

InfoPrint Productivity Tracker

Installing and Configuring

Version 2.1.1 PU3

G550-1136-04

InfoPrint Solutions Company

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Note:

Before using this information and the product it supports, read the information in "Notices" on page 23.

Fifth edition (March 2010)

This edition applies to InfoPrint Productivity Tracker Version 2.1.1 PU3 (Program Number 5639-AA9) and to all subsequent releases and modifications until otherwise indicated in new editions.

This edition replaces G550-1136-03.

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About this publication

This publication provides installation and configuration information about the InfoPrint® Productivity Tracker Version 2.1.1 PU3 licensed program (Program Number 5639-AA9). Productivity Tracker runs on a Windows® machine and is accessed from a Web-based user interface.

For information about InfoPrint products, see:

InfoPrint Solutions Company Web site (<http://www.infoprint.com>)

InfoPrint Information Center (<http://www.infoprint.com/infocenter>)

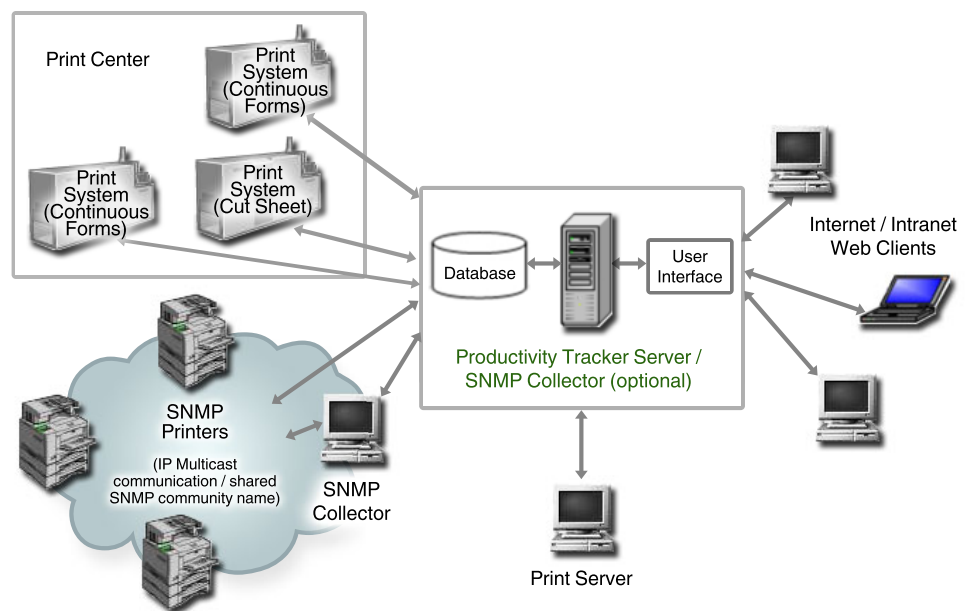
Chapter 1. About InfoPrint Productivity Tracker

InfoPrint Productivity Tracker lets you capture, display, and manipulate data about your print production facility. InfoPrint Productivity Tracker shows you information about job processing, print volumes, maintenance usage, device status, and more. InfoPrint Productivity Tracker includes several standard report formats and lets you create custom reports so you can find the specific information that you need.

Product overview

InfoPrint Productivity Tracker runs as a Web application on Microsoft® Windows. You can access it from a browser running on any AIX®, Windows, or Linux® workstation on your network. You should not install Productivity Tracker on several workstations. The application should only be installed on the Windows system that monitors your printing environment.

This diagram shows a high-level overview of the InfoPrint Productivity Tracker environment:



Supported print environments

InfoPrint Productivity Tracker Version 2.1.1 PU3 supports these print system microcode levels, SNMP, and Print Servers:

- InfoPrint 4000 with AFCCU™ microcode v.12.4.12 or later
- InfoPrint 4000 with AFCCU microcode v.11.11.12 or later
- InfoPrint 4100 with AFCCU microcode v.12.4.12 or later
- InfoPrint 4100 with AFCCU microcode v.11.11.12 or later
- InfoPrint 4100 with POWER® Controller v.15.2.010 or later

- InfoPrint 4100 with POWER Controller v.15.4.407 or later (provides additional data)
- InfoPrint 5000 (contact your InfoPrint Solutions Company representative for details)
- Printers supporting Simple Network Management Protocol (SNMP) v.1 based on Printer Management Information Base (MIB) v.1 (RFC1759) and Printer MIB v.2 (RFC 3805)
- InfoPrint ProcessDirector Print Server 1.3.1 PTF U829966 (Linux) or PTF US00109 (AIX)
- InfoPrint Pro C900AFP v.20.2

Productivity Tracker publications

InfoPrint Productivity Tracker publications explain how to install and use the product.

