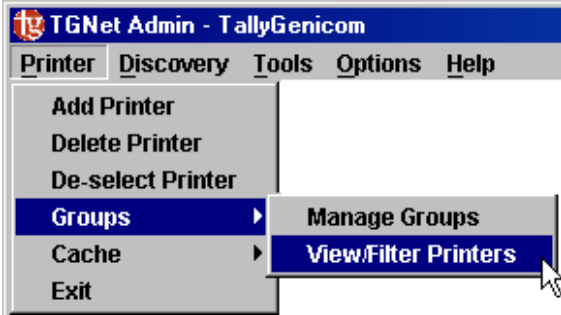
Initially, all Discovered printers are placed in the *Ungrouped Devices* group under *Root Group*. When *Ungrouped Devices* is selected, printers will be listed in the lower right panel. The *Root Groups* and the *Ungrouped Devices* groups cannot be deleted.




To Add a new group, you must first select the Root Group. If the new group is to be a subset of an existing group select the desired group, and then Add. Type a descriptive name for the new group into the text box and then click just outside the text box or press the Enter key. Select printers from the “Available Printers to Group” list, which shows all Discovered printers whether already in some other group or not, and click on the arrows pointing to the right to move them into the “Member of Selected Group” list. As groups are created and printers are put into them, they are removed from the *Ungrouped Devices* group.

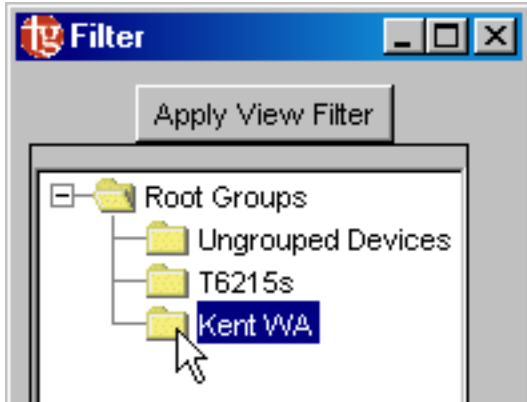
The next time *Ungrouped Devices* is selected, the printers which have been placed in some other group will not be shown in the “Available Printers to Group” list, (unlike what happens when any other group is selected), and the printers which have not yet been placed in any group will still be shown in the “Member of Selected Group” list.

### View/Filter Printers



Once you have your groups created, you may change the upper panel view by clicking on the View/Filter Printers. A window will open showing the groups that have been created. Select the group to be viewed from the window and click on “Apply View Filter”.

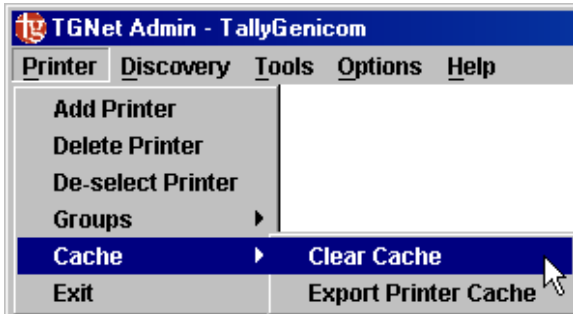
There is a Toolbar Icon for this function,  .



Now, only the printers in the selected group will appear in the upper panel of the main TGNet Admin window. All Discovered printers are still in the Cache, however, and TGNet Admin continues to poll them. Also, functions under the Tools menu, such as Printer Configuration, act on all applicable Discovered printers, not just the ones in the displayed group.


## Cache

### Clear Cache

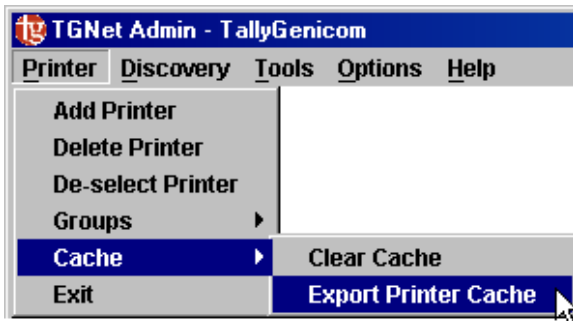


The Printer Cache is a persistent file maintained by TGNet Admin, transparent to the user, and is the place in which the information retrieved from the discovered printers is stored. Individual printers may be added or deleted from the Cache. The Clear Cache menu selection will clear all the Discovered printers from the Cache. Once the Cache is cleared, it cannot be recovered. To ensure this option wasn't selected by mistake, a dialog box will appear and let you cancel. Discovery, (requires Administrator privilege), or Add Printer may

be used to re-populate the Cache.

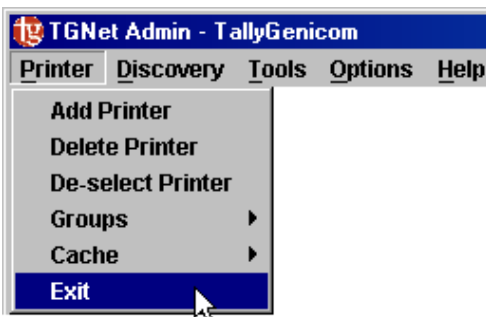
There is a Toolbar Icon for this function, .

### Export Printer Cache



The information held in the Cache may be exported as a comma separated values (.csv) format file, to facilitate report creation. All the Discovered printers in the Cache at the time of export will be included.

## Exit




When TGNet Admin is Exited, the Cache is preserved. There is an option in System tab of Preferences, where the Supervisor or Administrator may turn this feature off. If the "Keep me signed in on this computer" option is selected during the Log-in process, TGNet Admin will preserve that privilege level during Exit. The Group View/Filter selected view will not be preserved on Exit.

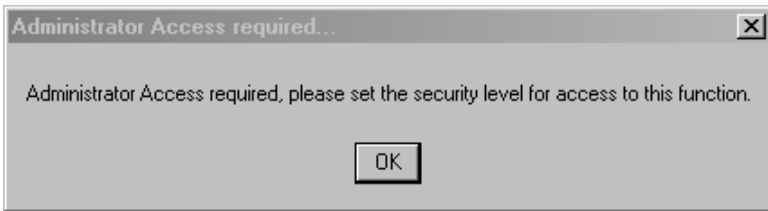
## Discovery Menu

### Start

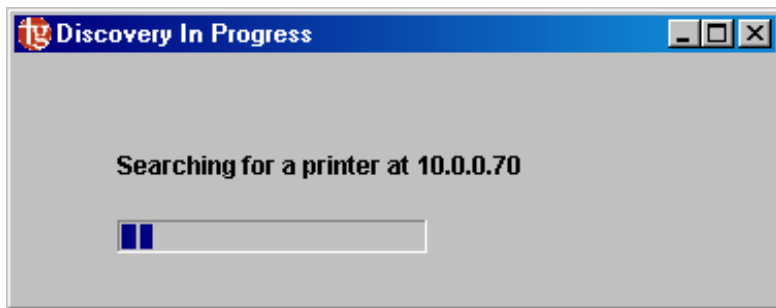


Selecting Discovery Start launches a printer Discovery process, based on the list of enabled IP Address ranges created in **Discovery ⇒ Configuration** (see next page).

A Toolbar Icon is available to launch a Discovery,  .



Administrator access is required to initiate this function due to the potential large volume of network traffic, depending on the number of IP addresses selected.

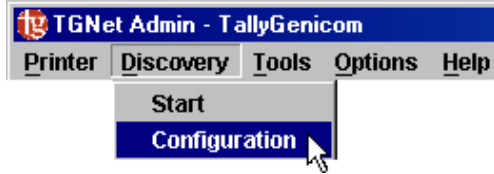


A progress window lets you track how far along the Discovery process is.

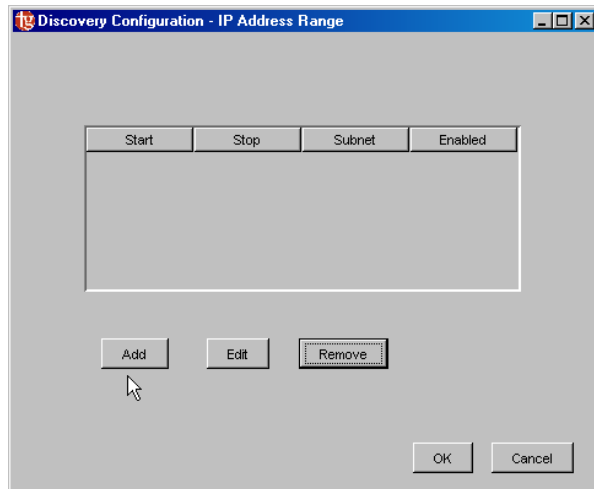
When finished, all Discovered printers will be listed in the Cache.

If printers are not found, but should have been, you may need to make adjustments to the Discovery Timeout and Retry parameters found in the Discovery tab of Preferences.

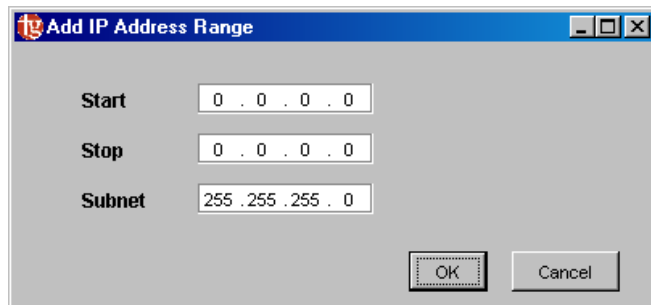
## Configuration



This menu item provides you with a means of creating a list of IP Addresses for TGNet Admin to use in the Discovery process. You may create as many ranges of IP Addresses as desired. A range can consist of a single IP Address or many IP Addresses. You also have the ability to enable or disable certain IP Address ranges as desired.



