

MFD Integration Matrix (8 February 2021)

This document has been written for PaperCut MF resellers and technical architects. It provides a feature-by-feature comparison of all the copier/MFD/MFP/printer integration services available in PaperCut MF. PaperCut MF is a vendor-neutral solution: all integration methods/options are treated equally, and an endeavor is made to ensure all options address all requirements.

This document changes often as new releases and devices become available. Please ensure this document is current. Log in to the [PaperCut MF Partner Portal](#) (Support > PaperCut MF Manuals) to access the latest version.

B - HP	Brother	Canon (MEAP)	Canon Gen3+ (MEAP)	Dell (AIP)	Dell (LeSF)	Epson	Fuji Xerox (AIP)	Fuji Xerox ApeosPort V+	HP (Chai)	HP FutureSmart (Legacy)	HP (OSA)	HP OXP (Printer Only)	HP OXP	HP Pro (Fast Release)
Bulk deployment: Allows the embedded solution to be rolled out remotely, to multiple devices. In environments that require large device roll outs, this not only increases operational efficiency, but also minimizes human errors.	No	No	No	Yes	No	No	Yes	Yes	No	No	No	Yes	Yes	No
Device scripting Customize user policy to restrict user behavior														
<ul style="list-style-type: none"> deviceLoginHook 	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
<ul style="list-style-type: none"> devicePrintReleaseHook 	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
<ul style="list-style-type: none"> deviceJobLogHook 	No	Yes	Yes	No	Yes	Yes	No	Yes	No	Yes	Yes	Yes	Yes	Yes
Language selection Allows users to select a preferred language that will be used when they log in to any device that supports language selection at any location.	No	No	No	No	No	No	No	No	No	No	No	No	No	No
Allocate or change accounts Allows users to allocate accounts to print jobs sent from a computer or using the Mobility Print environment (from a mobile device such as a smart phone or a tablet), directly at the device before releasing the job.	No	No	Yes	No	No	No	No	Yes	No	No	No	Yes	Yes	N/A
Change attributes Allows users to change the following attributes of held print jobs directly at the device before releasing the job: <ul style="list-style-type: none"> Copies Duplex mode (from 1-sided to 2-sided) Color mode (from color to grayscale) The device displays the related cost change and savings (if applicable).	No	No	Yes	No	No	No	No	Yes	No	No	No	No	Yes	N/A
Integrated Scanning Provides a consistent and easy way for users to scan documents to configurable email, folder, and cloud storage destinations and charge the job to an account.	No	No	Yes	No	No	Yes	No	Yes	No	No	Yes	N/A	Yes	No
Supported card readers Many organizations already have existing card systems on-site ranging from magstripe through to RFID and Proximity. Where possible a choice of card reader should be offered so you can leverage existing cards for off-the-glass copying authentication.	RFIdeas, Other keyboard emulating readers require custom MFD configuration.	RFIdeas, Elatec, NTWare. Other keyboard emulating readers must be tested.	RFIdeas, Elatec, NTWare. Other keyboard emulating readers must be tested.	RFIdeas, OmniKey, MagTek, Other keyboard emulating readers must be tested.	RFIdeas, OmniKey, MagTek – LeSF 2.1+ only: Elatec, Acid, Weltrend	RFIdeas, Elatec, HID Global, ACS, Sony	RFIdeas, OmniKey, MagTek, Other keyboard emulating readers must be tested.	IC Card Reader A, IC Card Reader B, HID Omnikey 5427 - External Type	RFIdeas, Elatec, Magtek. Other keyboard emulating readers must be tested.	RFIdeas, Elatec, Magtek, HP Common Card Readers. Other keyboard emulating readers must be tested.	RFIdeas, Elatec, Magtek. Other keyboard emulating readers must be tested. (Older devices may not support readers)	HP Proximity and Universal, RF IDEas Elatec TWN.	HP Proximity and Universal, RF IDEas Elatec TWN.	HP Proximity and Universal, RF IDEas Elatec TWN.
Supported related brands (re-label & OEM) The embedded solution has been confirmed to work on the following re-labeled or OEM devices.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Solution type Details on the type of integration method used by the solution: Embedded: Code running on the device at firmware level. Onboard: Code interacting with the device via web services. Middleware: Code interacting with the device via middleware. Hybrid: Code is a combination of other solution types (embedded, onboard, middleware).	Onboard	Embedded	Hybrid	Hybrid	Embedded	Middleware	Hybrid	Hybrid	Hybrid	Hybrid: <ul style="list-style-type: none"> Embedded for authentication Onboard for tracking, Zero Stop, print release, account selection 	Onboard	Onboard	Onboard	Onboard
Zero Stop Where possible, PaperCut MF will make use of a copier's ability to stop jobs while in progress when a user runs out of credit, reducing cost overruns.	Yes	Yes	Yes	Yes (C7765dn/A3 only)	Yes	Yes (up to 4 sheet delay)	Yes (DMP-X and above)	Yes	Yes	Yes (up to 8 sheet delay)	Yes (possible 1 page overrun on some devices)	No	Yes (up to 8 sheet delay)	N/A
Restrict color copying	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	N/A	Yes	N/A