The publications include:

- *InfoPrint Productivity Tracker Installing and Configuring* (this book) in PDF format.
- The Productivity Tracker product information center. The information center is installed as online help when you install Productivity Tracker.
- The InfoPrint Information Center (<http://www.infoprint.com/infocenter>)
- The Installation Guide and Readme files on the Productivity Tracker download page (http://www-01.ibm.com/support/docview.wss?rs=95&context=SR4SRZ&dc=D400&q1=psd1*&uid=psd1P4000907&loc=en_US&cs=utf-8&lang=en)

Starting and stopping Productivity Tracker

InfoPrint Productivity Tracker runs as Windows services on the server machine where it is installed.

To start Productivity Tracker services:

1. Log in to Windows as an administrator.
2. Navigate to **Control Panel** → **Administrative Tools** → **Services**.
3. Select these services and start them:
 - InfoPrint Productivity Tracker Storage
 - InfoPrint Productivity Tracker Print System Collector
 - InfoPrint Productivity Tracker Print Server Collector
 - InfoPrint Productivity Tracker - Apache Tomcat IPPTWebServer

To stop Productivity Tracker:

1. Log in to Windows as an administrator.
2. Navigate to **Control Panel** → **Administrative Tools** → **Services**.
3. Select these services (if currently started) and stop them:
 - InfoPrint Productivity Tracker Storage
 - InfoPrint Productivity Tracker Print Server Collector
 - InfoPrint Productivity Tracker Print System Collector
 - InfoPrint Productivity Tracker - Apache Tomcat IPPTWebServer

Chapter 2. System Requirements

Before you can install InfoPrint Productivity Tracker, you must obtain the required hardware, install the required software, and make sure network connectivity between your print systems, print servers, SNMP Collectors, and Productivity Tracker is set up.

Hardware requirements

Make sure that you have the required hardware to run InfoPrint Productivity Tracker.

The hardware requirements for InfoPrint Productivity Tracker are:

- Intel® or compatible CPU, with either a dual-core 2.0 GHz or single-core 3.0 GHz (or greater) processor
- Server-grade PC
- 2 GB RAM minimum
- 100 MB storage space for the Productivity Tracker application
- 500 MB storage space for each monitored print system after Productivity Tracker is installed.

Note: During installation, the database will be migrated to a new configuration which requires additional temporary storage space used during the conversion. Use this formula to compute this temporary database space requirement:

$(\text{database size}) \times (\# \text{ years of data}) \times 3 = \text{hard disk space required}$

Example: If the current database size is 3 GB and contains 4 years of data, the updater requires $3 \text{ GB} \times 4 \times 3 = 24 \text{ GB}$. To update to the current version of PT and retain archives of the 4 years of data in the current database in this example, at least 24 GB additional space is needed on the Productivity Tracker server for use during the conversion. At the end of the conversion, the new database files together will take a larger amount of disk space because of their new structure, but the temporary data used during the conversion is deleted.

Note: Be patient during the database conversion. It might take several hours to complete.

- Ethernet TCP/IP and network connectivity to each monitored print system
- CD-ROM drive on the machine where Productivity Tracker will be installed
- Color monitor with a resolution of 1280x1024 or greater on each workstation accessing Productivity Tracker

Note: If your monitor has a screen resolution lower than 1280x1024, you might need to scroll horizontally to see the entire width of the browser page.

The hardware requirements for each SNMP Collector are:

- Intel or compatible CPU, with either a dual-core 1.5 GHz or single-core 2.0 GHz (or greater) processor
- 512 MB RAM minimum
- 250 MB storage space for the SNMP Collector software
- 500 MB storage space for SNMP data

- Ethernet TCP/IP and network connectivity to each monitored print system and the Productivity Tracker server
- CD-ROM drive on the machine where Productivity Tracker will be installed
- Color monitor with a resolution of 1280x1024 or greater on each workstation accessing Productivity Tracker

Note: If your monitor has a screen resolution lower than 1280x1024, you might need to scroll horizontally to see the entire width of the browser page.

Memory (RAM) requirements for the Print Server Collector service:

- The service starts with a minimum of 64 MB of RAM.
- Depending on the number of print servers defined and the number of events transferred and processed by Productivity Tracker, this service might require up to 512 MB of RAM.
- The service will not require more RAM than what is physically available on the system.

Software requirements

Make sure that you have the required software to run InfoPrint Productivity Tracker.

The software requirements for InfoPrint Productivity Tracker and the SNMP Collector are:

- Operating system: Microsoft Windows XP Professional, Microsoft Windows Vista with Service Pack 2 (SP2), Microsoft Windows Server 2003, or Microsoft Windows Server 2008 with (SP2)
- A Web browser, as described below

InfoPrint Productivity Tracker requires a Web browser to access and display its user interface. You can access the user interface from the same system where InfoPrint Productivity Tracker is installed or from another system. One of these browsers must be installed and configured on the system where you access the user interface:

