



Scan Features Minimum Requirements Guide

WorkCentre M123/M128 WorkCentre Pro 123/128

701P42081





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WorkCentre Pro 123/128 Minimum Requirements

To enable Scanning Features

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Purpose

This document is intended to help the support centers and analysts in enabling Networking and Scanning features for use on a M123/M128 device. This document is not a substitute for the system administrator's guide or the user guide, rather it is intended to be used as a quick reference or checklist when enabling the scanning features.

General Network Setup

These are the minimal settings required to enable the device on the network.

General Network Setup			
Field Name	Description	Location	Value
Host Name	The device's SMB Host Name.	WUI :	
		Properties \rightarrow Protocol Settings \rightarrow TCP/IP	Ex: XRXxxxxxxxxxxxxx
Enable "TCP/IP"	Port by which TCP/IP client	WUI :	
Port	communicates with the TCP/IP server	Properties \rightarrow Port Settings	
		LUI :	
		System Settings \rightarrow System Settings \rightarrow Network Settings \rightarrow Port Settings	
Get IP Address	The Method used to get an IP address.	WUI :	
	Examples are;	Properties \rightarrow Protocol Settings \rightarrow TCP/IP	
	• DHCP or		Default is DHCP Auto.
	• Manual,	LUI :	
	• Etc.	System Settings \rightarrow System Settings \rightarrow Network	Note: If set for anything
		Settings \rightarrow Protocols Settings	other than Manual, skip
			IP Address, Subnet
			Mask and Gateway
ID Address		WILL .	neids.
IF Addless	This is Sheeta's TCP/IP Address.	Properties \rightarrow Protocol Settings \rightarrow TCD/ID	··
	The IP Address is a unique address		Fx: 192 168 1 50
	that identifies a device in a network.		LA. 172.100.1.50
		System Settings \rightarrow System Settings \rightarrow Network	

General Network Setup

Field Name	Description	Location	Value
		Settings \rightarrow Protocols Settings	
Subnet Mask	The Subnet mask address of the	WUI :	·•••••••
	device. The Subnet Mask identifies	Properties \rightarrow Protocol Settings \rightarrow TCP/IP	
	which part of the IP Address contains		Ex: 255.255.255.0
	the Subnet Address and which part	LUI :	
	contains the host (or device) address.	System Settings \rightarrow System Settings \rightarrow Network	
		Settings \rightarrow Protocols Settings	
Gateway	The Gateway Address is the IP	WUI :	·•••••••
Address	Address of the gateway, or router, that	Properties \rightarrow Protocol Settings \rightarrow TCP/IP	Ex: 192.168.1.1
	the machine will use to access devices		
	on other subnets.	LUI :	
		System Settings \rightarrow System Settings \rightarrow Network	
		Settings \rightarrow Protocols Settings	

Advanced Network Setup

DNS and WINS information has to be populated if a server name has been specified. DNS and WINS are protocols that allow the device to use names rather then IP addresses when specifying the hosts of services that the device uses (ex: LDAP Host, Kerberos Host, SMTP/ pop3 Host, etc).

Prerequisite

Complete the Network Installation. Refer to \rightarrow General Network Setup

Advanced Network Setup			
Field Name	Description	Location	Value
DNS Server	Dynamic Name Service. Specifying	WUI :	·
Address (up to 3	hosts by IP address is error prone and	Properties \rightarrow Protocol Settings \rightarrow TCP/IP	Ex: 192.168.1.2
DNS server	difficult. DNS allows names to be		
addresses can be	assigned to IP addresses. A DNS		If DHCP box is check via
specified)	server allows a client (like		Web UI, then DNS address

