*** Basic Information *** _____ _____ [Create date] 2018/04/17 _____ [Program Name] Network Support _____ [Version] 9.08 -----[PCB No.] _____ [Interchangeability] X / O _____ [Other Firmware Requirements] None _____ [PCB Requirements] None -----[Software category] Normal Release _____ [Release category] Normal Release _____ [Program category] Firmware -----Exported to(language) GEN(all) [Firmware No.] D0675526G [File Information] File Name D0675526G.fwu File Type Module for Service Size 6.91 MB (7250392 byte) [File Information] File Name D0675526G.rfu File Type Module for Remote Upgrade Size 6.92 MB (7258368 byte) [Availability of RFU] No _____ [Production reflection] 2018/04 ____ *** Note *** [Note] *** Important Notes *** _____ _____ [Important Notes] _____

[Modifications made:] Rank C

Other changes:

- Newly added SMBv2/v3 support. This firmware is dependent on the following firmware modules. Please be sure to update all of them:

[MP171/MP171F/MP171SPF]

- System/Copy v1.08 (D0675532B)

- Network Support v9.08 (D0675526G)

- Web Support v1.09 (D0675527G)

- Scanner v01.08 (D4685525F)

[Aficio MP 201SPF/Aficio MP 201F]

- System/Copy v1.09 (D1155532B)

- Network Support v9.08 (D0675526G)

- Web Support v1.01 (D1155526A)

- Scanner v02.03 (D1155521C)

Please refer to the RTB(No.RGene095) for details.

[Modification history]

Version 9.07

Symptom corrected:

- If "CNAME" is specified as the destination folder, ScanTo Folder will abort.

- If NBT is disabled, the destination for Scan to Folder might not be displayed and Windows authentication might fail.

- Cannot scan to shared folders in Windows 8 and Windows Server 2012.

- Cannot scan to shared folders in Mac OS X 10.7 or Mac OS X 10.8.

This firmware is dependent on the following firmware modules.

Please be sure to update all of them:

System/Copy firmware v1.05 or later

Version 9.06

Symptom corrected:

- 1. An httpd timeout has been implemented to prevent Web Image Monitor lockups that sometimes occurred when applications accessed the MFP by http. (GFPE#RC10060010)
- 2. Scan to SMB fails if the file submitted to the DFS folder in the destination and the file of the same name exist in the DFS folder.

3. If Windows Authentication is enabled, printing a large number of

copies of a job might take longer than might typically be expected.

- 4. Chunk Transfer Encoding over an IPP port might results in print jobs being reset.
- 5. If SSDP = Active (Web Image Monitor > Configuration > Network Security), a high load on the CPU might result in Web Image Monitor locking up.
- 6. MFP with an external controller will lose network connectivity. This only occurred if the network settings were changed repeatedly and the MFP's "NetWare" setting was already "Active" (before the network settings were changed).
- 7. The LP icon might not be shown in the Windows "Network" dialogue if SSDP is enabled. This affected Windows Vista, 2008/R2, and 7.
- 8. Under very specific combinations of IP address, Subnet Mask, and Gateway address, some of the printer's network configuration settings might revert to defaults.
- 9. Use of an IP address to send a Scan to SMB might result in the scanned document not being sent.
- 10. If the device's IPP Authentication setting is enabled, the driver cannot be installed on Windows 2008 R2 SP1 or 7 SP1 using an IPP port.
- 11. Scan to SMB fails if the both of the following conditions are met.
 - Either the device has NBT disabled or it is enabled but the device is unable to resolve the destination's NetBIOS name.
 - One or more octets in the destination's IPv4 address contain leading zeros.
- 12. SC991 might occur and network functions could not be used. This occurs if DHCP and DDNS are both enabled in the device and if the DHCP server distributes to the device an FQDN that is more than 127 byte in length.
- 13. Device applications or services that use any of port 80, 443, 7443 or 7444 could not be used. This occurs if the illegal packet is sent after SSL negotiation handshake to any of the device's TCP ports 443, 7443 or 7444. Affected applications include Web Image Monitor, IPP Printing and @Remote.