To add an IP address range, click the ADD button. To Edit an existing IP range, select the range row and then click the EDIT button.



In either case, a similar dialog box appears in which you may add or edit an IP address range.

To Remove an existing IP range, first select the range row and then click the REMOVE button. This choice removes the IP Range from the list, and those printers in this range will no longer be included in a Discovery. To limit discovery without removing a range, click the Enabled box, removing the check. By default, an IP Address range is Enabled when it is Added.

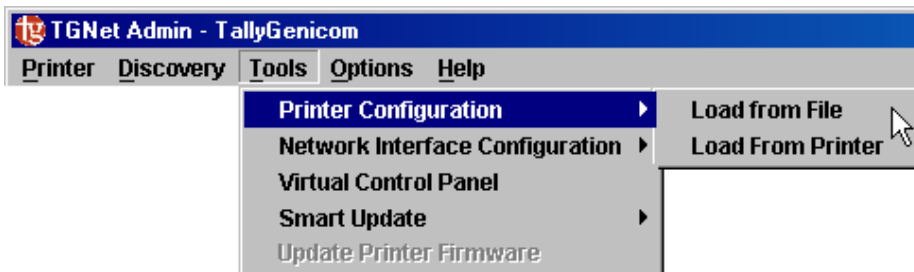
Changes made to the list of IP Address Ranges have no bearing on the Cache, except that the current list, for any given Discovery process, determines which IP addresses are searched for printers, and thus adding “new” printers to the Cache. Changes to this list can only Add printers to the Cache, and only after Discovery. This list never removes printers from the Cache.

## Tools Menu

Menu selections in the Tools menu are designed to take advantage of features specifically built into certain Tally, TallyGenicom, and Genicom printers. Refer to the Appendix for a list of supported printers.

In the Tools menu, a grayed-out menu item means that a printer must first be selected before opening the menu, or that the selected printer is not supported.

### Printer Configuration



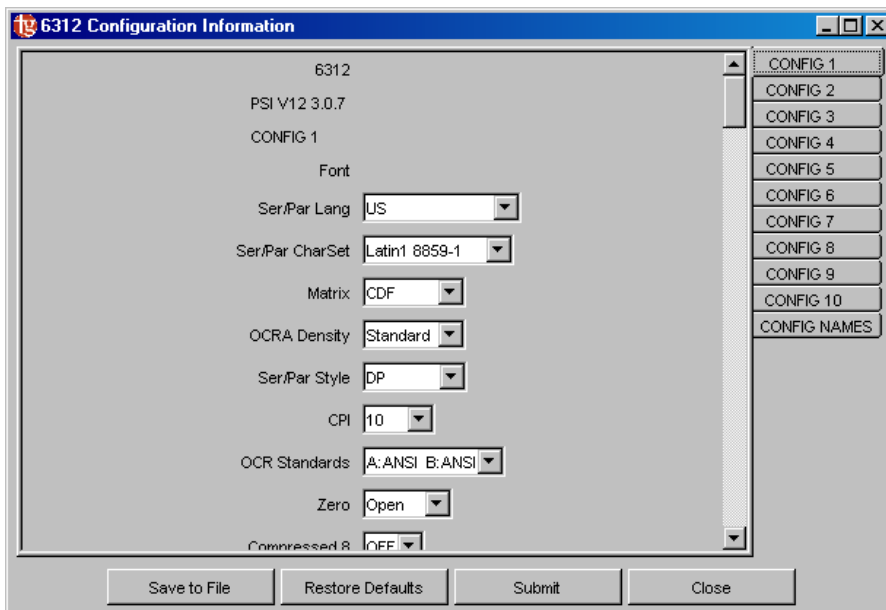
An eligible printer from the upper panel must first be selected to activate this option. The two options determine the source of the printer configuration; all other actions afterwards are the same. That is, users may open an existing file, or get a configuration from a selected printer.

### Load from File

This option opens an existing printer configuration file on your PC or from a connected network. An eligible printer must already be selected. Click on Load from File and a Browse window will open allowing you to find an appropriate file. Click Open and the chosen file will be opened in the Printer Configuration editor. A window will open displaying the retrieved configuration data. If the selected file is not a printer configuration formatted file, a warning window will open.

### Load From Printer

This option retrieves the printer configuration from the currently selected printer. Click on “Load From Printer” and a progress window will indicate the progress of retrieving the configuration data.

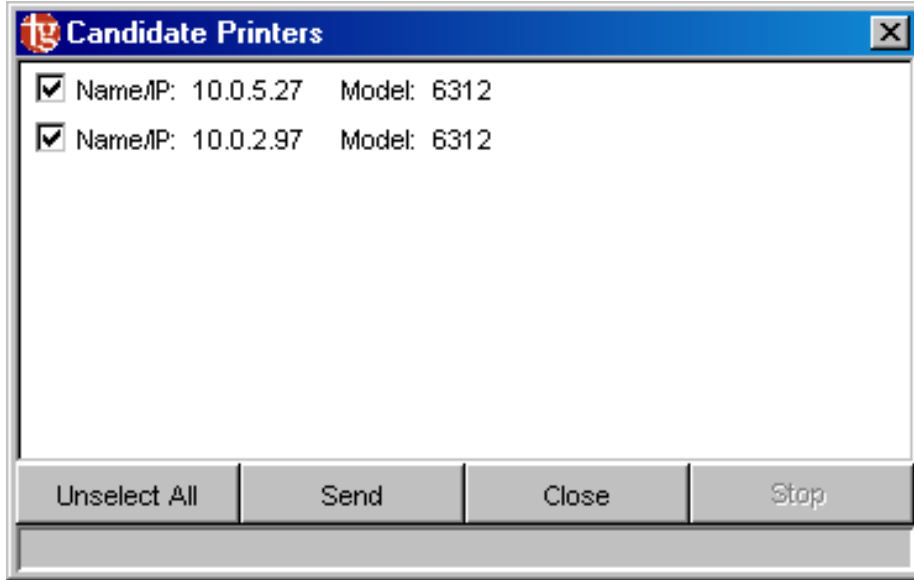


progress of retrieving the configuration data.

Once the configuration data has been obtained by TGNAdmin, whether from a saved file or a printer, the Printer Configuration Editor will be opened, where you can modify any or all ten of the configuration settings (including renaming them).

Restore Defaults abandons changes made during the editing session; Save to File opens a browse dialog box for saving to a new file or to overwrite an old one.

Refer to the Printer Operator Manual for a detailed explanation of Printer Configuration.

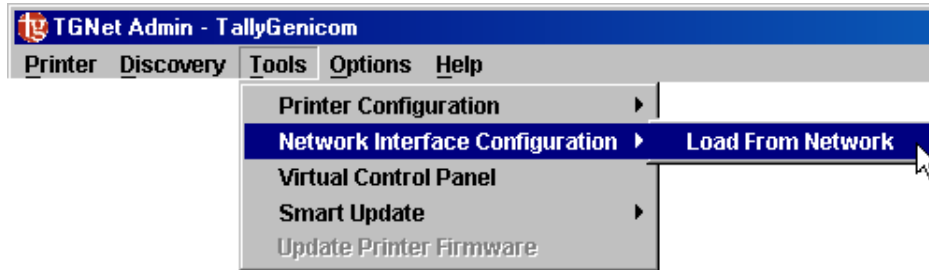


Clicking Submit brings up a dialog box containing a list of printers, taken from the Cache, that TGNet Admin has determined are candidates for receiving the configuration data.

By default, all candidate printers are selected, as indicated by the check boxes on the left. Click to select/de-select desired printers.

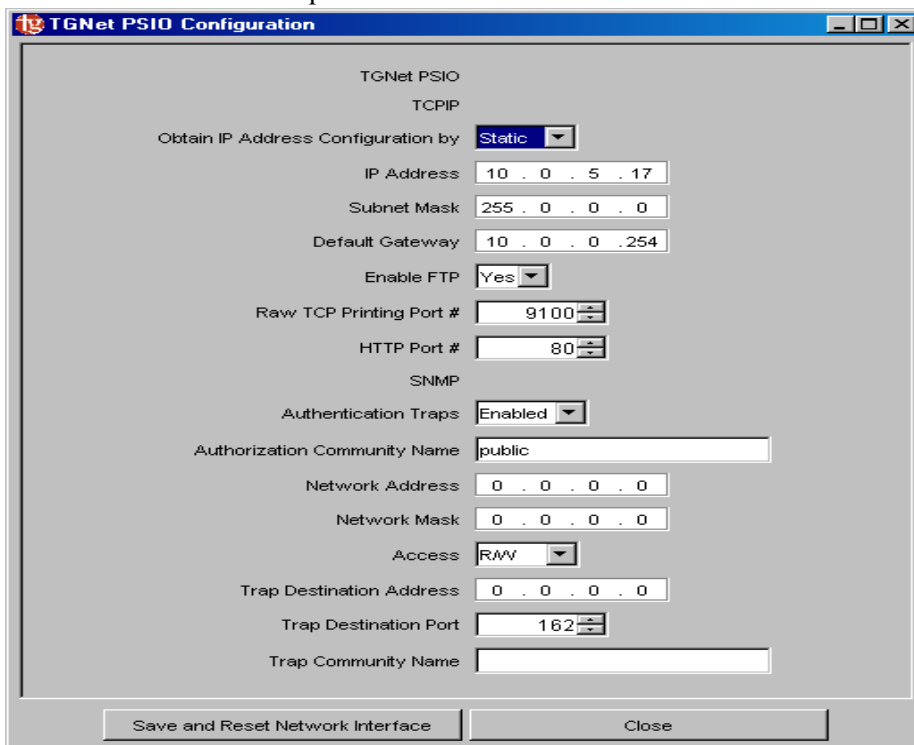
Once SEND has been clicked, the operation may not be halted. A progress window will be displayed for each printer as the configuration data is being sent. You should read the log file, printer\_config\_log.txt (found in the root folder of TGNet Admin, e.g., C:\Program Files\TallyGenicom\TGNet Admin\) to confirm the updating of each selected printer.

