

Fleet Manager

Administrator's Guide

August 2016

www.lexmark.com

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Overview

LexmarkTM Fleet Manager is a suite of tools that helps organizations save costs and improve productivity by making printer usage and maintenance easy to manage.

The central server component of Lexmark Fleet Manager is the Lexmark Fleet Tracker 3 (LFT3), which provides the primary user interface for the solution. Within this document, LFT3 is referred to as the Fleet Tracker.

Lexmark Fleet Manager supports the following data collectors:

- Lexmark Fleet Tracker 2 (LFT2)
- Lexmark Services Monitor (LSM)
- Embedded Services Monitor (eLSM)
- Local Printer Management Agent (LPMA)

These data collectors track device and user data, and then roll them up to the primary Fleet Tracker or Managed Service Provider (MSP). For more information, see the documentation for each data collector.

To manage printing environments effectively, Lexmark Fleet Manager can do the following:

- Monitor devices and track individual print users, print jobs, and all device meters.
- Calculate printing costs from a corporate, group, or cost-center perspective, and account for other printing cost factors, such as downtime, maintenance, storage space, and supplies.
- Provide graphical reports of printer usage, including the number of jobs and pages printed, the number of printers used, energy consumption, and supplies costs.
- Manage printer servicing, including printer maintenance schedules, automated e-mail alerts for printer supply levels, and service tickets.

This document provides instructions on how to configure, use, and troubleshoot the Fleet Tracker.

Getting started

System requirements

Hardware requirements

	Up to 1000 devices	Up to 5000 devices	Up to 12500 devices
Server	The application and the database are on a single server.	The application and the database are on a single server.	The application and the database are on separate servers.
Processor	Dual-core processor	Intel Core i7 processor or equivalent (such as the Intel Xeon processor E5 product family, which uses the Hyper-Threading Technology).	Intel Core i7 processor or equivalent (such as the Intel Xeon processor E5 product family, which uses the Hyper-Threading Technology).
RAM	4GB	8GB	8GB for the application 8GB for the database
Hard disk drive	50GB	150GB	30GB for the application 250GB for the database

Notes:

- If you want to support more than 12500 devices, then contact your Lexmark representative for the recommended hardware requirements.
- The hard disk drive requirements can support up to two years' worth of data.
- We recommend backing up the database regularly and implementing a data retention policy of at least 12 months.

Supported Microsoft® Windows® operating systems

- Windows Server® 2012 R2
- Windows Server 2012
- Windows Server 2008 R2

Supported databases

- PostgreSQL (built-in)
- Oracle[®] Database 11g Express Edition
- Oracle Database 11g Standard Edition One
- Oracle Database 11g Standard Edition
- Oracle Database 11g Enterprise Edition

Supported web browsers

- Google ChromeTM version 34.x or later
- Mozilla Firefox version 28.x or later

Setting up the database

Notes:

- If you are installing the Fleet Tracker without the built-in PostgreSQL database, then install an external PostgreSQL or Oracle database before installing the Fleet Tracker. For more information, see the documentation for your database vendor.
- When you install the database, take note of the database vendor name, URL or IP address, user name, and password. These data are required during the Fleet Tracker installation.

To set up an external PostgreSQL database, do the following:

- **1** From the database server, create a temporary directory.
- 2 Save the createPG.bat batch file to the temporary directory.
- **3** Run the command prompt as an administrator.
- **4** At the command prompt, navigate to the bin directory of PostgreSQL, and then run the **createPG.bat** batch file.

Note: The batch file creates two PostgreSQL databases named Ifm and Ifmdwh.

To set up an external Oracle database, do the following:

- **1** From the database server, create a temporary directory.
- 2 Save the createORA.sql file to the temporary directory.
- **3** Run the command prompt as an administrator.
- 4 At the command prompt, navigate to the temporary directory, and then type the following:

sqlplus oracleadmin/oraclepassword @createORA.sql ID PW

Where *ID* and *PW* are the LFM database user ID and password.

Note: The Oracle script configures the connection properties of the database and creates two Oracle users needed for the LFM installation. After running the script, make sure to reboot the Oracle server.

Installing the Fleet Tracker

Note: Make sure that you have administrative privileges to the server where you are installing the Fleet Tracker.

1 Launch the Fleet Tracker installer, and then follow the instructions on the screen.

- If an external database is installed, then select the appropriate database vendor.
- If you do not want to replicate data between an existing Fleet Tracker (LFT2) MSP and the new Fleet Tracker (LFT3), then clear **Port Mirror**.
- When installing the PostgreSQL database, you are prompted to type a super administrator user name and password for the database. These credentials are for the database only and do not need to be the same as the administrator credentials of the server.
- **2** After the installation, make sure that the following services are running:
 - LexmarkFleetTracker
 - LexmarkFleetTrackerDatabase

Note: The LexmarkFleetTrackerLicensing service does not run until you have uploaded a license file to the Fleet Tracker.

Configuring remote database connection

You may need to set up a connection to the Fleet Tracker database from a computer that does not have the solution installed. This setup is required when using a tool to create reports, such as the PENTAHO® software Pentaho Report Designer.

If you installed the Fleet Tracker with a built-in PostgreSQL database, then do the following:

- **1** From the server where PostgreSQL and Fleet Tracker are installed, navigate to the **pg_hba.conf** file, and then open it in a text editor.
- 2 Under host all all 127.0.0.1/32 trust, add another line that explicitly lists the IP address of the computer where you want to connect to the database. For example, host all all 192.168.2.12 trust.
- **3** Save and close the file, and then restart the LexmarkFleetTrackerDatabase service.

Note: For more information, see the Client Authentication section in the PostgreSQL documentation.

Accessing the Fleet Tracker web page

Note: Make sure that the firewall settings are configured to allow access to the Fleet Tracker.

- **1** Open a web browser, and then type the Fleet Tracker IP address.
- 2 Type admin as both the user name and password to log in as the default super administrator.

Note: We recommend adding at least two super administrators as backup. For more information on user roles and adding new users, see <u>"Configuring user access" on page 12</u>.

Understanding the web page

The Fleet Tracker web page is the primary interface for monitoring devices, managing policies, and generating reports. The web page is customizable.



Use	То		
Groups pane	Control the scope of the content pane, and manage clients and groups.		
	Note: When rolling up data from the data collector to the Fleet Tracker server, the client address details are rolled up to the group level.		
Content	Access specific information and configuration tasks using the tabs across the top of the right pane.		
pane	Note: All content views can be customized. Columns can be reordered, added, or removed and items can be sorted (ascending and descending), filtered, and grouped for each column values.		

