

Toshiba LAN connected MFPs with Network Viewer, ImageVision2000 or SmartLink2000

The Toshiba Network Viewer, ImageVision2000 and SmartLink2000 products support the following Toshiba MFPs when connected using a Network Interface Card [NIC]:

Toshiba DP120F

Toshiba DP125F

Toshiba e-STUDIO16

Toshiba e-STUDIO20

Toshiba e-STUDIO25



- TCP/IP is used to transport instructions and messages between the PC running the device driver and the Toshiba MFP – so the LAN must support TCP/IP protocol and this protocol must be installed at least on the PC running the Network Viewer or SmartLink2000 device driver.
- SMTP is used to send messages between the PC running the device driver and the Toshiba MFP to send or receive fax messages.
To achieve this the device driver installs itself as a simple SMTP server – this means that no other SMTP server can run on the PC that is running the Network Viewer or a SmartLink2000/ImageVision2000 device driver for a Toshiba MFP connected via NIC to the LAN.
- To send faxes from ImageVision2000/SmartLink2000 via a Toshiba MFP connected directly to the LAN, SMTP protocol is used.
This means that, on the Toshiba MFP, “E-Mail, Receive Mode” must be set to “SMTP” and the “Offramp Gateway” function on the Toshiba MFP must be set “ON”.
- The Network Viewer, ImageVision2000 and SmartLink2000 use FTP to exchange device and phonebook setup data with the Toshiba MFP that allows users to configure the device settings, One Touch, Abbreviated Dials and Groups for the Toshiba MFP from the PC. FTP access is protected by a username and password – so the username and password set on the Toshiba MFP must match those set for the device driver.

Configuring Toshiba MFP

Summary

To use a Toshiba MFP connected directly to the LAN with the Toshiba Network Viewer, ImageVision2000 or SmartLink2000 you must define the following settings on the Toshiba MFP:

- Either:

Program|Menu → INITIAL SETUP → NETWORK → TCP/IP → BOOTP/DCHP

Or:

Program|Menu → INITIAL SETUP → NETWORK → TCP/IP → IP ADDRESS

Program|Menu → INITIAL SETUP → NETWORK → TCP/IP → SUBNET MASK

Program|Menu → INITIAL SETUP → NETWORK → TCP/IP → DEFAULT GATEWAY

Depending on whether or not the LAN has a DHCP server to automatically assign IP addresses and related items.

- Program|Menu → INITIAL SETUP → NETWORK → TCP/IP → HOST NAME = “Domain Name” setting defined for device driver in Network Viewer, ImageVision2000 or SmartLink2000.
- Program|Menu → INITIAL SETUP → NETWORK → E-MAIL → E-MAIL ADDRESS = a valid email address, messages sent by the Toshiba MFP are declared to be “from” this email address.
- Program|Menu → INITIAL SETUP → NETWORK → E-MAIL → ERROR MAIL FW ADDR = a valid email address, to which error messages should be sent.
- Program|Menu → INITIAL SETUP → NETWORK → E-MAIL → SMTP SERVER ADDR = SMTP IP address to be used to send emails, or the IP of the ImageVision2000/SmartLink2000 device driver’s PC if not intending to use email from Toshiba MFP.
- Program|Menu → INITIAL SETUP → NETWORK → E-MAIL → RECEIVE MODE = SMTP
- Program|Menu → DEFAULT SETTINGS → E-MAIL SETUP → E-MAIL TO FAX GATEWAY = ON
- Program|Menu → INITIAL SETUP → NETWORK → FTP → FTP SERVER LOGIN NAME = “FTP User” setting defined for the device driver – default is “public”.
- Program|Menu → INITIAL SETUP → NETWORK → FTP → FTP SERVER LOGIN PASSWORD = “FTP Password” setting defined for the device driver – default is “pass”.
- Program|Menu → INITIAL SETUP → NETWORK → LAN FAX → LAN FAX SERVER ADDRESS = IP of PC running the device driver for this MFP



- After making changes to the Toshiba MFP’s Network Settings, always select the “INITIAL SETUP → NETWORK → COMPLETE” or “INITIAL SETUP → NETWORK → DONE” menu to save the changes.



- It is recommended that you then power off and back on the Toshiba MFP and wait at least 2 minutes for it to connect to the LAN, or until the Toshiba MFP has printed its NIC status report, before attempting to communicate with the Toshiba MFP via the LAN.

