

Scan to Folder White Paper

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**Ricoh Americas Corporation
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TABLE OF CONTENTS

1	INTRODUCTION.....	4
1.1	Target Audience.....	4
2	MODEL CROSS REFERENCE	4
3	SCAN TO FOLDER PC PREPARATION.....	6
3.1	Windows 2000 PC Preparation.....	6
3.2	Windows XP PC Preparation.....	9
4	PC NETWORK SETTINGS.....	10
5	MFP CONFIGURATION AT THE OPERATION PANEL.....	11
5.1	Enabling the SMB Protocol.....	11
5.2	User Address Configuration.....	12
6	SCAN TO FOLDER CONFIGURATION VIA WEB IMAGE MONITOR	15
6.1	Web Image Monitor Administrator Login Process.....	15
6.2	WIM Protocol Settings	17
6.3	WIM Address Book Configuration.....	19
7	ADDRESS BOOK CONFIGURATION VIA SMARTDEVICEMONITOR.....	21
7.1	Searching Network Segments	21
7.2	Address Book Configuration	22
8	SCAN TO FOLDER OPERATION	25
8.1	Scan to Folder Function for Non-registered Users	25
8.2	Additional Scan Settings.....	28
9	TROUBLESHOOTING.....	32
9.1	PC-level Troubleshooting.....	32
9.2	MFP-level Troubleshooting.....	33
9.3	Signs of Scan to Folder Failure	33

9.4 Checking PC Settings..... 34

9.5 MFP Network Browsing Capability Test..... 37

9.6 Scan to Folder Problems in a Windows 2003 Server Environment 38

10 SCAN TO FOLDER IN A MAC ENVIRONMENT..... 40

11 SUMMARY..... 40

1 Introduction

Ricoh Corporation developed Scan to Folder so customers can scan documents to shared folders, which several other users can access. It creates an efficient means of scanned document storage, access, and distribution without requiring additional hardware or software.

1.1 Target Audience

The target audience for this White Paper is:

- IT Administrators.
- All end-users - The information contained in the document can be distributed to end-users as long as the restrictions outlined on the cover page are followed.
- The support and marketing staff of Ricoh Sales companies, including Ricoh family group companies and their subsidiaries.
- Technical support personnel (CEs) of dealers.

2 Model Cross Reference

The tables below covers all models referenced in this document.

Product Code	Ricoh Corp Model Name	Savin (USA) Model Name	Gestetner Model Name	Lanier Model Name
B051	Aficio 1224C	C2408	DSc224	LD024C
B052	Aficio 1232C	C3210	DSc232	LD032C
B064	Aficio 1060	2560	6002	LD060
B065	Aficio 1075	2575	7502	LD075
B070	Aficio 2090	4090	9002	LD090
B071	Aficio 2105	4105	10512	LD0105
B079	Aficio 2035	4035	3532	LD035
B082	Aficio 2045	4045	4532	LD045
B089	Aficio 2022	4022	Dsm622	LD122
B093	Aficio 2027	4027	Dsm627	LD127
B121	Aficio 2015	4015	DSM615	LD115
B122	Aficio 2018	4018	DSM618	LD118
B123	Aficio 2018D	4018D	DSM618d	LD118D
B129	Aficio 1515	3515	Dsm415	LD015
B130	Aficio 1515MF	3515MF	Dsm415pf	LD015spf
B132	Aficio 3260c	C6045	DSc460	LD160c
B135	Aficio 2035e	4035e	Dsm635	LD135
B138	Aficio 2045e	4045E	Dsm645	LD145
B140	Aficio 2060	4060	Dsm660	LD160
B141	Aficio 2075	4075	Dsm675	LD175
B142	Aficio 2060SP	4060sp	Dsm660sp	LD160 SP
B143	Aficio 2075SP	4075sp	Dsm675sp	LD175 SP
B147	Aficio 2232c	C3224	DSc332	LD232c
B149	Aficio 2238c	C3828	DSc338	LD238c
B156	Aficio 3224c	C2410	DSC424	LD124C
B163	Aficio 2051	4051	Dsm651	LD151

Product Code	Ricoh Corp Model Name	Savin (USA) Model Name	Gestetner Model Name	Lanier Model Name
B168	Aficio 1515F	3515F	DSm415f	LD015f
B169	Aficio 2013PS		DSm415p	LD015sp
B178	Aficio 3235C	C3528	DSc435	LD335c
B180	Aficio 3245C	C4535	DSc445	LD345c
B182	Aficio 2035eSP	4035Esp	DSm635sp	LD135
B183	Aficio 2045eSP	4045Esp	DSm645sp	LD145
B188	Aficio 480W	4800WD	A080	LW411
B190	Aficio 2228c	C2820	DSc328	LD228c
B200	Aficio 5560	SDC555	CS555	LC155
B202	Aficio 3228C	C2824	DSC428	LD328c
B205	Aficio 3025 SP/SPF/Spi/P	8025 SP/SPF/Spi/G	DSm725 SP/SPF/Spi/G	LD225/SP
B209	Aficio 3030 SP/SPF/Spi/P	8030 SP/SPF/Spi/G	DSm730 SP/SPF/Spi/G	LD230
B222	MP C3500	C3535	DSc535	LD435c
B224	MP C4500	C4540	DSc545	LD445c
B228	Aficio 2051SP	4051sp	DSm651sp	LD151 SP
B229	Aficio 615c	SGC 1506	GS 106	LD215cg
B230	Aficio MP C2500	C2525	DSc525	LD425c
B234	Aficio MP9000	8090	DSm790	LD190
B235	Aficio MP1100	8110	DSm7110	LD1110
B236	Aficio MP1350	8135	DSm7135	LD1135
B237	Aficio MP C3000	C3030	DSc530	LD430c
B245	Aficio MP 1500	-	DSm715	LD315
B246	Aficio MP 5500	8055	DSm755	LD255
B248	Aficio MP 6500	8065	DSm765	LD265
B249	Aficio MP 7500	8075	DSm775	LD275
B250	Aficio MP 5500 SP	8055 SP	DSm755 SP	LD255 SP
B252	Aficio MP 6500 SP	8065 SP	DSm765 SP	LD265 SP
B253	Aficio MP 7500 SP	8075 SP	DSm775 SP	LD275 SP
B259	Aficio 2016	8016	DSm616	LD116
B260	Aficio 2020	8020	DSm620	LD120
B261	Aficio 2020D	8020d	DSm620d	LD120d
B262 / B292	Aficio MP 161	816	DSm416	LD016
B264	Aficio 3035 SP/SPF/Spi/G	8035 SP/SPF/Spi/G	DSm735 SP/SPF/Spi/G	LD235
B265	Aficio 3045 SP/SPF/Spi/G	8045 SP/SPF/Spi/G	DSm745 SP/SPF/Spi/G	LD245
B276	Aficio MP 1600	9016	DSm716	LD316
B277	Aficio MP 2000	9021d	DSm721d	LD320
B284	Aficio MP 161F	816f	DSm416f	LD016f
B288	Aficio MP 161SPF	816mf	DSm416pf	LD016SPF
B291	Aficio MP 3500G	8035eg	DSm735eg	-
B295	Aficio 4500G	8045eg	DSm745eg	-
B296	Aficio MP 3500	8035e	DSm735e	LD335
B297	Aficio MP 4500	8045e	DSm 745e	LD345
D007	Aficio MP 2510	8025e	DSm725e	LD325
D008	Aficio MP 3010	8030e	DSm730e	LD330

3 Scan to Folder PC Preparation

Use of the Scan to Folder function requires the creation of a destination folder on a PC. This section covers the creation, sharing, and user access setup of this folder on the Windows 2000 and XP operating systems.

NOTES

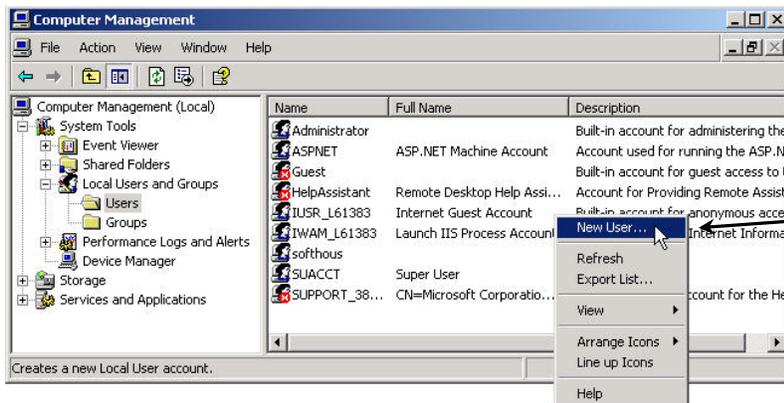
- Do not create the folder on the desktop. In a domain, it may not be possible to scan to a desktop folder even with proper share settings in place.
- For Windows 2000 and XP, users will need login name and password information
- Multiple folders can be created, if required.

3.1 Windows 2000 PC Preparation

This section details the steps used to configure a computer for use with Scan to Folder. A shared folder has to be set up, along with user accounts and access.

3.1.1 Adding New Users

1. On the Windows Desktop, right-click on the My Computer icon.
2. From the right-click menu, select **Manage** to open the Computer Management screen.



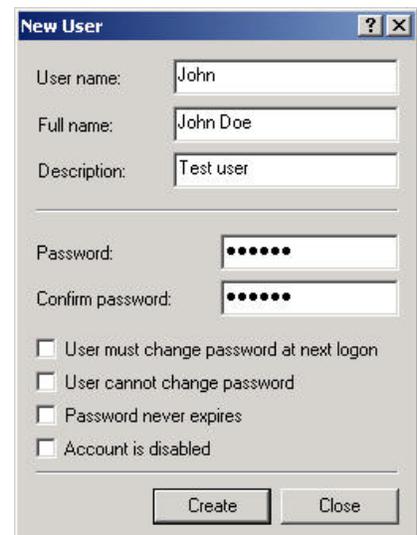
3. Under the *Local Users and Groups* section, select **Users**.
4. In the right window, right-click and select **New User**.

5. In the proper fields, enter the **User Name**, **Password**, and **Confirm Password** for the new user.
6. Check each of the option boxes as needed.
 - For Scan to Folder, the **User cannot change password** and **Password never expires** are helpful.

NOTES

If the user name and/or password changes, access to the folder from the MFP will fail.

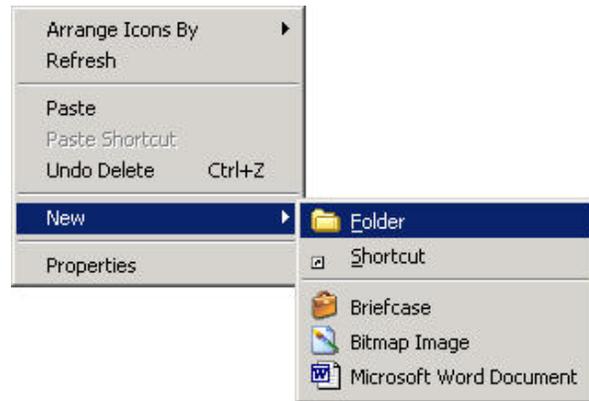
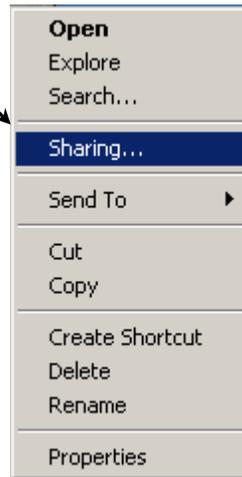
- If this happens, the user must to reset the password on the MFP to reflect the change made on their PC.



3.1.2 Creating a New Folder

This section details the creation of a new folder for use when by the Scan to Folder function.

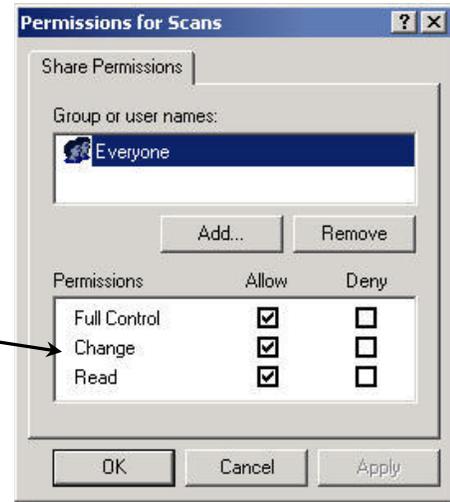
1. Open the directory/driver in which the folder will reside.
 - Do not create the folder on the desktop. In a domain, it may not be possible to scan to a desktop folder even with proper share settings in place.
2. Right-click in the desired root folder, and select **New** → **Folder** to create a new folder.
3. Enter the new folder's name.
4. Right-click on the new folder, and select **Sharing**.