Version 9.05.2

Other changes:

- 1. If the MFP/LP has a statically configured IP address and domain, it always sends a HELO using just its hostname. SMTP servers that require client HELOs to inlcude the client's FQDN will close the connection. The result of this was that the MFP/LP was unable to send emails.
- 2. Unable to Scan to SMB to a destination that is not specified using an FQDN.
- 3. Unable to Scan to SMB to destinations that are using both LM Authentication and Samba v2.x.
- 4. Windows Authentication fails if the username or password includes lower-case European characters.
- 5. The device's SMB timeout was too short (1sec). This caused problems when being used across subnets. For this reason, it has been increased to 10 sec.

- 6. For security reasons, the device will no longer accept SSL incoming, or establish outgoing, connections that use NULL or ADH ciphers.
- SSL-related changes:
- 7. When the device creates a certificate request, it is now able to specify which algorithm (SHA1 or MD5) it wants used to sign the certificate. This has been implemented by adding a field

"Algorithm Signature" to the certificate request form. Note: In order for this field to appear, Web Support firmware version 1.07 must also be applied to the device.

8. Web ImageMonitor now shows the certificate's key length in:
- Configuration > Security > Device Certificate > Details

Note: In order for this information to appear in the Details dialogue, Web Support firmware version 1.07 must also be applied to the device.

9. Specific versions of SSL or TLS (SSLv2, SSLv3, or TLSv1) can now be enabled/disabled using Web ImageMonitor. The setting can be configured from either of the following locations:

- Configuration > Security > Network Security
- Configuration > Security > SSL/TLS

Note: In order for these settings to appear, Web Support firmware version 1.07 must also be applied to the device.

- 10. The encryption strength used for SSL can now be configured. This can be done using either of the following settings in Web Image Monitor:
 - Configuration > Security > Network Security
 - Configuration > Security > SSL/TLS

Note: In order for this setting to appear, Web Support firmware version 1.07 must also be applied to the device.

Symptom corrected:

- 1. SDK/J applications might not be able to recognize some supported USB devices.
- 2. When the device IP address and DNS server location are obtained from DHCP, the domain specified by the device setting "IPv4 > Domain Name > Specify" will be overwritten by the domain obtained from DHCP.
- 3. Unable to Scan to SMB to Windows 7 or Windows Server 2008 R2 destinations that have Windows Live ID Sign-in assistant installed.
- 4. Trying and failing to login to a Scan destination three times might result in the Scanner application stalling.
- 5. Unable to Scan to SMB to Windows 98/98SE/Me/NT 4.0 destinations specified using an IP address.
- 6. The SMB retry function fails to retry the sending of failed SMB transfers (Scan to SMB or Fax delivery).
- 7. Unable to retrieve the Windows group name from a Windows 2008 R2 server during Windows Authentication. Because of this, logged in users will only be granted the "Available Functions" specified for them in the Addressbook.
- 8. The device is unable to assign group privileges to a logged in user if that group has a name consisting of more than 20 bytes. To address this issue, the supported group name length will be

increased to 40 bytes.

- 9. The MFP's Windows Authentication function is unable to use Kerberos when being authenticated on a Windows 2008 or Windows 2008 R2 server. The MFP will still be successfully authenticated because it is able to fail back to NTLMv2.
- 10. After changing the MFP's DNS server address or Domain name, Scan to SMB destinations specified using a hostname might not be found.
- The Scan to SMB "Connection Test" fails if performed on directory located directly below a DFS root. Only the "Connection Test" failed, scanning was successful and even the "Connection Test" worked if performed on any sub-directory.
- 12. The device might return an SC 819 error when browsing the network using SMB. This only occurred if SMB was browsed frequently and the device was not rebooted.
- 13. If the MFP's IP address is changed to an IP address of another subnet, users will not be able to browse the network (using Scan to SMB) until the MFP is rebooted.

Version 9.03

Symptom corrected:

- 1. When jobs are submitted to the device's lpr port repeatedly, some of the jobs might not be printed.
- 2. If IPP authentication is enabled, printing through an IPP port from a Windows Vista/Server 2008 client might result in printing failure.
- 3. If either of the WSD Printer or Netware functions are enabled, the following problems might occur. If these problems occur, they typically last for about 2.5 hours.

