

NaturalONE Tutorial

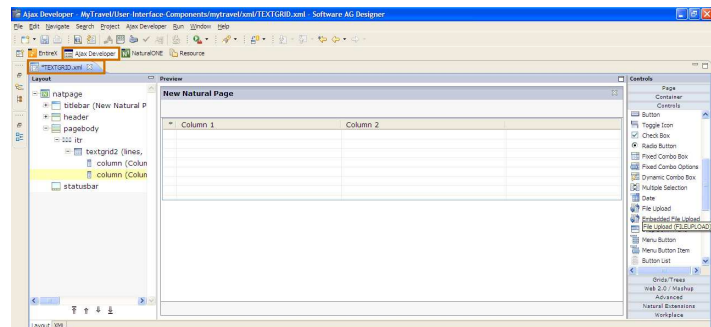
How to read CSV files with NaturalONE?

Recommended Reading

- NaturalONE tutorial: How to set-up a NaturalONE project?
- NaturalONE tutorial: How to create a Web GUI with NaturalONE?
- Creating a new Layout page - (Steps 1 thru 8).

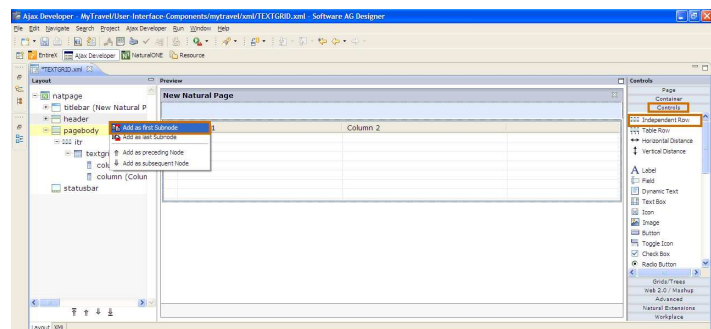
1 Open the **Ajax Developer** perspective.

Open the page layout called: „**TEXTGRID**“.

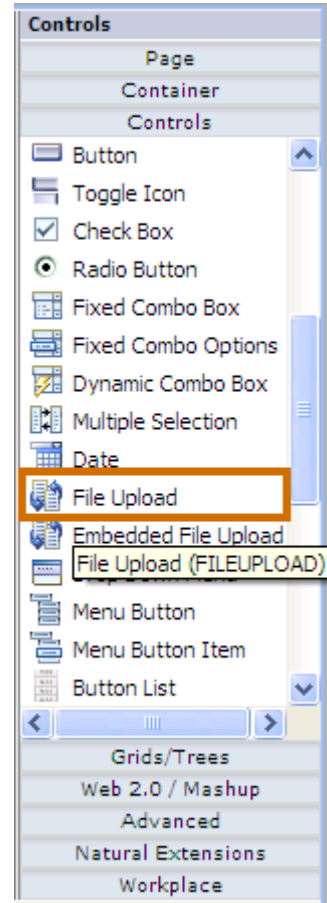


2 Select **Controls** on the **Controls** palette and select the **Independent Row** icon.

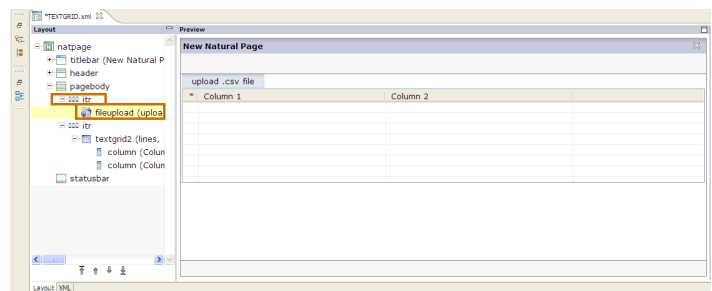
Drag and drop it onto **pagebody** in the **Layout pane**, and select: „**Add as first Subnode**“ (so it will appear before the textgrid).



- 3 Select the **File Upload** icon, and drag and drop onto ITR.



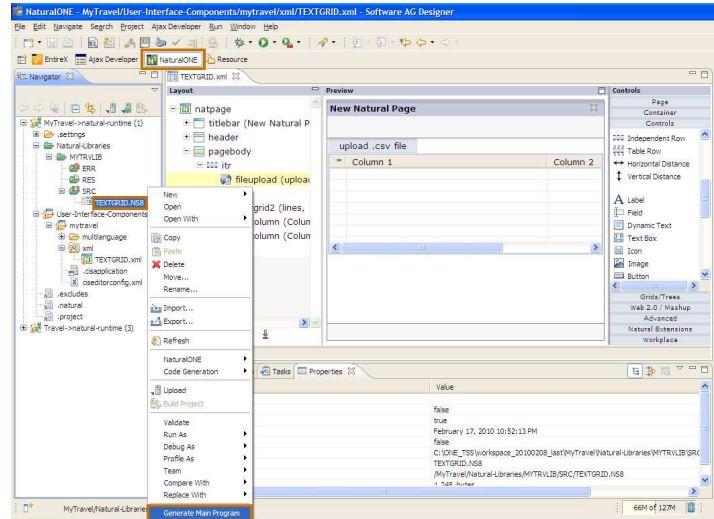
- 4 Drag and drop it onto ITR.



