

ST-Links

AlignmentKit

For ArcMap

Version 1.0

ArcMap Extension for
Creating and Managing
Pipeline/Railway Alignment Sheets

ST-Links Corporation

www.st-links.com

2011-2013

Contents

Introduction	3
Installation	3
Generate Alignment Dataset	5
Set Map Frames Properties.....	8
Add Band Frame to Map Document	9
Navigate Sheets	13
Export Alignment Sheets.....	14
Request License Key.....	16

Introduction

ST-Links AlignmentKit for ArcMap is an ArcMap extension for creating and managing Pipeline Alignment Sheets.

The main features of ST-Links AlignmentKit include:

1. Generate alignment dataset (includes Sheet, Route, Match Point, and Band line feature classes) based on the main data frame layout scale.
2. Navigate Sheets.
3. Create band data frames.
4. Set event layers (bands) symbology.
5. Export sheets as PDF file.

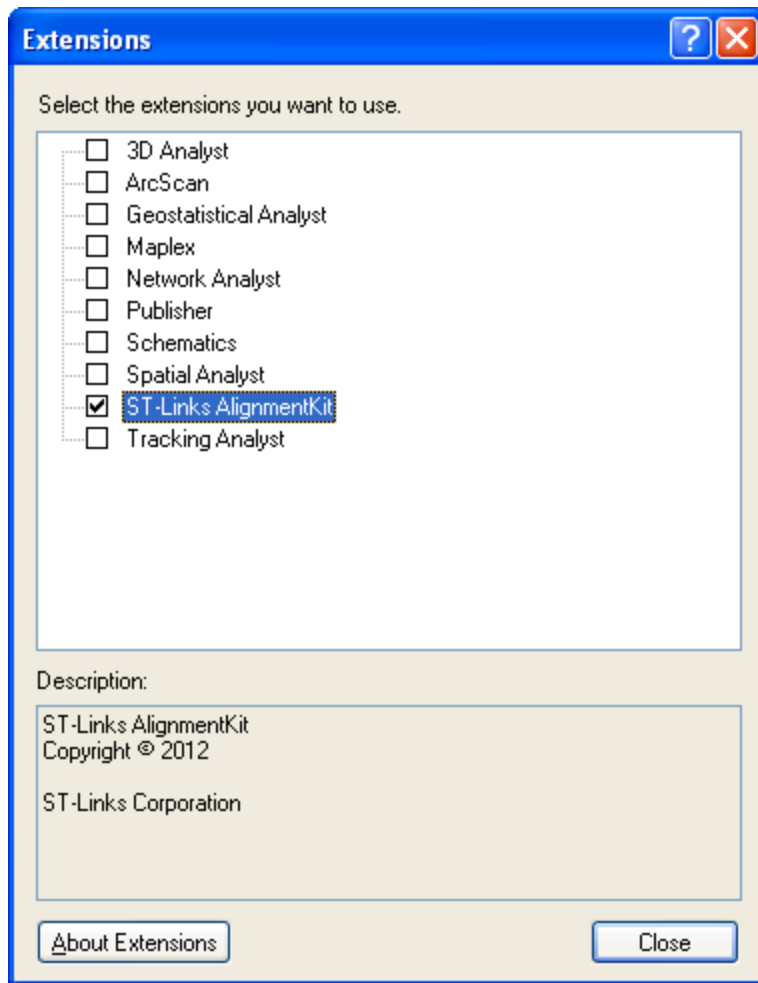
ST-Links AlignmentKit 1.0 works with ArcMap 10.0.

Installation

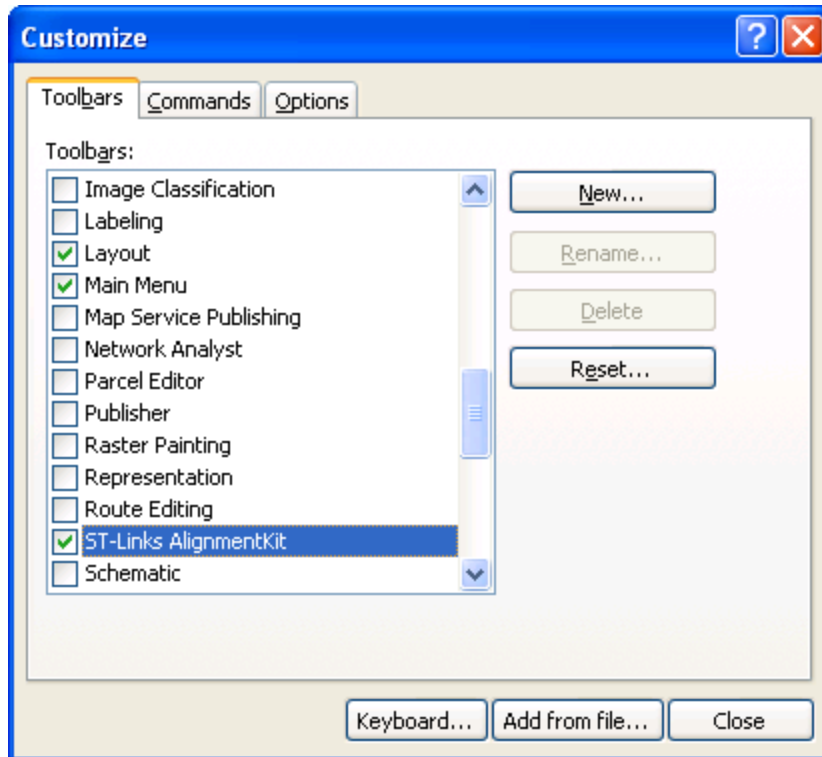
ST-Links AlignmentKit 1.0 works on .Net Framework 3.5 or above. If you don't have .Net Framework 3.5 or above installed, please download the .Net Framework 3.5 from Microsoft web site and install it to your computer.

To install ST-Links AlignmentKit on your computer, simply double click the STAlignmentSetup.msi file and follow the instruction to complete the installation. If you ever have installed this package, you may have to remove the previous version before you install the new one.

After installing, active ST-Links Alignment by checking the ST-Links AlignmentKit from menu Customize => Extension in ArcMap.



To show up the ST-Links AlignmentKit Toolbar, open ArcMap main menu Customize =>Toolbars, check the ST-Links AlignmentKit toolbar.