## Network Interface Configuration Load From Network






This menu item supports network configuration for TGNNet PSIO, TGNNet IIF-4, and EasyCom Xpress PSIO interfaces. For eligible printers, you may view and edit a portion of the Network Interface Configuration settings for a selected printer.

Select an eligible printer (“Load From Network” will be grayed out if the printer is not eligible), then click on Load From Network. If the Network Interface password has been changed from the default, a dialog box will come up asking for the NIC password. This will have been set by the Network Administrator. Once the password is accepted, the Network Configuration Editor window will open.

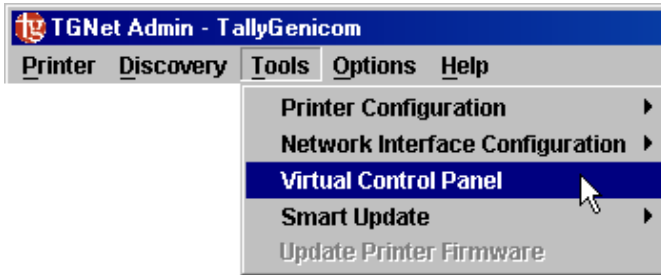


The Network Configuration Editor displays the network parameters that are available for changing. Once the changes have been made, click “Save and Reset Network Interface” to send any changes made to the printer. To abandon any changes made, click “Close”.

The full range of network configuration parameters may be found by right clicking on the desired printer and launching a Web Browser.

If the IP address is changed here, the printer will be displayed with a status of Unavailable. You should delete the printer from the Cache, , then Add the printer with the new IP address, . Alternatively, after deletion, put the new IP address in Discovery Configuration, and go through Discover, .

## Virtual Control Panel



This menu selection gives you “virtual” access to an eligible printer’s Control Panel, as if you were standing in front of the printer and pushing buttons on the actual control panel of the printer. Refer to the Appendix for supported printers.

There is a Toolbar Icon for this function,  .

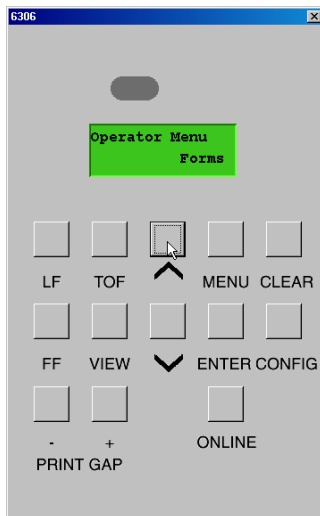


Figure 2: Control Panel for TallyGenicom 6300 series printers

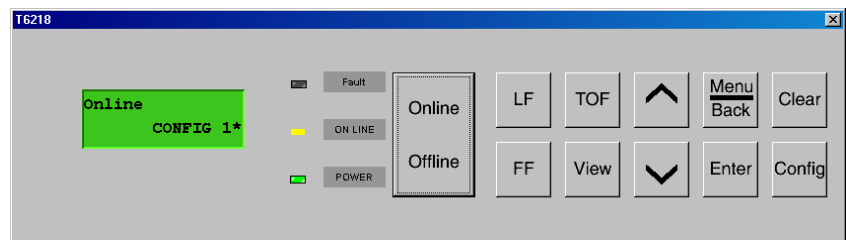


Figure 1: Control Panel for Tally T6200 series printers

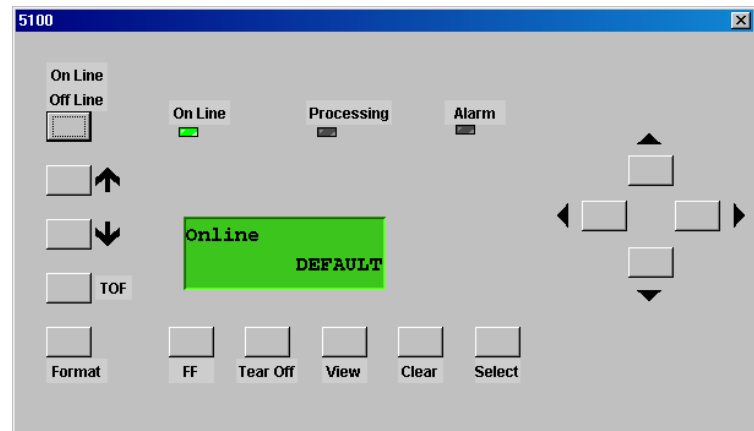
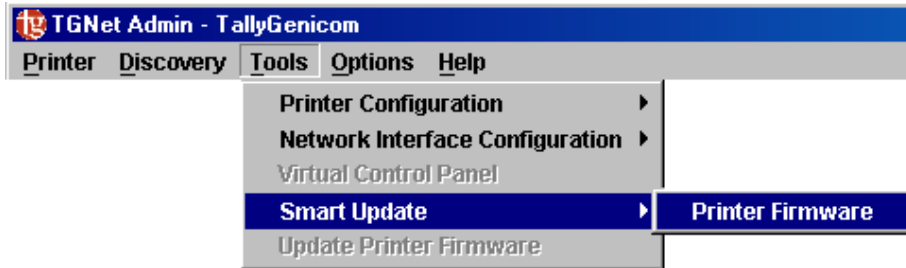


Figure 3: Control Panel for Genicom 5100 printer

### Smart Update Printer Firmware



This menu item allows you to perform a Printer Firmware update on one or more printers in the Cache. “Smart Update” means that after TGN Net Admin opens the firmware file, it examines all of the printers in its Cache, and selects those

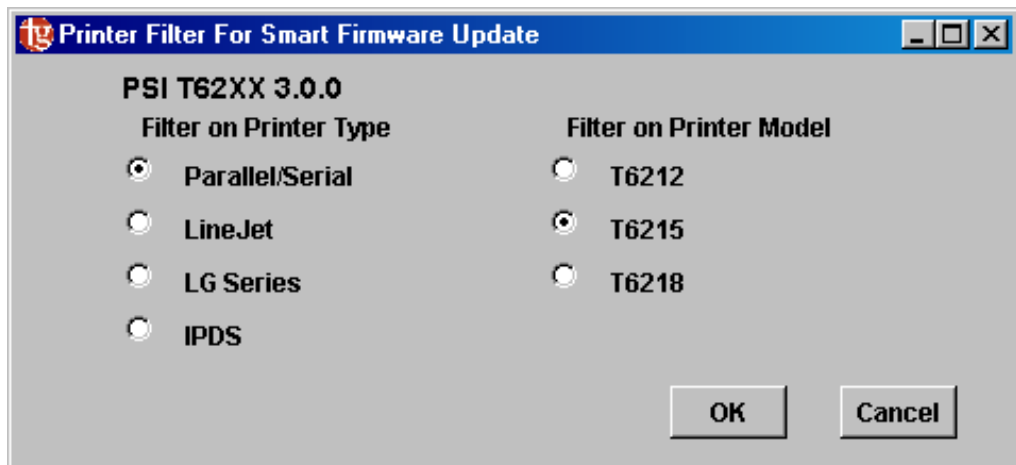
printers which would be candidates for a firmware update, based on the firmware file selected. Refer to the Appendix for supported printers.

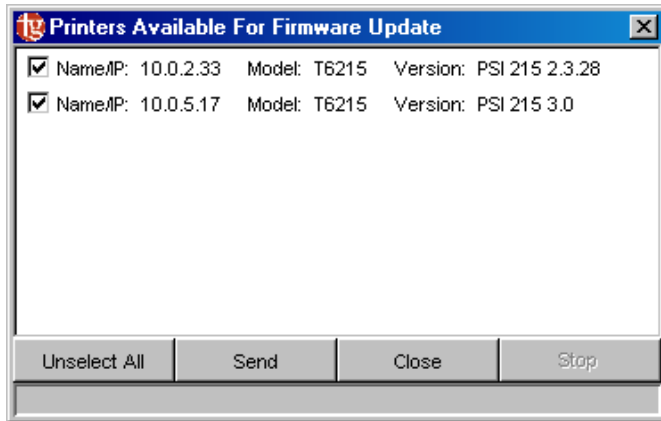
Smart Update does not support down-grading printers to an older version of firmware. This is supported by Update Printer Firmware on an individual printer basis.

Click on “Printer Firmware” and a browse window will open allowing you to search on your PC or network for a firmware file. If the selected file is not a valid printer firmware file, an error message will appear.

If the desired file has the name format, \*.exe, it is in a self-extracting archive format. It must first be executed, so that the archived file can be extracted. The extracted file is more likely to be the valid file which TGN Net Admin verifies.

