



eziLink RESULTS Training Manual

Participant Manual • January 2005

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Training Overview

1. Overview

This training course covers the use of **eziLink™** to create ESF submissions and focuses on the development of the submissions documents and not as a training course on silviculture. The focus of this training is on generating RESULTS submissions to meet the MOF district needs.

Following this course, attendees will have an understanding of the capabilities of the **eziLink™** product and how to utilize it to create ESF submission documents.

2. Attendee Pre-requisites

This training manual has been developed with the expectation that participants have training and exposure to the following:

- Knowledge of computers and their operation
- Knowledge of forest silviculture (for the RESULTS submissions).
- Awareness of ESF and RESULTS.
- Knowledge and experience working with MicroStation (including MAPS 3D), ArcView, ArcGIS, or ArcINFO and with familiarity on:
 - Spatial editing
 - Concepts of spatial topology and error correction
 - An understanding of the differences between CAD and GIS systems
 - An understanding of the approaches to converting data between CAD and GIS systems

3. Key Resources and References

In addition to this manual, there are a wide variety of resources and reference materials available on topics relating to ESF, FTA, and RESULTS that participants may find of use.

- Sample exercise data
- Powerpoint presentation
- Industry Guide to RESULTS
- ESF Website
- RESULTS Website
- eziLink Users Manual

Overview of Legacy FDP and the Current FRPA Submission Requirements

FTA / ECAS			Amendments			RESULTS		
PLANNING		DEVELOPMENT		HARVEST		SILVICULTURE		
Forest Stewardship Plan (FSP) Forest Development Plan (FDP)		Approval to Harvest (Government) Block is Engineered/Costs (Licensee)				Harvest Complete	Regen Survey	Free to Grow Survey
FRPA – Current Forest Range and Practices Act RESULTS 1 – Opening Definition 2 - Disturbance 3 - Milestone 4 – Silviculture Activity 5 – Forest Cover Polygon		Electronic - ECAS (Appraisal) FTA (Cut Permit)		Site Plan (SP) NO NEED TO AMEND		Submit* 1, 2, 3, 4, 5	Submit* 4, 5	Submit* 3, 4, 5
FPC – Legacy Forest Practices Code FORM GROUP - FS708 FORM A = (Opening Definition-1) FORM B = (Disturbance - 2, Silviculture Activity – 4) FORM C = (Milestone 3, Forest Cover Polygon – 5)		Hardcopy - ECAS (Appraisal) FTA (Cut Permit)		Silviculture Prescription (SP) MUST BE AMENDED				Submit* 3, 4, 5

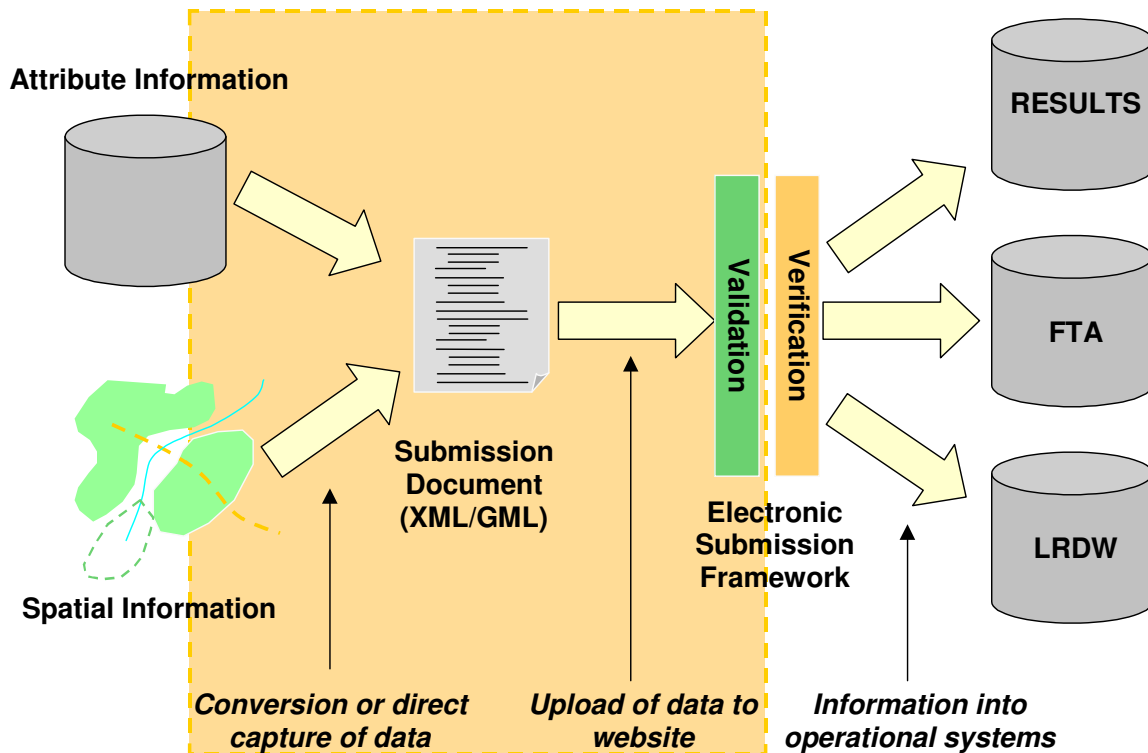
NOTES:

* Must be submitted annually by May 31, but may be submitted earlier as completed throughout the year.

** First **RESULTS** submission must use Tenure (Licence, Permit, Cutblock) or Timbermark (Timbermark, Cutblock) as the key (Opening Key has not yet been generated and Opening Number will be generated electronically in the future from the submission of the opening definition).

Introduction to e-Submission and eziLink Concepts

Conceptually, the electronic submission framework (ESF) for the BC Government is a mechanism to take information from external systems and move the data through the ministry's business process and migrate information into BC Government operational systems such as Forest Tenure Administration (FTA) and Reporting Silviculture Updates and Land Status Tracking (RESULTS).



eziLink provides tools to create and manage the submission documents for e-submission through the electronic submission framework. This includes support for:

- conversion of data from existing digital data sources,
- direct entry of information into a submission document,
- utilities and functions for quality assurance of formatting of submission documents
- utilities for managing upload and checking on the status of submissions
- validating the structure of the submission document to schema standards

It is not a replacement for business management systems or GIS/Mapping systems. It is designed for use in conjunction with other tools that perform these mapping and business management tasks.

eziLink is not designed to manage or access the business rules associated with a particular type of submission such as the fact that an existing opening definition submission must have been submitted and approved (exist in RESULTS) before a disturbance report can be submitted and processed. This verification process is the job of the business agents that are part of the ESF.

4. Supported Submission Types

eziLink supports RESULTS, FTA and ABR submissions that are currently published by MSRM and MOF. This includes support for any type of submission supported by the published submission schemas.

Forest Tenures and Permits Support

EziLink has support for the latest version of the FTA schema including support for:

- Harvest Applications requiring Cutting Permit for harvest authority (ie TFL and FL CP)
- Harvest Applications not requiring cutting permit for harvest authority (Special Use Permits, License to Cut)
- Timber License Applications and Eliminations
- Chart Applications
- Range Applications (Grazing and hay cutting permit and leases)

Through out the implementation of the INCOSADA replacement project, new non-revenue generating tenures will be supported for submission through ESF, FTA and eziLink.

Silviculture Submissions

EziLink has support for the latest version of the RESULTS schema including support for:

- Opening definitions
- Disturbance
- Forest Cover Polygon
- Silviculture Activities
- Milestones

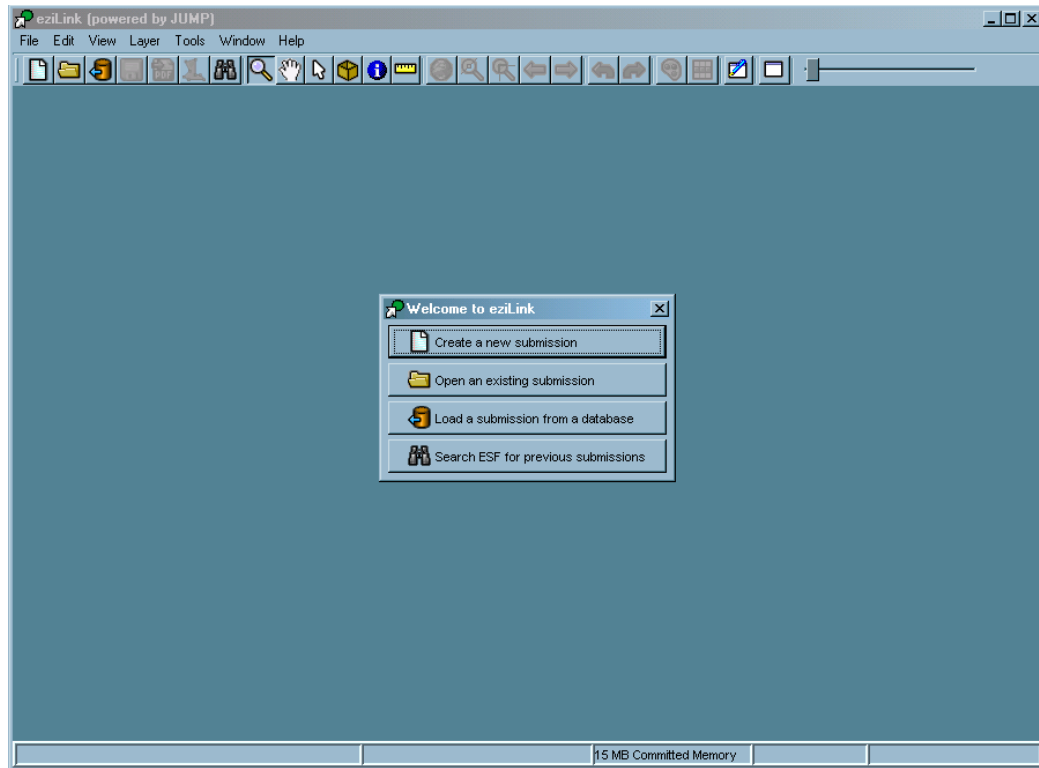
As Built Roads

Ezilink supports submissions for ABR including built road sections and events for:

- Deactivation
- access control structures
- construction
- culverts
- linear structures
- organic material in road construction

Introduction to eziLink

5. User Interface Overview



When first opened, **eziLink™** provides a dialog with three options for the user:

1. Create A New Submission

This will allow you to create a basic submission from scratch. **eziLink™** will guide you through the process of creating the submission. This is covered further in the training.

2. Open Existing Submission

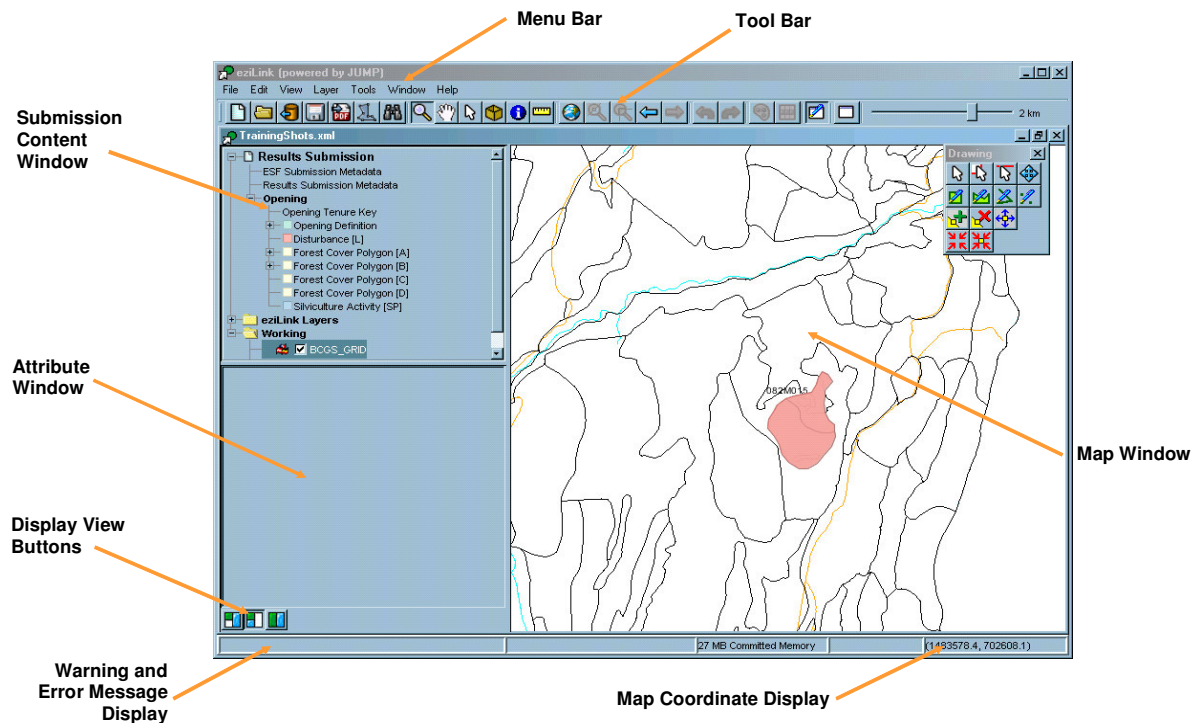
This will allow you to open a standard XML/GML document formatted to a supported schema (FTA or RESULTS) no matter how that submission was created.

3. Load A Submission from a Database

This option allows submission information to be loaded from an external datasource without having to manually enter attribute or spatial information. This is covered in detail in a separate training course.

4. Search ESF for previous submissions

This option allows you to search for previous ESF submissions based on user-entered criteria such as submission Id or different attributes. Then details of each submission can be by selecting it in the grid and clicking on the "Show Details" button.



Map Window

- Display for viewing and manipulating spatial data
- Shows submission spatial and back ground information

Submission Content Window

- This panel is used to show the structure of the submission
- Shows data(spatial layers) items that the user can interact with and their organization

Attribute Window

- Shows information on the attributes of the submission
- Changes as you select different items in the submission content window

Menu Bar

- Provides standard menu items to access the functions and features of the application

Tool Bar

- Provides access to functions and tools that are most often used

Display view Buttons

- Changes the perspective of the user interface

Warning and error message display

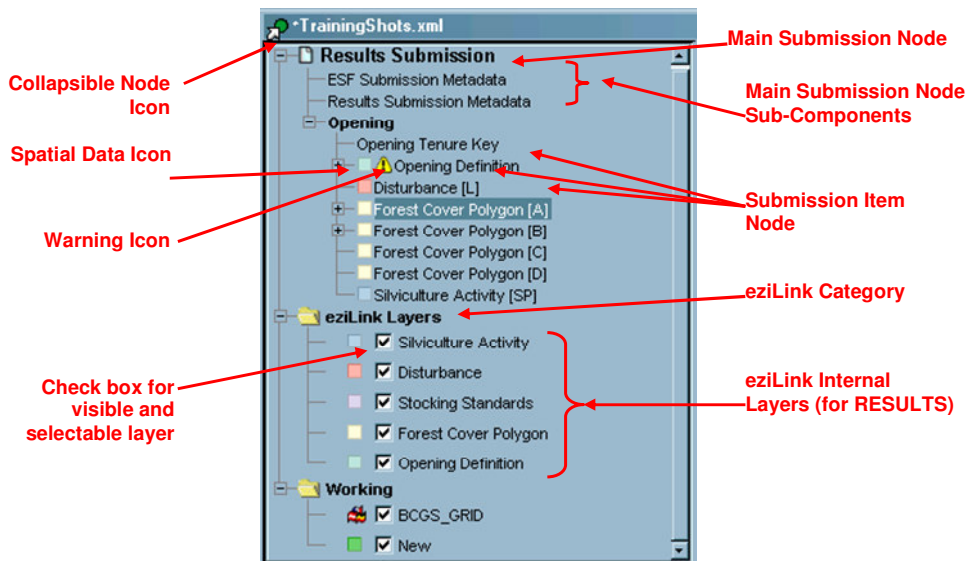
- Flashes when errors or systems warning occur

Map Coordinate display

- Displays the coordinates of the cursor in the map window

Submission Window

The submission window is the key to understanding the submission. It contains information on the structure, missing submission components and display of information in the attribute and spatial windows.



Main Submission Node

This is the top item in the schema for submissions. In the sample, this is a RESULTS submission. Under this are sub-components.

Sub-Components

Sub-Components are other submission components required for a particular schema. This can be spatial or just attribute information. These change depending on the submission being made.

Categories

Categories are groupings of spatial data layers. eziLink™ has its own internal layers category in which the internal layers of information are stored. It is important not to delete these layers, as it will stop eziLink™ from functioning correctly.

eziLink Internal Layers

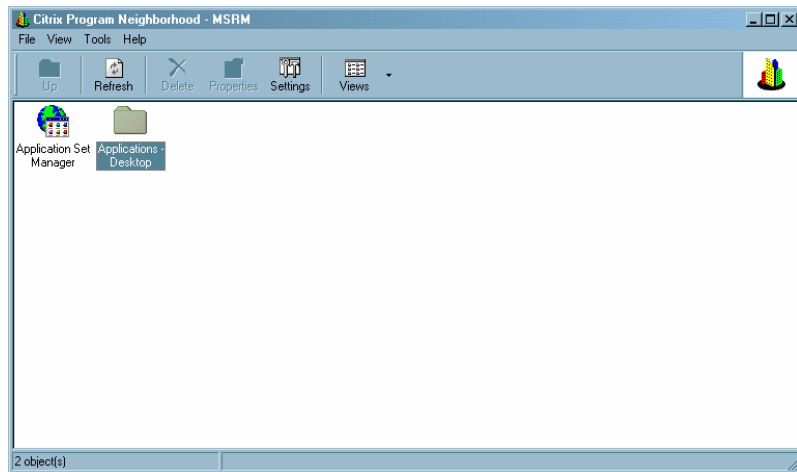
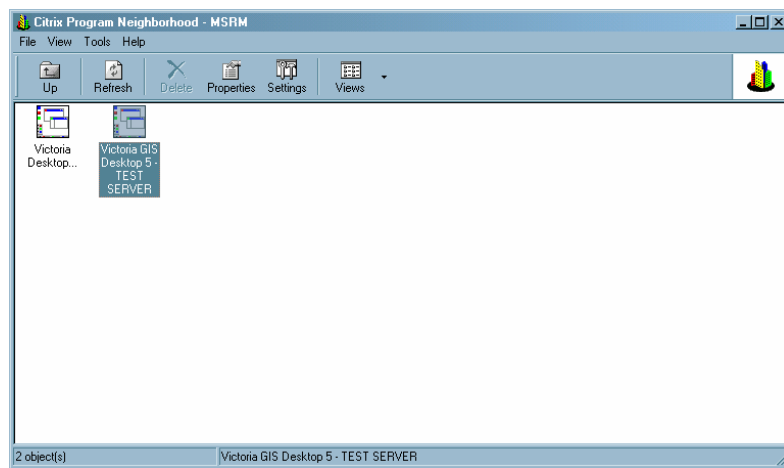
These layers are spatial layers used by eziLink™ and change depending on the submission being created. Do not remove these layers.

	Icon(s)	Description
Collapsible Node		Indicates if the submission item is collapsed or if there are sub components to the submission. Click to expand the tree to expose further components to the submission.
Spatial Data		Indicates that the submission item can have spatial data associated with it such as a cut block boundary. This does not indicate that it is required, only that it can have spatial data.
Warning		Indicates that there is something missing from the particular submission item. Hold the mouse over the item to get a listing of what is missing.
Layer Check Box		Indicates if the layer is to be visible and selectable in the spatial window.

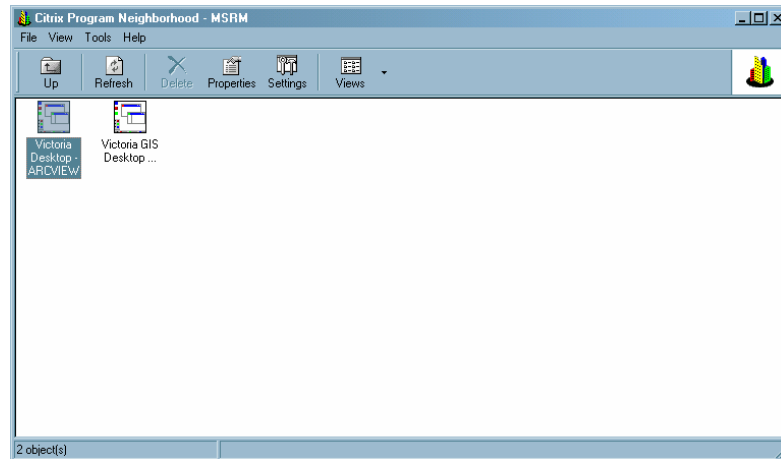
Exercise 1 – Opening An Existing Submission

In this exercise you will become familiar with opening a submission document and issues that arise when the submission is incorrectly formatted. Remember that eziLink can open submission files created to ESF schema standards no matter what application created it.

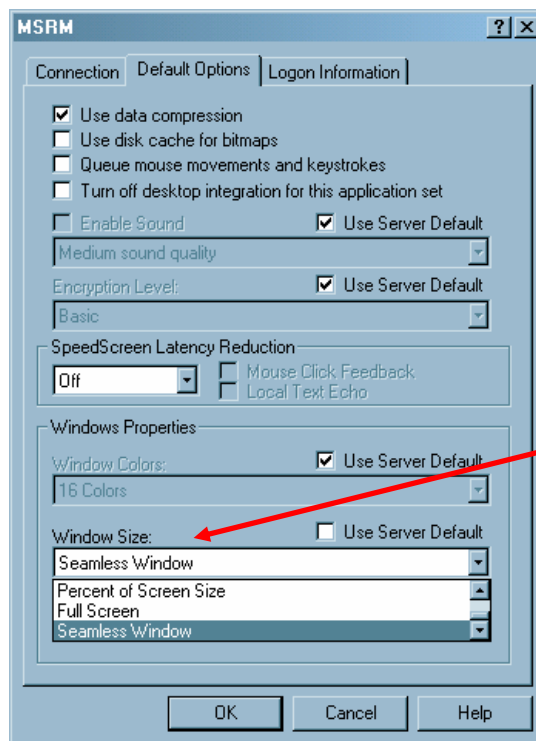
1. Log into the trainer server from the Citrix client. You should have at least two servers available to you once you have logged onto Citrix. The trainer server is called Victoria GIS Desktop 5 – TEST SERVER.



The production server that you will be using later should also be accessible and will be called 'Victoria Desktop - ARC VIEW' or 'Victoria Desktop - ARC INFO'.