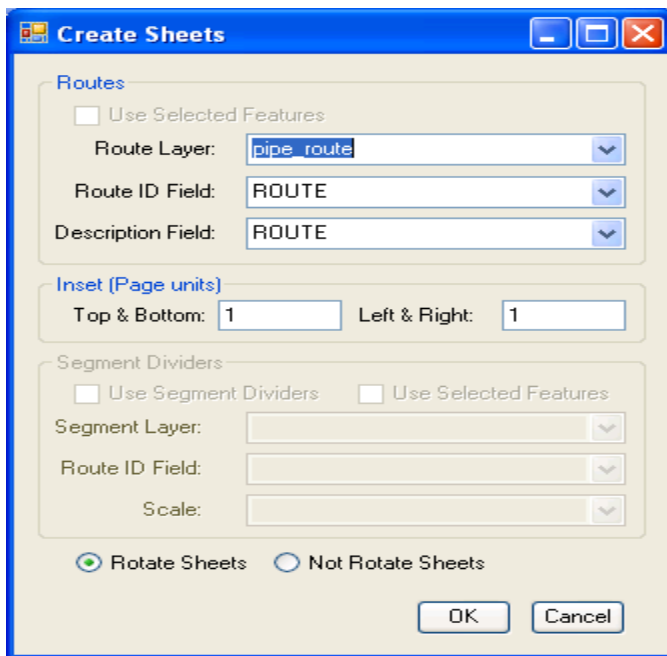
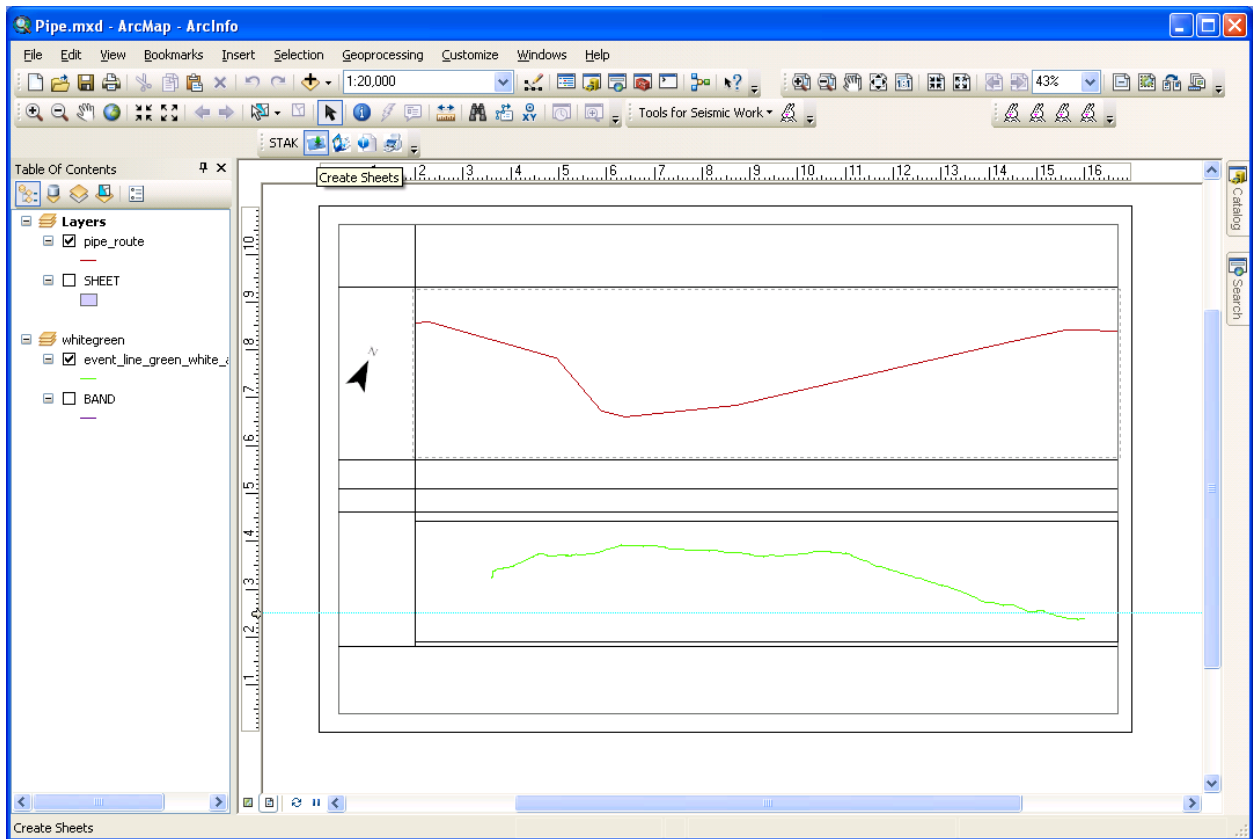


