

# **Lexmark Cloud Services**

Version 2019R3

**Security and Privacy White Paper** 

January 2020 www.lexmark.com

# Contents

Overview	4
Frequently asked questions	4
Security	6
Physical and operational security	6
Network security	6
Application security	6
Authentication	7
Security policies and procedures	8
Intrusion detection	8
Security logs	8
Incident management	8
Reliability and backup	e
Disaster recovery	g
Analytics	9
Information collected by Lexmark	10
Privacy	11
Data segregation	11
Control of processing	11
Data security and encryption	11
Data retention policy	12
Information collected by Lexmark	10
Cloud Print Management	14
Cloud job submission	14
Cloud job release	
Hybrid job submission	16
Hybrid job release	17
Cloud Fleet Management	19
Printer discovery	
Printer configuration update	

Regulatory compliance	
Summary	23
Notices	24
Edition notice	24
Index	25

Overview 4

# **Overview**

As cloud-based software solutions become prominent, discussions continue to revolve around security. When organizations implement a cloud-based solution, they put their trust in the solution provider to protect their data and deliver a secure platform.

Lexmark takes this trust seriously.

Cloud Print Management lets users print securely, retrieve documents, monitor print behavior, and view statistics. Users can also manage the printer configurations and monitor the status of printers.

Cloud Fleet Management lets partner and organization administrators manage their fleets, create and deploy printer configurations, monitor the status of printers, and view statistics.

The solution offers scalability and cost-effectiveness of print and on-demand content services, while maintaining the same levels of security, control, and performance.

This document is intended for Lexmark customers and Lexmark partners who are interested in understanding how the information assets are handled within Lexmark Cloud Services. The document also contains information on how the solution interacts with the information systems of the customer.

## Frequently asked questions

#### How is customer data encrypted?

Data waiting to be uploaded to Lexmark Cloud Services is protected at rest using AES-256 encryption. While the data is in transit to Lexmark Cloud, Transport Layer Security (TLS) protects the data. Once the incoming print data is converted to a printer-ready format, it is again encrypted using an AES/CBC 256-bit encryption key unique to each file.

For Hybrid Print Management, data is never sent to Lexmark but is encrypted at rest, similar to how it is encrypted in Lexmark Cloud.

#### How are users authenticated?

User authentication and authorization are done using a token-based OAuth protocol for client access during the print job submission and release, device discovery, and enrollment processes.

For seamless identity management, Lexmark Cloud Services supports single sign-on identity federation as a SAML 2.0—compliant provider using OAuth protocols. Lexmark Cloud Services can integrate securely with your existing identity management solution and does not store user credentials.

If federation with a SAML 2.0–compliant provider is not an option, then Lexmark Cloud Services manages the user credentials in a secure cloud-based authentication system.

### How can customers audit user activity?

Administrators can track metrics that give them a clear picture of the print behavior of their users. You can view a summary of these statistics in the Lexmark Cloud Services web portal. You can also export data to a CSV file.

Overview 5

### Who at Lexmark has access to customer data?

The data that Lexmark Cloud Services collects is accessible only to a select group within Lexmark IT Operations, and only for maintenance and troubleshooting purposes. An extensive approval process is followed when data must be accessed, and audit trails are documented. Strict adherence to data privacy is always held. For more information, see <u>"Security policies and procedures" on page 8</u>.

# **Security**

# Physical and operational security

Lexmark Cloud Services is instantiated in data centers in the United States and Germany that comply with ISO 127001 and SSAE 16 standards.

## **Network security**

Lexmark Cloud Services exists inside a Virtual Private Cloud (VPC). It is a secure network logically isolated from other virtual networks in the hosting provider using private IP addressing, in accordance with RFC 1918.

- Access to the services within the VPC is controlled through security groups that allow traffic only on specific ports for both inbound and outbound traffic.
- Access to the VPC configuration and services configuration is controlled using the hosting provider management tools.
- Outgoing traffic is signed using a certificate from a trusted root certificate authority (CA).
- The Lexmark Network Operations Center (NOC) monitors all incoming and outgoing traffic for the VPC.
- The Network Intrusion Detection System (NIDS) monitors all network traffic within the VPC. The NIDS immediately notifies the NOC if any issue is detected.

## **Application security**

Security is incorporated into every aspect of the development and the delivery of Lexmark Cloud Services.