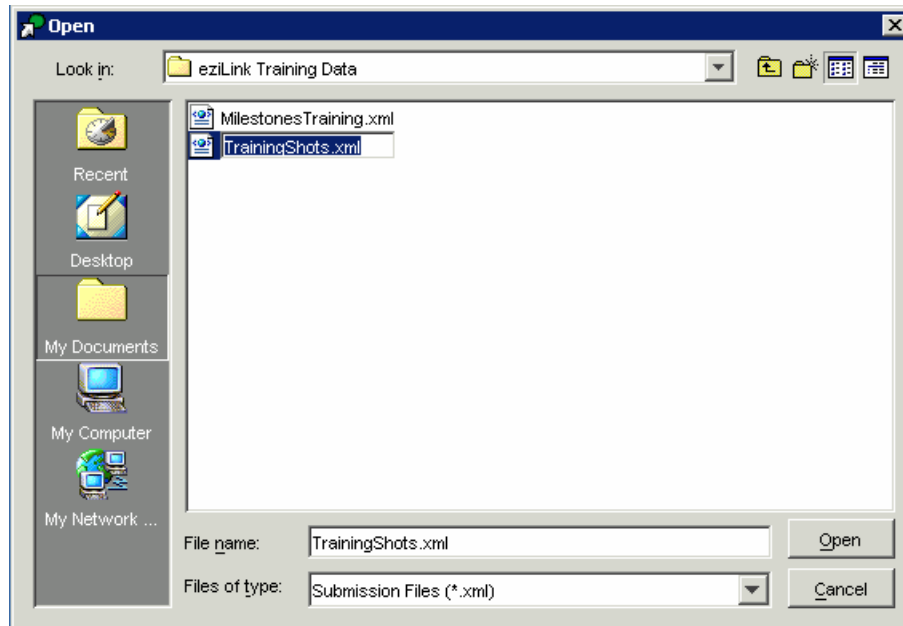


If you are using a double monitor you will want to play with the settings for the size of the terminal server window when it opens. See the diagram below. The Seamless window will take up both monitors and cause confusion so you can adjust it to a percentage of the Screen size.

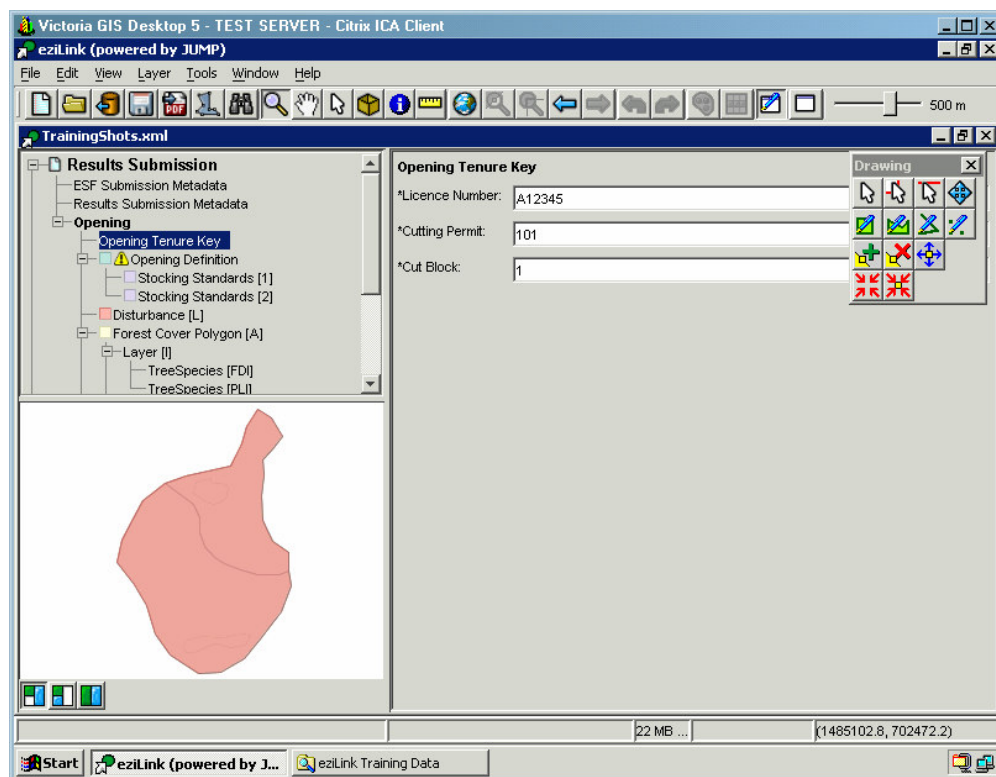


Change option here to adjust size of terminal server window.

2. **Open eziLink™.**
3. Start -> programs -> eziLink-> **eziLink™.**
4. **Click** 'Open An Existing Submission'.
5. Open the 'TrainingShots.xml' submission from the training directory on the terminal server.
`W:\Common_Training_Area\EziLink_Training_Data\<session Date>\<AM or PM>\Student Name - #\Ezilink Training Data\`



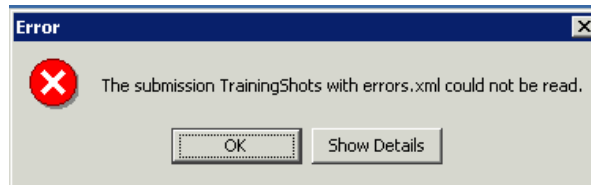
1. Click on the Opening Tenure Key in the submission content window. Note that the attribute window now shows information about the Opening Tenure key.



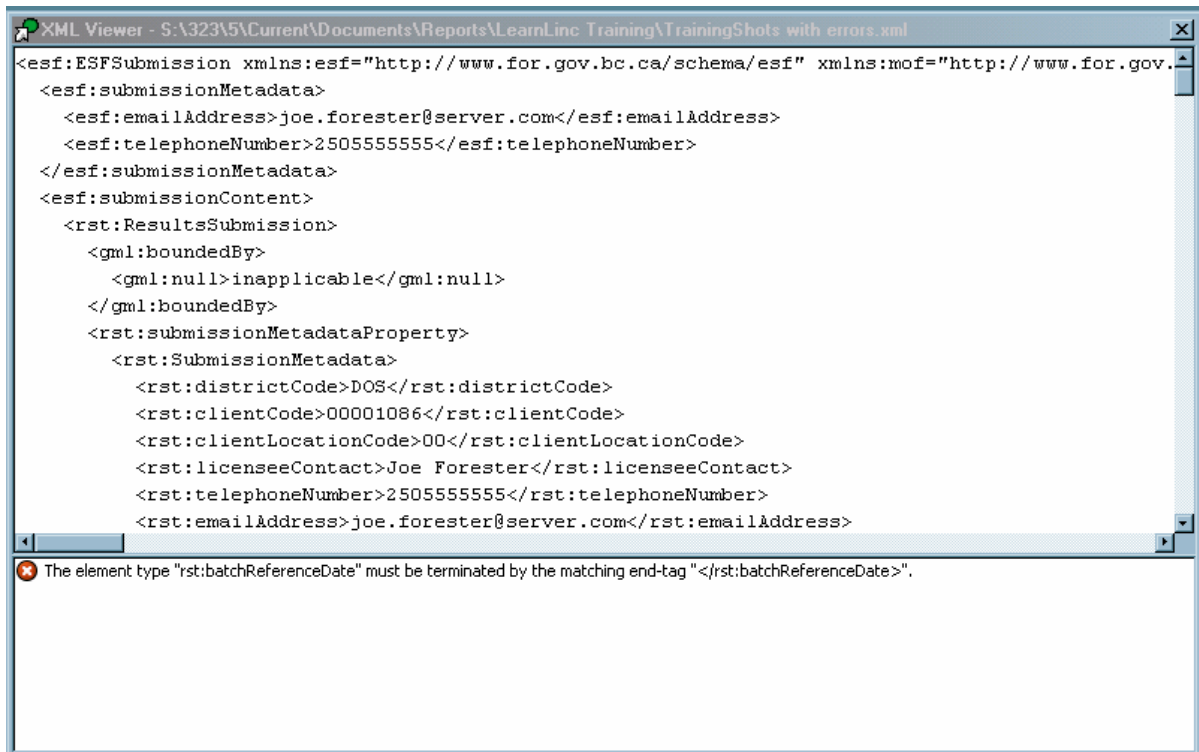
2. Click on all three display view buttons located in the bottom left corner of the screen to see the different displays perspectives.

eziLink will read XML files that are not correctly formatted and provide you a view of the file that identifies the errors in the file. To correct the errors, you must correct the problem in the translation routine, application or in a text editor.

3. Open the submission "Training Shots with errors.xml" in eziLink. Upon opening the file, eziLink will notify you that the file could not be read.



4. Click the "Show Details" button. EziLink will validate any errors that the file has and display. The bottom of the window describes what is incorrect in the file.



5. Click on the error messages in the bottom half of the window. Note that it indicates the section of the .xml file where the problem is.
6. Close the window.

Exercise 2 – The Submission Window

1. Reopen the “TrainingShots.xml” submission from the training directory
2. Click on the  display view button.
3. Click on the Results Submission Node and look at the attributes in the attribute window.
4. Click on the Opening Definition node and look at the attributes in the attribute window. Also note that the spatial component flashes in the spatial window showing the spatial representation of the submission item.
5. Place mouse over the Opening Definition node with the Warning icon. Do not click. A message appears indicating required attributes are missing from that item.
6. Click on the  collapsible Node Icon to collapse portions of the tree.
7. Right Click on each node of tree to review the options for that particular aspect of the submission.
8. Click on the check boxes under the eziLink layers category to make the layers appear or disappear in the spatial window.

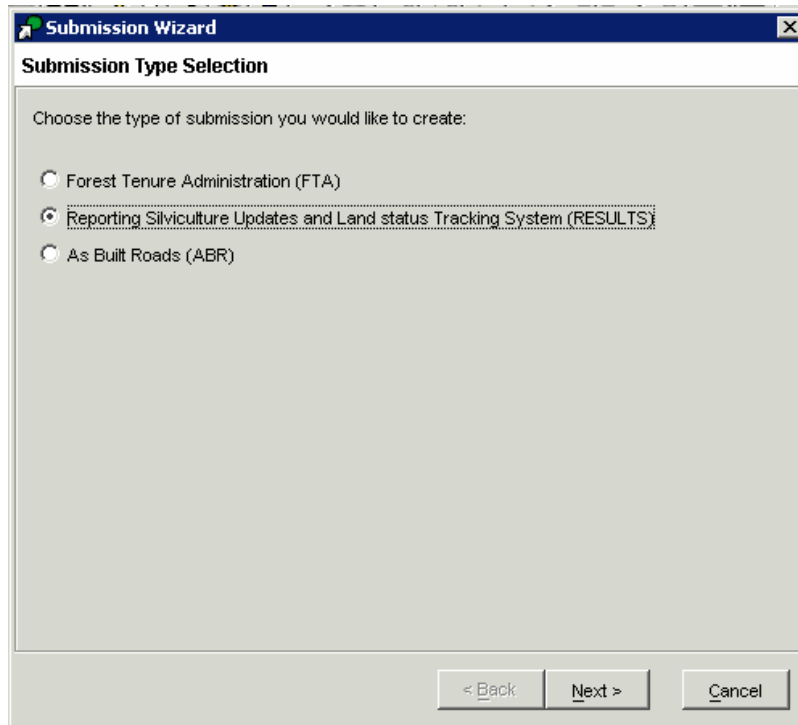
Exercise 3 – Modifying and Saving a Submissions

Making changes to attributes is simple. You select the item in the submission that you need to change and change the value in the attribute window. To save your changes simply save the file under the file menu or if you wish to save to a new file, use the “Save As”.

1. Click on the opening definition node with the warning icon in the submission window.
2. Make the Action ‘Insert”.
3. Click on the Results Submission node or any other node in the Submission Component Window to refresh the tree display for the Opening definition node. Note that the warning icon has disappeared indicating that all required information is entered for that component of the submission.
4. Save the submission to by using file -> save as.
5. Save the file to your student directory on the terminal server as TrainingShotsFixed.xml.

6. Creating a new submission

eziLink uses a wizard based approach for creating new submissions. This approach guides the user through the content required for a submission and allows them to make choices about what is to be included in a logical fashion.



Things to have ready before starting to create the submission are:

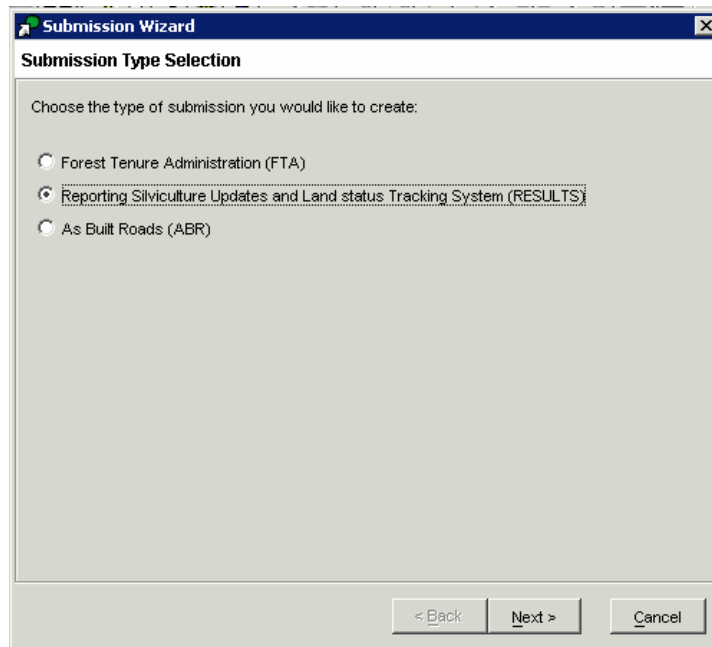
- Client information including client numbers, contact information, IDIR with the appropriate permissions.
- Details about the submission to be made such as any value that is not a default values
- Spatial data including information on format, projection of source data, and a way of identifying what spatial feature belongs to what component of the submission.

Exercise 4 – Working with the Submission Wizard

In this exercise, participants will begin creating a new Opening Definition. Use the Standards – Form 'A' included in the training package for attributes for the submission. All required digital data is included in the training data directory.

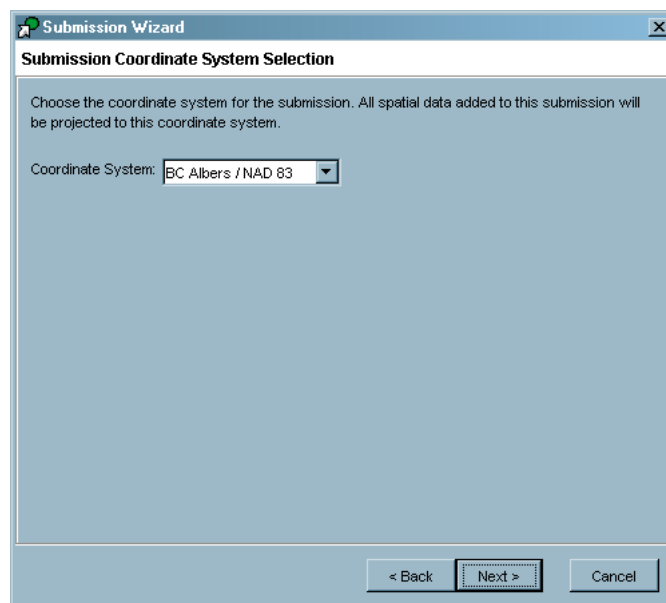
1. Ensure all submissions are closed.
2. Select File, New Submission. This will start the submission wizard that you can step through and complete the details.

3. Select Reporting Silviculture and Land status Tracking System (RESULTS) for the submission type as opening definitions are submitted as RESULTS submissions and click next. Note that eziLink also supports FTA and ABR submissions. To create one of these types of submissions, select the type submission to create.



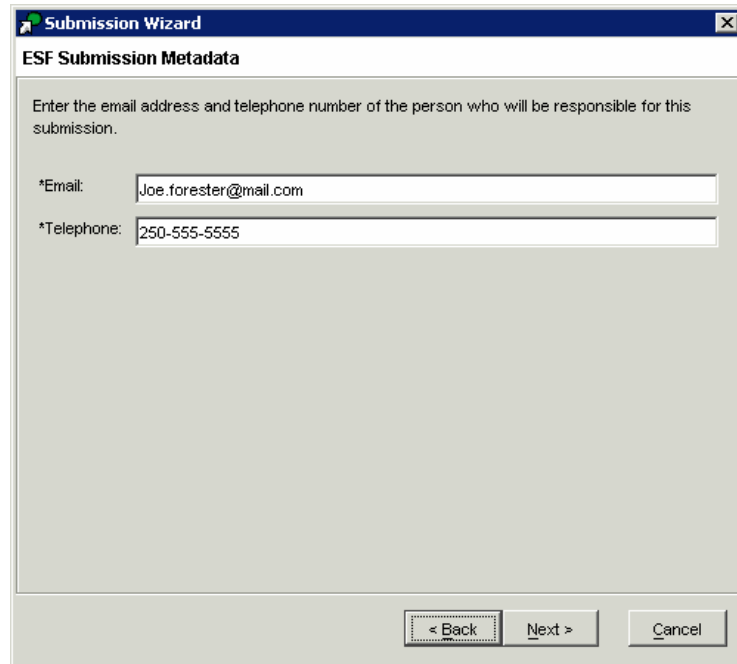
The screenshot shows a dialog box titled "Submission Wizard" with a sub-header "Submission Type Selection". The main area contains the instruction "Choose the type of submission you would like to create:" followed by three radio button options: "Forest Tenure Administration (FTA)", "Reporting Silviculture Updates and Land status Tracking System (RESULTS)", and "As Built Roads (ABR)". The "RESULTS" option is selected. At the bottom, there are three buttons: "< Back", "Next >", and "Cancel".

4. Chose the coordinate system that you wish to submit in from the drop down list. It is recommended that you submit in BC Albers as this is the project that all in the LRDW is stored as. Note that this projection is for the submission being made, not necessarily the spatial data that you are loading from a external file. eziLink will automatically re-project data on the fly to the projection supplied for the submission, as spatial data is loaded.



The screenshot shows a dialog box titled "Submission Wizard" with a sub-header "Submission Coordinate System Selection". The main area contains the instruction "Choose the coordinate system for the submission. All spatial data added to this submission will be projected to this coordinate system." Below this, there is a label "Coordinate System:" followed by a dropdown menu showing "BC Albers / NAD 83". At the bottom, there are three buttons: "< Back", "Next >", and "Cancel".

5. Enter the submission metadata from the form. The metadata contains information on whom is making the submission both the e-mail and telephone number must be provided. This screen is the same no matter what type of submission you are making. You will also note the asterisk beside some of the attributes. This asterisk identifies attributes that are minimum required to have a valid submission. Click “next” once complete.



The image shows a software window titled "Submission Wizard" with a close button in the top right corner. Below the title bar, the text "ESF Submission Metadata" is displayed. The main area of the window contains the instruction: "Enter the email address and telephone number of the person who will be responsible for this submission." Below this instruction are two input fields. The first field is labeled "*Email:" and contains the text "Joe.forester@mail.com". The second field is labeled "*Telephone:" and contains the text "250-555-5555". At the bottom right of the window, there are three buttons: "< Back", "Next >", and "Cancel".

6. Since Opening Definitions are RESULTS submissions, there is specific information that must be supplied for RESULTS submissions called the RESULTS metadata. Fill-in all the fields based on the form. Client Number and Client Location Code are specific to each licensee. If you are unsure what your client number and location code are, contact your local district office. The Admin District is the district that the submission will be sent to and the licensee contact is the name of the person that should be contacted at the licensee's office. The batch reference date is the date you want for the creation or submission of the file. Once complete click next.

The screenshot shows a Windows-style dialog box titled "Submission Wizard" with a sub-header "Results Submission Metadata". Below the sub-header is the instruction "Enter client information." followed by several input fields:

- *Client Number: A text box containing "0001086".
- *Client Location Code: A text box containing "00".
- *Administrative District: A dropdown menu showing "DOS - Okanagan Shuswap Forest District".
- *Licensee Contact: A text box containing "Joe Forester".
- *Contact Telephone: A text box containing "250-555-5555".
- *Contact Email: A text box containing "joe.forester@server.com".
- *Batch Reference Date: A date picker showing "Jan 20, 2005".
- *Validate Only: A dropdown menu showing "No".

At the bottom of the dialog are three buttons: "< Back", "Next >", and "Cancel". The "Next >" button is highlighted with a dashed border.

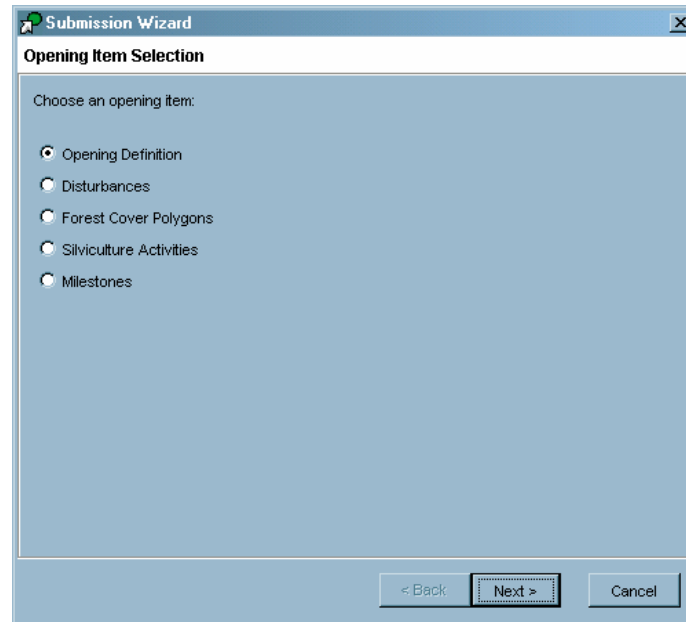
7. Choose Opening Tenure Key for the submission type and click next. Note the different types of application types supported by eziLink for RESULTS.

The screenshot shows a Windows-style dialog box titled "Submission Wizard" with a sub-header "Key Selection". Below the sub-header is the instruction "Choose one or more keys to identify the opening:" followed by a list of four checkboxes:

- ☒ Opening Tenure Key
- ☐ Opening Number Key
- ☐ Opening Timber Mark Key
- ☐ Opening ID Key

At the bottom of the dialog are three buttons: "< Back", "Next >", and "Cancel". The "Next >" button is highlighted with a dashed border.

1. Enter the Licence Number, Cutting Permit number that has been assigned to you by your instructor (student Id on your student directory), and Cut Block information. This is used to identify the opening that you are submitting for. For an opening definition submission, using a Tenure Key or an Opening Timber Mark key will establish the opening ID.¹ In the case of a natural disturbance the key is not needed as the opening category will flag RESULTS that there is no corresponding FTA block. However, the eziLink Wizard will insist on a key so select one and remove it later. Click next when complete.



The screenshot shows a window titled "Submission Wizard" with a close button (X) in the top right corner. Below the title bar is a section header "Opening Item Selection". The main area of the window contains the text "Choose an opening item:" followed by a list of five radio button options: "Opening Definition", "Disturbances", "Forest Cover Polygons", "Silviculture Activities", and "Milestones". The "Opening Definition" option is selected. At the bottom of the window, there are three buttons: "< Back", "Next >", and "Cancel". The "Next >" button is highlighted with a dashed border.

2. Fill in the information about the Opening from the Form A section B. Since this is the first submission of the opening definition and not an update, ensure that the Action is **"Insert"**. Click next once Complete.

¹ If an opening number has already be assigned outside of RESULTS, that key can be used along with the Tenure or Timber Mark key and RESULTS will create the tenure with that key if possible. This is a temporary provision to allow assigned opening numbers to get into RESULTS.

Submission Wizard

Opening Definition

Enter Opening Definition information.