Detail

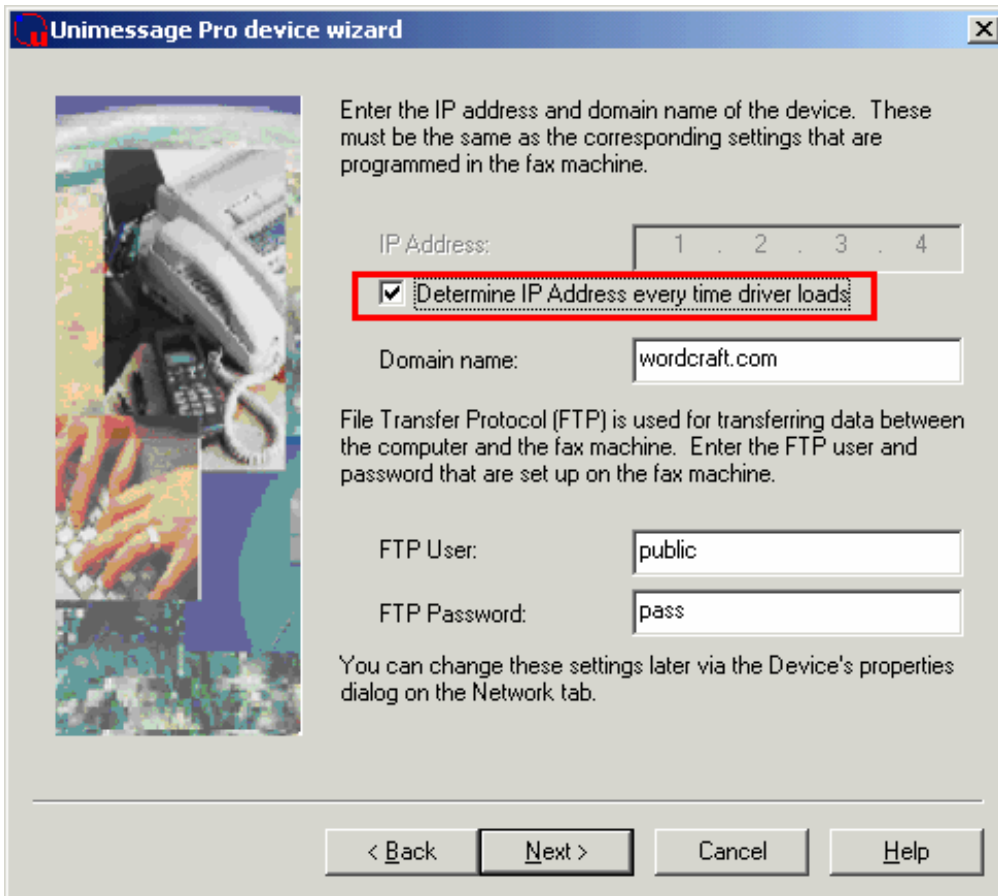
Press the “Program” or “Menu” button to enter programming mode on the Toshiba MFP.

1. INITIAL SETUP
 - 1.1. NETWORK
 - 1.1.1. TCP/IP
 - 1.1.1.1. BOOTP/DHCP

This should be set to "DISABLE" or “OFF” unless there have a DHCP server on the network, in which case the IP address of the machine will be determined when it powers up.

The Network Administrator should be able to tell you if there is a DHCP server on the network to assign IP addresses dynamically.

By default the device driver for Toshiba MFPs connected via a LAN will detect the IP being used by the Toshiba MFP each time the driver starts because the “Determine IP Address every time driver loads” option is selected:



So, after detecting the Toshiba MFP during installation (or entering the IP assigned to it at that time manually) the device driver will work whether a static or dynamically allocated IP address is used.



- The “MAC address” of the Toshiba MFP’s network card, which is unique and always remains the same, is stored in the device driver’s configuration file. Then, when the device driver starts it broadcasts an SNMP message around the network to find the NIC with the required MAC address and then learns the IP currently assigned to the card which it then uses for subsequent communications with the Toshiba MFP.
- The SNMP message will only reach devices in the same sub-net as the PC issuing the message – the PC where the device driver is running. So, if the Toshiba LAN MFP is in a different sub-net to the PC running the device driver you cannot use the “Determine IP Address every time driver loads” option and must set a static IP address for the Toshiba LAN MFP.