Advanced Ne	twork Setup		
Field Name	Description	Location	Value
	M123/M128) to ask the DNS server to look up the IP address for hosts specified by name.		information is populated automatically.
DNS Address 1-	These three fields allow the entry of	WUI :	· · · · · ·
3	DNS server IPs. For the device to use any Hostname	Properties \rightarrow Protocol Settings \rightarrow TCP/IP	Ex: 192.168.1.2
DNS Name	This is the Domain name of the	WUI :	
	device.	Properties \rightarrow Protocol Settings \rightarrow TCP/IP	Ex: <dnsname>.<company>.com</company></dnsname>
Domain Name	If DNS Server Address (IP address)	WUI :	
(up to 3 DNS	is left blank, then the DNS domain	Properties \rightarrow Protocol Settings \rightarrow TCP/IP	Ex:
Domain Names addresses can be specified).	names need to be specified		<dnsname>.<company>.com</company></dnsname>
WINS Server	Used in Microsoft Networking	WUI :	
	(SMB). WINS allow names to be	Properties \rightarrow Protocol Settings \rightarrow TCP/IP	Ex:
	assigned to IP addresses. A WINS		<dnsname>.<company>.com</company></dnsname>
	server allows a client (like Sheeta) to		If DHCP box is check via
	ask the WINS server to look up the		Web UI, then WINS address
	name		information is populated
	name		automatically.

Remote Authentication Setup

The M123/M128 device performs user authentication using Kerberos for windows and Kerberos for Solaris. When enabled, user access to scanning features (excluding scan to mailbox) will be prevented for un-authorized users. Access to the scanning features will be enabled once the user is authenticated by Kerberos.

However, since the username/password provided to utilize the scanning features (i.e. Scan to SMB, Scam to FTP, e-mail, Network Scanning) IS NOT the same username / password used to authenticate with the Kerberos server, tracking each user when accessing the networking features of the device will not be possible.

The following procedure describes how Kerberos works with different scanning functions.

Scan to E-Mail:

- The user selects <Scan to email>
- A login/password popup is displayed requiring the user to provide a username and password to the Kerberos server.
- The user enters the login and password.
- The device passes the login and password to the Kerberos server and if a match is found the user is successfully authenticated.
- "From:" field of the e-mail is automatically populated with the device login name and e-mail address created at the time of the device configuration.
- If SMTP server requires authentication, the device will use the SMTP username/password created at the configuration of the device to send an email to the server.

Scan to FTP/SMB:

- The user selects <Scan to FTP/SMB>
- A login/password popup will be displayed to authenticate users with the Kerberos server.
- The user enters the login and password.
- The login and password is passed on to the Kerberos server and if a match is found the user is successfully authenticated.
- The user needs to enter a valid login and password for the FTP/SMB server. This may or may not be the user's Kerberos login/password, rather it is a login/password that is accepted by the FTP/SMB server.

Network Scanning:

- The user selects <Network Scanning>
- A login/password popup will be displayed to authenticate users with the Kerberos server.
- User enters the login and password.
- The login and password is passed on to the Kerberos server and if a match is found the user is successfully authenticated.
- Through the templates/repositories, the users will enter a valid login/password for FTP/SMB servers. This may or may not be the user login/password; rather it is a login/password that is accepted by the FTP/SMB server.
- Public templates are accessible to any user. Private templates require a password that may or may not be different from the Kerberos password.

Prerequisite

Complete the Network Installation. Refer to \rightarrow General Network Setup

Complete DNS/WINS set up if Host names are provided for the mail servers, rather than IP addresses. Refer to \rightarrow Advanced Network Setup

Remote Authentication Setup			
Field Name	Description	Location	Value
Remote Setup login	Enable Remote Authentication	LUI:	
		System Settings \rightarrow Login setup/Auditron	
		Administration \rightarrow Remote Login Setup	Default:
			ON:
			Guest ON:
Remote Server IP	The IP address or the host name		
Address or Server	of the Kerberos server.		Ex of the IP address:
name.			192.168.1.2
	Note: If server host name is used	LUI:	
	instead of the IP address, refer to	System Settings \rightarrow System Settings \rightarrow	
	Advanced Network Setup for	Network Settings \rightarrow Remote	Ex of the host name:
	DNS / WINS settings.	Authentication	Ex: <name><company>.com</company></name>

