

Local Print Agent

Overview

The Local Print Agent is used to collect information from local printing devices. The technology of the local device determines the information reported to the Local Print Agent (older, lower-end devices may report less information than newer, higher-end devices), but the Local Print Agent attempts to collect the following information:

- Manufacturer
- Device description
- Serial number
- Meter reads
- OS version of Local Print Agent Host
- IP address of the machine the Local Print Agent is installed on (Local Print Agent Host)
- Asset number
- Location
- MAC address
- Miscellaneous (machine specific)
- Name of the account used to run Local Print Agent service

No print job or user data is collected.

How does it work?

The Local Print Agent launches as a service on the machine on which it is installed. The service communicates with the Printer DCA through the IP address of the machine using TCP and UDP port 35. The Local Print Agent uses PDL to collect information directly from local devices.

NOTE: Local Beacon (the predecessor to Local Print Agent) did not use PDL, and pulled information from the spooler rather than from the devices directly.

The traffic created by the Local Print Agent per local device is comparable to traffic for a network printer. For example, if there are three local devices, the size of data is approximately equivalent to the combined traffic from three network printers.

The Local Print Agent is idle except when directed by the Printer DCA to perform a query. The frequency of queries can be adjusted in the Printer DCA settings.

System Requirements

Each workstation on which you install Local Print Agent must have the following:

- Windows operating system (XP and higher supported)
- Microsoft .Net Framework 2.0 SP1 (or higher)
- Ports 35/UDP and 35/TCP must not be used by any other applications

In addition, if you are installing Local Print Agent using push technology, each workstation must have one of the following enabled and accessible:

- Windows Management Instrumentation (WMI)
- Remote Registry services

Installation Instructions

Local Print Agent collects information directly from locally connected printing devices and passes the information to the Printer DCA. To do this the Local Print Agent software must be installed on each computer connected to a local device from which you want to collect information.

Ideally, Local Print Agent should be installed on all computers at any location where you want to collect local device information. This would allow you to collect information from new local devices as soon as they are connected.

Before You Start

Before starting to install Local Print Agent, consider the following (and take the appropriate steps where necessary):

- Do you want to use push technology to install Local Print Agent?
If so, ensure WMI or Remote Registry services are installed on each machine where you want to install the Local Print Agent. You will also need the credentials of a user that belongs to the local administrator group on the target OS for each machine.
- Do you want to install Local Print Agent on all machines, or just those that are currently connected to local devices?
There is a different procedure to follow depending on what you want to do, so you need to make a decision.
- Do the machines have .Net Framework 2.0 SP1 (or later)?
If not, you must install .Net Framework 2.0 SP1 (or later) on each machine where you want to install the Local Print Agent.
- Determine the IP addresses/ranges of machines connected to local devices.
- Do any other applications use port 35/TCP and 35/UDP?
If so, you must identify and resolve the conflict.

Installing Local Print Agent

There are three steps that must be taken to collect local device data using the Local Print Agent:

1. Add the IP addresses/ranges of computers connected to local devices to the Printer DCA network scan.
BEST PRACTICE: When deploying the Local Print Agent to multiple subnets, create a separate profile for each subnet range. Deploy the Local Print Agent one subnet at a time to reduce the amount of network traffic generated, as well as reduce the system resources used on the server for the install. For information on setting up profiles, see page 19 of the Data Collection Agent Users Manual.
2. Enable the local device scanning option.
3. Install the Local Print Agent software on each computer connected to a local device from which you want to collect information. Depending on the circumstances at your site, there are three methods you can choose from to install Local Print Agent:
 - Third-party push tool installation
 - Printer DCA push tool installation (manual or automated)
 - Manual installation (from the local printer host computer)

BEST PRACTICE: If you already have a push install system in place, PrintFleet recommends that you use it to install the Local Print Agent software. Otherwise you can use the Printer DCA software to push the installation.

If a firewall is in place, you must also configure it to allow Port 35/TCP and 35/UDP.

Third-Party Push Tool Installation

If your site already uses a third-party push installation tool, you can use that to push install the **Local Print Agent.msi** file. The installation file can be found in the Printer DCA\support folder on the system installed with the Printer DCA (its default location).