After a valid file is chosen, a Filter window opens. This filter will select the printers by the type of firmware in the printer, and by printer models. Click OK after making the desired filter selections in each group. Note: more than one Printer Type and more than one Printer Model may be selected in the filter.

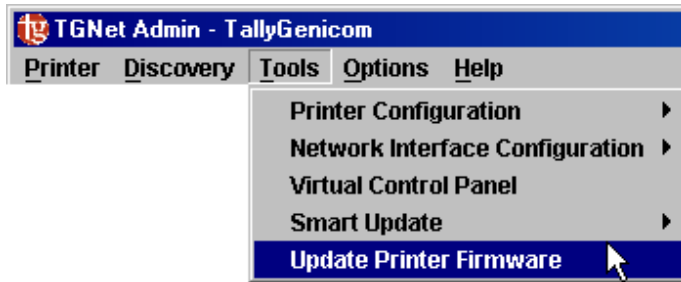




After clicking OK, a dialog box opens containing a list of cached printers, that TGN Net Admin has determined are candidates for updating. By default, all candidate printers are selected, as indicated by the check boxes on the left. Click to select/de-select the desired printers. When ready, click Send. To cancel out, click Close.

Once the firmware has been successfully sent to a printer, a dialog box will open, identifying the successful printer by IP address. The OK button must be clicked before TGN Net Admin will move on to the next printer in the list. This will be repeated until all printers in the list have been updated.

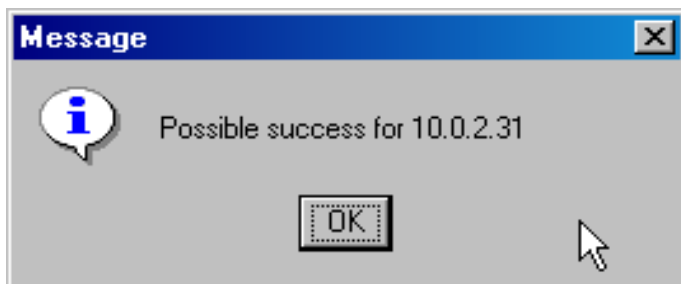
### Update Printer Firmware



This menu item updates the firmware of a single printer. Refer to the Appendix for supported printers. First select the target printer, then click Update Printer Firmware. A browse window will open allowing you to find the desired firmware file. The Printer Firmware Update begins immediately when a valid file is selected. There is no filtering on the Update Printer Firmware menu option.



*Use this menu option only when you are sure that the firmware file you are downloading is valid for the printer selected.*

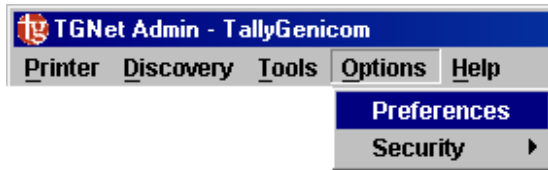


When the update has finished, the following message will appear. You may right click on the printer and choose to “Refresh Printer”. After “Refresh”ing, confirm that the updated firmware version number appears in the lower panel.

## Options Menu

The Preferences pertain to the functioning of various features of TGNNet Admin.

### Preferences



The Preferences window contains the following Tabs: System, Discovery, Printer Polling, Fast Polling, Logging, and Alerts. After setting options on any or all of the tabs, click OK. When any changes are made to Preferences, the application must be restarted before the changes take effect.

### System

#### Custom Application Location

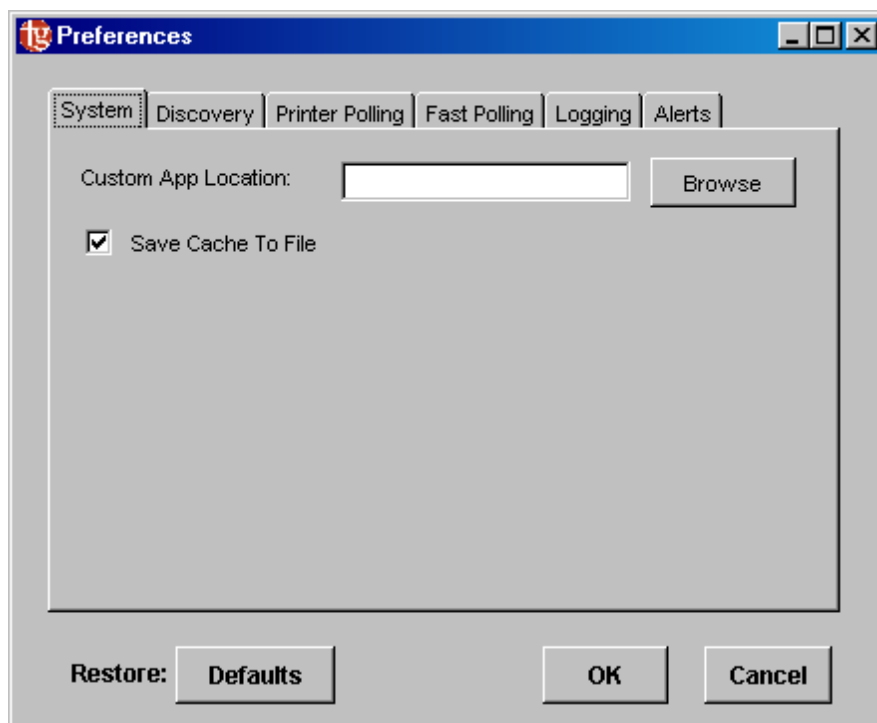
TGNNet Admin provides the capability to launch another application from within TGNNet Admin. The Custom Application Location is where this is configured. Fill in an absolute path name for the application, e.g., Print Guide, in the text box:

C:\Program Files\TallyGenicom\PrintGuide\PGuide.exe

If you don't know the path name, click on "Browse" to browse to the application.

#### Save Cache To File

By default, the TGNNet Admin Cache is saved to a file, and when TGNNet Admin is subsequently launched, the cached printers are displayed. If you wish to turn this feature off, it may be done here by clicking to uncheck the "Save Cache To File" box. The next time TGNNet Admin is launched, the Cache will be empty and no printers will be displayed.



## Discovery

The Discovery options enable you to modify the way TGNNet Admin Discovers the printer(s) on the network.

The screenshot shows the 'Discovery' tab of the 'Preferences' dialog box. It contains the following settings:

Setting	Value
Add Printer Timeout in ms (Default - 10)	10
Add Printer Retries from 1 - 99 (Default - 3)	3
Discovery Timeout in ms (Default - 10)	10
Discovery Retries from 1 - 99 (Default - 2)	2
SNMP Timeout in ms (Default - 50)	50
SNMP Retries from 1 - 99 (Default - 3)	3

Buttons at the bottom: Restore: Defaults, OK, Cancel.

Add Printer affects the timing for adding a single printer.

Discovery affects the timing for the Discovery process.

SNMP affects timing for other SNMP activity in TGNNet Admin.

These settings may need to be adjusted for TGNNet Admin's performance in your particular network environment.

## Printer Polling

Printers in the Cache can be periodically polled to update the Status column in the upper display panel.

The screenshot shows the 'Printer Polling' tab of the 'Preferences' dialog box. It contains the following settings:

Defaults  
 Disable  
 Custom

Setting	Value
Refresh Rate in ms (Default - 30000)	30000
Timeout in ms (Default - 10)	10
Retries from 1 to 99 (Default - 3)	3

Buttons at the bottom: Restore: Defaults, OK, Cancel.

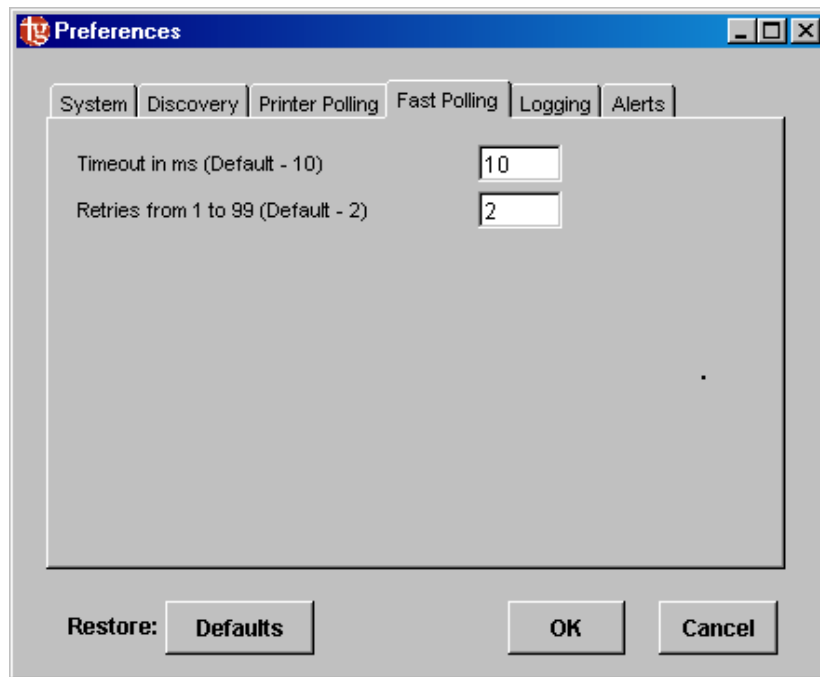
You may choose to leave this feature on the default setting Refresh Rate of 30 seconds.

In cases where there are a large number of printers in the Cache, you may Disable this feature, as it would have limited value.

You may select a Custom Refresh Rate based on the number of printers in the Cache. The smaller the Refresh Rate, the more network traffic TGNNet Admin will generate.

