

Xerox Product Security

Data Protection: Image Overwrite, Encryption and Disk Removal



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Introduction

General Purpose and Audience

This document is intended to provide users of Xerox products accurate and actionable information to help them evaluate and manage risks associated with image data stored to disk drives or other non-volatile memory.

(Posted publicly at www.xerox.com/security)

Summary Information

Xerox copiers, printers and multifunction products are intelligent devices that contain a computer and the necessary software that allows them to accomplish the many productivity-enhancing tasks that have become so valuable to today's workplaces. These internal computers may have a disk drive or other non-volatile storage where image data is written during job processing, or where it may be stored for later reprint. From the introduction of the first digital products Xerox has recognized the risk of retained data being inappropriately recovered from non-volatile storage and built features and countermeasures into our devices to help customers safeguard their data.

Xerox has taken information security seriously for years. An excellent source for security information is www.xerox.com/security, where information including security bulletins and patch information, US-CERT advisories, white papers, and videos on what customers can and should be doing to mitigate security risks can be found. Xerox provides detailed information about internal product workflows and the algorithm used for image overwrite in Information Assurance Documents which are available for many products at the website or as requested for older products.

Different devices represent different levels of risk. It's axiomatic that as functionality increases so does the potential risk. For those devices, countermeasures are built into the machine to reduce the risk.

- Not all copiers have hard disk drives. Those that do not are not at risk.
- Some copiers and multifunction devices have hard disk drives, but do not use the hard disk drive for the copying function. These are also not at risk.
- Those copiers and multifunction devices that use hard disk drives for copying should have an "image overwrite" feature that destroys the copied image immediately. That function should be built in, (which Xerox does), or installable via a security kit. If neither solution exists for the product, it is at risk.
- Also, most copiers and multifunction devices that have hard disks include a disk encryption feature which encrypts all stored customer image data with the state-of-the art AES encryption algorithm.
- Xerox has developed a disk removal program so that prior to a device being returned a
 Xerox technician will remove the disks and leave them with the customer. This program
 charges a flat fee per machine for the service. Contact Xerox Customer Support for
 information on fees and availability in your geography.

Best Practices for Hard Drives

Disk encryption will effectively protect data at rest from unauthorized access. Image overwrite is effective at removing data from the hard drive once the data is no longer needed. Xerox recommends that the following features be enabled for products supporting Disk Encryption and the Image Overwrite feature.

- Disk Encryption Uses state-of-the-art AES 128-bit encryption to secure data at rest.
- On Demand Image Overwrite Executed prior to removal or as needed to remove all image data from disk or other non-volatile storage.
- Immediate Image Overwrite Automatically executed immediately after jobs are completed to remove image data from disk or other non-volatile storage.
- Scheduled Image Overwrite Automatic, daily overwrite of all image data from disk or other non-volatile storage including any pending jobs.

For highly classified data, or if no overwrite capability is available, removing and destroying the disk drive may be the appropriate safe quard.

Xerox does not offer sanitization or cleansing services for returned disk drives. Some returned disks may get overwritten as part of the remanufacturing process; however it is not possible to know what happens to a specific disk in any particular case.

Next Steps

The table below will help you to identify Xerox products containing disks or other non-volatile storage and whether those products include image overwrite capability and/or disk encryption.

You'll need to assess the risk for your environment and determine whether hard drive removal or image overwrite is appropriate.

Instructions on how to install or enable image overwrite or disk encryption can be found in the product documentation which is available online at www.xerox.com in the 'Support and Drivers' link. These features can be administered at the local user interface or using Centreware Internet Services (CWIS).

Xerox offers technical and professional services to assist you.

Please contact your local Xerox sales representative or call **1-800-ASK-XEROX** (**1-800-275-9376 x773**) (8 AM - 8 PM ET, MON - FRI). Also you can check our website http://www.xerox.com/about-xerox/customer-training/enus.html for training and consulting help.

