

Security Guide

for Xerox[®]Translate and Print App

XTP version 1.0.0.5



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REVISION HISTORY

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1.0	March 2017	Initial Version for XTP 1.0.0.4
2.0	November 2020	Version for XTP 1.0.0.5 <ul style="list-style-type: none">• Adds a Send to Email recipient option.

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1. Preface

The Xerox® Translate and Print app provides an easy path for users to provide instant machine translations via the user's Xerox® Multifunction Device (MFD).

The Xerox® Translate and Print app can be installed on Xerox® Multifunction Devices which support ConnectKey technology. The user scans the document and receives a translation print in one of 44 languages. Additionally, the user may specify an email address to receive a translation of the scanned document.

Purpose

The purpose of the Security Guide is to disclose information for the Xerox® Translate and Print app 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® Translate and Print app 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® Translate and Print app does not establish security for any network environment.

This document does not provide tutorial level information about security, connectivity or Xerox® Translate and Print 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 Xerox® Translate and Print app; 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

Data Protection Overview

Use of the Xerox® Translate and Print app is unauthenticated. Any person with access to a Xerox Multifunction Device on which the app is installed may launch the Xerox® Translate and Print app and use its features. The device administrator has the option of requiring a person to authenticate with the Device before the device may be accessed.

The system maintains a record of translation orders executed on each Xerox® Multifunction device. Each record stores the Source and Target language, the number of pages translated and the date on which the translation was executed. Translation order records are anonymous, and tie back to a specific Device rather than a particular person.

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 documents and digital information in accordance with information protection best practices.

Scanned document content is not reused for other parties' translations, nor is it disclosed to third parties.

Xerox® employees are not permitted to review client documents and translation results, except in exceptional circumstances where a document:

- causes a service failure.
- leads to the abnormal consumption of computing resources.
- leads to additional exceptional cases connected with the functionality of the service.

A limited number of authorized Xerox® personnel may review a customer image for the sole purpose of reproducing and fixing the issue this document has caused. In such cases, only a derivative document, without any personal/confidential data, is used to fix the issue.

The output of the system is strictly determined by the input. Only non-executable plain text data is returned by the translation sub-system. The system prevents the insertion executable output as translation for non-executable content. Executable links in source documents are not translated.

HOSTING - MICROSOFT AZURE

The Xerox Translate web service is 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 service is 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 network speed).

The Xerox Translate Web Service incorporates third party Aspose file conversion and Mongo DB components. These components are configured to be accessible only from the local host; and not from the internet. The Mongo DB itself is not encrypted; but the disk the database resides on in the VM is encrypted. The Xerox Translate Web Service also invokes Xerox Services (hosted in the same Azure cloud) to initiate email. Xerox Services in turn invokes the external SendGrid email service to send the actual email to the recipient.

These Security highlights are relevant to the Xerox Translate and Print system:

General Azure security

- Azure Security Center
- Azure Key Vault
- Log Analytics

Storage security

- Azure Storage Service Encryption
- Azure Storage Account Keys
- Azure Storage Analytics

Identity and access management

- Azure Role Based Access Control
- Azure Active Directory
- Azure Active Directory Domain Services
- Azure Multi-Factor Authentication

Networking

- Network Security Groups
- Azure Traffic Manager

For a full description of Azure security, please follow the link: <https://docs.microsoft.com/en-us/azure/security/azure-network-security>

ABBYY CLOUD OCR

ABBYY Cloud OCR is a cloud-based document processing service that performs OCR conversion of scanned documents. ABBYY Cloud OCR SDK service is hosted on Microsoft Azure. All data, including personal data and uploaded documents, is processed and stored on Azure servers. No information is stored outside of the Microsoft Azure environment. ABBYY Cloud OCR SDK service utilizes encrypted data transfer using HTTPS protocol. Within the Microsoft Azure environment, the data transfer between storage and processing nodes is encrypted. ABBYY Cloud OCR SDK is SOC 2 Type II certified – PwC (PricewaterhouseCoopers) has evaluated ABBYY product, infrastructure, and policies, and certifies that the ABBYY service complies with SOC stringent requirements.