1.1.1.2. IP ADDRESS

Do not set this if the MFP should obtain its IP from a DHCP server – if a specific IP is set then this will be used even if BOOTP/DHCP defined above is set to “Enable”.

If set, this should be a valid, unique address on the local network. This address later gets entered into the setup if the device isn't being automatically detected.

The Network Administrator should be able to tell you what this should be.

1.1.1.3. SUBNET MASK

This should be a valid net mask for the local network, e.g. 255.255.255.0.

The Network Administrator should be able to tell you what this should be, or you could try running IPCONFIG.EXE on a LAN PC to see what it is set to on the PC – it may be the same for the Toshiba MFP.

1.1.1.4. DEFAULT GATEWAY

The local network's gateway IP address, or you could try running IPCONFIG.EXE on a LAN PC to see what it is set to on the PC – it may be the same for the Toshiba MFP.

The Network Administrator should be able to tell you what this should be.

1.1.1.5. HOST NAME = "Domain Name" setting defined for device driver

Used to be used by the IFAX NIC to validate the source of fax transmission jobs received via the NIC and therefore had to match the "Domain name" defined in ImageVision2000/SmartLink2000 for the device. However, latest firmware doesn't check the domain used to submit a fax transmission job against this HOST NAME and instead only accepts new fax transmission jobs from the PC with IP matching that defined for the MFP's LAN FAX SERVER ADDRESS.

For safety and simplicity it is probably best though to still set the Toshiba MFP's "HOST NAME" and device driver's "Domain name" values to the same settings. e.g. "wordcraft.com".

After changing any settings in the INITIAL SETUP, NETWORK, TCP/IP section press "Cancel" to return to the INITIAL SETUP, NETWORK section and select "01 COMPLETE" or "01 DONE" to save the changes.



- If you change the HOST NAME setting on the MFP via the Device Settings function in either Network Viewer, ImageVision2000 or SmartLink2000 then the "Domain Name" setting associated with the device driver is automatically updated to match.

1.1.2. E-MAIL

1.1.2.1. E-MAIL ADDRESS

You must define a valid email address, even if only using the Toshiba MFP to send fax messages from ImageVision2000/SmartLink2000.



- If you do not define a valid email address for this setting then the Toshiba MFP will not send a Message Disposition Notification [MDN] to ImageVision2000/SmartLink2000 when a fax transmission submitted by ImageVision2000/SmartLink2000 completes whether successfully or unsuccessfully.

This means that ImageVision2000/Smartlink2000 will show the fax transmission "In Progress" for 30 minutes while it waits for the MDN after which it will fail the attempt back to the Scheduler. If the job is then retried still without a valid email address being defined on the Toshiba MFP the sequence will repeat.

1.1.2.2. ERROR MAIL FW ADDRESS

The email address to which error messages should forwarded when appropriate.

1.1.2.3. RECEIVE MODE = SMTP

To use the Toshiba MFP to send messages to fax numbers from ImageVision2000/SmartLink2000 "SMTP" must be selected for this setting

1.1.2.4. SMTP SERVER ADDRESS

Enter the IP address of the SMTP mail server to be used by the Toshiba MFP to send emails.

If you only want to use the Toshiba MFP to send faxes from ImageVision2000/SmartLink2000 and do not have an SMTP server IP to use for sending emails from the Toshiba MFP then set the IP of the PC where ImageVision2000/SmartLink2000's device driver for this Toshiba MFP is running.