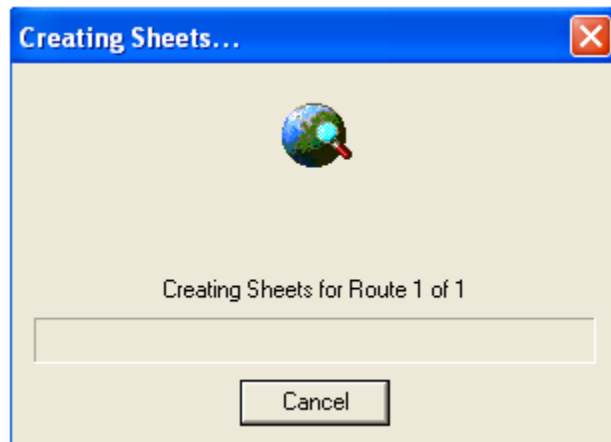
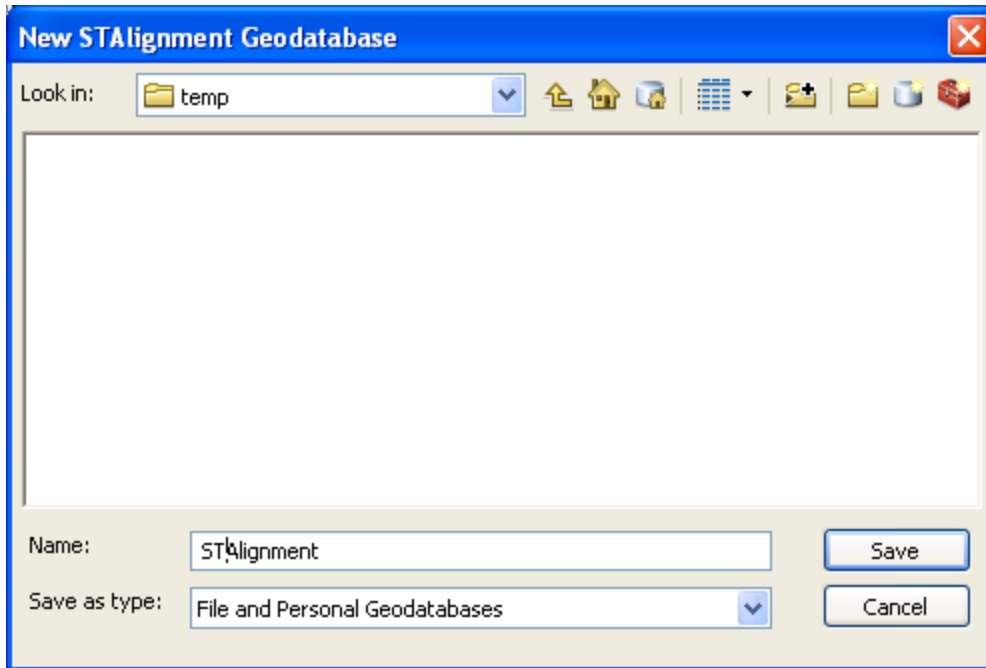
Generate Alignment Dataset

Before generating the Alignment Dataset, you must prepare your alignment sheet map layout with the main map in your layout and your pipeline (polylineM) in your main map data frame.

The following steps show you how to generate the dataset:

1. Switch the active view to page layout.
2. Set the scale for your main map. The alignment sheets will be generated based on this scale.
3. Click the Create button on the AlignmentKit toolbar. The Create Sheets window will pop up.
4. Fill up the form and then click OK. A new window will pop up to ask you for the location to store the generated datasets.
5. Choose a location (folder) and type a name in the name text box. Click Save, the tool will begin to generate the sheets and store the dataset.





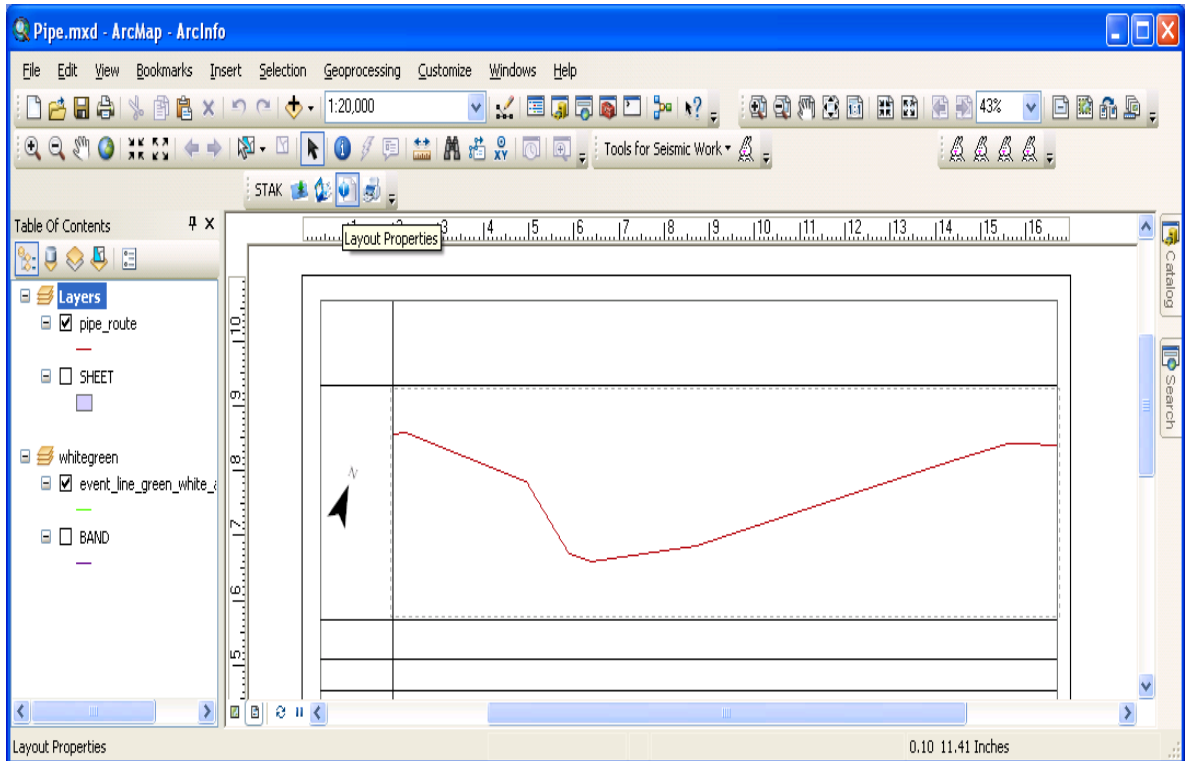
6. When it is done, a new dataset appears in the location you gave. The dataset includes 4 feature classes: BAND, MATCH, ROUTE, SHEET. Don't change the datasets name and the feature class names.
7. And the Sheet feature class is added to your main data frame as a layer.