5. This will open the folder options menu.
6. Click on the Sharing tab to access the folder's sharing settings.
7. Select **Share this folder**.
8. Click the Permissions button to set up user rights and access.



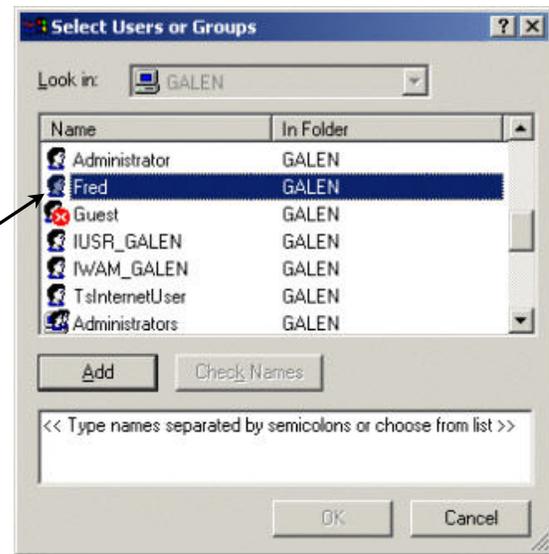
9. On the Permissions pop-up, verify that the Group labeled **Everyone** is present.
10. Check to ensure that the group has both **Change** and **Read** permissions enabled.



3.1.3 Private User/Group Folder Creation

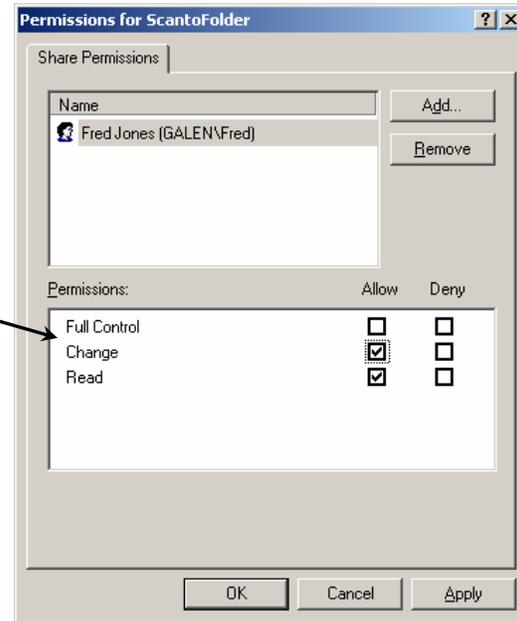
To specify access to the shared folder, a private user or group can be created allowing only certain users to access the folder.

1. On the permissions pop-up, select **Everyone** (see screenshot above).
2. Click Remove to delete Everyone from the permissions list.
3. Click the Add button to add a new user/group.
4. From the User/Group selection screen, click on the User/Group to add.
5. Click **Add** to add the User/Group to the list.



6. In the lower box of the User/Group screen, the added user/group will appear (*at left*).
7. Once all of the desired users/groups have been added, click **OK** to save the changes and return to the permissions screen.

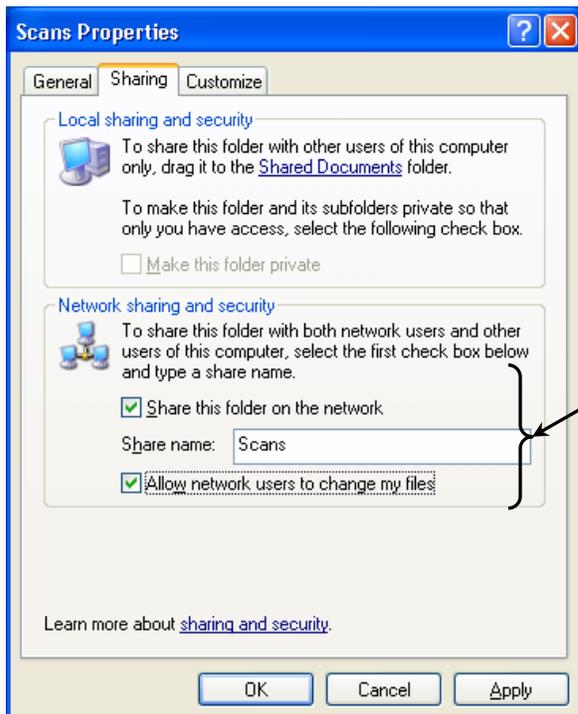
8. On the user/group permission screen, select the new user.
9. Check the Change box to grant editing permissions in the shared folder.
 - *Read only is the default setting.*
10. Click **OK** to save changes and exit.



3.2 Windows XP PC Preparation

The process for creating a folder and adding users in Windows XP is the same as Windows 2000. The only difference is the check boxes to enable from the folder-sharing tab.

1. Right-click on the shared folder.
2. From the right-click menu, select **Sharing and Security**.



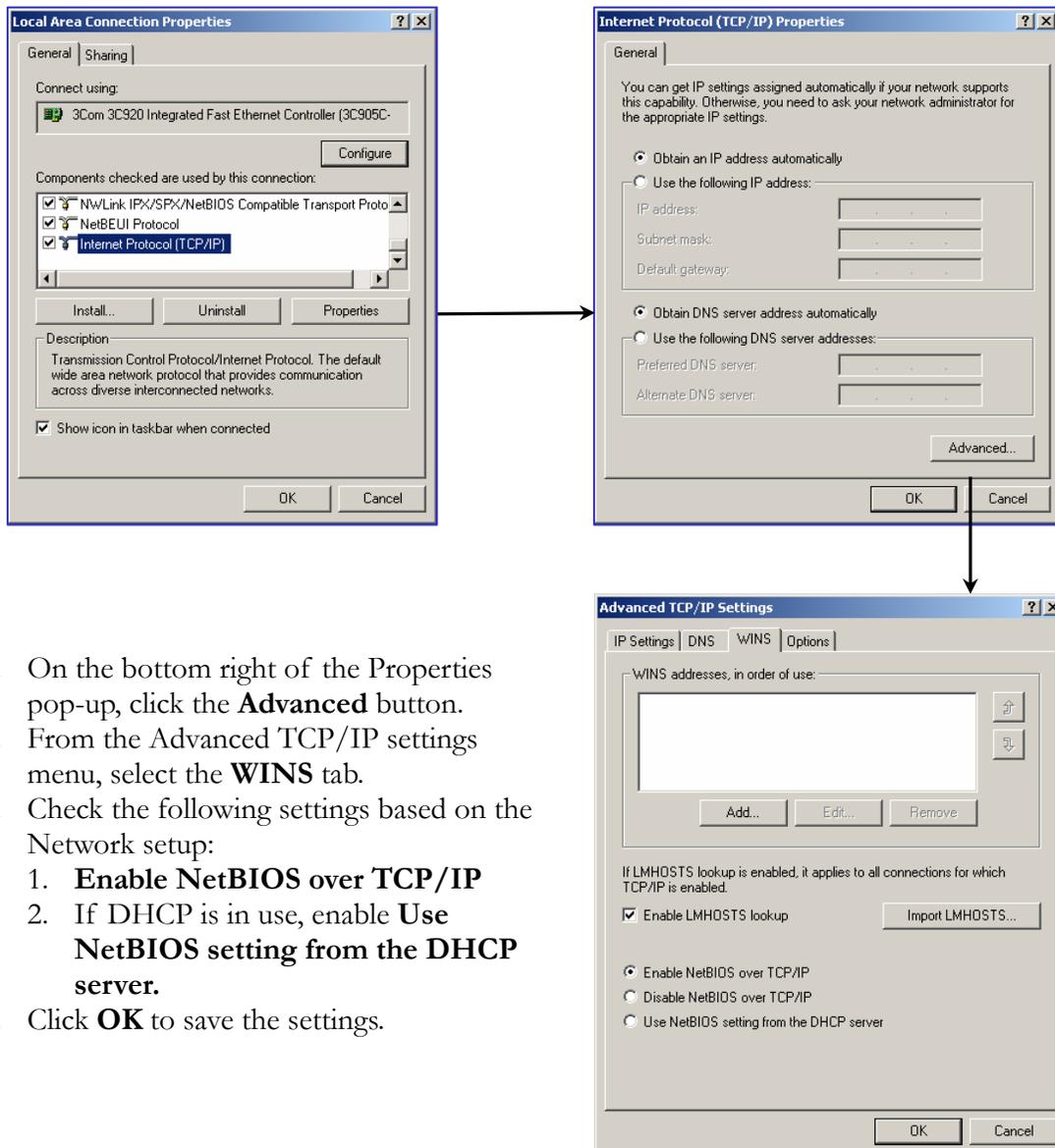
3. Check the boxes labeled **Share this folder on the network** and **Allow network users to change my files**.
4. Click **Apply** and then **OK** to save the settings.

IMPORTANT
Users **MUST** be allowed to change the files.

4 PC Network Settings

In order to for Scan to Folder to function correctly, some Network Settings must be added or changed. This section details these settings and the process used to add/alter them.

1. There are two ways to access the Network settings. They are:
 - A. From the Windows desktop, right-click on the **My Network Places** icon and select **Properties**.
 - B. From the Windows start menu, follow this click path: Start → Settings → Control Panel → Network and Dial-up Connections (2000) or Network Connections (XP).
 - o From the Connections screen, right-click on the appropriate network connection, and select **Properties**.
2. From the Connection's Properties screen, highlight **Internet Protocol (TCP/IP)**.
3. Click the **Properties** button to access the TCP/IP settings (*see figure below at left*).



4. On the bottom right of the Properties pop-up, click the **Advanced** button.
5. From the Advanced TCP/IP settings menu, select the **WINS** tab.
6. Check the following settings based on the Network setup:
 1. **Enable NetBIOS over TCP/IP**
 2. If DHCP is in use, enable **Use NetBIOS setting from the DHCP server**.
7. Click **OK** to save the settings.

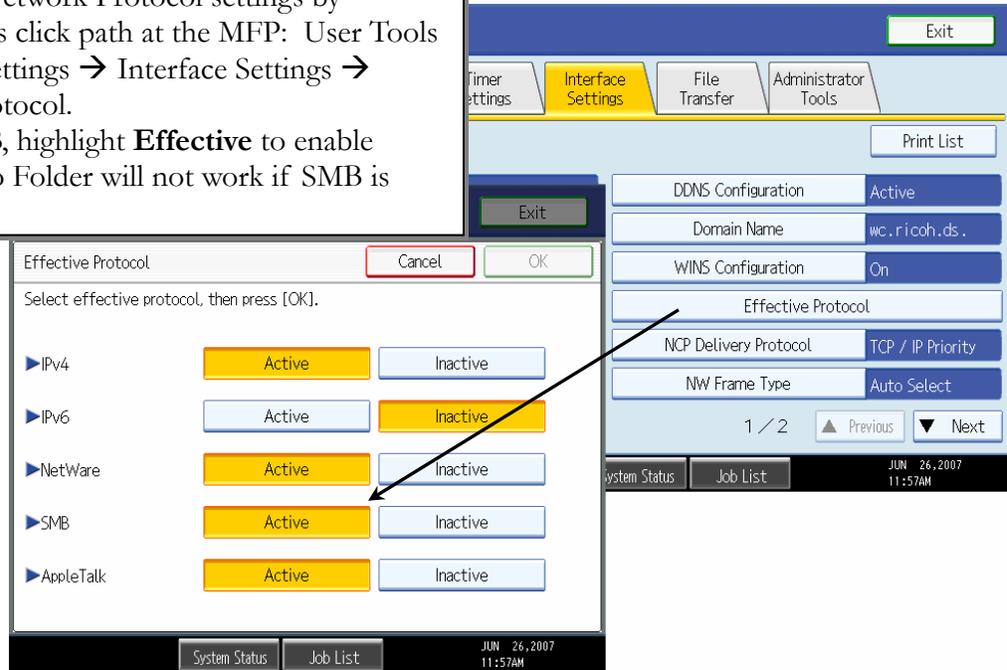
5 MFP Configuration at the Operation Panel

In addition to creation and configuring of the shared folder at the PC, the MFP must be configured in order to use the Scan to Folder function. This section covers the configuration performed at the MFP operation panel.