B - HP	Brother	Canon (MEAP)	Canon Gen3+ (MEAP)	Dell (AIP)	Dell (LeSF)	Epson	Fuji Xerox (AIP)	Fuji Xerox ApeosPort V+	HP (Chai)	HP FutureSmart (Legacy)	HP (OSA)	HP OXP (Printer Only)	HP OXP	HP Pro (Fast Release)
In many organizations it is desirable to limit users or groups of users to monochrome copying only.														
Enforced login workflow (e.g. account selection) PaperCut MF can bring the common printing workflows to off-the-glass copying, allowing costs to be associated with departmental accounts rather than just a user.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes (account selection via extra button)	Yes (account selection via extra button)	Yes	Yes (account selection via extra button)	Yes	N/A
Shared account selection from list Many organizations use named shared accounts. Where possible devices should offer the ability to select accounts from a visible list bypassing the need to use account codes.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	N/A
Shared account keyword search Expanding on the shared account selection from a list, the ideal interface should allow users to search accounts by keywords. This makes handling of 10,000 matters/projects easy.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	N/A
Shared account selection by code/PIN Selecting an account from a list or by search is preferred by most users, however some devices have constrained interfaces and selecting a code (e.g. numeric number) may be more convenient.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	N/A
Shared account invoicing/comments options Provide functionality to invoice jobs and add comments.	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	N/A
Customizable logos / colors If an organization already has a corporate style or branding in place, why not go the extra step and implement this on their copier login screens?	No	Yes (limited)	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	N/A
Track faxing Many devices include functionality for sending Faxes. Organizations may want to account for these events and where possible PaperCut MF will allow for tracking of these to the user.	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	N/A	Yes	N/A
Track USB printing Newer devices are now giving users the ability to print resources stored on removable media such as USB drives. Where available PaperCut MF will allow for tracking of these print jobs to the user.	Yes	Yes	Yes	Yes	Yes (LeSF 2.1+ only)	Yes	Yes	Yes	N/A	Yes	Yes	Yes	Yes	N/A
Track scanning (e.g. to email or USB memory stick) With many organizations implementing green practices it is becoming more common for users to scan a document to an electronic format rather than make another paper copy. Where possible PaperCut MF can track these scans to the user.	Yes	Yes	Yes	Yes	Yes (Email/FTP, to USB LeSF 2.1+ only)	Yes	Yes	Yes	Yes	Yes	Yes	N/A	Yes	N/A
Auto-populate email when Scanning														
Auto-populate email when Scanning (From address)	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	N/A	Yes	N/A
Auto-populate email when Scanning (To address)	No	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes (on HP FutureSmart 3.0)	Yes (on OSA4+ devices)	N/A	Yes	N/A
Fine grained system access control Multi-function devices often have the capability of faxing and scanning. Organizations may want to allow free faxing and scanning. In this case the device can often be configured to allow access to functions without login.	No	No	No	Yes	No	No	Yes	Yes	No	Yes	No	Yes	Yes	N/A
Secure Print Release / Find Me Printing After a user authenticates at a device, they should be able to release jobs from a hold-release queue or a global virtual find-me printing queue.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Release all jobs on login Shortcutting the process of selecting jobs held in the release queue by automatically releasing all print jobs on login/authentication.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Release jobs selected from a list Displays a list of jobs that can be individually printed or cancelled.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	N/A
Block jobs from being released to a printer reporting an error (PIE) Prevent users from releasing jobs on devices reporting an error.	No	Yes	Yes	No	Yes	No	Yes	Yes	No	No	Yes	Yes	Yes	N/A
User authentication at device options Ideal solutions may be configured to offer users a choice of authentication options (e.g. if the user has left their card at home they can fall back to username and password login).														
Username and password authentication	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No

B - HP	Brother	Canon (MEAP)	Canon Gen3+ (MEAP)	Dell (AIP)	Dell (LeSF)	Epson	Fuji Xerox (AIP)	Fuji Xerox ApeosPort V+	HP (Chai)	HP FutureSmart (Legacy)	HP (OSA)	HP OXP (Printer Only)	HP OXP	HP Pro (Fast Release)
										(Cannot use username and ID at the same time)				
ID-only authentication	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes (Cannot use username and ID at the same time).	Yes	Yes	Yes	No
ID + PIN authentication	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
Card-only authentication	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Card + PIN authentication	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
Self-association of cards with existing user accounts	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
Define or set PIN on first use/login	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
Allow anonymous access	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
Allow guest/anonymous access Authentication options can be configured together with the guest/anonymous access option so that copying is tracked against the anonymous user account.	No	Yes	Yes	No	No	No	No	Yes	No	No	Yes	No	Yes	No
Single Sign-On (SSO) Once a user is authenticated, SSO allows other MFP applications to re-use the user information (e.g. name, email, etc.). Applications may include 3rd party scanning solutions or built-in MFP features. Support depends on the platform and application. Options include: Platform: Applications may access user info using SSO features of the MFP platform. PaperCut: No platform SSO exists. Applications may use PaperCut Device REST APIs to access the logged-in user details.	PaperCut	PaperCut	PaperCut	PaperCut	Platform	PaperCut	PaperCut	PaperCut	PaperCut	Platform	Platform	No	Platform	PaperCut
Swipe to log out Allows users to use their swipe cards to log out of the device.	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	No	Yes	Yes	No
Offline mode Enables the device to continue to be used when the PaperCut server is unavailable. Options include: Platform: Offline access is provided by the device platform. Offline activity is not tracked. PaperCut: Offline access is provided by the application. Offline activity is tracked. N/A: Offline access is not available.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Extra licensing requirements Additional license/module may be required from the MFP vendor. Contact vendor for pricing is applicable.	No	Yes	Yes	No	No	Yes Epson EOP	Yes Extensible Customization Kit	Yes Extensible Customization Kit	No	No	Yes HP OSA.	No	No	No
Assisted setup Some devices may require installation assistance from trained/certified copier technician (e.g. service code setting changes)	No	No	No	No	No	No	No	No	No	No	No	No	No	No
Security rating (out of 5) Devices that do not follow best practice security and/or have known security issues such as lost data on power failure score lower here. E.g. scores lower than 4 may not be appropriate for secure student environments. Scores based on security reviews.	4	4	4	4	5	4	4	4	5	4.5	4	4.5	4.5	4
Install time (minutes) Expected install and post install testing time for a technician experienced with both PaperCut and copier/hardware platform.	20	30	30	30	30	25	30	20	30	30	30	15	20	20
Supported server operating systems PaperCut is full a cross-platform product and aims to support all hardware/software options in any combination. This lists the server OS's that are compatible with the solution.	Windows, Linux, Mac and Novell	Windows, Linux, Mac and Novell	Windows, Linux, Mac and Novell	Windows, Linux, Mac and Novell	Windows, Linux, Mac and Novell	Windows, Linux, Mac	Windows, Linux, Mac and Novell	Windows, Linux, Mac and Novell	Windows, Linux, Mac and Novell	Windows, Linux, Mac and Novell	Windows, Linux, Mac and Novell	Windows, Linux, Mac and Novell	Windows, Linux, Mac and Novell	Windows, Linux, Mac and Novell
All character sets supported Determines whether device can support non-English/Latin characters. E.g. Chinese, Japanese, Korean etc.	Yes	Yes (may require expansion packs)	Yes (may require expansion packs)	Yes	Yes (requires expansion packs)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	N/A