### Fast Polling

This feature is currently not supported.



## Logging

TGNet Admin can create three kinds of logs, saved as text files. You may enable or disable each one individually here.

### TGNet Admin Logging

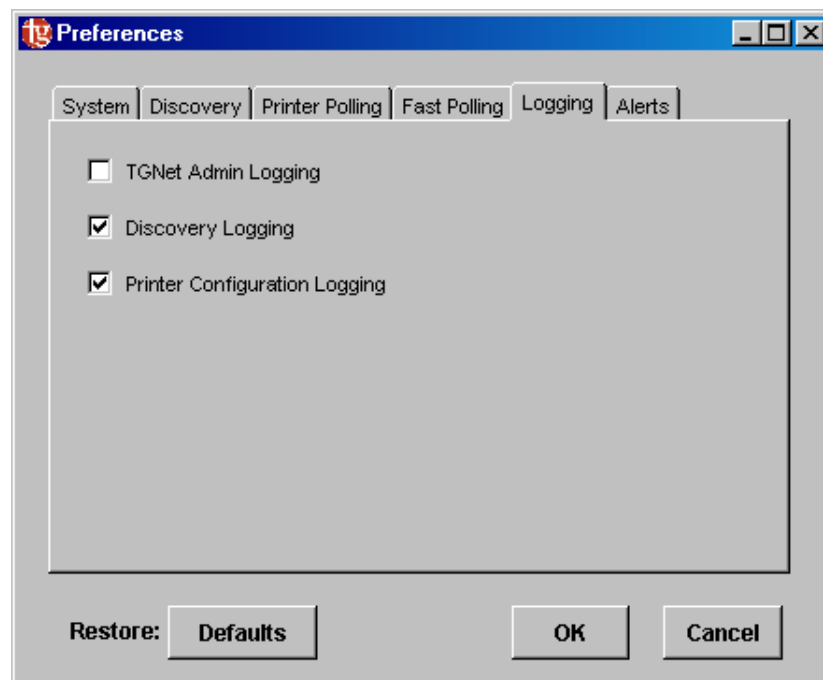
General information, warnings, and errors are saved in a log called tnetadm.txt (found in the root folder of TGNet Admin, e.g., C:\Program Files\TallyGenicom\TGNet Admin\). This file may be useful for tracking problems with TGNet Admin. By default, TGNet Admin Logging is turned off, as it has a direct effect on the performance of the application.

### Discovery Logging

The log is called discovery\_log.txt and is created each time a Printer Discovery is performed, found in the root folder of TGNet Admin, e.g., C:\Program Files\TallyGenicom\TGNet Admin\). By default, Discovery Logging is enabled and is only active when a Discovery is in progress. It may be useful in tracking down Discovery issues.

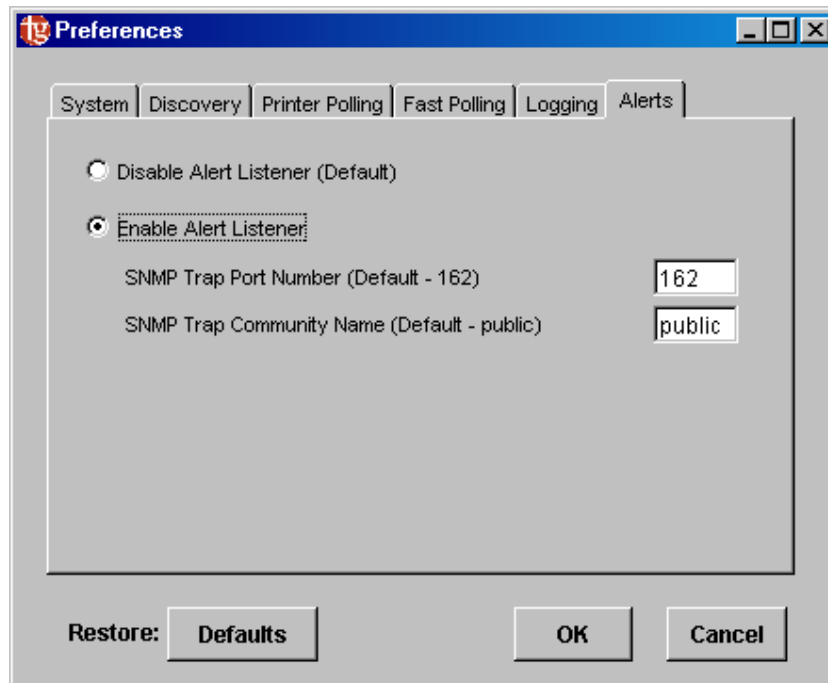
### Printer Configuration Logging

By default, Printer Configuration Logging is enabled and is only active when a Printer Configuration update is being done. When an update is completed, users need to check printer\_config\_log.txt (found in the root folder of TGNet Admin, e.g., C:\Program Files\TallyGenicom\TGNet Admin\), to confirm the updating of each selected printer.



## Alerts

Printers listed in the Cache, which have the ability to send SNMP traps and are configured to do so, can trigger an alert in TGNet Admin. For example, if a printer runs out of paper, the printer can send an SNMP trap to TGNet Admin. Refer to the Printer Operator Manual for setup instructions. By default, this feature is disabled.



If Alerts are Enabled, the Toolbar Alerts Icon will change from “No Alerts To View” to “Alerts Detected” when a printer in the Cache sends an alert.



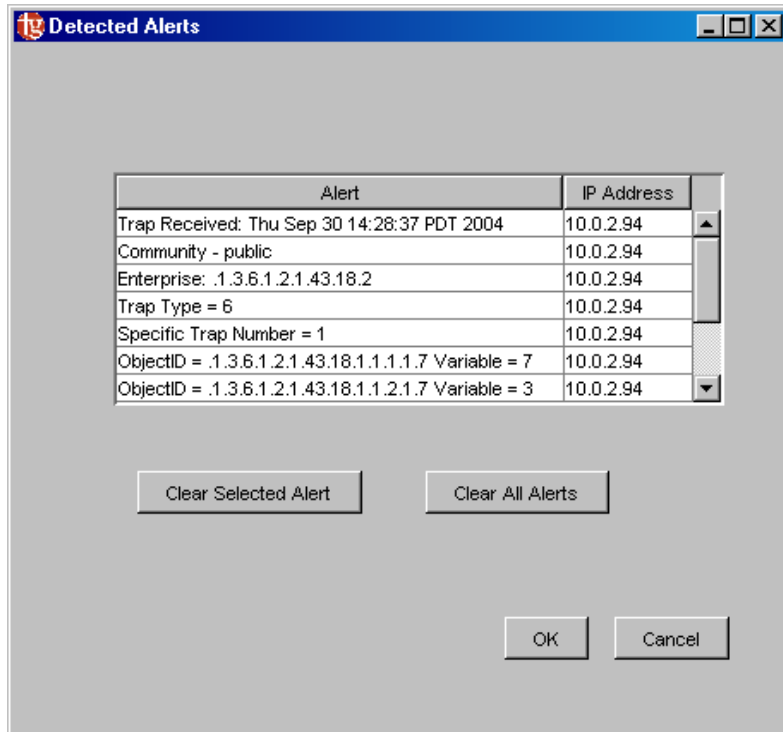
Figure 4: No Alerts To View



Figure 5: Alerts Detected

Each alert is only sent once, so TGNet Admin must be running at the time the trap is sent. The Alerts Detected icon indicates that there are one or more alerts to be viewed.

The workstation to which printers are set up to send traps must have a fixed IP address.



The printer showing in Figure 6 has run out of paper and an alert has been received by TGN Net Admin. The Toolbar Icon has changed from “No Alerts To View” to “Alerts Detected - click to view”. Clicking on the icon brings up the Detected Alerts window.

If this printer is selected, the information in the lower panel also shows that it is out of paper. This information is shown whether or not Alerts are enabled.

Note: this window will not show a new alert if it comes in while this window is open. The suggested usage for the current implementation of Alerts is to use the IP Address of the printer which sent the trap, select this printer in the upper panel and see the error state of the printer.

