Xerox® Security Guide

Scan to Cloud Email

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1. Introduction

Purpose

The purpose of the Security Guide is to disclose information for Xerox® apps with respect to device security. Device security, in this context, is defined as how data is stored and transmitted, how the product behaves in a networked environment, and how the product may be accessed, both locally and remotely. This document describes design, functions, and features of the Xerox® apps relative to Information Assurance (IA) and the protection of customer sensitive information. Please note that the customer is responsible for the security of their network and the Xerox® apps do not establish security for any network environment.

This document does not provide tutorial level information about security, connectivity or Xerox® app features and functions. This information is readily available elsewhere. We assume that the reader has a working knowledge of these types of topics.

Target Audience

The target audience for this document is Xerox field personnel and customers concerned with IT security. It is assumed that the reader is familiar with the apps; as such, some user actions are not described in detail.

Disclaimer

The content of this document is provided for information purposes only. Performance of the products referenced herein is exclusively subject to the applicable Xerox Corporation terms and conditions of sale and/or lease. Nothing stated in this document constitutes the establishment of any additional agreement or binding obligations between Xerox Corporation and any third party.

2. General Security Protection

User Data Protection within the products

Document and File Security

File content is protected during transmission by standard secure network protocols at the channel level. Since document source content may contain Personally Identifiable Information (PII) or other sensitive content, it is the responsibility of the user to handle the digital information in accordance with information protection best practices.

Hosting – Microsoft Azure

The cloud services are hosted on the Microsoft Azure Network. The Microsoft Azure Cloud Computing Platform operates in the Microsoft® Global Foundation Services (GFS) infrastructure, portions of which are ISO27001-certified. Microsoft has also adopted the new international cloud privacy standard, ISO 27018. Azure safeguards customer data in the cloud and provides support for companies that are bound by extensive regulations regarding the use, transmission, and storage of customer data.

The Apps hosted in the cloud are scalable so that multiple instances may be spun up/down as needed to handle user demand. The service is hosted both in the US and Europe. Users will be routed to the closest server geographically based on server load and network speed.

Cloud Storage – Microsoft Azure

All Azure Storage and Azure SQL data is secured when at rest using AES-256 encryption.

For a full description, please follow these links:

Azure SQL
https://azure.microsoft.com/en-us/updates/newly-created-azure-sql-databases-encrypted-by-default/

Azure Storage
https://azure.microsoft.com/en-us/blog/announcing-default-encryption-for-azure-blobs-files-table-and-queue-storage/

User Data in transit

Secure Network Communications

The web pages and app services that constitute the Xerox® solution are deployed to Microsoft Azure App Services. All web pages are accessed via HTTPS from a web browser. All communications are over HTTPS. Data is transmitted securely and is protected by TLS security for both upload and download. The default TLS version used is 1.2.

At launch, the apps must get an authentication/session token through the solution's authentication process. The access token acquired is used for that session of the app.

Xerox App Gallery supplies a link to a Certificate Authority root certificate for validation with the cloud web service. It is the responsibility of the customer to install the certificate on their devices and to enable server certificate validation on the devices.

For more information related to Azure network security, please follow the link:
https://docs.microsoft.com/en-us/azure/security/azure-network-security

3. Xerox® Scan to Cloud Email App – Xerox® ConnectKey App

Description

Overview

ConnectKey App
The ConnectKey App is a simple scan-document-to-email solution for your Xerox® device that integrates with Xerox's instance of the Microsoft Exchange Online service. The app assists the user with:

1. Scanning a hard copy document and emailing it to a recipient using a Xerox email account in Xerox's instance of Microsoft Exchange Online.
2. Selecting recipients from a list of contacts saved in the App, on the device.

Table 1. ConnectKey App user benefits

Application	What can I do?
ConnectKey App	• Select one or more recipients from the list of Saved email addresses. • Manually enter an email address • Scan a hard copy document with standard scan settings • Send the scanned document as an email attachment

App Hosting

The ConnectKey App depends heavily on cloud hosted components. A brief description of each can be found below.