Ko - R	Konica Minolta	Kyocera	Lexmark	Lexmark T656 printer	Lexmark T654 printer	Muratec	OKI (Open Platform)	OKI sXP2	Ricoh ESA SDK/J (SDK 4+)	Ricoh ESA SmartSDK (SOP)	Ricoh ESA SmartSDK (SOP) Printer Only			
Bulk deployment: Allows the embedded solution to be rolled out remotely, to multiple devices. In environments that require large device roll outs, this not only increases operational efficiency, but also minimizes human errors.	Yes (i-Option OpenAPI 4.0+ only)	Yes	No	No	No	No	No	No	No	Yes	Yes			
Device scripting Customize user policy to restrict user behavior														
● deviceLoginHook	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes			
● devicePrintReleaseHook	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes			
● deviceJobLogHook	Yes	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes	Yes			
Language selection Allows users to select a preferred language that will be used when they log in to any device that supports language selection at any location.	Yes	Yes	No	No	No	No	No	No	No	Yes	Yes			
Allocate or change accounts Allows users to allocate accounts to print jobs sent from a computer or using the Mobility Print environment (from a mobile device such as a smart phone or a tablet), directly at the device before releasing the job.	Yes	Yes	No	No	No	No	No	No	No	Yes	Yes			
Change attributes Allows users to change the following attributes of held print jobs directly at the device before releasing the job: <ul style="list-style-type: none"> Copies Duplex mode (from 1-sided to 2-sided) Color mode (from color to grayscale) The device displays the related cost change and savings (if applicable).	Yes	Yes	No	No	No	No	No	No	No	Yes	Yes			
Integrated Scanning Provides a consistent and easy way for users to scan documents to configurable email, folder, and cloud storage destinations and charge the job to an account.	Yes (i-Option only)	Yes	Yes	No	No	No	No	No	Yes	Yes	N/A			
Supported card readers Many organizations already have existing card systems on-site ranging from magstripe through to RFID and Proximity. Where possible a choice of card reader should be offered so you can leverage existing cards for off-the-glass copying authentication.	Konica proprietary reader (AU-201), with drivers: Omni Key, YSoft, possibly others	Card Auth. Kit required; US: RFIDeas, Elatec. EU: Elatec. Other: RFIDeas, Elatec + ask copier dealer	RFIDeas, OmniKey, MagTek – LeSF 2.1+ only: Elatec, Acid, Weltrend	RFIDeas, OmniKey, MagTek	RFIDeas, OmniKey, MagTek	RFIDeas pcProx plus	Elatec (custom firmware from OKI), Toshiba e-Bridge idGate, Magtek Dynamag	Elatec, TWN4	CIS, Elatec, HID Global, Inepro, Interflex, MagTek, RF IDeas, Tyssso	Elatec TWN4, RF IDeas	Elatec TWN4, RF IDeas			
Supported related brands (re-label & OEM) The embedded solution has been confirmed to work on the following re-labeled or OEM devices.	ImageTech, DEVELOP EU	Olivetti, Triumph-Adler, UTAX	OKI (LeSF), Toshiba (LeSF)	N/A	N/A	N/A	N/A	N/A	Lanier, Savin, Nashuatec, Gestetner	N/A	N/A			
Solution type Details on the type of integration method used by the solution: Embedded: Code running on the device at firmware level. Onboard: Code interacting with the device via web services. Middleware: Code interacting with the device via middleware. Hybrid: Code is a combination of other solution types (embedded, onboard, middleware).	Onboard	Embedded	Embedded	Embedded	Embedded	Embedded	Onboard	Middleware	Embedded	Embedded	Embedded			
Zero Stop Where possible, PaperCut MF will make use of a copier's ability to stop jobs while in progress when a user runs out of credit, reducing cost overruns.	Yes	Yes (1-3 page delay)	Yes	N/A	N/A	Yes	Yes	Yes	Yes (possible 1 page overrun on some devices)	Copy/USB print only (up to 3 page delay)	USB print only (up to 3 page delay)			
Restrict color copying In many organizations it is desirable to limit users or groups of users to monochrome copying only.	Yes	Yes	Yes	N/A	N/A	N/A	Yes	Yes	Yes	Yes	N/A			
Enforced login workflow (e.g. account selection)	Yes	Yes	Yes	N/A	N/A	No	No	Yes	Yes	Yes	N/A			