Remote Authentication Setup			
Field Name	Description	Location	Value
Remote Server Port	This is the Port Number used.		
number	Default is 88.		
Remote Server	Fully qualified domain which		
Realm Name	Kerberos server supports		
			Ex:
			Kerberos. <company>.com</company>

LDAP Setup

LDAP, Lightweight Directory Access Protocol, is an Internet protocol that email programs use to look up contact information from a server. LDAPaware" client programs can ask LDAP servers to look up entries in a wide variety of ways. LDAP servers index all the data in their entries, and "filters"(ex. Search root entry DN) may be used to select just the person or group you want, and return just the information you want. LDAP servers also provide an "authentication" service so that only authenticated users can access the LDAP server. However, most LDAP servers do not requires authentication.

Please refer to Appendix A for some examples on custom fields format as required by different servers.

<u>Prerequisite</u>

Complete the Network Installation. Refer to \rightarrow General Network Setup Complete DNS/WINS set up if a Host name is provided for the LDAP servers, rather than IP addresses. Refer to \rightarrow Advanced Network Setup

LDAP Setup			
Field Name	Description	Location	Value
Directory Server (LDAP)	Enable LDAP		
Primary Server	The Primary IP address of the LDAP server or server Name. If server name is used, ensure that DNS information is properly populated via Centreware Internet Services.		Ex: 192.168.1.2 OR Ex: <name>.<company>.com</company></name>
Primary Server Port Number	Port number of the primary LDAP Server	LUI:	Ex: Port 389
Secondary Server	The Secondary IP address of the LDAP server or server Name	System Settings \rightarrow System Settings \rightarrow E- Mail / Fax Settings \rightarrow Address Search (Directory Service)	Ex: 192.168.1.2 OR Kerberos. <company>.com</company>
Secondary Server Port Number	Port number of the primary LDAP Server		Ex: Port 389
Login/password	Login and password information required connecting to the LDAP server. Note: most LDAP servers don't require authentication, and therefore the login and password is usually optional.		

LDAP Setup			
Field Name	Description	Location	Value
Search Root entry DN (Distinguished Name	The format of the naming context will vary depending on the LDAP Server being used. A DN identifies an entry in an LDAP directory. Because directories are hierarchical, DNs identify the entry by its location as a path in a <i>hierarchical</i> <i>tree</i> (much as a path in a file system identifies a file). Generally, a DN begins with a specific common name, and proceeds with increasingly broader areas of identification until the country name is specified. CN=common name, [OU=organizational unit, O=organization, L=locality, ST=state or province], C=country name	LUI: System Settings → System Settings → E- Mail / Fax Settings → Address Search (Directory Service)	Ex for Active Directory Server: Rodc.Xerox.com dc=rodc,dc=Xerox, dc=com

LDAP Setup			
Field Name	Description	Location	Value
Scope of Search	 Search scope determines how far down the directory tree to search. There are three values that can be set for scope: base, which; onelevel, which, and subtree which This field narrows the search criteria as defined by the Search Root entry. Options are: Root Entry Only only searches the same level as the DN defined by the base DN setting One level below Root Entry only will search one level below the base and does not include the root entry All levels below root entry searches the base entry and everything below the base 	LUI: System Settings → System Settings → E- Mail / Fax Settings → Address Search (Directory Service)	
Object class of search target	This is like the Wild card. If one enters a string of characters for search criteria then all names that contain that string will be returned.		Ex: *
Server Application	The choices are Active Directory Netware Other Application (ex. Domino)		