The following table explains the information and settings that you can access from the main content pane tabs.

Use	То	
Devices	View the list of devices that the data collectors monitor. From this view, you can add or delete devices, move or copy devices into groups, and remove devices from groups.	
Users	View and export the list of monitored users.	
Print Queues	View print queues that the data collectors monitor.	
Tickets	View, create, edit, and delete tickets.	
Policies	View, create, edit, and delete device and group policies. Policies let you specify how tickets and e-mail notifications are managed for several device-related events.	
Inventory	View and export your inventory data.	
Historical Data	View historical data.	
Reports	Generate, schedule, export, and view reports. You can also view and delete archived reports.	
Data Collectors	View or export a list of data collectors and their information. You can also configure the settings for LPMA, and delete data collectors along with the devices associated with them.	
	Note: If multiple data collectors are rolling up data to a single client or group, then you can delete only the data collectors. The devices and print queues are not deleted.	

Customizing search options

- 1 From the Fleet Tracker web page, in the Search menu, select the tabs that you want to include in your search.
- 2 In the Search field, type the text that you want to search for, and then click the search icon.

Note: The search results appear in the content pane and a Search Results group is also created in the Groups pane. The most recent search results are saved until you log out.

Activating the Fleet Tracker license

In the Fleet Tracker, licenses let you monitor several devices. When you apply a license, you can specify which devices to monitor by changing their state to Managed or Unmanaged. You can still collect data for unlicensed devices, but the data is not stored in the database. For unlicensed devices that used to be licensed, the data from the period during which they were licensed can be accessed in the historical data views. If you monitor several devices that exceed the number allotted by the license, then you can purchase more Fleet Tracker licenses.

To obtain a license file, provide your Lexmark representative with the MAC address of your Fleet Tracker server. Your representative uses the MAC address to generate a license file for your Fleet Tracker. Each license file is associated with a specific MAC address and only works for the server with that address. If your server has multiple MAC addresses, then make sure to associate license files with a MAC address that does not change. If you want to install the Fleet Tracker on a different server, then you can acquire new license files.

- **1** From the Fleet Tracker web page, click **System Configuration**.
- 2 From the Upgrades and Licensing tab, in the Apply New License section, browse to the license file.
- 3 Click Apply > Close.

Notes:

- As long as there are allotted devices available for your license, newly discovered devices are set to a Managed state automatically.
- Unlicensed printers remain in Discovered state. You can change the state of devices from the Devices tab. For more information, see <u>"Understanding device states" on page 20</u>.

Upgrading the Fleet Tracker

- 1 From the Fleet Tracker web page, click System Configuration > Upgrades and Licensing.
- 2 From the Versions and Upgrades section, click Check for Updates.
- 3 If updates are available and you want to apply them, then click Apply Updates.
- 4 Click Close.

Configuring the Fleet Tracker

Configuring server settings

From the System Configuration dialog, you can configure the Fleet Tracker server settings.

- **1** From the Fleet Tracker web page, click **System Configuration** > **Server**.
- **2** Configure the following settings:
 - **Bind Address**—If the Fleet Tracker server has multiple network cards, then specify the IP addresses where you want the web page to be accessible. If you want to make all IP addresses accessible, then leave this field blank.
 - Session Timeout—Specify the number of minutes a user stays logged in to the Fleet Tracker web page before the connection times out.
 - Server Port—If you want to receive data on the server port, then select this option and specify the port number. We recommend setting it to port 80, which is the default value.
 - Secure Port—If you want to receive data that is secured using SSL encryption, then select this option and specify the port number. We recommend setting it to port 443, which is the default value. This option is available only if you upload a root certificate along with a signed certificate to the server.
 - Local Tracker Rollup Port—Specify the port number that the Fleet Tracker uses for LPMA data rollup. The default setting is port 2722.
- 3 Click Save, and then click Yes to restart the server.

Note: The changes take effect after the server restarts.

Enabling SSL for the Fleet Tracker

- 1 From the Fleet Tracker web page, click System Configuration > Server > Create Certificate Signing Request.
- **2** Enter the appropriate information, and then click **Ok**.
- **3** Save the request as **lfm.csr**.
- **4** Using your own or a trusted third-party Certificate Authority, create a root certificate and a signed certificate based on the certificate signing request. Alternatively, you can create a self-signed certificate using a tool like OpenSSL.
- **5** From the System Configuration dialog box, in the Server tab, select **Secure Port**, and then upload both the root and signed certificates.

Configuring e-automate connections

e-automate is a third-party application that helps customers manage common business processes, like inventory control and billing. The Fleet Tracker can be integrated with e-automate so that the application can leverage the Fleet Tracker data.

Note: In order for the Fleet Tracker data to integrate correctly with e-automate, the printer assets must be configured in e-automate first. Make sure that the e-automate asset serial number matches the device serial number.

- 1 From the Fleet Tracker web page, click **System Configuration** > **System Integration**.
- 2 From the e-automate section, click +. A new connection is added to the list of connections.
- **3** In the right pane, enter the appropriate information in each tab to configure the connection.
 - **a** In the Connection tab, enter the information that allows the Fleet Tracker to connect to e-automate.
 - **Connection Name**—Type a name for the e-automate connection.
 - Username—Type the user name that allows access to e-automate.
 - Password—Type the password that allows access to e-automate.
 - Company ID—Type the company ID associated with the e-automate server.
 - Server Address—Type the IP address of the e-automate server.
 - Port—Enter the port number on which the Fleet Tracker data is sent to e-automate.
 - Web API—Type the web API used with the e-automate server.
 - API Version—Enter the web API version number.
 - **b** In the Group Access tab, select the groups whose data is shared with e-automate over this connection.
 - c If necessary, change the meter mapping in the Mapping tab.

Notes:

- Make sure that the default values have not been changed in e-automate. These values must match the meter fields used in e-automate for the data to be integrated properly.
- If you do not want to send meters to e-automate, then from the Enabled column, clear the check box for each meter.
- If you want to send meters only to e-automate and it has a value other than zero, then from the Non-Zero column, select the check box for each meter.
- **4** Save the connection credentials.
- **5** Initiate a data transfer to e-automate. Do either of the following:
 - To initiate a one-time data transfer, click **Send data to e-automate now**.
 - After the transfer is complete, the Last Transfer column in the e-automate tab is updated with the appropriate time stamp.
 - To schedule a recurring data transfer, select Transfer Enabled. Use the Transfer Time field to specify whether to send the data daily, weekly, every other week, or monthly. Specify the hour of the day (0–23 in 24-hour time) for the transfer to occur.

