ECI DCA is designed to work on most networks with no additional configuration, but if the network has a connection restriction in place (such as restrictive firewall and/or proxy), the firewall/proxy settings may need to be adjusted to allow ECI DCA to connect to the services listed on this page.

Inbound Connections

There are no inbound connections from the internet to ECI DCA.

Outbound Connections

Service	Port	Connection To
Data Upload	**443/tcp** (HTTPS)	Your Printanista Hub Server
Software Updates	**443/tcp** (HTTPS)	ECI Updates Server
Registration (fallback)	**53/udp** (DNS)	Local Network DNS server (primary) ECI Updates Server (fallback)

Printanista Hub Server

All collected data is sent to the Printanista Hub server where it is made available for reporting and alerting. ECI DCA connects to the Printanista Hub server using HTTPS (port **433/tcp**). This connection is protected by industry standard **TLS** (Transport Layer Security). No other network data can be identified or collected by ECI DCA except for IP address, MAC address, and Hostname. The application is deployed inside the network and from there, it communicates with devices to gather operational information about the device that is made available via the device firmware and an SNMP Management Information Base (MIB).

This connection stays open the entire time ECI DCA is running. Normally a **WebSocket** connection is used, but in some situations ECI DCA may fall back to using either **server-sent events** or **HTTP long polling**.

ECI Updates Server

ECI Updates Server is a service run by ECI Device Management to facilitate DCA registration, automatic software updates, and DCA installations, and is required for ECI DCA operation. Note that ECI DCA doesn't send any collected device or configuration data to ECI Updates Server.

Software Updates

ECI DCA auto-updates itself by downloading updates published on https://updates.printanista.net/. Connections are always made on the standard HTTPS port **443/tcp**.

Registration

ECI DCA uses DNS requests to *.reg.pf-d.ca to register. It will first try to do this using the local network DNS servers, and then fall back to talking directly to ECI Updates Server IP addresses (using port 53/udp). The firewall only needs to permit this connection to ECI Updates Server if local DNS server(s) don't resolve the registration requests.

Types of Information Collected

ECI DCA attempts to collect the following information from networked printing devices during a network scan:

- IP address (can be masked)
- Manufacturer
- Serial number
- Asset Number
- MAC address
- Device description
- Device status
- Firmware
- Location
- Toner Cartridge supply level
- Meter reads
- Meter type
- Monochrome or color identification

Service Region

ECI DCA is routed to the region to which it has the lowest network latency and based on service availability. In certain locations, the region being used may change over time as activity on the global internet infrastructure can affect latency.

ECI Updates Server IP Addresses

Region	IP Address
Ohio, USA	18.221.28.125
	18.221.142.58
Frankfurt, Germany	18.194.186.127
	18.194.190.64
Sydney, Australia	52.63.134.199
	54.79.239.117

Support

If you have additional questions about connectivity or are running into any registration or installation problems, email dca@rjyoung.com.