Table 1. Web browser requirements for the user interface

Install browser:	Obtain from:
One of these: <ul style="list-style-type: none"> • Microsoft Internet Explorer 6.x (Windows XP only) • Microsoft Internet Explorer 7 • Mozilla 1.7.13 • Mozilla Firefox 2.0.0.9 	One of these: <ul style="list-style-type: none"> • Internet Explorer: the Windows operating system or http://www.microsoft.com • Mozilla and Firefox: http://www.mozilla.org

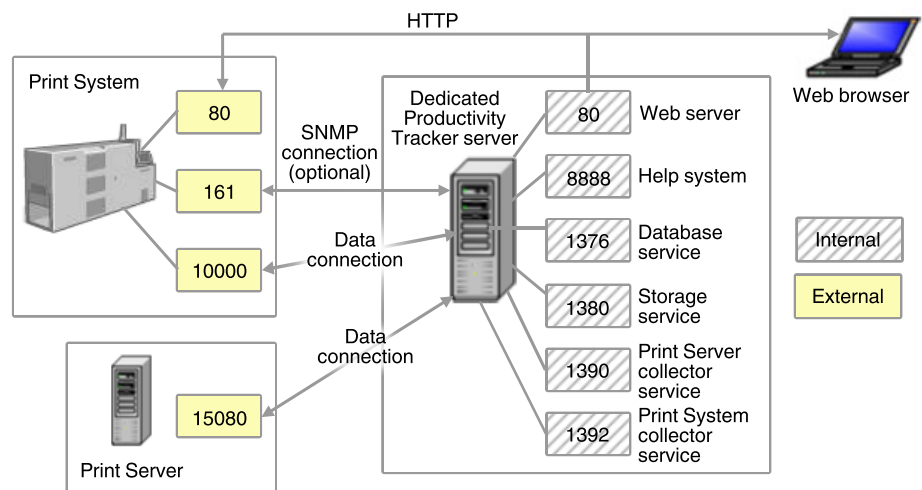
Network requirements

Make sure that InfoPrint Productivity Tracker can connect to your print systems by checking port settings and verifying that Productivity Tracker is enabled on each print system.

To make sure that Productivity Tracker can get data from your print systems:

- The server running Productivity Tracker must be able to communicate with these ports on every monitored print system. The method you use to authenticate Productivity Tracker depends on the type of network access control you use.
 - TCP/IP port 80; the printer uses this port to display its Web page. If port 80 cannot be accessed, you cannot display the print system Web page from Productivity Tracker.
 - TCP/UDP port 161; this port is used to allow inter-process communication between the SNMP collector agent(s) and the SNMP Collector service.
 - TCP/IP port 1376; this port is used to access the database service.
 - TCP/IP port 1380; this port is used to access the storage service.
 - TCP/IP port 1390; this port is used to allow inter-process communication between the Print Server Collector service and print servers.
 - TCP/IP port 1392; this port is used to allow inter-process communication between the Print System Collector service and print systems (both cutsheet and continuous forms).
 - TCP/IP port 8888; this port is used to access the help system.
 - TCP/IP port 10000; this port is used to get print system data and event information.
 - TCP/IP port 15080; this port is used to get print server data and event information.

This diagram shows how Productivity Tracker uses ports in your environment:

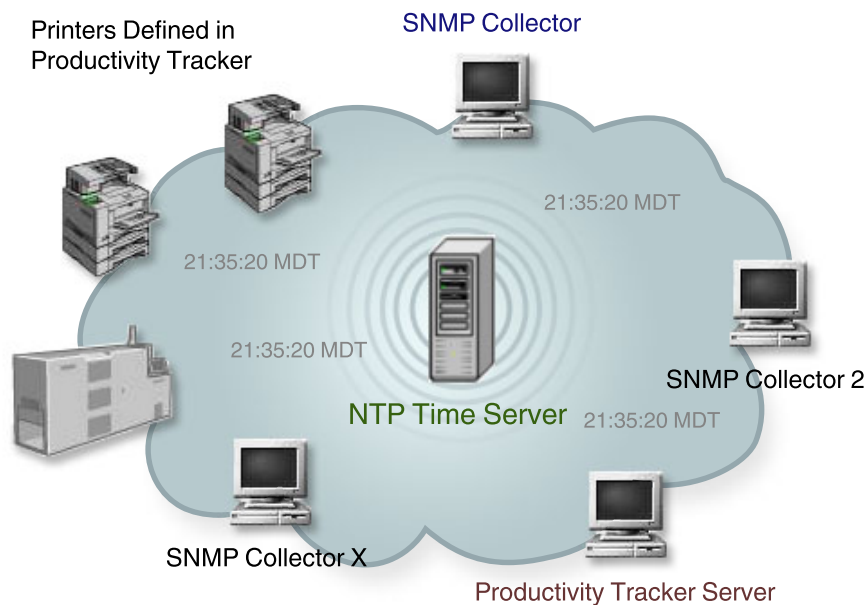


- All print systems that you want to get data from must have the hardware feature for Productivity Tracker enabled. For instructions about enabling features, see your hardware documentation.
- Firewalls must be configured to allow network traffic between user workstations and UDP port 161 on the Productivity Tracker server, and to allow communication with SNMP collectors and printers.
- Firewalls must also be configured to allow network traffic between the print server and the Productivity Tracker server.
- All component applications (such as Productivity Tracker and SNMP collectors) should be installed within the same LAN address range. If SNMP collector

agents are installed in a different range of addresses than Productivity Tracker, network devices (such as firewalls and routers) must be configured to allow multicast messages to pass through.