1.1.3. FTP

1.1.3.1. FTP SERVER LOGIN NAME = "FTP User" setting defined for the device driver – default is "public"

1.1.3.2. FTP SERVER LOGIN PASSWORD = "FTP Password" setting defined for the device driver – default is "pass"

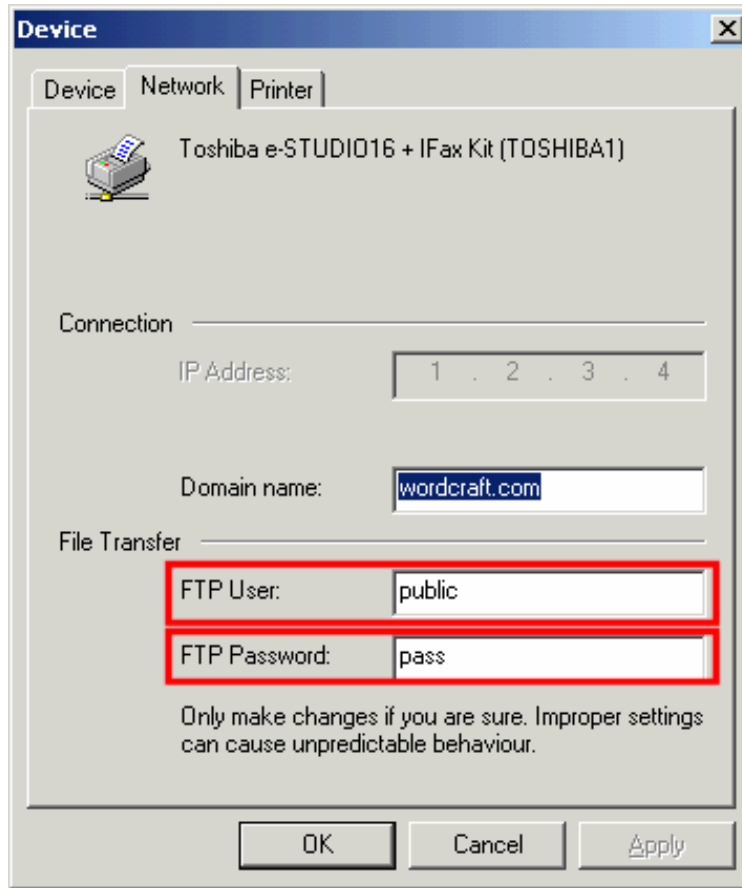
FTP is used to exchange device setup data between the Network Viewer, ImageVision2000 or SmartLink2000 and the Toshiba MFP.



- If the FTP user and password settings on the Toshiba MFP do not match those associated with the device driver in either Network Viewer, ImageVision2000 or SmartLink2000 then attempts to read setup data from the Toshiba MFP will fail with "Invalid credentials for setup".

Check the "FTP User" and "FTP Password" settings in the "File Transfer" section of the dialog displayed in Network Viewer, ImageVision2000 or SmartLink2000 when you do the following:

- Start Network Viewer, ImageVision2000 or SmartLink2000
- If Welcome screen appears click "Browse Folders"
- In left-hand folder tree, click "Devices" to open the "Devices" folder
- Right-click appropriate device driver name and select "Properties".
- Select the "Network" tab
- The following dialog appears:



match the FTP SERVER LOGIN NAME and FTP SERVER LOGIN PASSWORD settings on the MFP using the MFP's front panel:

- Program|Menu → INITIAL SETUP → NETWORK → FTP → FTP SERVER LOGIN NAME
- Program|Menu → INITIAL SETUP → NETWORK → FTP → FTP SERVER LOGIN PASSWORD
- If you change the FTP SERVER LOGIN NAME or FTP SERVER LOGIN PASSWORD settings on the MFP via the Device Settings function in Network Viewer, ImageVision2000 or SmartLink2000 then the “FTP User” and “FTP Password” settings associated with the device driver are automatically updated to match.

1.1.4. LAN FAX

1.1.4.1. LAN FAX SERVER ADDRESS = IP of PC running the device driver for this MFP

The Toshiba MFP only accepts messages for transmission to fax numbers from a PC with this IP.



- If the IP of the PC where ImageVision2000/SmartLink2000's device driver for this Toshiba MFP doesn't match the IP defined for the LAN FAX SERVER ADDRESS on the Toshiba MFP then fax transmissions from ImageVision2000/SmartLink2000 will fail immediately, with errors such as “Remote fax abandoned”.

Checking Communication

Check NIC is receiving power

Check the LED indicators on the Toshiba MFP's NIC:

- Green LED is lit while the NIC is properly connected to the LAN
- Amber LED blinks while data is being communicated

Check the PC where Network Viewer, ImageVision2000 or SmartLink2000 will run can “see” the Toshiba MFP

At the Network Viewer/ImageVision2000/SmartLink2000 PC...

- Click “Start, Run”
- Type:

```
PING -T aaa.bbb.ccc.ddd
```

Where aaa.bbb.ccc.ddd is the IP of the Toshiba MFP

- Press ENTER

The PC will then send, at regular intervals, a small message to the Toshiba MFP's IP and report whether a response is received or not (if not a timeout will be reported) and if so how quickly.

Responses should be received to 99% of messages and should be received quickly, say less than 10ms ideally.

