

## Appendix

### Hardware Specification

#### Operating Environment

- Temperature: +5C to +35C
- Humidity : 20-80% RH (no dewing)

#### Storage Environment

- Temperature: -10C to +50C
- Humidity : 20-90% RH (no dewing)

#### EMI

- VCCI Class B
- FCC Class B
- EN55022 Class B
- EN55024

#### CPU

- 32bit RISC CPU

#### Memory

- RAM : 2MByte
- FlashROM : 1MByte

#### Network Interface

- 10BASE-T/100BASE-TX (auto-detection): 1 port

## Printer Interface

-IEEE 1284 compatible parallel interface port (support bi-directional)/ 36 pin Amphenole connector-1 port.

## Others

-DIP switch : 4 switches

-LED : 3 LEDs, one for status (Orange), one for 10BaseLINK (Green), one for 100BaseLINK (Green).

## Software Specification

### Supported Protocols

#### <PRICOM 3100 (multi-protocol model)>

##### \*TCP/IP

Raw(9100) Port, LPD, FTP, IPP, HTTP, TELNET, DHCP, BOOTP, SNMP, POP3, SMTP, DNS, DDNS, WINS, TCP, UDP, ARP, RARP, IP, ICMP, NetBIOS over TCP/IP

##### \*NetBEUI

SMB, NetBIOS

##### \*NetWare

IPX, SPX, SNMP, NDS(NetWare 4.x/5/6)

Remote printer mode (up to 8 servers)

Print server mode (up to 8 servers, 32 queue)

Frame automatic detection from IEEE 802.2, IEEE 802.3, Ethernet-II or SNAP frame type

##### \*AppleTalk

PAP, ATP, ZIP, RTMP, NBP, AEP, DDP, AARP, ELAP, AppleTalk phase2

#### <PRICOM 3100 TCP/IP model>

##### \*TCP/IP

Raw(9100) Port, LPD, FTP, IPP, HTTP, TELNET, DHCP, BOOTP, SNMP, POP3, SMTP, DNS, DDNS, WINS, TCP, UDP, ARP, RARP, IP, ICMP, NetBIOS over TCP/IP

##### \*NetBEUI

SMB, NetBIOS

## HP-compatibility

PRICOM supports the compatibility function of Hewlett Packards JetDirect series of print server This enables you to administrate via JetAdmin/WebJetAdmin and also support Jetdirect Printing Functions (TCP/IP #9100 printing, Direct IPX Printing)



**TIP**

- JetAdmin enables you to manage IPX/SPX and TCP/IP devices.
- TCP/IP model supports only the printing utility (TCP/IP #9100 printing) of JetDirect. It does not support Direct IPX Printing.

### -JetAdmin-compatibility

PRICOM is compatible with JetAdmin and can be used for administration and configuration. JetAdmin is a network printer administration utility available commonly for the JetDirect series



**TIP**

- PRICOM does not support all the features of JetAdmin.
- Refer to JetAdmin help option for the usage of JetAdmin.

### -WebJetAdmin-compatibility

PRICOM is compatible with WebJetAdmin and can be used for configuration and administration.

WebJetAdmin is a sophisticated network printer administration utility for use in large-scale intranet.



**TIP**

- PRICOM does not support all the features of WebJetAdmin.
- Refer to WebJetAdmin help option for the usage of WebJetAdmin.

### -JetDirect port-compatibility

PRICOM is compatible with JetDirect port, which enables you to share printers in a small-scale environment where no server exists. TCP/IP or IPX/SPX protocol can be used for printing.

## IPv6 Function

This document describes the usage and limitation of the IPv6 function of PRICOM 3100.



-The IPv6 function is provided for technical preview purpose only. Our customer support would not handle questions about IPv6.

### What is IPv6?

IPv6 is the next generation of TCP/IP. Although TCP/IP protocol is widely used with the Internet, the current IPv4 version has limitation of its relatively small address space of 32bit. IPv6 provides incredibly large address space of 128bit, and it also has many improved features than IPv4.



-In order to use IPv6 functionality of PRICOM 3100, the other component of the network (Router, Client PC, etc) has to be already IPv6 enabled.