Product Designation	Detailed Security Information	Overwrite Default enablement	Disk Encryption Default Enablement	Recommended Action prior to return or disposal
Copy Centre C20 CopyCentre C118 Phaser 3100MFP, 3200MFP, 3300MFP Phaser 3140, 3155B, 3160B, 3160N Phaser 3150 Phaser 3425, 3428 Phaser 3250 Phaser 3600 Phaser 3600 Phaser 6110MFP Phaser 6121MFP Phaser 6128MFP Phaser 6128MFP Phaser 6180, 6180MFP WorkCentre M20, M20i WorkCentre M15 WorkCentre M118, M118i WorkCentre PE120, PE120i	The products listed do not contain a hard drive and are not vulnerable to information theft from the hard drive. *Note: The WC4118 has battery back-up for image memory. Remove power for 72 hours to allow battery to drain, dissipating any residual image data.	Not available		
WorkCentre Pro 215 WorkCentre Pro 412 WorkCentre Pro 416 WorkCentre Pro 421 WorkCentre 3119 WorkCentre 4118* WorkCentre 4150/C WorkCentre 3210, 3220 Xerox 214/212 Digital Printer/Copier				
Phaser 6280	The product listed contains an optional hard drive used for print operations. Neither Image Overwrite nor disk encryption of the hard disk is available.	Not available	Not available	If optional hard drive is present, consider having disk removed.

Product Designation	Detailed Security Information	Overwrite Default enablement	Disk Encryption Default Enablement	Recommended Action prior to return or disposal
WorkCentre 5030/5050* WorkCentre 5632, 5638, 5645, 5655, 5665, 5675, 5687** WorkCentre 5735, 5740, 5745, 5755, 5765, 5775, 5790**	The products listed do not use a hard drive for Copy jobs. The WorkCentre products use a hard disk for print and scan operations. *Image Overwrite is included as a standard feature in the WC5030/5050 and WC5135/5150. Disk encryption is included as a standard feature in the WC 5030/5050 with system software version 5.004.44.000 or greater. ** Image Overwrite, which allows overwriting of the image data upon job completion, on demand or on a programmed recurrence schedule, and disk encryption, which encrypts the image store areas on the hard disks, are included as standard features on the WorkCentre 56XX and 57XX products. Applies only if the Fax accessory is present: WC5130/5150 - Fax nonvolatile memory is not overwritten; WC5135/5150 - Fax nonvolatile memory is overwritten if Image Overwrite is installed and enabled; WC5600 and 5700 series - Fax non-volatile memory is overwritten if Image Overwriten if Image Overwrite is enabled.	WorkCentre 5030/5050: Uninstalled. Enabled upon installation. Contact Xerox Customer Support to obtain installation codes. WorkCentre 5600 series: Prior to system SW version 21.120.031.000: Uninstalled, Enabled upon installation, Contact Xerox Customer Support to obtain installation codes; After system SW version 21.120.031.000 or 25.054.010.000: Installed and Enabled. WorkCentre 5135/5150; WorkCentre 5700 series: Installed and Disabled.	WorkCentre 5030/5050: Prior to system SW version 05.004.44.000, not available. After system SW version 05.004.44.000, installed and enabled. All others: Installed and enabled.	If features are present, run On-Demand Image Overwrite prior to return. Otherwise, call the Xerox Customer Support Center to check on availability or to schedule disk removal.

Product Designation	Detailed Security Information	Overwrite Default enablement	Disk Encryption Default Enablement	Recommended Action prior to return or disposal
CopyCentre/WorkCentre/ WorkCentre Pro 232, 238, 245, 255, 265, 275* CopyCentre C35, C45, C55 WorkCentre M35, M45, M55 WorkCentre Pro 35, 45, 55 CopyCentre C165, C175 WorkCentre M165, M175 WorkCentre Pro 165, 175 WorkCentre BookMark 40/55	The products listed do not use a hard drive for Copy jobs. The WorkCentre products use a hard disk for print and scan operations. An Image Overwrite optional accessory is available for these products which allow overwriting of the image data upon job completion or on demand. *On selected releases the Image Disk Overwrite can be configured to run on a regular schedule. Applies only if the Fax accessory is present: Fax nonvolatile memory is not overwritten.	Enabled upon installation. Contact Xerox Customer Support to obtain the Image Overwrite accessory.	Not available, except for 200-series. Disk encryption is included as a standard feature in the CC/WC/WC Pro 200-series with system software version 12/13/14.60.17. 000 or greater. It is enabled by default and cannot be disabled.	If features are present, run On-Demand Image Overwrite prior to return. Otherwise, call the Xerox Customer Support Center to check on availability or to schedule disk removal.
ColorQube 9201, 9202, 9203 WorkCentre 6400 WorkCentre 7655, 7665, 7675 WorkCentre 7755, 7765, 7775	The products listed use a hard drive for all imaging functions. Image Overwrite, which allows overwriting of the image data upon job completion or on demand, and disk encryption, which encrypts the image store areas on the hard disks, are included as standard features. Applies only if the Fax accessory is present: CQ9200 and WC7700 series - Fax non-volatile memory is overwritten if Image Overwrite is installed and enabled; WC6400 and 7600 series - Fax non-volatile memory is not overwritten.	CQ92XX and WC77XX series: Installed and Enabled WC76XX series: Enabled upon installation. Contact Xerox Customer Support to obtain installation codes. WorkCentre 6400: Installed but disabled by default	Installed and Enabled WorkCentre 6400: Installed but disabled by default	Run On-Demand Image Overwrite prior to return. Consider disk removal for complete assurance.
CopyCentre C2128/C2636/C3545* WorkCentre Pro C2128/C2636/C3545* CopyCentre Pro C32, C40 WorkCentre Pro 32, 40 CopyCentre C65/C75/C90 WorkCentre Pro 65/75/90	The products listed use a hard drive for all imaging functions. An Image Overwrite optional accessory is available for these products which allow overwriting of the image data upon job completion or on demand. Applies only if the Fax accessory is present: Fax nonvolatile memory is not overwritten.	Not installed. Enabled upon installation. Contact Xerox Customer Support to obtain installation codes.	Not available	If features are present, run On-Demand Image Overwrite prior to return. Otherwise, call the Xerox Customer Support Center to check on availability or to schedule disk removal.