If no responses are ever received:

- Check the IP address set on the Toshiba MFP matches the IP used in the PING command.
- Check that no firewall on the PC is preventing the message going out from the PC or coming in from the Toshiba – maybe disable any personal firewall on the PC as a test to see if the results change.

If responses *sometimes* timeout and aren't received:

- Examine the network cabling and infrastructure (including HUBS) and try pinging other PCs and devices to see if they respond any better.

If other PCs or devices respond more reliably then maybe there's a problem with the Toshiba MFP's NIC or the cables between the PC issuing the PING command and the Toshiba MFP – maybe try different cable to the Toshiba MFP or a different port in a HUB if one is being used.

Press CTRL and C to stop the PING program.

Check for SMTP Server running on the PC intended to run Network Viewer, ImageVision2000 or SmartLink2000's device driver

Before installing Network Viewer, ImageVision2000 or SmartLink2000 or while neither are running

At the Network Viewer/ImageVision2000/SmartLink2000 PC...

Windows 95(OSR2)/98/Me/NT4:

- Click “Start, Run”
- Type:

```
TELNET 127.0.0.1 25
```

- Press ENTER

Windows 2000/XP

- Start a command prompt:
Click “Start, Programs, Accessories, Command Prompt”
- Type:
TELNET 127.0.0.1 25
- Press ENTER

If there is no SMTP server running you should see a message box saying something like:

Could not open a connection to 127.0.0.1

This is good, there is no existing SMTP server running on the PC. The Network Viewer/ImageVision2000/SmartLink2000 device driver should be able to set up its SMTP server without conflicting with an existing SMTP server.

If there is already an SMTP server running on this PC you should see something like:

220 somewhere.com NTMail (v6.04.0010/NT9682.00.22282d95) ready for ESMTP transfer

This is not good, there is an existing SMTP server running on the PC. You will not be able to start the device driver on this PC without first closing whatever SMTP server is already running. The wording of the “220” message may give you a clue about what is running the SMTP server so you can find it and close it.

Type “QUIT” and press ENTER to exit TELNET.

After installing Network Viewer/ImageVision2000/SmartLink2000 and while the software is running

At the Network Viewer/ImageVision2000/SmartLink2000 PC...

Windows 95(OSR2)/98/Me/NT4:

- Click “Start, Run”
- Type:
TELNET 127.0.0.1 25
- Press ENTER

Windows 2000/XP

- Start a command prompt:
Click “Start, Programs, Accessories, Command Prompt”
- Type:
TELNET 127.0.0.1 25
- Press ENTER

You should now see a line that says:

220 Unimessage ESMTP server ready for transfer.

This is good and indicates that the Network Viewer/ImageVision2000/SmartLink2000 SMTP server is listening correctly.

If you don't see this line...

- Ensure that the Network Viewer/ImageVision2000/SmartLink2000's device driver is running (check the "Devices" folder)
- Examine the Windows System Tray for the Network Viewer/SmartLink2000 device driver's icon – it looks like a printer on a LAN cable.



Double click the icon to open the driver's status window then click the "General" tab and make sure it says "Waiting for job..."

- Check that no firewall is running on either PC that prevents connections to port 25 on the PC where the device driver is running from the other PC.

Type "QUIT" and press ENTER to exit TELNET.

Check Network Viewer/ImageVision2000/SmartLink2000's SMTP server is accessible from other PCs on the LAN

While the Network Viewer/ImageVision2000/SmartLink2000 is running, on another PC on the LAN...

Windows 95(OSR2)/98/Me/NT4:

- Click "Start, Run"
- Type:

```
TELNET eee.fff.ggg.hhh 25
```

Where eee.fff.ggg.hhh is the IP of the PC running Network Viewer or SmartLink2000's device driver.

- Press ENTER

Windows 2000/XP

- Start a command prompt:
Click "Start, Programs, Accessories, Command Prompt"

- Type:
TELNET eee.fff.ggg.hhh 25

Where eee.fff.ggg.hhh is the IP of the PC running the device driver.

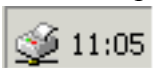
- Press ENTER

You should now see a line that says:

```
220 Unimessage ESMTP server ready for transfer.
```

If you don't see this line...

- Ensure that the Network Viewer/SmartLink2000's device driver is running (check the "Devices" folder)
- Examine the Windows System Tray for the Network Viewer/SmartLink2000 device driver's icon – it looks like a printer on a LAN cable.