### Outline for IPv6 function

#### Product release

PRICOM 3100 supports following functionality over IPv6;

- \* Configuration over TELNET and HTTP.
- \* Printing over FTP and LPR.
- \* Connection check with ping6.
- \* Route tracing with traceroute6.

#### IPv6 address

The link-local address of PRICOM 3100 will be as follows;

FE80:0:0:0:0:0280:92FF:FE $xx:yyzz$

( $xxyyzz$  is the lower 3-digit of the Ethernet address in hexadecimal format)



## NOTE

-The IPv6 address could be automatically configured if there is an IPv6-enabled router with stateless-auto configuration server capability on the network.



## TIP

### Limitation

- PRICOM 3100 supports link-local and stateless-auto configuration for IPv6 address configuration. Thus, the manual-configuration and statefull-auto configuration (DHCPv6) are not supported.
- IPsec features (Both AH(Authentication Header) and ESP(Encapsulating Security Payload)) are not supported.
- The traffic-class and flow-label in the IPv6 header is fixed to 0.
- Jumbo-Payload is not supported.
- PRICOM 3100 supports send/receive fragmentation. However the maximum payload size in a single packet is limited up to 3072, including the header length.
- SNMP IPv6 MIB is not supported.
- The utilities shipped with PRICOM 3100 are not IPv6 enabled.
- When printing with IPv6, the IP address in the banner page is printed as 0.0.0.0.

## How to use

### Enabling the IPv6 functionality of PRICOM 3100

The IPv6 functionality is disabled as factory default.

In order to enable it, follow the instruction below;

- (1) Assign IPv4 address in usual way  
(Refer to the setup guide for more details)
- (2) Access to the configuration of PRICOM 3100 with Web browser or TELNET.
- (3) Set IPv6 item as Enabled in the TCP/IP Configuration menu.
- (4) Save the configuration, then restart PRICOM 3100.

The IPv6 functionality will be enabled after PRICOM 3100 is restarted.

## Enabling the IPv6 functionality of the PC

Following instructions are how to enable IPv6 functionality of the Microsoft Windows XP. Please refer to the manual for other operating systems.

### (1) Enabling IPv6 functionality

Run the "ipv6.exe" from the command prompt. In order to open the command prompt window, run the "cmd" command from "Run..." menu in the start menu.

(Example)

```
C:/> ipv6 install
```



-Please refer to the Microsoft Website to know more about "ipv6.exe"

#### NOTE

### (2) Register the IPv6 address and the hostname into the hosts file

When you specify the target address, you can use the hostname rather than the IPv6 address if you registered them into the hosts file.

On the Windows XP, the host file is stored at;

Folder C:/windows/system32/drivers/etc

(Assuming the system drive is C:)

File: hosts

Add the address/hostname information with using notepad or other text editing software.



#### NOTE

(Example of Hosts file)

```
# Copyright (c) 1993-1999 Microsoft Corp.
```

```
#
```

```
# This is a sample HOSTS file used by Microsoft TCP/IP for Windows.
```

```
#
```

```
# Additionally, comments (such as these) may be inserted on individual  
# lines or following the machine name denoted by a '#' symbol.
```

```
#
```

```
# For example:
```

```
#
```

```
# 102.54.94.97 rhino.acme.com # source server
```

```
# 38.25.63.10 x.acme.com # x client host
```

```
127.0.0.1 localhost
```

```
fe80::280:92ff:fe12:3456 pricom3100
```

```
IP address hostname
```



-If you use IPv6 function on Windows XP by adding link-local address to the hosts file, you need to specify the default interface by IPv6 rtu command. If you have multi-interface, you can not use this function.  
\* For further operational information on "ipv6.exe", please refer to the Microsoft Corporation website.

### (3) How to use PRICOM 3100 on the Windows XP

Once the Windows XP becomes IPv6 enabled and the hostname/address was configured in hosts file, you can do...