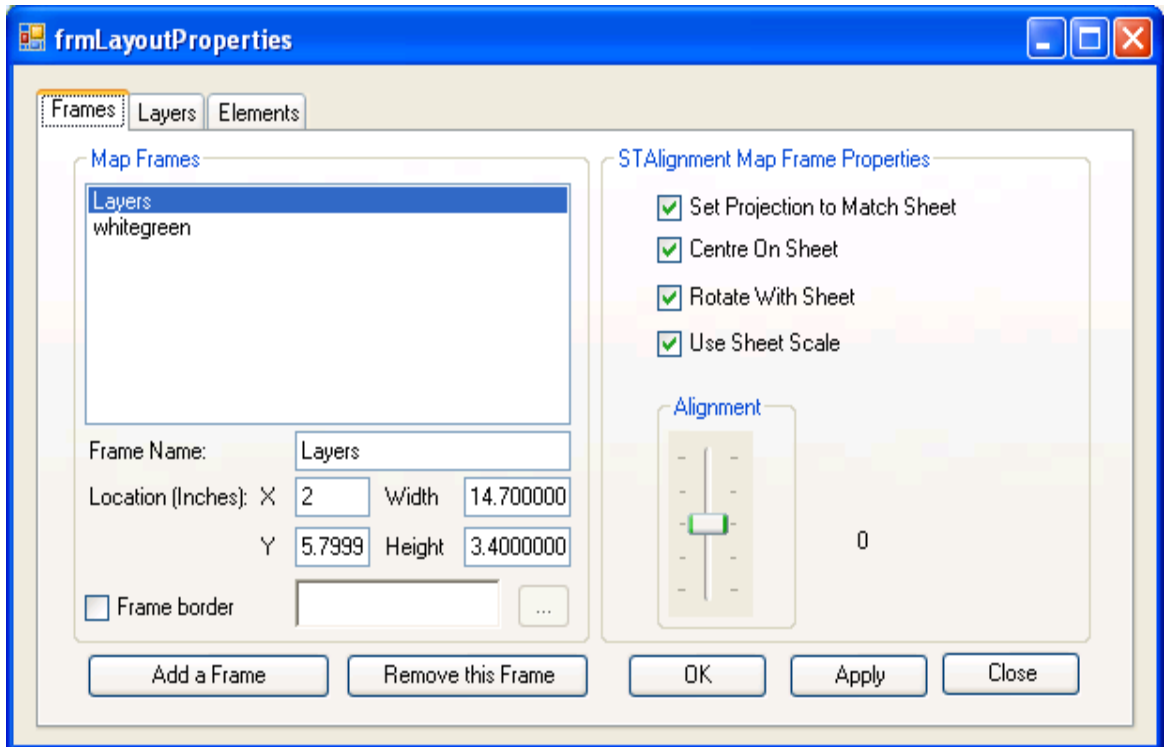
Set Map Frames Properties

Before you can navigate sheets, you need to set map frame properties for each map frame and band frame.

Follow these steps to set Map Frame properties.

- 1) Click the button "Layout Properties" on the ST-Links AlignmentKit toolbar.





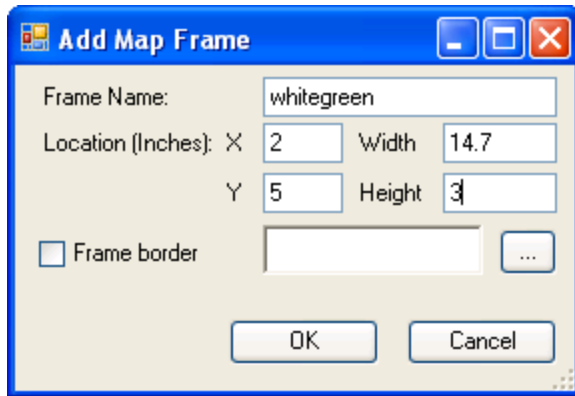
- 2) Click the Frames Tab. You will see all the frames displayed in the list.
- 3) Select each frame, check the check boxes in the STAlignment Map Frame Properties panel and set the alignment to 0. Click Apply button for each frame.
- 4) Once you set the STAlignment Properties for the frame, the frame will zoom to the sheet when you navigate the sheets.

Add Band Frame to Map Document

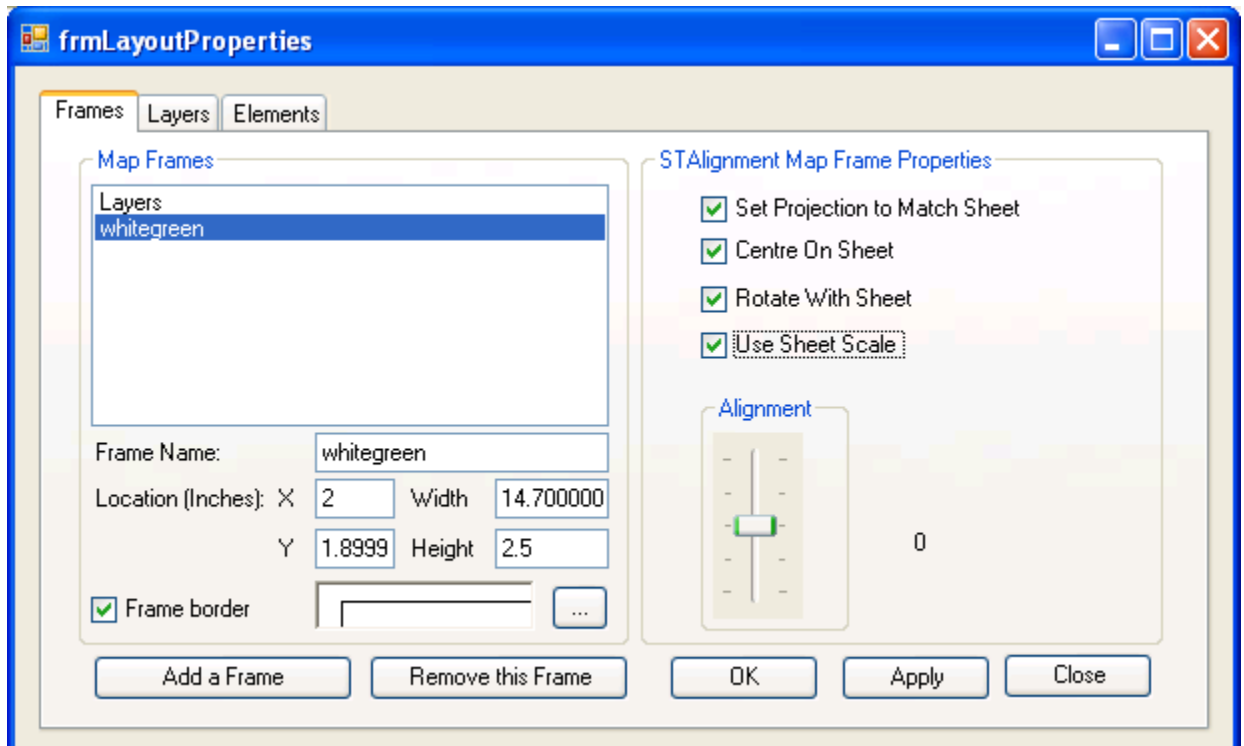
Each alignment data layer is arranged as a band map frame in the layout. Each band will include a band line layer, band event table, and band event layer(s).