*Action:	I - Insert
Licensee ID:	1
Opening Category:	FTML - Forest Tenure - Major Licensee
Opening Location Name:	Opening Valley
Opening Gross Area:	0
Previous Stand Type:	MAT - Mature
Previous Species 1:	FDI - DOUGLAS-FIR (INTERIOR)
Previous Species 2:	PLI - LODGEPOLE PINE (INTERIOR)
Previous Age Class:	6 - 101 - 120 Years
Previous Height Class:	4 - 28.5 - 37.4 Meters
Previous Stock Class:	4 - Stocking Class 4
Previous Site Index:	18
Previous Site Index Source:	H - SI from stand before harvest

< Back Next > Cancel

- Now you must add either tenure or stocking standards to the submission. Only enter tenure information if the opening is a multi-tenure opening (i.e. falls into more than one license or CP). This sample submission is single tenure so you will not need to add tenure information. Select Add Stocking Standards and click next.

Submission Wizard

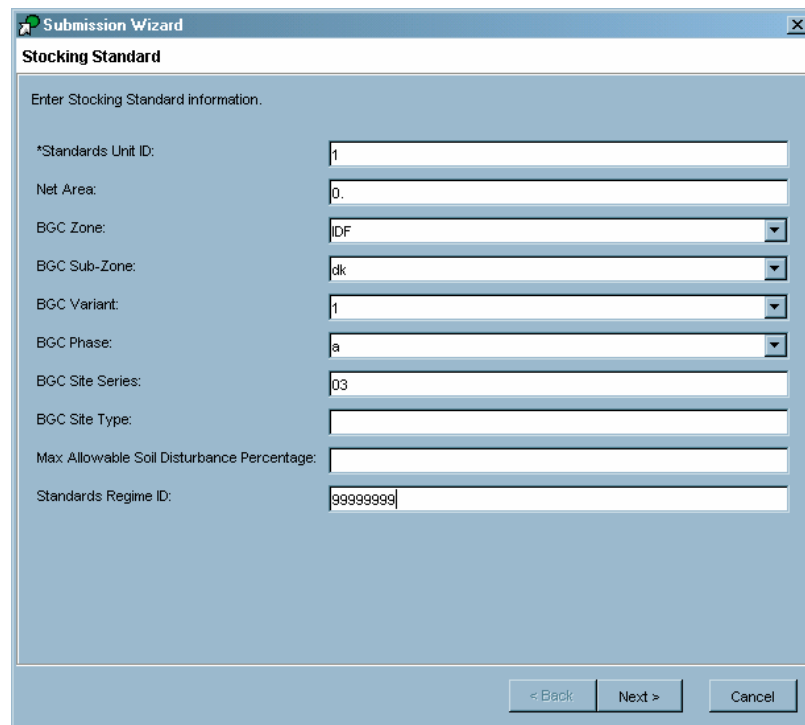
Question

What would you like to do?

☒ Add Stocking Standards
☐ Add Tenures
☐ Finish

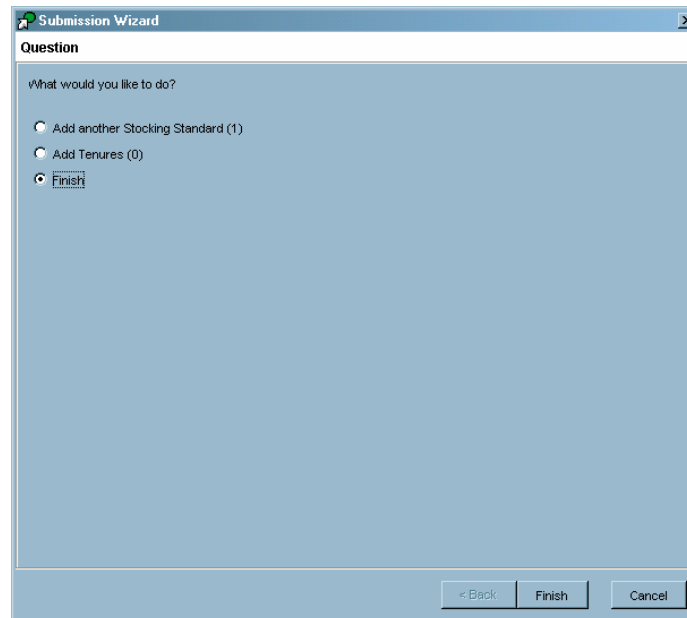
< Back Next > Cancel

4. Enter the Stocking information off the Form A for SU 1. Click Next when done. Note that the final submission will require a Standards Regime Id even though the application of it may vary for natural disturbances.



The image shows a software window titled "Submission Wizard" with a sub-header "Stocking Standard". Below the header is the instruction "Enter Stocking Standard information." followed by a series of input fields. The fields are: "*Standards Unit ID:" with the value "1"; "Net Area:" with the value "0."; "BGC Zone:" with a dropdown menu showing "IDF"; "BGC Sub-Zone:" with a dropdown menu showing "clk"; "BGC Variant:" with a dropdown menu showing "1"; "BGC Phase:" with a dropdown menu showing "a"; "BGC Site Series:" with the value "03"; "BGC Site Type:" which is empty; "Max Allowable Soil Disturbance Percentage:" which is empty; and "Standards Regime ID:" with the value "99999999". At the bottom right of the window are three buttons: "< Back", "Next >", and "Cancel".

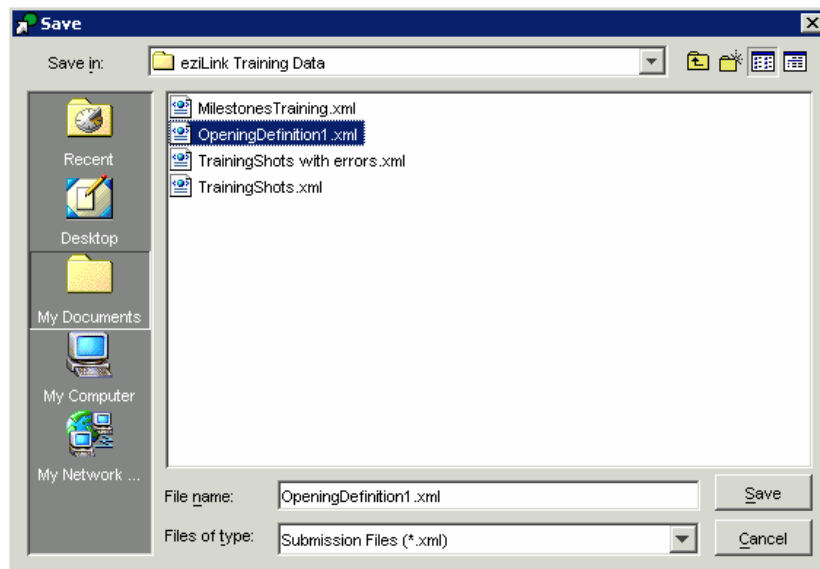
5. Add a second stocking standard and click finish and the finish button once all information is entered.



The image shows a software window titled "Submission Wizard" with a sub-header "Question". Below the header is the question "What would you like to do?" followed by three radio button options: "Add another Stocking Standard (1)", "Add Tenures (0)", and "Finish". The "Finish" option is selected. At the bottom right of the window are three buttons: "< Back", "Finish", and "Cancel".

You have now created a submission document. You will notice that the submission content window contains the information that you just entered. Click on different components of the submission to see the attributes that you have entered. Note that there is no spatial information. If you zoom to any of the eziLink layers the map window is empty.

7. Save the file to your student directory for use later in the exercise where you load the spatial component of the submission. To save the file, chose File->save As or click the  (save) button on the toolbar. Name the file "OpeningDefinitionEx5.xml"



Exercise 5 – Looking at the eziLink Files

1. Start Notepad.
Start ->Programs->Accessories->notepad.
2. Open the XML file that you just saved to the desktop.
 - a. File Open
 - b. Navigate to the computer desktop
 - c. Select all files in the file type dropdown
 - d. Select the <your name>.xml
3. Opening the EZI file that you just saved to the desktop.
4. File Open.
5. Navigate to the computer desktop.
6. Select all files in the file type dropdown.
7. Select the OpeningDefinitionEx5.ezi.

You will note that when a file is saved, there are actually two files that are saved. One has the extension .xml, and the second has the extension .ezi. The XML file contains a properly formatted XML to the ministry schema that the submission is being created for. The EZI file contains extra

information about the file that you have created that does not get sent to the ministry such as error logs, creation dates and more.

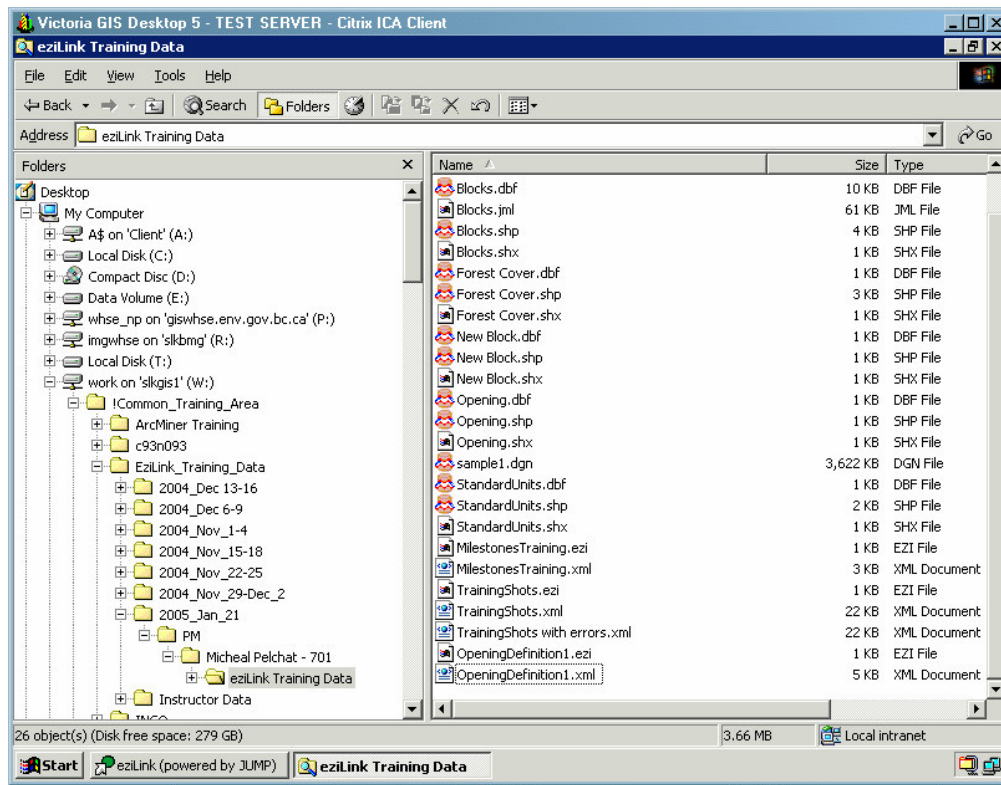
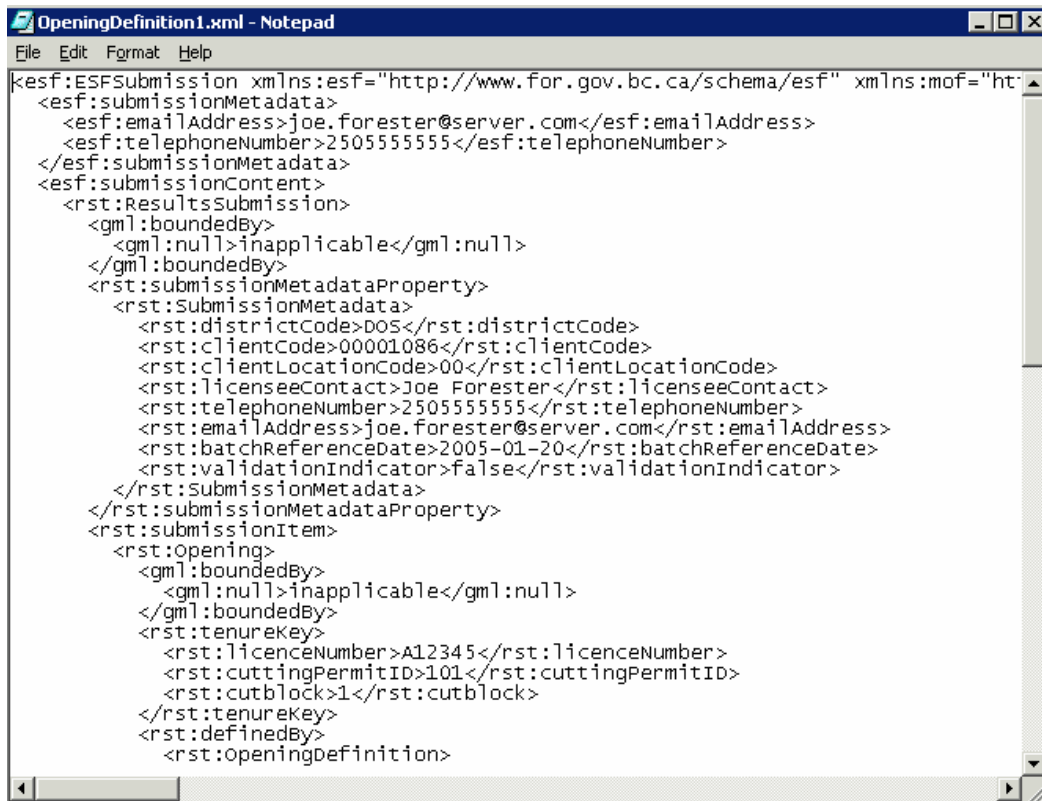
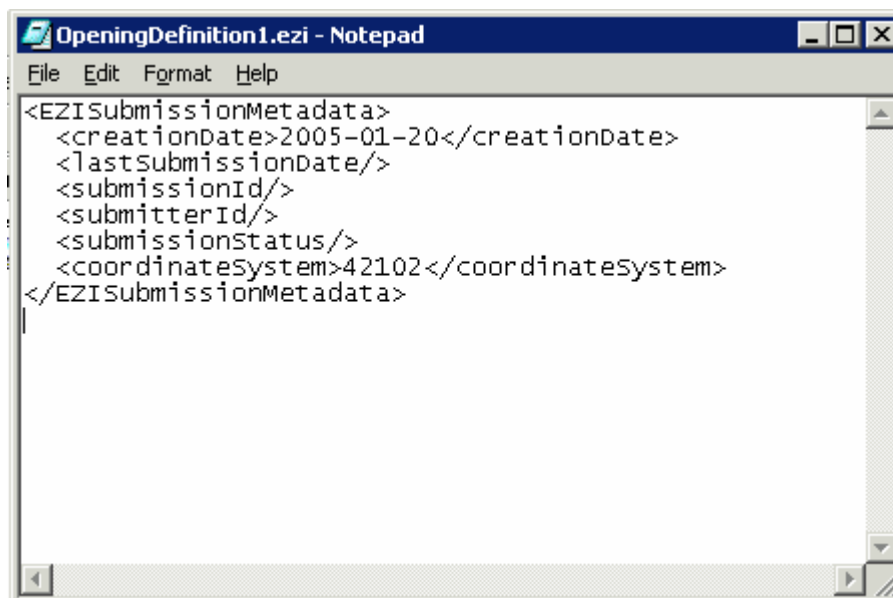


Figure 1. XML File



```
OpeningDefinition1.xml - Notepad
File Edit Format Help
<esf:ESFSubmission xmlns:esf="http://www.for.gov.bc.ca/schema/esf" xmlns:mof="ht
<esf:submissionMetadata>
  <esf:emailAddress>joe.forester@server.com</esf:emailAddress>
  <esf:telephoneNumber>2505555555</esf:telephoneNumber>
</esf:submissionMetadata>
<esf:submissionContent>
  <rst:ResultsSubmission>
    <gml:boundedBy>
      <gml:null>inapplicable</gml:null>
    </gml:boundedBy>
    <rst:submissionMetadataProperty>
      <rst:SubmissionMetadata>
        <rst:districtCode>DOS</rst:districtCode>
        <rst:clientCode>00001086</rst:clientCode>
        <rst:clientLocationCode>00</rst:clientLocationCode>
        <rst:licenseeContact>joe Forester</rst:licenseeContact>
        <rst:telephoneNumber>2505555555</rst:telephoneNumber>
        <rst:emailAddress>joe.forester@server.com</rst:emailAddress>
        <rst:batchReferenceDate>2005-01-20</rst:batchReferenceDate>
        <rst:validationIndicator>false</rst:validationIndicator>
      </rst:SubmissionMetadata>
    </rst:submissionMetadataProperty>
    <rst:submissionItem>
      <rst:Opening>
        <gml:boundedBy>
          <gml:null>inapplicable</gml:null>
        </gml:boundedBy>
        <rst:tenureKey>
          <rst:licenceNumber>A12345</rst:licenceNumber>
          <rst:cuttingPermitID>101</rst:cuttingPermitID>
          <rst:cutblock>1</rst:cutblock>
        </rst:tenureKey>
        <rst:definedBy>
          <rst:OpeningDefinition>
```

Figure 2. EZI File

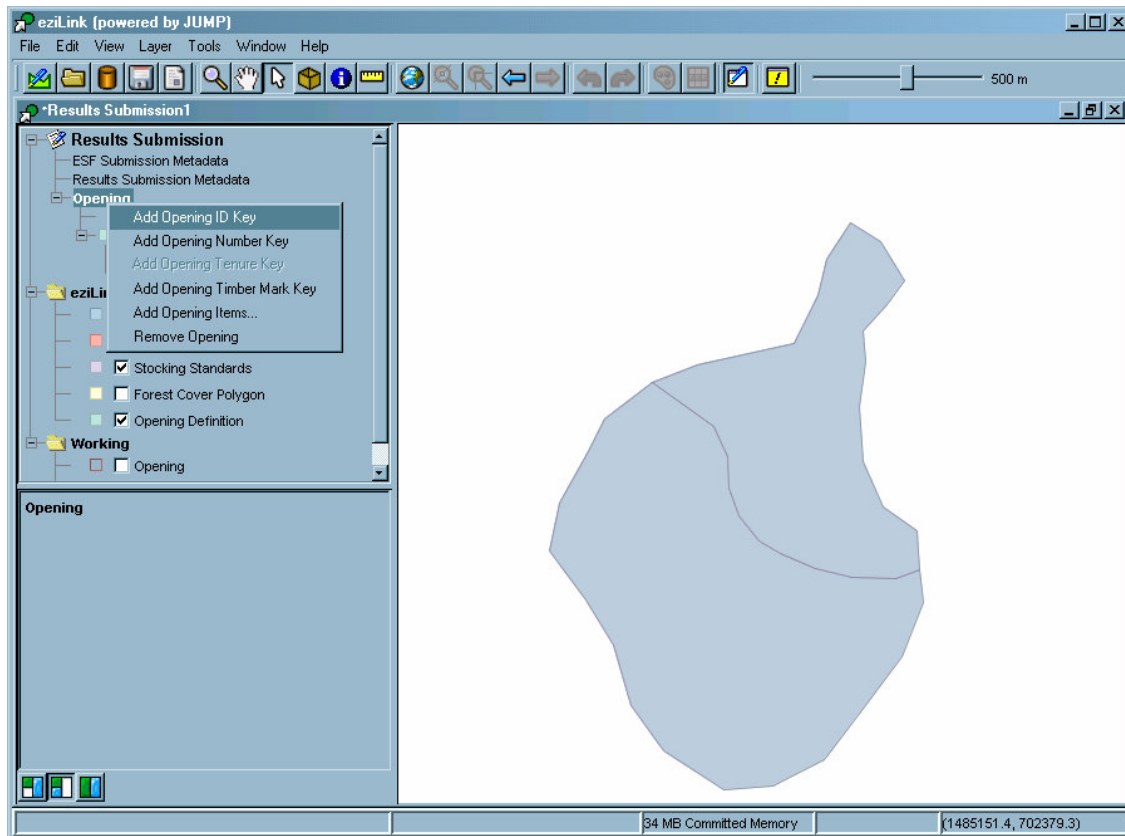


```
OpeningDefinition1.ezi - Notepad
File Edit Format Help
<EZISubmissionMetadata>
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  <lastSubmissionDate/>
  <submissionId/>
  <submitterId/>
  <submissionStatus/>
  <coordinatesSystem>42102</coordinatesSystem>
</EZISubmissionMetadata>
```

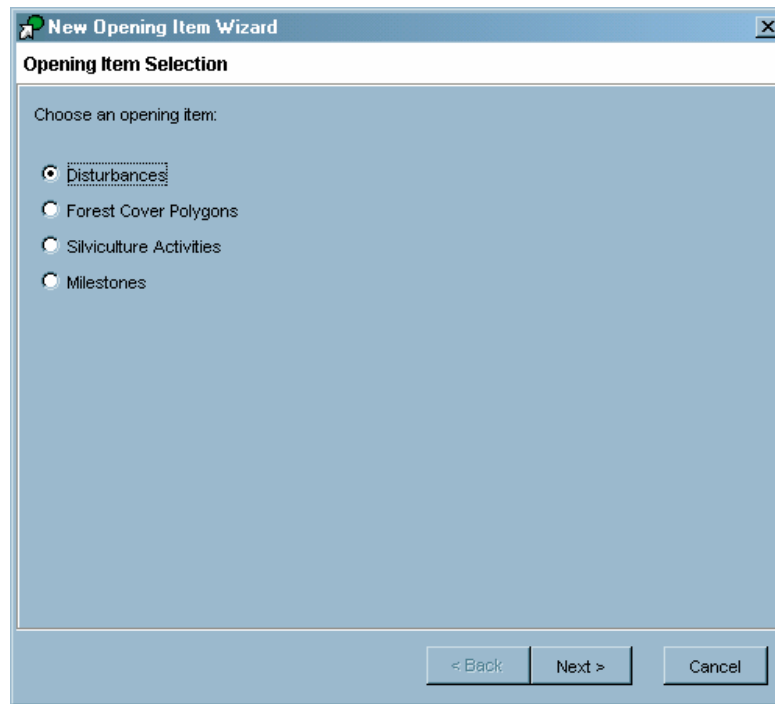
Exercise 6 – Disturbance Reporting

Use the Standards – Form ‘B’ included in the training package for attributes for the submission. All required digital data is included in the training data directory. In this exercise you will be adding disturbance information to an existing submission.

1. Open the Opening Definition submission you created in the previous exercise.
2. Right-click on the opening and select “Add Opening Item”. Doing this brings you back to the submission wizard and allows you to add new information to an existing submission without having to create a new submission each time.

