

KPAX software data collector agent security note and KPAX Liberty hardware data collector agent security note

Security overview

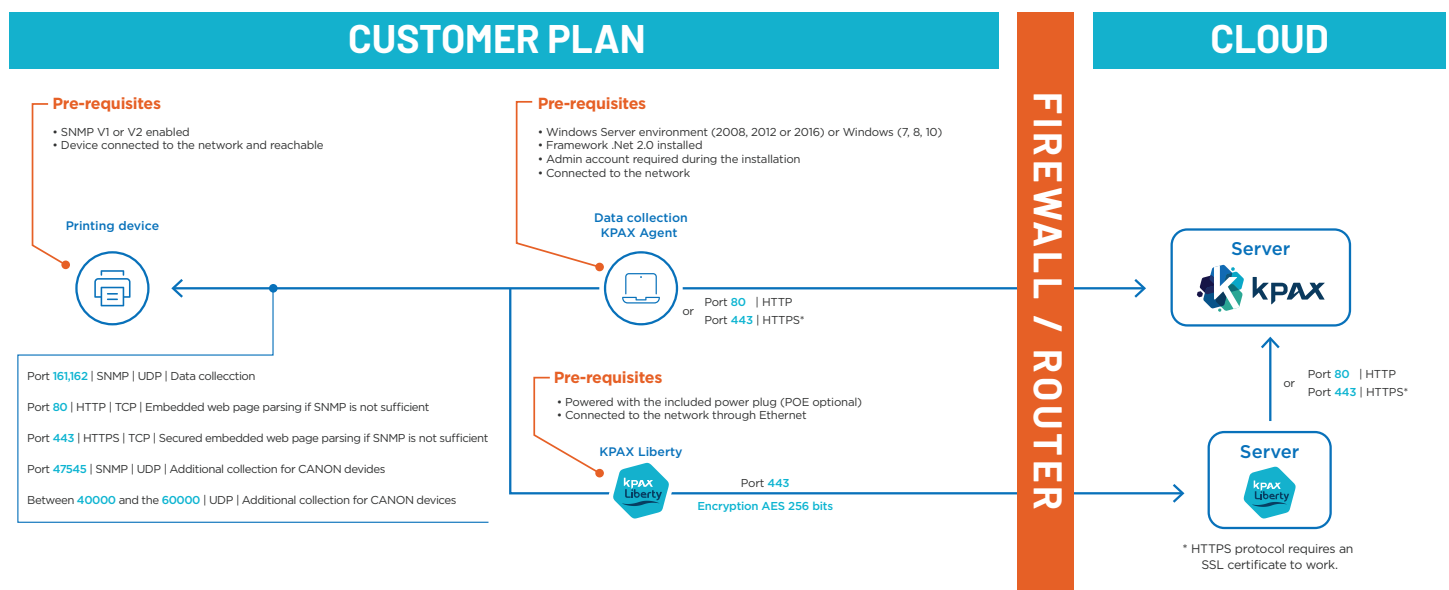
ACDI Document & Print Services is committed to providing software solutions that are secure and can be used in all network environments. The KPAX solution collects data from the device, which includes toner status, meters, alerts, etc., on printing equipment and sends only the information necessary for the management of the fleet. It does not collect any personal information or information concerning details of the user, or their print jobs.

This document will cover the specific security and network requirements of the following components:

- **KPAX software data collector agent**
- **KPAX Liberty hardware data collector agent**
- **Type of Information Collected**
 - An example of the network traffic generated by our agents

TECHNICAL ARCHITECTURE

KPAX Agent and KPAX Liberty



KPAX software data collector agent

KPAX software data collector agent is a piece of software that is installed on a Windows environment (preferably server or user workstation) with connectivity to the printing systems. KPAX software data collector agent runs as a Windows® service allowing it to run 24 hours a day, seven days a week, in a closed session. At a regular and customizable frequency, the Windows service discovers the devices on the network (defined by IP address ranges) and collects general information, counters, ink/toner levels, and consumable parts, as well as LCD panel alerts/message.

KPAX Liberty

KPAX Liberty hardware is a data collector agent. It eliminates the need to install a software agent. It does not have an operating system (Linux, macOS, Windows, or Unix) but has a firmware which makes it much more secure than a computer or a Raspberry Pi. Furthermore, all the data it collects is secured with 256-bit AES, with symmetric private key (identical to military encryption or that which is used for banking transactions).

Type of information collected

KPAX Agent collects the following information (non-exhaustive list):

Collected data:

Material identification

- Manufacturer
- Model
- Serial number
- IP address
- Mac address
- Network name

Hardware feature

- Typology (MFP, printer, ..)
- Technology (laser, inkjet, etc.)
- Color support
- R/V Support
- Date of installation
- Firmware version

Use of equipment

- Machine counter
- Total Mono / Color
- Advanced counters (print, copy, scan, fax, A3, A4, both sides)
- Proprietary meters (Canon, Xerox, Kyocera, Ricoh, Lexmark)
- Consumables and parts
- Technical alerts (LCD panel and additional MIB information)

The agent is only able to collect this information when it is available in the equipment's memory. No print job or user data is collected.

Information collection and transmission methods:

KPAX Agent and Liberty collect print and copy equipment information using SNMP, ICMP and HTTP protocols. The data collected by KPAX Agent is transmitted to the central database via HTTP (port 80), or HTTPS (port 443). KPAX Liberty transmits its information via port 443 SSH with AES 256bit encryption.

Optional remote updates (KPAX Agent only):

KPAX Agent has an optional remote update feature activated by the enabling automatic update option. The automatic update will periodically check that the KPAX Agent service is up to date, and if required update the agent. The KPAX Liberty's firmware will update automatically and securely using 256bit AES.

Network traffic:

The network traffic generated by the collection agent is minimal, it varies according to the number of devices that are being analyzed. The table below shows the network load associated with the collector compared to the network load associated with a simple standard web page.

Event	Size (approx. value)
Loading a simple standard web page (google.com)	Approx. 35 Kb
Discovery scan, no IP address	Approx. 1 Kb
Full scan - 8 devices	Approx. 4 Kb
Meter scan - 8 devices	Approx. 3 Kb
Scan of consumables - 8 devices	Approx. 1 Kb
Scan of maintenance parts - 8 devices	Between 2 Kb and 4 Kb
Alert scan - 8 devices	Approx. 2 Kb