LDAP Setup			
Field Name	Description	Location	Value
Attribute type of Recipient name	Directory searches are often done by searching for a partial name in the common name (cn) attribute.		Ex: searching for "Flint" within the cn would turn up this entry.
			Williams Flintson Barb Flintson Wilma Flintson Etc.
Attribute type of Last Name	This is the surname (last name).		Ex: Flintson
Attribute type of First Name	This is the given name	LUI: System Settings → System Settings	Ex: Wilma
Attribute type of E Mail Address	Email address	→ E- Mail / Fax Settings → Address Search (Directory Service)	Ex: dino@bedrock.com
Attribute type of Custom Item 1	These fields can be customized. The type holds the value of the field		Ex: telephoneNumber
Attribute Name of Custom Item 1	These fields can be customized. The Name field displays the word		Ex: Telephone Number
Attribute type of Custom Item 2	These fields can be customized. The type holds the value of the field		Ex: PhysicalDeliveryOfficeName
Attribute Name of Custom Item 2	These fields can be customized. The Name field displays the word		Ex: Office

LDAP Setup			
Field Name	Description	Location	Value
Attribute type of	These fields can be customized. The		
Custom Item 3	type holds the value of the field		Ex:
			department
Attribute Name of	These fields can be customized. The		
Custom Item 3	Name field displays the word		Ex:
			Department
Maximum search	The number of requests that LDAP will		
results	return (maximum is 100)		
Search time Out	The amount of time it waits to get a		
	response from the LDAP server.		

Scan to Email/iFax/Receive Email/Mail Notification Setup

Email, iFax, and Receive email at the device requires SMTP (for sending mail) and POP3 (receiving mail) to be populated correctly. If host names are entered for the email servers (i.e. SMTP and POP3) then DNS / WINS information need to be populated correctly.

Prerequisite

Complete the Network Installation. Refer to \rightarrow General Network Setup Complete DNS/WINS set up if Host names are provided for the mail servers, rather than IP addresses. Refer to \rightarrow Advanced Network Setup

R : Required NR : Not Required

Field Name	Description	Location	Scan To Email	iFax	Receive Email	Mail Notification	Value
Enable "Send Email Port"	Without enabling this port, Scan to email option will not be made available.	LUI: System Settings → System Settings → Network Settings → Port Settings	R	R	NR	R	
Enable Receive Email Port	Without enabling this port, Scan to email option will not be made available.	WUI: Properties → Port Settings LUI: System Settings → System Settings → Network Settings → Port Settings	NR	R	R	NR	
Enable SOAP Port	SOAP is a simple XML based protocol to let applications exchange information over HTTP. Or more simply: SOAP is a	WUI: Properties → Port Settings	R	NR	NR	NR	

Scan to Em	Scan to Email/iFax/Receive Email/Mail Notification Setup						
Field Name	Description	Location	Scan To Email	iFax	Receive Email	Mail Notification	Value
	protocol for accessing a Web Service						
Administrator Email Address	Address used to receive mail notification when device can not connect to the SMTP Server	WUI: Properties → Machine Details	R	R	R	R	Ex: admin@ <company>.com</company>
Machine Email Address	This is the Email address of the device.	WUI: Properties → Machine Details LUI: System Settings → System Settings → Network Settings → Machine Email Address	R	R	R	R	Ex: machine@ <company.com< td=""></company.com<>
SMTP Server Address OR SMTP Server	The IP address of the SMTP server.	WUI: Properties → Protocol Settings → Email	R	R	NR	R	Ex – Server Address: 192.168.1.2

Scan to Em	ail/iFax/Rec	eive Email/N	lail No	otificat	tion Setu	qu	
Field Name	Description	Location	Scan To Email	iFax	Receive Email	Mail Notification	Value
Name (it is better to use the fully qualified domain name)		LUI: System Settings → System Settings → Network Settings → SMTP Settings					Ex – Server Name: Name. <company>.com</company>
SMTP User Name and Password	This is the SMTP server authentication. If SMTP server requires authentication, the a login and password is required for the SMTP server	WUI: Properties → Protocol Settings → Email LUI: System Settings → System Settings → Network Settings → SMTP Settings	R	R	NR	R	
POP3 Server Address OR POP3 Server Name (it is better to use the fully qualified	The IP address of the POP3 server.	WUI: Properties → Protocol Settings → Email LUI: System Settings → System	NR	R	R	NR	Ex – Server Address: 192.168.1.2 Ex – Server Name: Name. <company>.com</company>

