

# Command Collector

## QUICK START GUIDE



### 1 Install and open Collector

- 1 Install the Collector software and then access the login page by opening a Web browser and navigating to “http://<hostname or IP Address of Collector>/Collector/”
- 2 Once on the login page, enter your username and password (default “administrator” and “password”) then click **Login**.

### 2 Add a sensor

The Sensors page appears upon logging in. First, you need to add sensors to Collector:

- 1 Click on **Add Sensors** on the main Sensors page, opening the Add Sensor page.
- 2 Select the sensor type from the drop-down list.
- 3 Enter the following information:
  - The IP/host name used to connect to the sensor
  - The port number used to connect to the sensor
  - The multi-drop ID used by this sensor (may be optional, depending on device)
  - The custom ID used to identify the sensor (optional)
  - The collection interval that determines how often Collector connects to the sensor and collects data (in seconds)
- 4 Select the appropriate time zone.
- 5 Put a check next to applicable Options and Networks.
- 6 In the white box, enter any custom properties for the sensor type.
- 7 Click the **Add** button.

The sensor will now be added to the list on the main Sensors page. Open this page by selecting **Sensors** from the menu bar. Click on a sensor name for details, including sensor configuration and lane assignments.

### 3 Start/Stop collection

For data collection, click on **Sensors** in the menu bar then follow the steps below:

- 1 Put a check next to the sensors for which you would like data to be collected.
- 2 Select **Collection** from the Sensors toolbar then click the **Start Collection** button.
- 3 Click the **Stop Collection** button to stop data collection for all selected sensors.



The Status icon will be empty if collection is stopped, green/yellow/red if collection has started.

**Note.** This step is not necessary if you checked the **Start Collecting Data Immediately** check box when adding the sensor. In that case, collection has already started.

### 4 Change sensor information

If necessary, sensor information can be changed on the Sensor Config page. This page can be accessed by clicking on the name of the desired sensor. There are four tabs with configurable information. Two of these tabs, **Sensor Config** and **Lanes/Approaches**, are used to change sensor information:

- 1 **Sensor Config** – This tab contains all basic configuration information. The box on the top half of the page contains the custom configuration control. This information will help identify each sensor, as Collector can support any number of different data collection devices. The box on the bottom half of the page contains the standard Collector sensor information as discussed in step 2 on the previous page. Any changes can be save by clicking **Save Changes**.

A screenshot of the 'Sensor Config' tab in a software interface. It has four tabs: 'Sensor Config', 'Lanes/Approaches', 'Sensor Commands', and 'Data Query'. The 'Sensor Config' tab is active. It contains a 'SmartSensor HD' icon and several configuration fields. On the right, there's a 'TMDD Information (Optional)' section with fields for Latitude, Longitude, Datum, Route Name, Owner, Station Name, and Mile Marker. Below this, there's a 'Sensor Networks' section with checkboxes for 'AMPARO', 'I-65', 'I-85', and 'Demo'. At the bottom, there are 'Save Changes' and 'Cancel Changes' buttons.

- 2 **Lanes/Approaches** – This tab allows you to view lanes and configure approaches (abstract groupings of lanes) for the sensor. In the Approaches box you can create or update an approach by providing the name, type, and direction. Lanes can then be moved from approach to approach by clicking on a lane and dragging it to the desired approach. Any changes can be made by clicking **Save Changes**.

A screenshot of the 'Lanes/Approaches' tab in a software interface. It has four tabs: 'Sensor Config', 'Lanes/Approaches', 'Sensor Commands', and 'Data Query'. The 'Lanes/Approaches' tab is active. It shows a table with columns 'ID', 'Description', 'Dir', and 'Custom ID'. The table is divided into two sections: 'East' and 'West'. The 'East' section has four rows (LANE\_01 to LANE\_04) all with 'E' direction. The 'West' section has four rows (LANE\_05 to LANE\_08) all with 'W' direction. To the right of the table is an 'Approaches' section with fields for 'Name', 'Type', and 'Direction', and buttons for 'Create Approach', 'Update Approach', and 'Delete Approach'. At the bottom, there are 'Save Changes' and 'Cancel Changes' buttons.

## 5 Run sensor commands

Sensor commands allow you to send specific commands directly to the sensor. Commands run on a set interval, but you also have the option of viewing results without waiting for an automatic update by selecting **Commands** from the Sensors toolbar. There are three basic commands to run:

- **Update Configuration** – Collector retrieves current sensor configuration.
- **Synchronize Sensor Time** – Collector will attempt to synchronize the sensor time with the current server time.
- **Collect Data** – Collector will collect data from the sensor.