Ko - R	Konica Minolta	Kyocera	Lexmark	Lexmark T656 printer	Lexmark T654 printer	Muratec	OKI (Open Platform)	OKI sXP2	Ricoh ESA SDK/J (SDK 4+)	Ricoh ESA SmartSDK (SOP)	Ricoh ESA SmartSDK (SOP) Printer Only				
PaperCut MF can bring the common printing workflows to off-the-glass copying, allowing costs to be associated with departmental accounts rather than just a user.															
Shared account selection from list Many organizations use named shared accounts. Where possible devices should offer the ability to select accounts from a visible list bypassing the need to use account codes.	Yes	Yes	Yes	N/A	N/A	Yes	Yes	Yes	Yes	Yes	Yes				
Shared account keyword search Expanding on the shared account selection from a list, the ideal interface should allow users to search accounts by keywords. This makes handling of 10,000 matters/projects easy.	Yes	Yes	Yes	N/A	N/A	Yes	Yes	Yes	Yes	Yes	Yes				
Shared account selection by code/PIN Selecting an account from a list or by search is preferred by most users, however some devices have constrained interfaces and selecting a code (e.g. numeric number) may be more convenient.	Yes	Yes	Yes	N/A (via client software)	N/A (via client software)	Yes	Yes	Yes	Yes	Yes	Yes				
Shared account invoicing/comments options Provide functionality to invoice jobs and add comments.	Yes (i-Option only)	Yes	Yes	Yes	No	No	No	No	Yes	Yes	Yes				
Customizable logos / colors If an organization already has a corporate style or branding in place, why not go the extra step and implement this on their copier login screens?	Yes (i-Option only)	Yes	Yes	Yes	N/A	No	Yes	No	Yes	Yes	Yes				
Track faxing Many devices include functionality for sending Faxes. Organizations may want to account for these events and where possible PaperCut MF will allow for tracking of these to the user.	Yes	Yes	Yes	N/A	N/A	Yes (Memory Transmission)	Yes	Yes	Yes	Yes	N/A				
Track USB printing Newer devices are now giving users the ability to print resources stored on removable media such as USB drives. Where available PaperCut MF will allow for tracking of these print jobs to the user.	Yes	Yes	Yes (LeSF 2.1+ only)	No	N/A	Yes	Yes	Yes	No (Not supported by ESA SDK – raised with Ricoh)	Yes	Yes				
Track scanning (e.g. to email or USB memory stick) With many organizations implementing green practices it is becoming more common for users to scan a document to an electronic format rather than make another paper copy. Where possible PaperCut MF can track these scans to the user.	Yes	Yes	Yes (Email/FTP, to USB LeSF 2.1+ only)	N/A	N/A	Yes (Email, FTP, Network Folder, to USB)	Yes	Yes	Yes	Yes	N/A				
Auto-populate email when Scanning															
Auto-populate email when Scanning (From address)	Yes	Yes (A4 need firmware update)	Yes	N/A	N/A	No	Yes	No	No (no API – raised with Ricoh)	Yes (cannot be configured or disabled)	N/A				
Auto-populate email when Scanning (To address)	Yes (i-Option OpenAPI 3.1+ only)	Yes (only on 7 inches or larger screens)	Yes	N/A	N/A	No	Yes (with 08 system code setting)	No	No (no API – raised with Ricoh). Can add user's email to address book for easy access	Yes	N/A				
Fine grained system access control Multi-function devices often have the capability of faxing and scanning. Organizations may want to allow free faxing and scanning. In this case the device can often be configured to allow access to functions without login.	No	No	No	No	No	No	No	No	Yes	Yes	Yes				
Secure Print Release / Find Me Printing After a user authenticates at a device, they should be able to release jobs from a hold-release queue or a global virtual find-me printing queue.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes				
Release all jobs on login Shortcutting the process of selecting jobs held in the release queue by automatically releasing all print jobs on login/authentication.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes				

Ko - R	Konica Minolta	Kyocera	Lexmark	Lexmark T656 printer	Lexmark T654 printer	Muratec	OKI (Open Platform)	OKI sXP2	Ricoh ESA SDK/J (SDK 4+)	Ricoh ESA SmartSDK (SOP)	Ricoh ESA SmartSDK (SOP) Printer Only			
Release jobs selected from a list Displays a list of jobs that can be individually printed or cancelled.	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes			
Block jobs being released to a printer reporting an error (PIE) Prevent users from releasing jobs on devices reporting an error.	No	Yes	Yes	No	No	No	Yes	No	Yes	Yes	Yes			
User authentication at device options Ideal solutions may be configured to offer users a choice of authentication options (e.g. if the user has left their card at home they can fall back to username and password login).														
Username and password authentication	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes			
Id-only authentication	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes			
Id + PIN authentication	Yes	Yes	Yes	Yes	Yes	No	No	No	Yes	Yes	Yes			
Card-only authentication	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes			
Card + PIN authentication	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes			
Self-association of cards with existing user accounts	Yes (i-Option OpenAPI 3.1+ only)	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes			
Define or set PIN on first use/login	Yes (i-Option only)	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes	Yes			
Allow anonymous access	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes			
Allow guest/anonymous access Authentication options can be configured together with the guest/anonymous access option so that copying is tracked against the anonymous user account.	Yes (i-Option only)	Yes	Yes	No	No	No	No	No	No	Yes	Yes			
Single Sign-On (SSO) Once a user is authenticated, SSO allows other MFP applications to re-use the user information (e.g. name, email, etc.). Applications may include 3rd party scanning solutions or built-in MFP features. Support depends on the platform and application. Options include: Platform: Applications may access user info using SSO features of the MFP platform. PaperCut: No platform SSO exists. Applications may use PaperCut Device REST APIs to access the logged-in user details.	Platform	Platform	Platform	Platform	PaperCut	PaperCut	Platform	Platform	PaperCut	Platform	Platform			
Swipe to log out Allows users to use their swipe cards to log out of the device.	No	Yes	Yes	Yes	No	No	No	No	Yes	Yes	Yes			
Offline mode Enables the device to continue to be used when the PaperCut server is unavailable. Options include: Platform: Offline access is provided by the device platform. Offline activity is not tracked. PaperCut: Offline access is provided by the application. Offline activity is tracked. N/A: Offline access is not available.	N/A	PaperCut	N/A	N/A	N/A	N/A	N/A	N/A	PaperCut	N/A	N/A			
Extra licensing requirements Additional license/module may be required from the MFP vendor. Contact vendor for pricing is applicable.	No	No	No	No	No	No	Yes	No	Yes Java VM card	No	No			
Assisted setup Some devices may require installation assistance from trained/certified copier technician (e.g. service code setting changes)	Device dependent (RAM or firmware upgrade)	No	No	No	No	Yes	Yes	No	Yes	Yes	Yes			
Security rating (out of 5) Devices that do not follow best practice security and/or have known security issues such as lost data on power failure score lower here. E.g. scores lower than 4 may	4	4	5	5	5	3.5	4	4	4	4	4			