Product Designation	Detailed Security Information	Overwrite Default enablement	Disk Encryption Default	Recommended Action prior to return or
WorkCentre 7120 WorkCentre 7132 WorkCentre 7232, 7242 WorkCentre 7228, 7235, 7245	The products listed use a hard drive for all imaging functions. An Image Overwrite optional accessory is available for these products which allow overwriting of the image data upon job completion or on demand. Applies only if the Fax accessory is present: Fax non-volatile memory is overwritten if Image Overwrite is installed and enabled.	Uninstalled. Enabled upon installation. Contact Xerox Customer Support to obtain the Data Security Kit.	Uninstalled. Enabled upon installation. Contact Xerox Customer Support to obtain the Data Security Kit.	No special action if features were being used. If features were not being used, call the Xerox Customer Support Center to check on availability or to schedule disk removal.
WorkCentre 7328/7335/7345/7346 WorkCentre 7425/7428/7435*	The products listed use a hard drive for all imaging functions. Image Overwrite is included as a standard feature on these products. *Disk encryption, which encrypts the image store areas on the hard disks, is included as a standard feature. Applies only if the Fax accessory is present: Fax non-volatile memory is overwritten if Image Overwrite is installed and enabled.	Installed and Enabled	Installed and Enabled	No special action if features were being used. If features were not being used, call the Xerox Customer Support Center to check on availability or to schedule disk removal.
Phaser 3635* WorkCentre 4150S, 4150X, 4150XF** WorkCentre 4250S/4250X/4250XF* WorkCentre 4260S/4260X/4260XF*	The products listed use a hard drive for Copy operations involving landscape/stapled jobs only. The products listed use a hard drive for print and scan operations. * Image Overwrite is included as a standard feature on these products. * These products include disk encryption. ** Image Overwrite is a chargeable option on the WC4150 products.	Installed, but disabled by default; can be enabled using CWIS	On those products that include disk encryption, it is permanently enabled and cannot be disabled.	If features are present, run On-Demand Image Overwrite prior to return. Otherwise, call the Xerox Customer Support Center to check on availability or to schedule disk removal.