The following steps show you how to set up a band frame.

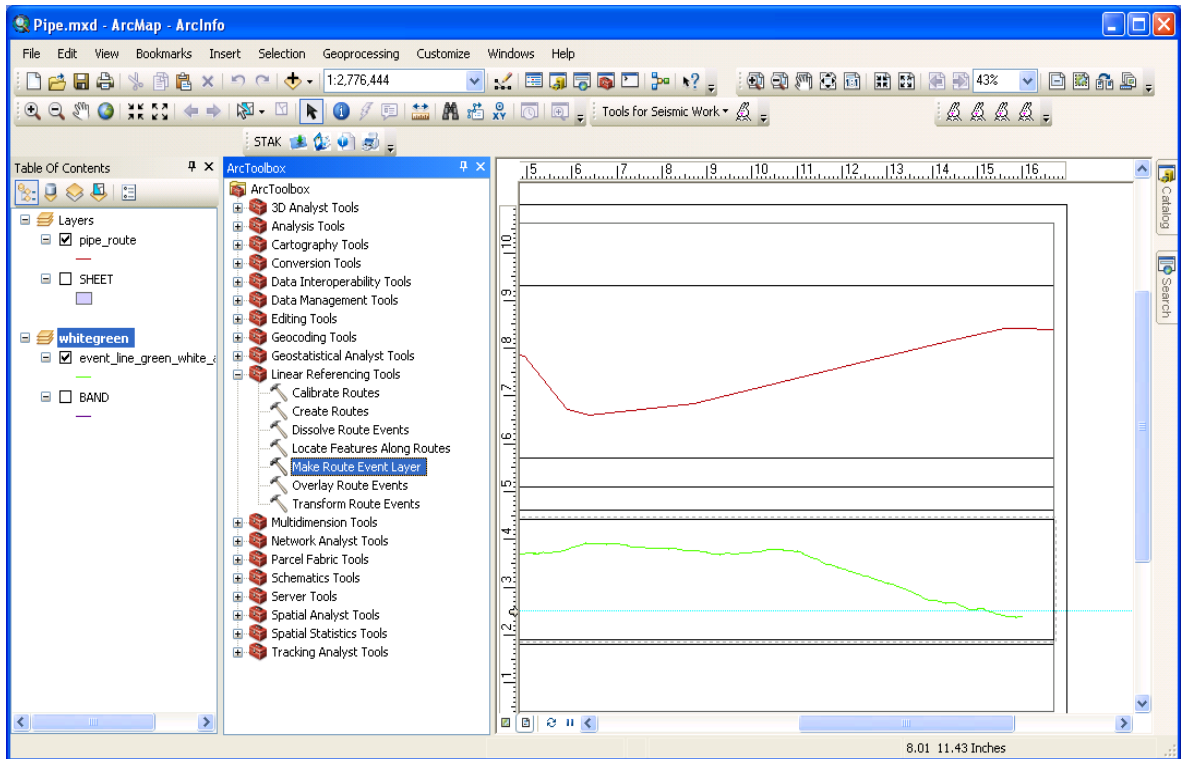
1. Click the Frame tab in the Layout Properties window.
2. Click "Add a Frame" button.



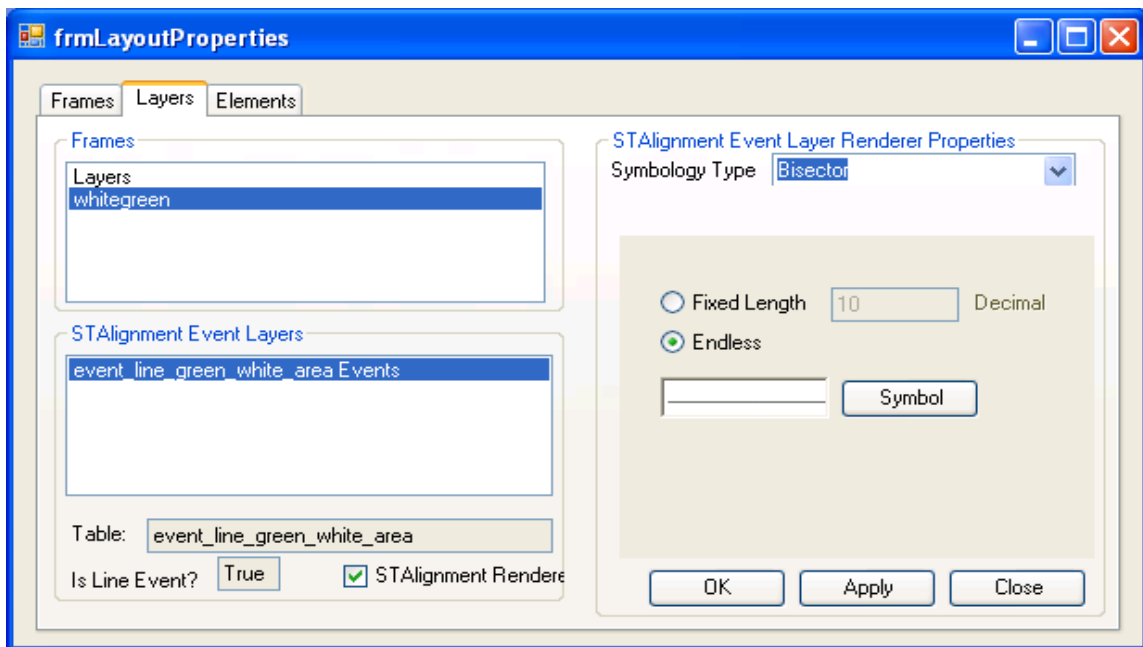
3. Fill up the text boxes. The unit is the page unit (inch or cm).
4. Click OK button, the empty frame is added to the map document.
5. Select the new added frame, set the Map Frame Properties for this frame.