- For Productivity Tracker to create accurate reports about print activities, it is important to have a Network Time Protocol (NTP) available and configured for all systems within the network, including the Productivity Tracker server, SNMP collector agents, and printer controllers. While not ideal, if an NTP (common time) server cannot be set up, an Internet time server (such as *time-a.nist.gov*) can be used.

This diagram shows how an NTP server can "broadcast" a time/date stamp to system computers and printers:



- Configure print centers to be in the same time zone as the print systems they monitor, and to use the same NTP server.
- Time stamps from polled reports and SNMP reports might not match. Productivity Tracker reports for printers not using SNMP communications use the printer time for time stamps. SNMP reports use the SNMP Collector time stamps. If the enterprise has printers using SNMP in several time zones, SNMP servers can not record the correct SNMP time stamps for events from all printers. (The time will be correct according to the SNMP collector but might not be correct according to the time zone where the event happened.)
- You cannot force data retrieval for SNMP reports before you run a report. You cannot influence how often or when SNMP data is updated. SNMP data is updated only when the IP multicast refreshes the data.

Chapter 3. Productivity Tracker installation

Before you can install Productivity Tracker, make sure your system meets all system requirements.

See Chapter 2, “System Requirements,” on page 3 to verify system requirements.

Installing Productivity Tracker

Do the steps in this section to install InfoPrint Productivity Tracker. Your system must meet all hardware, software, and network requirements before installing the application. The installation might take several hours because of the database conversion process, if required.

If you are upgrading from a previous release, back up your Productivity Tracker database before installing. See “About the database, backups, and archives” on page 17 for more information about the database and what happens to the database during installation.

Note: See the hard disk requirements for conversion of the database in “Hardware requirements” on page 3 before installation.

Note: If Productivity Tracker is already installed and running, shut down the Windows services (according to “Starting and stopping Productivity Tracker” on page 2).

For the latest Productivity Tracker updater, visit:

http://www-01.ibm.com/support/docview.wss?rs=95&context=SR4SRZ&dc=D400&q1=psd1*&uid=psd1P4000907&loc=en_US&cs=utf-8&lang=en

To install Productivity Tracker:

1. Log in to Windows as an administrator.
2. Insert the Productivity Tracker CD into the CD-ROM drive. The InstallShield Wizard runs automatically from the CD if the Windows system is configured to autorun CDs.
3. If the installation wizard does not run automatically:
 - a. Navigate to the drive where you inserted the CD.
 - b. Double-click **setup.exe**.
4. Respond to the prompts as the InstallShield Wizard steps you through the installation. The installer assigns port numbers for the Web service, database, and storage service (Windows service) and others. You must change any port number for which you are already using the default port.
5. Click **Done** to complete the installation and start Productivity Tracker.

If problems occur during installation, you can check the install log file (**Program Files\InfoPrint\InfoPrint Productivity Tracker\InfoPrint_Productivity_Tracker_InstallLog.log**) for more detailed information about the installation process.

Uninstalling Productivity Tracker

You can uninstall InfoPrint Productivity Tracker using the Windows **Add or Remove Programs** function.

Before uninstalling Productivity Tracker, stop the web and database services according to the procedure in “Starting and stopping Productivity Tracker” on page 2.

Note: Users currently accessing Productivity Tracker with a Web browser will lose their session, login status, and currently running reports until the server and Web server services are restored.

To uninstall Productivity Tracker:

1. Access the Add or Remove Programs function:
 - In Windows XP:
 - a. Click **Start** → **Control Panel**.
 - b. Double-click **Add or Remove Programs**.
 - In Windows Vista:
 - a. Click **Start** → **Control Panel**.
 - b. Double-click **Programs and Features**.
2. Click **InfoPrint Productivity Tracker**.
3. Remove the program.

Alternately, you can uninstall Productivity Tracker with the uninstall script:

Program Files\InfoPrint\InfoPrint Productivity Tracker\Uninstall Productivity Tracker\Uninstall Productivity Tracker.exe

Double-click the executable file and respond to the prompts.

If files or folders cannot be removed by the uninstaller, you will receive a list of the items that the uninstaller left behind.

Chapter 4. SNMP Collector installation

Before you can install SNMP Collectors, you must obtain the required hardware, install the required software, and make sure network connectivity between your print systems and InfoPrint Productivity Tracker is set up and that Productivity Tracker Version 2.1.1 PU1 or later has been installed and is functioning correctly.