Product Designation	Detailed Security Information	Overwrite Default enablement	Disk Encryption Default Enablement	Recommended Action prior to return or disposal
CopyCentre C123, C128, 133 WorkCentre M123, M128, 133 WorkCentre Pro 123, 128, 133* WorkCentre 5222/5225/5230* WorkCentre 5016, 5020	The CopyCentre and WorkCentre products do not use a hard drive for copy, unless the optional hard drive option has been installed. The WorkCentre Pro products use a hard drive for print and scan operations. * A Data Security Kit that includes both image overwrite and disk encryption is available for the products indicated.	WorkCentre Pro 123, 128, 133: Image Overwrite must be enabled after the option is installed. Contact Xerox Customer Support to obtain installation codes. WorkCentre 5200-series: Enabled upon installation.	WorkCentre Pro 123, 128, 133: Disk encryption must be enabled after the option is installed. Contact Xerox Customer Support to obtain installation codes. WorkCentre 5200-series: Enabled upon installation.	No special action if features were being used. If features were not being used, call the Xerox Customer Support Center to check on availability or to schedule disk removal.
Phaser 7750, 7760 Phaser 8560MFP, 8860MFP WorkCentre C2424	The products listed use a hard drive for some imaging functions such as any stored job format, or collated jobs. Standard print jobs do not write to the disk. These devices include Image Overwrite as a standard feature. Image Overwrite can be enabled via the security settings on the device's web page.	Installed; disabled by default	Encryption is available for the 7760 and 8560MFP, and is enabled via FW update, the default state is no encryption. Contact Xerox Customer Support to obtain the update.	If features are present, run On-Demand Image Overwrite prior to return. Otherwise, call the Xerox Customer Support Center to check on availability or to schedule disk removal.
Phaser 4500 Phaser 4510 Phaser 5500 Phaser 5550 Phaser 6120 Phaser 6350, 6360 Phaser 7300 Phaser 7400 Phaser 7500 Phaser 8550, 8560, 8860	These Phaser products do not use a hard drive for printing, unless the optional hard drive option has been installed. The hard drive option includes the Image Overwrite feature. Configure the option via the device Web Page (Properties) or the Local User Interface (Tools) to enable or disable Image Overwrite.	Installed; not enabled by default	Encryption is available for the 4510, 5550, and 6360, and is enabled via FW update, the default state is no encryption. Contact Xerox Customer Support to obtain the update.	If features are present, run On-Demand Image Overwrite prior to return. Otherwise, call the Xerox Customer Support Center to check on availability or to schedule disk removal.

Product Designation	Detailed Security Information	Overwrite Default enablement	Disk Encryption Default Enablement	Recommended Action prior to return or disposal
WorkCentre C226	This WorkCentre product uses a hard drive for all imaging functions. A Data Security Kit chargeable option is available that enables Image Overwrite and hard drive encryption.	Enabled when Data Security Kit is installed. Contact Xerox Customer Support to obtain the kit.	Not available	No special action if features were being used. If features were not being used, call the Xerox Customer Support Center to check on availability or to schedule disk removal.
DocuColor 12	This DocuColor product does not use a hard drive to copy, unless the electronic collation option has been purchased. Copy images are not transferred to Network controllers offered with this product.	Not available	Not available	If optional hard drive is present, consider having disk removed.
DocuColor 240, 250 DocuColor 242, 252, 260	This DocuColor product uses a hard drive for all imaging functions. The product includes Image Overwrite and Disk Encryption features. The Image Overwrite option allows overwriting of image date upon job completion. Network controllers offered with this product may offer various options for Image Overwrite, Encryption or Removable Hard Disk. Please contact your local Xerox representative for more information.	Enabled by default	Encryption of image data in the print engine is not enabled.	No special action if features were being used. If features were not being used, call the Xerox Customer Support Center to check on availability or to schedule disk removal.
DocuColor 3535	This DocuColor product uses a hard drive for all imaging functions. Network controllers offered with this product may offer various options for Image Overwrite, Encryption or Removable Hard Disk. Please contact your local Xerox representative for more information.	Not available	Not available	Consider having disk removed.

Product Designation	Detailed Security Information	Overwrite Default enablement	Disk Encryption Default Enablement	Recommended Action prior to return or disposal
Document Centre 220, 230, 332, 340, 420, 426	These Document Centre products do not use a hard drive, unless the hard drive option has been installed. If the hard drive option is not installed the image data is buffered in volatile memory and will either be overwritten by subsequent jobs or dissipated when power is removed.	Not available	Not available	If optional hard drive is present, consider having disk removed.
Document Centre 240, 255, 265, 425, 430, 432, 440, 460 Digital Bookmark	These Document Centre products use a hard drive for all imaging functions. Disk overwrite is not available for these products.	Not available	Not available	Consider having disk(s) removed.
WorkCentre 423, 428	These WorkCentre products use a hard drive for all imaging functions. Disk overwrite is not available for these products.	Not available	Not available	Consider having disk(s) removed.
Document Centre 460ST, 470ST, 480ST, 490ST	These Document Centre products use a hard drive for all imaging functions. An Image Overwrite accessory for the Network Controller hard disk only, is available for these products, which allows overwriting of the image data upon job completion or on demand. A Removable Hard Drive option is also available.	Not installed Not enabled Contact Xerox Customer Support to obtain the Image Overwrite and/or Removable Hard Drive accessories.	Not available	Consider having disk(s) removed.
Document Centre 535, 545, 555	The Digital Copier configurations of these Document Centre products do not use a hard drive, unless the hard drive option has been installed. The Network Multifunction System configurations of these Document Centre products use a hard drive for all imaging functions. There is an Image Overwrite option for this configuration that allows overwriting of the image data upon job completion or on demand.	Not installed Not enabled Contact Xerox Customer Support to obtain the Image Overwrite accessory.	Not available	Consider having disk removed.