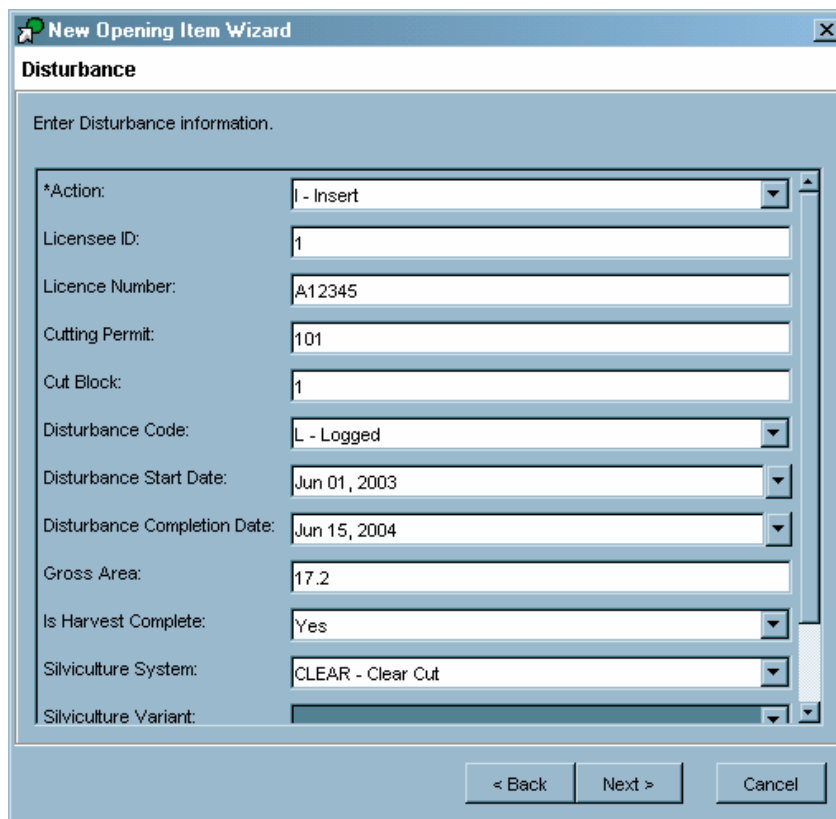


3. Select "Disturbances" from the options and click next



The screenshot shows the 'New Opening Item Wizard' window with the 'Opening Item Selection' tab. The instruction 'Choose an opening item:' is at the top. Below it are four radio button options: 'Disturbances' (selected), 'Forest Cover Polygons', 'Silviculture Activities', and 'Milestones'. At the bottom are three buttons: '< Back', 'Next >', and 'Cancel'.

4. Fill out the required information for the disturbance from the Form B – Section B and click next.



The screenshot shows the 'New Opening Item Wizard' window with the 'Disturbance' tab. The instruction 'Enter Disturbance information.' is at the top. Below it are several input fields and dropdown menus:

*Action:	I - Insert
Licensee ID:	1
Licence Number:	A12345
Cutting Permit:	101
Cut Block:	1
Disturbance Code:	L - Logged
Disturbance Start Date:	Jun 01, 2003
Disturbance Completion Date:	Jun 15, 2004
Gross Area:	17.2
Is Harvest Complete:	Yes
Silviculture System:	CLEAR - Clear Cut
Silviculture Variant:	

At the bottom are three buttons: '< Back', 'Next >', and 'Cancel'.

5. Select no for additional disturbances and click finish to return to the main eziLink application.
6. Save the files to your student directory as DisturbanceEx6.xml.

Exercise 7 – Adding Silviculture Activities to a Submission

Silviculture activity reports could be anything from site prep to planting. In this tutorial we will add a simple survey activity to the submission prepared earlier.

1. Open the submission from the previous exercise.
2. Right-click on the opening and select “Add Opening Items”. Select “Silviculture Activities”.
3. Fill in the information for the site prep activity in the section C of Form ‘B’ and click next.

New Opening Item Wizard

Silviculture Activity

Enter Silviculture Activity information.

*Activity Base: SP - Site Preparation

Licensee ID: 1

Activity Date: Sep 15, 2004

Is Actual Date: No

Activity Technique: ME - Mechanical

Activity Method: MOUND - Mounding

Objective 1: CE - Crop Establishment

Objective 2:

Objective 3:

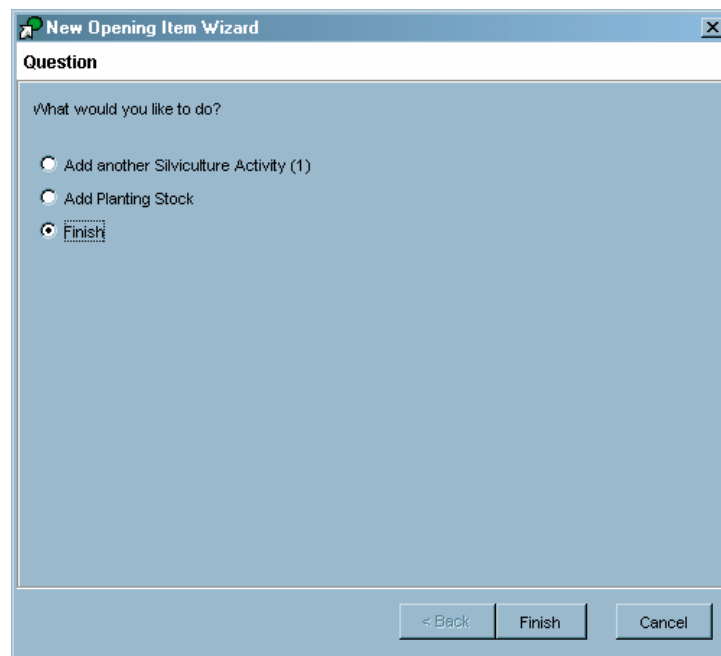
Funding Source: IA - Industrial Appraisal

Funding Project ID:

Net Area Treated:

< Back Next > Cancel

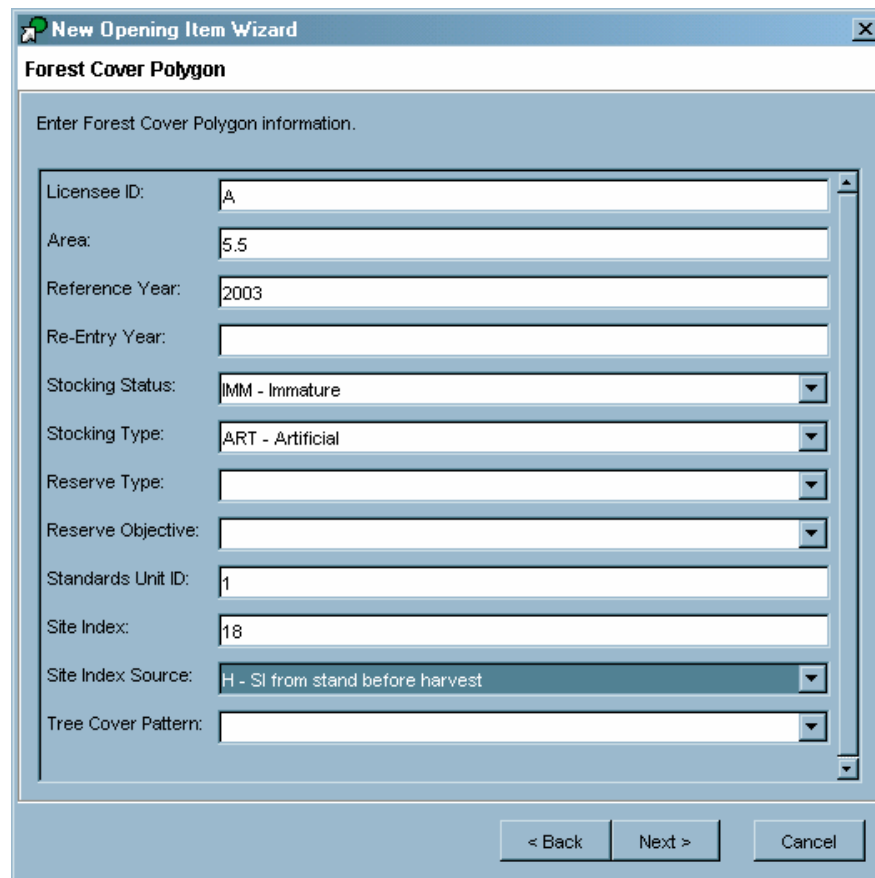
4. You are now presented with the option of adding planting stock information or another activity. You are only required to add planting stock if the activity was planting. For this submission, only site prep was done. Select finish and click the finish button.



5. Save the file to your student directory as SilvicultureActivityEx7.xml

Exercise 8 – Submission of Forest Cover Polygon Information

1. Open the submission from the previous exercise.
2. Right-click on the opening and select “Add Opening Items”. Select “Forest Cover Polygons”.
3. Fill in the information for the Forest Cover Polygon in the first line of section C of Form ‘C’ and click next.

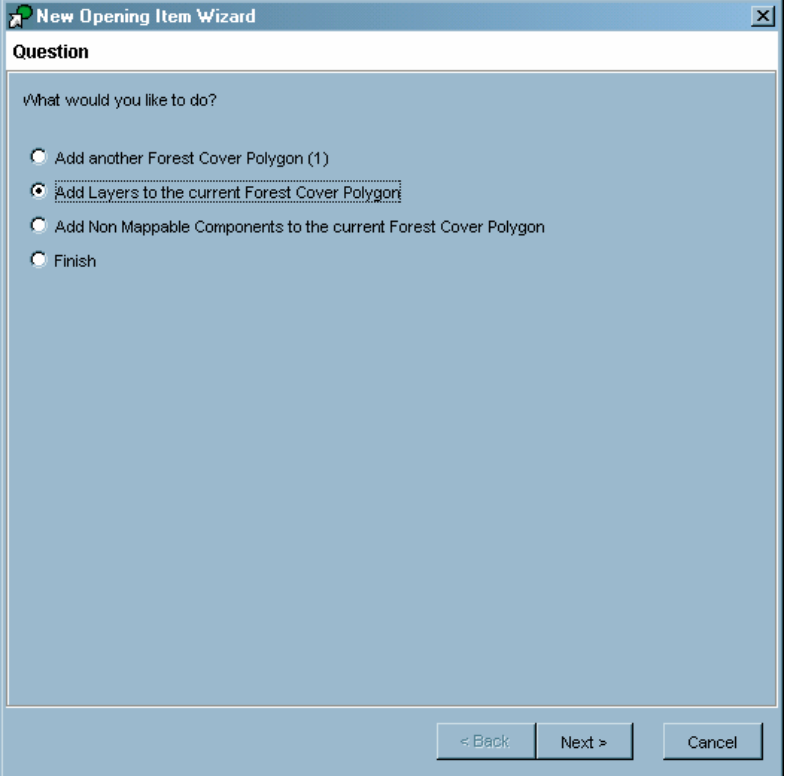


The image shows a software window titled "New Opening Item Wizard" with a close button (X) in the top right corner. Below the title bar, the text "Forest Cover Polygon" is displayed. The main area of the window contains the instruction "Enter Forest Cover Polygon information." followed by a series of input fields and dropdown menus. The fields are: "Licensee ID:" with the value "A"; "Area:" with the value "5.5"; "Reference Year:" with the value "2003"; "Re-Entry Year:" which is empty; "Stocking Status:" with a dropdown menu showing "IMM - Immature"; "Stocking Type:" with a dropdown menu showing "ART - Artificial"; "Reserve Type:" with an empty dropdown menu; "Reserve Objective:" with an empty dropdown menu; "Standards Unit ID:" with the value "1"; "Site Index:" with the value "18"; "Site Index Source:" with a dropdown menu showing "H - SI from stand before harvest"; and "Tree Cover Pattern:" with an empty dropdown menu. At the bottom of the window, there are three buttons: "< Back", "Next >", and "Cancel".

Licensee ID:	A
Area:	5.5
Reference Year:	2003
Re-Entry Year:	
Stocking Status:	IMM - Immature
Stocking Type:	ART - Artificial
Reserve Type:	
Reserve Objective:	
Standards Unit ID:	1
Site Index:	18
Site Index Source:	H - SI from stand before harvest
Tree Cover Pattern:	

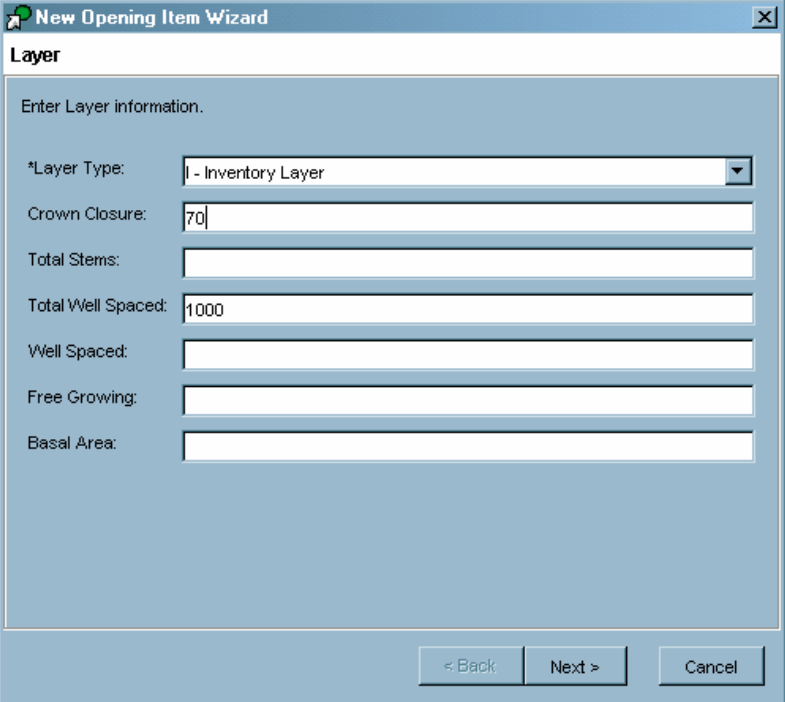
< Back Next > Cancel

4. Select Add Layers to the Current Forest Cover Polygon, click next.



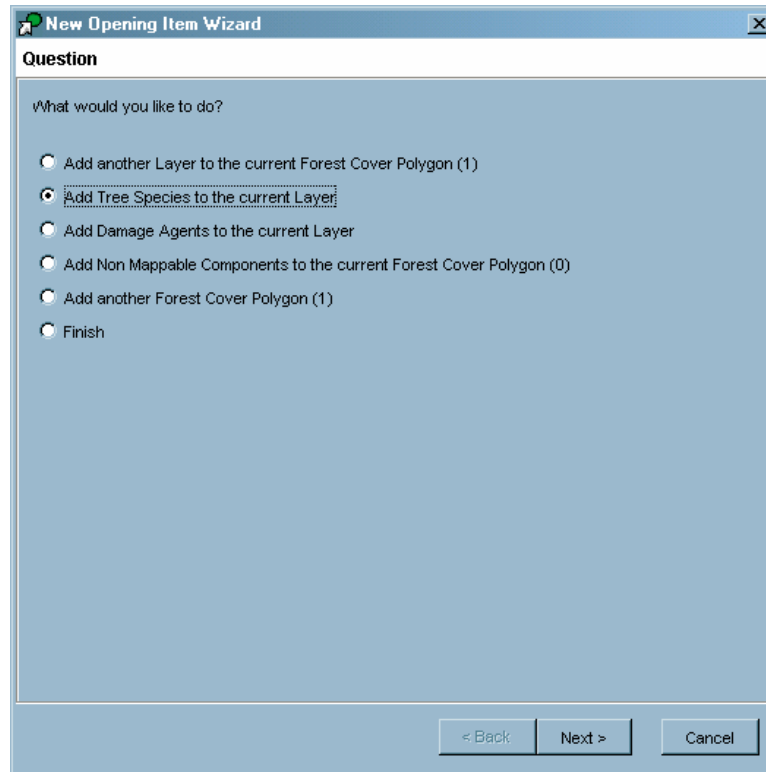
The screenshot shows the 'New Opening Item Wizard' dialog box, specifically the 'Question' step. The title bar reads 'New Opening Item Wizard' with a close button. The main area is titled 'Question' and contains the text 'What would you like to do?'. There are four radio button options: 'Add another Forest Cover Polygon (1)', 'Add Layers to the current Forest Cover Polygon' (which is selected), 'Add Non Mappable Components to the current Forest Cover Polygon', and 'Finish'. At the bottom right, there are three buttons: '< Back', 'Next >', and 'Cancel'.

5. Add the layer information for the inventory layer.



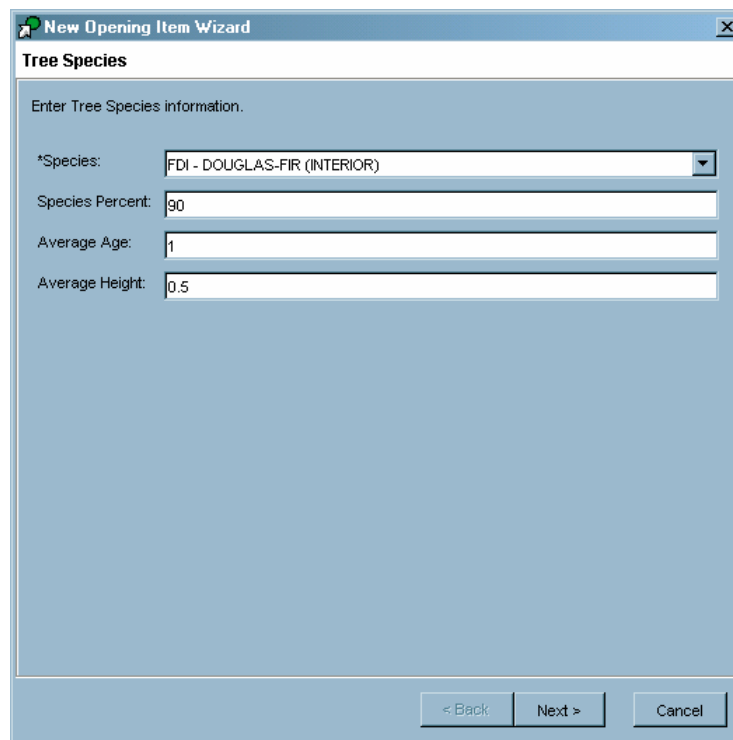
The screenshot shows the 'New Opening Item Wizard' dialog box, specifically the 'Layer' step. The title bar reads 'New Opening Item Wizard' with a close button. The main area is titled 'Layer' and contains the text 'Enter Layer information.'. There are several input fields: '*Layer Type:' with a dropdown menu showing 'I - Inventory Layer'; 'Crown Closure:' with a text box containing '70'; 'Total Stems:' with an empty text box; 'Total Well Spaced:' with a text box containing '1000'; 'Well Spaced:' with an empty text box; 'Free Growing:' with an empty text box; and 'Basal Area:' with an empty text box. At the bottom right, there are three buttons: '< Back', 'Next >', and 'Cancel'.

- Click next once the data has been entered.



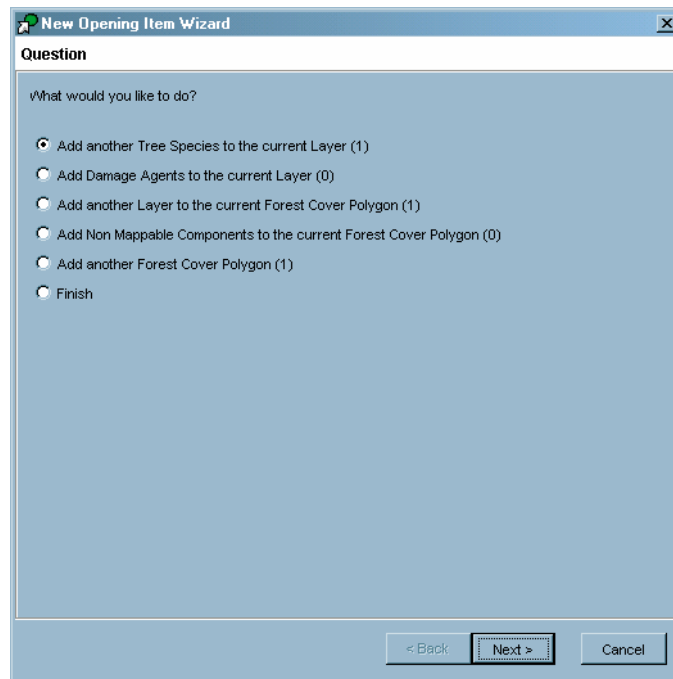
The image shows a software window titled "New Opening Item Wizard" with a close button in the top right corner. The window has a tab labeled "Question". Below the tab, the text "What would you like to do?" is displayed. There are seven radio button options listed: "Add another Layer to the current Forest Cover Polygon (1)", "Add Tree Species to the current Layer" (which is selected), "Add Damage Agents to the current Layer", "Add Non Mappable Components to the current Forest Cover Polygon (0)", "Add another Forest Cover Polygon (1)", and "Finish". At the bottom of the window, there are three buttons: "< Back", "Next >", and "Cancel".

- Now add species information for the first species by selecting Add Tree Species to the Current Layer and clicking next.



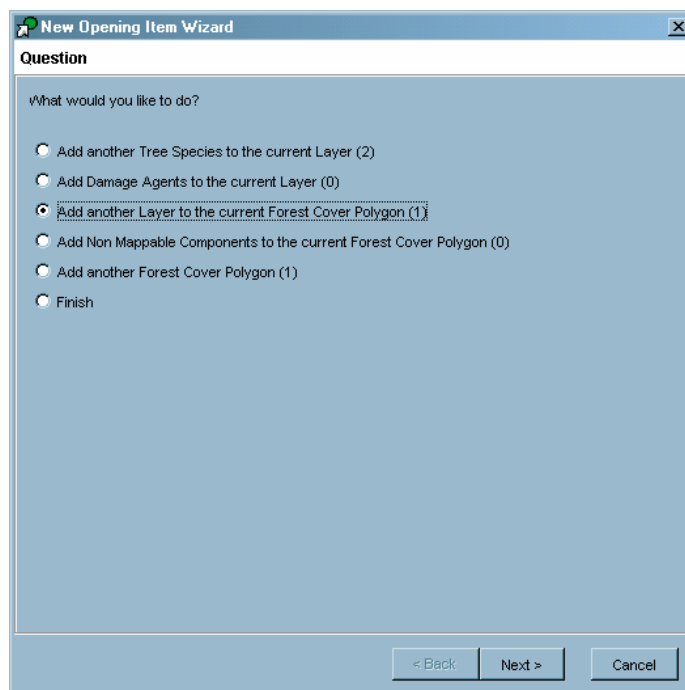
The image shows the same software window "New Opening Item Wizard" but with the "Tree Species" tab selected. The text "Enter Tree Species information." is at the top. Below it, there are four input fields: "*Species:" with a dropdown menu showing "FDI - DOUGLAS-FIR (INTERIOR)", "Species Percent:" with the value "90", "Average Age:" with the value "1", and "Average Height:" with the value "0.5". At the bottom, there are three buttons: "< Back", "Next >", and "Cancel".

8. Add the second species to the forest cover layer by selecting Add Tree Species to the Current Layer and click next. Enter the species information as above and click next once complete.