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not be appropriate for secure student environments. Scores based on security reviews.														
Install time (minutes) Expected install and post install testing time for a technician experienced with both PaperCut and copier/hardware platform.	45	30	30	20	20	5	50	20	45	20	20			
Supported server operating systems PaperCut is full a cross-platform product and aims to support all hardware/software options in any combination. This lists the server OS's that are compatible with the solution.	Windows, Linux, Mac and Novell	Windows, Linux, Mac and Novell	Windows, Linux, Mac and Novell	Windows, Linux, Mac and Novell	Windows, Linux, Mac and Novell	Windows, Linux and Mac	Windows, Linux, Mac and Novell	PaperCut: Windows, Linux, Mac and Novell Middleware: Windows	Windows, Linux, Mac and Novell	Windows, Linux, Mac and Novell	Windows, Linux, Mac and Novell			
All character sets supported Determines whether device can support non-English/Latin characters. E.g. Chinese, Japanese, Korean etc.	Yes	Yes	Yes (requires expansion packs)	Yes (requires expansion packs)	Yes (requires expansion pack)	No (English, French, Spanish)	Yes	Yes	Yes for SDK10+ devices. Previous devices may not support all Asian character sets	Yes	Yes			

S – X	Samsung	Sharp OSA	Sharp OSA (HTML Browser n2.0+)	Sindoh	Toshiba eConnect	Toshiba SDK2	Toshiba V3	Xerox Network Accounting	Xerox Secure Access EIP 1.0+	Xerox Secure Access EIP 1.5+	Xerox (Secure Access EIP 1.5+) Print Only		
Bulk deployment: Allows the embedded solution to be rolled out remotely, to multiple devices. In environments that require large device roll outs, this not only increases operational efficiency, but also minimizes human errors.	No	Yes	Yes	Yes (i-Option OpenAPI 4.0+ only)	No	Yes	Yes	Yes	No	Yes	Yes		
Language selection Allows users to select a preferred language that will be used when they log in to any device that supports language selection at any location.	No	No	Yes	Yes	No	No	No	No	No	No	No		
Device scripting Customize user policy to restrict user behavior													
<ul style="list-style-type: none"> deviceLoginHook 	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
<ul style="list-style-type: none"> devicePrintReleaseHook 	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
<ul style="list-style-type: none"> deviceJobLogHook 	Yes	Yes	Yes	Yes	No	No	No	Yes	Yes	Yes	Yes		
Allocate or change accounts Allows users to allocate accounts to print jobs sent from a computer or using the Mobility Print environment (from a mobile device such as a smart phone or a tablet), directly at the device before releasing the job.	No	No	Yes	Yes (i-Option only)	No	No	Yes	No	No	Yes (for EIP 3.0+ devices)	Yes (for EIP 3.0+ devices)		
Change attributes Allows users to change the following attributes of held print jobs directly at the device before releasing the job: <ul style="list-style-type: none"> Copies Duplex mode (from 1-sided to 2-sided) Color mode (from color to grayscale) The device displays the related cost change and savings (if applicable).	No	No	Yes	Yes (i-Option only)	No	No	Yes	No	No	Yes (for EIP 3.0+ devices)	Yes (for EIP 3.0+ devices)		
Integrated Scanning Provides a consistent and easy way for users to scan documents to configurable email, folder, and cloud storage destinations and charge the job to an account.	No	Yes	Yes	Yes (i-Option only)	Yes	No	Yes	No	No	Yes (for EIP 3.0+ devices)	N/A		
Supported Card Readers Many organizations already have existing card systems on-site ranging from magstripe through to RFID and Proximity. Where possible a choice of card reader should be offered so you can leverage existing cards for off-the-glass copying authentication.	RFIdeas, Elatec, Magtek. Other keyboard emulating readers must be tested	RFIdeas, Elatec, Magtek. Other keyboard emulating readers must be tested. (Older devices may not support readers)	Elatec TWN3 Prox Elatec TWN4 Equitrac Y591-EHID-201 v01 Onmikey 5427 MAGTEK 21040110 RF IDEAS AIR ID Enroll Proximity Reader RDR-7081AKU RF IDEAS RDR-6081AKU RF IDEAS RDR-7582AKU RF IDEAS RDR-80581AKU RF IDEAS RDR-805H1AKU RF IDEAS RDR-805T1AKU	Konica proprietary reader (AU-201), with drivers: Omni Key, YSoft, possibly others. SDH1200, RFIdeas.	RFIdeas, Elatec, Magtek. Other keyboard emulating readers must be tested.	Elatec, Toshiba e-Bridge idGate, Magtek Dynamag, RFIdeas, IDTECH, Datalogic, Cartardis, FTDI. Other keyboard emulating readers require MFD to be configured by a technician.	Elatec, Toshiba e-Bridge idGate, Magtek Dynamag, RFIdeas, IDTECH, Datalogic, Cartardis, FTDI. Other keyboard emulating readers require MFD to be configured by a technician.	N/A	USB readers from Elatec, RFIdeas, OmniCard (*some models see docs). Network card readers from Elatec and RFIdeas.	USB readers from Elatec, RFIdeas, OmniCard (*some models see docs). Network card readers require MFD to be configured by a technician.	USB readers from Elatec, RFIdeas, OmniCard (*some models see docs). Network card readers from Elatec and RFIdeas.		
Supported related brands (re-label & OEM) The embedded solution has been confirmed to work on the following re-labeled or OEM devices.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
Solution type Details on the type of integration method used by the solution: Embedded: Code running on the device at firmware level. Onboard: Code interacting with the device via web services. Middleware: Code interacting with the device via middleware. Hybrid: Code is a combination of other solution types (embedded, onboard, middleware).	Embedded	Onboard	Onboard	Onboard	Onboard	Onboard	Onboard	Onboard	Onboard	Onboard	Onboard		