Double click the icon to open the driver's status window then click the "General" tab and make sure it says "Waiting for job..."

- Check that no firewall is running on either PC that prevents connections to port 25 on the Network Viewer/SmartLink2000 PC from the other PC.

Type "QUIT" and press ENTER to exit TELNET.

Check that Network Viewer/ImageVision2000/SmartLink2000 PC can communicate with Toshiba MFP's SMTP server

At the Network Viewer/SmartLink2000 PC...

Windows 95(OSR2)/98/Me/NT4:

- Click "Start, Run"
- Type:

```
TELNET aaa.bbb.ccc.ddd 25
```

Where aaa.bbb.ccc.ddd is the IP of the Toshiba MFP

- Press ENTER

Windows 2000/XP

- Start a command prompt:
Click "Start, Programs, Accessories, Command Prompt"

- Type:

```
TELNET aaa.bbb.ccc.ddd 25
```

Where aaa.bbb.ccc.ddd is the IP of the Toshiba MFP

- Press ENTER

You should now see a line that says:

```
220 ESMTP Service Ready
```

If TELNET gets disconnected immediately it is likely that the LAN FAX SRV ADDRESS is set incorrectly on the Toshiba MFP. If it remains connected, type "QUIT" [ENTER] to exit from the server.

Check can send fax messages successfully from ImageVision2000/SmartLink2000 via Toshiba MFP

1. Start ImageVision2000/SmartLink2000.
2. Create a new message to a fax number:
 - a. If Welcome is visible, click "Browse Folders" to open the main display.
 - b. Press Ctrl+N
 - c. Enter a fax number into the "To:" field.
 - d. Enter a brief Subject and Message.
 - e. Click "Send"

The job should enter ImageVision2000/SmartLink2000's Outbox and shortly change status from "Pending" to "In Progress".



- If the job shows a status of "Problem" the text after the word "Problem" should indicate

what is wrong

e.g. “No active device” or “No device to deliver by selected distribution method” might indicate that the device driver is not running – to correct this problem, open “Devices” folder, select the device and click the green “Start” button in the “Devices” folder’s toolbar.

3. If the job fails immediately with, for example, “Remote fax abandoned” – check the LAN FAX SERVER ADDRESS setting on the Toshiba MFP matches the IP address of the PC where Network Viewer, ImageVision2000 or SmartLink2000’s device driver is running.

You can change this setting either via the front panel of the Toshiba MFP:

- Program|Menu
- INITIAL SETUP
- NETWORK
- LAN FAX
- LAN FAX SERVER ADDRESS

Or via the “Device settings” function in ImageVision2000/SmartLink2000:

- Start ImageVision2000/SmartLink2000.
- If Welcome screen appear, click “Browse Folders” button.
- In left-hand folder tree, click “Devices” to open the “Devices” folder.
- If the appropriate device driver is not already running, right-click the device driver name and select “Launch fax”.
- Right-click the appropriate device driver name and select “Device settings”.
- Change the setting.
- Click the “Write settings” button.



- You can run IPCONFIG.EXE in a Command Prompt on the PC to learn the PC’s IP address.

4. If the job remains “In progress” indefinitely¹ as shown in ImageVision2000/SmartLink2000’s Outbox, then verify that the intended recipient of the fax actually received it or print the TX REPORT on the Toshiba MFP to see if the job was sent successfully as well as verifying the LCD screen is not displaying any errors.

If the fax message was received OK, the Toshiba MFP TX Report indicates it was sent OK and the Toshiba MFP’s LCD is not showing any error: check that the INITIAL SETUP → NETWORK → E-MAIL → E-MAIL ADDRESS setting on the Toshiba MFP is set to a syntactically valid email address – if it isn’t the Toshiba MFP doesn’t send an MDN message back to ImageVision2000/SmartLink2000 reporting the outcome of the fax transmission.

