



## LDAP (Lightweight Directory Access Protocol)

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Author: James Evans (BIE P&S Product Planning)



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## 1: Overview

Every email program has a personal address book, but how do you look up an address for someone who's never sent you email? How can an organisation keep one centralised up-to-date phone book that everybody has access to? The solution is to have LDAP. LDAP, Lightweight Directory Access Protocol, is an Internet protocol that email and other programs use to look up information from a directory server. So, instead of having to write in the recipients email address or have to find it from another source, you can search for it using LDAP direct from the control panel of the multifunction machine.

## 2: Customer benefits

- It simplifies the process of scanning a document to email through its effective search facility.
- It can save time, particularly if the recipients email address is unknown to the sender.

## 3: LDAP in practice

The editor for a publishing company regularly uses scan to email to send her colleagues scanned images from different publications. Thanks to LDAP, the editor is now able to search for e-mail addresses rather than typing them out. This saves her a lot of time, especially on email addresses which are long and hard to remember.

## 4: Configuring LDAP through the embedded web server

1. Log onto the printer remotely through a web browser
2. Click on 'Network Configuration' and enter your username and password if prompted. The default user name is 'admin' and the default password is 'access'.
3. Click on 'Configure Protocol' and ensure that LDAP is enabled then click on 'Advanced Settings' where you can begin to configure LDAP.
4. Please note that you must also configure your Brother multifunction machine to communicate with your email server. If you have not already done so, please refer to section 5 for further information.

This is the location of your LDAP server.

Change the port if necessary. (389 is the typical port number of LDAP).

Enter the **Search Root**. This is the place to start a search. For example; if the domain name of the Active Directory server is set to "local.example.com", the Search Root could be such as "cn=Users, dc=local, dc=example, dc=com".

This is how many seconds LDAP will try to send an email before timing out.

Select **Simple** method in the Authentication section, and specify **Username** and **Password**. In the case of connecting to the Active Directory server, enter the DN (Distinguished Name) format. (Ex. "cn=username, cn=Users, dc=local, dc=example, dc=com ")

This information will appear on the email. For example it could be a company name or way of recognising a department.

*This is good for companies with many printers configured with LDAP*

**Network Configuration**

TCP/IP NetBIOS Protocol

### Configure LDAP

Status: Enable

LDAP Server Address: 10.2.129.7

Port: 389

Timeout for LDAP: 5 sec

Authentication:  Simple  Anonymous

Username: Cn=BIEMF017,ou=printers,ou=bie,dc

Password: Enter password: [masked]

Retype password: [masked]

Search Root: dc=eu,dc=brothergroup,dc=net

Attribute of Name (Search Key): cn

Attribute of E-mail: Scanned\_From\_Product\_Planning

Attribute of Fax Number: facsimileTelephoneNumber

Optional Attribute 1: sn

Optional Attribute 2: title

Optional Attribute 3: ou

Optional Attribute 4: description

Buttons: Cancel, Submit, Set to Default

## 5: How to use LDAP

1. At the machines control panel, press '**Search/Speed Dial**'.
2. Press ▲ or ▼ to choose Server & Local.
3. Press **OK**.
- 4 .Enter initial characters for your search by using the dial pad.

### Note

- You can enter up to 15 characters.

5. Press **Search/Speed Dial** or **OK**.

The LDAP search result will be shown on LCD before the local address book search result with ►. If there is no match on the server and the local address book, the LCD will show '**Not Found**' for 2 seconds.

6. Press ▲ or ▼ to scroll until you find the name you are looking for.  
To confirm details of the result information, highlight the result and press ►.
7. Press **OK**.  
If the result includes both a fax number and an E-mail address, the machine will prompt you to press ▲ or ▼ to choose either a fax number or an E-mail address.
8. Press **OK**.
9. Load your document and press **Mono Start** or **Colour Start**

## 6. How to configure your machine to work communicate with your email server

1. Log onto the printer remotely through a web browser
2. Click on 'Network Configuration and enter your username and password if prompted. The default user name is 'admin' and the default password is 'access'.
3. Click on 'Configure Protocol' and ensure that POP3/SMTP is enabled then click on 'Advanced Settings'
4. Here you will need to configure the Brother machine with information about your email server (Please refer to next page for a detailed explanation of how to do this)