Printer DCA Push Tool Installation

The Printer DCA has an embedded push tool specifically for Local Print Agent. In addition, you can schedule periodic push installs to your entire Printer DCA scan range to ensure that Local Print Agent gets installed to any new computers on the network.

To push install Local Print Agent from the Printer DCA:

1. Under the **Scan** tab, make sure the correct scan profile is selected from the **Scan Profile** list.
2. On the **Tools** menu, select **Local Agent Management**.
3. Click **Scan All**. This will scan all IP addresses included in the selected scan profile.
4. Under the IP Address column, click to select the check boxes beside each IP address belonging to a computer you want to install Local Print Agent on. Optionally, click **All**, **None**, **Not installed**, or **Installed** to automatically select a set of IPs.
5. If you are not currently logged onto the computer as an administrator, in the **Credentials** area, click **Change**. Enter the local administrator credentials (for the target OS) in the **Username**, **Password**, and **Domain** boxes, and then click **OK**.
6. Click **Install**.

To schedule regular push installs using the Printer DCA:

1. Under the **Scan** tab, make sure the correct scan profile is selected from the **Scan Profile** list.
2. Under the **Local** tab, select the **Enable Push Install** check box.
3. In the Change Push Install Credentials screen, enter the credentials of the user that belongs to the Domain administrator group.
NOTE: The user must also belong to the *local administrator group* on the target OS.
4. Beside **Start**, select a start date and time for the automated push install.
5. Beside **Repeat**, select the interval at which you want to perform the push install.
6. Click **Save**.

Manual Installation

In environments that do not allow push installation tools, you must install the Local Print Agent software manually on each computer connected to a local printing device.

To install Local Print Agent:

- Run the **Local Print Agent.msi** file on the computer. The installation file is found by default in: program files\Printer DCA\Support folder.

The installation file can be copied to a USB drive, CD, etc. for portability.

Known Issues

Local Print Agent only supports HP and HP-based devices and devices that implement basic PDL. Brother devices (and other vendors) are not supported unless they are using HP engines or they support PDL.

Please avoid installing a Local Print Agent to detect any OfficeJet, DeskJet, Dot Matrix, or any other InkJet print devices as it may cause extraneous print jobs to be created.

Ensure the correct driver is installed for the local device. Unfortunately, if the device is using the HP Universal Print Driver, a specific driver will need to be used if available as that generic driver doesn't support the collection method used by the Local Print Agent.

Troubleshooting

If there is a local device that isn't appearing after installation:

1. Identify the IP address of the machine with a local device attached that isn't reporting.
2. Ensure that the machine that is attached to the local device is part of the domain, and the domain administrator account has access to log in.
3. On the machine that the Printer DCA is installed on, open the Printer DCA and ensure that on the Scan tab the **Local Devices** box is checked.
4. Navigate to **Tools**, open the Local Agent Management, and perform a scan on the network to identify the locations where the Local Print Agent has been loaded. Ensure that the IP address of the machine is listed here as installed.

If the IP address of the machine is not listed as installed:

1. Select that IP address and attempt the installation again remotely. *Optionally* you can take the install file from the Printer DCA support folder and manually load the Local Print Agent.
2. If you've installed a few Local Print Agents and they aren't showing up in the Local Agent Management screen when you scan, it's generally best to look on the local system at the log files for the agent. They are located in "Program Files\Local Print Agent\Local Print Agent_Logs". If the agent is failing, there should be some technical troubleshooting information in there that will be useful for tech support.

If the IP address of the machine is listed as installed:

1. Adjust the **Local Agent Timeout** setting on the Scan tab to 15000ms.
2. Ensure that the Local Print Agent service is running on the machine with the locally attached device.
3. Check that UDP port 35 is open for communication.
4. Check to see if it's using the HP Universal Print Driver. Unfortunately that driver doesn't support the collection method we're using and a model-specific driver will need to be used if available.
5. Right-click an IP with the agent installed and select **Get Data**. This will force a "test" scan of the selected Local Print Agent. If there are local devices at the target IP, the screen will show "Performing Local Device Scan" and will take a minute or two before returning data in a new window. If there are no devices at the IP, you will see "There are no local devices at this IP" in the messages column.

If using a parallel-connected local device:

- Check that bi-directional communication is enabled at the driver. (See [example](#).)
- Check that bi-directional communication is enabled in the BIOS of the workstation to which the local device is attached.