5.1 Enabling the SMB Protocol

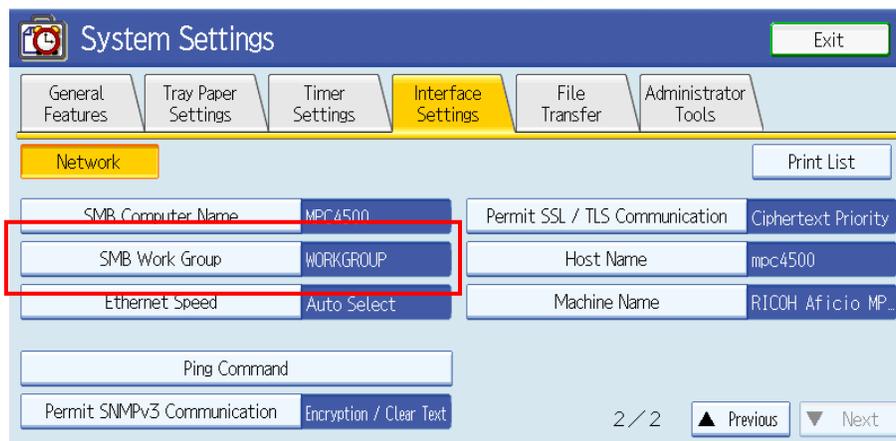
Since Scan to Folder uses the SMB protocol to function, it must be enabled at the MFP.

1. Access the Network Protocol settings by following this click path at the MFP: User Tools → System Settings → Interface Settings → Effective Protocol.
2. Next to SMB, highlight **Effective** to enable SMB. Scan to Folder will not work if SMB is disabled.



5.1.1 SMB Workgroup Name

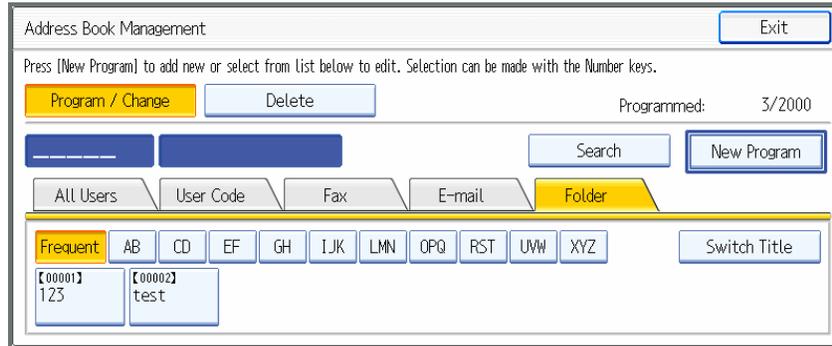
The SMB Workgroup name must match at least one of the workgroups on the network in order to browse the network for a shared folder. To view/edit the SMB workgroup, follow this path from the operation panel: System Settings → Interface Settings → Page 2 → SMB Computer Name → SMB Workgroup (*see below*).



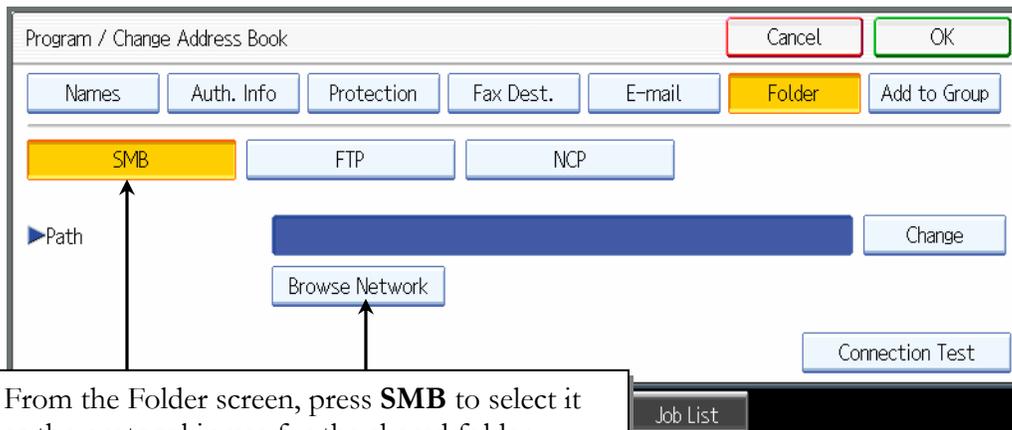
5.2 User Address Configuration

Users must have the shared folder information added to their account in order to use Scan to Folder. This section details the process for adding the folder information to a user's account.

1. Start by following this click path at the MFP: User Tools → System Settings → Administrator Tools (or Key Operator Tools) → Address Book Management.
2. From the Address Book Management screen, select either **New Program** or select a user to edit from the address list.



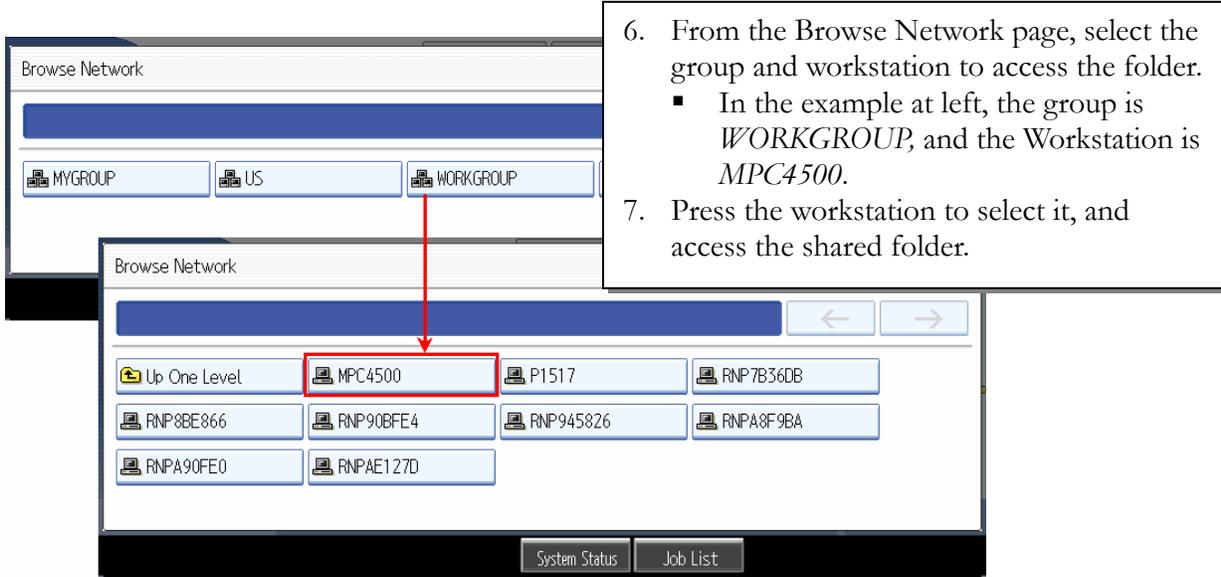
3. From the Program/Change Address screen, select the **Folder** tab to add the shared folder's address information.



4. From the Folder screen, press **SMB** to select it as the protocol in use for the shared folder.
5. Next to the Path field, press **Browse Network** to search for the shared folder on the Network.

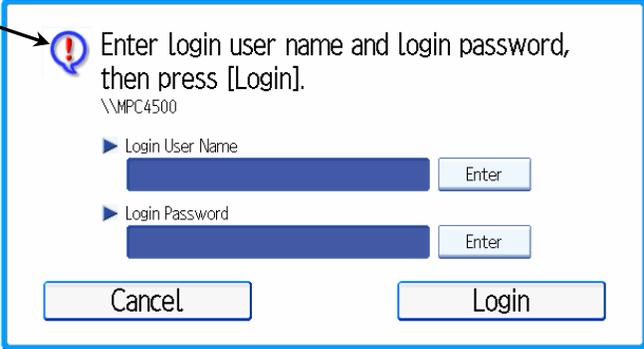
NOTES

- Entering the direct path to the shared folder in the Path field is also possible. However, ALL of the information (computer name, PC IP address, etc.) must be exact or the connection will fail.
- If Browse fails, use IP address (or Computer Name) and select Browse.

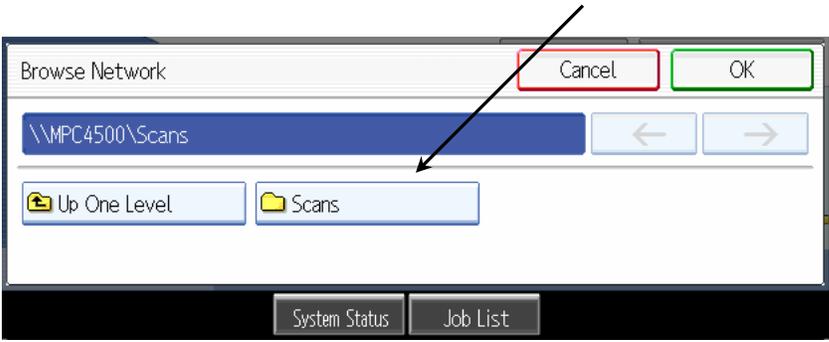


6. From the Browse Network page, select the group and workstation to access the folder.
 - In the example at left, the group is *WORKGROUP*, and the Workstation is *MPC4500*.
7. Press the workstation to select it, and access the shared folder.

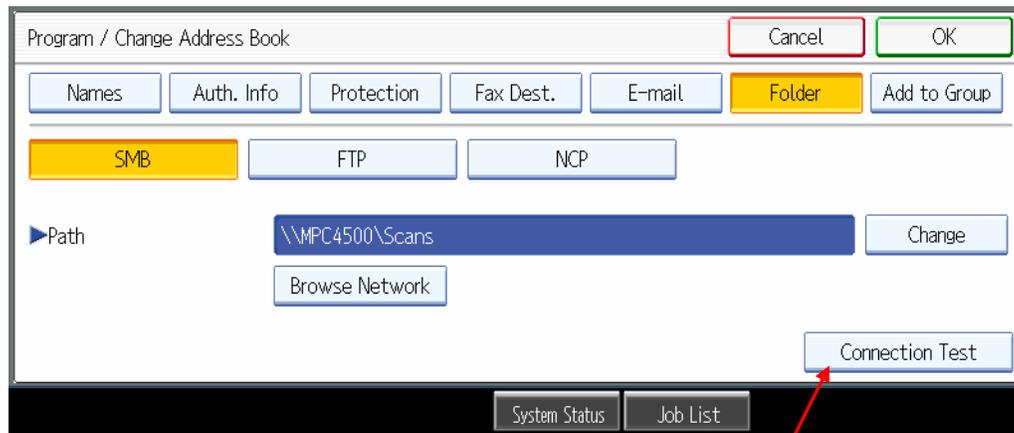
8. A message will appear stating “Cannot log in with the entered password.”
9. Click **Exit** to close the message.
10. A login screen will open. In the login screen enter the user name and password added in section 3.1 (page 6).



11. If the login is successful, a message will open stating “Connection with PC has succeeded.”
12. Navigate through the folders to find the Shared Folder (named *Scans* in this example).



13. Press the folder to select it, and press **OK** to return to the main folder tab.
14. The address of the shared folder (*Scans*) now appears in the path field of the User's folder tab. The shared folder connection is now complete.

**NOTE**

If the shared folder path was input manually, press Connection Test to check that the folder address is valid and accessible by the MFP.

6 Scan to Folder Configuration via Web Image Monitor

The address book settings made at the operation panel in section 5 can also be set up in Web Image Monitor (WIM). This section details the steps used to configure the Scan to Folder address settings via WIM.

6.1 Web Image Monitor Administrator Login Process

In order to access, and change, the necessary settings, it is necessary to login to WIM as an Administrator. The Administrator login process is outlined below.

1. Enter the IP address in the address field using the following form: *http://printer host name or IP address* (e.g. <http://172.16.121.40>) and click on **Go** or press Enter. This opens the page shown in Figure 6.1 below.
2. In the upper right-hand corner, click **Login**, which opens a login page (Figure 6.2).