Note: Failed transfers do not appear in the Last Transfer column. To identify the cause of failure, check the error logs from the **LFM.log** file on the server. You can also get information on the number of successes and failures.

- **6** If necessary, save the connection credentials.
- 7 Click Close.

Note: When the Fleet Tracker completes a data transfer to e-automate for a given connection, the Last Transfer column in the e-automate tab is updated. Likewise, the "e-automate update time" column in the Devices tab is updated for the devices from which data is sent.

Configuring user access

From the System Configuration dialog box, you can add or remove users, update user information, and set up group-level access.

- **1** From the Fleet Tracker web page, click **System Configuration** > **Users**.
- 2 From the Users pane, add, delete, or select a user.
- **3** If you are adding a user, then do the following:
 - **a** In the General Information tab, specify the user information, and then select a role.

Note: If you want the user to receive notifications only and not log in to the web page, then clear **Enabled**.

- **b** If you want the user to receive e-mail notifications, then in the Contact Information tab, enter the contact details.
- **c** In the Group Access tab, select the groups that you want the user to have access to. Granting access to a group also provides access to all the child groups under it.
- 4 Click Save > Close.

Assigning user roles

You can assign one of the following roles to a user:

- **Super Administrator**—Super administrators have unrestricted access to all parts of the Fleet Tracker web page but cannot change their own group access or delete their user account.
- Administrator Administrators have complete access to the Fleet Tracker web page. They can update user information for groups they have access to, but cannot add or delete super administrator accounts.
- **Technician**—Technicians can view data and manage tickets for any groups that they have access to. They can also edit their own general and contact information. Technicians cannot perform any configuration tasks from the Fleet Tracker web page.
- **Customer Manager**—Customer managers have privileges similar to technicians. They can view data and create tickets. They can also create new historical data views and generate and schedule reports, but they cannot archive the reports or share the historical views.
- **Customer Viewer**—Customer viewers can view the data for the groups to which they are given access. However, they cannot make any configuration changes or create any new historical views, reports, or tickets.
- **API**—API users can only make calls to the Fleet Tracker Open API REST interface; other users cannot do the same. These users cannot access the Fleet Tracker web page. Calls made to the API by API users only return the data for groups that they have access to.

The following table further illustrates the permissions of each user role.

	Super administrator	Administrator	Technician	Customer manager	Customer viewer	ΑΡΙ
System Configuration	Unlimited	Unlimited except for the E-mail Notifications and Server tabs Note: In the e-automate section, administrators can modify only their group information.	Can only edit personal information	Can only edit personal information	Can only edit personal information	No access
Groups pane	Unlimited	Unlimited	No access	No access	No access	No access
Devices tab	Unlimited	Unlimited	View	View	View	No access
Users tab	Unlimited	Unlimited	No access	View	View	No access
Print Queues tab	Unlimited	Unlimited	View	View	View	No access
Tickets tab	Unlimited	Unlimited	View and edit; cannot delete	Unlimited	View	No access
Policies tab	Unlimited	Unlimited	No access	No access	No access	No access
Inventory tab	Unlimited	Unlimited	View	No access	No access	No access
Historical Data tab	Unlimited	Unlimited	Unlimited	Cannot share custom views	View	No access
Reports tab	Unlimited	Unlimited	View, e-mail, and export reports; cannot archive reports	View, schedule, e-mail, and export reports; cannot archive reports	View	No access
Data Collectors tab	Unlimited	Unlimited	View	No access	No access	No access
Make API calls	No access	No access	No access	No access	No access	Unlimited

Notes:

- Users of all roles are prohibited from changing their own user ID and role.
- Users of all roles can view only the data or configuration tasks for groups to which they have been given access by a super administrator.

Adding a vendor

In the Fleet Tracker, vendors are organizations that are responsible for the upkeep of your devices. Most technicians who service your printers belong to a vendor. You can manage your vendors from the System Configuration section and assign tickets to them. Creating vendors lets you send maintenance tickets consistently to the same organization. You can also confirm that a specific organization is handling all the upkeep of a group of devices.

- 1 From the Fleet Tracker web page, click System Configuration > Vendors > New Vendor.
- **2** From the General Information tab, specify the appropriate information.
- **3** From the Branch Offices tab, click **New Branch Office**, specify the appropriate information, and then click **Ok**.
- 4 From the Technicians tab, click Add Technician, specify the appropriate information, and then click Ok.

Note: Add technicians in the Users section before assigning them to a vendor. For more information, see <u>"Configuring user access" on page 12</u>.

5 Click Ok.

Configuring e-mail notifications

Note: To get your e-mail server information, contact your e-mail provider. To view examples of e-mail server settings for some common e-mail providers, see <u>"Appendix A: Common e-mail server settings" on page 34</u>.

- **1** From the Fleet Tracker web page, click **System Configuration** > **E-mail Notifications**.
- 2 From the E-mail Server section, configure the following:
 - SMTP Gateway—Type the address for your e-mail server.
 - **SMTP Gateway Port**—Enter the port number used for sending e-mail notifications. The default is port 25.
 - User ID—Type the e-mail address that you want to use for sending the e-mail notifications.
 - **Password**—Type the password for the e-mail address.
- **3** Do one or more of the following:
 - To add SMTP properties, click **Advanced Settings**, configure the properties, and then click **Ok**.

Note: Each SMTP property consists of a name-value pair.

- To specify a sender e-mail address other than the default, in the "From" E-mail Address field, type the e-mail address.
- To specify a reply e-mail address other than the default, select **Use a different e-mail address for** "**Reply-To,**" and then type the e-mail address.
- 4 Click Save.

Customizing e-mail messages

You can customize the content and style of the e-mail messages that the server sends as notifications. Use the Groovy Server Pages (GSP) templates on which the messages are based.

You can do one or more of the following:

- Add variables that tie into back-end Fleet Tracker data to populate the message with appropriate content.
- Structure your content using styles.
- Add images, such as your organization logo.
- Introduce conditional logic to create dynamic messages.

For more information and tips on customizing e-mail messages using the GSP templates, see <u>"Appendix B:</u> <u>Understanding GSP e-mail templates" on page 35</u>.