There are two versions of SNMP data collection (called Management Information Base (MIB) standards). While the MIB standards are in place to provide a common set of data collected via SNMP, implementation of those standards might vary from one manufacturer to another. This might affect the quality and/or quantity of the information collected from printers via SNMP. That is why some SNMP printers might provide more complete data than others.

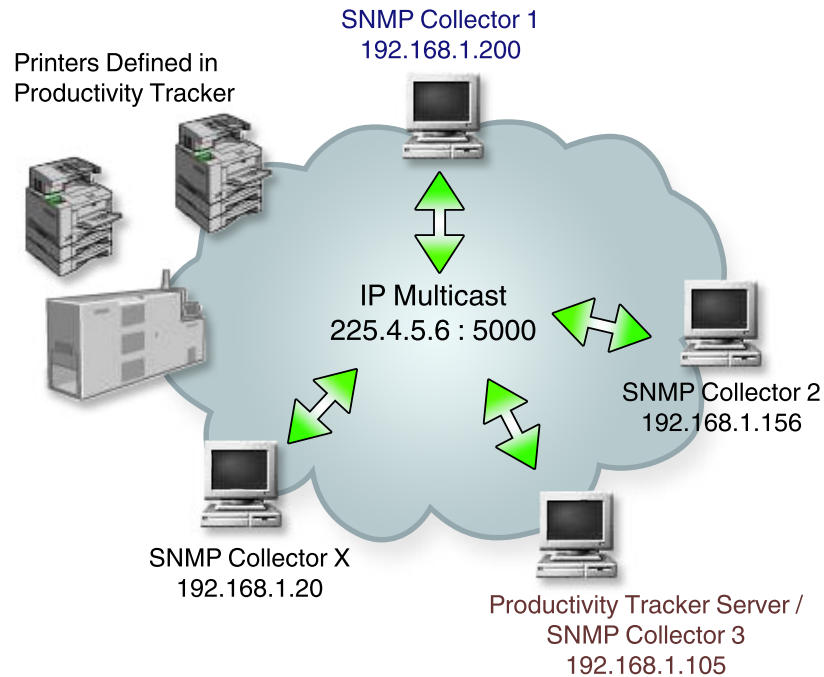
SNMP Collector requirements

This section covers the requirements necessary to install InfoPrint Productivity Tracker SNMP Collectors.

Before installing the SNMP Collector:

- Make sure Productivity Tracker server is running before installing the SNMP Collector.
- Make sure firewalls used for computers to be used as SNMP Collector Agents have been configured to allow communications with the Productivity Tracker server using UDP port 161.
- Allow/enable IP Multicast within all active elements of the network (such as switches, routers and firewalls) using address 225.4.5.6, port 5000.
- Make sure each SNMP Collector Agent has access to the computer where Productivity Tracker is installed (for accessing the database engine).
- Install at least 2 SNMP collector agents for Productivity Tracker to make sure that if one collector is incapacitated, the next Collector Agent in the environment continues to collect data. The recommended number of SNMP collector instances is 4 (one actively polling via SNMP, and the others used for backup).
- Configure the Productivity Tracker server, SNMP Collector Agents, and all printers to use a local time server (NTP). Generating consistent time stamps is a key element for collecting accurate data. If a local time server is not available, an Internet time server (such as *time-a.nist.gov*) can be used. See "Network requirements" on page 4 for more information about SNMP and NTP time servers.
- Make sure you have the Productivity Tracker server signature.
- Disable VPN clients on all computers used as SNMP Collectors. VPN clients will not allow the install to complete, and will disrupt the ability of multicast communications needed for SNMP Collectors to synchronize information correctly.
- Disable stand-by or hibernate state for all computers used as SNMP Collectors or communications will be disrupted.
- Enable SNMP with a known read community name (usually this community name is set to **public**) on all printers which will be monitored via SNMP.
- Allow/enable IP Multicast within all active elements of the network (switches, routers, firewalls, etc.) on address 225.4.5.6, port 5000.

This diagram shows the SNMP portion of the Productivity Tracker print environment and how the IP multicast protocol is used for exchanging and synchronizing data between the SNMP collector agents :



Installing SNMP Collectors

Do the steps in this section to install InfoPrint Productivity Tracker SNMP Collectors.

To install an InfoPrint Productivity Tracker SNMP Collector:

Note: If Productivity Tracker is already installed and running, shut down the Windows services according to "Starting and stopping Productivity Tracker" on page 2.

1. Log in to Windows as an administrator.
2. Install the latest Productivity Tracker update according to the instructions in "Installing Productivity Tracker" on page 7.
3. Insert the SNMP Collector install CD into the CD-ROM drive. The SNMP Collector InstallShield Wizard runs automatically from the CD if the Windows system is configured to autorun CDs.
4. If the installation wizard does not run automatically:
 - a. Change to the drive where you inserted the CD.
 - b. Double-click **setup.exe**.
5. Respond to the prompts as the InstallShield Wizard steps you through the installation. We recommend you use the default folder the installer assigns for the application. If the Agent is installed on the same computer as the Productivity Tracker server, the installer will use the same install and shortcut folder and will skip a couple of steps. If installing on the Productivity Tracker server, the server signature field will auto-fill.
6. Click **Done** to complete the installation and start the SNMP Collector service.