- Software design—Potential security issues are identified as early as possible. Design documentation is peer-reviewed.
- **Code development**—Static code analysis tools are used to identify security issues. Peer code reviews are held on all changes.
- Quality assurance—Manual and automated security testing identifies potential security issues.
- Before release—Independent security service providers analyze and monitor Lexmark Cloud Services for potential security risks.

Lexmark Cloud Services provides two token-based authentication options:

- **Single sign-on federated authentication**—Lexmark Cloud Services provides single sign-on identity federation as a SAML 2.0—compliant provider using OAuth protocols. The user credentials reside in your corporate identity management system, not in Lexmark Cloud Services.
- Full identity management life cycle—Lexmark Cloud Services handles the full identity management life cycle, and manages user credentials in a secure cloud-based authentication system.

For customers who are using the Lexmark Cloud Services identity management support, the customer administrator can control the following password complexity requirements:

- The minimum password length can be configured from 8 to 128 characters.
- The policy can be configured to require one or more of the following:
  - Uppercase characters
  - Lowercase characters

- Special characters
- Numbers

When users connect to Lexmark Cloud Services and are authenticated, they are assigned a token during their session. Before printing a document, the token is validated before any actions are performed.

Cookies used by the solution do not store any sensitive information on the user's system.

Lexmark Cloud Services uses the following methods to prevent, detect, and eliminate malware.

- Cloud Print Management converts only valid files.
- Documents submitted to Cloud Print Management through e-mail are checked for malware before they are converted to PDF format.
- The supported file types are the following:

.csv, .doc, .docx, .gif, .html, .jpg, .odp, .ods, .odt, .pdf, .ppt, .pptx, .rtf, .tiff, .txt, .xls, .xlsx

The database layer of Lexmark Cloud Services plays a significant role in security by ensuring the following:

- Each printed document is encrypted using AES/CBC 256-bit encryption using a separate key before being stored.
- Stored passwords are protected by a salted SHA/256 one-way cryptographic hash function.

After a document is printed, unless requested by the user, the file is deleted from the file system. The related metadata needed to show it in the user print queue is removed. Administrators can configure how long the jobs can be held in the queue before they are deleted, even if the jobs have not been printed.

### **Authentication**

#### **Cloud Print Management**

Users are required to authenticate before they can submit and release jobs.

The following authentication methods are supported:

- User name and password
  - Workstation authentication during submission.
  - Mobile device authentication during submission and release.
  - Manual login at the printer during release when using the native identity management system of Lexmark Cloud Services.
- Badge authentication at the printer during release
- Secure login code at the printer during release when federated with the identity management system
  of the customer
  - The secure login code is a single-use code and expires in 15 minutes when not used.
  - The Lexmark Cloud Services Print Management web portal generates the secure login code. The Lexmark Mobile Print application can also be used on a device running the iOS operating system or the Android<sup>TM</sup> platform.
- PIN login at the printer during release
  - Replaces the user name and password when authenticating at the printer during release.
  - PINs are multiuse and a PIN expiry can be set.

- The customer administrator determines the PIN length. The PIN length can be 4–12 digits.
- The customer administrator determines how PINs are generated. The administrator can set the PIN
  to be user generated, administrator generated, or auto generated.
- Badge + PIN as second factor login at the printer during release

Users are required to use both their badge and their PIN to release jobs.

The customer administrator determines which authentication methods are supported at the printer.

#### **Cloud Fleet Management**

Users are required to authenticate with their user name and password before they can discover and enroll printers.

## Security policies and procedures

Lexmark Cloud Services are operated in accordance with the following policies and procedures to enhance security:

- Customer passwords are stored using a one-way salted hash.
- If there is suspicion of inappropriate access, then Lexmark can provide customers log entry records and their analysis to help in forensic analysis when available. This service is provided to customers on a time and materials basis.
- Data-center physical access logs, system infrastructure logs, and application logs are kept for a minimum of 90 days. Logs are kept in a secure area to prevent tampering.
- Passwords are not logged.
- Lexmark does not set a defined password for a user. Passwords are reset to a random value that must be changed on first use, and delivered automatically through e-mail to the requesting user.