S – X	Samsung	Sharp OSA	Sharp OSA (HTML Browser n2.0+)	Sindoh	Toshiba eConnect	Toshiba SDK2	Toshiba V3	Xerox Network Accounting	Xerox Secure Access EIP 1.0+	Xerox Secure Access EIP 1.5+	Xerox (Secure Access EIP 1.5+) Print Only		
Zero Stop Where possible, PaperCut MF will make use of a copier's ability to stop jobs while in progress when a user runs out of credit, reducing cost overruns.	Yes	Copy/USB print only possible 1 page overrun on some devices	Copy/USB print only possible 1 page overrun on some devices	Yes	Yes (possible 1 page overrun on some devices)	Yes	Yes	No	No	Yes (for Xerox EIP 2.0+ devices with Job Limits enabled)	N/A		
Restrict color copying In many organizations it is desirable to limit users or groups of users to monochrome copying only.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes (PaperCut MF 13.4 onwards and Xerox EIP 2.0+ devices with Job Limits enabled)	N/A		
Enforced login workflow (e.g. account selection) PaperCut MF can bring the common printing workflows to off-the-glass copying, allowing costs to be associated with departmental accounts rather than just a user.	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes		
Shared account selection from list Many organizations use named shared accounts. Where possible devices should offer the ability to select accounts from a visible list bypassing the need to use account codes.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes		
Shared account keyword search Expanding on the shared account selection from a list, the ideal interface should allow users to search accounts by keywords. This makes handling of 10,000 matters/projects easy.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes (Exact name search)	Yes	Yes		
Shared account selection by code/PIN Selecting an account from a list or by search is preferred by most users, however some devices have constrained interfaces and selecting a code (e.g. numeric number) may be more convenient.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
Shared account invoicing/comments options Provide functionality to invoice jobs and add comments.	Yes	Yes	Yes	Yes (i-Option only)	Yes	No	Yes	No	No	Yes	Yes		
Customizable logos / colors If an organization already has a corporate style or branding in place, why not go the extra step and implement this on their copier login screens?	Yes	Yes	Yes	Yes (i-Option only)	Yes	Yes	Yes (logos only)	No	No	Yes (for EIP 3.0+ devices)	Yes		
Track faxing Many devices include functionality for sending faxes. Organizations may want to account for these events and where possible PaperCut MF will allow for tracking of these to the user.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes (not supported on all MFPs, contact Xerox to check support)	Yes (not supported on all MFPs, contact Xerox to check support)	Yes (not supported on all MFPs, contact Xerox to check support)	N/A		
Track USB printing Newer devices are now giving users the ability to print resources stored on removable media such as USB drives. Where available PaperCut MF will allow for tracking of these print jobs to the user.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	N/A	N/A	Yes	Yes		
Track scanning (e.g. to email or USB memory stick) With many organizations implementing green practices it is becoming more common for users to scan a document to an electronic format rather than make another paper copy. Where possible PaperCut MF can track these scans to the user.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	N/A		
Auto-populate email when Scanning													
Auto-populate email when Scanning (From address)	Yes (for SDK 1.16 devices)	Yes (on OSA4+ devices)	Yes	Yes	No	Yes	Yes	No	Yes	Yes	N/A		
Auto-populate email when Scanning (To address)	Yes (for SDK 1.16 devices)	No	No	Yes	Yes	Yes (with 08 system code setting)	Yes (with 08 system code setting)	No	Yes (enabled with "Add to me" in Email Defaults settings)	Yes (enabled with "Add to me" in Email Defaults settings)	N/A		
Fine grained system access control Multi-function devices often have the capability of faxing and scanning. Organizations may want to allow free faxing and scanning. In this case the device can often be configured to allow access to functions without login.	Yes	No	No	No	No	No	No	Device dependent	Device dependent	Device dependent	Device dependent		