The Productivity Tracker SNMP Collector Windows service automatically starts after installation.

Note: Restart the Windows services according to “Starting and stopping Productivity Tracker” on page 2.

Uninstalling SNMP Collectors

You can uninstall InfoPrint Productivity Tracker SNMP Collectors using the Windows **Add or Remove Programs** function.

Before uninstalling InfoPrint Productivity Tracker, stop the web and database services according to the procedure in “Starting and stopping Productivity Tracker” on page 2.

Note: Users currently accessing Productivity Tracker with a Web browser will lose their session, login status, and currently running reports until the server and Web server services are restored.

To uninstall Productivity Tracker:

1. Access the Add or Remove Programs function:
 - In Windows XP:
 - a. Click **Start** → **Control Panel**.
 - b. Double-click **Add or Remove Programs**.
 - In Windows Vista:
 - a. Click **Control Panel**.
 - b. Double-click **Programs and Features**.
2. Click **Productivity Tracker**.
3. Remove the program.

Alternately, you can uninstall the Productivity Tracker SNMP Collector with the uninstall script:

Program Files\InfoPrint\InfoPrint Productivity Tracker\Uninstall SNMP Collector\Uninstall SNMP Collector.exe.

Double-click the executable file and respond to the prompts.

If files or folders cannot be removed by the uninstaller, you will receive a list of the items that the uninstaller left behind.

Chapter 5. Configuring the system

Configuration tasks for InfoPrint Productivity Tracker include setting up properties for print centers and print systems, creating a database backup schedule, adding users, and more.

Note: We recommend that you restart a print system before adding it to the Productivity Tracker system. Restarting the print system before polling it for the first time makes sure that Productivity Tracker can obtain the print system's configuration and start-up parameters. Without a restart event in the log, print system data might not be available for reports.

You must do these tasks, at a minimum, to configure Productivity Tracker. Follow the order shown here:

1. Add at least one user.
2. Add print centers.
3. For each print center:
 - a. Define shifts.
 - b. Define operator activities.
 - c. Add print systems and set up their polling interval.
 - d. Manually poll the print system if an automatic poll has not occurred.
 - e. Edit page profile information.

We recommend doing all the tasks described in this section.

Setting the report row maximum

Administrators can set the maximum number of rows of data that Productivity Tracker includes in reports. As the maximum number of rows increases, more system resources are required.

To set the maximum allowed number of report rows:

1. Log in as an administrator.
2. Click **Setup** in the banner and click **System** → **Settings**.
3. Enter the maximum number of rows that you want to include in reports. The default value is 3,000. The minimum value is **10** and the maximum value is **65,000**.
4. Click **Save**.

Adding users

All users who access the InfoPrint Productivity Tracker system must have an InfoPrint Productivity Tracker user name and must be identified as either an administrator user or a user.

Authorized users can create user names for everyone who uses InfoPrint Productivity Tracker.

Users can create reports for all the print centers, print systems, and SNMP printers that Productivity Tracker manages, and can view (but not change) system settings.

Administrators can do all user tasks, and can also set system preferences, add users, do database maintenance functions, and more.

To add a user:

1. Log in as an administrator.
2. Click **Setup** in the banner and click **Users**.
3. Click **Add**.
4. Enter information into the required fields.
5. Click **OK**.

Inform the newly added user the user ID and password they will use to log in to the application.

Adding print centers

Before retrieving print system data, you must define your print centers and their print systems. InfoPrint Productivity Tracker includes a default print center named **Main Center**. You can rename it, or you can set up your print centers and then delete the default print center. At least one print center must exist.

To add a print center:

1. Log in as an administrator.
2. Click **Setup** in the banner and click **Enterprise** → **Print Centers**.
3. Click **Add**.
4. Enter values for the required fields on the **General** tab.
5. Click **Save**.
6. Optional: Enter values for the fields on the **Print System** tab. Although this step is optional, you must set up the print systems from which you want to obtain data before retrieving data and printing reports.
7. Optional: Enter values for the fields on the **Page Profiles** tab. Although this step is optional, you must set up page profile information before retrieving data and printing reports that depend on page dimension data so that job page counts are accurate. Productivity Tracker uses a page profile named Default Profile for all jobs that print before the print system reports that a snapshot is loaded. After the first snapshot is loaded, its corresponding page profile is used for all jobs until the next snapshot is loaded.
8. Optional: Enter values for the fields on the **Activities** tab.
9. Optional: Enter values for the fields on the **Operators** tab.
10. Optional: Enter values for the fields on the **Shifts** tab. Although this step is optional, you must set up shifts before retrieving data and printing reports so that work shift statistics are accurate.
11. Click **Close**.

Adding print servers

Before retrieving print server data and creating reports, an authorized user must define the print servers.