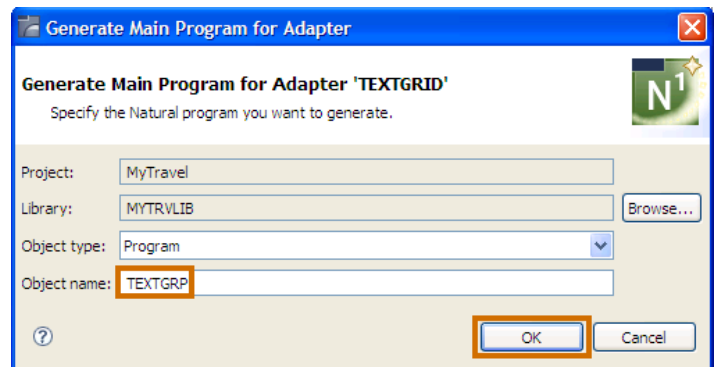
- 6 Select the **NaturalONE** perspective.

In the *Navigator* view you can see the newly created adapter **TEXTGRID.NS8**.

Select the adapter and from the context menu, choose **Generate Main Program**.



- 7 Type „**TEXTGRP**“ as *Object name* and press **OK**.

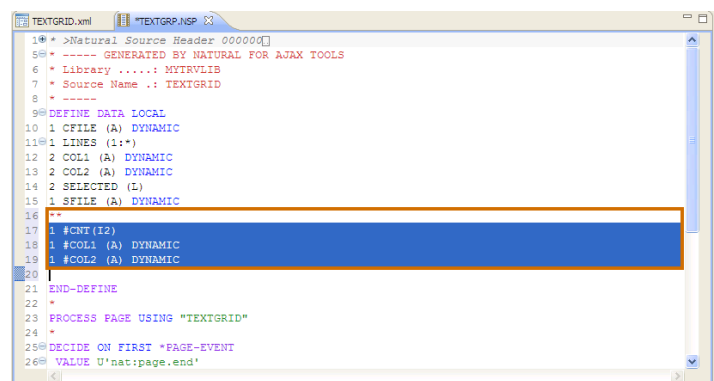


- 8 The source editor is opened. Add some the following code:

```

**
1 #CNT ( I 2 )
1 #COL1 ( A ) DYNAMIC
1 #COL2 ( A ) DYNAMIC
    
```

(#CNT - a row counter
#COL1 & #COL2 - are two fields to be filled from the input CSV file)

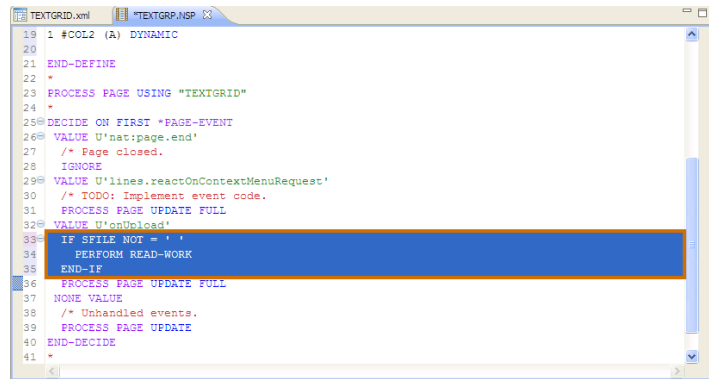


- 9 The “**onUpload**” event will be activated after the Upload process is completed.

SFILE will then contain the name of the file created on the server.

After „**VALUE U'onUpload**“ type:

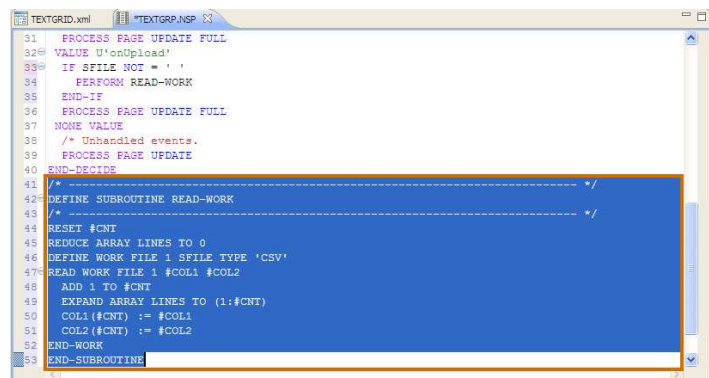
```
IF SFILE NOT = ' '
    PERFORM READ-WORK
END-IF
```



- 10 You will now define a Subroutine that will define and read a workfile with the name previously stored in SFILE.