Product Designation	Detailed Security Information	Overwrite Default enablement	Disk Encryption Default Enablement	Recommended Action prior to return or disposal
DocuColor 1632, 2240 WorkCentre M24	These products use a hard drive for all imaging functions.	Not available	Not available	Consider having disk removed.
Nuvera 100/120 Digital Copier/Printer and Production System	Print Engine: All models of Nuvera print engines include one or more hard drives.	Overwrite is not enabled by default. Contact Xerox	Not available	Consider having disk(s) removed.
Nuvera 100/120/144 EA/MX Digital Production System Nuvera 200/288 EA/MX Perfecting Production System	If the optional Data Overwrite feature for DocuSP/FFPS is installed the Image Disk(s) in the print engine can be securely Overwritten.	Customer Support to obtain the Overwrite kit and have it installed.		
	An optional Removable Hard Drive Kit may be available. Please contact your local Xerox representative for information.			
	Digital Front End: This product includes an embedded DocuSP or FreeFlow Print Service controller that captures Image data on the Hard drive. Image Overwrite and other security features are available. Refer to information provided elsewhere in this document on the DocuSP/FreeFlow Print Server.			
iGen3 90/110 Digital Production Press iGen4 90/110 Digital production Press	Print Engine: All models of iGen print engines include one or more hard drives where image data may be captured.	Not available	Not available	Consider having disk(s) removed.
production ress	An optional Removable Hard Drive Kit may be available. Please contact your local Xerox representative for information.			
	Digital Front End: This product is offered with a choice of DFEs. All of them capture Image Data on internal hard drive(s). Image Overwrite and other security features may be available. Refer to information provided elsewhere in this document on the DocuSP/FreeFlow Print Server, EFI Fiery Server, and Creo Spire Server.			

Product Designation	Detailed Security Information	Overwrite Default enablement	Disk Encryption Default Enablement	Recommended Action prior to return or disposal
Xerox 700 Digital Color Press	Print Engine: this device uses a hard drive for all imaging functions. The product includes Image Overwrite and Disk Encryption features. The Image Overwrite option allows overwriting of Image data upon job completion. An optional Removable Hard Drive Kit may be available. Please contact your local Xerox representative for information. Digital Front End: This product is offered with a choice of DFEs. All of them capture Image Data on internal hard drive(s). Image Overwrite and other security features may be available. Refer to information provided elsewhere in this document on the DocuSP/FreeFlow Print Server, EFI Fiery Server, and Creo Spire Server.	Installed and enabled by default	Installed but not enabled.	No special action if features were being used. If features were not being used, call the Xerox Customer Support Center to check on availability or to schedule disk removal.
Xerox 4110/4590 Copier/Printer Xerox 4110/4590 Enterprise Print System	Print Engine: These devices use a hard drive for all imaging functions. An optional Security kit that includes Image Overwrite and Encryption Features is available. Please contact your local Xerox representative for information. An optional Removable Hard Drive Kit may be available. Please contact your local Xerox representative for information. Digital Front End: This product is offered with a choice of DFEs. All of them capture Image Data on internal hard drive(s). Image Overwrite and other security features may be available. Refer to information provided elsewhere in this document on the DocuSP/FreeFlow Print Server, EFI Fiery Server, and Creo Spire Server.	Overwrite is not enabled by default. Contact Xerox Customer Support to obtain the Security kit and have it installed.	Encryption of image data in the print engine is not enabled by default. Contact Xerox Customer Support to obtain the Security kit and have it installed.	No special action if features were present and being used. If features were not being used, call the Xerox Customer Support Center to check on availability or to schedule disk removal.