Field Name	Description	Location	Scan To Email	iFax	Receive Email	Mail Notification	Value
domain name)		Settings → Network Settings → POP3 Settings					
POP3 User Name and Password	This is the POP3 server authentication. If POP3 server requires authentication, the a login and password is required for the POP3server	WUI: Properties → Protocol Settings → Email LUI: System Settings → System Settings → Network Settings → POP2 Settings	NR	R	R	NR	

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Scan to E	mail/iFax/Reco	eive Email/N	lail No	otificat	ion Setu	ıp	
Field Name	Description	Location	Scan To Email	iFax	Receive Email	Mail Notification	Value
LDAP	Remote Address Book directory server supports Windows 2000 Active Directory, Exchange Server 2000, and Exchange Server 2003 and Novel Netware 5	WUI: Properties \rightarrow Protocol Settings \rightarrow LDAP LUI: System Settings \rightarrow System Settings \rightarrow Network Settings \rightarrow Email Settings	Should Global required	be set if search is 1	NR	NR	

Scan to FTP/SMB Setup

Files can be scanned on the M123/M128 device and routed on to a server or a client using FTP or SMB protocol. Directory structures (repositories) need to be created on the server to hold the scanned documents. It is assumed that an FTP server/client or an SMB server/client exists and is configured on the network.

<u>Prerequisite</u>

Complete the Network Installation. Refer to \rightarrow General Network Setup Complete DNS/WINS set up if Host names are provided for the mail servers, rather than IP addresses. Refer to \rightarrow Advanced Network Setup

Scan to FTP/SMB Setup						
Field Name	Description	Location	Scan To FTP	Scan To SMB	Value	
Enable "TCP/IP" Port"	Port by which TCP/IP client communicates with the TCP/IP server	WUI: Properties → Port Settings LUI: System Settings → System Settings → Network Settings → Port Settings	R	R		
Enable "FTP Client" Port	Port by which FTP client communicates to the FTP server	WUI: Properties → Port Settings LUI: System Settings → System Settings → Network Settings → Port Settings	R	NR		
Enable "SMB Port"	Port by which SMB client communicates to the SMB server	WUI: Properties → Port Settings LUI:	NR	R		

Field Name	Description	Location	Scan To FTP	Scan To SMB	Value
		System Settings \rightarrow System Settings \rightarrow Network Settings \rightarrow Port Settings			
Enable "SNMP" Port.	Simple Network Management Protocol	WUI: Properties → Port Settings	R	R	
		System Settings \rightarrow System Settings \rightarrow Network Settings \rightarrow Port Settings			
Enable "SOAP" Port	SOAP is a simple XML based protocol to let applications exchange information over HTTP. Or more simply: SOAP is a protocol for accessing a Web Service	WUI: Properties → Port Settings LUI: System Settings → System Settings → Network Settings → Port Settings	R	R	
FTP login and User name	Login and password required by the FTP server for Authentication.	LUI: All Services \rightarrow Scan to FTP	R	NR	
SMB Login and User Name	Login and password required by the SMB server for Authentication.	LUI: All Services \rightarrow Scan to FTP	NR	R	
Repositories	A folder containing the Scanned images.	WUI: Services → Job Templates → Display Job Templates Screen → File Repository Setup	R	R	

Network Scanning Setup

Files can be scanned on the M123/M128 device and routed on to a server using FTP or SMB protocol. Directory structures (repositories) need to be created on the server to hold the scanned documents. Templates have to be created on the device. The information in the templates will be used to specify the transfer protocol (FPT/SMB) as well as the attributes of the scanned document.

Prerequisite

Complete the Network Installation. Refer to \rightarrow General Network Setup.

Complete DNS/WINS set up if Host names are provided for the mail servers, rather than IP addresses. Refer to \rightarrow Advanced Network Setup Complete Scan To FTP/SMB depending on the type of the protocol that is used by network environment. Refer to \rightarrow Scan To FTP/SMB Templates and repositories must be created through CentreWare Internet Services (refer to User Guide) or CentreWare Scanning Services.