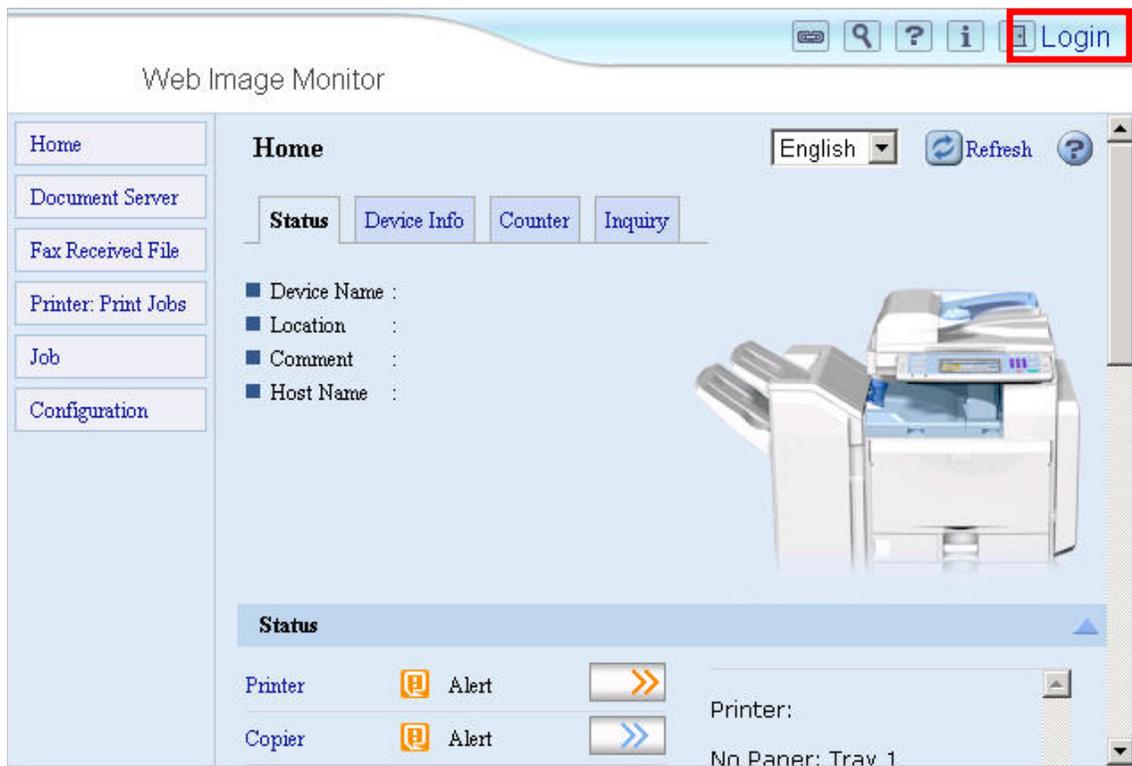


Figure 6.1: Web Image Monitor Main Screen



The image shows the login page for Web Image Monitor. At the top, there is a banner with a blue and green abstract background and the text "Web Image Monitor" in white. Below the banner, there are two input fields: "Login User Name" with the text "User1" and "Login Password" with asterisks. A "Login" button is positioned below the password field.

Figure 6.2: Web Image Monitor Login Page

3. Access to Administrator mode requires a password. Login to enter Administrator mode.
4. If the login was successful, the word **Administrator** in the upper right-hand corner. See Figure 6.3.

NOTE

The login process may differ slightly depending on the machine in use.



Figure 6.3: Administrator Main Screen

NOTE – Non-Secure Devices

For non-secure devices, access WIM and click the Administrator button in the upper-right corner of the page. At the login screen, leave the user name *blank* and enter *password* in the password field.

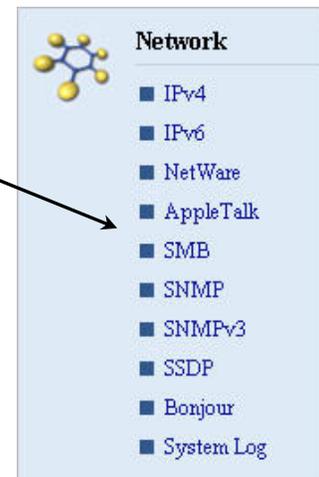
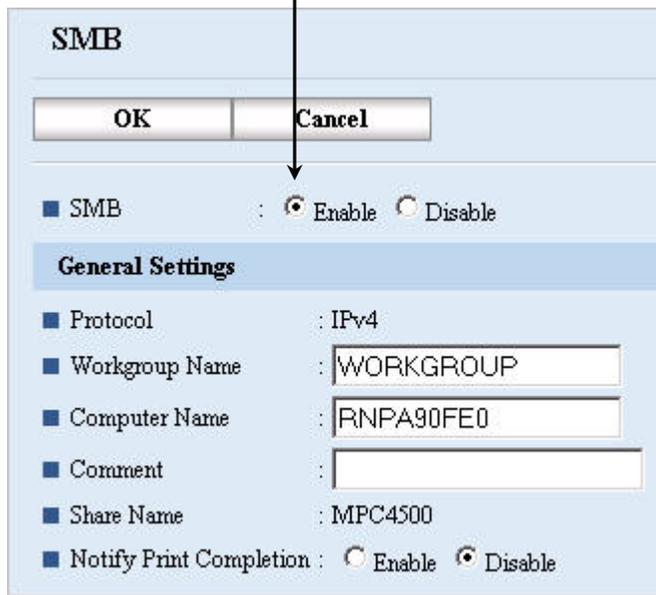
6.2 WIM Protocol Settings

After logging in as an Administrator, all of the necessary settings can be changed from WIM. This section details each of the settings needed to use Scan to Folder.

6.2.1 Enabling the SMB Protocol

In order to use Scan to Folder, the SMB protocol must be enabled.

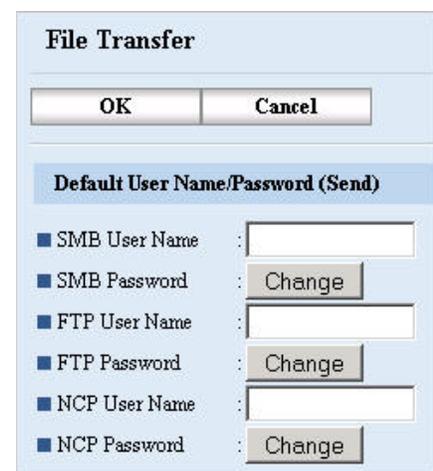
1. From the left-hand toolbar, select **Configuration**.
2. Under the Network heading, select **SMB**.
3. Next to SMB, click the Enable radio button.



4. Under the General Settings tab, enter the Workgroup Name used on the Network.
5. Click **OK** to save the settings and return to the Configuration page.

6.2.2 Default User Name for SMB and FTP

1. To set the default user name and password for SMB and or FTP (if using Scan to FTP), select **File Transfer** from the Configuration screen.
2. Enter the user name and password (by clicking the change button).
3. Click **OK** to save the changes and exit.



6.2.3 SNMP Configuration

The SNMP protocol can be enabled and configured via WIM.

1. From the Configuration page (or toolbar – depending on the version of WIM in use), click on **SNMP** (under the Network heading).
2. Next to the field labeled SNMP, ensure that the **Enable** radio button is selected.
3. Under the protocol heading, the enabled protocol should be either TCP/IP or IPv4 (depending on the version of WIM in use).

■ SNMP : Enable Disable

Protocol

■ IPv4 : Enable Disable

■ IPv6 : Enable Disable

■ IPX : Enable Disable

SNMPv1/v2 Setting

■ SNMPv1/v2 Function : Enable Disable

■ SNMPv1 Trap Communication : Enable Disable

■ SNMPv2 Trap Communication : Enable Disable

■ Permit Settings by SNMPv1 and v2 : On Off

Community

No.	Community Name	Access Type	Protocol Type	Enable/Disable	Manager Address
1	public	read-only	IPv4	<input checked="" type="radio"/> Enable <input type="radio"/> Disable	0.0.0.0
			IPv6	<input checked="" type="radio"/> Enable <input type="radio"/> Disable	::
			IPX	<input checked="" type="radio"/> Enable <input type="radio"/> Disable	0 : 00000000
2	admin	read-write	IPv4	<input checked="" type="radio"/> Enable <input type="radio"/> Disable	0.0.0.0
			IPv6	<input checked="" type="radio"/> Enable <input type="radio"/> Disable	::
			IPX	<input checked="" type="radio"/> Enable <input type="radio"/> Disable	0 : 00000000

SNMP Community Settings

Under the Community heading, there should be two default Communities listed: public and admin. Do not change these default community settings, unless necessary to meet network security settings.

6.3 WIM Address Book Configuration

Using Web Image Monitor, user data can be added, deleted, and/or modified to ensure it is up to date. It also provides a faster, more efficient manner in which to update the address book than data entry from the MFP Operation Panel. This section outlines the steps to modify the MFP address book.

1. Login to Web Image Monitor as an Administrator (*see section 6.1 – page 15*).
2. From the left-hand toolbar, select **Address Book**.
3. The Address Book main screen will open. It displays the existing user list, including the Registration number, E-mail address, Name of each user (Figure 6.4).
4. From the Address Book main screen, click **Change** to edit an existing user or **Add User** to create a new user account.

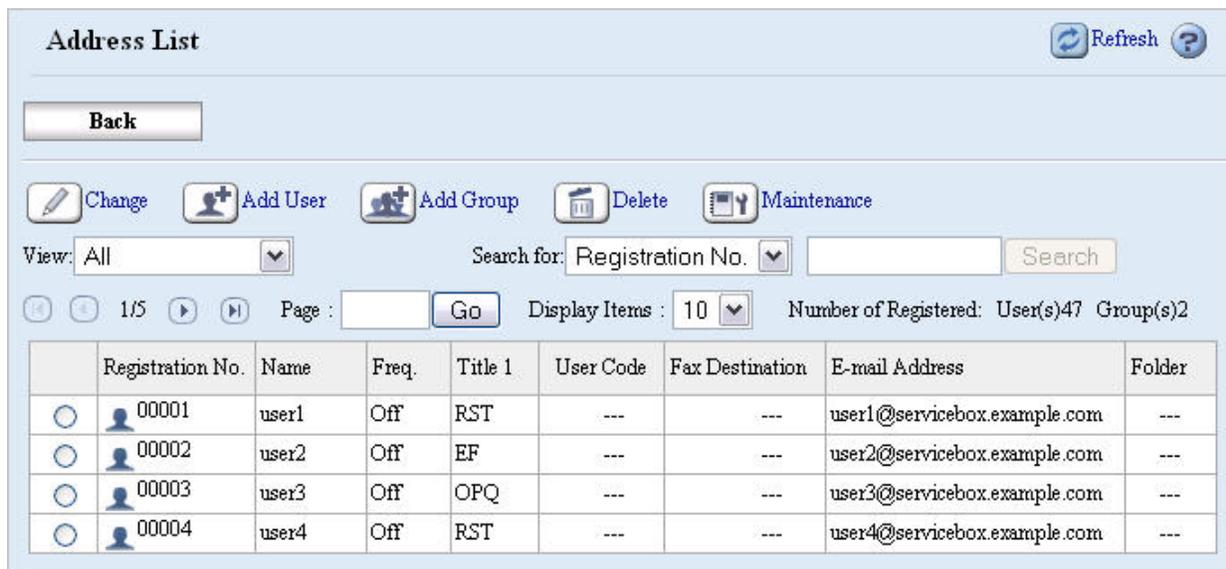
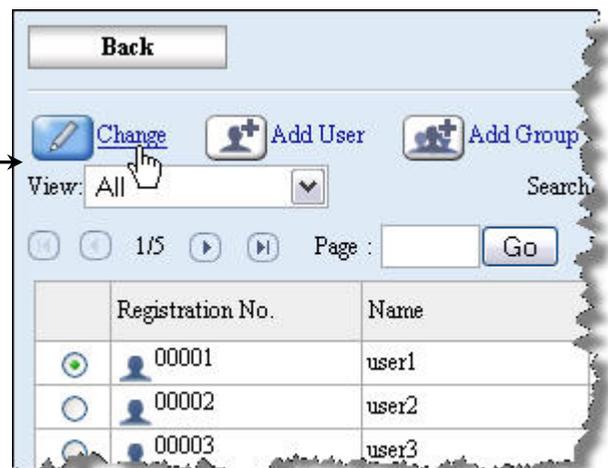


Figure 6.4: Address Book Main Screen

1. From the main address list, click **Add User** to add a new user. OR click radio button next to the name of the desired user and click **Change**.



2. For new users, a Registration number will be auto-populated.
3. Enter a Name and Key Display (what will appear on the MFP Op panel).
NOTE: If no **Key Display** is entered, the user will not appear on the MFP operation panel.
4. From the drop down boxes, select the user's title(s).
5. If desired, select **On** in the Add to Freq. Radio button to have the user appear in the Frequent tab on the MFP.

6. Under the Authentication Information heading, specify the necessary information (User Code, SMTP, Folder, LDAP, etc). The **Specify Other Auth. below** radio must be selected to edit the Authentication information.

7. In the Protocol drop down box (under the Folder heading) select **SMB** to make it the protocol in use.
8. Enter the path to the shared folder on the PC (*the path created in section 5.2 – page 12*).
9. In the Folder Authentication section (under the Authentication Heading), enter the user name and password needed to access the folder.
 - Be sure to highlight the *Specify Other Auth. Info Below* radio button.