Product Designation	Detailed Security Information	Overwrite Default enablement	Disk Encryption Default Enablement	Recommended Action prior to return or disposal
Xerox 4112/4127 Copier/Printer & Enterprise Printing System Xerox 4595 Digital Copier/Printer	Print Engine: These devices use a hard drive for all imaging functions. An optional Security kit that includes Image Overwrite and Encryption Features is available. Please contact your local Xerox representative for information. An optional Removable Hard Drive Kit may be available. Please contact your local Xerox representative for information. Digital Front End: This product is offered with a choice of DFEs. All of them capture Image Data on internal hard drive(s). Image Overwrite and other security features may be available. Refer to information provided elsewhere in this document on the DocuSP/FreeFlow Print Server, EFI Fiery Server, and Creo Spire Server.	When the kit is installed, Overwrite is enabled by default. Contact Xerox Customer Support to obtain the Security kit and have it installed.	Encryption of image data in the print engine is not enabled by default. Contact Xerox Customer Support to obtain the Security kit and have it installed.	No special action if features were being used. If features were not being used, call the Xerox Customer Support Center to check on availability or to schedule disk removal.
DocuColor 2045/2060 Digital Color Press DocuColor 5252 Digital Color Press DocuColor 6060 Digital Color Press	Print Engine: These print engines include an Image Disk. Data is stored in a proprietary format. An optional Image Overwrite Graphics kit is available. This is a manual overwrite process. Contact your local Xerox representative for information. Digital Front End: This product is offered with a choice of DFEs. All of them capture Image Data on internal hard drive(s). Image Overwrite and other security features may be available. Refer to information provided elsewhere in this document on the DocuSP/FreeFlow Print Server, EFI Fiery Server, and Creo Spire Server.	Overwrite is not enabled by default. Contact Xerox Customer Support to obtain the Overwrite Graphics kit and have it installed.	Not available	If Image Graphics Overwrite kit is present, run this manual overwrite process prior to return. Otherwise, call the Xerox Customer Support Center to schedule disk removal.

Product Designation	Detailed Security Information	Overwrite Default enablement	Disk Encryption Default Enablement	Recommended Action prior to return or disposal
DocuColor 5000 DocuColor 7000/8000 Digital Press DocuColor 7000AP/8000AP Digital Color Press DocuColor 7002/8002 Digital Color Press	Print Engine: These devices do not include an Image disk. The DocuColor 5000 has a User Interface platform (PCUI) that does include a Hard Drive, but no image data is ever stored on it. Overwrite is not needed. Digital Front End: This product is offered with a choice of DFEs. All of them capture Image Data on internal hard drive(s). Image Overwrite and other security features may be available. Refer to information provided elsewhere in this document on the DocuSP/FreeFlow Print Server, EFI Fiery Server, and Creo Spire Server.	Not available	Not available	No special action is needed for the se print engines.
DocuPrint 65 Laser Printer DocuTech 65 Publisher DocuPrint 75/90 Digital Printer DocuTech 75/90 Digital Printer DocuPrint 75 MICR DocuPrint 75MX EPS Digital Printer	Print Engine: These devices include an Image disk. Overwrite software is available. Please contact your local Xerox representative for information. Removable HD kits are not available for these print engines. Digital Front End: This product includes an embedded DocuSP controller that captures Image data on the internal hard drive. Refer to information provided elsewhere in this document on the DocuSP/FreeFlow Print Server.	Overwrite is not enabled by default. Contact Xerox Customer Support to obtain the Overwrite kit and have it installed.	Not available	Consider having disk(s) removed.
DocuPrint 4635 NPS/IPS DocuPrint 4090 NPS/IPS DocuPrint 4850/4890 NPS/IPS DocuPrint 92C NPS/IPS DocuPrint 96 NPS/IPS/MX DocuPrint 180 IPS MX Printer DocuPrint 180 NPS MX Printer Note: there may be variants of the above which also include the IPS/NPS controller.	Print Engine: These devices do not include an image disk. Digital Front End: These printers include an NPS/IPS embedded controller which includes one or more hard drives where Image data is stored. Refer to information provided elsewhere on the NPS/IPS embedded controllers.	Not available	Not available	No special action is needed for these print engines.