For more information about ABBYY security, see: <https://www.abbyy.com/cloud-ocr-sdk/specifications/> . For more information about ABBYY privacy, see: <https://www.abbyy.com/privacy/> .

MICROSOFT TRANSLATOR

Microsoft Translator, part of the collection of Cognitive Services and an Azure service, is a cloud-based text translation API. The service uses modern neural machine translation technology and

offers statistical machine translation technology. Translation is from a source language to a target language. The service is hosted in Azure Cloud.

Customer data submitted for translation to Azure Cognitive Services Translator are not written to persistent storage. There will be no record of the submitted text or any portion thereof, in any Microsoft data center. For more information on Microsoft Translator data confidentiality and compliance, see: <https://www.microsoft.com/en-us/translator/business/notrace/> .

SENDGRID SERVICE

The solution provides for an email service, hosted by SendGrid. The email service sends translated documents to the recipient.

For further details on SendGrid security, see: <https://sendgrid.com/policies/security/> . For more information about SendGrid privacy, see their parent company's privacy statement at: <https://www.twilio.com/legal/privacy> ; and their Data Protection Addendum at: <https://www.twilio.com/legal/data-protection-addendum> .

User Data in transit

DEVICE WEBSERVICE CALLS

During standard usage of the Xerox® Translate and Print app, calls to the device web services are used to initiate and monitor scan functions and retrieve device information using the EIP interface.

All communications to and from the Xerox® Translation Web Service 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.

ABBYY CLOUD OCR AND XEROX TRANSLATION WEB SERVICES

All web communication between The ABBY Cloud OCR service and the Xerox Translate Web Service is encrypted using TLS 1.2. The Xerox Translate Web Service connects to ABBYY Cloud OCR via a secured connection, using an ApplicationID and a Password.

MICROSOFT TRANSLATOR AND XEROX TRANSLATION WEB SERVICES

Microsoft Translator is a multilingual machine translation cloud service provided by Microsoft. The Microsoft Translator endpoint (<https://api.cognitive.microsofttranslator.com/>) exposed over HTTP enforces TLS 1.2 communication with Xerox Translation web services. The Xerox Translate Web Service connects to Microsoft Translator via a secured connection, using a subscription key and a Secret key.

XEROX TRANSLATION WEB SERVICES AND XEROX SERVICES

The Xerox Translate web service communicates with Xerox Services within the same Azure cloud to initiate email. Communication between the services is secured by secret Key.

XEROX SERVICES AND SENDGRID

The Xerox Services communicates with SendGrid to send emails using the SendGrid API defined at: <https://sendgrid.com/docs/api-reference/>. This communication is done via HTTPS and the data is transmitted securely and is protected by TLS security. The minimum TLS version used is 1.2. The Xerox Services connects to SendGrid via a secured connection, using an API key.

3. Translate and Print – Xerox® ConnectKey® App

Description

OVERVIEW

The Xerox® Translate and Print ConnectKey app supports translation of scanned documents at a Xerox Multifunction Device; and optionally emailing a recipient the translation.

ConnectKey App

The Xerox® Translate and Print app may be purchased from the Xerox App Gallery and then installed on Xerox® Devices from the Xerox® App Gallery. The purpose of the App is to provide translations of scanned documents.

The ConnectKey App allows any person with access to the Device to use the app's functionality. The app does not require any user credentials. Any device user may view records of the translation orders initiated at the Device. Since no credentials are involved, all translation order records are anonymous.

The ConnectKey App allows users to scan a document and have a translated version print at the device. The user may optionally specify an email recipient for the app to send the translation to.

Table 1. ConnectKey App user benefits

Application	What can I do?
ConnectKey App	<ul style="list-style-type: none">• Scan, translate, and print a document• View previous translation order records.• Optionally send the translation to an email recipient.