7 Address Book Configuration via SmartDeviceMonitor

Using the Address Management tool in SmartDeviceMonitor for Admin (SDMA), user accounts can be added, or modified, to include all of the settings needed to use Scan to Folder. This section details the process used to change the settings via SmartDeviceMonitor.

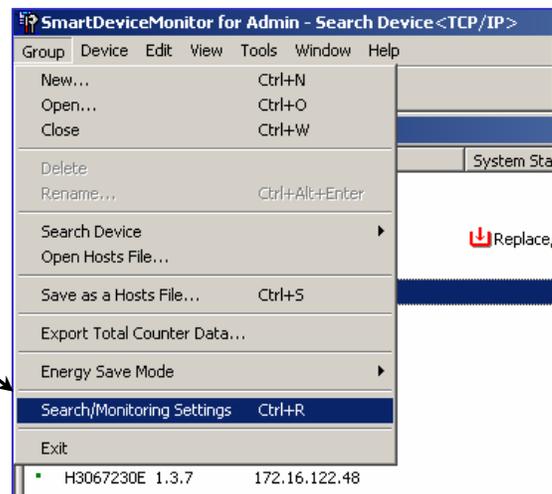
NOTE

- It is best to download and install the latest version of SDMA to ensure that it will work properly with the latest devices.
 - SDMA is located on the device's driver download website.
 - Once SDMA is launched, it will automatically search the local area network for devices

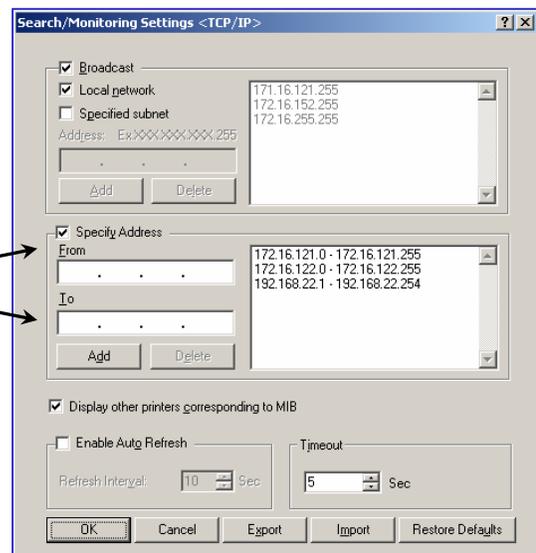
7.1 Searching Network Segments

In order to access the address book of a device, a network search must be performed first to find the device. To speed up this process, follow the steps below to search specific network segments.

1. From the main toolbar, click on **Group** and then **Search/Monitoring Settings**.



2. On the Search/Monitoring Settings screen, uncheck **Broadcast** to force SDMA to search only designated networks.
3. Check **Specify Address**, and enter the address of the network segment to search or select an address range from the list in the right-hand column.



7.2 Address Book Configuration

After locating the device list on the desired network segment, the address book settings can now be modified to work with Scan to Folder.

1. From the device search results page, select the device to configure.

2. In the main toolbar, click Tools → Address Management Tool.

Name	IP Address	Model	Device Type
AP2610_P			
AP3800C			
H3067230E 1.3.7			
RDP_691318	172.16.163.80	LA5E...	
RDP_692233	172.16.163.35	Aficio 1050	RICOH Aficio 1050 / RICOH Ne...
RDP_C69998	172.16.160.33	Aficio 850	RICOH Aficio 850 / RICOH Net...
RDP_D10527	172.16.160.34	Aficio 1018D	RICOH Aficio 1018D / RICOH N...
RNP6A5EAD	172.16.160.26	Aficio 1013F	RICOH Aficio 1013F / RICOH N...
RNP6A5EB1	172.16.160.24	LASER AP2600N	
RNP6EE9A7	172.16.163.82	LASER AP2600N	
RNP6FB181	172.16.160.108	Aficio 2090	
RNP704D32	172.16.160.31	Aficio 1232C	
RNP72967D	172.16.160.37	MLP26n	
RNP733A51	172.16.160.30	2545/2245	
RNP758C0C	172.16.160.141	Aficio CL3000	
RNP77CE19	172.16.163.71	Aficio CL7000	Duluth_GA Showroom
RNP77CEFD	172.16.160.125	Aficio CL7000	
RNP793D42	172.16.160.206	Aficio 1224C	
RNP7D059E	172.16.160.182	Aficio 2022	
SAVIN_SERVICE	172.16.160.36	9945DPE/2045DPE	SAVIN 9945DPE/2045DPE
SLP38c DE	172.16.160.32	SLP38c DE	SAVIN SLP38c DE
Unidentified name	172.16.163.33	EPI Fiery Embedded	EPI Fiery Embedded

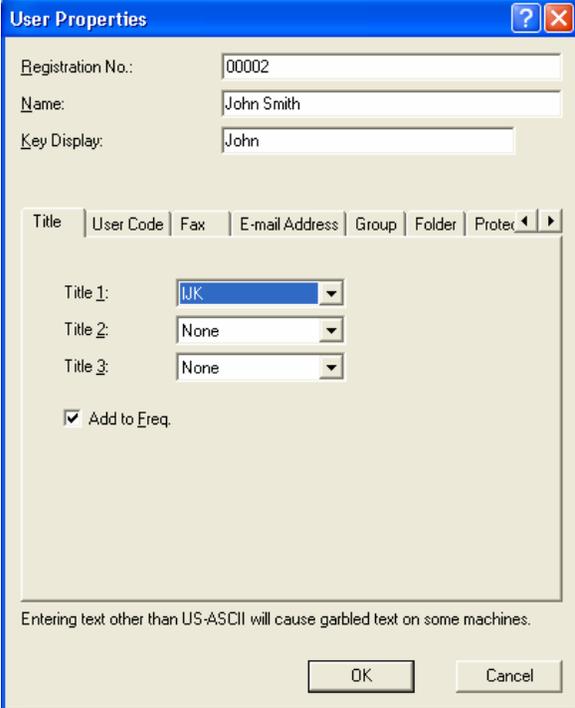
3. At the Password/Authentication screen, login as an Administrator.
4. To add a new user, click the add new user button, or double click on an existing user to edit his or her user account settings.

Address Management Tool - RNP7D059E : 172.16.160.182

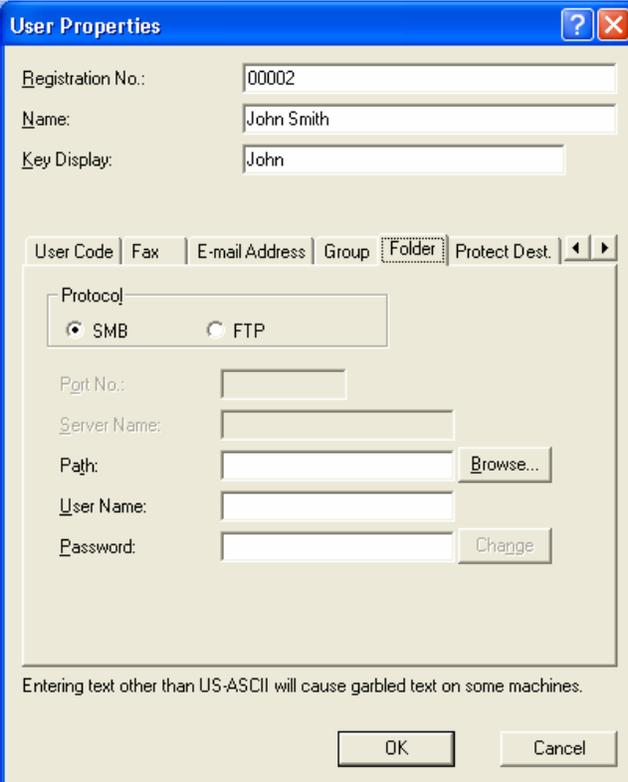
Registration No.	Name	Freq.	Title 1	Title 2	Title 3	User Code	Fax No.	E-mail Address	Folder	Status
00001	Fred Jones	Yes	EF			1234		fred@seminar.com	cfg	

For Help, press F1 | Maximum users: 1999 Maximum groups: 100

5. For new users, enter the Name and Key Display in the appropriate fields.
6. On the **Title** tab, select the user's title from the drop down box.
 - Also, check the **Add to Freq.** Box to add the user to the *Frequent* tab on the MFP operation panel.



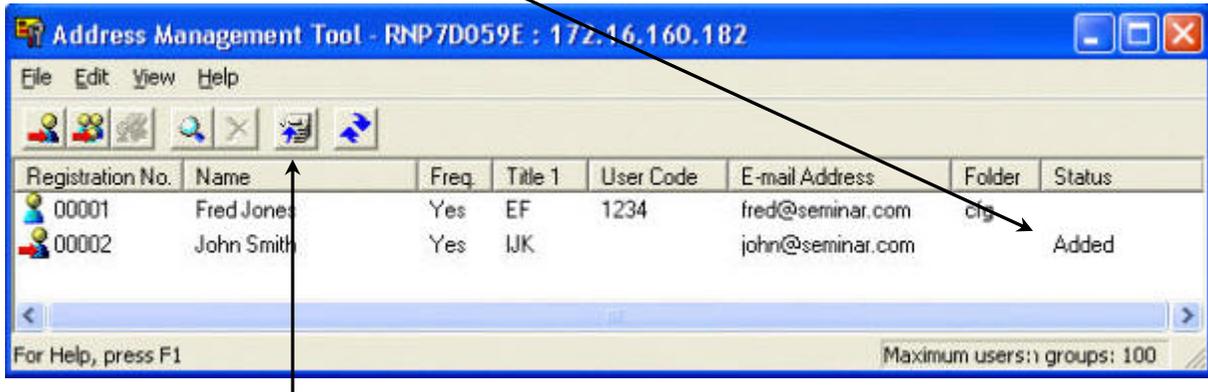
The image shows the 'User Properties' dialog box with the 'Title' tab selected. The fields are filled with: Registration No.: 00002, Name: John Smith, Key Display: John. Under the 'Title' section, there are three dropdown menus: Title 1: IJK, Title 2: None, Title 3: None. The 'Add to Freq.' checkbox is checked. At the bottom, there are 'OK' and 'Cancel' buttons. A warning message at the bottom reads: 'Entering text other than US-ASCII will cause garbled text on some machines.'



The image shows the 'User Properties' dialog box with the 'Folder' tab selected. The fields are filled with: Registration No.: 00002, Name: John Smith, Key Display: John. Under the 'Folder' section, the 'Protocol' dropdown is set to 'SMB'. Below it are fields for Port No., Server Name, Path (with a 'Browse...' button), User Name, and Password (with a 'Change' button). At the bottom, there are 'OK' and 'Cancel' buttons. A warning message at the bottom reads: 'Entering text other than US-ASCII will cause garbled text on some machines.'

7. On the User Properties screen, click the tab labeled **Folder**.
8. Under the Protocol section, select SMB to enable it for use with Scan to Folder.
9. Enter the path to the shared folder via browsing the network or using the address from the MFP operation panel configuration (*section 5.2 – page 12*).
10. Enter the User Name and Password used to access the folder in the appropriate fields.
11. Click **OK** to save the settings and add the new user (or modify the existing user).

12. The new user will show up in the Address list for the selected device, with the notation of **Added** in the Status column.



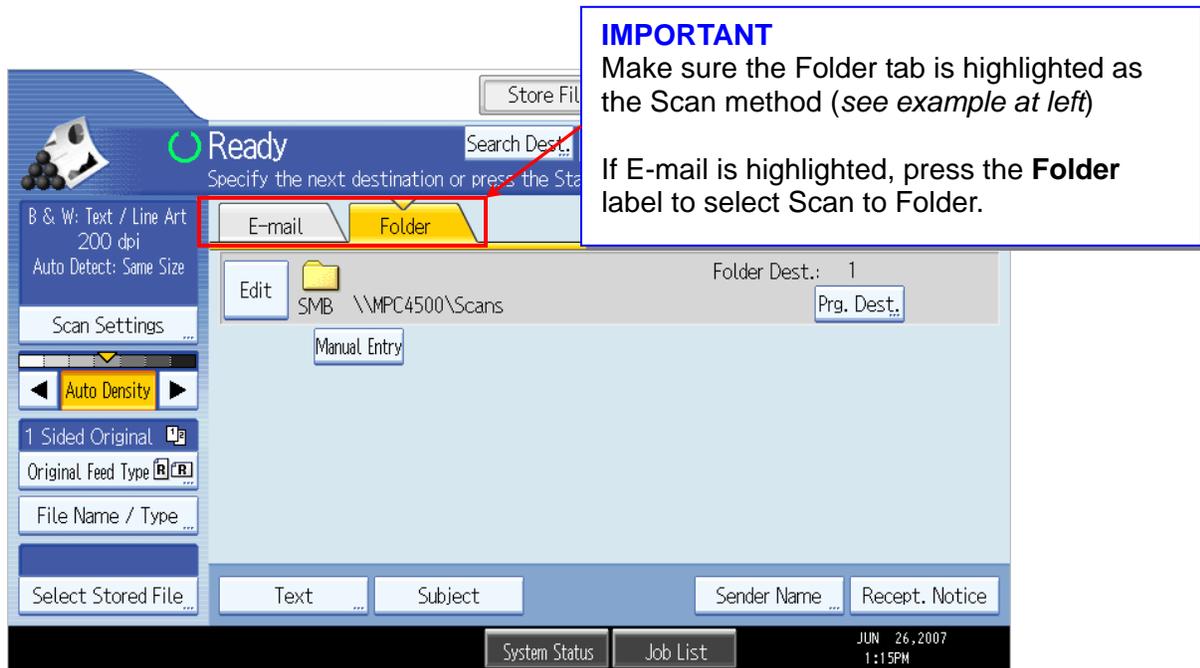
13. To finalize the changes and apply them to the MFP, click the apply button on the toolbar.
14. On the Confirm (Apply Settings) pop-up, click **Yes** to save the changes and apply them to the MFP.