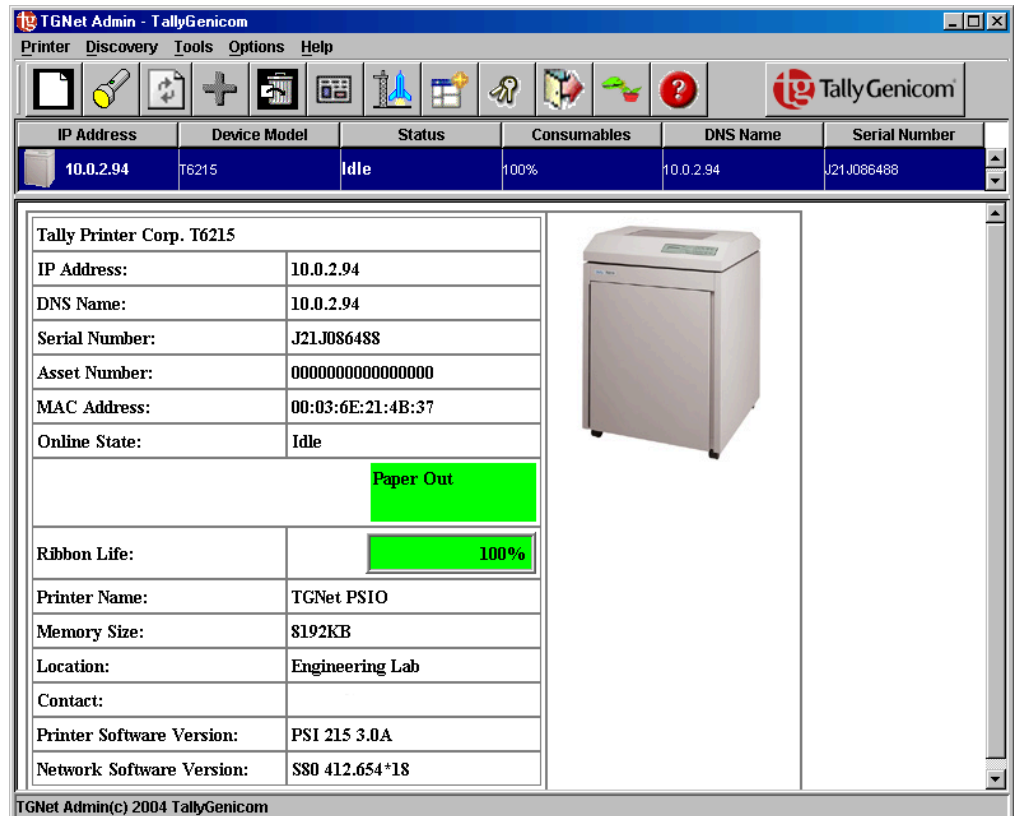
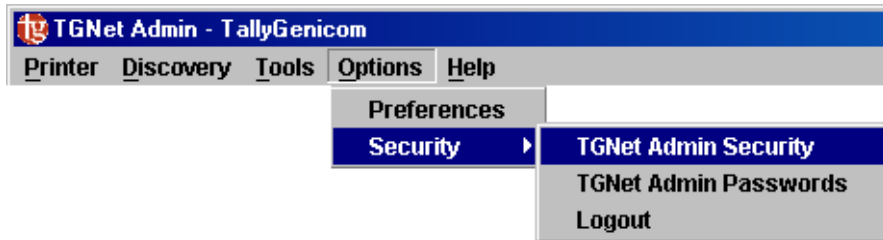


Figure 6: Lower panel printer details showing “Paper Out”.

## Security

### TGNet Admin Security



A simple password-based security system has been implemented in TGNet Admin. There are three levels of security: Administrator, Supervisor, and User. The Administrator and Supervisor levels require a password.

TGNet Admin is shipped with the default passwords of *super* for Supervisor Privilege, and *adm* for Administrator Privilege. It is recommended that these passwords be changed when TGNet Admin is installed.

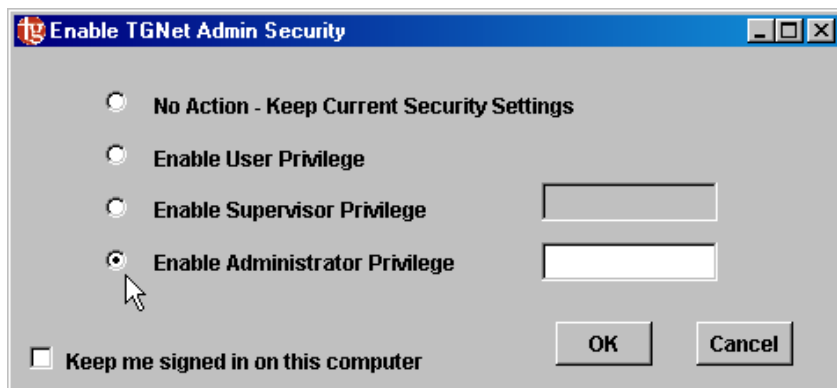
Features requiring Administrator Privilege:

- Launching a Discovery
- Inputting IP Address Range list used in Discovery
- Updating Printer Firmware
- Smart Printer Firmware Update
- Network Interface Configuration

Features requiring Administrator or Supervisor Privilege:

- Setting Preferences
- Printer Configuration operations

All other functions are accessible to all users.




This is the log-in screen which appears when selecting any feature requiring a password, if you have not previously logged in.

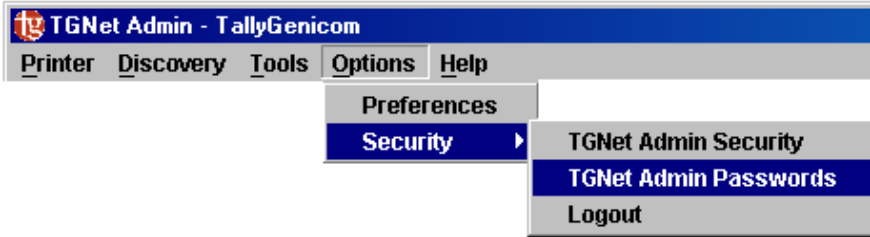
“No Action - Keep Current Security Settings” has the same effect as clicking the “Cancel” button.

“Keep me signed in on this computer” checkbox will maintain the privilege log-in level at the point TGNet Admin is exited. The next time TGNet Admin is launched, you will automatically be logged in at the previous log-in privilege level. If this option is unchecked, TGNet Admin will revert to the lowest level, User Privilege, when it is relaunched after being shut down.

Selecting “Enable User Privilege” then OK, is how a Supervisor or Administrator can log out from this dialog box.

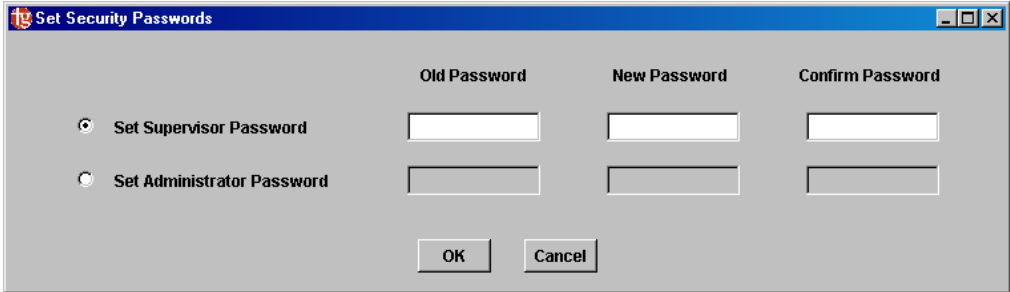
A Toolbar Icon is available for the Enable TGNet Admin Security feature, .

### TGNet Admin Passwords



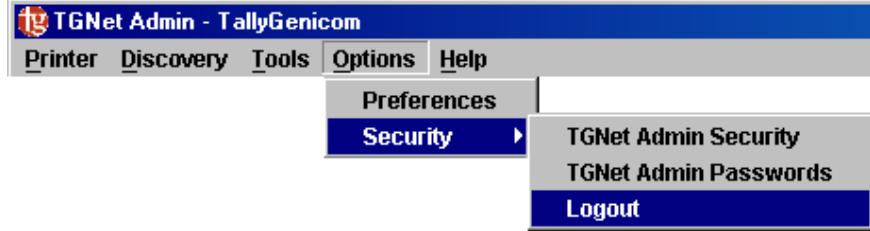
This is where the Administrator and Supervisor passwords are changed. It is recommended that these passwords be changed when TGNet Admin is installed.

The application is shipped with the default passwords of *super* for Supervisor Privilege, and *adm* for Administrator Privilege.



In order to set both Supervisor and Administrator passwords, you will enter one, click OK, and come into the menu again to set the other one.

### Logout



Logging out sets all security privileges to the lowest level, User Privilege.

“Logout of Current Security Level” Toolbar Icon:  .

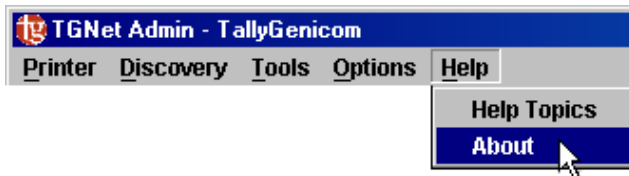
## Help Menu Help



Clicking on this option opens up an HTML document listing all of the functions of TGNet Admin. It can be printed to a local printer or any printer on the network.

Help Toolbar Icon, .

## About



Clicking on this option brings up the “about” window showing the version number of the software.

It is not necessary to enter the TallyGenicom website’s URL into your browser. Clicking on the TallyGenicom icon to the right of the Toolbar Icons will automatically launch the default browser and open up the main page of the website.



## Non-Menu Features

### Right Mouse Click on Printer

The following options become available by right clicking on a printer displayed in the upper panel:



#### Refresh Printer

Updates the cached information on the selected printer only. Selective updating can only be done by right clicking.

#### Delete Printer

Deletes the selected printer from the Cache.

#### Launch Web Browser

Opens up the Web Panel for the selected printer. This function can only be accessed with a right click. This is dependent on the printer supporting it.

#### Toggle Printer State

Supported by Tally T6200 series and TallyGenicom 6300 series printers.

#### Launch Virtual Control Panel

Supported by Tally T6200 series, TallyGenicom 6300 series, and Genicom 5100 printers.

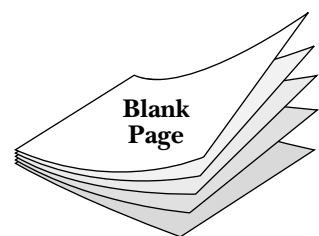
#### Reset Device

Supported by Tally T6200 series and TallyGenicom 6300 series printers.

### Refresh Printers In Cache


There is a Toolbar Icon with no corresponding Menu Bar command, ,

which refreshes the information on all of the printers in the Cache. If there are a lot of printers listed in the Cache, this process might take a bit a time, so be patient.