To run any of these commands, put a check next to the desired sensors on the main Sensors page then click on **Commands** in the Sensors toolbar and click the appropriate button for the command you would like to run.

Commands may also be accessed on the Sensor Config page (as discussed in step 4 on the previous page) under the **Commands** tab. This tab also contains an option for a custom command. Device-specific commands will be listed for each sensor.

The image shows a software interface with a toolbar at the top containing 'Commands', 'Networks', 'Data', 'Search', and 'Help'. Below the toolbar, there are four large buttons: 'Update Configuration', 'Synchronize Time', 'Collect Data', and 'Collect All Data'. Below these buttons is a section titled 'Collect data from a selected date/time range'. This section contains four input fields: 'Start Date:' (11/13/2012), 'End Date:' (11/14/2012), 'Start Time:' (10:00 AM), and 'End Time:' (10:00 AM). At the bottom of this section is a button labeled 'Collect Data For Date/Time Range'.

## 6 Run data query

The **Data Query** tab on the Sensor Config page provides various options for data querying. Once on the Sensor Config page (opened by clicking on a sensor name from the main Sensors page), follow the steps below:

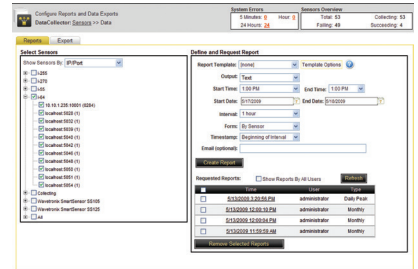
- 1 Click on the **Data Query** tab.
- 2 Set the Start and End Times, and use the calendars to select the Start and End Dates.
- 3 Select how to group the data—by lane, approach or sensor—and what interval to use—the sensor's interval, 5 minutes, 15 minutes, 1 hour or a custom interval.
- 4 If desired, remove approach data from the query by unchecking the approach name in the Approaches box.
- 5 Select an option from the **Show Sensor By** drop-down list—sensor information can be displayed in the query result using IP/Port, Location or Custom ID. Then, select whether you would like to use the timestamp from the beginning or the end of the interval.
- 6 Select the output format(s) from the available options then click Run Data Query.
- 7 The results of the query can be opened in a new window by clicking on the links at the bottom of the page.

The image shows the 'Data Query' tab in a software interface. It has several sections: 'Start Time' and 'End Time' (both set to 4:00 PM), 'Start Date' (11/17/2009) and 'End Date' (11/19/2009) with calendar icons, and two calendar views for May 2009. Below these are two tables showing data for May 2009. To the right, there are checkboxes for 'By Lane', 'By Approach', and 'By Sensor'. Below these is a 'Show Sensor By' dropdown menu with options: 'IP/Port', 'Location', and 'Custom'. There is also a 'Beginning of Interval' checkbox. At the bottom, there is an 'Output Format' section with checkboxes for 'Graph', 'Table', 'Text', 'XML', and 'HTML'. A 'Run Data Query' button is at the bottom right.

## 7 Run a report

Command Collector allows you to create a report containing data from one or more sensor. To run a report, follow the steps below:

- 1 Click on **Data** in the menu bar and open the **Reports** tab.
- 2 In the Select Sensors box, check the sensor(s) you would like included in the report.
- 3 If desired, select a template from the **Report Template** drop-down list.
- 4 From the **Output** drop-down list, select the desired output report type.
- 5 Set the Start and End Times, and use the calendars to select the Start and End Dates.
- 6 From the **Interval** and **Form** drop-down lists, select what interval to use—the sensor's interval, 5 minutes, 15 minutes, 1 hour or a custom interval—and how to group the data—by lane, approach or sensor. Select whether you would like to use the timestamp from the beginning or the end of the interval.
- 7 If you would like the results of the report to be sent in an email, enter a valid email address.
- 8 Click **Create Report**. The Requested Reports table will contain a link to the new report.
- 9 Report settings can be saved as a template by using the **Template Options** menu. These report templates can be automated using the **Export** tab (see below).



To run an automatic report, follow the steps below:

- 1 Click on **Data** in the menu bar and open the **Export** tab.
- 2 In the Automated TMDD Export box, select the type of automated report: **TMDD Configuration Export**, **TMDD Data Export**, or **Automated Custom Export**.
- 3 In the Automated Custom Export Box, select a report template (created on the **Reports** tab).
- 4 Assign a schedule using either the **Basic** or **Advanced** tab in the Schedule box, then click **Add**.
- 5 Select **Sequential** or **Overwrite** as the file operation.
- 6 If you would like the report results to be sent in an email, enter a valid email address.
- 7 Click **Create Export Schedule**. Once a schedule is created, it will appear in the Current Automated Export box.