8 Scan to Folder Operation

Once all of the necessary settings are in place, the Scan to Folder function can be used from the MFP. This section details the process used when using Scan to Folder.

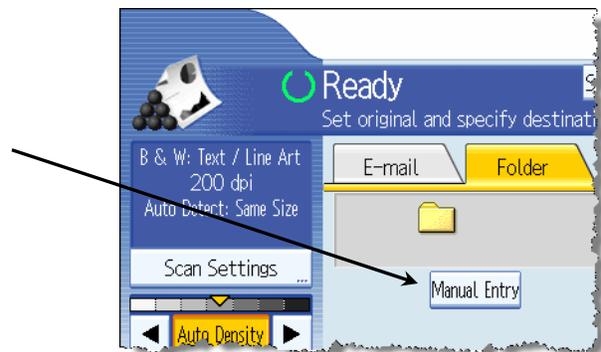
1. On the MFP operation panel, select Scanner → Choose the User → Press Attach Sender and choose the Sender.
2. Choose Scanner Settings as required, and press the start key.



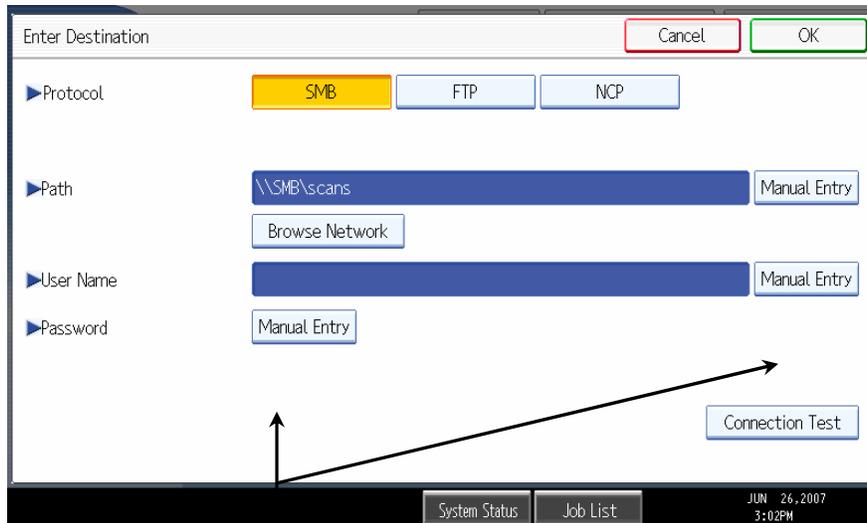
8.1 Scan to Folder Function for Non-registered Users

In some cases, a non-registered user may want to use the Scan to Folder function. In these situations, the shared folder has to be selected via a manual search.

1. For non-registered users, start by pressing the **Manual Entry** button on the Scanner screen. This opens the Destination entry screen, from which to add the shared folder information.



2. On the Enter Destination screen, select **SMB** for Scan to Folder.
3. In the Path field, press **Manual Input** to enter the path to the shared folder (*see below*).
 - a. If the exact path is unknown, press **Browse Network** and follow the steps outlined in section 8.1.2 – page 26.



4. Enter the User Name and Password by pressing the **Manual Entry** button next to each field and entering the criteria (*see section 8.1.1 below for more information*).
5. To ensure the settings are correct, press **Connection Test** (*lower right-hand corner of above image*) to test the link with the shared folder.

8.1.1 Path, User Name, and Password Manual Input

Selecting Manual Input opens a keypad used to enter in the path, user name, and/or password (*see below*).



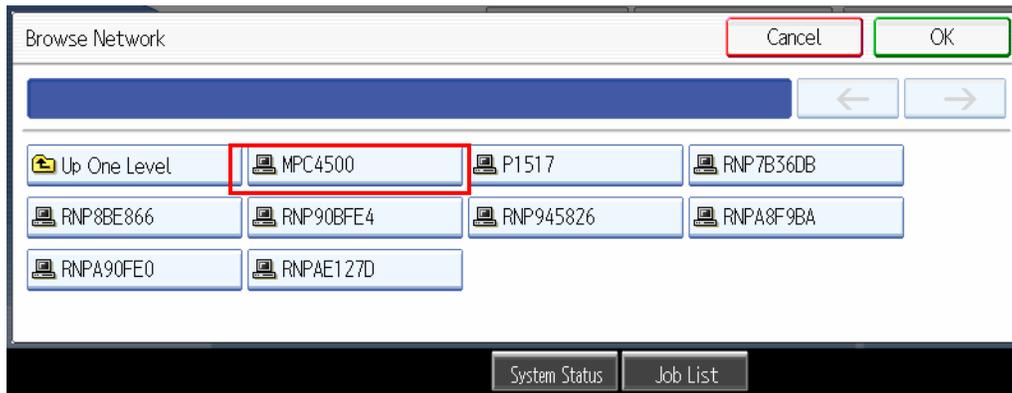
IMPORTANT

When manually entering the path of the shared folder, make sure to follow this format:
\\computername\sharedfoldername or **\\PC IP Address\sharedfoldername**

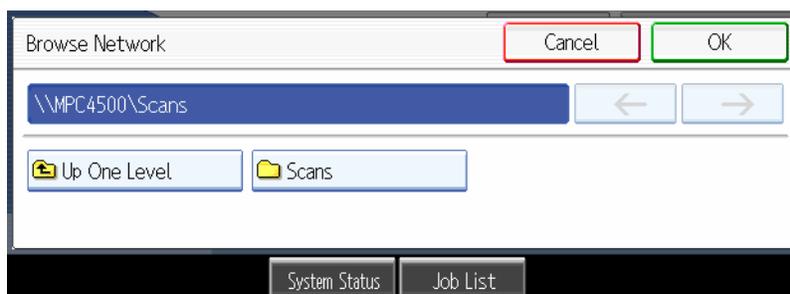
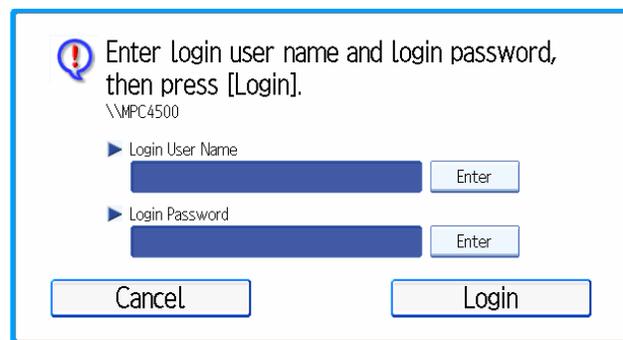
8.1.2 Adding the Shared Folder via Browsing the Network

If the shared folder address is unknown, using the Browse Network function allows users to search the network for the folder and ensures the exact, correct address will be used as the path. This ensures the Scan to Folder scan are routed to the proper folder.

1. After pressing the Browse Network on the Enter Destination folder, a screen will open displaying the workgroups on the LAN segment in use (*see example below*).



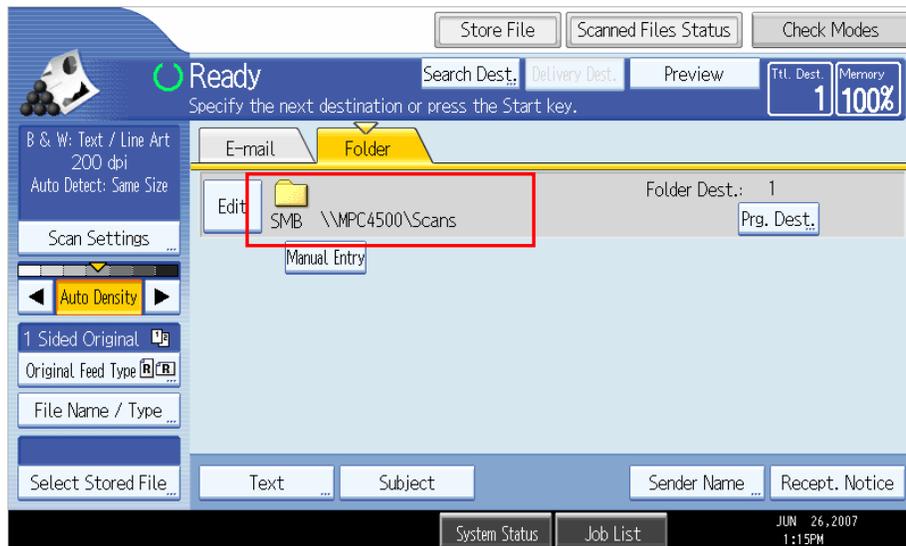
2. From the workgroup screen, select the desired workgroup (*MPC4500 in the above example*) and press **OK**.
3. Browse the workstations available in the workgroup to find the one containing the shared folder.
4. A message will appear stating “Cannot log in with the entered password.”
5. Click **Exit** to close the message.
6. A login screen will open. In the login screen enter the user name and password required to access the PC.
 - *If the user does not know this information, Scan to Folder will fail.*
7. After completing the login process, browse the workstation for the shared folder.
8. Select the folder, and press **OK** to save the path and exit (*see example below*).



NOTE

After selecting the folder, perform press Connection Test to verify that the folder path is valid.

9. With the selected folder is displayed in the Scanner destination window (*see below*), press Start to complete the Scan to Folder process.

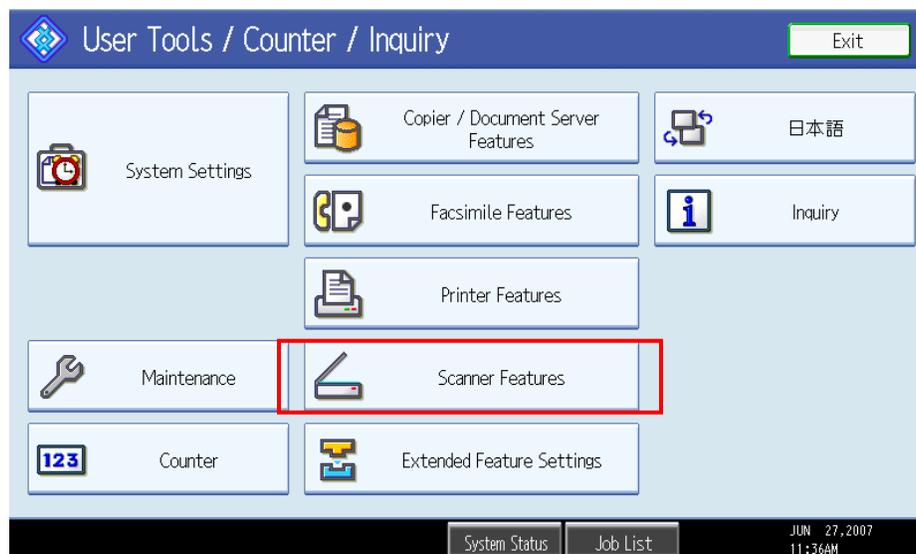


8.2 Additional Scan Settings

In addition to the Scan to Folder configuration settings covered in previous sections, there are other features available at the MFP operation panel for modifying the scan settings.

