



Rethinking Enterprise Printing: Pharos Vision for 2023 and Beyond

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Question and Answer Session

Q: What protocols/communication services are used by Pharos Cloud to establish the secure communication with the printer and Pharos Cloud?

- Print Scout, a lightweight client application, registers itself via an HTTPS (TLS) connection to Pharos Cloud and maintains a secure connection to the cloud service to enable print job submission and release.
- Device Scout, an agent deployed on a Windows App Server within an organization's environment, registers itself via an HTTPS (TLS) connection to Pharos Cloud and maintains a secure connection to the service to enable device configuration and secure managed printers.
- Device Scout comes bundled with a Site Service that acts as a conduit between Pharos Cloud and network printers that are unable to connect to Pharos Cloud directly. The secured printer communicates via an HTTPS (TLS) connection to the Site Service to authenticate users and release documents.
- Print Scout queries the printer for its status before delivering documents using SNMP.

Q: Once secure authentication has been established between Pharos Cloud, the User, and the Printer, what method/protocol is used to send the print jobs from the User to the printer?

The user logs into the workstation and the Print Scout app runs on the workstation. The workstation is the common thread between the User and the Print Scout. The Print Scout will:

1. Communicate with the network printers using SNMP over UDP port 161 and
2. Communicate with the network printers over the printing protocols IPPS (default), IPP, or RAW using TCP ports 443, 631, and 9100. IPPS is IPP over TLS. Since neither IPP nor RAW are encrypted, Pharos recommends enabling IPPS printing on printers.