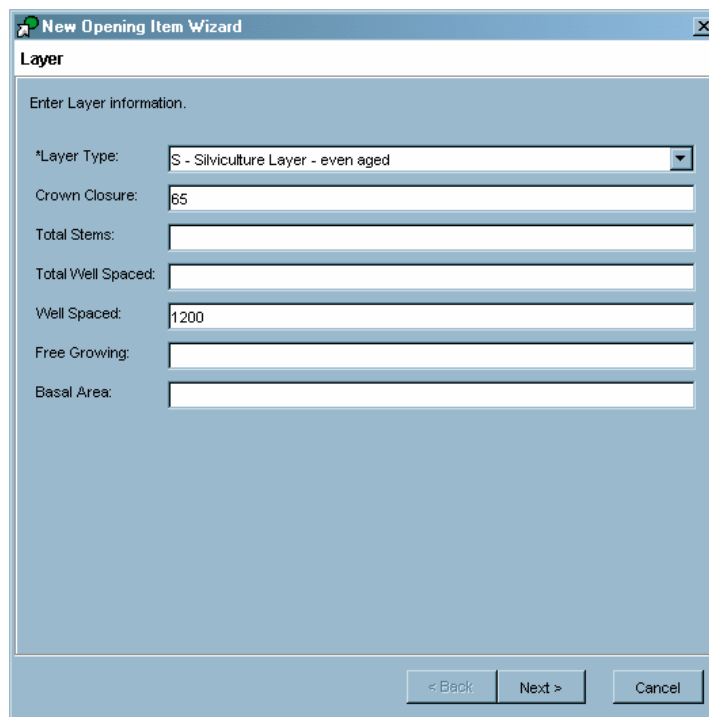
The image shows a 'New Opening Item Wizard' dialog box. The title bar is blue with a small icon on the left and a close button on the right. Below the title bar is a section labeled 'Question' with a light blue background. The text 'What would you like to do?' is displayed. There are six radio button options listed: 'Add another Tree Species to the current Layer (1)', 'Add Damage Agents to the current Layer (0)', 'Add another Layer to the current Forest Cover Polygon (1)', 'Add Non Mappable Components to the current Forest Cover Polygon (0)', 'Add another Forest Cover Polygon (1)', and 'Finish'. The first option is selected. At the bottom right, there are three buttons: '< Back', 'Next >', and 'Cancel'.

9. Now add the Silviculture layer by selecting "Add Another Layer" to the current forest cover polygon.



The image shows the same 'New Opening Item Wizard' dialog box. The title bar and 'Question' section are identical. The text 'What would you like to do?' is displayed. The radio button options are the same, but the third option, 'Add another Layer to the current Forest Cover Polygon (1)', is now selected. The other options are 'Add another Tree Species to the current Layer (2)', 'Add Damage Agents to the current Layer (0)', 'Add Non Mappable Components to the current Forest Cover Polygon (0)', 'Add another Forest Cover Polygon (1)', and 'Finish'. The buttons at the bottom right are '< Back', 'Next >', and 'Cancel'.

10. Fill in the Layer information from the second line of the form 'C' as before.

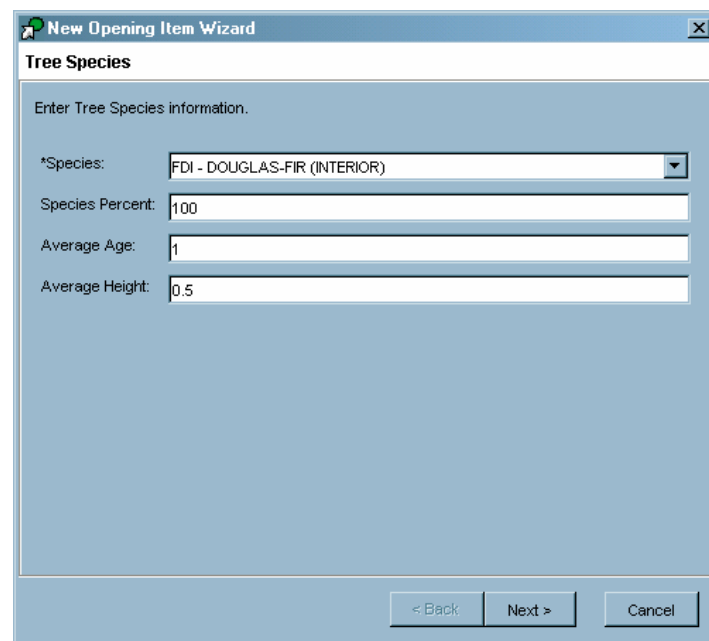


The screenshot shows the 'New Opening Item Wizard' dialog box with the 'Layer' tab selected. The title bar reads 'New Opening Item Wizard'. Below the tab, the text 'Enter Layer information.' is displayed. The form contains the following fields:

- *Layer Type: A dropdown menu with 'S - Silviculture Layer - even aged' selected.
- Crown Closure: A text box containing '65'.
- Total Stems: An empty text box.
- Total Well Spaced: An empty text box.
- Well Spaced: A text box containing '1200'.
- Free Growing: An empty text box.
- Basal Area: An empty text box.

At the bottom right, there are three buttons: '< Back', 'Next >', and 'Cancel'.

11. Add a new tree species and include the species information from the second line of Form C as before.

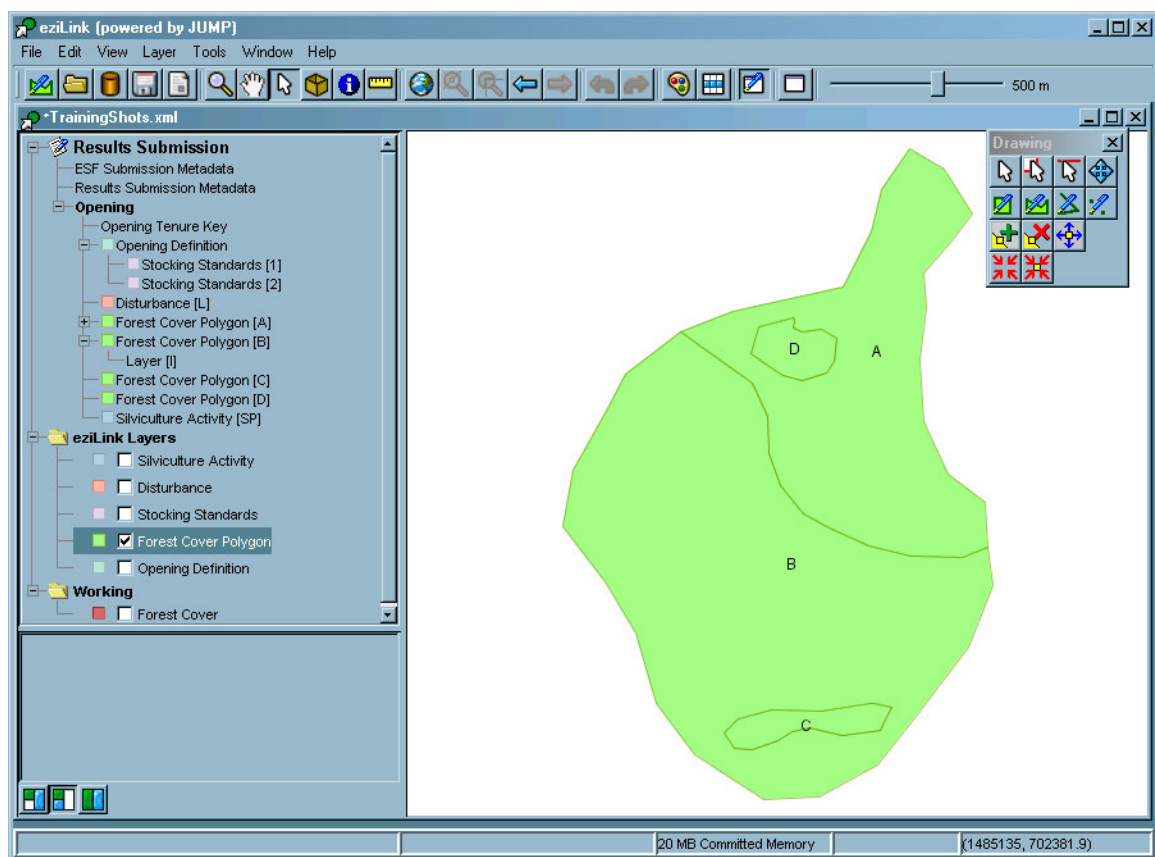


The screenshot shows the 'New Opening Item Wizard' dialog box with the 'Tree Species' tab selected. The title bar reads 'New Opening Item Wizard'. Below the tab, the text 'Enter Tree Species information.' is displayed. The form contains the following fields:

- *Species: A dropdown menu with 'FDI - DOUGLAS-FIR (INTERIOR)' selected.
- Species Percent: A text box containing '100'.
- Average Age: A text box containing '1'.
- Average Height: A text box containing '0.5'.

At the bottom right, there are three buttons: '< Back', 'Next >', and 'Cancel'.

12. Once all information is added select finish and click on the finish button.



13. Save the submission to your student directory as ForestCoverEx8.xml.

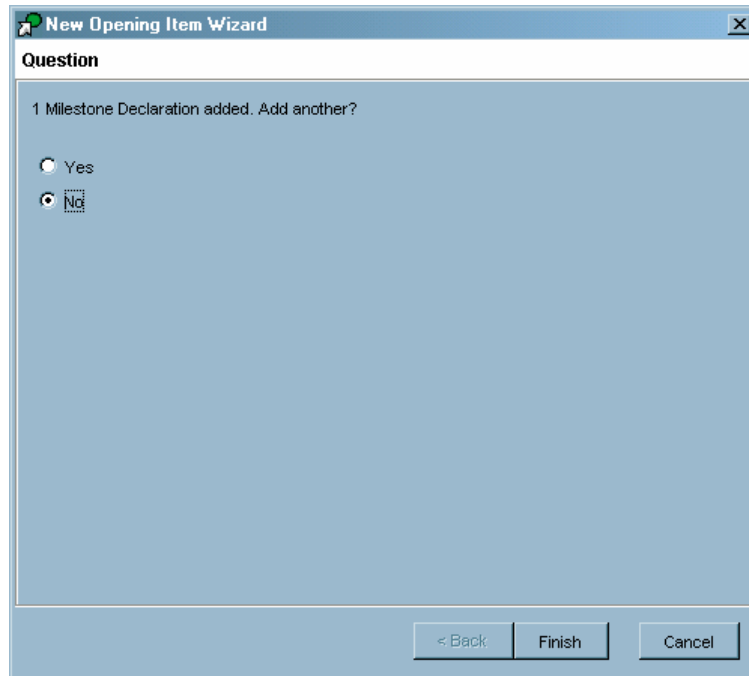
Exercise 9– Milestone Submissions

Milestone submissions are for declaring free-to-grow, harvest complete and that regen has been met. There is no spatial data associated with the milestone declaration. In this exercise you will create a new submission to indicate that harvesting has been completed on the block. This submission could be included in the same submission as before, but we thought you need the practice on new submissions.

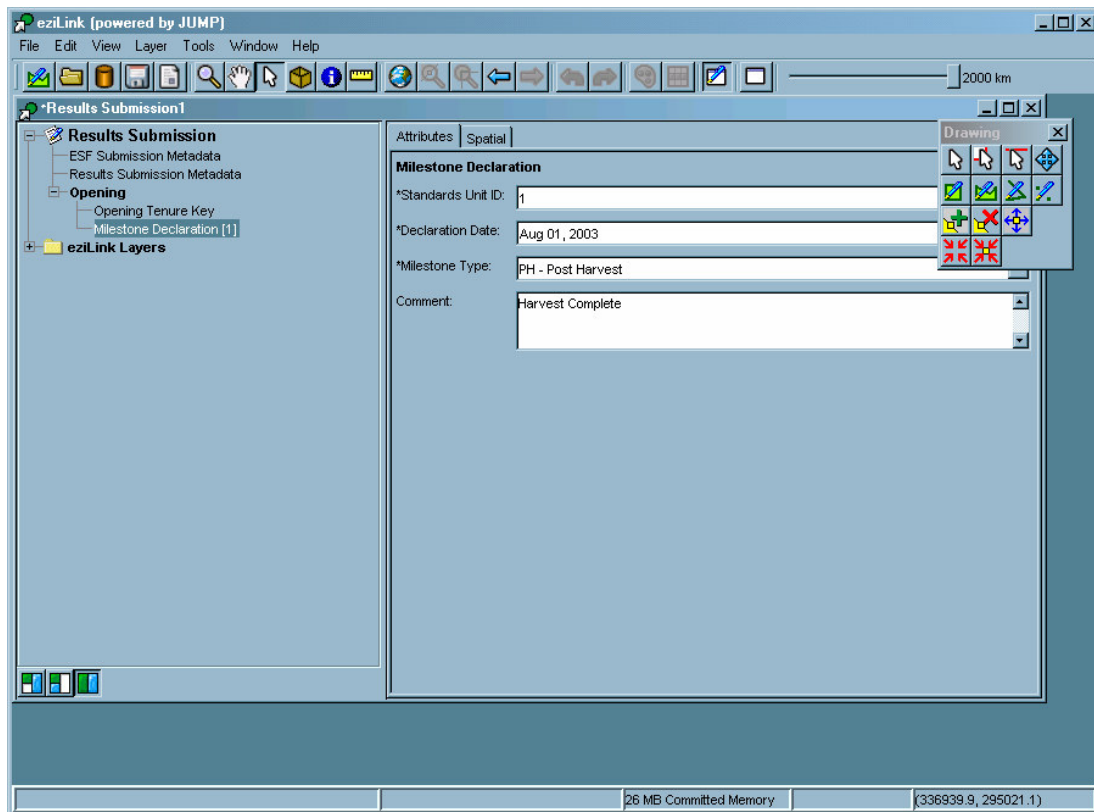
1. Close all open submissions.
2. Start a new submission.
3. Step through and fill-in all the ESF and RESULTS metadata. Select key for the block (only one is required) and select milestones from the list.
4. Enter the SU for the declaration, as they must be made on an SU basis. Enter the milestone information from the Form 'C' provide in your training package for each SU.

The screenshot shows a 'New Opening Item Wizard' dialog box with a 'Milestone Declaration' tab. The dialog has a title bar with a green icon and a close button. The main area is light blue and contains the text 'Enter Milestone Declaration information.' Below this are four input fields: '*Standards Unit ID:' with the value '1', '*Declaration Date:' with a date picker showing 'Aug 01, 2003', '*Milestone Type:' with a dropdown menu showing 'PH - Post Harvest', and 'Comment:' with a text area containing 'Harvest Complete'. At the bottom right are three buttons: '< Back', 'Next >', and 'Cancel'.

5. Add another milestone and enter the information in your training package on Form C for the milestone for SU B. Choose not to add any more milestones by checking "No".



- Click on the finish button. Save your submission to your student directory as MilestonesEx9.xml. It is now ready to be submitted through the ESF to the ministry.



Working With Spatial Data

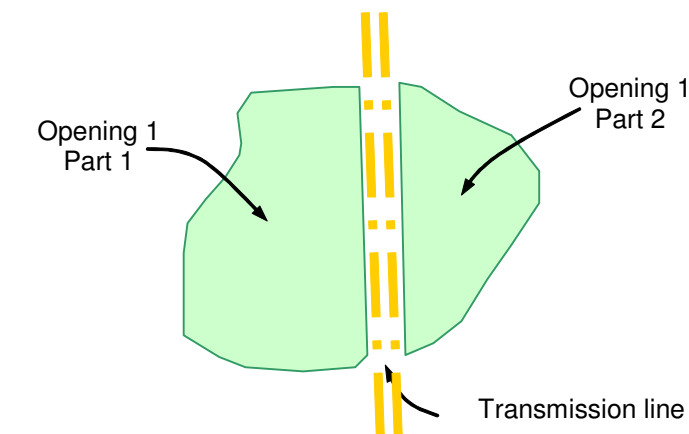
The power of **eziLink™** comes from its ability to deal with the spatial and attribute data seamlessly when creating a submission. **eziLink™** provides support for IGDS and Shapefile data (as well as a few more formats) and provides the tools necessary to prepare spatial data for submissions.

Spatial data is required for most submissions. Many common types of digital spatial data can be loaded into **eziLink™** and you can even create spatial data within **eziLink™** by adding line or polygons by heads up digitizing on the screen. Spatial data can be manipulated in **eziLink™**, but it is advisable to start with a “clean” data set to minimize the amount of editing required. For example, for an opening definition submission, the file would ideally contain opening boundaries as polygons.

7. Properly Formatting Spatial Data in Submissions

One of the more difficult issues to deal with when preparing a submission document is complete knowledge of the spatial data and how it should be structured for the submission. Traditionally we are taught to think of spatial information in terms of polygons, lines and points. Polygons, lines, and points are still key to the structure of the spatial information, but for electronic submissions, these simple geometries must be extended to include multiple parts and internal holes.

Multi-part geometry allows for a single feature (such as a cut block), represented by two spatially isolated polygons, to be represented in GML as a multi-part polygon. It is extremely important to use multi-part geometries when trying to represent a single feature when there are gaps between some of the feature parts. Multi-part polygons in GML **are not** the same in structure as utilizing two polygons to represent the same feature. Attributes are stored only once in a submission for a feature being represented by a multi-part geometry (i.e. a single cut block divided by a transmission line). Representing a feature with two polygons, such as one cut block described spatially by two polygons with duplicate attributes, within a submission file will cause your submission application to fail (see diagram below).



Single Opening (CP 101 Block 1) represented by a multi-part polygon.

For RESULTS reporting, a common usage of multi-part polygons will be in representing an opening boundary where the opening definition boundary is consistent with the opening boundaries that are part of the submission. For the Opening represented by two single polygons, the opening definition would be represented by a single multi-part polygon (see diagram below).

When dealing with spatial projections, three general types are supported: Geographic (Latitude/Longitude), Universal Transverse Mercator (zone 7,8,9,10,11 in metres), and Albers Equal Area (BC Standards). When supplying e-submission documents, the project information must be defined for each spatial object. For information on encoding GML and examples for submissions, refer to the RESULTS Submission Guide available at <http://www.for.gov.bc.ca/his/esf/>.

Common Mistakes in Formatting Documents

There are some key things to be aware of when formatting submissions:

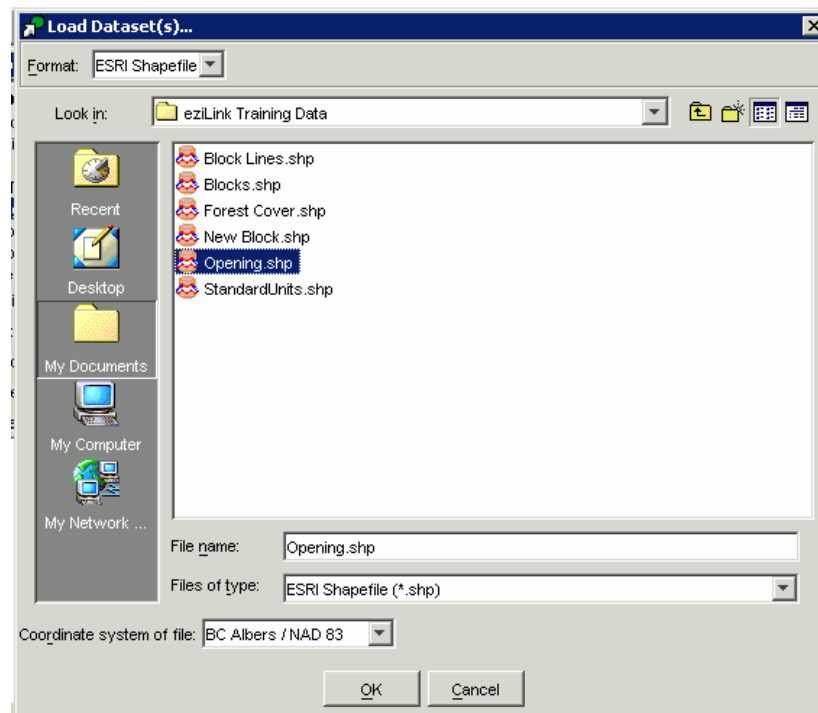
1. Do not think of the submission document as a database. The structures to the submission can be seen more as a document with structure and content much like a book with chapters, sections, and paragraphs rather than tables of information. The “schema” defines the structure.
2. Do not overlook the importance of the spatial information within the submission. It is critical for a properly formatted document to include the properly formatted spatial information.
3. CAD systems do not create the spatial data structures required for e-submission. Data conversion routines must manipulate CAD to create the correct structure.

Optional attributes that have no information supplied within the submission should not have XML/GML tags.

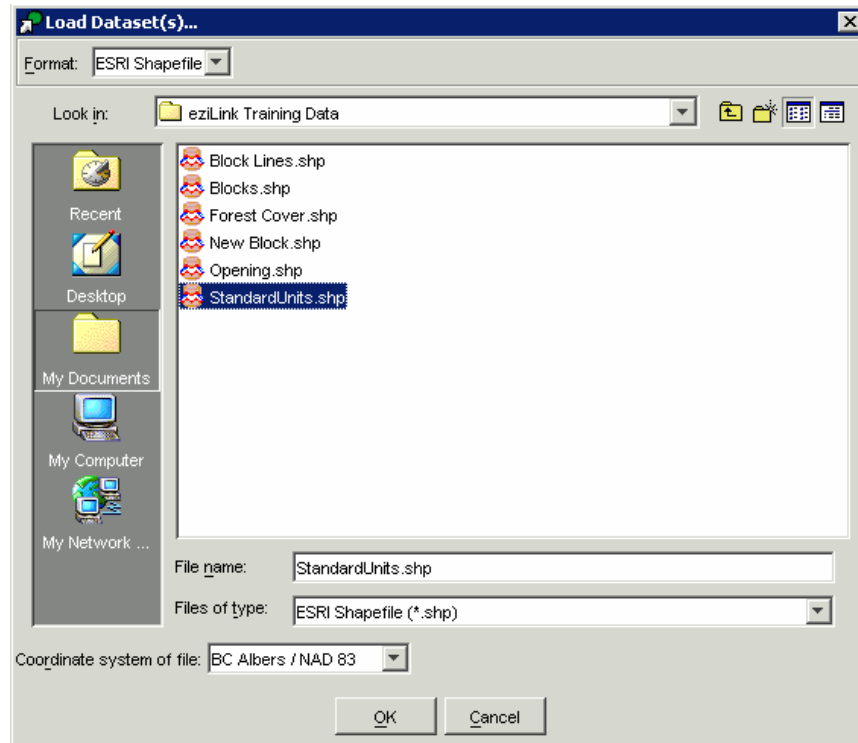
Exercise 10 – Loading Spatial Data into a Submission

Spatial data is required for most submissions. Many common types of digital spatial data can be loaded into **eziLink™** and you can even create spatial data within **eziLink™** by adding line or polygons by heads up digitizing on the screen. Districts will be adding spatial data that is already clean and should not be editing data directly within eziLink. For example, for a cutting permit submission, the file would ideally contain block boundaries as polygons.

1. Close all open submissions.
2. Open the OpeningDefinitionEx5.xml submission that was created in exercise 5.
3. To add spatial data to your submission, select “File” on the Menu bar, then select “Load Dataset”. A file navigation window will open to allow you to choose the spatial data file you wish to load. From the dropdown box at the top, select the format of file you are using.
4. Click on File > Load Dataset(s). This will allow you to find the files you need.
5. A Load Window comes up. Do the following :
 - a. Select the ESRI Shapefile format from the format drop down.
 - b. For the Coordinate System of the file use the drop down list and select “BC Albers / NAD 83”.



- c. Select the Opening.shp from the training data folder on your desktop and click “OK”. **eziLink™** will now display a working layer with the name of the file you loaded.



