



“Tips from the Techies” Proc Format and Enterprise Guide

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Introduction

- **PROC Format**
 - Nested Formats
 - Picture Formats
- **EGuide**
 - ODS (Output Delivery System)
Device: ActiveX vs ActiveX Image
 - Logging

Creating User Defined Formats

- General form of a PROC FORMAT step

```
proc format;  
    value <$>format-name range1='label'  
                                range2='label'  
                                ...; run;
```

- Allows users to define custom informats and formats for variables
- Unique SAS feature (v SQL databases etc)

Nested Formats

- A 'nested' format is where one or more of the labels is another SAS format.
- One use for nested formats is to subset values out of larger ranges

Name Age

Alfred 14

Henry 14

James twelve

Jane twelve

Janet 15

Joyce eleven

Judy 14

Louise twelve

Mary 15

Philip 16

Robert twelve

Nested Formats Example

```
proc format;
  value agefmt
    0-<13=[words12.]
    13-high=[3.];
run;
```

```
proc print
  data=sashelp.class;
  id name;
  var age;
  format age agefmt.;
run;
```

Name Age

Alfred 14

Henry 14

James twelve

Jane twelve

Janet 15

Joyce eleven

Judy 14

Louise twelve

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Philip 16

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Picture Formats

- A **picture** is a template for displaying numbers.
- It can contain “digit selectors”:

- 0 – conditional placeholder
- 9 – absolute placeholder

Example:

-Picture "+0000" would print:+35

-Picture "9999-" would print:0035-

- A **picture template** also contains a thousands separator, decimal/fractional separator

Using Dates with Picture Formats

- **DATATYPE=DATE | TIME | DATETIME**

specifies that you can use **directives** in the picture as a template to format date, time, or datetime values. See the definition and list of [directives](#).

%a Locale's abbreviated weekday name

%A Locale's full weekday name

%b Locale's abbreviated month name

%B Locale's full month name

%H Hour (24-hour clock) as a decimal number (0-23)

%j Day of the year as a decimal number (1-366)

%Y Year with century as a decimal number

Picture Formats - Example

```

proc format ;
  picture doy
    low-high=
    'Day %j of the year %Y' (DATATYPE=DATE);
run;

```

%Y
 Year with century as a decimal number

```

data _null_;
  date='27May2008'd;
  put date= doy30.;
run;

```

%j Day of the year as a decimal number (1-366)

date=Day 148 of the year 2008

Eguide: Output and Logging

- Eguide Output
 - **ODS** (Output Delivery System)
 - **Graph Format**
 - ActiveX, Java
 - PNG, JPEG, GIF
 - ActiveX Image, Java Image

Eguide: Output Devices

Graph Format	ActiveX (graph rendered on client)	ActiveX Image (graph rendered on server)
Device	ActiveX	Actximg
Usage	Interactive	Static
Requirements	Require ActiveX Control	For Web clients don't require ActiveX control
Output	Produces HTML files with commands to run Active X control, + copy of data	Produces PNG image files

Active X HTML Page – contains embedded data values!

```
<DIV align=center>
```

```
<TABLE class=Table cellSpacing=1 cellPadding=7 rules=groups
```

```
summary="Procedure Print: Data Set SASHELP.CLASS" frame=box>
```

```
....
```

```
<TH class="l RowHeader" scope=row>Alfred</TH>
```

```
<TD class="r Data">14</TD></TR>
```

```
<TR>
```

```
<TH class="l RowHeader" scope=row>Alice</TH>
```

```
<TD class="r Data">13</TD></TR>
```

```
<TR>
```

```
<TH class="l RowHeader" scope=row>Barbara</TH>
```