### Intrusion detection

Lexmark, or an authorized third party, monitors Lexmark Cloud Services for unauthorized intrusions using network-based and host-based intrusion-detection mechanisms. Lexmark may analyze data collected from users' web browsers for security purposes. Data collected include device type, screen resolution, time zone, operating system version, browser type and version, system fonts, installed browser plug-ins, and enabled MIME types. These data are collected to detect compromised browsers, to prevent fraudulent authentications, and to make sure that the services function properly.

## **Security logs**

Information from systems used in Lexmark Cloud Services is logged to their respective system log facility or to a centralized syslog server for network systems. These systems include firewalls, routers, network switches, and operating systems. Information is logged to enable security reviews and analysis.

## Incident management

Lexmark maintains policies and procedures on managing security incidents. Lexmark notifies impacted customers without undue delay of any unauthorized disclosure of their respective customer data.

Lexmark publishes system status information on the Lexmark Cloud Services Status Page.

# Reliability and backup

All networking components, network accelerators, load balancers, web servers, and application servers are configured in a redundant configuration.

All customer data submitted to Lexmark Cloud Services are stored on a primary database server with multiple active clusters for higher availability.

All customer data submitted to Lexmark Cloud Services are stored on highly redundant carrier-class disk storage and multiple data paths to ensure reliability and performance.

All customer data submitted to Lexmark Cloud Services, up to the last committed transaction, are replicated automatically to the secondary site on a near-real-time basis. Customer data are backed up to localized data stores. The backups are verified for integrity, and stored in the same data centers as their instance.

## **Disaster recovery**

Production data centers are designed to mitigate the risk of single points of failure, and provide a resilient environment to support service continuity and performance. Lexmark Cloud Services uses secondary facilities that are geographically diverse from their primary data centers. Secondary facilities are equipped with hardware, software, and Internet connectivity that can be used in case Lexmark production facilities at the primary data centers are unavailable.

Lexmark has disaster-recovery plans in place and tests them at least once a year. The disaster-recovery exercise validates the ability to failover a production instance from the primary data center to the secondary data center. The exercise uses developed operational and disaster-recovery procedures and documentation.

The Lexmark Cloud Services disaster-recovery plans have the following objectives:

- Restoration of the Cloud service (recovery time objective) within 12 hours after Lexmark has declared a disaster
- Maximum customer data loss (recovery point objective) of 4 hours

**Note:** These targets do not include a disaster or multiple disasters causing the compromise of both data centers at the same time. Development and test bed environments are also not included.

## **Analytics**

Lexmark may track and analyze the usage of Lexmark Cloud Services for security purposes, as well as to improve both the product and the user experience. For example, Lexmark may use the information to understand and analyze trends, or track frequently used features to improve product functionality.

Lexmark may share anonymous usage data on an aggregate basis as part of doing our regular business. For example, we may share information publicly to show trends about the general use of our services.

## Information collected by Lexmark

When you access or use Lexmark Cloud Services, the following information may be collected automatically:

Usage information—User activity within Lexmark Cloud Services is monitored. Information such as
applications and features used, actions taken within the system, and the type and configuration of printers
you enroll may be collected.

Device information—When a device is enrolled in Lexmark Cloud Services, a set amount of data is polled.
This data includes the model, serial number, page counts, applications installed, configuration settings, and device logs for troubleshooting. This information is collected to help partners in deploying Lexmark Cloud Services.

#### How information is used

The information collected is used only for the limited purposes of Lexmark Cloud Services and its related functionality and services. These limited purposes are as described in this Privacy Notice and as permitted by applicable laws. These limited purposes include circumstances where it is necessary to fulfill your requested services, or where you have given us your express consent. Other purposes include the following:

- Provide, operate, maintain, and improve Lexmark Cloud Services.
- Send you technical notices, updates, security alerts, and support and administrative messages.
- Monitor and analyze trends, usage, and activities about Lexmark Cloud Services to help in future product development.
- Personalize and improve Lexmark Cloud Services, and provide features to customize your experience and match your usage and preferences.

Data and reports are not released, sold, reproduced, transferred, or otherwise exploited or disclosed.

Privacy 11

# **Privacy**

# **Data segregation**

Lexmark Cloud Services segregates customer data, making sure that only authorized data is returned. A filtering layer between you and your data is developed, and operated in a multi-tenant architecture. The architecture is designed to segregate and restrict customer data access based on business needs. It also provides an effective logical data separation for different customers using customer-specific organization IDs, allowing the use of customer and user role-based access privileges. Further data segregation is established by providing separate environments for different functions, especially for testing and production.