If all seems well, enable logging as detailed below:

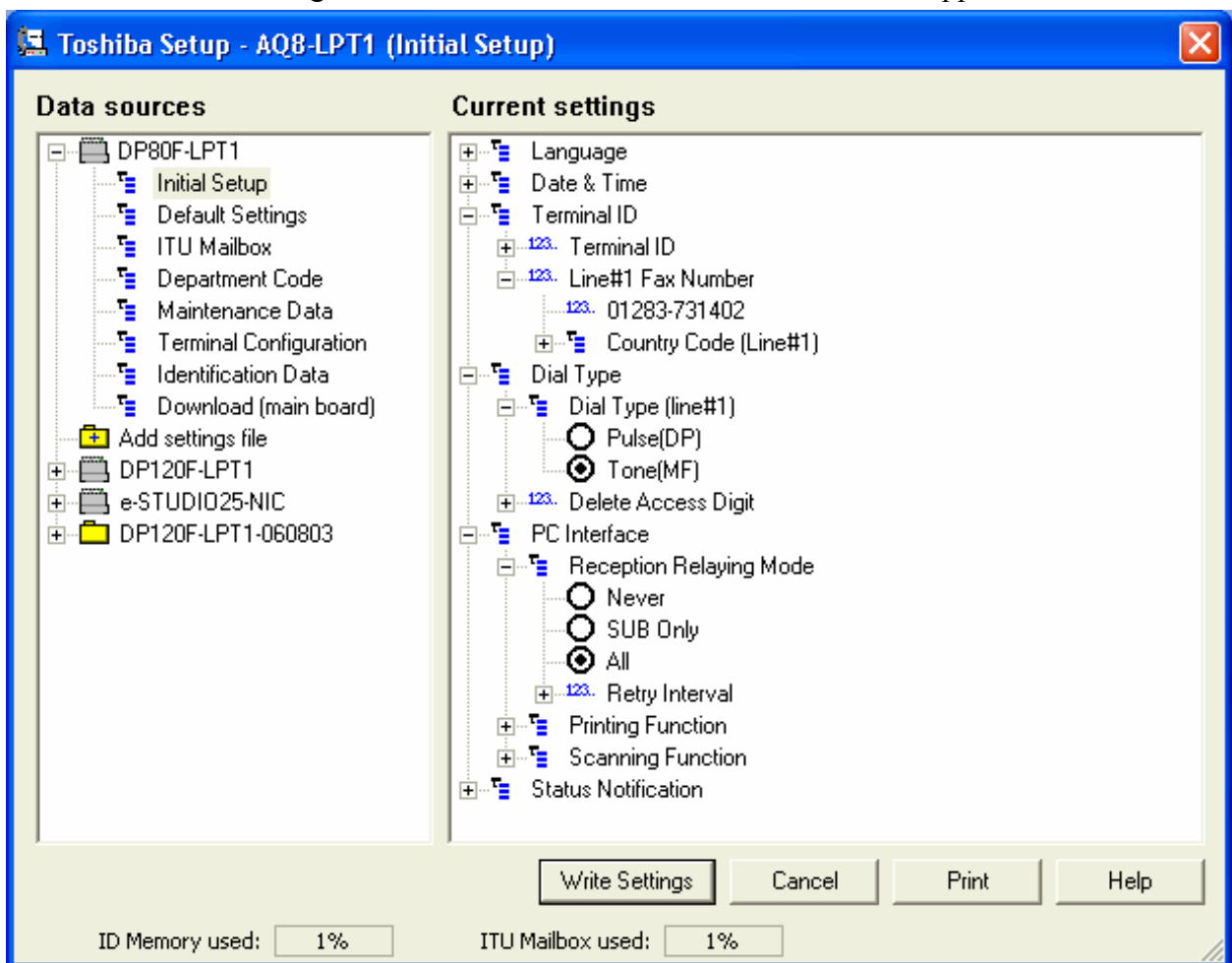
- Collect a set of logs (see below).
- Write a description of the sequence of events that lead to the job remaining “In progress” in definitely.

¹ Leave at least 5 minutes after the transmission completes for the Toshiba MFP to send the MDN outcome message back to ImageVision2000/SmartLink2000 before deciding that it is not going to do so.

- Collect the .DEV file from the main ImageVision2000/SmartLink2000 program files folder named after your device.
 - Collect a Function List printed by the Toshiba MFP
- Send all the above to support@wordcraft.com for review.