To add a print server:

1. Log in as an administrator.
2. Click **Setup** in the banner and click **Enterprise** → **Print Servers**.

3. Click **Add**. You see the Add a Print Server page.
4. Enter values for the required fields.

Note: To change the color that identifies this print server in reports, click **Choose** to open the color chooser.

5. Click **OK**.

Note: Integration between InfoPrint Productivity Tracker and print servers does **NOT** include mapping of job IDs known to Productivity Tracker from monitoring printers to job IDs used by print servers.

Adding shifts

Authorized users can define the work shifts at a print center. InfoPrint Productivity Tracker uses shift information when creating reports that show productivity by shift. You should set up work shifts before retrieving any print system data. InfoPrint Productivity Tracker includes a default shift named **Off shift** but we recommend that you set up your shifts, then (optionally) delete the default shift. At least one shift must exist for each print center.

To add a shift:

1. Log in as an administrator.
2. Click **Setup** in the banner and click **Enterprise** → **Print Centers**.
3. Select a print center for which you want to add a shift and click **Edit**.
4. Click the **Shifts** tab.
5. Click **Add**.
6. Enter values for all required fields.
7. Click **OK**.

Notes:

- a. If you select **Same for all days** for a shift, enter the start time only for one day and it will repeat for all days.
- b. Shifts cannot overlap.
- c. Shifts cannot be less than one hour.
- d. The defined shifts must encompass the entire week; you cannot have any unassigned time.
- e. The default shift **Off shift** has a start time of 7:00 AM. To have a different start time for a shift, you must first edit the **Off shift** shift to have a start time that corresponds to the ending time of another shift, then edit your other shifts.
- f. To delete the **Off shift** shift, you must create at least one other shift first.

For example, to create shifts that are the same for every day, and the shifts are from midnight to 8:00 AM, from 8:00 AM to 4:00 PM, and from 4:00 PM to midnight:

1. Edit the default **Off shift** shift to change its start time to 12:00 AM.
2. Add a new shift and set a start time of 8:00 AM.
3. Add another shift and set a start time of 4:00 PM.
4. Optional: Delete the **Off shift** time period and create a new shift with the same start time, giving it a name that you prefer.

Adding print center activities

Authorized users can define custom activities for a print center and send those activities to the print systems in that print center. The activity list displays on the print system console.

InfoPrint Productivity Tracker provides these default activities:

- Took a break
- Serviced printer
- Cleaned printer
- Changed printer configuration
- Loaded forms
- Aligned forms
- Cleared stacker
- Checked print quality
- Added/checked supplies
- Cleared jam
- Cleared error
- Waited for network outage to end
- Waited for printer to warm up
- Waited for printer to restart
- Waited for operator to be available

To add a print center activity:

1. Log in as an administrator.
2. Click **Setup** in the banner and click **Enterprise** → **Print Centers**.
3. Select the print center for which you want to add an activity and click **Edit**.
4. Select the **Activities** tab.
5. Click **Add**.
6. Enter values for the required fields. You must enter an activity description for at least one language. The activity description displayed on the print system depends on its language setting. For example, if you send the list of activities to all print systems in the print center and the interface in your print system is German, you will see the description in German.
7. Click **OK**. The activity is added at the bottom of the list.
8. To send this list of activities to all print systems in the print center, select the **Send activities to all print systems in this print center** checkbox. In nearly all cases, you should leave this option selected. You might want to clear the checkbox if you are using InfoPrint Productivity Tracker on more than one server to monitor the same print systems and you do not want both servers to send an activities list to the print systems.
9. Click **Close**.

Adding print systems

Before retrieving print system data and creating reports, an authorized user must define the print systems.

To add a print system:

1. Log in as an administrator.

2. Click **Setup** in the banner and click **Enterprise** → **Print Systems**.
3. Click **Add**. You see the Add a Print System page.
4. Enter values for the required fields.

Note: To change the color that identifies this print system in reports, click **Choose** to open the color chooser.

5. Click **OK**.

Modifying SNMP collectors

Authorized users can modify which SNMP collector agent is currently active and restart them.

To change which SNMP collector is currently active or to restart the active collector:

1. Log in as an administrator.
2. Click **Setup** in the banner and click **System** → **SNMP Settings**.
3. Click the checkbox next to the collector you want to activate or restart.
4. Click **Activate** to activate or **Restart** to restart the selected SNMP collector.

About the database, backups, and archives

InfoPrint Productivity Tracker uses the Apache Derby database engine. This runs as an independent process that is started automatically by the operating system and has its own allocated memory. This section explains how InfoPrint Productivity Tracker uses the database files and how archiving works.

See “Hardware requirements” on page 3 which explains the database conversion process for InfoPrint Productivity Tracker upgrades.