# **Control of processing**

Throughout the entire chain of processing activities, Lexmark and its third-party data processors, also called sub-processors, implement strict procedures. These procedures are designed to make sure that data is processed only as the customer has instructed. Lexmark and its affiliates have written agreements with their sub-processors. These agreements contain privacy, data protection, and data security obligations that provide a level of protection appropriate to their processing activities. Compliance with such obligations, and the technical and organizational data security measures implemented by Lexmark and its sub-processors are subject to regular audits.

## Data security and encryption

Lexmark Cloud Services segregates customer data, making sure that only authorized data is returned. A filtering layer between you and your data is developed.

Data waiting to be uploaded to Lexmark Cloud Services is protected at rest using AES-256 encryption. While the data is in transit to the Lexmark Cloud, TLS protects the data. Once the incoming print data is converted to a printer-ready format, it is again encrypted using an AES/CBC 256-bit encryption key unique to each file.

Jobs submitted through e-mail are accepted only as Simple Mail Transfer Protocol (SMTP) content submitted using TLS.

The solution uses port 443 for SSL. If HTTPS communication across your firewall is enabled for the following domains, then Lexmark Cloud Services can transfer data and work with the security your system already has in place.

- iss.lexmark.com
- ccs.lexmark.com
- ccs-cdn.lexmark.com
- amazonaws.com

The solution uses certificates from a trusted root certification authority.

Files are encrypted using AES/CBC (256-bit key).

Privacy 12

Users are required to authenticate before they can submit and release jobs. The following authentication methods are supported:

- User name and password
  - Workstation authentication during submission
  - Mobile device authentication during submission and release
  - Manual login at the printer during release when using the native identity management system of Lexmark Cloud Services
- Badge authentication at the printer during release
- Secure login code at the printer during release when federated with the identity management system of the customer
  - The secure login code is a single-use code and expires in 15 minutes when not used.
  - The Lexmark Cloud Services web portal generates the secure login code. The Lexmark Mobile Print
    application can also be used on a device running the iOS operating system or the Android platform.
- PIN login at the printer during release
  - Replaces the user name and password when authenticating at the printer during release.
  - PINs are multiuse and a PIN expiry can be set.
  - The customer administrator determines the PIN length (4–12 digits).
  - The customer administrator determines how PINs are generated. The administrator can set the PIN to be user-generated, administrator-generated, or auto-generated.
- Badge + PIN as second factor login at the printer during release
  - Users are required to use both their badge and their PIN to release jobs.

The customer administrator determines which authentication methods are supported at the printer.

## Data retention policy

The following data sets are maintained, each with its own lifetime:

- Analytics data (reports and statistic)—This data is kept back to the time the organization was created.
- Print job—The jobs waiting to be released are held for an interval that the customer's print administrator
  has set. The interval can be set from one hour to seven days. When an interval for a job expires, the job is
  deleted from the Lexmark Cloud.
- **Print job history**—The personal history of what the user has printed. The print job history is retained for an interval that the print administrator has set. The interval can be set from one hour to seven days. Print history data older than the set interval is deleted and no longer shown.

### Information collected by Lexmark

When you access or use Lexmark Cloud Services, the following information may be collected automatically:

- Usage information—User activity within Lexmark Cloud Services is monitored. Information such as
  applications and features used, actions taken within the system, and the type and configuration of printers
  you enroll may be collected.
- Device information—When a device is enrolled in Lexmark Cloud Services, a set amount of data is polled.
  This data includes the model, serial number, page counts, applications installed, configuration settings, and device logs for troubleshooting. This information is collected to help partners in deploying Lexmark Cloud Services.

Privacy 13

#### How information is used

The information collected is used only for the limited purposes of Lexmark Cloud Services and its related functionality and services. These limited purposes are as described in this Privacy Notice and as permitted by applicable laws. These limited purposes include circumstances where it is necessary to fulfill your requested services, or where you have given us your express consent. Other purposes include the following:

- Provide, operate, maintain, and improve Lexmark Cloud Services.
- Send you technical notices, updates, security alerts, and support and administrative messages.
- Monitor and analyze trends, usage, and activities about Lexmark Cloud Services to help in future product development.
- Personalize and improve Lexmark Cloud Services, and provide features to customize your experience and match your usage and preferences.