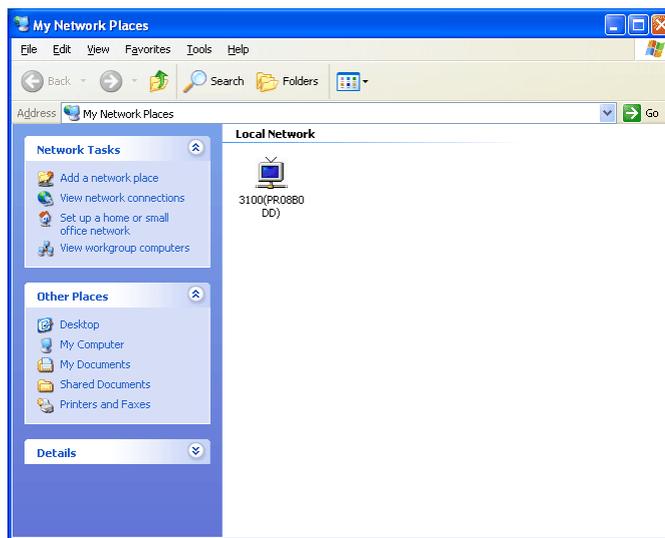
- Configuration / status display with Internet Explorer 6.0
- Printing from "Print services for Unix" port.
- File-printing with LPR or FTP from the command prompt.
- Connection check with ping6.



-The "standard TCP/IP port" printing and "IPP" printing of current versions of Windows XP are not IPv6 enabled.  
In order to printing over IPv6, you have to install "Print services for Unix" component from the control panel.  
Please refer to the Section.4 "Printing LPR port on the Windows XP" of the users manual of PRICOM 3100.  
-When use with Internet Explorer 6.0 or Unix print services, you have to specify the address as hostname rather than IPv6 address.  
(fe80::280:92feff:xx:yyzz)

## Network Plug & Play

This product can be automatically detected in Windows Me/XP environment. Simply connect this product to a network and Windows Me/XP will automatically detect and display this product in "My Network Places". By double clicking a device, the web page of this product will appear. The following explains how to use this function on your PC.



### Windows XP Setting

1. Right click on **My Network Places**, then select **Properties**.
2. Select **Optional Networking Components** in **Advanced** menu. Then **Windows Optional Networking Components Wizard** appears.
3. Select **Networking Services**, Click **Details**.
4. Check **Universal Plug and Play**, then click **OK**.
5. Click **Next**.

### Windows Me Setting

1. Select **Start – Settings – Control Panel – Add/Remove Programs**.
2. Select **Windows Setup – Communications – Details**.
3. Check **Universal Plug and Play**, then click **OK**.
4. Click **OK**.

## ThinPrint Product .print Client Support

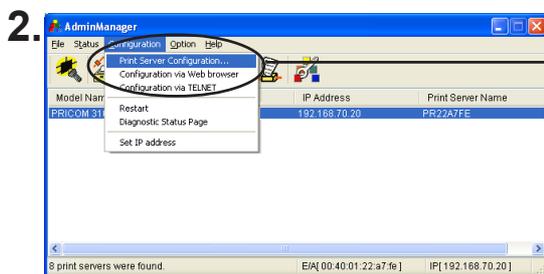
This product supports the “.print Client” function of “.print” which is the network load distributed printing technology of ThinPrint. This product can be registered into the “.print Server Engine” of ThinPrint as a printing printer. The print data in the zone restriction carried out by the “.print Server Engine”, and compressed print data can be received directly and then be output to a printer.



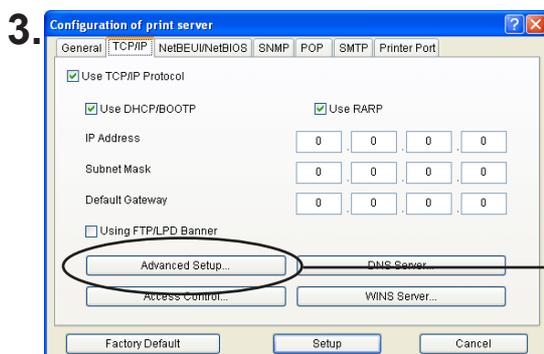
- This functionality is only supported by the PRICOM 3100 TCP/IP model.
- This product does not support the "Driver Free Printing" function.