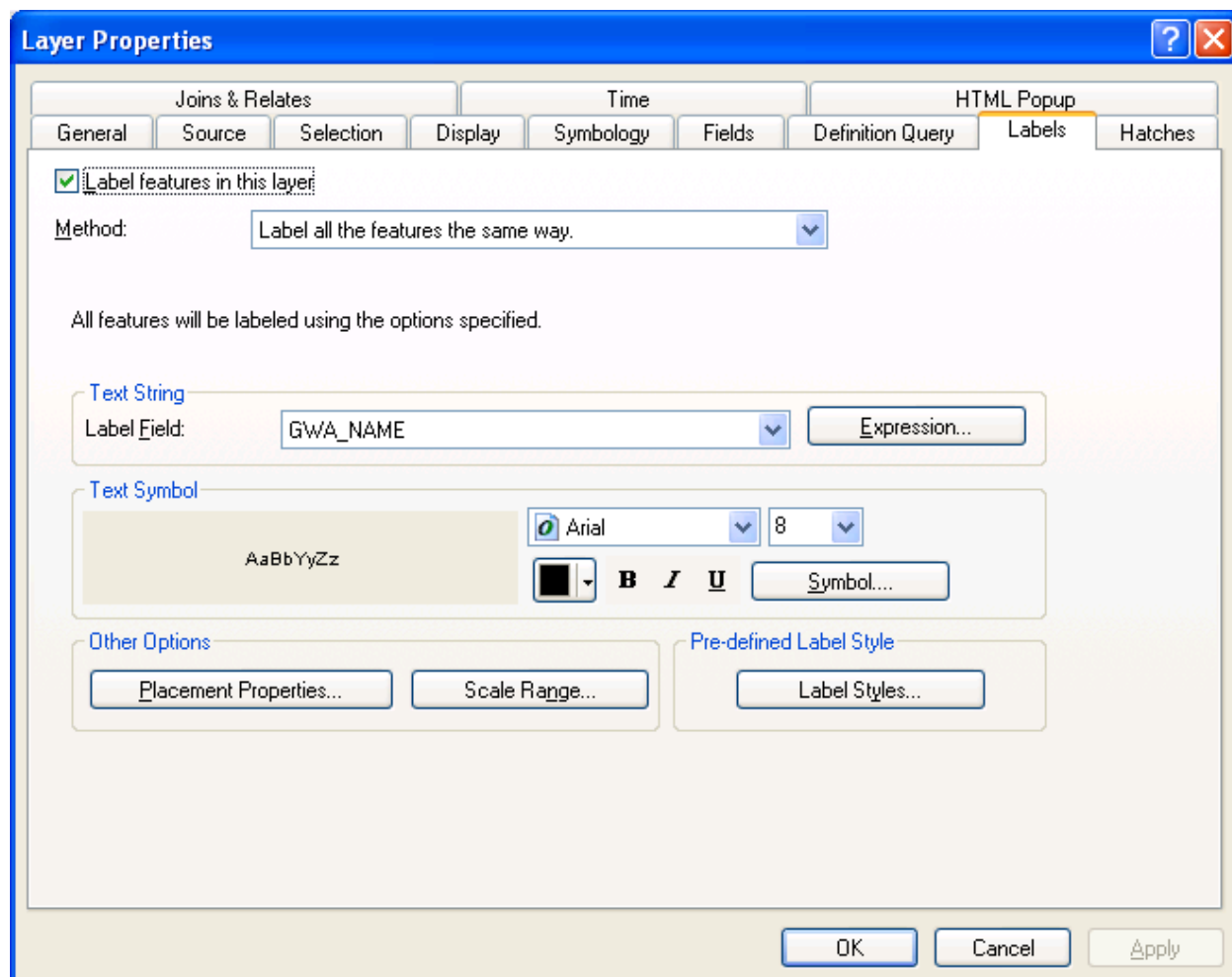
6. Click Apply and OK button to complete this operation.
7. In the TOC of the ArcMap, add the band feature class from the alignment dataset to this frame, add the Event table to this frame.
8. Switch to display view of the TOC, active the map frame, use the Linear Reference Tools => Make Route Event Layer to add an event layer. Choose the band as the reference route and the event table to create this new event layer.