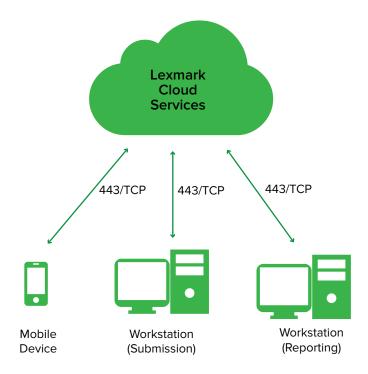
Data and reports are not released, sold, reproduced, transferred, or otherwise exploited or disclosed.

# **Cloud Print Management**

# **Cloud job submission**

Using Lexmark Cloud Services, print jobs can be submitted to the Lexmark Cloud server from mobile devices and workstations using Lexmark applications. Print jobs can also be submitted through e-mail using a Lexmark Cloud e-mail address.

The Lexmark Cloud Reporting service provides the tracking of the job submission activity and various reports based on the user role.



#### Ports and protocols used during job submission

Port	Protocol	Function
443	HTTPS	Job submission
443	HTTPS	Job information submission
443	HTTPS	Reporting

**Note:** For job submissions through e-mail, the print job is secured once it reaches Lexmark's inbox. A secure IMAP connection is used to retrieve the job from Lexmark's inbox.

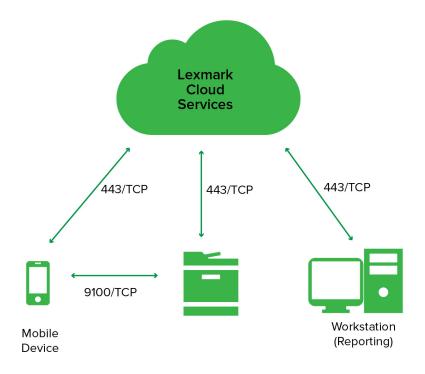
#### **Submission categories**

Category	Data collected	Purpose
Job submission	Native or rendered print file	Holding the file until it is deleted or printed
Job submission through e-mail	Native print file	Holding the file until it is deleted or printed
Job submission information	Site, submission IP address, user ID, job or file name, submission date, number of pages, number of pages per side, color, duplex, driver, submission source, copies, user name, e-mail address	Generating reports on print activity of the organization through the Analytics web portal

# Cloud job release

Submitted print jobs can be released from Lexmark Cloud Services to any printer that supports the solution. Print jobs can also be released through a mobile device with the Lexmark Mobile Print application installed.

The Lexmark Cloud Services Reporting service tracks the job release activities. It also provides customized usage reports.



#### Ports and protocols used during job release

Port	Protocol	Function
443	HTTPS	Job release
443	HTTPS	Job release statistics

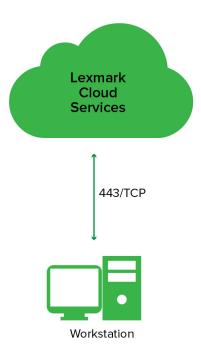
Port	Protocol	Function
443	HTTPS	Reporting
9100	TCP	Mobile job release

#### Release categories

Category	Data collected	Purpose
Job release	Native or rendered print file that the user submitted	Generating a printed version of the document that the user submitted to Lexmark Cloud Services
Job release statistics	Job ID, site, submission IP address, user ID, job name, submission date, final date, final action, final site, number of pages, release IP address, release user ID, release method, color, duplex, paper size, release model, release model type, release host name, destination, copies, user name, e-mail address	, ,

# Hybrid job submission

In the Hybrid mode, print jobs are held locally on the user's workstation rather than being sent to the cloud. The workstation must have the Lexmark Print Management Client (LPMC) installed in Hybrid mode. The LPMC application informs the cloud that a print job is being held for release on the workstation.



#### Ports and protocols used during job submission

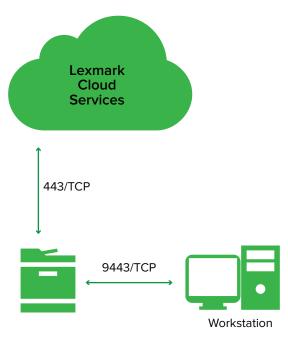
Port	Protocol	Function
443	HTTPS	Workstation registration

#### **Submission categories**

Category	Data collected	Purpose
Workstation registration	User ID, workstation name, workstation IP address	Identifying the workstation where print jobs are held

# Hybrid job release

In the Hybrid mode, print jobs are held locally on the user workstation. The workstation must have the LPMC installed in the Hybrid mode. The LPMC application notifies the cloud server that a print job is being released on the printer.