Managing pricing and costs

Customer pricing and partner cost information can be configured at both the group and device level. Customer pricing information lets you specify how you charge customers for a device or group of devices. Likewise, partner cost information lets you specify the costs associated with monitoring a device or group of devices. As with policies, devices within a group inherit the group pricing and cost information, but changes to a specific device information override the group information.

1 From the Fleet Tracker web page, do either of the following:

Edit information for a group of devices

- **a** From the Groups pane, select a group, and then click 📝.
- b Click Customer Pricing or Partner Costs.

Edit information for a device

- **a** From the Devices tab, click the name of the device.
- b Click Customer Pricing or Partner Costs, and then click Edit.
- **2** Enter the pricing or cost information. The Customer Pricing fields are associated with what you charge the customer, and the Partner Costs fields are associated with your own costs.
 - Purchase Order—Enter the order number.
 - Acquisition Date—Enter the date when the device was acquired.
 - Acquisition Type—Select the type of acquisition.
 - Buyout Price—Enter the price to purchase the device.
 - Initial Payment—Enter the initial payment.
 - Final Payment—Enter the final payment.
 - Monthly Payment—Enter the monthly payment.
 - Number of Payments—Enter the number of payments required.
 - Schedule Event—Enable the event scheduling controls.
 - Expiration Notice Date—Enter the date when the contract expires. The expiration occurs at 8:00 AM on the specified date.
 - E-mail Notification—Select a user who should receive an e-mail notification for this event.
 - **Notify Before**—Specify when to send the notification before expiration.
 - **BW Allowance**—Enter the number of allotted black-and-white pages.
 - **BW Rate/Page**—Enter the base-level price per black-and-white page. This rate can be used if you want to charge customers or track your costs according to per-page usage, rather than a flat monthly rate.
 - **Color Allowance**—Enter the number of allotted color pages.

- **Color Rate/Page**—Enter the base-level price per color page. This rate can be used if you want to charge customers or track your costs according to per-page usage, rather than a flat monthly rate.
- BW Overage Rate/Page—Enter the price per black-and-white page over the allotted number.
- Color Overage Rate/Page—Enter the price per color page over the allotted number.
- Maintenance Payment—Select the pricing model used to bill maintenance.
- Maintenance Cost—Enter the maintenance price.

3 Click Save > Close.

Managing devices

Grouping printers

Creating a printer group

Create printer groups and clients to simplify the monitoring of printer usage and the generation of reports. Clients and groups function similarly, although they vary in their definitions. Clients are used to organize printers and groups for a single customer, and you cannot nest a client under a client. Groups can be used to organize printers, clients, and other groups.

1 From the Fleet Tracker web page, in the Groups pane, click 🚁.

To edit a group, select the group, and then click 📝.

2 From the General Information tab, type the appropriate information.

Note: The Name field is required.

- **3** From the Customer Pricing tab, type the pricing information that you want to associate with the new group.
- 4 Click Save > Close.

Moving or copying devices to groups

- **1** From the Fleet Tracker web page, in the Devices tab, select one or more devices.
- **2** Do either of the following:
 - Click **Move**, and then from the Move Device(s) To dialog box, select the group to which you want to move the devices.

Note: You can also click and drag the devices to a group in the Groups pane. Moving a device to another group removes it from the group it is in, depending on the level of the destination group.

 Click Copy, and then from the Copy Device(s) To dialog box, select the group to which you want to copy the devices.

In customer environments, some devices may be moved from one location to another. In the earlier versions of the Fleet Tracker, a device may appear to be associated with an old group even after the device is moved. In the newer version of the Fleet Tracker, a device can be associated with its new group automatically during a rollup. The following scenarios show how the Fleet Tracker manages the device when it is moved to another location:

• Scenario 1: A device is associated with one group.

If the device is rolled up from a different data collector, then the device is moved to a new group automatically. Only the most recent data are added to the new group, but the historical data are removed from the old group.

• Scenario 2: A device is associated with multiple groups.

If the device is associated with a group that contains multiple subgroups, then all instances of the device are removed from the old group and subgroups. Only one instance of the device appears in the new group that corresponds to the data collector from where the most recent data are rolled up.

• Scenario 3: A device is rolled up from LPMA.

If the device was rolled up previously from LSM or LFT2 and the device status is network connected, then a second device instance is created. The second device instance is associated with a new group that corresponds to LPMA. If the device is rolled up from LPMA and the device status is offline, then the device is moved to the new group automatically. The connection type of the device changes from network to USB, and all other device data for LPMA are updated accordingly.

• Scenario 4: A device is moved to a different group manually after being moved automatically.

The next rollup from the same data collector does not override the manual move. If the next rollup is from a different data collector, then the device is moved to a new group automatically.

• Scenario 5: A device is rolled up from a data collector without a site location.

If a data collector does not have a site location, then the device is rolled up to a client instead of a group. A user may create a group under the client, and then copy a device from the client to the group. If the data collector in the next rollup has a site location, then the device appears under a new group that represents the site location. The device is removed from the client, but the copy of the device from the user-created group under the client is retained.

Note: All devices that were moved automatically are highlighted in gray for the next 15 days after the first rollup. If the devices are copied to other groups manually after being moved automatically, then all the groups associated with those devices are highlighted.

Removing devices from groups

Note: When you access the Fleet Tracker web page, make sure to log in as a super administrator.

- **1** From the Fleet Tracker web page, in the Groups pane, select a group.
- **2** From the Devices tab, select one or more devices that you want to remove from the group.
- 3 Click Remove from Group > Yes.

Managing an individual printer

- **1** From the Fleet Tracker web page, in the Devices tab, click the printer that you want to manage.
- **2** Do one or more of the following:
 - From the Device Details tab, view information about the printer, including its location and supplies status.
 - From the Tickets tab, review, create, or delete tickets associated with the device.
 - From the Policies tab, create, edit, or delete the device policy.
 - From the Customer Pricing and Partner Costs tabs, update the pricing and cost information for the device.
 - From the Historical Data tab, view archived information about the device.
 - From the Log tab, view the device log.

Notes:

- Generating reports is not supported at the device level.
- Changes made to settings at the device level override settings at the group level.

Adding a printer manually

- **1** From the Fleet Tracker web page, in the Devices tab, click **New Device**.
- **2** Enter the appropriate information for the printer that you want to add.

If necessary, add another printer.