After „**END-DECIDE**“ type:

```
/* -----
*/
DEFINE SUBROUTINE READ-WORK
/* -----
*/
RESET #CNT
REDUCE ARRAY LINES TO 0
DEEINE WORK EILE 1 SFILE
TYPE 'CSV'
READ WORK FILE 1 #COL1
#COL2
ADD I TO #CNT
EXPAND ARRAY LINES TO
(1:#CNT)
COL1(#CNT) := #COL1
COL2(#CNT) := #COL2
END-WORK
END-SUBROUTINE
```

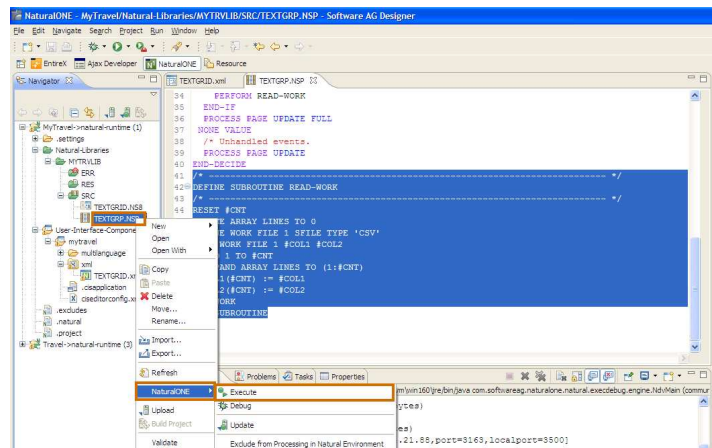


Notice that the workfile is defined as “**TYPE ‘CSV’**” -

assuming that each row contains two values separated by semicolon.

For each record, the X-Array named „lines“ which is the data structure behind the Textgrid, is expanded by 1 and the content from the record is moved to the next array entry.

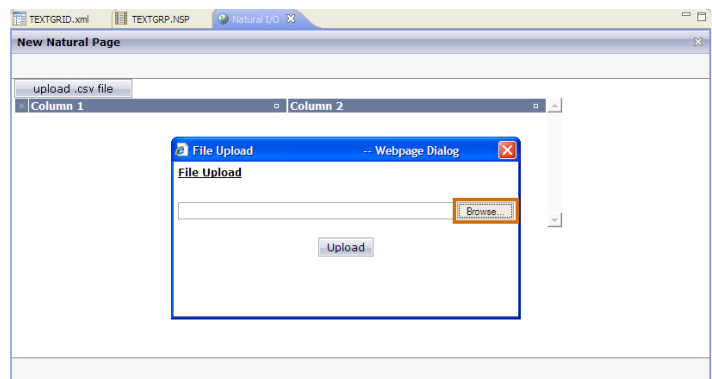
- 11 Save the program and execute to check the result.



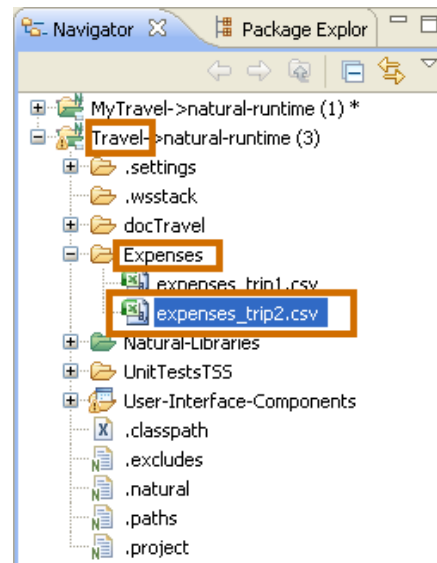
- 12 Press the „upload .csv file“ button.

A File Upload dialog is opened.

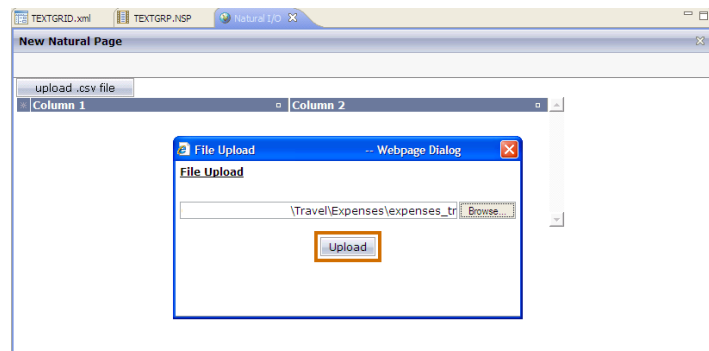
Press the „Browse“ button.



- 13 Select the following CSV file:
Travel → **Expenses** → **expenses_trip2.csv**



- 14 Press the „**Upload**“ button.



- 15 In this last screenshot you can see the textgrid displaying the data at the end of the Read loop.