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 is implemented as a weblet installed on the Xerox MFD. The device weblet enables the following behavior on a Xerox device:

1. Presents the user with an application UI and executes the business logic of the app.
2. Interfaces with the EIP API to initiate operations at the Device.
3. Interfaces with the Xerox Translate web service to translate supplied image documents.

Xerox Extensible Interface Platform® Web Services

During standard usage of the ConnectKey App, calls to the device web services are used to initiate scan and print operations on the device.

COMPONENTS

MFD

The MFD is an EIP capable device capable of running ConnectKey App weblets installed from the Xerox App Gallery. In this case, the MFD has the Xerox® Translate and Print app weblet installed.

Translate and Print – App weblet

The Xerox® Translate and Print app weblet is installed on the MFD via the Xerox® App Gallery. The weblet is responsible for hosting web pages, which are displayed on the UI of the MFD, and provide the basis for user interaction with the Xerox® Translate and Print app.

Xerox® Translate Web Service

The Xerox® Translate Web Service is hosted on the Microsoft Azure Cloud System.

The web service interacts with the ABBYY platform using the ABBYY Cloud OCR API to perform Optical Character Recognition on the scanned document. The web service interacts with Microsoft Translator to convert the document to the target language. The web service incorporates Aspose to format the translated document into pdf that can be printed or emailed. The webservice interacts with Xerox® Services to initiate optional email of a translated document. The web service incorporates a Mongo DB to store input documents, translated documents, and records for each translation order.

Abbyy Cloud OCR

The solution provides for an OCR capability hosted by ABBYY in the Microsoft Azure cloud. The OCR capability performs Optical Character Recognition on a scanned document as described in <https://www.abbyy.com/cloud-ocr-sdk/specifications/>. The Xerox® Translate Web Service connects to ABBYY Cloud OCR via a secured connection, using an ApplicationID and a Password.

Microsoft Translator

The solution provides for a translation capability hosted by Microsoft in the Microsoft Azure cloud at <https://api.cognitive.microsofttranslator.com/>. Translation is from a source language to a target language. The Translate Web Service connects to Microsoft Translator via a secured connection, using a subscription key and a Secret key.

Xerox® Services

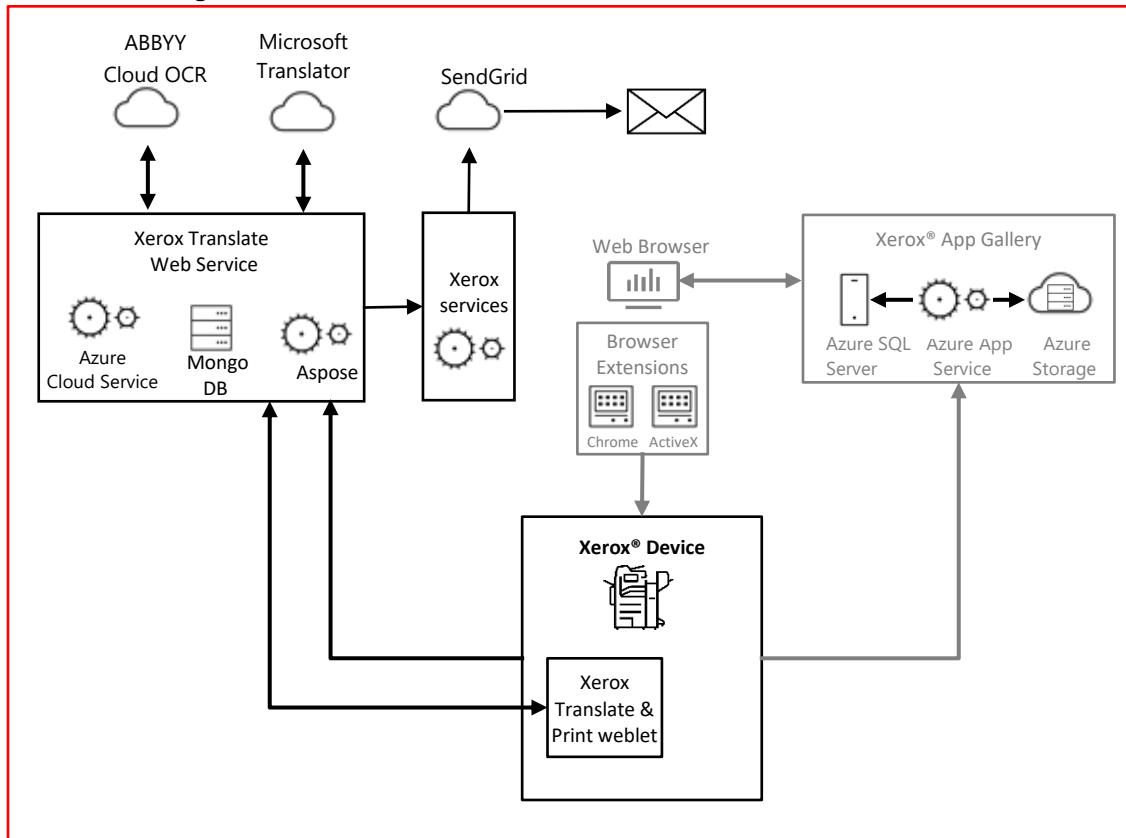
Xerox® Services invokes SendGrid via the SendGrid API to email the recipient the translated document. Xerox® Services connects to SendGrid via a secured connection, using an API key.