ConnectKey App
The ConnectKey App consists of two key components, the device weblet and the cloud-hosted web service. The device weblet is a ConnectKey/EIP web app that enables the following behavior on a Xerox device:

1. Presents the user with an application UI that executes functionality in the cloud.
2. Interfaces with the EIP API, which delegates work, such as document scanning and printing.

The weblet communicates with the cloud-hosted web service, which executes the business logic of the app.

Exchange Online Web Service
The solution depends on EWS (Exchange Web Services) to send the email. All requests are made over HTTPS.

Xerox Extensible Interface Platform® Web Services

During standard usage of the ConnectKey App, calls to the device web services are used to initiate and monitor scan functions and to pull relevant details related to device properties and capabilities.

Components

MFD with Xerox® Scan to Cloud Email App – ConnectKey App

This is an EIP capable device that can scan and execute ConnectKey Apps installed from the Xerox App Gallery. In this case, the device has the Xerox® Scan to Cloud Email App installed.

Xerox® Scan to Cloud Email App – Web Services

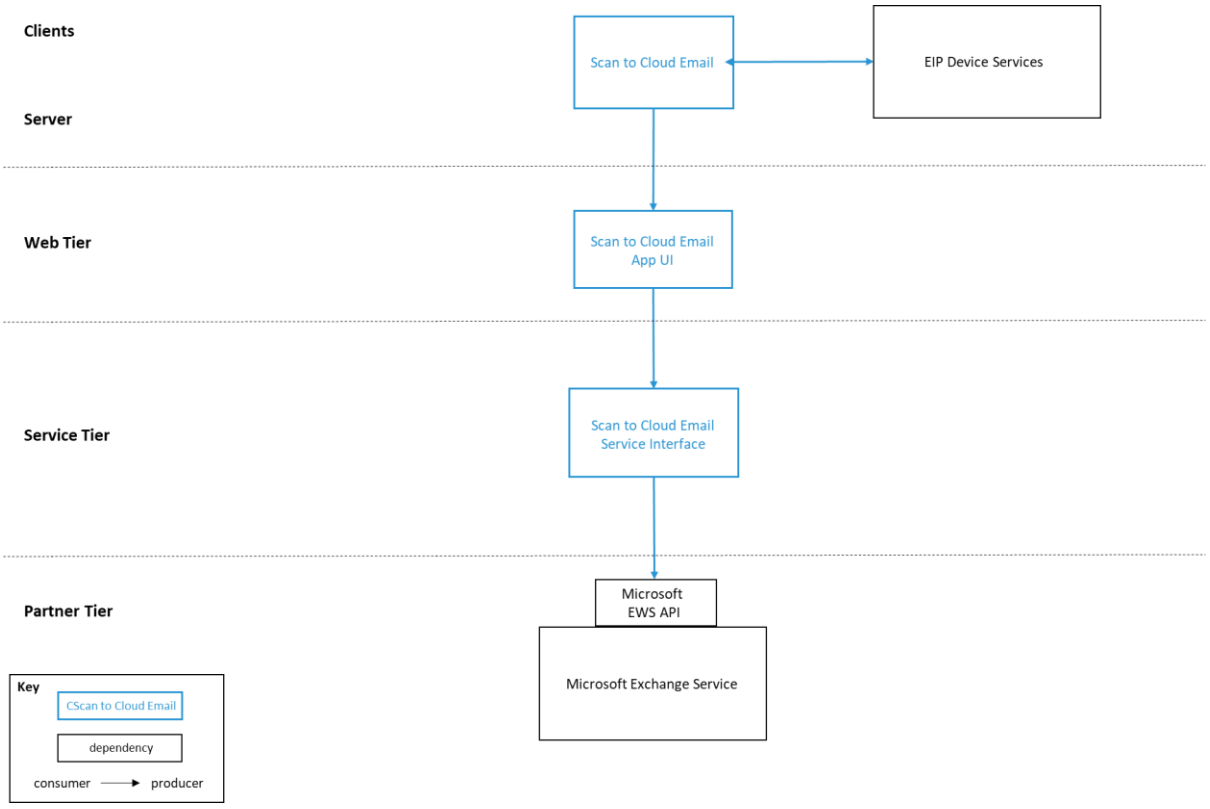
The Web Service is a service hosted on the Microsoft Azure Cloud System. The service is responsible for hosting the web pages which are displayed on the UI of the printer and provide the services support for the Xerox® apps. The web service interacts with the Exchange Online service using the Microsoft EWS API and Microsoft services using the Azure APIs.