3 Click Ok.

Note: Devices that are added manually are set to storage state. Data is not collected from devices that are added manually unless a data collector discovers these devices.

Adding an alternate printer serial number

- **1** From the Fleet Tracker web page, in the Devices tab, click any column menu.
- 2 Click Columns > Alternate Serial Number.
- **3** In the Alternate Serial Number field for a printer, click the empty cell to reveal a text box, and then enter the alternate serial number. This value is saved when you leave the text box.

Notes:

- The alternate serial number does not replace the serial number that the Fleet Tracker automatically retrieves.
- The alternate serial number appears in the ticket details in the Tickets tab, and in the Device Serial Number column in the Historical Data tab.

Adding custom device fields

- **1** From the Fleet Tracker web page, in the Devices tab, click any column menu.
- 2 Click Custom Columns > +.
- 3 Type a name for the new custom column, and then click Ok.
- 4 Click Ok.

Note: You can add values for custom fields in the Devices tab. For any printer, click the custom field cell to reveal a text box, and then type the value. This value is saved when you leave the text box.

Filtering devices

- **1** From the Fleet Tracker web page, in the Devices tab, click a column menu.
- **2** Mouse over the Filters option.

Note: The filtering option may not be available in some column menus.

3 Specify the values that you want to filter.

Note: For the System Uptime column, enter the number of days in decimals. For example, if the value is half a day or 12 hours, then type **0.5**.

Understanding device states

You can set the devices to one of the following states:

- **Managed**—These devices are monitored in the system, and the collected data are stored in the database. Managed devices count against the number of allotted devices in your license. When devices are discovered, they are set to this state automatically while your allotted devices last.
- **Unmanaged**—These devices are similar to managed devices, but can be classified according to whether you are charging for their use currently or in the future. Unmanaged devices count against the number of allotted devices in your license.
- **Discovered**—These devices have been discovered, but are not being actively monitored. The collected data are not stored in the database. Discovered devices do not count against the number of allotted devices in your license. If you exceed the number of allotted devices in your license, then newly discovered printers are set to this state.
- **Retired**—These devices are no longer in use, and no data is collected from them. You can set the devices to this state to keep them in the system for historical data. Retired devices do not count against the number of allotted devices in your license.
- **Storage**—These devices are currently not in use, and no data is collected from them. You can set the devices to this state to keep them in the system for future monitoring. Storage devices do not count against the number of allotted devices in your license.

To change the device state, do the following:

- **1** From the Fleet Tracker web page, in the Devices tab, select one or more devices.
- 2 Click Edit State.
- **3** In the State menu, select a device state.
- 4 Click Ok.

Note: If the device state is changed from Managed or Unmanaged to Retired, Discovered, or Storage, then the device row is highlighted in yellow. The values in some columns are no longer shown. When sorting or filtering devices by columns, the devices are listed in the same manner as when the values of the columns were still shown.

Understanding device statuses

In the Fleet Tracker, each device is associated with a device or printer status.

Device status

The device status refers to the current operational state of the device.

- **Running**—The device is operating normally.
- Inactive—The device is not active.
- Warning—An error has been detected but the device is still usable.
- **Down**—The device is not usable.
- Unknown—The Fleet Tracker cannot determine the device status.
- **Testing**—The device is in a testing state and cannot be used.

Printer status

The printer status refers to the current state of the printer portion of the device; multifunction products have features beyond just printing print jobs.

- Idle—The printer is idle.
- Warmup—The printer is in the process of warming up.
- **Printing**—The printer is in the process of printing a document.
- **Other**—The printer state could be one of several miscellaneous states.
- **Unknown**—The Fleet Tracker cannot determine the printer status.

Managing policies

A policy lets you specify how ticket creation and e-mail notifications are handled for a number of device-related conditions and tasks. These events fall into three categories: service, maintenance, and supplies.

A master policy covers all devices and groups of devices, and can be customized as needed. You can also create a custom policy for a device or group, overriding the policy of any parent groups that the device or group belongs to.

Understanding policies

There are three types of policy events:

- **Service**—Lets you specify how to handle device conditions that require service (for example, jammed devices and empty trays).
- **Maintenance**—Lets you schedule maintenance activities and specify how to handle them (for example, replace fuser, replace toner).
- **Supplies**—Lets you specify how to handle supplies-related device conditions (for example, paper out, waste toner bottle level alert).

You can configure what happens when each policy event is triggered using the following:

- **Event Scheduling**—Lets you schedule a maintenance activity (by date or page count). You can also set the event to recur.
- **Ticket Creation**—Lets you configure when tickets are created before or after an event is triggered. You can also set the priority level, assign the ticket to a vendor, or add more information in the notes field.
- **E-mail Notification**—Lets you configure when e-mail notifications are sent before or after an event is triggered.

When the Fleet Tracker receives a new data rollup, device conditions such as changes in usage or status trigger policy events. The policy event is triggered the first time the condition is detected and is not retriggered until the condition is resolved. So if the condition persists for subsequent rollups, then no new e-mail notifications or tickets are generated until the condition is reset and occurs again.

The following flowchart illustrates the life cycle of a device condition as it applies to policy events (does not include maintenance events):



You can trigger policies either by date or by rollup. Scheduled maintenance policies occur at the specified date. Rollups trigger all other policies. After the data from a rollup is saved, all newly discovered devices are evaluated to see if any policy conditions are met. Tickets and e-mails are generated as indicated by the device policies. If a ticket or e-mail is generated, an internal flag is set to avoid duplicate tickets and e-mails.

Creating a group policy

- **1** From the Fleet Tracker web page, in the Groups pane, select the group of devices for which you want to create a policy.
- 2 Click Policies > New Policy > Customize Policy.

- **3** Customize the policy for the appropriate service, maintenance, and supply events.
- 4 Click Ok.

Creating a device policy

- **1** From the Fleet Tracker web page, in the Devices tab, click the name of the device for which you want to create a policy.
- 2 Click Policies > New Policy > Customize Policy.
- **3** Customize the policy for the appropriate service, maintenance, and supply events.
- 4 Click Ok.

Editing a policy

1 From the Fleet Tracker web page, in the Policies tab, select a group or client to which the policy is assigned.

Note: The policy events are organized according to their types in the Service, Maintenance, or Supplies tabs.

- **2** Click the event and edit the policy settings.
- 3 Click Ok.

Managing service tickets

Creating a device service ticket

In most cases, tickets are automatically generated as a result of a group or device policy event. You can create service tickets manually only for a single device at a time.