S – X	Samsung	Sharp OSA	Sharp OSA (HTML Browser n2.0+)	Sindoh	Toshiba eConnect	Toshiba SDK2	Toshiba V3	Xerox Network Accounting	Xerox Secure Access EIP 1.0+	Xerox Secure Access EIP 1.5+	Xerox (Secure Access EIP 1.5+) Print Only		
Secure Print Release / Find Me Printing After a user authenticates at a device, they should be able to release jobs from a hold/release queue or a virtual/"global" Find Me Printing queue.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
Release all jobs on login Shortcutting the process of selecting jobs held in the release queue by automatically releasing all print jobs on login/authentication.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
Release jobs selected from a list Displays a list of jobs that can be individually printed or cancelled.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes		
Block jobs being released to a printer reporting an error (PIE) Prevent users from releasing jobs on devices reporting an error.	Yes	Yes	Yes	No	Yes	Yes		No	No	Yes (for EIP 3.0+ devices)	Yes (for EIP 3.0+ devices)		
User authentication at device options Ideal solutions may be configured to offer users a choice of authentication options (e.g. if the user has left their card at home they can fall back to username and password login).													
Username and password authentication	Yes	Yes	Yes	Yes	Yes (Cannot use username and ID at the same time.)	Yes	Yes	Yes	Yes	Yes	Yes		
Id-only authentication	Yes	Yes	Yes	Yes	Yes (Cannot use username and ID at the same time.)	Yes	Yes	Yes	Yes	Yes	Yes		
Id + PIN authentication	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes		
Card-only authentication	Yes	Yes	Yes	Yes	Yes	Yes	Yes	N/A	Yes	Yes	Yes		
Card + PIN authentication	Yes	Yes	Yes	Yes	Yes	Yes	Yes	N/A	Yes	Yes	Yes		
Self-association of cards with existing user accounts	Yes	Yes	Yes	Yes	Yes	Yes	Yes	N/A	Yes	Yes	Yes		
Define or set PIN on first use/login	Yes	Yes	Yes	Yes (i-Option only)	Yes	No	Yes	No	Yes	Yes	Yes		
Allow anonymous access	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
Allow guest/anonymous access Authentication options can be configured together with the guest/anonymous access option so that copying is tracked against the anonymous user account.	No	Yes	Yes	Yes (i-Option only)	Yes	No	Yes	No	No	Yes	Yes		
Single Sign-On (SSO) Once a user is authenticated, SSO allows other MFP applications to re-use the user information (e.g. name, email, etc.). Applications may include 3 rd party scanning solutions or built-in MFP features. Support depends on the platform and application. Options include: Platform: Applications may access user info using SSO features of the MFP platform. PaperCut: No platform SSO exists. Applications may use PaperCut Device REST APIs to access the logged-in user details.	Platform	Platform	Platform	Platform	Platform	Platform	Platform	PaperCut	Platform	Platform	Platform		
Swipe to log out Allows users to use their swipe cards to log out of the device.	Yes	No	No	No	Yes	No	Yes	N/A	Yes	Yes	Yes		
Offline mode Enables the device to continue to be used when the PaperCut server is unavailable. Options include: Platform: Offline access is provided by the device platform. Offline activity is not tracked. PaperCut: Offline access is provided by the application. Offline activity is tracked. N/A: Offline access is not available.	N/A	Platform	Platform	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		

S – X	Samsung	Sharp OSA	Sharp OSA (HTML Browser n2.0+)	Sindoh	Toshiba eConnect	Toshiba SDK2	Toshiba V3	Xerox Network Accounting	Xerox Secure Access EIP 1.0+	Xerox Secure Access EIP 1.5+	Xerox (Secure Access EIP 1.5+) Print Only		
Extra Licensing Requirements Additional license/module may be required from the MFP vendor. Contact vendor for pricing is applicable.	No	Yes Sharp OSA	Yes Sharp OSA	No	Yes - eCP (eConnect Platform)	No	No	Yes - Network Accounting / JBA module	Yes - Network Accounting / JBA module	Yes - Network Accounting / JBA module	Yes - Network Accounting / JBA module		
Assisted setup Some devices may require installation assistance from trained/certified copier technician (e.g. service code setting changes)	No	No	No	Device dependent (RAM or firmware upgrade)	No	Yes	Yes	Yes	Yes	Yes	Yes		
Security rating (out of 5) Devices that do not follow best practice security and/or have known security issues such as lost data on power failure score low here. E.g. scores lower than 4 may not be appropriate for secure student environments. Scores based on security reviews.	4	4	4	4	4.5	4	4	3	4	4 (EIP 1.5 devices) 4.5 (EIP 2.0+ devices)	4 (EIP 1.5 devices) 4.5 (EIP 2.0+ devices)		
Install Time (minutes) Expected install and post install testing time for a technician experienced with both PaperCut and copier/hardware platform.	30	30	30	45	30	50	15	45	45	40	40		
Supported server operating systems PaperCut is full a cross-platform product and aims to support all hardware/software options in any combination. This lists the server OS's that are compatible with the solution.	Windows, Linux, Mac and Novell	Windows, Linux, Mac and Novell	Windows, Linux, Mac and Novell	Windows, Linux, Mac and Novell	Windows, Linux, Mac and Novell	Windows, Linux, Mac and Novell	Windows, Linux, Mac and Novell	Windows, Linux, Mac and Novell	Windows, Linux, Mac and Novell	Windows, Linux, Mac and Novell	Windows, Linux, Mac and Novell		
All character sets supported Determines whether device can support non-English/Latin characters. E.g. Chinese, Japanese, Korean, etc.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No (Latin characters only)	No (Latin characters only)	No (Latin characters only)	No (Latin characters only)		