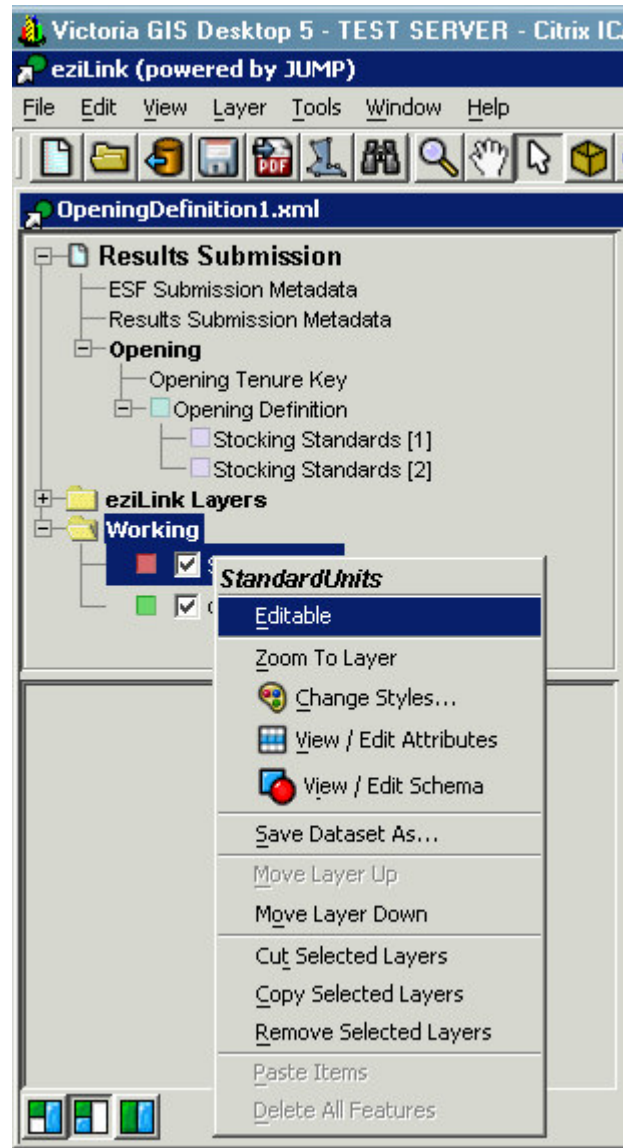
d.

2. Load the StandardUnits.shp shapefile from the training data directory.
3. Load the Forest Cover shapefile from the training data directory.
4. To display the spatial data in the spatial window, right click on each of the new layers and select "Zoom To Layer". The spatial data you loaded should now be displayed.

Exercise 11 - Adding Spatial Data to a Submission File

After spatial data has been loaded into a working layer it must be associated with the proper item in the submission window. This is as simple as click, copy and paste.

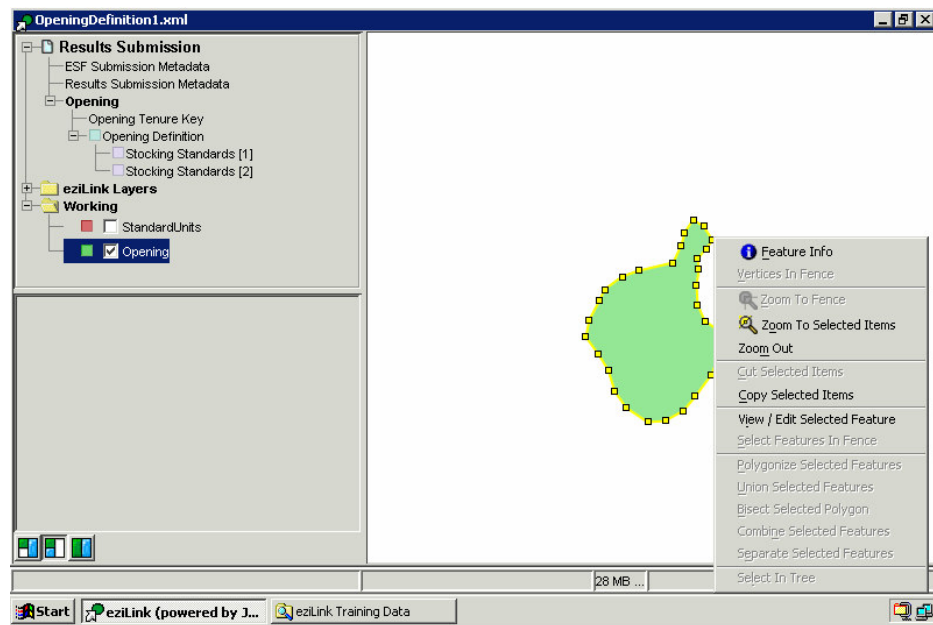
1. Turn off all of the **eziLink™** working layers by un-checking the visibility check boxes.
2. To enable you to edit the spatial data, right click on the new layer and click on “Editable”.



3. Before you edit spatial data, make sure that you are editing the correct layer. Highlighting a layer makes it the active layer. This is important so that you don't inadvertently change or delete data in the wrong layer.

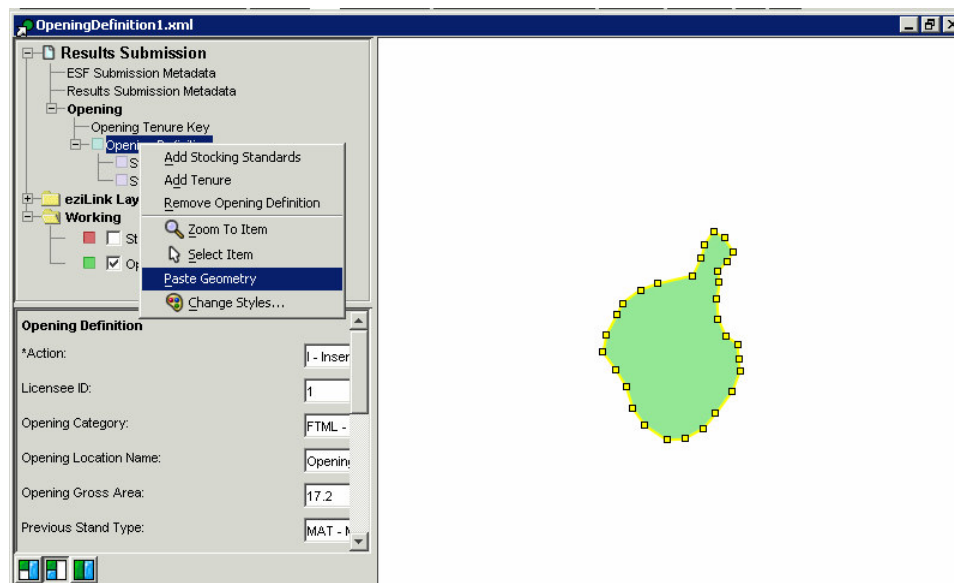
4. To copy a spatial feature into a submission file item:

- a. Use the select tool  from the Drawing Toolbox or the toolbar to select the spatial feature or part by clicking on the feature in the spatial window.
- b. With the feature highlighted (e.g. an opening polygon), right click and select “Copy Selected Items”.

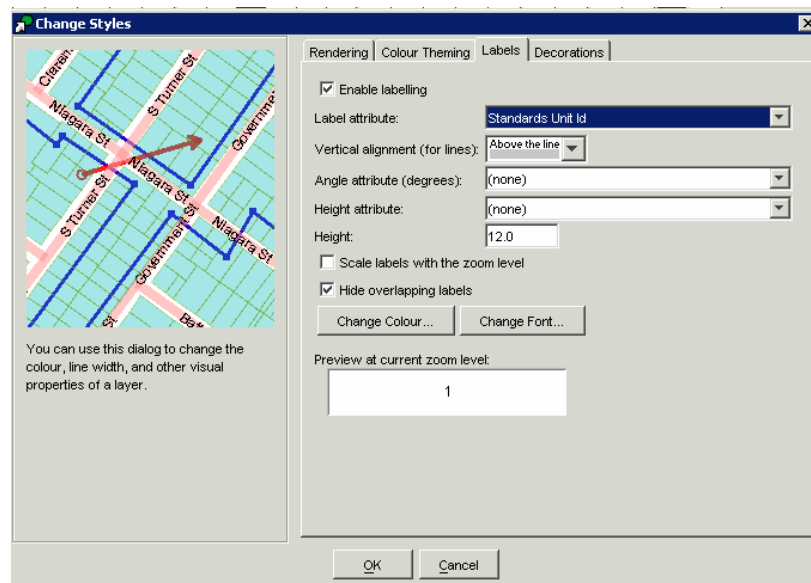


5. In the Submission Document Window:

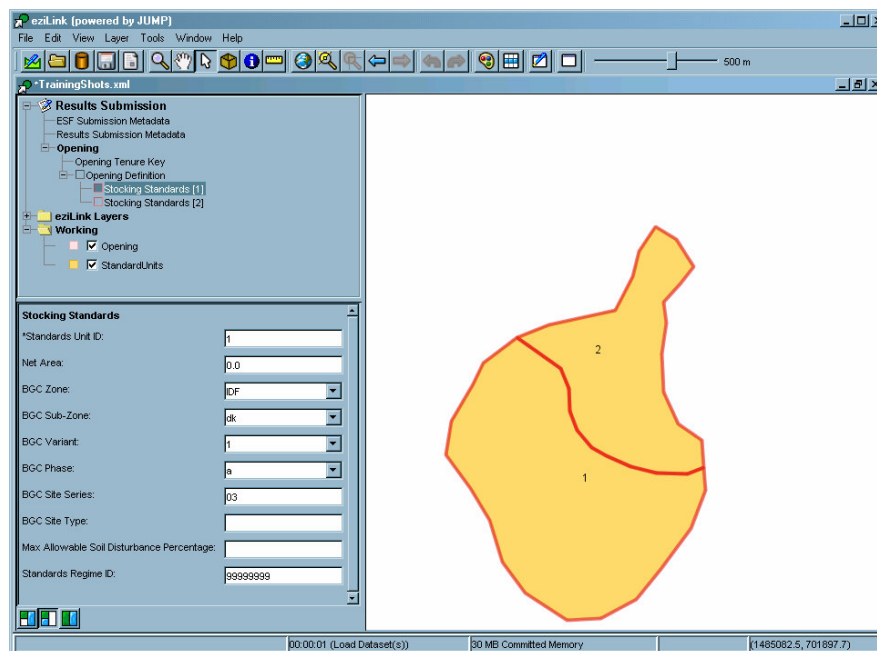
- a. Highlight the opening Definition submission item.
- b. Right click and select “Paste Geometry”.



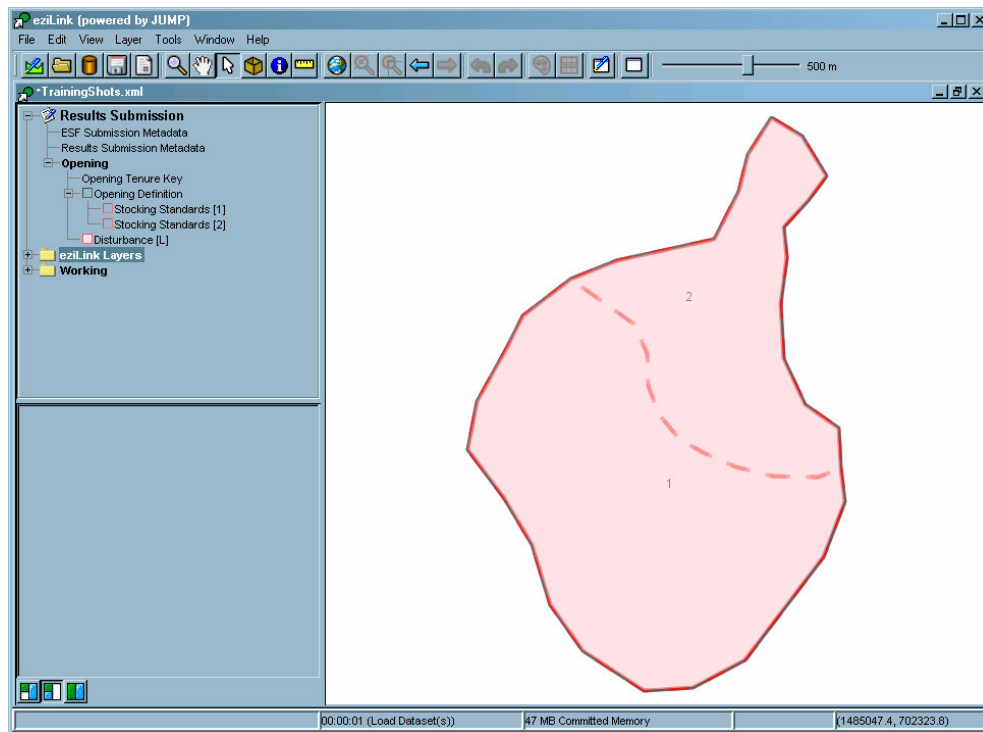
- c. Click on the Opening Definition in the Submission Document Window, the boundary of the Opening will be highlighted briefly.
 - d. If you turn off all of the working layers and turn on the **eziLink™** layers, the new geometry appears.
2. Add labeling to the SU layer for the SU attributes contained in the shapefile so that you can identify the SU's. To do this, right-click on the spatial dataset node under the Working category and chose "Change Styles".



3. Go to the labels tab and check the box beside "enable labeling". Then choose the attribute "Name" from the list box for the label.

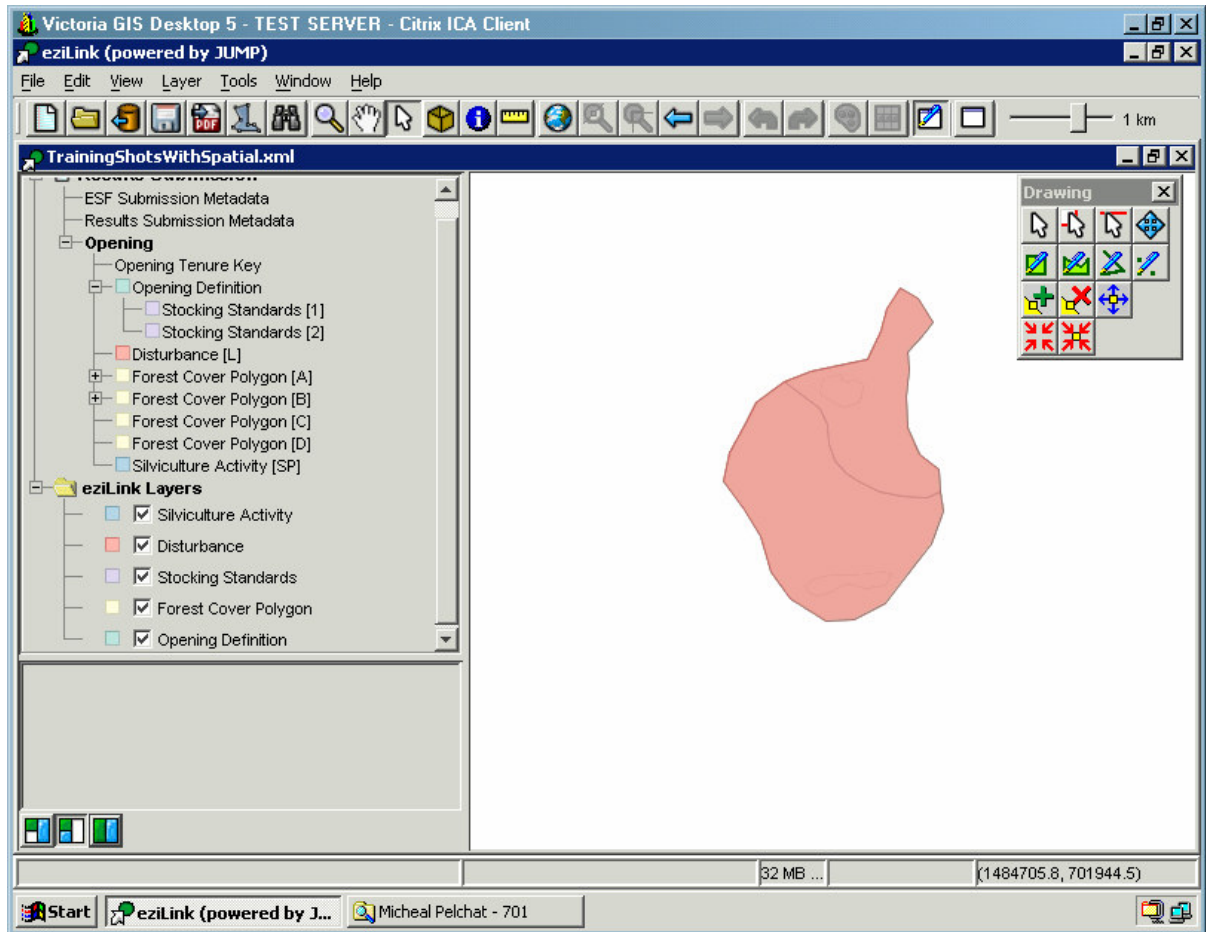


4. Paste the opening polygon into the Disturbance. You will still have the polygon boundary in memory so just highlight the Disturbance node in the Submission window and right-click and select "Paste Geometry".
5. Select, copy and paste the SU polygons into the appropriate submission component.
6. Label the Forest Cover working layer so that you can see what the forest cover polygons are.
7. Now select, copy and paste the forest cover polygon to the appropriate submission item in the submission window.
8. Silviculture activities can have spatial information added, but it is not required. You could add the location of the activity if you so chose in the same fashion as adding all submission spatial information. For this tutorial we will not add spatial data. Save the submission to your desktop.



9. You now have a submission with an opening definition, a disturbance report, a Silviculture Activity report, and a Forest Cover Polygon report.
10. **Click** on the opening definition node in the submission document window and the seamless boundary of the opening will be highlighted briefly.
11. **Click** on each of the stocking standard nodes in turn in the submission document window to see the boundaries of each of the stocking standards highlighted briefly.
12. **Click** on the Disturbance node in the submission document window to see the boundary of the disturbance highlighted briefly.
13. **Click** on the each of the Forest Cover Polygon nodes in the submission document window to see the boundary of the forest cover polygon highlighted briefly.

If you turn off all of the working layers and turn on the **eziLink™** layers, the new geometry appears. The relevant layer for the opening would be the Opening Definition layer, the relevant layer for the stocking standards would be the Stocking Standards layer, the relevant layer for the Disturbance would be the Disturbance layer, the relevant layer for the Silviculture Activity would be the Silviculture Activity and the relative layer for the Forest Cover polygons would be the Forest cover polygon layer.



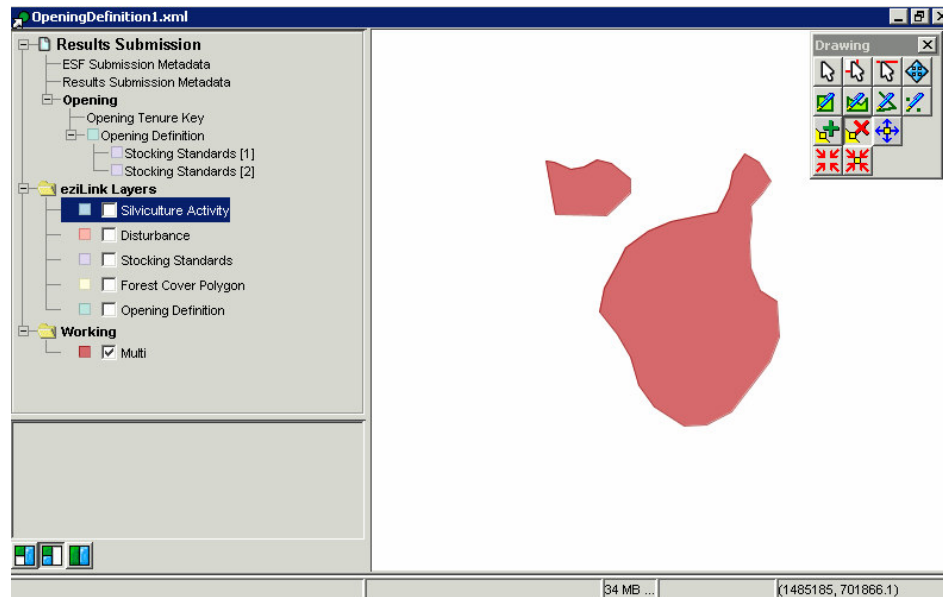
14. Save the submission to your student directory as RESULTSWithSpatial.xml. This is a properly formatted Opening Definition Submission for RESULTS.

Exercise 12 – Working with Multi-part Geometries

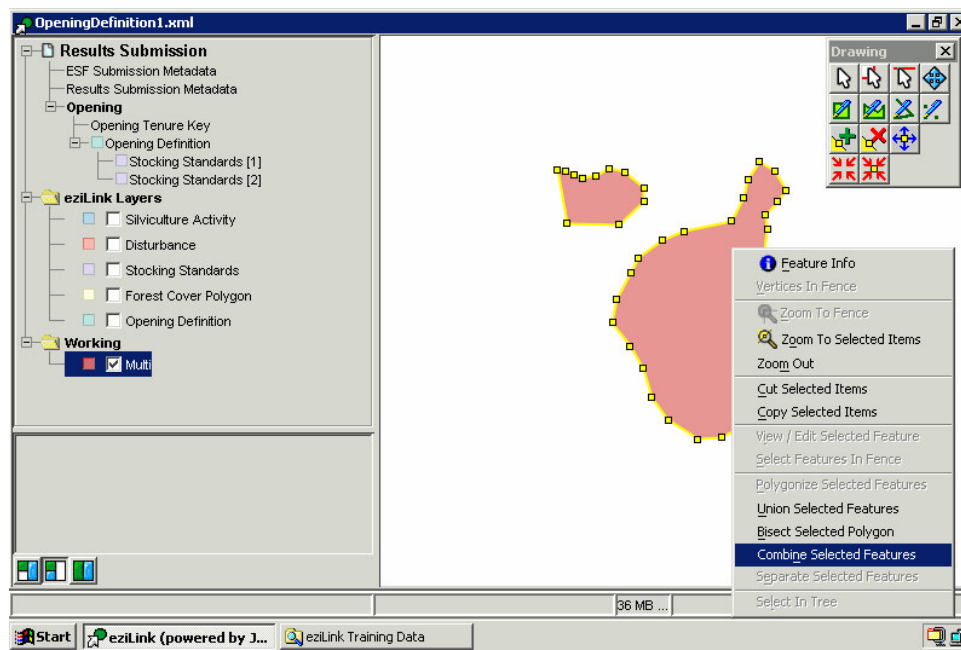
To create a submission layer that has multiple parts (e.g., an opening layer that is made up of multiple polygons), you need to first combine the features into a multipart geometry before pasting it into the submission layer.

1. Open the file "OpeningDefinitionEx5.xml".
2. Load the dataset "Multi.shp".

3. Turn off all **eziLink™** Internal Layers and only have the working layer that was loaded turned on.



4. Select multiple features in the working layer by holding the shift key while selecting the features with the Select Features tool using the cursor in the Mapping Window.
5. Right click and select Combine Selected Features. This will create the geometry for a multipart polygon of the selected features.