Product Designation	Detailed Security Information	Overwrite Default enablement	Disk Encryption Default Enablement	Recommended Action prior to return or disposal
4050 4090 4135 4250 4650 4850 4890 4890 HLC 8700 LPS 9700 LPS 9790 LPS DocuPrint 92 LPS DocuPrint 92C LPS DocuPrint 96 LPS DocuPrint 180 LPS DocuPrint 4090 LPS DocuPrint 4850 LPS	Print Engine: These devices do not include an image disk. Digital Front End: These printers include an embedded "J-11" Digital Front End that includes a hard drive that captures Image data.	Not available	Not available	No special action is needed for these print engines.
of the above printers. "J-11 Controller"	Digital Front End: The J-11 controller is a digital front end that includes a hard drive to process print resources and Image data. Production PostScript Option (PPO) for the J-11 controller included a second Digital Front End with an Image disk for image processing and a second "Shared Disk" to transfer Image data to the J-11 controller.	Not available	Not available	Consider having disk(s) removed.
DocuPrint 155/180 EPS & MX Printer DocuPrint 100/115/135 EPS and MX Printer	Print Engine: These devices do not include an image disk. Digital Front End: This product includes a DocuSP/FreeFlow Print Server that captures Image data on the hard drive. Data Overwrite and other security features are available. Refer to information provided elsewhere in this document on the DocuSP/FreeFlow Print Server.	Not available	Not available	No action is needed for these print engines.

Product Designation	Detailed Security Information	Overwrite Default enablement	Disk Encryption Default Enablement	Recommended Action prior to return or disposal
DocuPrint 350/424/500/525/7000/850/1 000/1050 Continuous Feed Transactional Printer	Print Engine: Continuous Feed print engines use the "Stampa" engine controller. There are hard drives which do not capture image data, unless	Not available	Not available	Consider having the disk(s) removed.
Xerox 495 Continuous Feed Printer	special diagnostic functions are enabled by the Xerox Service			
Xerox 650/1300 Continuous Feed Printer Note: there may be additional models of Xerox-sold Continuous Feed printers not listed here. Please contact your Xerox Support representative for security-related questions about these products.	engineer. Digital Front End: Choices of Digital Front Ends include the DocuSP/FreeFlow Print Server (FFPS). When this configuration is installed an additional subsystem called the "DP/CF Publisher" provides a bridge between the DocuSP/FFPS system, and the Print Engine. The DP/CF Publisher platform includes an Image Disk. Data overwrite is not available for DP/CF Publisher Image Disk.			

Product Designation	Detailed Security Information	Overwrite Default	Disk Encryption	Recommended Action prior to
		enablement	Default Enablement	return or disposal
DocuSP/FreeFlow Print Servers (FFPS)	Digital Front End: The DocuSP or FreeFlow Print Server (FFPS) captures customer jobs, print resources, and Image data on one or more hard drives. When DocuSP/FFPS is embedded with the printer, the optional Data Overwrite feature will Ovewrite the print engine's Image Disk. This is true for DP 65/75/90 printers, and the Nuvera family of printers. Xerox offers the following options for DocuSP/FreeFlow Printer Server products; please contact your local Xerox representative for information. - Optional Removable Hard drive Kit so drives may be stored in a secure location - Optional On-Demand Data Overwrite feature for DocuSP 3.8 and later, and FFPS 6.x and later. Note: With the FreeFlow Print Server 7.x software, the feature is a no-charge option. Note: When DocuSP/FFPS is embedded with the DP65/75/90 printers or the Nuvera printers, the optional Data Overwrite feature will Overwrite the print engine's internal Image Disk. It does not perform this function for any other print engine.	Overwrite is not enabled by default. For DocuSP or FFPS 6.x contact Customer Support to obtain the Overwrite kit and have it installed. For FFPS 7.x, contact Xerox Customer Support to have the Overwrite kit installed.	Not available	Consider having the disk(s) removed.
NPS/IPS embedded controller	Digital Front End: The NPS and IPS embedded digital controllers capture image data.	Not available.	Not available	Consider having disk(s) removed.
DocuTech Production Publisher Model 90 and 135 DocuTech 135 Printer	Print Engine: These printers include an embedded proprietary controller with one or more hard drives which store Image Data.	Not available	Not available	Consider having disk(s) removed.
	Digital Front End: An optional Network Controller/Front End includes one or more hard drives that store image data.			