Hardware	VCC Controller	Cartadis cPad	Cartadis CopiCode	Fast Release
Supported related brands (re-label & OEM) The embedded solution has been confirmed to work on the following re-labeled or OEM devices.				
Solution Type Details on the type of integration method used by the solution: Embedded: Code running on the device at firmware level. Onboard: Code interacting with the device via web services. Hardware: Device interaction via externally connected hardware. Hybrid: Code is a combination of other solution types (embedded, onboard, middleware).	Hardware	Hardware	Hardware	Hardware
Zero Stop Where possible, PaperCut MF will make use of a copier's ability to stop jobs while in progress when a user runs out of credit, reducing cost overruns.	Yes	Yes	Yes	N/A
Restrict color copying In many organizations it is desirable to limit users or groups of users to monochrome copying only.	No	Yes	Yes	N/A
Enforced login workflow (e.g. account selection) PaperCut MF can bring the common printing workflows to off-the-glass copying, allowing costs to be associated with departmental accounts rather than just a user.	Yes	Yes	Yes	N/A
Shared account selection from list Many organizations use named shared accounts. Where possible devices should offer the ability to select accounts from a visible list bypassing the need to use account codes.	Yes	Yes	Yes	N/A
Shared account keyword search Expanding on the shared account selection from a list, the ideal interface should allow users to search accounts by keywords. This makes handling of 10,000 matters/projects easy.	No	Yes	Yes	N/A
Share account selection by Code/PIN Selecting an account from a list or by search is preferred by most users, however some devices have constrained interfaces and selecting an account by a code (e.g. numeric number) may be more convenient.	Yes	Yes	Yes	N/A
Customizable logos / colors If an organization already has a corporate style or branding in place, why not go the extra step and implement this on their copier login screens?	No	Yes (with assistance from cPad distributor)	No	N/A
Track Faxing Many devices include functionality for sending Faxes. Organizations may want to account for these events and where possible PaperCut MF will allow for tracking of these to the user.	No	No	No	N/A
Track USB printing Newer devices are now giving users the ability to print resources stored on removable media such as USB drives. Where available PaperCut MF will allow for tracking of these print jobs to the user.	No	Dependent on settings of MFD	No	N/A
Track Scanning (e.g. to email or USB memory stick) With many organizations implementing green practices it is becoming more common for users to scan a document to an electronic format rather than make another paper copy. Where possible PaperCut MF can track these scans to the user.	No	No	No	N/A
Auto-populate email when Scanning (From address)	No	No	No	N/A
Auto-populate email when Scanning (To address)	No	No	No	N/A
Fine grained system access control Multi-function devices often have the capability of faxing and scanning. Organizations may want to allow free faxing and scanning. In this case the device can often be configured to allow access to functions without login.	N/A	N/A	N/A	N/A
Secure Print Release / Find-me After a user authenticates at a device, they should be able to release jobs from a hold-release queue or a global virtual find-me printing queue.	Yes	Yes	Yes	Yes

Hardware	VCC Controller	Cartadis cPad	Cartadis CopiCode	Fast Release
Release all jobs on login Short cutting the process of selecting jobs held in the release queue by simply allowing all print jobs to be automatically released on login/authentication.	Yes	Yes	Yes	Yes
Release jobs selected from a list Displays a list of jobs that can be individually printed or cancelled.	Yes	Yes	Yes	No
User authentication at device options Ideal solutions may be configured to offer users a choice of authentication options. (e.g. if the user has left their card at home they can fall back to username/password login)				
Username and Password authentication	Yes (VCC Alpha only)	Yes	Yes	No
ID only authentication	Yes	Yes	Yes	No
ID + Pin authentication	Yes	Yes	Yes	No
Card only authentication	Yes	Yes	Yes	Yes
Card + Pin authentication	Yes	Yes	Yes	No
Self-association of Cards with existing user account	Yes	Yes	Yes	No
Define or set PIN on first use/login	Yes	Yes	Yes	No
Supported Card Readers Many organizations already have existing card systems on-site ranging from magstripe through to RFID and Proximity. Where possible a choice of card reader should be offered so you can leverage existing cards for off-the-glass copying authentication.	Reader is built-in to device. See vendor documentation.	See vendor documentation	See vendor documentation	Network card readers from Elatec, RFideas. See Fast Release docs
Swipe to log out Allows users to use their swipe cards to log out of the device.	No	No	No	No
Offline mode Enables the device to continue to be used when the PaperCut server is unavailable. Options include: Platform: Offline access is provided by the device platform. Offline activity is not tracked. PaperCut: Offline access is provided by the application. Offline activity is tracked. N/A: Offline access is not available.	N/A	N/A	N/A	N/A
Extra Licensing Requirements Additional license/module may be required from the MFP vendor. Contact vendor for pricing is applicable.	Device dependent	Device dependent	Device dependent	No
Assisted setup Some devices may require installation assistance from trained/certified copier technician (e.g. service code setting changes)	Yes	Yes	Yes	No
Security rating (out of 5) Devices that do not follow best practice security and/or have known security issues such as lost data on power failure score low here. E.g. scores lower than 4 may not be appropriate for secure student environments. Scores based on security reviews.	5	5	5	4
Install Time (minutes) Expected install and post install testing time for a technician experienced with both PaperCut and copier/hardware platform.	Device dependent	Device dependent	Device dependent	30
Supported server operating systems PaperCut is full a cross-platform product and aims to support all hardware/software options in any combination. This lists the server OS's that are compatible with the solution.	Windows, Linux, Mac and Novell	Windows, Linux, Mac and Novell	Windows, Linux, Mac and Novell	Windows, Linux, Mac and Novell
All character sets supported	No (Latin characters only)	No (Latin characters only)	No (Latin characters only)	No (Latin characters only)