- **1** From the Fleet Tracker web page, in the Devices tab, click the name of the device for which you want to create a ticket.
- 2 Click Tickets > New Ticket.
- **3** Enter the appropriate information.
- 4 Click Ok.

Updating a service ticket

- 1 From the Fleet Tracker web page, in the Tickets tab, locate the ticket that you want to update, and then click the ticket number.
- **2** From the General Information tab, make the necessary changes, and then click **Save**.
- **3** From the Technician Visits tab, add details about a new visit, or update the information of an existing visit.
- **4** To return to the main Tickets tab, click **All Groups**.

Managing data and reports

When you view historical data by group or generate reports by group, make sure that one of the following is selected in the Groups pane:

- All groups containing at least one client or group
- A client containing one group as a site location
- A group containing another group

Note: A device that was moved out of a group may be rolled up again to the same group automatically. This instance causes two rows for the same device to appear in the historical data or reports. The period of when the device is associated to a group is not captured in historical data or reports.

Understanding date ranges

When viewing the historical data or generating reports, you can select one of the following predefined date ranges from the Time Period menu:

- Last 30 Days—Shows data from the previous 30 days until the current date
- Last 90 Days—Shows data from the previous 90 days until the current date
- Last Week—Shows data from the previous week starting on a Sunday and ending on the last Saturday
- Last Month—Shows data from the previous calendar month excluding the month of the current date
- Last Quarter—Shows data from the previous quarter excluding the quarter of the current date
- Last Year—Shows data from the previous calendar year excluding the year of the current date
- This Week—Shows data from the last Sunday until the current date
- This Month—Shows data from the first day of the current month until the current date
- This Quarter—Shows data from the first month of the current quarter until the current date
- This Year—Shows data from January 1 of the current year until the current date

For historical data, if you select an option that includes a date range in the View menu, then the data shown for the time period changes. The historical data view covers the full weeks, months, quarters, or year that fits into the specified time period.

For example, on October 8, a user selects **Supplies by Quarter** in the View menu and **Last 30 days** in the Time Period menu. The last 30 days start from September 7 to October 8, which falls under the third quarter (July to September) and fourth quarter (October to December). In this case, viewing the historical data shows supplies data from July 1 to October 8.

Viewing historical data

Creating views

You can create flat table views to review archived data for a specified period. In a flat table, each row represents one item, such as a device. The columns are pieces of information associated with each item, such as IP address, toner levels, and status.

- 1 From the Fleet Tracker web page, in the Historical Data tab, click 🗔.
- **2** Type a descriptive name for the view.

Note: You can also edit or remove views.

- **3** Select the item that you want the rows to represent, such as a device, group, or supply.
- 4 Select and arrange the columns. Use the arrows to move items from the Available list into the Selected list.
- 5 If you want this view to be available to other users, then select Shared, and then click Ok.

Selecting a view

- **1** From the Fleet Tracker web page, in the Historical Data tab, click the View menu, and then select a predefined view.
- 2 From the Time Period menu, select the date range that you want the view data to cover.

Note: If you select Custom Date Range, then specify the range in the From/To text boxes.

3 Click 🧹.

Note: You can also export the historical data view into a CSV file.

Managing reports

Understanding reports

Predefined reports

- Consumed Supplies (CSV)—Lists the supplies that were replaced for each device within a specified period
- Days Until Empty Summary by Current Cartridge—Shows a summary of the estimated number of days remaining until the supply is empty based on the current cartridges
- Days Until Empty Summary by Device Lifetime—Shows a summary of the estimated number of days remaining until the supply is empty based on the old and current cartridges
- Days Until Empty Summary by Device Time Span—Shows a summary of the estimated number of days remaining until the supply is empty based on the old and current cartridges within a specified period
- Days Until Empty by Current Cartridge—Lists the estimated number of days remaining until the supply is empty for each device based on the current cartridges
- Days Until Empty by Device Lifetime—Lists the estimated number of days remaining until the supply is empty for each device based on the old and current cartridges

- Days Until Empty by Device Time Span—Lists the estimated number of days remaining until the supply is empty for each device based on the old and current cartridges within a specified period
- Inventory by Group (CSV)—Lists the number of devices, the uptime percentage, and the recent percentage of reporting devices in each group within a specified period
- Supplies by Device (CSV)—Lists the supplies usage for each device within a specified period
- Volumes by Device (CSV)—Lists the print, copy, fax, and scan page volumes for each device within a specified period

Custom reports

You can create custom reports using the Pentaho Report Designer software. The following parameters are required in every report:

- entity—The ID of the device or group for which the report is run
- **starttimestamp**—The start date of the report
- **endtimestamp**—The end date of the report

The following keywords are also required to determine whether the report can be run on a group or a device:

- device
- group

Note: For more information on creating custom reports, see the help information for the Pentaho Report Designer software.

Generating reports

- **1** From the Fleet Tracker web page, in the Reports tab, select a predefined report.
- 2 If necessary, select a time period that you want to cover in your report.
- **3** Schedule, view, export, or e-mail the report.

Notes:

- You can edit, delete, or export current scheduled reports from the Scheduled Reports tab. You can also view and delete past reports from the Archived Reports tab.
- Details of scheduled reports show the local time zone from where the client is accessing the application.

Managing data collectors

Configuring the LPMA settings

- **1** From the Fleet Tracker web page, in the Data Collectors tab, select one or more LPMA data collectors.
- 2 Click LPMA Settings, and then configure the following:
 - Job Report—Send job reports to the LFM server on each specified day of the week, within the specified start time and end time. The repeat interval can be either in minutes or in hours, and the default setting is two hours. You can select one or more of the following information that you want to include in the job reports:
 - Track User Printing—Include the user information.
 - Include Document Names-Include the names of the printed documents.
 - Track Local Printer Queues—Monitor the printing activity of local (USB, DOT4, parallel, or serial port) printers.
 - Track Networked Printer Queues—Monitor the printing activity of network printers.
 - **Inventory Report**—Send inventory reports to the LFM server on each specified day of the week, within the specified start time and end time. The repeat interval must be at least one hour, and the default setting is three hours.
 - **Blackout Schedule**—Disable the communication between LPMA and the LFM server on each specified day of the week, within the specified start time and end time. This setting is disabled by default.
 - **Remote Configuration**—Retrieve the LPMA configuration from the LFM server on each specified day of the week. The repeat interval must be at least one minute, and the default setting is 12 hours.
 - **Software Update**—Check software updates for LPMA on the LFM server on each specified day of the week. The repeat interval must be at least one minute, and the default setting is 24 hours.