Product Designation	Detailed Security Information	Overwrite Default enablement	Disk Encryption Default Enablement	Recommended Action prior to return or disposal
Xerox 5090/5090S Copier Xerox 5390 Copier Xerox 5690 Copier	Print Engine: These Optical Copier devices do not include an image disk. Overwrite software is not needed. NOTE: These copiers may include an optional Touch Screen User Interface module, which includes an embedded proprietary controller and hard drive. However, this hard drive only stores executable software. The Image Path is entirely "analog electronics" and the Image cannot be captured on this hard drive. Overwrite feature is not needed.	Not available	Not available	No special action.
DocuTech 128/155/180 Highlight Color System DocuTech 6100 Publisher DocuTech 6115/6135 Printer DocuTech 6155/6180 Printer	Print Engine: These devices do not include an image disk. Digital Front End: This product includes a DocuSP/FreeFlow Print Server that captures Image data on the hard drive. Data Overwrite and other security features are available. Refer to information provided elsewhere in this document on the DocuSP/FreeFlow Print Server.	Not available	Not available	No action is needed for these print engines.
EFI Fiery , and Fiery Controllers and Servers	Digital Front End: All Fiery controllers and Servers include a hard drive where image data may be stored. Fiery System 6 and above includes an optional "Secure Erase" feature which must be enabled by the System Administrator. Fiery "bustled" DFE software Version 2.0 and above supports an optional Secure Erase kit. Contact your local Xerox representative for information. Depending on the specific product code, the Secure Erase feature might be a chargeable option. Contact your local Xerox representative for information.	Overwrite is not enabled by default. If the Secure Erase feature is not included in the product, contact Xerox Customer Support to obtain the Secure Erase kit and have it installed.	Not available	Consider having disk(s) removed.

Product Designation	Detailed Security Information	Overwrite	Disk	Recommended
		Default enablement	Encryption Default Enablement	Action prior to return or disposal
Creo Color Servers, Creo Spire	Digital Front End: These Print Servers include a hard drive where Image data is captured. Creo CX software as indicated in the User Documentation includes the "Disk Wipe" utility. Note: The system administrator must ensure that Symantec Norton Utilities software is not installed on the system; the Disk Wipe utility does not function properly when this software is present. FreeFlow Application Suite:	Overwrite is not enabled by default. If the Disk Wipe feature is not included in the product, contact Xerox Customer Support to obtain the Disk Wipe kit and have it installed.	Not available	Run Disk Wipe or consider having disk(s) removed.
FreeFlow Application Suite products FreeFlow Makeready FreeFlow Process Manager FreeFlow Express to Print FreeFlow Output Manager FreeFlow Web Services	these software packages are installed on standard-issue Windows PCs, which include hard drives that store Image data. PCs may be provided by the customer or purchased/leased from Xerox. Security of the software and data on these PCs is the responsibility of the customer. The customer is responsible for securely erasing or Overwriting these files when they are no longer needed, and before any leased PCs are returned to Xerox. 3 rd party software is available to overwrite hard drives on Windows PCs. Numerous removable hard drive solutions are available for a number of Windows PCs.	Not available	Not available	Dispose of disks according to your standard policies for PC's.
Xerox Wide Format Scanners: Wide Format Scan System 6204 Scanner 6604 Scanner 6279 Scanner	Wide Format Scanners: These devices do not include a hard drive. Overwrite is not needed.	Not available	Not available	No special action.
Xerox Wide Format Printer and Copier Systems: 510, 721, 6204, 6604, 6605, 6050A, 6030, 6622	Wide Format Printers and Copiers: These devices do not include a hard drive. Overwrite is not needed.	Not available	Not available	No special action.

Product Designation	Detailed Security Information	Overwrite Default enablement	Disk Encryption Default Enablement	Recommended Action prior to return or disposal
Wide Format "Basic Print Service"	Digital Front End: This product includes a single hard drive where Image data stored.	Not available	Not available	Consider having disk removed.
Xerox Accxes Controller FreeFlow Accxes Print Server	Digital Front End: This product includes a single hard drive where Image data is captured. An optional Image Overwrite feature is available which performs both On Demand and Immediate Image Secure Overwrite. An optional Removable Hard Drive kit is available. Contact your local Xerox representative for information.	Overwrite is not enabled by default. Contact Xerox Customer Support to obtain the Overwrite kit and have it installed.	Not available	If features are present, run On-Demand Image Overwrite prior to return. Otherwise, call the Xerox Customer Support Center to check on availability or to schedule disk removal.

Additional Information

For additional information or clarification on any of the product information given here, contact your local Xerox Customer Support Centre (see table below); or visit the Xerox Website.

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