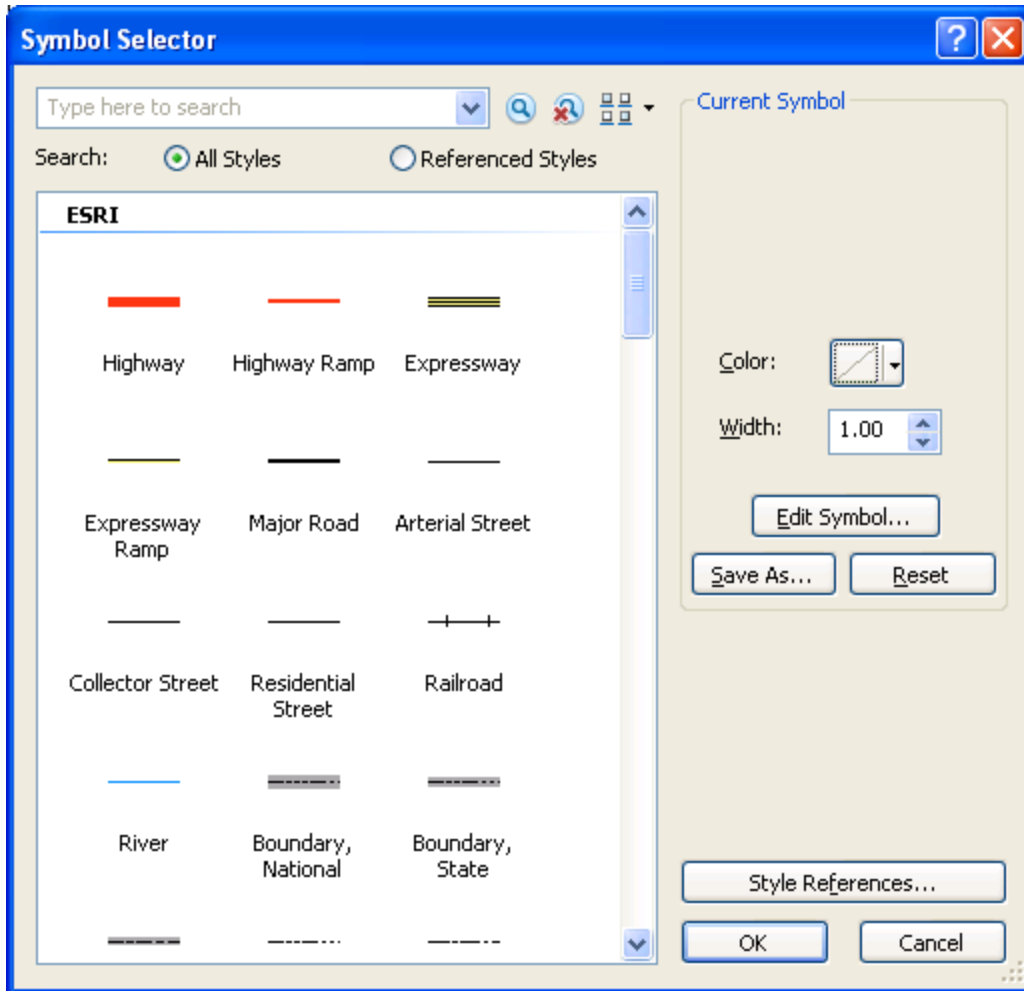


9. Click the Layout Properties button on the Toolbar.
10. Select Layer Tab.
11. Select the frame, and select the Event Layer.
12. Check STAlignment check box.
13. Choose Bisector for point event layer and click OK.



14. The point event layer with bisector can be used as separator in the band frame in layout.
15. For segment event, just set the event label and set the symbology color to no color.

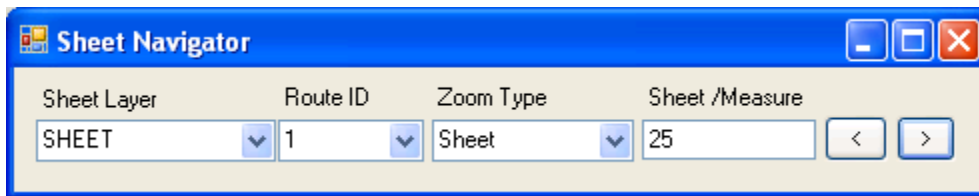
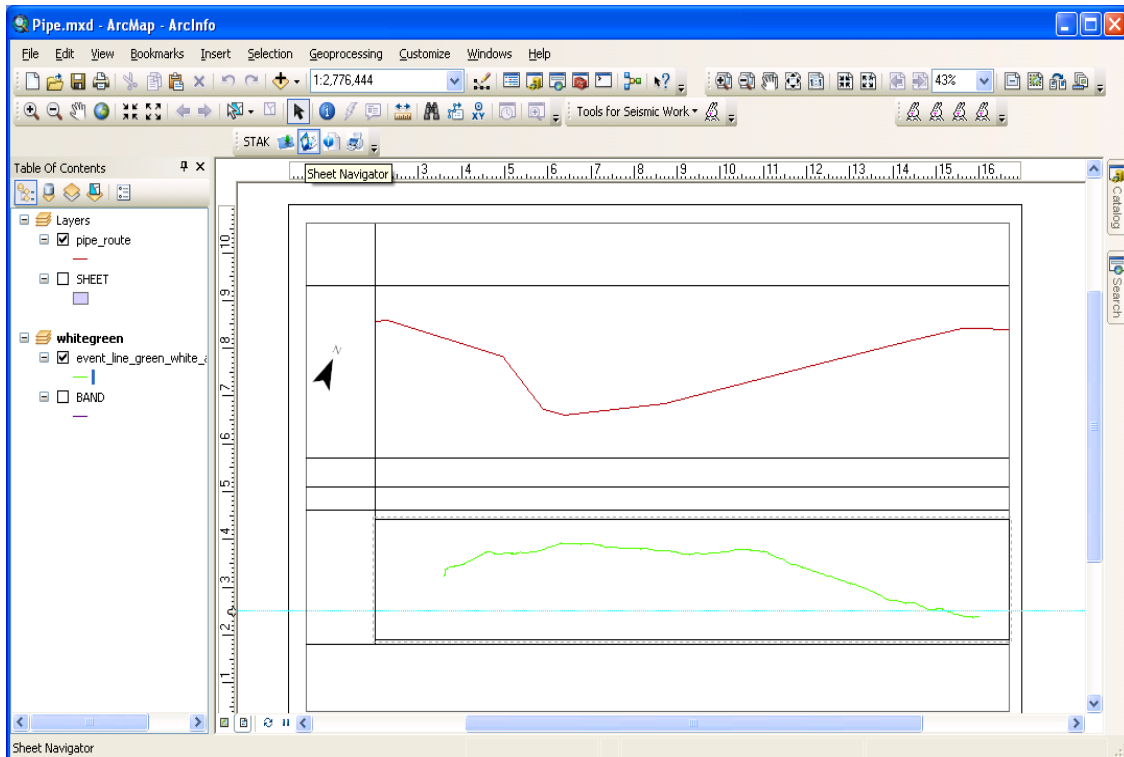




Navigate Sheets

Once you set your band frames and your main map, you can use the Sheet Navigator button to navigate the sheets.

- 1) Set your active map to the main map frame.
- 2) Switch to layout view.
- 3) Click the Sheet Navigator button on the Toolbar.



- 4) Click the “<” or “>” to navigate the sheets. You can also type the sheet number in the sheet number text box and click the “<” or “>” button.