Note: You can also configure the LPMA settings using a configuration file. For more information, see the *Local Printer Management Agent Administrator's Guide*.

3 Click Ok.

Note: You can view or export the data that LPMA collects in the Print Queues tab.

Frequently asked questions

How do I change my password?

- **1** From the Fleet Tracker web page, click **System Configuration** > **Users**.
- 2 Select your user name.
- **3** In the General Information tab, change your password, and then click **Save**.
- 4 Click Close.

What do I do if I forget my password?

Contact a super administrator to change your password. We recommend setting up at least two super administrators so that they can back each other up in editing the information of other users. If you have no super administrators set up, then contact customer support.

My network uses Novell software products for user authentication and printing (Micro Focus iPrint). Will the data collectors work in this environment?

Yes. If the printers are using TCP/IP, then the data collectors get page count and status information directly from the printers. If Windows operating system print definitions are used (outside Novell software environment), then user printing statistics can be obtained from desktops with parallel- or USB-connected printers.

What impact will the Fleet Manager components have on the network?

The Fleet Manager components have very little impact on network bandwidth. The SNMP probes and the returned data are a few packets at most, and the interval for polling devices and timeout settings can be customized.

What happens to my reports after upgrading the Fleet Tracker server?

Upgrading the Fleet Tracker server overwrites the existing predefined reports. Any customizations made to the predefined reports are lost. Custom reports are still available after the upgrade without any additional steps.

To avoid overwriting customized predefined reports, change the file names before upgrading the Fleet Tracker server. You can distinguish between the predefined reports and custom reports by changing the title of the custom reports using the Pentaho Report Designer software.

If the current database is compatible with the updated reports, then you can replace the new predefined reports with the old customized-predefined reports.

The old reports can be found at

install_path\webapps-bak-timestamp\ROOT\reports

Where *install_path* is the installation path for the Fleet Tracker and *timestamp* is the time stamp for the update.

The current reports can be found at

install_path\server\webapps\ROOT\reports

Where *install_path* is the installation path for the Fleet Tracker.

Note: Make sure to back up the new reports so that you can restore them if necessary.

Troubleshooting

Cannot install the Fleet Manager components

Try one or more of the following:

Log in with administrator privileges

Make sure that the installation procedures are performed correctly

Restart the computer after installing the database component

Contact your Lexmark representative

Cannot access the Fleet Tracker web page

Try one or more of the following:

Make sure that the Fleet Tracker service is running

- **1** From the Fleet Tracker server, open the Windows Run dialog box, and then type **services.msc**.
- **2** From the Services window, check the status of the Lexmark Fleet Tracker service.
- **3** Do either of the following:
 - If the status is "Started," then right-click LexmarkFleetTracker, and then click Restart.
 - If the status is not "Started," then right-click LexmarkFleetTracker, and then click Start.

Contact your Lexmark representative

Cannot upload a license file

Try one or more of the following:

Make sure that the license has not yet expired

Make sure that the license file is associated with the correct MAC address

If the number of devices in the Fleet Tracker exceeds the number of allotted devices in the license, then purchase more licenses

If you do not want to purchase more licenses, then delete some devices or change their states. For more information, see <u>"Understanding device states" on page 20</u>.

Contact your Lexmark representative

Appendices

Appendix A: Common e-mail server settings

E-mail providers usually recommend the following e-mail server settings for configuring outgoing e-mail with their services.

Notes:

- E-mail providers may change these settings at any time. Make sure that the configurations are still valid before implementing them in the Fleet Tracker.
- These settings may vary for your particular e-mail setup.

Gmail

- SMTP Gateway—smtp.gmail.com
- SMTP Gateway Port—465
- User ID
- Password

Gmail SMTP properties

Name	Value
mail.smtp.auth	true
mail.smtp.socketFactory.port	465
mail.smpt.socketFactory.class	javax.net.ssl.SSLSocketFactory
mail.smtp.socketFactory.fallback	false

Outlook

- SMTP Gateway—smtp.live.com
- SMTP Gateway Port—587
- User ID
- Password

Outlook SMTP properties

Name	Value
mail.smtp.starttls.enable	true
mail.smtp.port	587

Yahoo Mail

- SMTP Gateway—smtp.mail.yahoo.com
- SMTP Gateway Port—465 or 587
- User ID
- Password

Yahoo Mail SMTP properties

Name	Value
mail.smtp.auth	true
mail.smtp.socketFactory.port	465
mail.smpt.socketFactory.class	javax.net.ssl.SSLSocketFactory
mail.smtp.socketFactory.fallback	false

Appendix B: Understanding GSP e-mail templates

GSP is a presentation language, similar to JavaServer Pages (JSP), that allows for much flexibility. It lets you mix HTML and GSP tags so that you can craft dynamic e-mail content and styles for your notifications. You can modify the message templates in any way you see fit and can use any functionality that GSP makes available.

Variables are accessed in GSP files in the following format: **\${** objects.device.manufacturerName **}**. In this example, objects is the top-level object and device is its child. manufacturerName is the actual variable or property in the objects.device object that is returned.

Here are some helpful tips for customizing notifications using GSP.

- Some e-mail providers, such as Gmail, may ignore HTML styles that are included in the GSP templates. But if the HTML styles are embedded inline, then they are honored.
- If you are not sure whether an object is null, then use an "if/else" clause to check it before you show it. Or include the following logic in the variable statement: \${ ticket?.technician?.displayname }. This logic ensures that if the ticket and technician objects are not null, then the display name field is returned.

For more information on GSP capabilities, see the appropriate Grails documentation, available online.

Updating GSP templates

The GSP templates used to generate e-mail messages come preconfigured on the Fleet Tracker server in the *Fleet_Tracker_install_path*\server\webapps\ROOT\WEB-INF\grails-app\views\emails directory. To customize the e-mail notifications that the Fleet Tracker sends, update the GSP files accordingly.

- 1 Access the Fleet Tracker server, and then navigate to *Fleet_Tracker_install_path\server\webapps\ROOT* \WEB-INF\grails-app\views\emails.
- **2** Open the GSP template that you want to update, make the necessary changes, and then save the file.

Note: If you need to revert to predefined templates later, make sure to keep backup copies of the templates.