This function can setup by using AdminManager, a web browser, or TELNET. The following procedure explains how to configure this product using AdminManager.

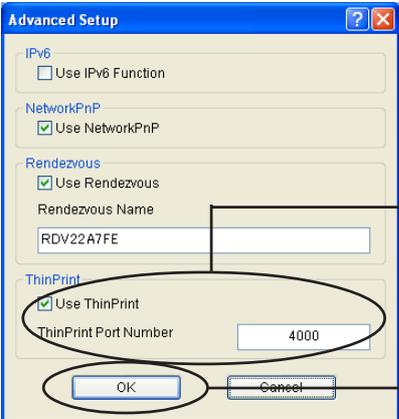
1. Start AdminManager and select this product from a list.



**Print Server Configuration** is chosen from the **Configuration** menu.

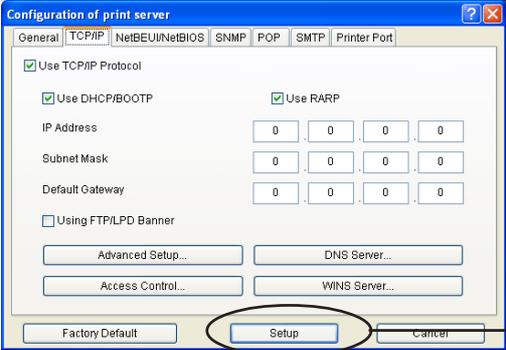


Click **Advanced Setup** on the **TCP/IP** tab.

4.  **Advanced Setup**

Check **Use ThinPrint**, and specify a **ThinPrint port number**.

Click **OK**.

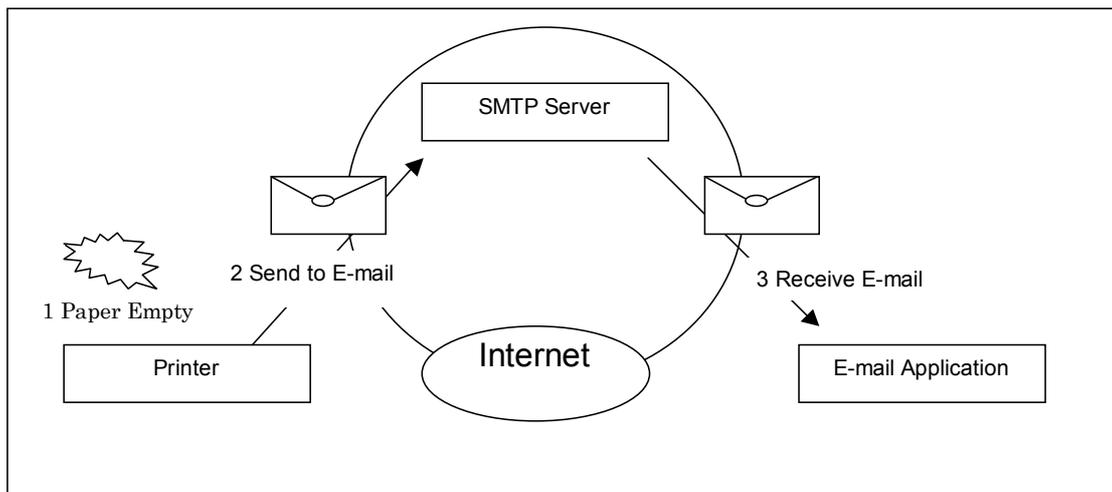
5.  **Configuration of print server**

Click **Setup**.

6. The configuration information becomes effective after rebooting the product. By specifying this product to be the printing output place of a .print Server Engine, this product can be used in the .print environment.

## E-Mail Warning Notification Function (SMTP)

If the E-Mail warning notice function of is used, the printer status can be monitored by E-Mail. This product transmits printer status to the appointed E-Mail address (2 E-mail addresses can be specified) whenever the printer status changes. By using this function, "paper out", "off-line", and "a printer error" are detectable via the Internet.