1) The network might become unresponsive.

- 2) User Tools can be accessed but configuration changes will not be applied.
- 3) Application buttons on the operation panel might become unresponsive.
- 4. The MFP's IP address lease renewal request is incorrectly formatted and rejected by DHCP relay agents. This will result in a loss of connectivity that lasts until the MFP reinitializes the network connection (10 seconds).

Version 9.02.1 1st Mass production

*** Basic Information *** _____ _____ [Create date] 2018/05/22 _____ [Program Name] Web Support _____ [Version] 1.09 -----[PCB No.] _____ [Interchangeability] X / O _____ [Other Firmware Requirements] None _____ [PCB Requirements] None -----[Software category] Normal Release _____ [Release category] Normal Release _____ [Program category] Firmware -----Exported to(language) GEN(all) [Firmware No.] D0675527G [File Information] File Name D0675527G.fwu File Type Module for Service Size 3.09 MB (3236448 byte) [File Information] File Name D0675527G.rfu File Type Module for Remote Upgrade Size 3.09 MB (3244288 byte) [Availability of RFU] Yes _____ [Production reflection] 2018/04 _____ *** Note *** ______ [Note] _____ *** Important Notes *** _____ [Important Notes] _____

[Modifications made:] Rank C

Other changes:

Newly added SMBv2/v3 support. This firmware is dependent on the following firmware modules. Please be sure to update all of them: - System/Copy v1.08 (D0675532B)

- Network Support v9.08 (D0675526G)

- Web Support v1.09 (D0675527G)

- Scanner v01.08 (D4685525F)

Please refer to the RTB(No.RGene095) for details.

[Modification history]

Version 1.08

Symptom corrected:

Even if "Restrict Use of Destinations (Scanner)" or "Restrict Adding of User Destinations (Scanner)" is enabled, authenticated users can still see entries other than their own in the Address Book (via Web Image Monitor).

This only occurred if "Restrict Use of Destinations (Fax)" and "Restrict Adding of User Destinations (Scanner)" were disabled.

Version 1.07 Other changes:

SSL-related changes:

Note: The new fields will only appear if Network Support firmware version 9.05.2 or later has also been applied to the device.

- 1. When the device creates a certificate request, it is now able to specify which algorithm (SHA1 or MD5) it wants used to sign the certificate. This has been implemented by adding a field "Algorithm Signature" to the certificate request form.
- 2. Web Image Monitor now shows the certificate's key length in:- Configuration > Security > Device Certificate > Details

3. Specific versions of SSL or TLS (SSLv2, SSLv3, or TLSv1) can now be enabled/disabled using Web Image Monitor. The setting can be configured from either of the following locations:

- Configuration > Security > Network Security

- Configuration > Security > SSL/TLS

- 4. The encryption strength used for SSL can now be configured. This can be done using either of the following settings in Web Image Monitor:
 - Configuration > Security > Network Security
 - Configuration > Security > SSL/TLS

Version 1.06

Other changes:

1.

- Unfinished jobs (ie. those in the processing state) are now recorded in logs downloaded via Web ImageMonitor.
- Log entries with future dates (as the result of a change of the device clock) are now recorded in logs downloaded via Web ImageMonitor.
- The overwriting of a log entry is now logged. Old entries are overwritten if the maximum number of entries has been reached.

Maximum number of entries: Access Log (with HDD): 6000 Access Log (without HDD): 500 Job Log (with HDD): 2000 Job Log (without HDD): 500

2. Entries in the Result column of logs downloaded via WIM, are now worded differently.

Version 1.05 Symptom corrected: WIM contained Russian wording errors.