If the Fleet Tracker server detects changes in the templates, then it recompiles the GSP files. The next e-mail notification it sends uses the updated template.

There are five predefined templates that the Fleet Tracker uses to generate e-mail notifications. Each template has some specific objects associated with it and objects that are common across all templates that you can use to customize the content. The rest of this topic outlines what each template is used for and the data items that are available for them.

The following objects are common across all the GSP e-mail templates:

- dictionary—This object is used internally to translate text strings, primarily field names, into the appropriate localized text. There are no predefined child objects; instead, the developer defines them and they vary based on the implementation. This object is an extension to the strings that appear in /i18n/index_ \$language.properties, where language is a language code, such as "en" or "de."
- **objects**—This object contains the "theme objects" of the e-mail (such as objects.device and objects.policy). Most of the data items that you use in the notifications are found in this object.
- **host**—This object contains the host name and host IP address of the server sending the e-mail. To access the fields, use "host.hostAddress" for the IP address and "host.hostName" for the host name.

The **PolicyDeviceEvent_***language.gsp* template is used to generate e-mail notifications for policy events, as configured in the device policy. The following objects can be used in this template.

Object	Property	Data Type	Description
objects.device	.manufacturerName	String	Name of device manufacturer.
	.modelName	String	Model name of the device.
	.serialNumber	String	Serial number of the device.
	.contactName	String	Name of the contact for the device.
	.name	String	Friendly name of the device.
	.ipAddress	String	IP address of the device.
	.colorCapable	boolean	Returns true if the device is color capable.
	.accountCode	String	The client the printer belongs to.
	.tickets	array of Objects	Contains all tickets associated with the device. Each Object exposes the following properties:
			• .details (String)
			 .dateCreated (Date)
			 .lastUpdated (Date)
			 .dueDate (Date)
			 .dueTime (Date)
			 .technician (Object)
			 .technician.displayName (String)
			 .ticketId (String)
			 .status (String)
			.priority (String)
	.port	Object	Exposes the .type (String) property.
	.lastDataCollection	Date	The last time rollup data was received from the device.
	.macAddress	String	MAC address of the device.
	.dnsHostName	String	DNS host name of the device.
	.assetTag	String	An optional identifier field; may be null.
	.firmware	String	Current version of firmware installed on the device.
	.engineCode	String	Engine firmware level of the device.

Object	Property	Data Type	Description
objects.policy	.problem	String	The event that triggered the policy notification.

The **PolicyGroupEvent_***language.gsp* template is used to generate e-mail notifications for policy events, as defined in the group policy. The following objects can be used in this template.

Object	Property	Data Type	Description
objects.group	.name	String	Name of the group
	.notes	String	Informational text associated with the group
	.accountCode	String	Account code of the group
	.address1	String	The first line of the address where the group is located
	.address2	String	The second line of the address where the group is located
	.city	String	The city where the group is located
	.province	String	The province where the group is located
	.postalCode	String	The postal code for the group
	.country	String	The country where the group is located
	.email	String	The e-mail address associated with the group
	.telephone	String	The telephone number associated with the group
	.fax	String	The fax number associated with the group
	.contact	String	The name of the group contact
	.contactPhone	String	The telephone number of the group contact
	.contactEmail	String	The e-mail address of the group contact
objects.policy	.problem	String	The event that triggered the policy notification

The **CostForGroupExpiration_language.gsp** template is used to generate e-mail notifications for contract expiration at the group level. The **CostForDeviceExpiration_language.gsp** template is used to generate e-mail notifications for contract expiration at the device level. The following objects can be used in both of these templates.

Object	Property	Data Type	Description
objects.costs	.purchaseOrder	String	Identifier to track the actual purchase order for the specific group or device.
	.acquisitionDate	Date	Date of acquisition in MM/DD/YYYY format.
	.acquisitionType	String	Type can be "Purchase," "Lease," or "Rental."
	.puchaseOption	float	Used to keep buyout price.
	.initialPayment	float	Initial payment.
	.finalPayment	float	Final payment.
	.monthlyPayment	float	Monthly payment.
	.numberOfPayment s	Integer	Total number of payments.
	.expirationNoticeD ate	Date	Date of expiration of the contract in MM/DD/YYYY format.
	.emailNotification	String	E-mail address associated with the selected user.
	.bwAllowances	Integer	Number of allotted black-and-white pages.
	.colorAllowances	Integer	Number of allotted color pages.
	.bwRatePerPage	float	Price per black-and-white page.
	.colorRatePerPage	float	Price per color page.
	.bwOverage	float	Overage price per black-and-white page.
	.colorOverage	float	Overage price per color page.
	.maintenancePaym ent	String	Maintenance payment can be "Annually," Monthly," "Quarterly," or "Cost Per Page."
	.maintenanceCost	float	Maintenance cost.
objects.group			An object that, along with all its child objects, is available for CostsForGroupExpiration_language.gsp.
objects.device			An object that, along with all its child objects, is available for CostsForDeviceExpiration_language.gsp .

The final GSP template available for customization is **ReportEmail_language.gsp**, which is used to generate messages when reports are e-mailed. The Fleet Tracker lets users print transparencies and does not make any objects available for this template. But you can still structure the style and presentation of the e-mail using GSP as you see fit.

The following GSP example shows how to filter data by using conditional logic. The e-mail message shows information about tickets that are created or updated as a result of the device alert, as determined by the time stamps. This example can be useful when a policy event triggers ticket creation, ticket changes, or e-mail notifications.

```
<g:each in="${objects.device.tickets}"
<g:if test="${ new Date().toTimestamp().toString().tokenize(".")[0] ==</pre>
it.dateCreated.toString().tokenize(".")[0]
                                            || new
Date().toTimestamp().toString().tokenize(".")[0] ==
it.lastUpdated.toString().tokenize(".")[0] && it.status != 'statusClosed'}">
<div>
<h2>Open Tickets</h2>
<br><b>Ticket#:</b> ${ it?.ticketId }</br>
<br><b>Urgency:</b> ${ it?.priority } </br>
<br><b>Status:</b> ${ it?.status } </br>
<br>>date Opened:</b> ${ it?.dateCreated } </br>
<br><b>Due Date:</b> ${ it?.dueDate } ${ it?.dueTime } </br>
<br><b>Assigned to:</b> ${ it?.technician?.displayname } </br>
<br><b>Details:</b> ${ it?.details }
</div>
</g:if>
</g:each>
```

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August 2016

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