**Network Configuration**

TCP/IP NetBIOS Protocol

### Configure POP3/SMTP

Status: Enable

SMTP Server Address: 10.2.129.14

SMTP Port: 25

SMTP Server Authentication Method:
   
 none
   
 SMTP-AUTH
   
 POP before SMTP

SMTP-AUTH Account Name: \_\_\_\_\_

SMTP-AUTH Account Password: Enter password \_\_\_\_\_  
Retype password \_\_\_\_\_

Printer E-mail Address: bnr8d4d6b@example.com

POP3 Server Address: 0.0.0.0

POP3 Port: 110

Mailbox Name: \_\_\_\_\_

Mailbox Password: Enter password \_\_\_\_\_  
Retype password \_\_\_\_\_

Using APOP

Segmented Message Timeout: 120 min

[I-FAX Settings](#)

Cancel Submit

This is the location of your SMTP server and associated SMTP port address. The standard port number for SMTP is 25

If your require SMTP server requires authentication, please input the necessary information here.

Some features of this machine, like I-Fax, allow you to send and receive emails to it. Please assign your printer an email address to make use of these features.

If you use POP 3, please enter your POP3 details in here. The standard port number for this email system is 110.

Click here if you use APOP (more secure version of POP3)

This is the time which the multifunction machine will wait for each section of a segmented message before sending them all. If the message is only part complete, the part complete message will be sent.

5. When you have filled in the necessary information, click on 'Submit'

6. After a short while you will be asked if you want to send a test email to ensure a connection had been established with your email server. Please enter an email address and click 'Submit'. If you do not want to test you email connectivity, please go to step 9 otherwise continue.

**Network Configuration**

TCP/IP NetBIOS Protocol

### Test E-mail Send/Receive Configuration

Test E-mail Send Configuration

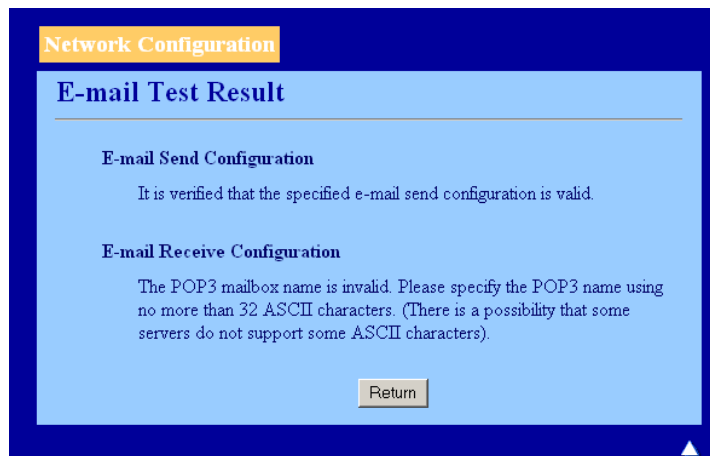
Send test E-mail

Destination E-mail Address: \_\_\_\_\_

Test E-mail Receive Configuration

Cancel Submit

7. After a few moments you will be shown a screen showing if the connections to the email server were successful. If they were not, please go back and check your settings. If they were, you should receive a confirmation email.



8. Please click on submit to go back to the original configuration screen.

## 7 – Enabling LDAP in Active Directory

1. In ISS Manager, right click the SMTP virtual server and then click properties
2. Click in the LDAP Routing tab
3. Select the Enable LDAP Routing check box
4. Set options as described in the following table
5. Reboot the Active Directory server.
6. If this option is not available in IIS Manager then please try the following:
7. Launch Domain Controller Security Policy from Administrative Tools.
8. Select "Security Settings" => "Local Policies" => "Security Options".
9. Set LDAP server signing requirements to "None" in Domain Controller.
10. Reboot the Active Directory server.

## 8: Further Information

The LDAP function for the MFC-9840CDW supports LDAP Version 3, which is backward compatible with older versions. Security protocols like Secure Socket Layer (SSL) are not supported.

You can also configure LDAP through Web BRAdmin and BRAdmin Professional. Please refer to documentation or help files that are associated with these applications for further information.