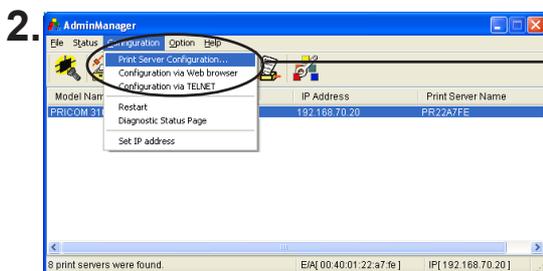


- This function cannot be used if the printer cannot indicate an error to this product.

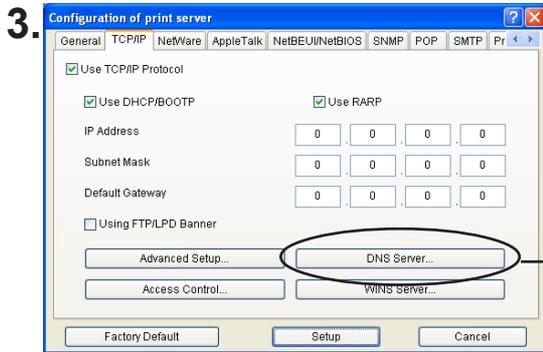
**TIP**

This function can setup by using AdminManager, a web browser, or TELNET. The following procedure explains how to configure this product using AdminManager.

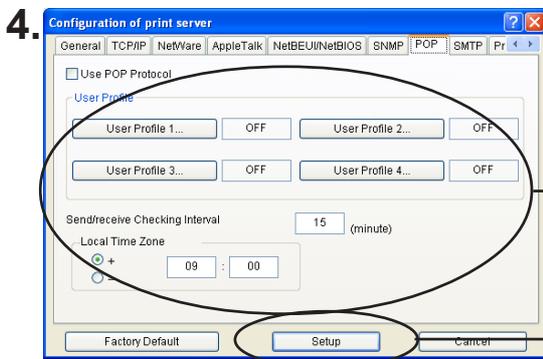
1. Start AdminManager and select this product from a list.



**Print Server Configuration** is chosen from the **Configuration** menu.



On the **TCP/IP** tab click on **DNS server** and enter the DNS server address.