Version 1.04 1st Mass production

*** Basic Information *** _____ [Create date] 2018/05/22 _____ [Program Name] System/Copy _____ [Version] 1.08 -----[PCB No.] _____ [Interchangeability] X / O _____ [Other Firmware Requirements] None _____ [PCB Requirements] None -----[Software category] Normal Release _____ [Release category] Normal Release _____ [Program category] Firmware -----Exported to(language) GEN(all) [Firmware No.] D0675532B [File Information] File Name D0675532B.fwu File Type Module for Service Size 16.69 MB (17505320 byte) [File Information] File Name D0675532B.rfu File Type Module for Remote Upgrade Size 16.70 MB (17510656 byte) [Availability of RFU] Yes _____ [Production reflection] 2018/04 *** Note *** [Note] _____ *** Important Notes *** _____ [Important Notes] _____

[Modifications made:] Rank C

Other changes: Newly added SMBv2/v3 support. This firmware is dependent on the following firmware modules. Please be sure to update all of them: - System/Copy v1.08 (D0675532B)

- Network Support v9.08 (D0675526G)

- Web Support v1.09 (D0675527G)

- Scanner v01.08 (D4685525F)

Please refer to the RTB(No.RGene095) for details.

[Modification history]

Version 1.07

Symptom corrected: [Embedded RC Gate]: @Remote auto calls (Ex. service calls, supply calls, alarm calls) are not sent from the device if engine-related SC errors occur frequently within a short period of time.

Version 1.06

Other changes:

This firmware was modified to support a new TPM chip on the controller board, as production of the current chip was discontinued.

IMPORTANT: Once you have installed this version, v1.06, DO NOT DOWNGRADE the System/Copy firmware.

Version 1.05

Symptom corrected:

1. Cannot communicate with the @Remote Center if embedded RC Gate is enabled.

2. Although the "Logout Using Card" function of Card Authentication Package v2 is turned on, the user cannot log out when he or she swipes the card.

3. Cannot scan to shared folders in Mac OS X 10.7 or Mac OS X 10.8.

This firmware is dependent on the following firmware modules.

Please be sure to update all of them:

Network Support firmware v9.07 or later

Version 1.04

Symptom corrected:

- 1. If the Auto Logout timer is On, there will be a memory leak occurring everytime a user logs in to the device.
- 2. Repeated failures to login with an IC card will lock the entire account instead of just locking out the access of that card (PIN lock).
- 3. If left for more than 5 minutes on one of the various loginrelated screens, the operation panel might be freeze.
- 4. The timer used for the "Access Violation" setting's time interval does not properly compensate for changes to the device timer.
- 5. If User Code authentication is enabled or if "External Optional Counter Type" != 0, accounts locked by the "Lock out" setting (SP-5413-1) are not locked out of WIM.
- 6. If the "External Optional Counter Type" setting (SP-5113-002) is not equal to '0', the following problems might occur:
 - Print jobs result in the Data-In LED blinking but nothing is output.
 - Fax jobs are printed successfully but not counted by the counter.
- 7. The MFP operation panel might go black and not return until the power is cycled. This only occurred if the MFP had a Device Accounting Unit such as a coin collector or charge card reader.
- 8. If an application button on the operation panel (Scanner, Copier, Printer, etc.) is pushed while the machine is logging a user on ("Authenticating... Please wait."), the login process will be cancelled and the login prompt will be displayed again.
- 9. If connection to the server configured as "LDAP1" fails, the MFP will not try to contact "LDAP2" or "LDAP3".
- 10. After several alternations between Energy Saving mode and Ready mode, the submission of a job to the MFP might cause it to freeze.
- 11. SC870 may occur while the user is editing the Address Book via WIM if the machine has entered/recovered from Energy Saver mode since the power switch was last turned on.

Version 1.03

Symptom corrected:

SC870 is triggered and cannot be cleared if the main power switch is turned off while data is being written to the Address Book.

Version 1.02

Symptom corrected:

1. If the Password Policy is enabled, "Target User Entry ID" and "Target User Code/User Name" are not logged in the CSV file that downloaded via Web Image Monitor and in the Web SmartDeviceMonitor's Access Log List when a user tries and

fails due to the password policy to change their password.