# Chapter 3

## Using TGN Net Admin

IP Address	Device Model	Status	Consumables	DNS Name ▾	Serial Number
 10.0.5.27	6306	Offline	100%	10.0.5.27	J21JO86599

### Monitoring Printers

The upper panel in TGN Net Admin provides the following information columns: IP Address, Device Model, Status, Consumables, DNS Name, and Serial Number.

Each column can be used to sort the display by clicking on the column title.

#### IP Address

The IP Address column displays an icon plus the IP Address. For printers that are “well-known” to TGN Net Admin, an icon resembling the printer will be displayed. Otherwise the generic icon will be shown.



#### Device Model

The Device Model column displays the Model Name for “well-known” printers and Printer for any other generic printer.

#### Status

The Status column attempts to display the current status of each printer. See the Appendix for a list of status display messages.

#### Consumables

The Consumables column attempts to display the current level of ribbon life, in the case of TallyGenicom line printers. Printers which have no means of sensing consumable life will most likely have a display of 0%.

#### DNS Name

The DNS Name column will either display an IP Address or the DNS name of the printer, if there is a DNS server which knows about the printer.

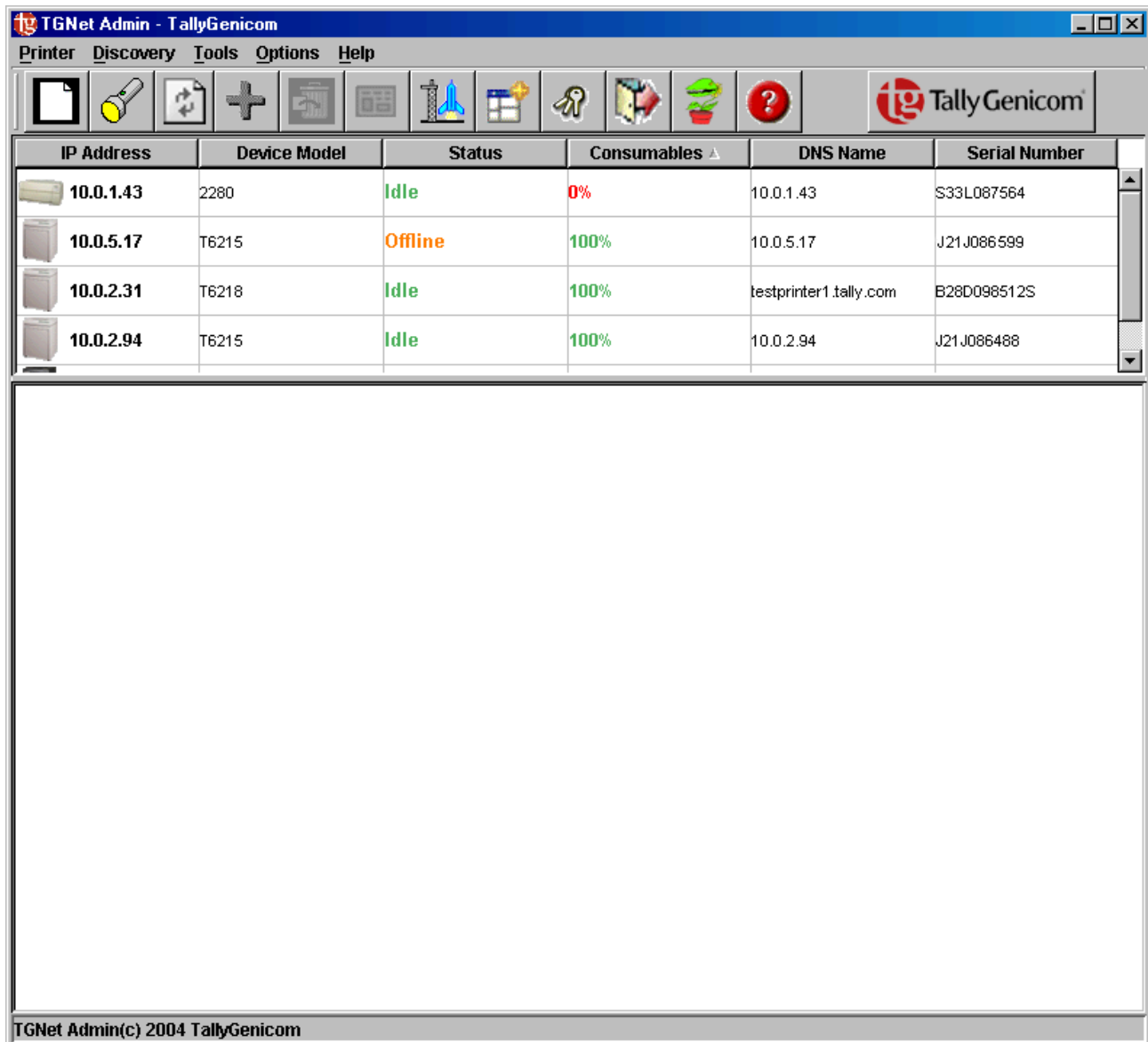
#### Serial Number

The Serial Number column displays the serial number of the printer, if this feature is supported by the printer. The printer must be “well-known”. TallyGenicom line printers support this feature.

### Sorting the Display

Click on any of the column titles to sort the display, based on what is displayed in the selected column. The direction of the sort is indicated by a small triangle which will either point upwards for an ascending sort or downwards for a descending sort. No triangle means there is no sorting. The unsorted printers are presented in the order they were added to the Cache.

You might click on the Consumables column for an ascending sort so that those printers closest to needing attention to the ribbon would be listed first.



The screenshot shows the TGNAdmin interface with a table of printer information. The table has six columns: IP Address, Device Model, Status, Consumables, DNS Name, and Serial Number. The data is sorted by Consumables percentage in ascending order. The first printer has 0% consumables, while the others have 100%. The interface includes a menu bar (Printer, Discovery, Tools, Options, Help), a toolbar with various icons, and a footer with the text 'TGNAdmin(c) 2004 TallyGenicom'.

IP Address	Device Model	Status	Consumables ▲	DNS Name	Serial Number
10.0.1.43	2280	Idle	0%	10.0.1.43	S33L087564
10.0.5.17	T6215	Offline	100%	10.0.5.17	J21J086599
10.0.2.31	T6218	Idle	100%	testprinter1.tally.com	B28D098512S
10.0.2.94	T6215	Idle	100%	10.0.2.94	J21J086488

Figure 7: Ascending Consumables Sort

Figure 7 shows the results of an ascending sort on the Consumables column, with a printer that needs a new ribbon listed first.

Clicking on a printer shown in the upper panel, brings up a display in the lower panel with additional information.

The screenshot shows the TGNNet Admin software interface. The top panel displays a list of printers with columns for IP Address, Device Model, Status, Consumables, DNS Name, and Serial Number. The third printer, with IP 10.0.2.94 and model T6215, is selected. The lower panel provides detailed information for this printer, including its serial number, asset number, MAC address, online state, ribbon life, printer name, memory size, location, contact information, and software versions. A photograph of the printer is also shown.

IP Address	Device Model	Status	Consumables	DNS Name	Serial Number
10.0.2.31	T6218	Idle	100%	testprinter1.tally.com	B28D098512S
10.0.2.219	5100	Idle	379054	10.0.2.219	0403-B-00975
10.0.2.94	T6215	Idle	100%	10.0.2.94	J21J086488

<b>Tally Printer Corp. T6215</b>	
IP Address:	10.0.2.94
DNS Name:	10.0.2.94
Serial Number:	J21J086488
Asset Number:	0000000000000000
MAC Address:	00:03:6E:21:4B:37
Online State:	Idle
	Online CONFIG 1+
Ribbon Life:	100%
Printer Name:	TGNet PSIO
Memory Size:	8192KB
Location:	Engineering Lab
Contact:	
Printer Software Version:	PSI 215 3.0A
Network Software Version:	S80 412.654

For the selected printer, T6215, in addition to the printer information that is provided in the upper panel, the lower panel shows its serial number, asset number, MAC address, that it is in an on-line state with Configuration #1 active, the name of the printer, how much memory it has, where it is located, and which versions of the printer software and the network software are running.

In general, the specific amount of detail provided to TGNNet Admin is dependent upon the printer. “Well-known” printers will typically have more information that TGNNet Admin is able to display. Generic printers are those which are not “well-known” to TGNNet Admin, but support some portion of the SNMP Printer MIB.

## Controlling the Printers

For those printers supporting Virtual Control Panel, you may control a printer without being physically near it. A print job may have been sent to a T6215, for example, but it seems to be stuck in the queue. TGN Net Admin shows that the status of that printer is off-line and so its Virtual Control Panel is brought up and the printer is placed on-line, permitting the printing of the job.

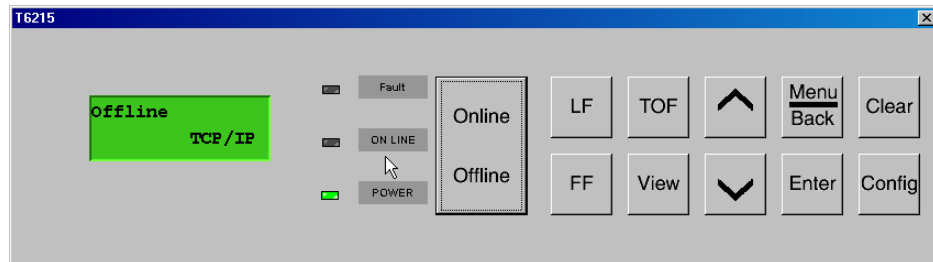


Figure 8: Printer is in Off-line state.