- Database files are stored on the hard drive where the InfoPrint Productivity Tracker server is installed. Database files include the current year and the previous year. All other database files are archived. This explains the database folders (found in **Program Files\InfoPrint\InfoPrint Productivity Tracker**):
database - current and previous year database files
backups - database backups
archives - database archives
- In the past, InfoPrint Productivity Tracker kept a single database, which had a default storage time length of up to 5 years. As of version Version 2.1.1 PU1, the database structure and functioning has changed, and there is now one database file per year.
- The current database structure is more efficient, and database files are saved differently than previous versions. During migration to the current version of InfoPrint Productivity Tracker, the installation process splits the database into separate databases (one for every year). The current and previous year (if available) are converted and stored as separate database files in the database folder. Additional previous years are converted and then saved as separate compressed .zip files (named by year) in the **archives** folder.

Note: While you should leave files in the **backups** and **archives** folders to run reports against them, the .zip files provide a convenient way for you to back up the files to another location or media (backup server, CD-ROM, DVD, tape, etc.)

Example: The database before the upgrade contained data from 2006–2009. The database folder before migration:

`database\ptweb\`
The database folder after migration:
`database\ptweb_2009\` and `database\ptweb_2008\`
The archives folder after migration:
`archives\ptweb_2007.zip` and `archives\ptweb_2006.zip`

Scheduling database backups

You can set up an automatic backup schedule for the report data that InfoPrint Productivity Tracker stores. You can also create a database backup manually.

To schedule a database backup or run an immediate backup:

1. Log in as an administrator.
2. Click **Setup** in the banner and click **System** → **Storage**.
3. Select the **Backup** tab.
4. To run an immediate backup, click **Run Now**.
5. Enter values for the required fields. Depending on the value you select for **Frequency**, the other drop-down lists change to show valid selections. The maximum recommended backup setting, is 3 months because some Print Systems overwrite their local print data at 3-month intervals. If 3 months is used, create a backup using the **Run Now** button.
6. Click **Save**.

While the backup process runs, you cannot do other tasks and users cannot log in.

Scheduling database maintenance

Authorized users can set up an automatic maintenance schedule for the InfoPrint Productivity Tracker database. Database maintenance cleans up the database tables, checks the integrity of the data, and removes data that is older than the data storage time limit. You can also run database maintenance manually.

To schedule database maintenance or run a maintenance process manually:

1. Log in as an administrator.
2. Click **Setup** in the banner and click **System** → **Storage**.
3. Select the **Maintenance** tab.
4. To run the maintenance process now, click **Run now**.
5. Select the desired days and times to run the maintenance process, according to a 12-hour clock. Specify A.M. or P.M.
6. Click **Save**.

While the maintenance process runs, you cannot do other tasks and users cannot log in.

Defining logging settings

You can customize logging settings to show different levels of detail. InfoPrint recommends that you use detailed logging only when necessary to troubleshoot a problem, because detailed logging can cause poor system performance. Log files are stored in the directory **Program Files\InfoPrint\InfoPrint Productivity Tracker\log**.

To define logging settings:

1. Log in as an administrator.
2. Click **Setup** in the banner and click **System** → **Logging**.
3. Select a level of detail. The default detail level is **Severe**. Detail level **All** is the most detailed. The level of detail decreases for selections lower on the list.
4. Enter a maximum number of log files to create. The default number of log files is 3. The maximum value is 9. The system creates this number of files and overwrites the content of each file as the maximum file size is exceeded.
5. Enter a maximum file size for the log files. The default maximum file size is 50 MB. The maximum value you can enter is 100 MB. When the maximum file size is reached, the system either creates an additional log file or overwrites the content of the current file, depending on the selected number of log files.
6. Click **Save**.

Instructing new users how to log in

After you set up user names, tell your users how to log in to the Productivity Tracker system.

Give each user this information about the installation:

User name

Tell users the user names and passwords that you created for them.

URL for the InfoPrint Productivity Tracker user interface

The default URL that all users use to access the user interface is: `http://[hostname].[local_domain]/`. If you have to use a port number other than the default port, the URL is `http://[hostname].[local_domain]:[port_number]/`. The name of the machine where Productivity Tracker is installed is *hostname*.

Login authority

Each user name that you created has a set of actions that it is authorized to do based on whether the user type is **User** or **Administrator**. Tell users what types of actions they can do in the user interface.

Note: Make sure that you tell your users about the InfoPrint Productivity Tracker information center/help system and how they can access it. The URL for the information center is: `http://[hostname].[local_domain]:8888/help/index.jsp`. The name of the machine where InfoPrint Productivity Tracker is installed is *hostname*. You can open the information center using that address from anywhere in your network, even if you are not currently logged in to Productivity Tracker.

Appendix. Accessibility

InfoPrint Solutions Company strives to provide products with usable access for everyone, regardless of age or ability. This section describes the accessibility support built into InfoPrint Productivity Tracker .

Features

Accessibility features help users who have a physical disability, such as restricted mobility or limited vision, use information technology products successfully.

The accessibility features of Productivity Tracker include:

- Standard Microsoft Windows navigation
- Interface design which accommodates screen readers.

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