Check can read setup data from Toshiba MFP into Network Viewer/SmartLink2000

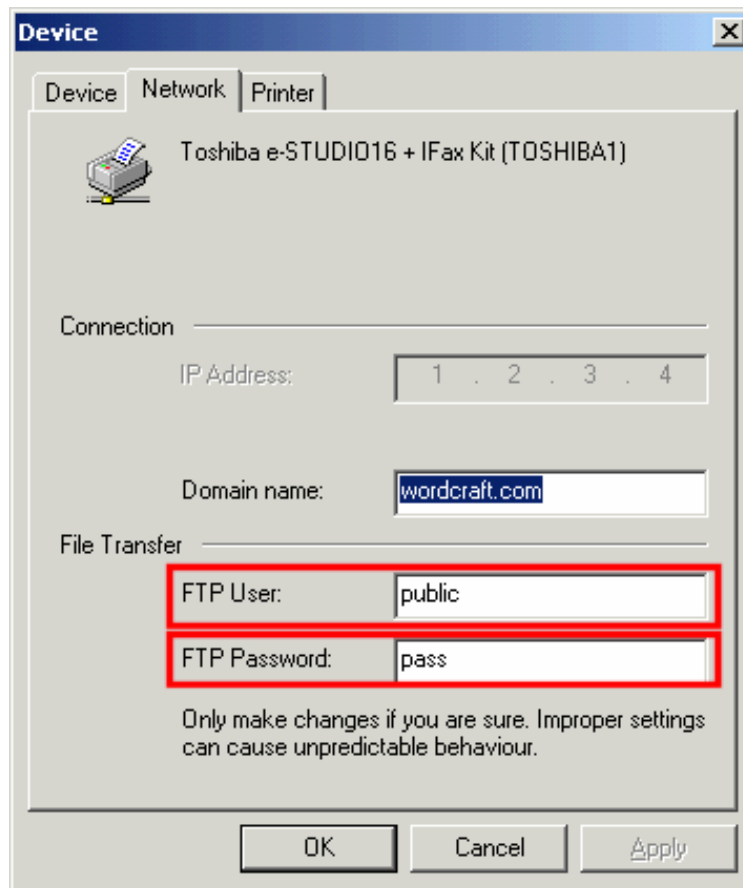
1. Start Network Viewer, ImageVision2000 or SmartLink2000.
2. If Welcome is visible, click “Browse Folders” to open the main display.
3. In the left-hand folder tree, select “Devices” to open the Devices folder.
4. Right click the appropriate device name and if present select “Launch fax” from the menu – if this menu is not present this means the device driver is already running and you may continue with the next step.
5. Right click the appropriate device name and select “Device settings” – Network Viewer/ImageVision2000/SmartLink2000 should start to read setup data from the Toshiba MFP.
6. If all is well a Device Settings screen similar to the one shown below should appear:



7. If the above doesn't appear or an error such as "Invalid credentials for setup" appears:
- Check that the INITIAL SETUP → NETWORK → FTP → FTP SERVER LOGIN NAME setting on the Toshiba MFP matches exactly the "FTP User" setting defined for the device driver.
 - Check that the INITIAL SETUP → NETWORK → FTP → FTP SERVER LOGIN PASSWORD setting on the Toshiba MFP matches exactly the "FTP Password" setting defined for the device driver.



- You can review and edit the current settings for "FTP User" and "FTP Password" in Network Viewer, ImageVision2000 or SmartLink2000 as detailed below:
 - Start Network Viewer, ImageVision2000 or SmartLink2000
 - If Welcome screen appears click "Browse Folders"
 - In left-hand folder tree, click "Devices" to open the "Devices" folder
 - Right-click appropriate device driver name and select "Properties".
 - Select the "Network" tab
 - The following dialog appears:



Enabling Network Viewer, ImageVision2000 or SmartLink2000 device driver logging

1. Launch Windows Explorer
2. Browse into the main Network Viewer, ImageVision2000 or SmartLink2000 program files folder

e.g. C:\Program Files\Unimessage Pro
C:\Program Files\SmartLink

3. Locate the .DEV file named after the device driver you have defined in Network Viewer/ImageVision2000/SmartLink2000 to communicate with and control the LAN connected Toshiba MFP.
4. Open this file using any available text editor, e.g. Windows NotePad.
5. Add the following two lines after the [Network] section heading:
Log=C:\TECDRV#.LOG
LogData=1
6. Save the edited file back to disk
7. Restart Network Viewer/ImageVision2000/SmartLink2000 – the device driver should start producing TECDRV*.LOG files in C:\ - these are the files you need to collect to send to support@wordcraft.com after reproducing a problem and then shutting down Network Viewer/ImageVision2000/SmartLink2000.