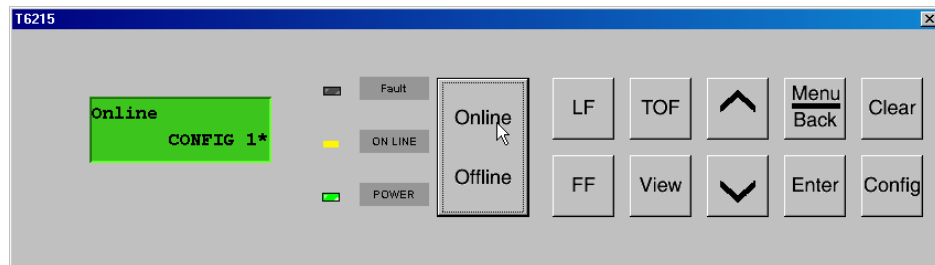
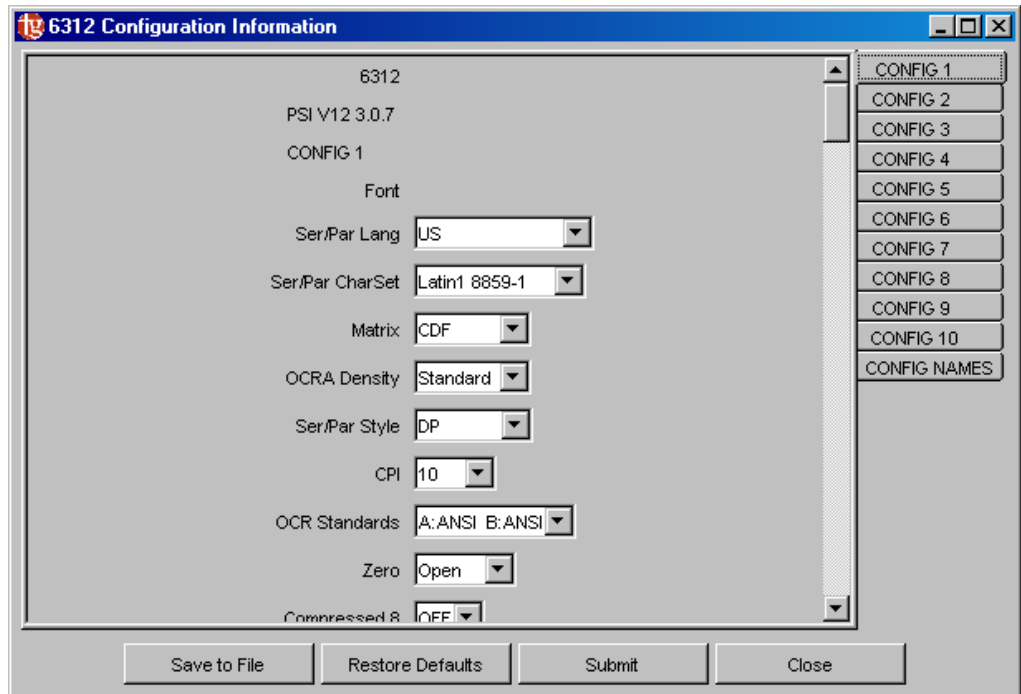


Figure 9: Printer is placed in On-line state.

## Changing Printer Configurations

One of the powerful features of TGNNet Admin is the ability to update the Printer Configurations of more than one printer at a time. A printer's Printer Configuration needs to be revised every time, for example, that a previously established form is changed, or when a new kind of form is added. For Tally T6200 series printers and TallyGenicom 6300 series printers with firmware version 3.0c or higher, any of the 10 Printer Configurations may be edited and updated through TGNNet Admin. Multiple printers may have their Printer Configurations updated at once.



A common way to go about this is to select one of the printers needing its Printer Configurations to be updated, and from the Tools menu, select Printer Configuration then Load From Printer. This will open up the Printer Configuration Editor.

The above display shows the default Configuration of a TallyGenicom 6312 printer with the default Configuration names. Each of the 10 available Configurations can be given more meaningful names, reflecting their application.

The Editor window opens with Config 1 displayed. Systematically edit each of the parameters that need to be changed, for any or all of the 10 Configurations. Click on "Save to File" to create a Master Configuration file. Once it has been tested and verified, then it can be applied to any or all other similar printers, as detailed in **Tools => Printer Configuration => Load from File**.

When the Submit procedure is executed, the log file, printer\_config\_log.txt should be checked to verify the success/failure of updating each of the target printers, (found in the root folder of TGNNet Admin).

## Updating Printer Firmware


TGNet Admin provides two printer firmware update methods for networked Tally T6200 series printers and TallyGenicom 6300 series printers. The Tally T6200 series printers must have the 8 megabyte controller in order to support either of these methods. You may update their firmware with version 3.0c or greater, and do so to more than one printer at a time using the Smart Update option in the Tools menu. The process of how to do this is explained in Chapter 2, **Tools => Smart Update => Printer Firmware**.

It is recommended that printer firmware be kept up-to-date, unless older versions are needed for the sake of legacy applications. The firmware version of each printer is shown in TGNet Admin's lower panel when a printer is selected.

Should it be required that older firmware be reloaded, the Update Printer Firmware menu selection is the way to do it. See Chapter 2, **Tools => Update Printer Firmware**. Only a single printer at a time may be updated.

## Security

In cases where restricted access is needed, the Administrator and Supervisor passwords should be changed from the defaults, at the time TGNet Admin is installed.

When Administrator or Supervisor privilege is invoked on a workstation where restricted access is required, the Administrator or Supervisor must either Logout via the Logout Tool Bar Icon,  , via the **Security => Logout menu**, or close the application.

# Appendix

## Supported Printers

Menu selections in the Tools Menu of TGNet Admin are designed to take advantage of features specifically built into certain Tally, TallyGenicom, and Genicom printers with the following firmware versions:

	<u>Printer Configuration</u>	<u>Smart Firmware Update</u>	<u>Firmware Update</u>	<u>Virtual Control Panel</u>	<u>*NIC Config</u>
T6212	3.0c+	3.0c+	2.2d+	3.0c+	S80 412.654
T6215	3.0c+	3.0c+	2.2d+	3.0c+	S80 412.654
T6218	3.0c+	3.0c+	2.2d+	3.0c+	S80 412.654
6306	all	all	all	all	S80 412.654
6312	all	all	all	all	S80 412.654
5100	N/A	N/A	N/A	44A116012	S80 416.640

NIC firmware for the Tally and TallyGenicom printers Printer Configuration, Smart Firmware Update, Firmware Update, Virtual Control Panel, and NIC Configuration must be version 412.654 or greater. For Genicom 5100 printers the NIC firmware must be EasyCom Xpress PSIO 10/100 version 416.640.

Tally and TallyGenicom printers which support traps will need a NIC firmware version of 412.654 or greater.

\*Network Interface firmware version

### Status

The upper panel of TGNet Admin provides a Status column, which attempts to display the Status of printers contained in the Cache. Status indications are color coded in three colors to indicate the readiness of a printer's availability for printing.

<b>Green</b>	indicates that the printer is Online and ready to print.
<b>Orange</b>	indicates that the printer is not reporting a condition which would prevent it from printing, other than possibly being Offline.
<b>Red</b>	indicates that, either the printer is in an indeterminate state or that it has a condition which prevents it from printing.

In any case, clicking on the printer in question may reveal further information in the lower panel of TGNet Admin, about the readiness of the printer.

### Well-Known Printers

Printers which have been referred to as "well-known" in this User's Guide, typically have more meaningful Status information than those which are classified as Generic.

<b>Unavailable</b>	is displayed when the printer has become unreachable on the network.
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### T6200/6300 Series Printers

<b>Idle</b>	Online, waiting for print jobs
<b>Printing</b>	Online, busy with a print job
<b>Offline</b>	Offline either due to operator action or a fault condition
<b>Ribbon Low</b>	Printer ribbon is getting low on ink
<b>Paper Out</b>	Printer cannot print due to a paper out condition
<b>Ribbon Out</b>	Printer ribbon has reached end of life
<b>Platen Open</b>	Printer cannot print because the platen is open
<b>Paper Motion Fault</b>	Printer cannot print due to a paper jam
<b>Service Required</b>	Printer cannot print, service is required

### 5100 Series Printers

<b>Idle</b>	Online, waiting for a print job
<b>Printing</b>	Online, busy with a print job
<b>Offline</b>	Offline, but the status is otherwise indeterminate

## Generic Printers

There is no guarantee that Generic printers support any of the 3 SNMP Objects which TGNet Admin looks at to determine a printer's Status. In any case, TGNet Admin makes a best effort to retrieve the information contained in hrDeviceStatus, hrPrinterStatus and hrPrinterDetectedErrorState. What is displayed is based on the definition of these three objects, as defined in RFC 1514. Below is a recap of the pertinent information in the RFC. Please refer to RFC 1514 for a more detailed description.

### hrDeviceStatus

- unknown
- running
- warning
- testing
- down

### hrPrinterStatus

- other
- unknown
- idle
- printing
- warmup

### hrPrinterDetectedErrorState

- lowPaper
- noPaper
- lowToner
- noToner
- doorOpen
- jammed
- offline
- serviceRequested

Unknown is displayed when none of the above are returned



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