#### Ports and protocols used during job release

Port	Protocol	Function
443	HTTPS	Registered workstation
9443	ТСР	Job release from workstation

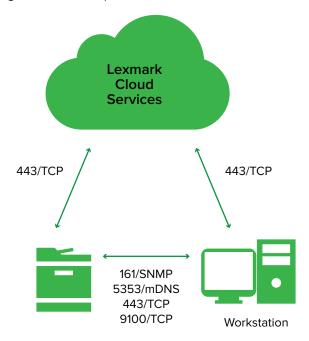
#### **Release categories**

Category	Data collected	Purpose
Registered workstations	User ID, workstation IP address	Identifying the workstations where the user is holding jobs to be printed
Job release	Print job held on the workstation	Generating a printed version of the document retrieved from the workstation

# **Cloud Fleet Management**

# **Printer discovery**

Printers must be enrolled to the Lexmark Cloud Services Fleet Management web portal before they can be managed. Printer discovery is performed using a Lexmark workstation application. A Lexmark embedded application is installed on the enrolled printers. Enrolled printers regularly poll the Lexmark Cloud Services website for configuration changes or other requests.



#### Ports and protocols used during discovery and enrollment

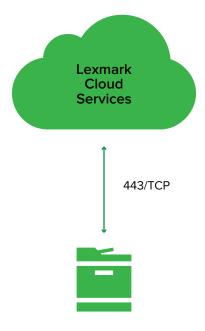
Port	Protocol	Function
161	SNMP	Printer discovery
5353	mDNS	
443	HTTPS	Retrieve Printer Configuration Agent
443	HTTPS	Install Printer Configuration Agent
9100	HTTP	
443	HTTPS	Printer enrollment
443	HTTPS	Report Printer Configuration Agent data
443	HTTPS	Report printer data

#### Discovery and enrollment categories

Category	Data collected	Purpose
Printer discovery	Basic printer details, such as manufacturer, model, IP address, and serial number	Identifying the printers that are eligible for enrollment
Retrieve Printer Configuration Agent	Printer Configuration Agents	Obtaining model-specific versions of the Printer Configuration Agent from the cloud
Install Printer Configuration Agent	Printer Configuration Agent	Installing the model-specific version of the Printer Configuration Agent on the printer
Printer enrollment	Enrollment code	Securely associating the printer with the customer organization
Report Printer Configuration Agent data	Agent ID, agent version, polling interval, agent logging level	Displaying useful information to customers, including the version of the agent installed, and letting customers find printers easily
Report printer data	Asset identity information (model, serial number, manufacturer), IP address, MAC address, host name, contact name, location, asset tag, time zone, asset capabilities (color, duplex, hard drive, fax, scan), firmware version, applications installed, supplies information, page count information	Displaying useful information to customers, letting customers find printers easily, and making sure that the correct versions of applications are installed

# **Printer configuration update**

Several functions can be performed on printers that are enrolled to Lexmark Cloud Services. Printer applications can be installed or removed, printer firmware can be updated, and data can be collected and shown in the Fleet Management web portal.



### Ports and protocols used during a configuration update

Port	Protocol	Function
443	HTTPS	Poll for printer configuration tasks
443	HTTPS	Report Printer Configuration Agent data
443	HTTPS	Report printer data
443	HTTPS	Install or configure applications
443	HTTPS	Retrieve firmware

#### Fleet management categories

Category	Data collected	Purpose
Report Printer Configuration Agent data	Agent ID, agent version, polling interval, agent logging level	Displaying useful information to customers, including the version of the agent installed, and letting customers find printers easily
Report printer data	Asset identity information (model, serial number, manufacturer), IP address, MAC address, host name, contact name, location, asset tag, time zone, asset capabilities (color, duplex, hard drive, fax, scan), firmware version, applications installed, supplies information, page count information	Displaying useful information to customers, letting customers find printers easily, and making sure that the correct versions of applications are installed

# **Regulatory compliance**

Lexmark aims to uphold the highest standards possible.