Export Alignment Sheets

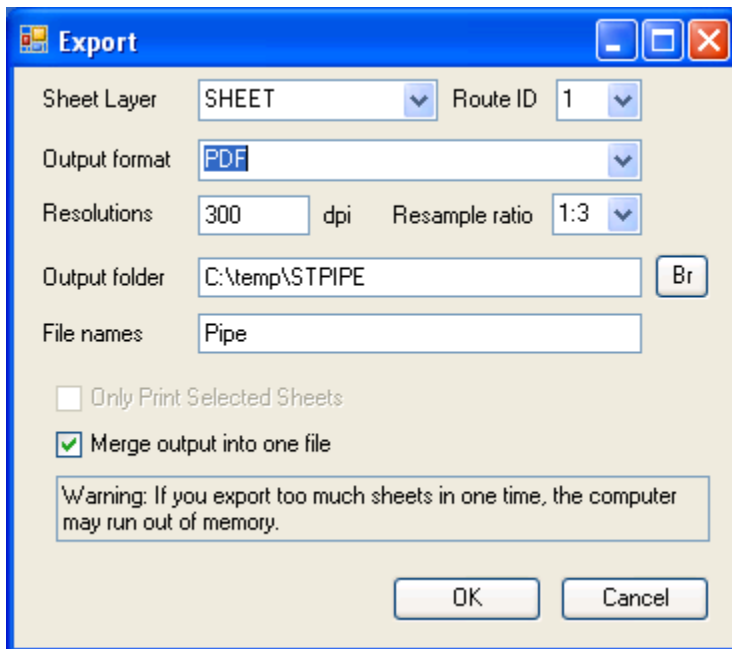
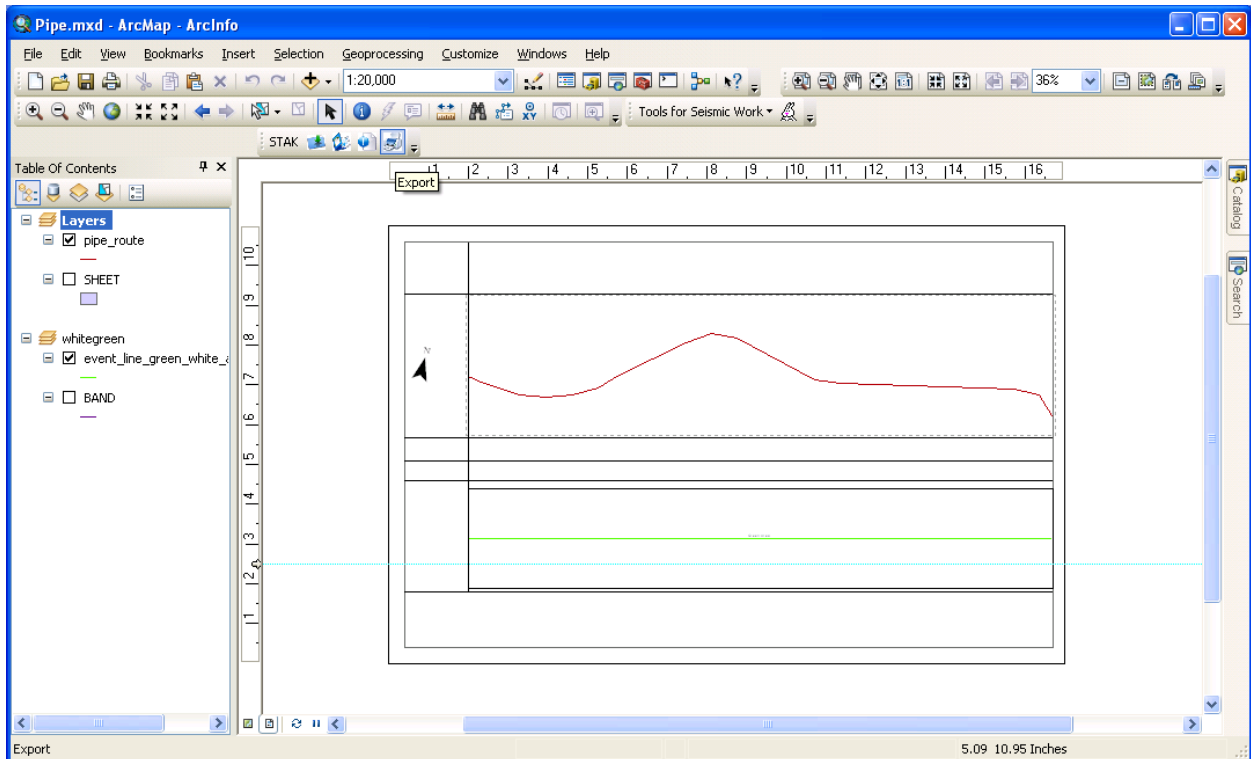
You can use the ArcMap Export map function to export each sheet one by one, or you can use the STAlignmentKit “Export” to export all the sheets in one time.

If you use the ArcMap export function, navigate to the sheet you want to export and then export the sheet.

If you use the STAlignmentKit “Export” function, follow the following steps:

- 1) Set active map to your main map frame.
- 2) Switch to layout view
- 3) Align map layout so that a whole is display on the screen.

4) Click the Export button in the STAlignmentKit tool bar.



5) Fill up the text boxes and click OK.

6) The sheets will be exported to PDF files.

Request License Key

The software can be used without a license key. However, no license key will limit the total sheets of 5.

The following steps show you how to request and active a license key.

- 1) Click the “STAK” on the ST-Links AlignmentKit toolbar. The About AlignmentKit Window will be popup.



- 2) Click the Request License Key button.

ST-Links Request License

1. Fill out the following required information.
2. Click the Create Request File and save the file.
3. Send the file to register@st-links.com
4. After receiving your license file, click the Register License button on the About form to activate your license.

User Name:

Company Name:

Position:

E-mail:

Phone:

Address:

Country:

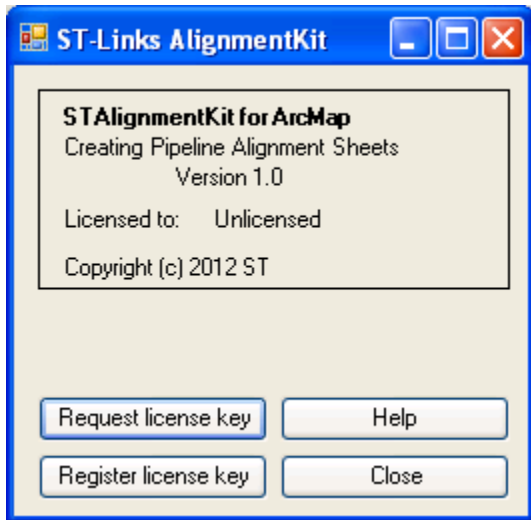
Reference Number:

Create Request File

- 3) Fill out the form. Then click “Create Key Request File” to save a request file in your drive.
- 4) Send an email to register@st-links.com along with the generated request file (as attachment).

After you receive a license key file from ST-Links, follow the following steps to active your license:

- 1) Click the STAK button to open the window:



- 2) Click button "Register license key", then load your license file. Once the key is activated, a message box will popup to tell you the result.