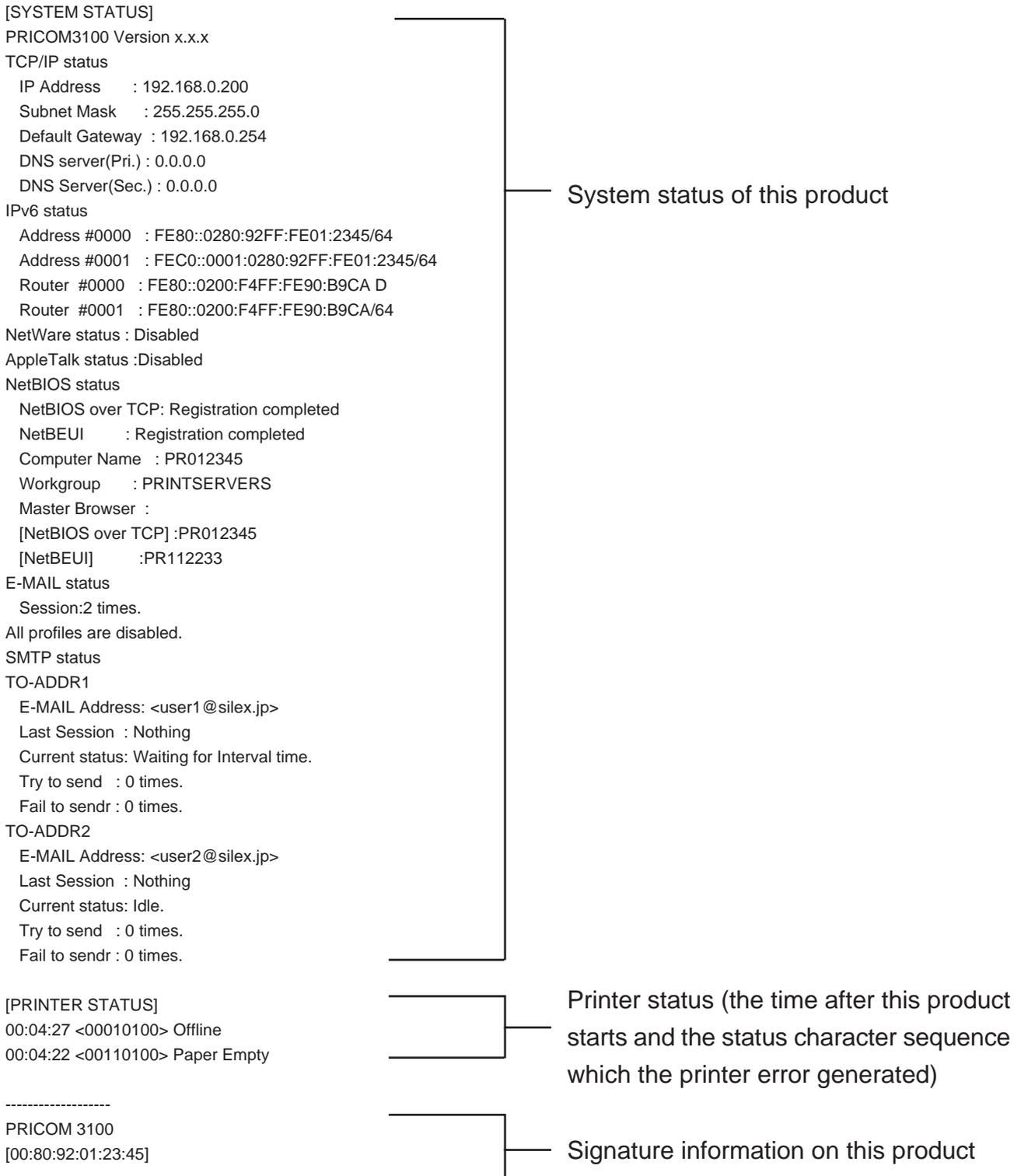


Select the **SMTP** tab and enter the transmission information for E-Mail.

Click **Setup**.

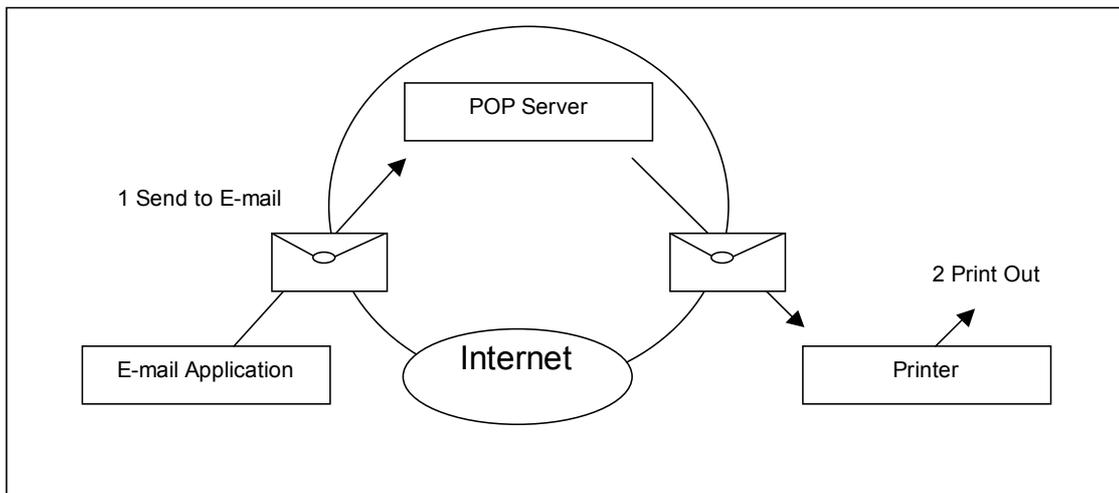
5. The configuration information becomes effective after rebooting the product.

The following E-Mail messages are transmitted from this product.



## E-Mail printing function (POP)

By using the E-Mail printing function, E-Mail data transmitted via the Internet can be sent directly to a printer. This product will output to a printer the E-Mail text and text (\*.txt) files or printer driver generated (\*.prn) files attached to E-Mail. Only the file name of the attached file will print if it is not a "\*.prn" or "\*.txt" file.