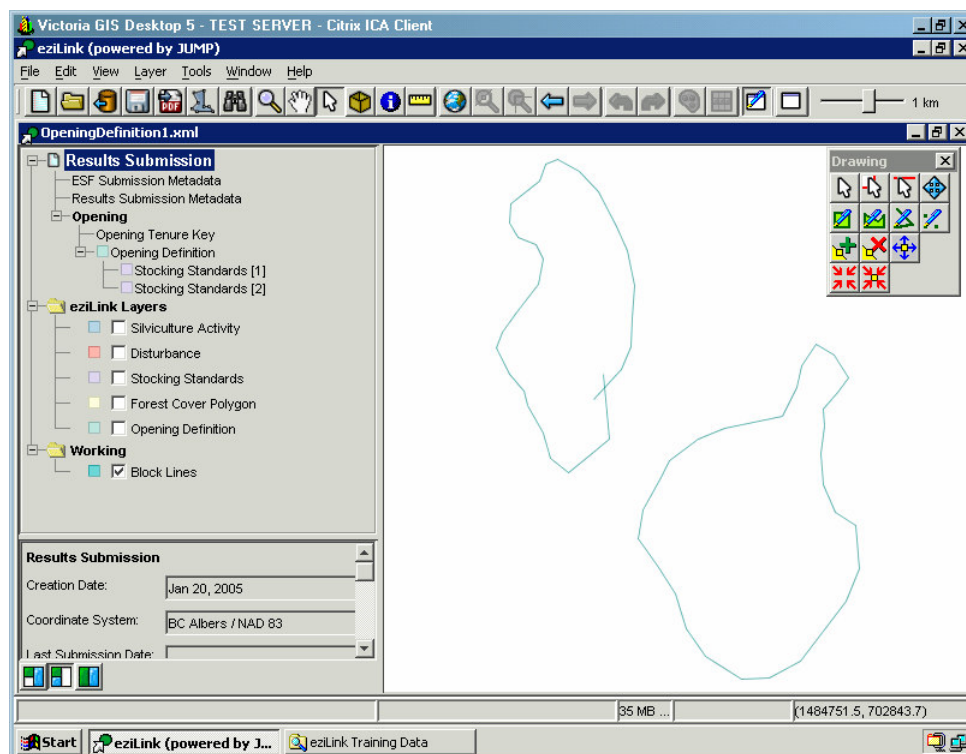
6. Right click again and select "Copy Selected Items".
7. In the submission document window, highlight the cutting permit.
8. Right click on the layer and select "Paste Geometry".

9. Turn on all the **eziLink™** working layers. The selected features should now be displayed in a different color, and when you click on the layer that you pasted them into, all of the features you added should be highlighted briefly.
10. Close the submission without saving.

Exercise 13 – Creating Polygons from Linestrings

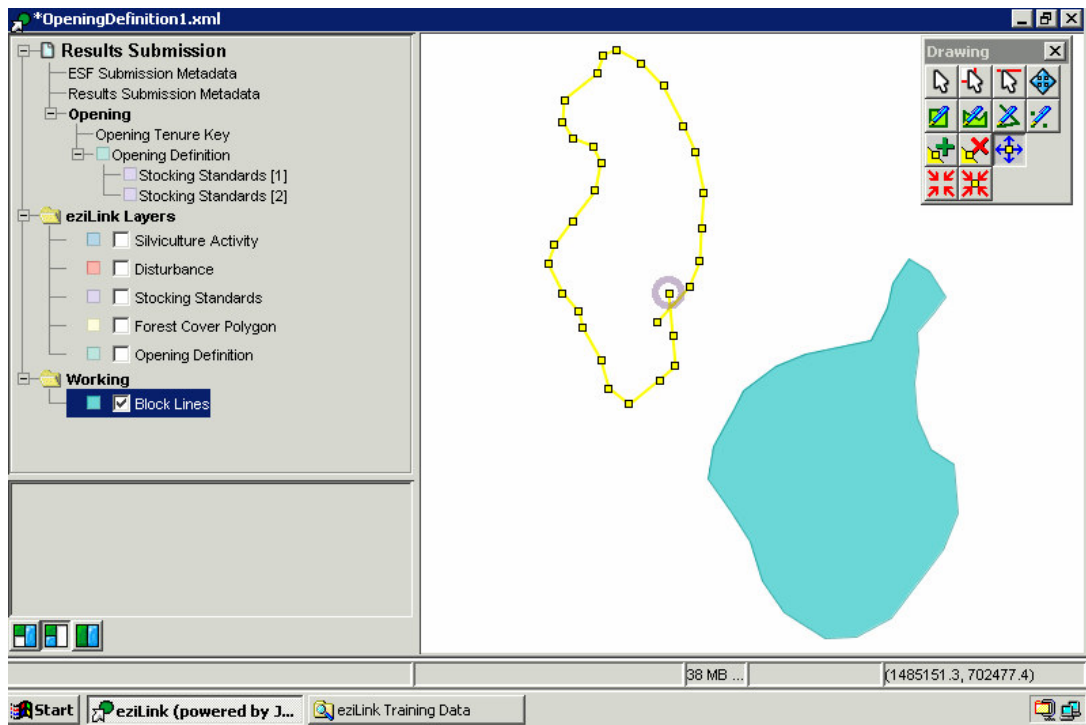
Many times you may load a file that only contains linestrings that are made to represent a polygon. EziLink provides simple tools to change a set of “clean” linestrings where there are no gaps or overlaps between the lines into a polygon.

1. Open OpeningDefinitionEx5.xml.
2. Load block lines.shp from the training data directory.
3. Make sure the block lines are editable. To ensure the layer is editable, right click on the layer in the submission content window and ensure that there is a check box next to “editable”. If there is not, select “editable” in the menu.
4. Select all the lines that make up the boundary of the polygon for the lines polygon selected below.



5. Under the edit menu select polygonize the selected items. The shape should now be filled in.
6. Now try to select and polygonize the other line in the Block Lines layer.
7. A warning comes up. Click the  in the toolbar. A message box comes up and tells you there are dangles. Dangles are created when the ends of the lines don't match up.
8. Zoom to the area of the dangles.

9. Select the  vertex move tool from the drawing toolbox and drag the end of one line on top of the other until they snap together.



10. Now select the lines again and polygonize. The polygon should now appear if you have done everything correctly.
11. Close the submission without saving the file.

Exercise 14 – Calculating Area from the Geometry

One of the common issues for getting FTA submissions accepted ensuring the net area less than the gross area as calculated from the geometry. Remember that the gross area will vary slightly between projections and is compared to four decimal places of precision. It is always good to check this before submitting.

1. Reopen "RESULTSWithSpatial.xml". Note the value for the gross area for each of the Stocking Standards in the submission.
2. Select the Opening Definition node in the submission content window. This is because if you have a particular stocking standard selected in the tree and attempt to calculate areas for the entire layer, no value will be stored in the select stocking standard.

3. From the tools menu select "Calculate Areas and Lengths". This will open a dialog box that gives you parameters for calculating areas and lengths for the geometry.

The screenshot shows a dialog box titled "Calculate Areas and Lengths". It has a standard Windows-style title bar with a close button. The dialog contains the following elements:

- Layer:** A dropdown menu with "Stocking Standards" selected.
- Calculate area:** A checked checkbox.
- Area attribute name:** A dropdown menu with "Net Area" selected.
- Area units:** A dropdown menu with "Hectares" selected.
- Calculate length:** An unchecked checkbox.
- Length attribute name:** A dropdown menu with "Maximum Allowable Soil Disturbance Percentage" selected.
- Buttons:** "OK" and "Cancel" buttons at the bottom.

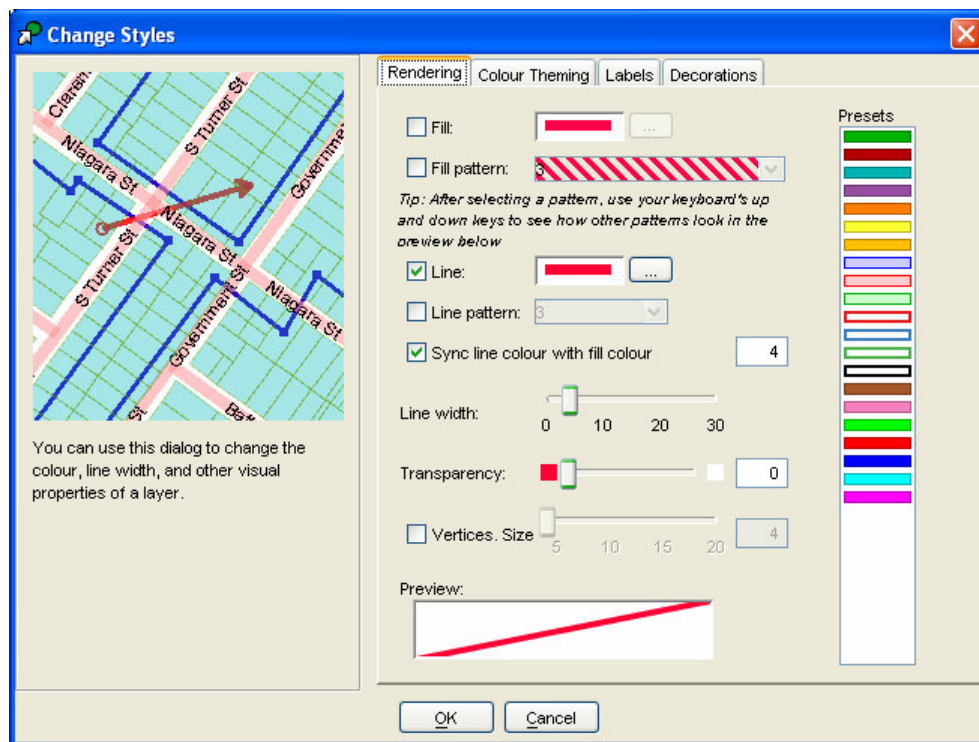
4. In the layer drop down menu, choose the "Stocking Standards" layer. This is the layer that you will calculate the area based on the geometry.
5. Ensure that the "Calculate area" check box is selected and that the "calculate length" check box is not selected.
6. Choose the "Net Area" from the area attribute name. This is the field that the area will be stored. It is important to note that the values will be overwritten in values have been typed in previously.
7. In the "Area units" select hectares to have the data calculated in the appropriate units.
8. Click "Okay"
9. Look at the new value in the net area. Once you have reviewed the stocking standards, save and close the submission.

Cartographic Operations

The XML/GML files for submission do not contain any information on formatting (colour, style, etc.) and each time you open **eziLink™** the formatting is already specified. **eziLink™** does provide basic formatting capabilities so that you can change the look of you spatial data and save it for future use.

Exercise 15 - Changing Colours

1. Open TrainingShotsWithSpatial.xml.
2. Select the opening definition node in the submission window.
3. Right click and select  change styles.
4. A “Change Style” dialog will appear. Change the settings as they appear below and click on okay.



5. Click okay. Note that the opening boundaries now show up as red lines in the spatial window.

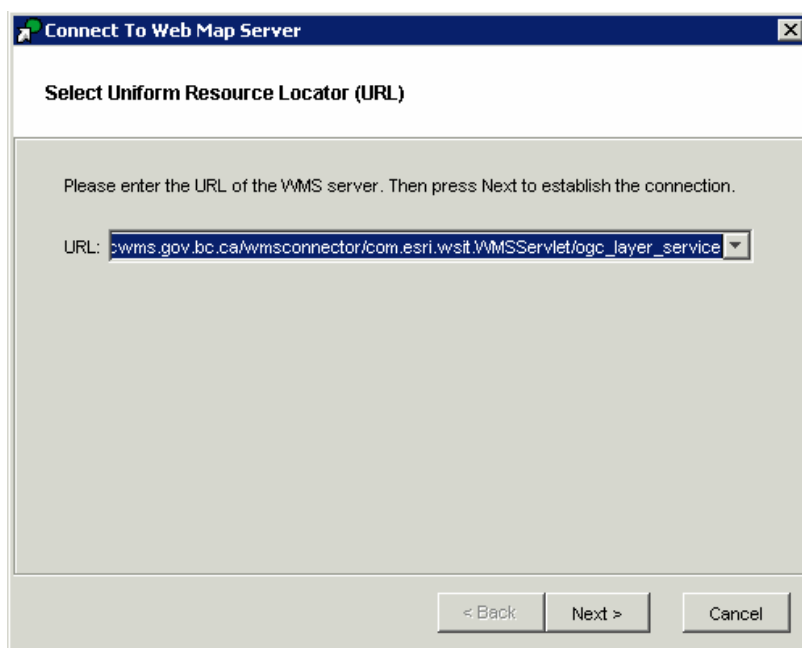
8. Using and Working with WMS layers

eziLink™ supports accessing spatial layers through web based service providers through a specification call a Web Map Service (WMS). The information is published on the internet and can be accessed from within **eziLink™**. The BC Government publishes mapping information this way for the maps.gov.bc.ca websites. It is important to note that the availability of the WMS layers is dependent

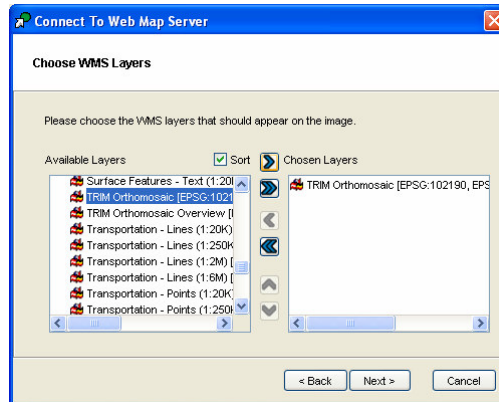
not only on eziLink but also the group publishing the data as WMS layers. The servers may not always be available.

Exercise 16 – Adding WMS Layers for Spatial Referencing

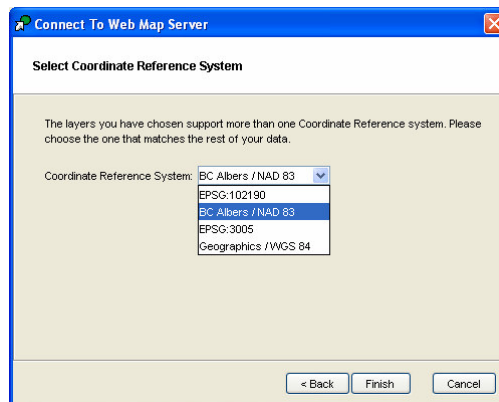
1. Ensure that your latest submission is open.
2. Highlight the working category in the submission window.
3. Under the "layers" menu, select add WMS Query.
4. In the address bar, type
http://libcwms.gov.bc.ca/wmsconnector/com.esri.wsit.WMSServlet/ogc_layer_service



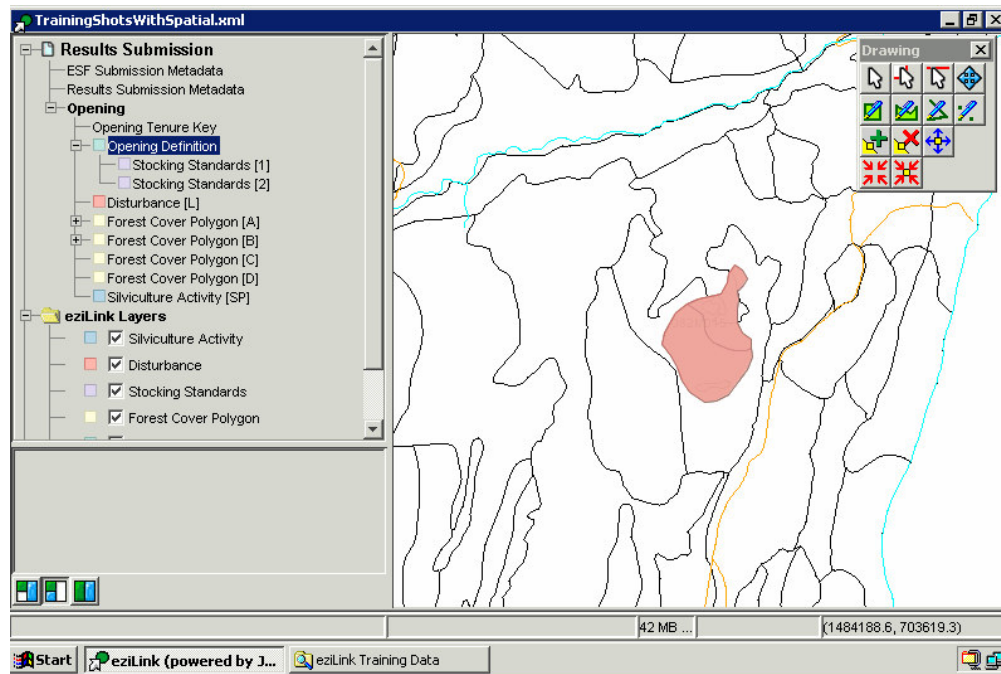
5. Click next.
6. Select:



7. Find "BCGS Grid" from the available layers list.
8. After the item is highlighted, click the "add layer"  button.
9. Click next.
10. Select BC Albers from the list of available projections.



11. Click finish.
12. A layer should appear with a timer in the working layers, give it a few seconds and the reference layer should show up with your submission items overtop.

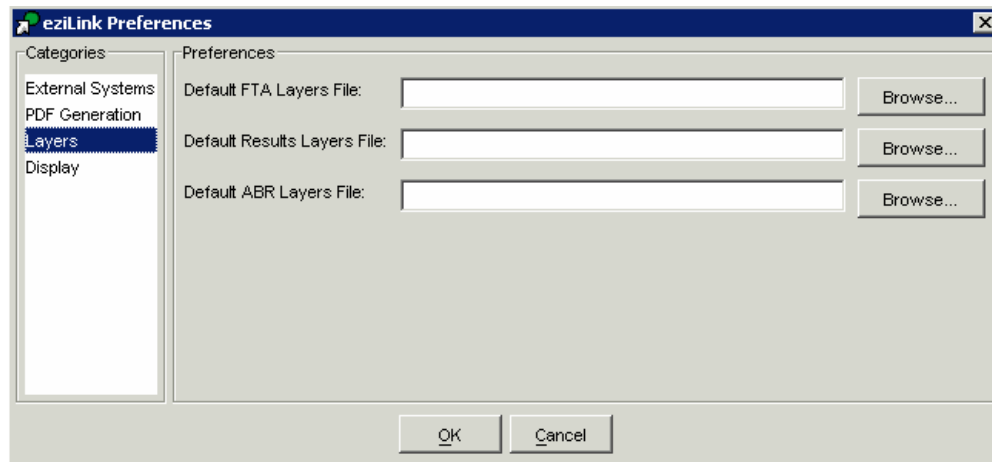


Exercise 17 – Saving Layer Formatting

1. Select "Save Layer As..." under the layer menu.
2. Provide a name for the file such as RESULTS_Layer.ezl and save it in your student directory.
3. Close the submission.
4. Open the submission again and note that the formatting has returned to its original version.
5. Select Load Layers... under the layer menu.
6. Select the file that you saved (RESULTS_Layer.ezl and select open. The formatting that you saved has now re-appeared.

Exercise 18 – Making Formatting Permanent

1. Under tools menu select eziLink preferences.
2. Highlight 'Layers' in the window on the left.
3. Click the browse button for the Default RESULTS Layers File.



4. Select the layer file that you created from your desktop.
5. Close and reopen your latest submission. Now the formatting will appear each time you create a new RESULTS submission.

E-submission Utilities and Services

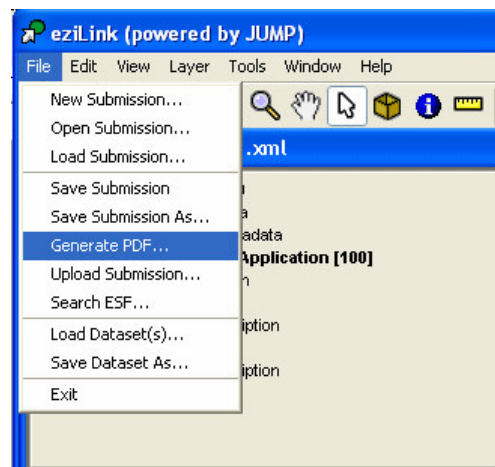
eziLink has a variety of tools that are specific to ESF submissions and the e-submission process. These include:

- Generate PDF Report of the Submission
- Upload of Submission to the ESF
- Query of Submission Status from the ESF
- Management of Submission Details

Exercise 19 - Create a PDF Report

eziLink™ allows you to create a hardcopy report of the submission. It is very simple to create, simply

select “Generate PDF” under the file menu or click the  icon on the toolbar. The PDF document can be saved, e-mailed or printed. To generate a PDF document, the submission must have been saved.

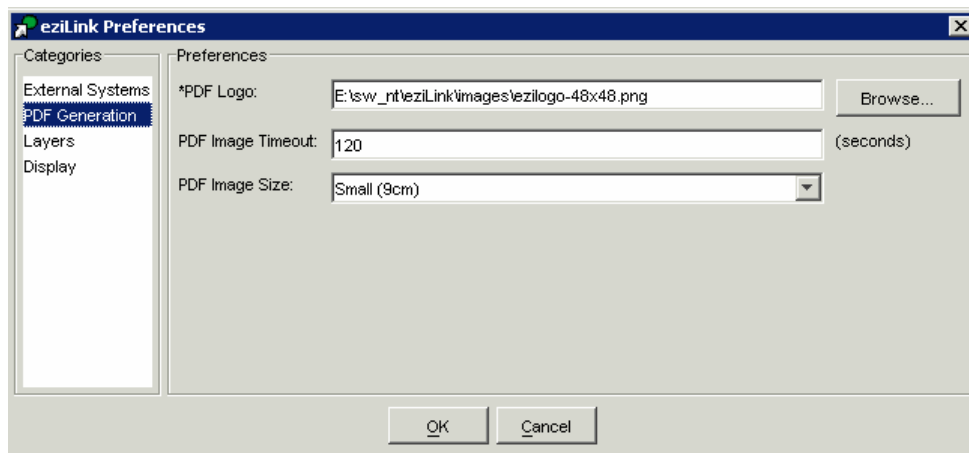


1. Open the RESULTSWithSpatial.xml” submission from the training directory if it is not already open.
2. Select “Generate PDF” under the file menu or click the  icon.
3. Wait a few seconds as eziLink™ generates the PDF.

Notice the size of the spatial display window and the logos on the top of the PDF document. These can be changed in the ‘eziLink preferences’ form that is accessed from the ‘Tools’ menu.

Open the tab for ‘PDF Generation’ to see the formatting options. To change the left-hand logo, **click** on the ‘Browse’ button beside the “PDF Logo” textbox and browse to the new logo file that has been saved as an image file to replace the default path and filename. This new logo will now be displayed on the PDF documents. To return to the eziLink default logo, just browse to E:\sw_nt\eziLink\images\ezilogo-48x48.png on the terminal server or copy/note the path before

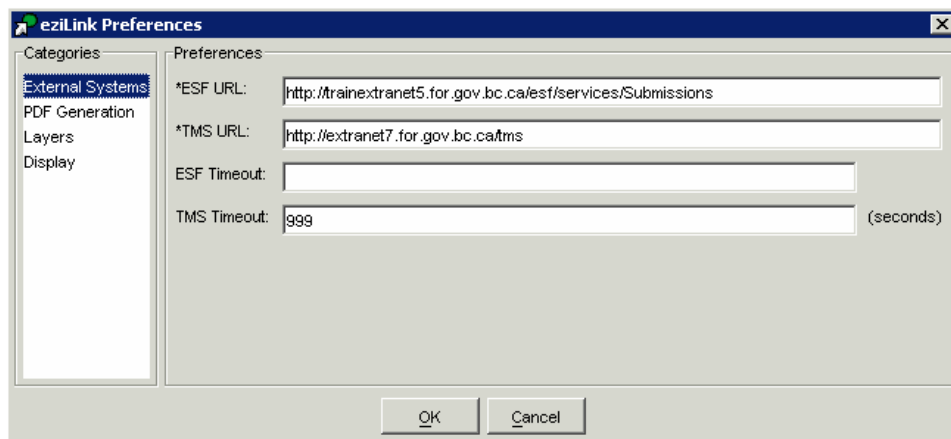
you change the logo so that you can browse and paste it back in. You can also change the size of the spatial image and the timeout factor (in seconds) for the generation of the PDF.