SendGrid Service

The solution provides for an email service hosted by SendGrid. The email service sends a recipient a translated document.





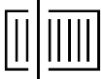
ARCHITECTURE AND WORKFLOWS

Architecture Diagram



Workflows – ConnectKey App

Scan, translate, and Print Workflow

-  **Step 1:** User launches the Translate and Print app weblet at the Device
-  **Step 2:** User specifies the source language of the document to be scanned.
-  **Step 3:** User selects the target language of the document to be printed.
-  **Step 4:** User modifies the scanning options (i.e., single sided, original size, etc.).
-  **Step 5:** User selects the Scan button and the document is scanned.



Step 6: The Xerox Translate web service translates the scanned document.



Step 7: The translated document is printed to the Device.

View “My Orders” Workflow



Step 1: User launches the Translate and Print app weblet at the Device



Step 2: User selects the view orders option



Step 3: The Xerox Translate web service provides the Translate and Print app weblet with records of translation orders initiated at the Device.



Step 4: The Translate and Print app weblet displays the content of the translate order records in the device browser for the user to view.

Scan, translate, and Print with optional email Workflow



Step 1: User launches the Translate and Print app weblet at the Device



Step 2: User specifies the source language of the document to be scanned.



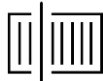
Step 3: User selects the target language of the document to be printed.



Step 4: User specifies the email address of the recipient.



Step 5: User modifies the scanning options (i.e., single sided, original size, etc.).



Step 6: User selects the Scan button and the document is scanned.



Step 7: The Xerox Translate web service translates the scanned document.



Step 8: The translated document is printed to the Device.



Step 9: The translated document is emailed to the recipient.

User Data Protection

APPLICATION DATA STORED IN THE XEROX CLOUD

User data related to the categories below are stored in the Mongo DB hosted by the Xerox cloud translation service:

- Anonymous records for each translation order.
- Document data

Document data is deleted after a 2-year retention period. A user may submit a written request to Xerox to have document data deleted.

LOCAL ENVIRONMENT

Application data transmitted

Application data is protected during transmission by standard secure network protocols at the channel level. Since document content may contain Personally Identifiable Information or other sensitive content, it is the responsibility of the user to handle the scanned and printed documents in accordance with information protection best practices.

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.

- The Translate and Print app weblet
- Scratchpad data storage

No user-specific data is stored locally on the device.

4. Additional Information & 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

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/

Table 2 Additional Resources