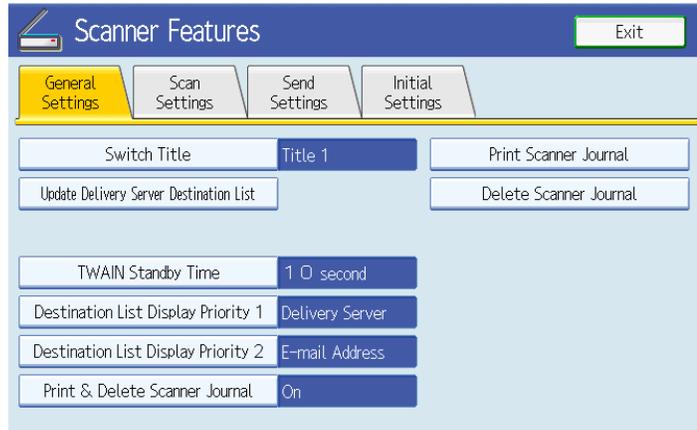
8.2.1 Scanner Features

This section covers additional scan settings available in the Scanner Features settings of User Tools. To access this section, click **User Tools** on the MFP, and then press **Scanner Settings** (*see below*).



General Settings Tab

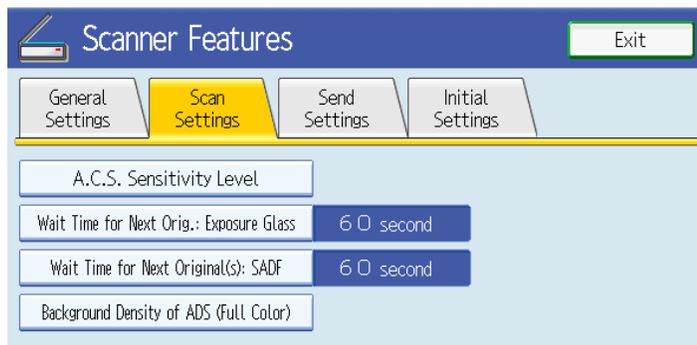
- **Priority 1** – Data displayed when Scan button is pushed: either embedded scanning or ScanRouter
- **Priority 2** – Default selection when embedded scanning is selected: either scan to e-mail or scan to folder



Scan Settings

From the Scan Settings tab of the Scanner Features section, users can edit settings such as:

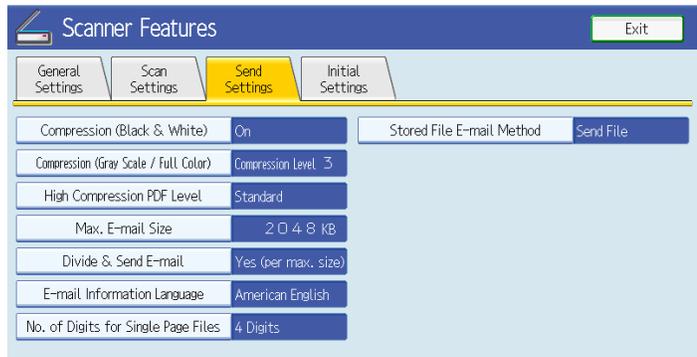
- Wait Time for Next Originals
- Background Density of ADS



Send Settings

The majority of the settings available via the Send Settings tab are used for Scan to E-mail, such as:

- Max E-mail Size
- File Type Priority (pdf, tiff, single or multi-page)
- Divide and Send E-mail

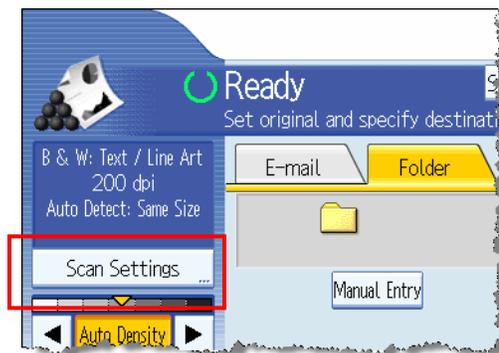


Default Scan Settings

To access, view, and/or modify the default scan settings, select the **Scan Settings** button from the Scanner main screen.

NOTE

In older MFPs, access the default scan settings via this click path: User Tools → Scanner Features → Scan Settings → Default Scan Settings



Selecting Default Settings will bring up the default scan settings screen (*see image below*). From this screen, users can edit the following default settings:

- Scan Type
- Resolution
- Image Density
- Scan Size



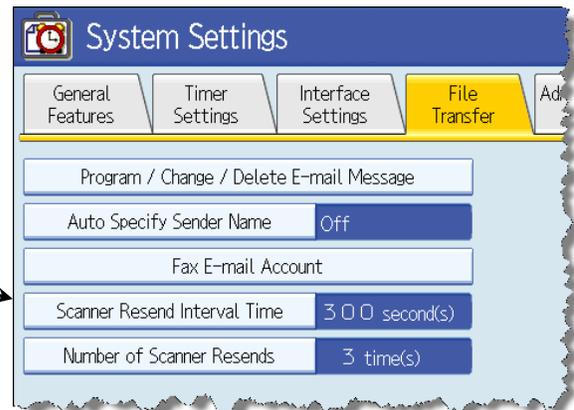
8.2.2 Scanner System Settings

In addition to the Scanner Features section, there are also scan settings in System Settings, which can be modified. To access these settings open User Tools and press **System Settings**.

File Transfer

From the System Settings screen, select the **File Transfer** tab. From this screen the Scanner Recall Interval Time can be changed.

- **Scanner Recall Interval Time:** The amount of time the MFP waits before attempting to resend a scanned file that encountered a connection failure.

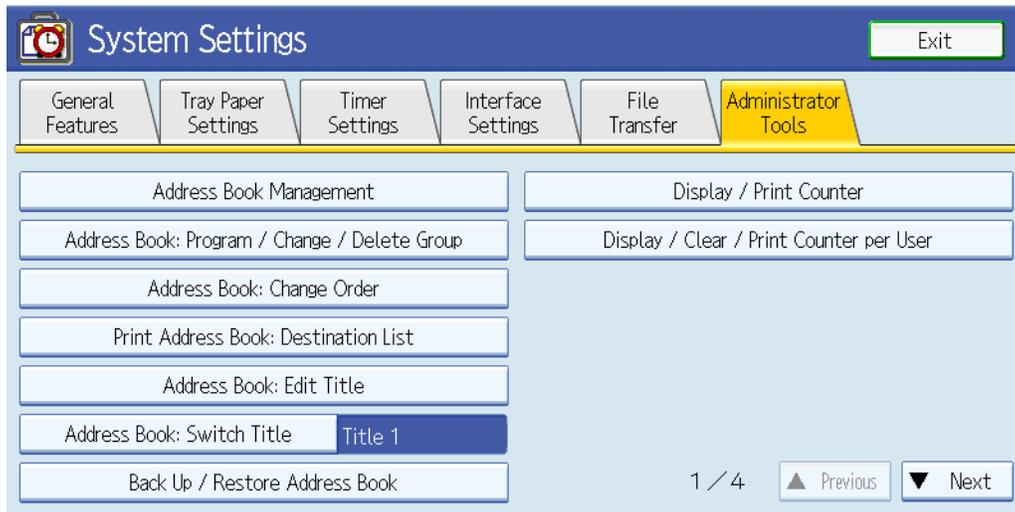


Administrator/Key Operator Tools

To access this screen, select the Administrator/Key Operator Tools (depending on the device in use) tab from the System Settings screen.

From this screen (*see example below*), the following scan settings can be modified:

- Address Book Management
- Title editing and selecting
- Programming/changing/deleting groups



9 Troubleshooting

For various reasons, Scan to Folder will sometimes fail to operate correctly. This section covers the most common issues behind the function's failure and the solutions to these issues.

9.1 PC-level Troubleshooting

This section deals specifically with problems on the PC that holds the shared folder, which are causing Scan to Folder to fail.

9.1.1 Firewalls

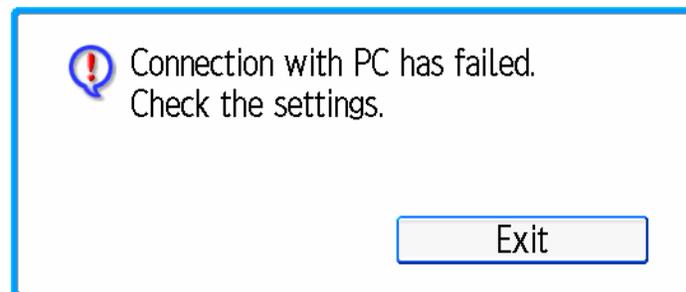
Firewalls may be blocking the ports used by Scan to Folder. Check any firewalls on the PC to see if the OS or third party software is blocking the following ports:

- **137** nbname TCP/UDP NetBEUI over TCP/IP name service
- **138** nbdgram UDP NetBEUI over TCP/IP (NB datagram)
- **139** nbsess TCP NetBEUI over TCP/IP (NB session)

Also, check with the network administrator. Routers may be setup to block these ports on the customer's network.

9.1.2 Other Settings

- Make sure that the folder on the PC is shared with full permission.
 - If it full permission is not enabled, the message below will appear when attempting to use Scan to Folder.



- Check to ensure that the NetBIOS setting is correct on the WINS tab (*for more information, see section 4 – page 10.*)

9.2 MFP-level Troubleshooting

This section covers common MFP setup issues that cause Scan to Folder to fail. First, make sure the following settings are enabled via the MFP operation panel:

- SMB protocol
 - Make sure TCP+NetBEUI is selected.
- SNMP
 - Make sure TCP/IP is the selected protocol.
- SMB Name & Workgroup
 - Make sure both are correct.

9.2.1 Checking the Shared Folder Path

Test the network connection by using the **Browse Network** (*see section 5.2 – page 12*) button to manually search for the folder. This will demonstrate whether or not the MFP is able to access the PC containing the shared folder and the folder itself.

- If the PC does not appear, manually enter the path using the IP address.
 - *Example:* \\PC IP Address\shared file name

9.3 Signs of Scan to Folder Failure

Below are some common signs that the attempt to use Scan to Folder has failed. The sections following this address the possible solutions for these problems.

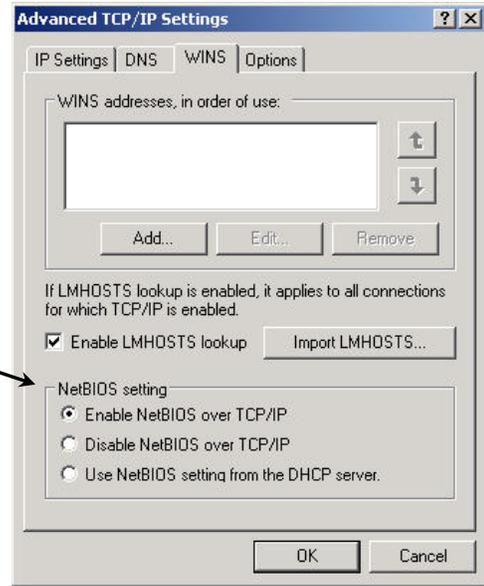
- If an error message appears stating the MFP cannot access the network, remove the MFP from the network and connect to it with a laptop via a cross over cable.
 - One of the network PCs may be causing this problem.
 - If the offending PC is removed from the network, the MFP will be able to browse the network again.
- Failed Connection Test after setting up the shared folder path.
- Even if the path to the shared folder is setup in the browser with the correct PC login credentials, scan to folder still fails.
- When using the PC's IP address instead of its computer name (as the path to the folder) scanning may work, but the MFP still cannot browse the network.

9.4 Checking PC Settings

If any of the problems mentioned in section 9.3 (page 33) occur, begin troubleshooting by checking the settings on the PC containing the shared folder.

Although the two points below will not prevent the MFP from browsing the network, it is still useful to verify that:

- The shared folder on the PC has the proper sharing rights (full read and write privileges enabled).
 - For more information, see section 3.1.2 – page 7.
- Check the WINS tab (in the Advanced section of TCP/IP properties) to ensure **Enable NetBIOS over TCP/IP** or are **Using NetBIOS from DHCP server** (if the customer is using a DNS server).
 - For more information, see section 4 – page 10.



9.4.1 Checking NetBIOS over TCP/IP via Device Manager

In addition to checking the NetBIOS settings via TCP/IP properties, the setting can also be verified by the Device Manager.

1. To begin, follow one of these two paths:
 - Right-click on the My Computer icon → select Properties → Hardware tab → Device Manager
 - From the Start Menu, select Control Panel → System → Hardware tab → Device Manager.
2. In Device Manager, click **View** on the main toolbar.
3. Select **Show Hidden Devices** to access the NetBIOS over TCP/IP setting.
4. Scroll down to Non-Plug and Play Drivers, and search for **NetBIOS over TCP/IP**.
5. Right click on NetBIOS over TCP/IP, and select **Properties**.
6. In the drop down box of the Device usage section (on the General tab), make sure **Use this device (enable)** is selected.