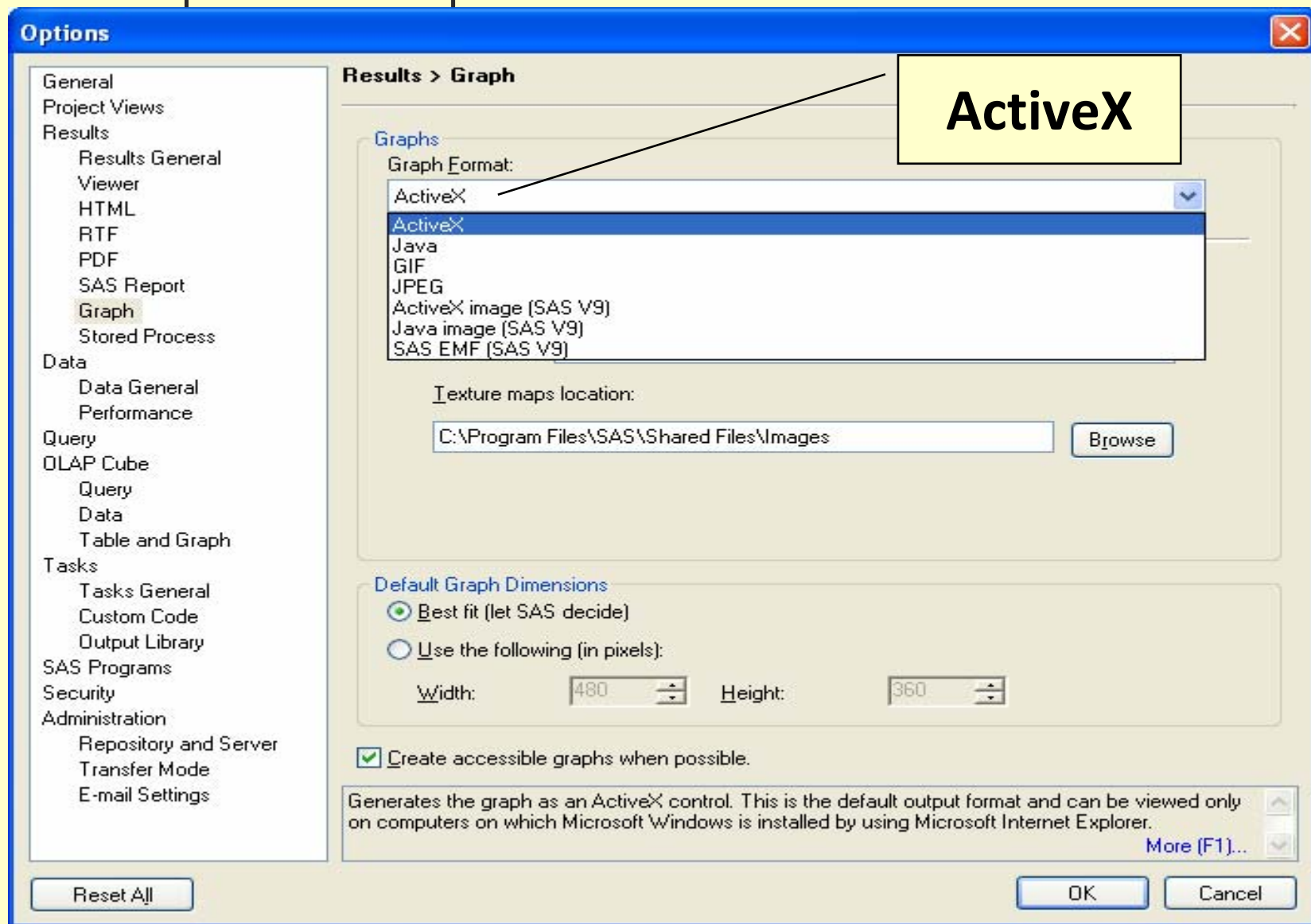
```
<TD class="r Data">13</TD></TR>
```

**Embedded
Data**

**Embedded
Data**

**Embedded
Data**

Tools > Options > Graph



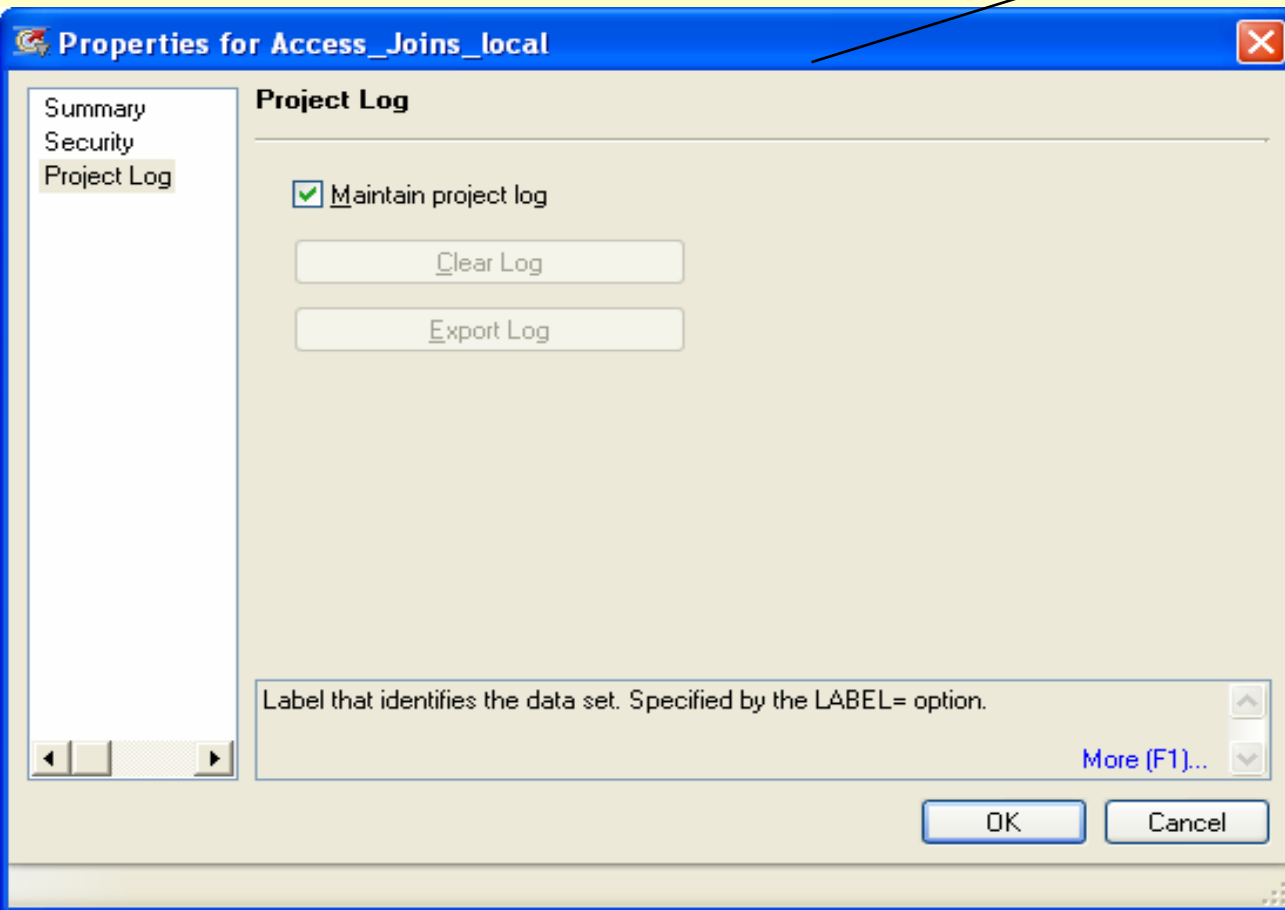
Enterprise Guide Logging

- Use the Task Log and Task Status window when running tasks or multiple tasks

- Enable the Project Log for your SAS Enterprise Guide Project

Activating Project Log

- Project > Properties > Project Log



**Activated
from Project
Properties
pane**

Resources

- **Base SAS 9.1.3 Procedures Guide, Second Edition**

http://support.sas.com/documentation/onlinedoc/91pdf/sasdoc_913/base_proc_8977.pdf

- **SAS/GRAPH 9.1 Reference**

http://support.sas.com/documentation/onlinedoc/91pdf/sasdoc_91/graph_ref_6960.pdf

- **SAS Enterprise Guide Help (Help> SAS Enterprise Guide Help)**

Questions...