4.

Exercise 20 - Uploading and Checking Submissions

Open the 'Ezilink preferences' window under the 'Tools' menu and ensure the ESF website is set to the training server: <http://trainextranet5.for.gov.bc.ca/esf> for the purposes of the training.

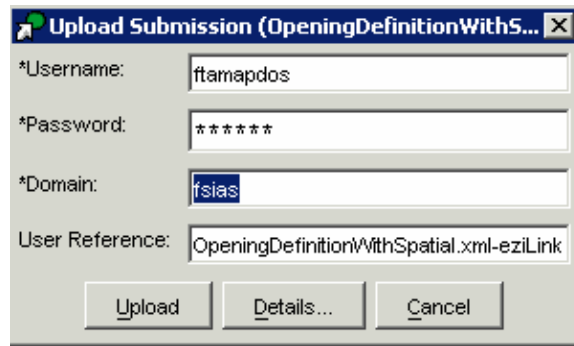


eziLink™ provides all the capabilities to upload files directly to the ministry as well as check on the status of submissions. The process of submitting requires an IDIR (government user id) and password. To upload a submission, select upload submission under the file menu. You will be prompted for a user name and password and domain. For this exercise use the following:

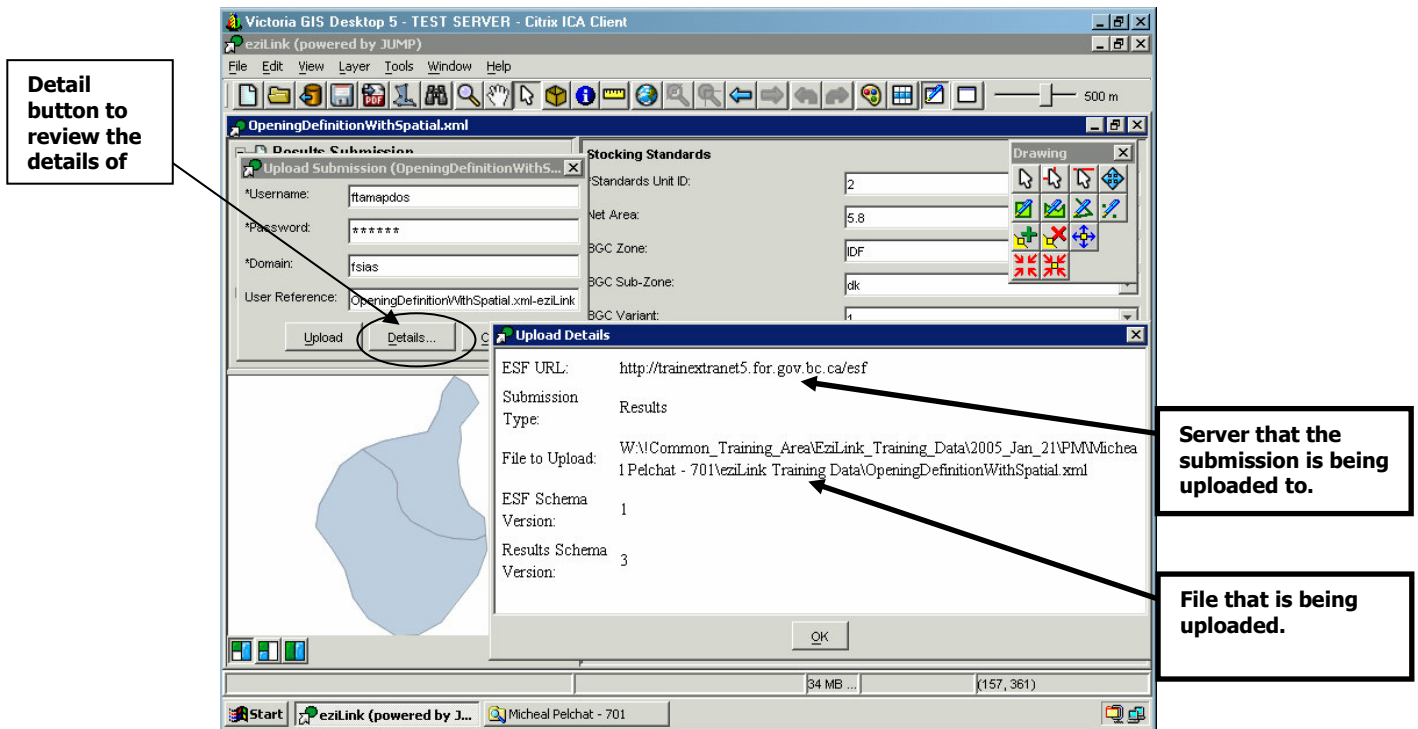
UserID – ftamapdos

Password – ftfta

Domain – fsias

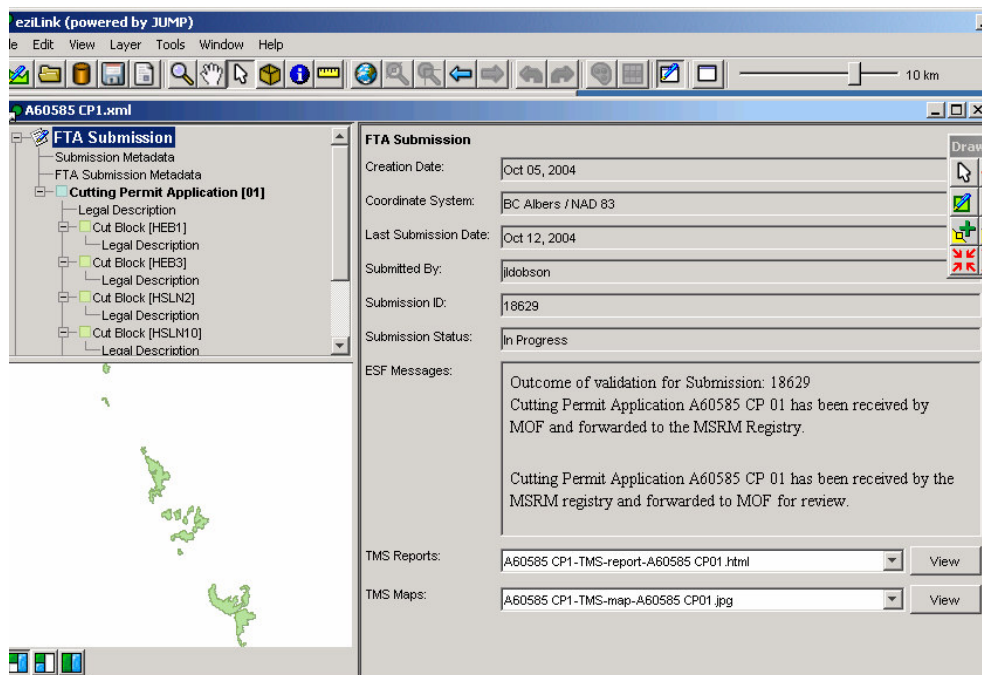


1. **Select** 'Upload Submission' under the file menu.
2. **Click** on the 'Details' button to review the details of the version of the schema, the server that the submission is being made and other related details.



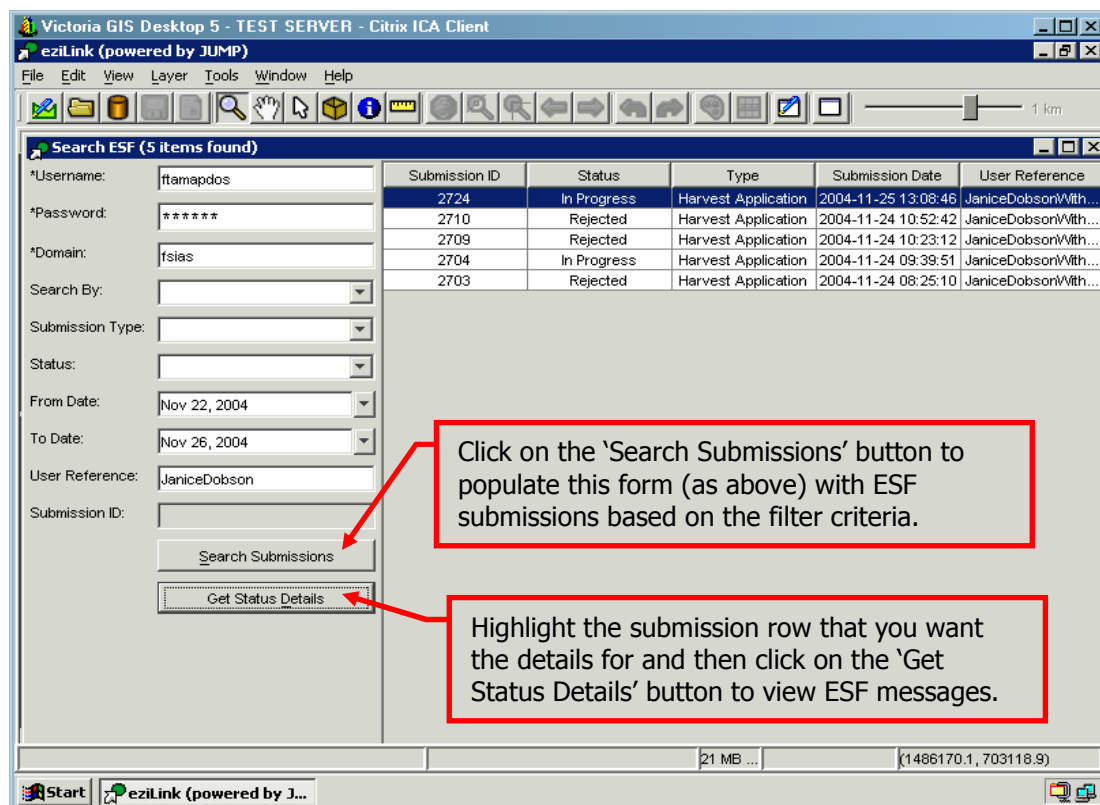
3. **Click** 'Upload'. Again, monitor the status of the upload in the bottom left hand corner of the status bar. If this is blank almost immediately, the website may be down.
4. After a few seconds, the status bar should indicate the upload was successful and show a submission id.
5. **Highlight** the 'RESULTS Submission' component from the submission content window. Right now the ESF message is blank and the status is 'Submitted'.
6. **Select** 'Get ESF Submission Status...' from the file menu and **enter** your user information. Note, for this to work, you must have uploaded the submission to the ESF from within eziLink and the submission must have a submission ID.

7. **Click** on the RESULTS Submission item in the submission window and the attribute page will display the submission ID, status and ESF messages as in the example below.

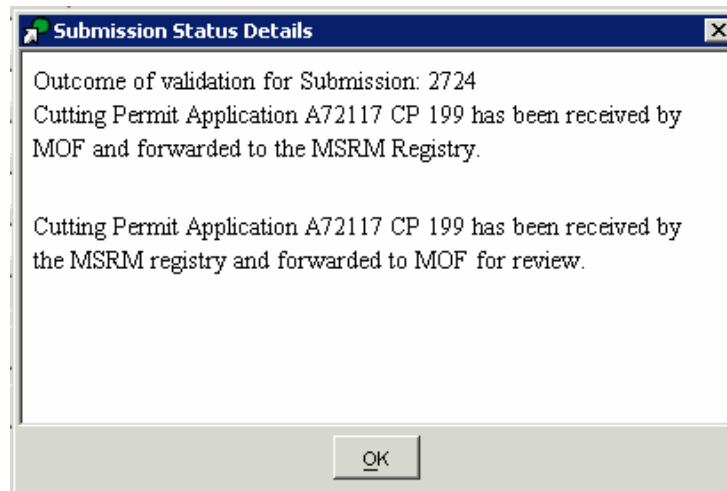


Ezilink also will check the status of previous submissions:

1. **Select** 'Search ESF' under the file menu.



2. **Enter** your search criteria and **click on** the button 'Search Submissions' under the filters on the left-hand side of the form.
3. To get details on the status, **select** the submission of interest from the list and **click** the 'Get Status Details' button on the left-hand side at the bottom of the filter criteria.



4. **Close** the window.

Quality Assurance and Troubleshooting

9. Key Steps for Quality Assurance

1. Ensure all minimum requirements are completed
 - Ensure that there are no warning flags in the submission content window
2. Validate Layers that will be submitted
 - Validate the Spatial topology and content using the "Validate Selected Layers"
 - Include checks for basic topology, consecutive points, minimum segment lengths, minimum angles, minimum area and appropriate geometry types for the submission.
3. Visually inspect against WMS or other reference Layers
 - Looking for data not in correct location
4. Review attributes
 - Ensure that attributes make sense for the type of submission being made
 - Ensure that amendment reasons and correct license information are included in a component is being amended
 - Check that the gross area is greater than or equal to the net area where required in a submission component

10. Common Submission Failures and Resolution

1. "Net area is greater than Gross Area"
 - Occurs in submission components where a net area is required
 - Caused by the net area specified in submission being greater than the area of the feature as defined by the geometry of the feature (not the area specified in the gross area).
 - To correct, use the internal eziLink function calculate the area in to the Gross area of the submission and adjust the net area to be the same or less than calculated area. This must be corrected to four decimal places as ESF checks based on four decimals of precision.
2. "Self Intersection"
 - Occur in the components requiring spatial component, typically where a multi-part geometry is present.
 - Caused when geometry shares a common boundary with itself. Such as adjacent blocks that share a common boundary that share a border self-intersect.
 - To correct, remove the geometry from the submission, check for non-seamless features or duplicate features used for the offending submission component. Once corrected reload the data into eziLink and copy into the submission.

Appendix A - Submission Forms



STANDARDS - FORM 'A'

SHADED AREAS ON THIS FORM ARE MANDATORY
UNSHADED AREAS MUST BE COMPLETED IF STANDARDS ID NOT AVAILABLE

A. ADMINISTRATION		LICENSEE CONTACT NAME		LICENSEE E-MAIL ADDRESS		TELEPHONE NO.		DATE	
REGION	DISTRICT	JOE BLOW		joe.blow@server.com		250-555-5555		(YYY-MM-DD) 2004-03-15	
KAMLOOPS DOS									

B. TENURE (Enter one of Opening, Timbermark/Block, Licence No./Cutting Permit/Cutblock)									
OPENING		OBLIGATION		LICENSE NO.		CUTTING PERMIT		LICENSEE	
0946.001-015		F099A		A72117		XXX		ACE FORESTRY CORP	
STAND TYPE		TIMBER TYPE		PREVIOUS		GROSS AREA (ha)		MAX ALLOWABLE PERMANENT ACCESS %	
MKT		FDL		PLI		17.2		3	
1 SPECIES		2 SPECIES		CLASSES		INDEX		SITE	
FDL		PLI		6441		18		H	
SRC CODE		H							
SITE PLAN EXEMPT (Y/N)		N							

C. STANDARDS									
SU		NET AREA (ha)		BIOGEOCLIMATIC		MAX ALLOWABLE SOIL DISTURBANCE %		STANDARDS ID	
1		11.3		CWH M51 06		5		13	
PREFERRED SPECIES		ACCEPTABLE SPECIES		MIN. HEIGHT		MIN. HEIGHT		MIN. HEIGHT	
1		2		3		1		4	
MIN. HEIGHT		MIN. HEIGHT		MIN. HEIGHT		MIN. HEIGHT		MIN. HEIGHT	

SU		NET AREA (ha)		BIOGEOCLIMATIC		MAX ALLOWABLE SOIL DISTURBANCE %		STANDARDS ID	
2		5.9		ESSF WK1 02		2		257	
PREFERRED SPECIES		ACCEPTABLE SPECIES		MIN. HEIGHT		MIN. HEIGHT		MIN. HEIGHT	
1		2		3		1		4	
MIN. HEIGHT		MIN. HEIGHT		MIN. HEIGHT		MIN. HEIGHT		MIN. HEIGHT	

SU		NET AREA (ha)		BIOGEOCLIMATIC		MAX ALLOWABLE SOIL DISTURBANCE %		STANDARDS ID	
1		2		3		1		4	
MIN. HEIGHT		MIN. HEIGHT		MIN. HEIGHT		MIN. HEIGHT		MIN. HEIGHT	

SU		NET AREA (ha)		BIOGEOCLIMATIC		MAX ALLOWABLE SOIL DISTURBANCE %		STANDARDS ID	
1		2		3		1		4	
MIN. HEIGHT		MIN. HEIGHT		MIN. HEIGHT		MIN. HEIGHT		MIN. HEIGHT	

ACTIVITY REPORTING - FORM 'B'

A. ADMINISTRATION		DISTRICT		LICENSEE CONTACT NAME		LICENSEE E-MAIL ADDRESS		TELEPHONE NO.		DATE	
REGION		KAMLOOPS DOS		Joe Blow		joe.blow@server.com		250-555-5555		2004-03-15	

B. DISTURBANCE (Enter either Opening or Timbermark/Block)												
OPENING NO.		OBLIGATION		DISTURBANCE CODE	SILVICULTURAL SYSTEM			HARVEST DATES		GROSS AREA (ha)	HARVEST COMPLETED ON CUTBLOCK (Y/N)	
		TIMBER MARK	BLOCK		SYSTEM	VARIANT	PHASE	STARTED YEAR - MONTH	COMPLETED YEAR - MONTH			
0946001-015		F099A	1	L	CC			REMOV	03-06	03-07	17.1	Y

C. SILVICULTURE													
OPENING NO.		OBLIGATION		CUTTING PERMIT	CUTBLOCK	ACTIVITY		OBJECTIVES		FUNDING SOURCE*		DATE YEAR - MONTH	NET AREA TREATED (ha)
		TIMBERMARK	BLOCK			BASE	TECH. METHOD	1	2	3	CODE		
0946001-015		F099A	1	XXX	1	SP ME MOUND	CE					03-09	17.2
SEEDLOT / VEGETATIVE LOT													
OPENING NO.		OBLIGATION		CUTTING PERMIT	CUTBLOCK	ACTIVITY		OBJECTIVES		FUNDING SOURCE*		DATE YEAR - MONTH	NET AREA TREATED (ha)
TIMBERMARK		BLOCK				BASE	TECH. METHOD	1	2	3	CODE <td>PROJECT # <td>DATE* INDICATOR</td> </td>		
SEEDLOT / VEGETATIVE LOT													
OPENING NO.		OBLIGATION		CUTTING PERMIT	CUTBLOCK	ACTIVITY		OBJECTIVES		FUNDING SOURCE*		DATE YEAR - MONTH	NET AREA TREATED (ha)
TIMBERMARK		BLOCK				BASE	TECH. METHOD	1	2	3	CODE <td>PROJECT # <td>DATE* INDICATOR</td> </td>		
SEEDLOT / VEGETATIVE LOT													
OPENING NO.		OBLIGATION		CUTTING PERMIT	CUTBLOCK	ACTIVITY		OBJECTIVES		FUNDING SOURCE*		DATE YEAR - MONTH	NET AREA TREATED (ha)
TIMBERMARK		BLOCK				BASE	TECH. METHOD	1	2	3	CODE <td>PROJECT # <td>DATE* INDICATOR</td> </td>		
SEEDLOT / VEGETATIVE LOT													
OPENING NO.		OBLIGATION		CUTTING PERMIT	CUTBLOCK	ACTIVITY		OBJECTIVES		FUNDING SOURCE*		DATE YEAR - MONTH	NET AREA TREATED (ha)
TIMBERMARK		BLOCK				BASE	TECH. METHOD	1	2	3	CODE <td>PROJECT # <td>DATE* INDICATOR</td> </td>		
SEEDLOT / VEGETATIVE LOT													
OPENING NO.		OBLIGATION		CUTTING PERMIT	CUTBLOCK	ACTIVITY		OBJECTIVES		FUNDING SOURCE*		DATE YEAR - MONTH	NET AREA TREATED (ha)
TIMBERMARK		BLOCK				BASE	TECH. METHOD	1	2	3	CODE <td>PROJECT # <td>DATE* INDICATOR</td> </td>		
SEEDLOT / VEGETATIVE LOT													
OPENING NO.		OBLIGATION		CUTTING PERMIT	CUTBLOCK	ACTIVITY		OBJECTIVES		FUNDING SOURCE*		DATE YEAR - MONTH	NET AREA TREATED (ha)
TIMBERMARK		BLOCK				BASE	TECH. METHOD	1	2	3	CODE <td>PROJECT # <td>DATE* INDICATOR</td> </td>		
SEEDLOT / VEGETATIVE LOT													
OPENING NO.		OBLIGATION		CUTTING PERMIT	CUTBLOCK	ACTIVITY		OBJECTIVES		FUNDING SOURCE*		DATE YEAR - MONTH	NET AREA TREATED (ha)
TIMBERMARK		BLOCK				BASE	TECH. METHOD	1	2	3	CODE <td>PROJECT # <td>DATE* INDICATOR</td> </td>		
SEEDLOT / VEGETATIVE LOT													
OPENING NO.		OBLIGATION		CUTTING PERMIT	CUTBLOCK	ACTIVITY		OBJECTIVES		FUNDING SOURCE*		DATE YEAR - MONTH	NET AREA TREATED (ha)
TIMBERMARK		BLOCK				BASE	TECH. METHOD	1	2	3	CODE <td>PROJECT # <td>DATE* INDICATOR</td> </td>		
SEEDLOT / VEGETATIVE LOT													



FOREST COVER AND DECLARATIONS - FORM 'C'

SHADED FIELDS ARE MANDATORY WITH ALL SUBMISSIONS MADE AFTER DEC. 31, 2003

A. ADMINISTRATION				B. TENURE (Enter one of Opening, Timbermark/Block, Licence No./Cutting Permit/Cutblock)			
REGION	DISTRICT	LICENSEE CONTACT NAME	LICENSEE E-MAIL ADDRESS	TELEPHONE NO.	DATE (YYYY-MM-DD)	OPENING NO.	
KAMLOOPS	DOS	Joe Blow	joe.blow@server.com	250-555-5555	2004-03-15		
						TIMBERMARK	BLOCK
						F099A	/
						CUTTING PERMIT	CUTBLOCK
						XXX	/
						LICENCE NO.	
						A72117	

[illegible]

D. MILESTONE DECLARATIONS				
SU	DECLARATION OF OBLIGATIONS MET			COMMENTS
	POST HARVEST YYYY - MM - DD	REGENERATION YYYY - MM - DD	FREE-GROWING YYYY - MM - DD	
1	2003-08-01			HARVEST COMPLETE
2	2003-08-01			HARVEST COMPLETE

The development of **asLink** is the result of combining the experience and expertise of two companies well established as leaders in their fields for providing quality products and services.