9.4.2 Checking NetBIOS over TCP/IP via the Command Prompt

The Command Prompt is yet another possible way to verify the NetBIOS over TCP/IP setting is enabled. If the setting is enabled in both TCP/IP Properties and the Device Manager, checking it via the Command Prompt will show whether or not the TCP/IP Protocol itself is bad.

1. From the command prompt, enter **ipconfig/all**.
2. If NetBIOS appears in the settings list marked as **Disabled** (*see below*), the TCP/IP protocol must be removed and reinstalled.

NOTE

If the TCP/IP protocol is working (and NetBIOS over TCP/IP is enabled), the NetBIOS will **NOT** appear in the settings list at all.

```

Command Prompt
IP Routing Enabled. . . . . : No
WINS Proxy Enabled. . . . . : No
DNS Suffix Search List. . . . . : wc.ricoh.com
                                   us.ricoh.ds

Ethernet adapter Local Area Connection:

   Connection-specific DNS Suffix  . : savin.rfg.com
   Description . . . . .           : 3Com 3C920 Integrated Fast Ethernet
   Controller (3C905C-XX Compatible) . . . . . :
   Physical Address. . . . .       : 00-06-5B-E2-CF-9D
   DHCP Enabled. . . . .           : Yes
   Autoconfiguration Enabled . . . . : Yes
   IP Address. . . . .             : 192.168.1.190
   Subnet Mask . . . . .           : 255.255.255.0
   Default Gateway . . . . .       : 192.168.1.1
   DHCP Server . . . . .           : 192.168.1.1
   DNS Servers . . . . .           : 192.168.1.1
   NetBIOS over Tcpip. . . . .     : Disabled
   Lease Obtained. . . . .         : Thursday, December 15, 2005 3:34:58
   Lease Expires . . . . .         : Thursday, December 15, 2005 5:34:58

PM
PM
C:\Documents and Settings\kleins>

```

9.4.3 Deleting and Reinstalling the TCP/IP Protocol

This section covers the deletion and reinstallation of the TCP/IP Protocol. This is necessary if the situation covered in section 9.4.2 (*above*) occurs.

IMPORTANT

- Do **NOT** perform this procedure on a customer's PC. Contact the Network Administrator, and ask them to perform the TCP/IP delete and reinstall.
- Be sure to have the operating system CD available for reinstalling TCP/IP before starting this procedure.
- Record all TCP/IP settings and DNS information so they can be input TCP/IP has been reinstalled.
- TCP/IP **cannot** be uninstalled in Windows XP or Windows Server 2003. For information on resetting TCP/IP on these platforms, see section 9.4.4 (*page 36*).

1. From the Windows desktop, right-click on the **My Network Places** icon and select **Properties**.
 - OR - From the Windows start menu, follow this click path: Start → Settings → Control Panel → Network and Dial-up Connections (2000) or Network Connections (XP).
2. From the Connections screen, right-click on the appropriate network connection, and select **Properties**.
3. From the Connection's Properties screen, highlight **Internet Protocol (TCP/IP)**.
4. Click **Uninstall**.
5. A reboot is required before installing TCP/IP.
6. Insert the operating system CD, and select Install → Protocol → Add → TCP/IP
7. Reboot to finalize the installation.
8. To verify TCP/IP is installed and working properly, run the **ipconfig/all** command again (see section 9.4.2 (*page 35*) for instructions).
9. Note in the image below that NetBIOS over TCP/IP no longer appears. This means it is enabled and TCP/IP is running properly.

```

Command Prompt
Primary DNS Suffix . . . . . :
Node Type . . . . . : Broadcast
IP Routing Enabled. . . . . : No
WINS Proxy Enabled. . . . . : No
DNS Suffix Search List. . . . . : savin.rfg.com

Ethernet adapter Local Area Connection:

Connection-specific DNS Suffix . : savin.rfg.com
Description . . . . . : 3Com 3C920 Integrated Fast Ethernet
Controller (3C905C-IX Compatible)
Physical Address. . . . . : 00-06-5B-E2-CF-9D
DHCP Enabled. . . . . : Yes
Autoconfiguration Enabled . . . . : Yes
IP Address. . . . . : 192.168.1.190
Subnet Mask . . . . . : 255.255.255.0
Default Gateway . . . . . : 192.168.1.1
DHCP Server . . . . . : 192.168.1.1
DNS Servers . . . . . : 192.168.1.1
Lease Obtained. . . . . : Thursday, December 15, 2005 3:55:05 PM
Lease Expires . . . . . : Thursday, December 15, 2005 5:55:05 PM

C:\Documents and Settings\kleins>

```

9.4.4 Resetting TCP/IP in XP or Server 2003

Internet Protocol (TCP/IP) is an essential component of both Windows XP and Server 2003, and therefore it cannot be uninstalled. However, if the NetBIOS over TCP/IP settings appears as disabled (as described in section 9.4.2 – *page 35*), resetting the TCP/IP to its original state is possible.

Resetting TCP/IP is performed using the **Netsh.exe** utility. To run Netsh.exe, and reset TCP/IP, follow the steps below.

1. From the Windows task bar, select **Start → Run**.
2. In the Run dialogue box, type **cmd** (which will open the command prompt) and click **OK**.
3. At the command prompt, enter this command: **netsh int ip reset [log_file_name]**
 - Command syntax breakdown:
 - **int**: Shortened form of *Interface* command.
 - **[log_file_name]**: To reset TCP/IP via netsh, the reset results must be sent to a log file. Create a log file, or enter the existing log file name, and insert the name at the end of the command. The reset data will be sent to this file.
4. Type **exit** and press **Enter** to close the command prompt.

Reset Log

Below is an example of the log file generated via the **netsh int ip reset** command. The contents of the log file will vary based on the PC's configuration. However, if none of the original TCP/IP Registry keys were altered during the reset there will no actions recorded in the log.

```

reset    SYSTEM\CurrentControlSet\Services\Dhcp\Parameters\Options\15\RegLocation
         old REG_MULTI_SZ =
         SYSTEM\CurrentControlSet\Services\Tcpip\Parameters\Interfaces\?\DhcpDomain
         SYSTEM\CurrentControlSet\Services\Tcpip\Parameters\DhcpDomain

added   SYSTEM\CurrentControlSet\Services\Netbt\Parameters\Interfaces\Tcpip_{2DDD011E-B1B6-4886-87AC-B4E72693D10C}
added   SYSTEM\CurrentControlSet\Services\Netbt\Parameters\Interfaces\Tcpip_{BAA9D128-54BE-43F6-8922-313D5371}
reset   SYSTEM\CurrentControlSet\Services\Netbt\Parameters\Interfaces\Tcpip_{BD2859BA-B26A-4E2B-A3FE-3D246F90}
         old REG_MULTI_SZ =
         10.1.1.2

deleted SYSTEM\CurrentControlSet\Services\Netbt\Parameters\EnableLmhosts
added   SYSTEM\CurrentControlSet\Services\Tcpip\Parameters\Interfaces\{2DDD011E-B1B6-4886-87AC-B4E72693D10C}
added   SYSTEM\CurrentControlSet\Services\Tcpip\Parameters\Interfaces\{2DDD011E-B1B6-4886-87AC-B4E72693D10C}
added   SYSTEM\CurrentControlSet\Services\Tcpip\Parameters\Interfaces\{2DDD011E-B1B6-4886-87AC-B4E72693D10C}
deleted SYSTEM\CurrentControlSet\Services\Tcpip\Parameters\Interfaces\{2DDD011E-B1B6-4886-87AC-B4E72693D10C}
reset   SYSTEM\CurrentControlSet\Services\Tcpip\Parameters\Interfaces\{2DDD011E-B1B6-4886-87AC-B4E72693D10C}
         old REG_DWORD = 0

```

9.5 MFP Network Browsing Capability Test

After completing the TCP/IP reinstall covered in section 9.4.3 (*page 35*), the MFP should be able to find the shared folder by browsing the network.

Verify this by browsing to the network to find the PC containing the shared folder and logging in to access the folder (*for more information, see section 5.2 – page 12*).

9.6 Scan to Folder Problems in a Windows 2003 Server Environment

SMB Signing is enabled by default in Directory Services, but many third party SMB clients do not support it. Fortunately, as of October 2005 firmware is available for all GW MFPs. The firmware is either incorporated into the GW firmware, or available as a separate file download.

If the firmware is a separate file, it is necessary to complete a Custom Firmware Request form (*see section 9.6.1*)

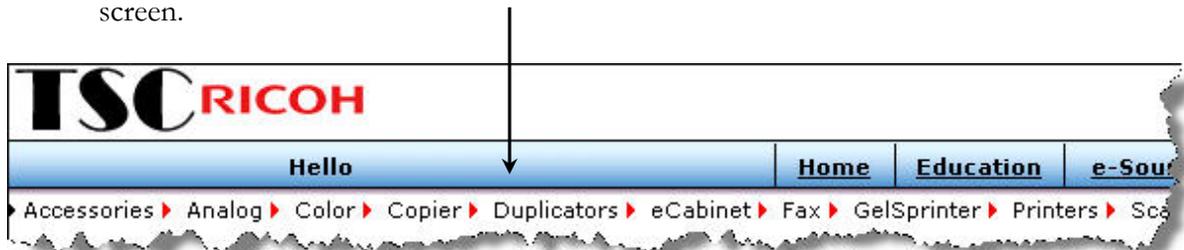
IMPORTANT

- If the MFP does not support SMB signing, Scan to Folder is not possible on a 2003 Server.
 - An error message reading “Can’t Connect” will appear on the operation panel.

9.6.1 SMB Signing Firmware Requests via TSC

The SMB Signing firmware is available via a Custom Firmware Request form located on the TSC Web site (<http://www.tscweb.net>). Follow the steps below to access the form and submit a firmware request.

1. Login to the TSC Website.
2. From the TSC home page, navigate to the product page via the links at the top of the screen.



3. On the product page, search for the header labeled **Custom Firmware** in the Firmware section.
4. Under this header, there should be a file named “bate_stamp.zip.” Click on the file name to open the Custom Firmware form.

Digital Copiers ▶ Aficio 850/1050/1085/1105 ▶ Savin 2085DP/2105DPP/2585/25105 ▶ Gestetne 5485/5505/5685/5705			
▶ Print Controller Type 850 ▶ Print Controller Type EB105/E ▶ A294/A295 Enhancement Not			
Firmware			
File Name	File Size	File Description	Date
TROUBLESHOOTING GUIDE			
Custom Firmware			
bate_stamp.zip	1.13MB	Bates Stamp	06/10/2004
Punch Unit			



Custom Firmware Request Form

Request Originator:
First Name:

Select the Firmware are you downloading today.

- Auto Job Promotion
- B236 ONLY Custom Punch Firmware
- A294/A295 Customized Bates Numbering Firmware
- B064/B065 Legal Size Saddle Stitch Firmware for the SR860 (Booklet Finisher)
- B070/B071 Customized Bates Numbering Firmware
- B070/B071 Legal Size Saddle Stitch Firmware for the SR860 (Booklet Finisher)
- FontDownloadUtility
- B010 customized firmware that supports mixed paper size selection for both architecture and engineering sizes.
- Allows Mac OS X printing through a USB port.
- B070 B071 Enhanced Bates Stamp
- B070 B071 Enhanced SR860lg
- B070 B071 BCU firmware for use with the GBC StreamPunch/Cover Interpose
- B089/B093 Custom firmware to allow "Scan to Folder" to function on a Windows 2003 with SMB packet signing enabled.
- B135/B138 Custom firmware to allow "Scan to Folder" to function on a Windows 2003 with SMB packet signing enabled.
- B147/B148 Custom firmware to allow "Scan to Folder" to function on a Windows 2003 with SMB packet signing enabled.

5. On the form, complete all of the fields.
NOTE: All fields **MUST** be entered or an error message will appear when submitting the form.
6. From the firmware section, click the radio button next to each firmware to download.
7. Click Submit Form to complete the process and download the firmware.

10 Scan to Folder in a Mac Environment

Depending on the OS version in use, SMB may or may not be supported. Below is a breakdown of which OS versions support Scan to Folder/SMB scanning.

OSX 10.2 or later: Support SMB Windows File Sharing.

- Click the link below for instructions on enabling SMB Windows File Sharing:
 - <http://docs.info.apple.com/article.html?artnum=107083>

OS levels previous to 10.2: Do NOT support SMB

- In these situations, use Scan to FTP.

11 Summary

The material covered in this White Paper should help answer many questions concerning Scan to Folder, such as the shared file setup, MFP configuration, and network settings.

This White Paper contains all of the setup information needed to enable, and use, the Scan to Folder function. It applies only to the machines listed in the Model Cross reference (*page 4*).