We ensure compliance with the protection of user rights in the processing and protecting of personal data under the General Data Protection Regulation (GDPR) through the following:

- Processing of the subject data within the European Union
- Erasure of the data subject when removed from the system
- Inclusion of the data subject to the right to be forgotten

The data centers used for Lexmark Cloud Services have achieved the following:

- ISO 27001 certification
- PCI DSS certification
- SOC compliance

#### ISO/IEC 27001:2013

The information security management system for the managed print services provided by the Imaging Solution Services division of Lexmark passes the ISO/IEC 27001:2013 standards. For more information, see the ISO/IEC 27001:2013 certification.

Summary 23

# **Summary**

Lexmark is an industry leader in document and device security. This expertise is the backbone of Lexmark Cloud Services, combining dedication to security with the lightweight ease of the cloud. Lexmark Cloud Services simplifies your print needs while offering the framework to manage your users and their activities. The solution lets you work better and more securely while reducing costs and expenses.

Using Lexmark Cloud Services, you can transmit and maintain your documents securely.

Notices 24

# **Notices**

#### **Edition notice**

January 2020

The following paragraph does not apply to any country where such provisions are inconsistent with local law: LEXMARK INTERNATIONAL, INC., PROVIDES THIS PUBLICATION "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some states do not allow disclaimer of express or implied warranties in certain transactions; therefore, this statement may not apply to you.

This publication could include technical inaccuracies or typographical errors. Changes are periodically made to the information herein; these changes will be incorporated in later editions. Improvements or changes in the products or the programs described may be made at any time.

References in this publication to products, programs, or services do not imply that the manufacturer intends to make these available in all countries in which it operates. Any reference to a product, program, or service is not intended to state or imply that only that product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe any existing intellectual property right may be used instead. Evaluation and verification of operation in conjunction with other products, programs, or services, except those expressly designated by the manufacturer, are the user's responsibility.

For Lexmark technical support, go to <a href="http://support.lexmark.com">http://support.lexmark.com</a>.

For information on Lexmark's privacy policy governing the use of this product, go to **www.lexmark.com/privacy**.

For information on supplies and downloads, go to www.lexmark.com.

© 2017 Lexmark International, Inc.

All rights reserved.

#### **GOVERNMENT END USERS**

The Software Program and any related documentation are "Commercial Items," as that term is defined in 48 C.F.R. 2.101, "Computer Software" and "Commercial Computer Software Documentation," as such terms are used in 48 C.F.R. 12.212 or 48 C.F.R. 227.7202, as applicable. Consistent with 48 C.F.R. 12.212 or 48 C.F.R. 227.7202-1 through 227.7207-4, as applicable, the Commercial Computer Software and Commercial Software Documentation are licensed to the U.S. Government end users (a) only as Commercial Items and (b) with only those rights as are granted to all other end users pursuant to the terms and conditions herein.

#### **Trademarks**

Lexmark and the Lexmark logo are trademarks or registered trademarks of Lexmark International, Inc. in the United States and/or other countries.

Android is a trademark of Google LLC.

All other trademarks are the property of their respective owners.

Index 25

# Index

#### Α

analytics 9 application security 6 authenticating users 4 authentication 7

#### C

cloud job release 15 cloud job submission 14 control of processing 11

#### D

data
encrypting 4
exporting 4
data encryption 11
data privacy 4, 11, 10
data retention policy 12
data security 4, 11, 8
data segregation 11
disaster recovery 9

#### E

encrypting data 4 exporting data 4

#### F

frequently asked questions 4

#### Н

Hybrid job release 17 Hybrid job submission 16

#### I

incident management 8 information collected by Lexmark 10 intrusion detection 8

#### J

jobs releasing 15, 17 submitting 14, 16

#### N

network security 6

#### 0

operational security 6 overview 4

#### P

physical security 6
ports 11
printer configuration update 20
printer discovery 19
printers
discovering 19
privacy 4
protocols 11

#### R

regulatory compliance 22 releasing cloud jobs 15 releasing Hybrid jobs 17 reliability and backup 9

#### S

securing data 11
security 4
security logs 8
security policies and
procedures 8
submitting cloud jobs 14
submitting Hybrid jobs 16
summary 23

#### Т

tracking user activity 4

#### U

user activity tracking 4 users authenticating 4