

Security White paper

Each Prisume Manager software installation is set up based on full data security and confidentiality. Bulletproof security is crucial for us. The below section describes the technical details concerning the Prisume Server and the Prisume Data Collector.

Network requirements

- **Access to Internet**
- **SNMP-enabled network**

Prisume uses HTTP port 80 (Hyper-Text Transfer Protocol) for communication between the Prisume Data Collector and the Prisume Server. You can compare this to browsing the web with an Internet browser on a standard PC. All data is exchanged in a compressed and encrypted way using HTTPS port 443 (HyperText Transfer Protocol Secure).

Ports used

- **HTTP port 80**
- **HTTPS port 443**

The Prisume Data Collector is using Simple Network Management Protocol (SNMP) to collect MIB/ OID data from the printers on your network - using as few network resources as possible. No print jobs can be reproduced or replicated based on the submitted data. Only accounting/status information is transmitted. This ensures a high degree of confidentiality.

Please note that data is encrypted and compressed when transmitted. The data transmission (HTTP request) is usually below 100 Kb. Data is by default scheduled to be transmitted every 180 minutes to the Prisume Server. The Prisume Data Collector service is easily configured on the Prisume Server.

Technologies used

The Prisume Server and the Prisume Data Collector are built on the flexible and highly secure .NET platform, which offers superior performance and scalability.

Requirements

- Microsoft Windows Communication Foundation (WCF).
- Microsoft .Net 4.6 framework or higher (if not installed on the server it will require ~600MB).
- SNMP version 1.0 enabled on network and devices.
- Community default name: "Public". It is possible to set the community.
- Name for each range.

The main Prisume Data Collector functions

- Authentication: The Prisume Data Collector scans all defined network ranges searching for imaging devices (printers, MFPs, fax machines, etc.).
- List of network ranges: The network scan is flexible and able to collect data from one specific IP Address to a full IP range, e.g.: 192.168.99.1 to 192.168.99.254.
- List of MIBS: The Prisume Data Collector only performs SNMP reads and is not able to update or make any changes to the imaging device.
- Discover and collect phases: The Prisume Data Collector uses two phases to collect data from an Imaging device: Discover and collect. Both phases use SNMP to look for specific OID's. From the server, it is possible to configure how often each phase is executed.

The discover phase

The discover phase is used to look at all IP addresses specified using SNMP. The phase will reveal if the specific IP address holds an image device. First, one SNMP packet is sent to all IP addresses. If a reply is received, a unique set of OID's is sent to identify the image device. Then the image device is found and stored in the database for the collect phase.

The collect phase

Depending on the imaging devices found in the discover phase, the type of data requested can vary. Small devices such as mono printers are prompted for very little information whereas a large MFD typically has a wider data set to be collected.

Not all data is collected each time a collect phase is completed. Some data is collected each time and other data is collected only once. Collecting the IP address, MAC and Hostname of each image device scanned is standard. This ensures the accurate identity and location information on each imaging device. If a printer is found, it is matched to a specific MIB and via SNMP asked for the specific information related to type and model.

Examples of data output

Name	OID	Result
Model_Name	1.3.6.1.4.1.11.	HP Color LaserJet CM4730 MFP
DeviceIdentifier	1.3.6.1.2.1.25.	HP Color LaserJet CM4730 MFP
Model_Number	1.3.6.1.4.1.11.	CB481Q
SerialNumber	1.3.6.1.4.1.11.	JPC1H11795
Firmware_Data_Code	1.3.6.1.4.1.11.	20110829
Firmware_Version	1.3.6.1.4.1.11.	50.021.0
Hostname	1.3.6.1.2.1.1.5.	NP1870A6C
Printer_Display	1.3.6.1.2.1.1.43.	Ready
Device_Location	1.3.6.1.4.1.11.	Reception
Device_AssetNumber	1.3.6.1.4.1.11.	PRN-2011A8743
Device_Total	1.3.6.1.4.1.11.	698265
Copy_Total	1.3.6.1.4.1.11.	12669
Print_Total	1.3.6.1.4.1.11.	6B4331
Fax_total	1.3.6.1.4.1.11.	1265
Print_BW_Total	1.3.6.1.4.1.11.	558744
Print_Color_Count	1.3.6.1.4.1.11.	125587