Version 1.01

Symptom:

The vendor code contained in the controller board Mac address was updated from "00-00-74" to "00-26-73" (all possible Mac addresses using the old vendor code have been exhausted). Symptom corrected: 1.If a user logs back in after their session has timed out, the device might stall with the message "Authenticating ... Please wait". 2. The printer application will stall if any of the following situations are encountered: - A print job is submitted while another print job is already being processed by the device. - A print job is submitted while the TWAIN driver is scanning. 3.A scan initiated by TWAIN might fail if a print job is already being processed by the device. 4.Scan to NCP fails if all of the following conditions met: - The destination is specified using the IP address. - The Novell server and the device are in different subnets. - The subnet routers filter SLP multicasts. Note: Requires System firmware (version 1.01 or later) and Scanner firmware (version 1.05 or later). 5.Scan to NCP fails or takes long time to complete if the IPX protocol is used and there are more than 2 Novell Directory Services (NDS) servers in the netwok hierarchy. Note: Requires System firmware (version 1.01 or later) and Scanner firmware (version 1.05 or later). 6.If the device is configured to use "Custom Authentication", logins to Web ImageMonitor will be logged as "LDAP Authentication" in the Remote Communication Gate S Pro and Web SmartDeviceMonitor Access Logs.

Version 1.00.1 1st Mass production

*** Basic Information ***
[Create date] 2020/01/16
[Program Name] GDI without NIC
[Version] 1.03
[PCB No.]
[Interchangeability] X / O
[Other Firmware Requirements] None
[PCB Requirements] None
[Software category] Normal Release
[Release category] Normal Release
[Program category] Firmware
Exported to(language) GEN(all) [Firmware No.] D1105520B [File Information] File Name D1105520B.zip File Type Module for Service Size 0.94 MB (983105 byte) [Availability of RFU] No
[Production reflection]
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[Note]
*** Important Notes ***
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*** Modification History ***
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Symptom corrected:

- A vulnerability (CVE-2019-14308) to a potential buffer overflow sending

a crafted LPD packet has been fixed.

[Modification history]

Version 1.02

Symptom corrected:

The print speed decreases to about half that of the predecessor model when performing duplex print jobs.

Version 1.00 1st Mass production

*** Basic Information *** _____ ______ [Create date] 2018/05/22 _____ [Program Name] Scanner _____ [Version] 01.08 -----[PCB No.] _____ [Interchangeability] X / O _____ [Other Firmware Requirements] None _____ [PCB Requirements] None -----[Software category] Normal Release _____ [Release category] Normal Release _____ [Program category] Firmware -----Exported to(language) GEN(all) [Firmware No.] D4685525F [File Information] D4685525F.fwu File Name File Type Module for Service Size 0.94 MB (981852 byte) [File Information] File Name D4685525F.rfu File Type Module for Remote Upgrade Size 0.94 MB (987392 byte) [Availability of RFU] Yes _____ [Production reflection] 2018/04 ____ *** Note *** [Note] _____ *** Important Notes *** _____ [Important Notes] _____

[Modifications made:] Rank C

Other changes: Newly added SMBv2/v3 support. This firmware is dependent on the following firmware modules. Please be sure to update all of them: - System/Copy v1.08 (D0675532B)

- Network Support v9.08 (D0675526G)

- Web Support v1.09 (D0675527G)

- Scanner v01.08 (D4685525F)

Please refer to the RTB(No.RGene095) for details.

[Modification history]

Version 01.07

Symptom corrected:

The operational panel suddenly shuts off and hangs, and the condition cannot be cleared without rebooting the machine.

------Version 01.06

Symptom corrected: If a WSD scan is cancelled mid-job, the Start-button LED will turn red and the scanner will freeze.

Version 01.05

Other changes:

WSD Scanner (Push Type) now supports Windows 7/ Windows 2008 Server R2. Notice: Due to Windows 7/ Windows 2008 Server R2 spec changes, WSD Scanner (Push Type) jobs that are in-progress can no longer be manually cancelled from the PC side.

Symptom corrected:

1.Scan to NCP fails if all of the following conditions met:

- The destination is specified using the IP address.
- The Novell server and the device are in different subnets.
- The subnet routers filter SLP multicasts.

Note: Requires System firmware (version 1.01 or later) and Scanner firmware (version 1.05 or later).

2.Scan to NCP fails or takes long time to complete if the IPX protocol is used and there are more than 2 Novell Directory

Services (NDS) servers in the network hierarchy.

Note: Requires System firmware (version 1.01 or later) and Scanner firmware (version 1.05 or later).

Version 01.04 1st Mass production