



Phone 563.556.8392
Toll-free 800.678.6565
Fax 563.556.5321
4131 Westmark Drive
Dubuque, IA 52002-2627
www.eaglepoint.com

Eagle Point Solution to a Frequently Asked Question

Using Data Collection

Summary:

This document explains how to use Data Collection to bring field collected data into your drawing.

Product: Eagle Point Software™ 2001

Release: 2001 and greater

Platform: All

Related documents:

The tips, solutions and suggestions contained in Eagle Point Solution Papers, any Eagle Point Technical Assistance Document or given by an Eagle Point Technical Assistance Representative are suggested for use at your own risk. Document contents are subject to change without notice. No warranty of any kind, expressed or implied, is made with respect to such tips, solutions, and suggestions except as may be expressly stated in the licensing agreement or other contractual document, including, without limitation, any warranty of merchantability of fitness for a particular purpose. In no event is Eagle Point Software Corporation liable for incidental or consequential damages in connection with or arising out of the use of such tips, solutions and suggestions.

AutoCAD is a registered trademark of Autodesk, Inc. MicroStation is a registered trademark of Bentley Systems, Inc. All other product names are trademarks of their respective holders.

As always, should you have any questions regarding any phase of installation, contact Eagle Point Technical Assistance at (800) 477-0909.

CAPABILITIES

Downloading data from a collector/file.

- Edit the data collection file
- Place customized symbols and line work
- Enhanced Features
 - Use Field Code as Line Name
 - 3D Line Template
 - Cross-Section Patterning
- Upload data directly to a collector/file

HOW

To bring data in you have 2 choices:

- **Download directly from the collector**
*Select Data Collection—Jobs—Download from Collector
(Select the help icon on the dialog box for more details)*
- **Download from a file**
*Select Data Collection—Jobs—Import ASCII file
(Select help icon on the dialog box for more details)*

Downloading the data will attach the job to the file. To reduce the data into the CAD graphic so it is visible, select Select Data Collection—Jobs—Reduce. Next, *Select the Job you want to reduce and click on the OK button.*

As long as there are no errors you should now have the points reduced and showing in the CAD graphic.

Problems that may occur are that AutoCAD search paths don't have the path to where your DWG's are or the format is set incorrectly. If the format is incorrect the data will not reduce. One way to check this is to select the preview option on the Reduce Job dialog box to see if it previews the data.

Things to keep in mind when using Data Collection:

- **To edit a job**
Select Jobs—Edit Instrument/Formatted File
This allows you to edit the data that the surveyors have collected so if they make an error or the instrument height is off, the data does not need to be re-collected.

- **Placing customized symbols and line work**
Another important capability of data entry is to be able to recognize the shots as unique points and potentially draw in line work to connect break lines. This not only quickly allows the draftsmen to visualize the sight, but also saves time by not having to play connect the dots. This is accomplished by surveyors entering unique descriptions for each shot.
- **Data Collection reads the description from the collected data in the following order.**
 - Field Code
 - Designator
 - Line name
 - Description

Field Code

Found under the *System—Node Field Code Library* menu. You need to create your own library and include all of the codes you will use or use/modify the default library Eagle Point has provided. The purpose of this library is to allow you to insert your own symbol (DWG) with each shot that is taken in the field.

An example would be a field code of **EPR** for the right edge of pavement. So when the surveyors collect the data in the field the first part of the description that they enter for the shot would be **EPR**. From that point there are more options.

Designator

Found under the *Data Collection—Options—Designators* menu. There is a list of special characters that relay to Data Collection what you want to do. One of the basic features is to automatically draw in the line work.

So using the above example you would enter in a . (period) to tell Data Collection to draw a line from that shot. So it now looks like **EPR.** The period is the default designator for draw line. You will see that special characters are used, so they are not repeated in the description. If they are repeated, it will cause confusion when trying to reduce the data collection file.

To take this one step further, if the shot you were taking was on a curve you would add the curve designator to the description as follows **EPR.-**. This tells Data Collection to connect this shot to the previous EPR shot and that this shot is going to be on a curve. Below (under Line Name) is the explanation for how Data Collection knows which shots to connect.

If you do not want to draw line work from a particular shot you would **not** enter in a designator and you would then just place a point there rather than drawing line work. An example could be a fire hydrant. You would enter in **FH** (field code) only. In this case you would not have a line name. Data Collection then looks for a description, which is optional as well. If you do not place a description, Data Collection will use the description entered in the field code library.

Line Name

Each break line should have its own name, such as **epr** for edge of pave right, **cl** for centerline, or **epl** for edge of pave left.

Using the above example, you must now let Data Collection know which shots to connect. This is done by entering in a line name. So your entry would now look like **EPR.EPR**. This tells Data Collection to draw a line between all epr's in the file. Data Collection reads the ASCII file from top to bottom and connects all the **.epr's** in the file, in descending order.

Another feature of this is to create a line work library. This allows you to define all of the lines that you will use and set up the properties of each line. So using a line name of CL you could set the properties to be a color of red, a line type of center2, and so forth. For more information on the line work library select the *Data Collection—Options—Line Work* menu.

Description

After you enter in your line name you can enter a description using one of two methods:

1. If you enter the designator for insert description it will add your typed in description as well as the field code library description. So if you entered **epr.epr*(insert description)mr teds corner** it would place that description as well as what is in the Node Field Code Library.
2. If you leave the asterisk out it will only place your typed in description, ignoring the Node Field Code Library.

ENHANCED FEATURES

To learn more about enhanced features such as Use Field as Line Name, 3D Line Template, Cross Section Patterning, etc., select the *Data Collection—Options—Reduction Settings* menu. From there select the Line Work tab and Help about.

UPLOADING TO A COLLECTOR

Data Collection allows you to upload data directly to a collector or to a file by selecting the *Data Collection—Jobs—Upload to Collector/Export Nodes* menu.

If you upload directly to the collector, you can upload points straight from the dwg or from an ASCII file (if uploading to a TDS data collector, you must upload from a file). See the Data Collection manual for more options and details on Data Collection.