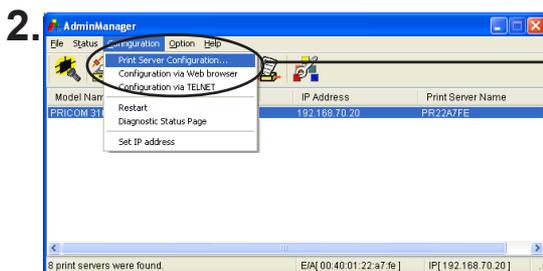


**TIP**

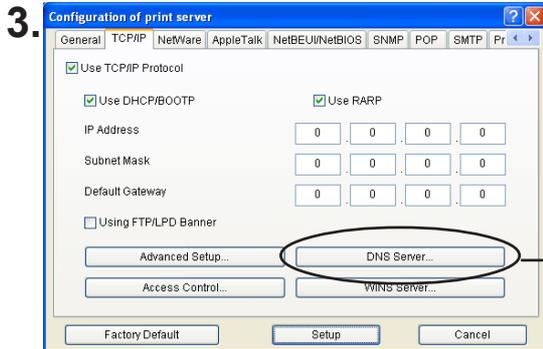
- The printer must have a font in order to print the E-Mail text and a text file.
- When attaching a printer driver generated file (\*.prn), the driver for the printer used to print the file must be used.
- When you print only an attached file, please send an e-mail with the subject including "/nobody."

This function can setup by using AdminManager, a web browser, or TELNET. The following procedure explains how to configure this product using AdminManager.

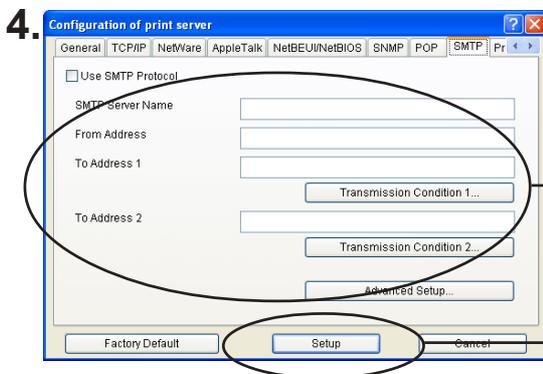
1. Start AdminManager and select this product from a list.



**Print Server Configuration** is chosen from the **Configuration** menu.



On the **TCP/IP** tab click on **DNS server** and enter the DNS server address.



Select the **POP** tab and enter the E-Mail receiving address information.

Click **Setup**.



**NOTE**

- The following information can be configured to a user setup.

Item	Explanation	Initial value (Factory default)
User Profile	Enable/Disable mail retrieval function for individual user.	DISABLE
POP Server Name	Specify the mail server's host name or IP address. When domain name is used, it is necessary to configure the DNS server.	Blank
POP Port Number	Set the number of the POP port. Usually the value should be the default (110).	Blank
POP User Name	Set the login name (user name) of the mail account.	Blank
POP Password	Set the password to be used when connecting to the mail server.	110
Use APOP	Enable/ Disable APOP setting at server. In order to use APOP, it is necessary that the mail server supports APOP.	NO
Delete Mail after Retrieve	The excluded E-mail is not deleted even if the item of "Delete Mail after Retrieval" is checked.	NO
Return a read receipt	The transmitting propriety of a notice that a POP E-Mail has been received and is printing is setup. This notice E-Mail will transmit based on the SMTP setup.	NO
Maximum Retrieve (Kbyte)	E-mails with a size larger than specified are excluded from being processed.If you set "0", the size is not limited.	0 (With no restriction)
Filter Setting	Using filters, set to print only specified mail. When null (empty string: default) is set, all e-mail is printed. Configure filters by means of strings connected by "OR" (" ") or "AND"("&") and featuring four kinds of the items: "Subject" ("S:string"), "To Address" ("T:string"), "Carbon Copy" ("C:string") and "From Address" ("F:string").	Blank

5. The configuration information becomes effective after rebooting the product.