

LazReport, local variables and StringGrid

This tutorial tries to explain how to send local variables and data from a StringGrid to a report build with Lazreport and Lazarus.

To send a local variable to a LazReport's report, do as follows:

- Create a variable in LazReport and do not assign a value.
- This can be done at the menu file > variable list > variable in LazReport
- Now create a variable and do not assign a value.

1) Configure the event OnGetValue from the TfrReport to assign the value of our local variable to the LazReport value.

- If our local variable is called `var_local` and our report's variable is called `var_report`, on the event OnGetValue we should write:

```
If ParName = 'var_report' then  
    ParValue := var_local;
```

To send data from a TStringGrid to LazReport, we should use a component called TfruserDataset. This component will represent our rows on the TStringGrid to be represented on the report. Do as follows:

- 1) Add a TfrUserDataset to the form and configure it on the property Dataset from the TfrReport.
- 2) Create a longint variable with a public or private scope under the form we are working with, for example `FRow`. This variable will be used to reference the different rows from our StringGrid.

3) Then we must size our TfruserDataset, do as follows:

- Configure the number of rows, via the OnCheckEOF event:

```
procedure TForm1.frUserDataSet1CheckEOF(Sender: TObject; var Eof: Boolean);  
begin  
    Eof := FRow > StringGrid1.RowCount - 1;  
end;
```
- This way we define how many rows we are working with. The RowCount property from a StringGrid shows the numbers of rows it contains (- 1 because it starts from 0).

4) Now we should define from which row to start. Usually row 0 is used for column captions, so let's start from 1.

- Configure the OnFirst event from the TfrUserDataSet:

```

procedure TForm1.frUserDataSet1First(Sender: TObject);
begin
  FRow := 1;
end;

```

- 5) Configure the OnNext event from the TfrUserDataSet:

```

procedure TForm1.frUserDataSet1Next(Sender: TObject);
begin
  Inc(FRow);
end;

```

- 6) That's it with the TfrUserDataSet. Now let's prepare the TfrReport to receive data.

- Create a variable inside the report for each field we want to receive from the StringGrid.
- Add a Master Data band, and add text boxes as needed, one for each variable.
- Configure the OnGetValue event (as explained early on this tutorial) to assign the fields of the StringGrid, using the Cells property (column, row).

```

procedure TForm1.frReport1GetValue(const ParName: String; var ParValue: Variant
);
begin
  if ParName = 'variable_1' then
    ParValue := StringGrid1.Cells[1, FRow];

  if ParName = 'variable_2' then
    ParValue := StringGrid1.Cells[2, FRow];
end;

```

That's it! There is a small example with this tutorial to demonstrate how to do this. If someone finds this tutorial useful, write me at german.basisty@gmail.com

Enjoy!