R: Required

O: Optional

Network Scanning Setup							
Field Name	Description	Location	Network Scanning	Value			
Templates	Templates define the attributes for a particular job, as well as the destination(s) of the scanned document. Templates can be created using Centerware Internet Services, or Centerware Network Scanning.	LUI: Services → Job Templates → Display Job Templates Screen → Template	R				
Repositories	A folder containing the Scanned images.	LUI: Services → Job Templates → Display Job Templates Screen → File Repository Setup	R				
Centerware Network Scanning	Can be used to create templates	Must be installed via CD ROM	0				

Scan to Mailbox

This feature will allow documents to be stored in to a mailbox for future processing. Internet Services and scan driver utility can be used to create, view, and print documents stored in a mailbox.

<u>Prerequisite</u>

Complete the Network Installation. Refer to \rightarrow General Network Setup.

Scan to Mailbox				
Field Name	Description	Location	Scan To Mailbox	Value
Enable "Salutation" Port	This port is used for discovering and polling of scanners	LUI: System Settings → System Settings → Network Settings → Port Settings	R	
Enable "HTTP" Port		WUI: Protocols → Port Settings LUI: System Settings → System Settings → Network Settings → Port Settings	R	
Scan Driver Utility	The Utility that will be installed on the client and allows users to view/print the scanned documents within a mailbox	Must be installed via CD ROM	0	
Centerware Internet Services	Allows users to view/print the scanned documents within a mailbox	Using a browser, enter the Machines IP address.	0	
Mailboxes must be created.	Mailboxes need to be created via UI or Internet	LUI: All Services \rightarrow Setup Menu \rightarrow	R	

Scan to Mailbox					
Field Name	Description	Location	Scan To	Value	
			Mailbox		
	Services	Mailbox			
		LUI:			
		System Settings \rightarrow Setup Menu \rightarrow			
		Mailbox			

Appendix A

Examples of Configuring the LDAP Fields on different Severs

This section provides an example of how different LDAP fields can be configured on different servers. Please note that this section does not describe every LDAP field supported by M123/128 device.

Choosing the type of LDAP Server

The SA/KO shall be allowed to choose the type of LDAP server that is being used via the Remote UI from:

- Exchange
- Domino
- Netscape Directory Services
- ADS LDAP
- NetWare LDAP

Based on this selection, the user shall be presented with a default mapping of the device display item to the corresponding LDAP field as follows:

NetWare LDAP Default Mapping

Display Item	Default LDAP Mapping
Name	fullName
Email Address	mail
IFax Address	
Business Phone	telephoneNumber
Business Address	postalAddress
Office	physicalDeliveryOfficeName
City	1
State	st
zip code	postal code
country	co (no entry in client)
UID	uid

Domino Default Mapping

Display Item	Default LDAP Mapping
Name	cn
Email Address	mail
IFax Address	
Business Phone	telephonenumber
Business Address	postaladdress
Office	officestreetaddress
City	1
State	st
zip code	postalcode
country	со
UID	shortname

Exchange Default Mapping

Display Item	Default LDAP Mapping
Name	cn
Email Address	mail
IFax Address	
Business Phone	telephoneNumber
Business Address	postalAddress
Office	physicalDeliveryOfficeName
City	1
State	st
zip code	postalCode
country	со
UID	uid

ADS Default Mapping

Display Item	Default LDAP Mapping
Name	cn

Display Item	Default LDAP Mapping
Email Address	mail
IFax Address	
Business Phone	telephoneNumber
Business Address	postalAddress
Office	physicalDeliveryOfficeName
City	1
State	st
zip code	postalCode
country	со
UID	SAMAccountName

Netscape Default Mapping

Display Item	Default LDAP Mapping
Name	cn
Email Address	mail
IFax Address	
Business Phone	telephonenumber
Business Address	postalAddress
Office	physicalDeliveryOfficeName
City	1
State	st
zip code	postalCode
country	со
UID	uid