Microsoft Exchange Online Service

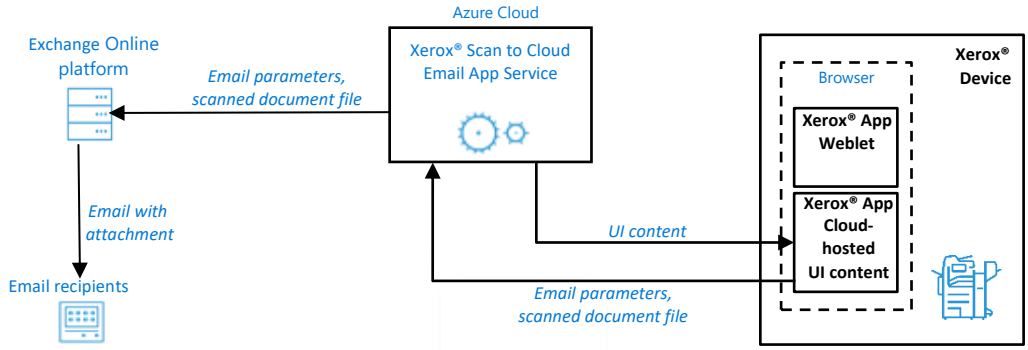
The Microsoft Exchange Online cloud hosted service provides a web API that is used for submitting the document for sending.

Architecture and Workflows

Architecture Diagram



Data Flow Diagram



Workflows

Scan to Email Recipient – Scan hard copy document and send via Exchange to recipient(s)

Step 1: Launch the App on the Xerox device.

Step 2: Specify Recipients (select from saved list or manually enter email address).

Step 3: Optionally change the scan settings, email subject field, email body, or attachment name.

Step 4: Scan and send the document(s) using the Send button.

User Data Protection

Application data stored in the Xerox cloud

User data related to the categories below are stored in cloud persistent storage until a delete event occurs.

- Create a scanned image file from a paper document and email to recipient(s) via Exchange

The following activities will trigger a delete event, for digital document files that meet the associated criteria.

- A delete occurs when the system detects intermediate processing files exist after a job has completed.

The balance of data stored in the cloud, that is unrelated to user Personally Identifiable Information, may be stored indefinitely for event reporting purposes.

Local Environment

Application data transmitted
Application data related to the categories below are transmitted to/from the Xerox device.

- Session data
- Job data

Application data stored on the Xerox device
The following app data is stored on the device, in persistent storage, until the App is uninstalled from the device.

- Device data
- Configuration data
- Saved email addresses

HTTP Cookies
The ConnectKey App does not store any cookies on the device.

4. Additional Information and Resources

Security @ Xerox

Xerox maintains an evergreen public web page that contains the latest security information pertaining to its products. Please see https://www.xerox.com/security.

Responses to Known Vulnerabilities

Xerox has created a document which details the Xerox Vulnerability Management and Disclosure Policy used in discovery and remediation of vulnerabilities in Xerox software and hardware. It can be downloaded from this page: https://www.xerox.com/information-security/information-security-articles-whitepapers/enus.html.

Additional Resources

Table 4. Below are additional resources.

Security Resource	URL
Frequently Asked Security Questions	https://www.xerox.com/en-us/information-security/frequently-asked-questions
Bulletins, Advisories, and Security Updates	https://www.xerox.com/security
Security News Archive	https://security.business.xerox.com/en-us/news/