



TIBCO Software Inc.

**Working in Production Mode
Using TIBCO Spotfire Clinical Graphics and
TIBCO Spotfire Statistics Services**

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Introduction

This document provides guidance and advice about working with the TIBCO Spotfire Clinical Graphics (TSCG) package outside of the context of the TSCG user interface. It is for power users who want to create graphs, override .igd parameters, send jobs to, and retrieve jobs from, the server while working in SAS Production mode.

Production Advantages

Using TSCG in production mode, users can:

- Define, generate, and render a graph from a SAS production environment.
- Override input parameters to vary the data source, the output type and location, and other plot elements based on the override parameters allowed in the environment.

Automated Graph Creation in SAS Production Mode

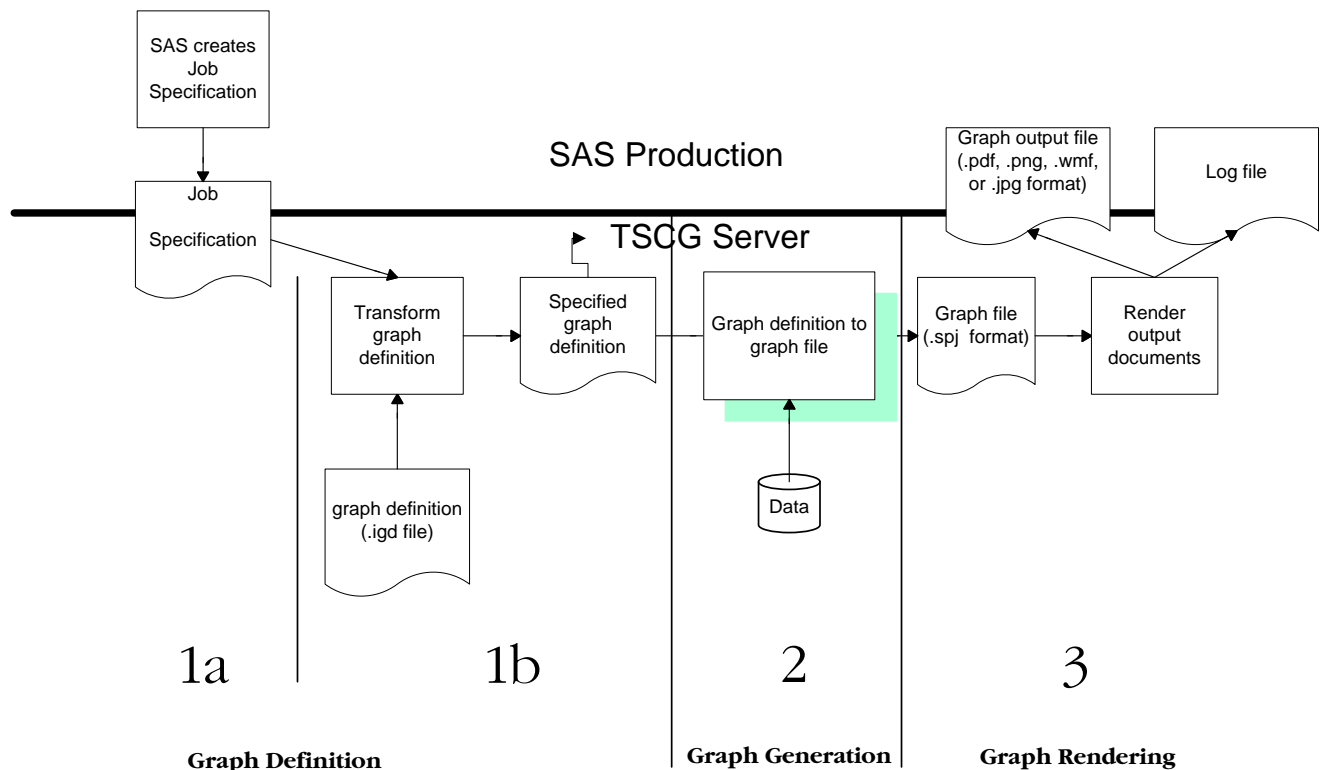


Figure 1: SAS production.

The production workflow encompasses defining, generating, and rendering graphs.

1. **Defining a graph:** SAS creates Graph Job Specification file. The file contains the graph definition file name, output file location, the data source, and a list of

parameters.

The TSCG Production Server transforms the specified graph definition file with the parameters supplied in the Graph Job Specification file.

2. **Generating a graph:** The server transforms the IGD file into an SPJ file. See Figure 5.
3. **Rendering a graph:** The graphlet package creates a PDF, PNG, WMP or JPG document which is stored in the location specified. A log file of the process is created and stored.

Generating a Graph File from a Graph Definition

Figure 2 details the process of generating the graph file with the Spotfire S+ Engine.

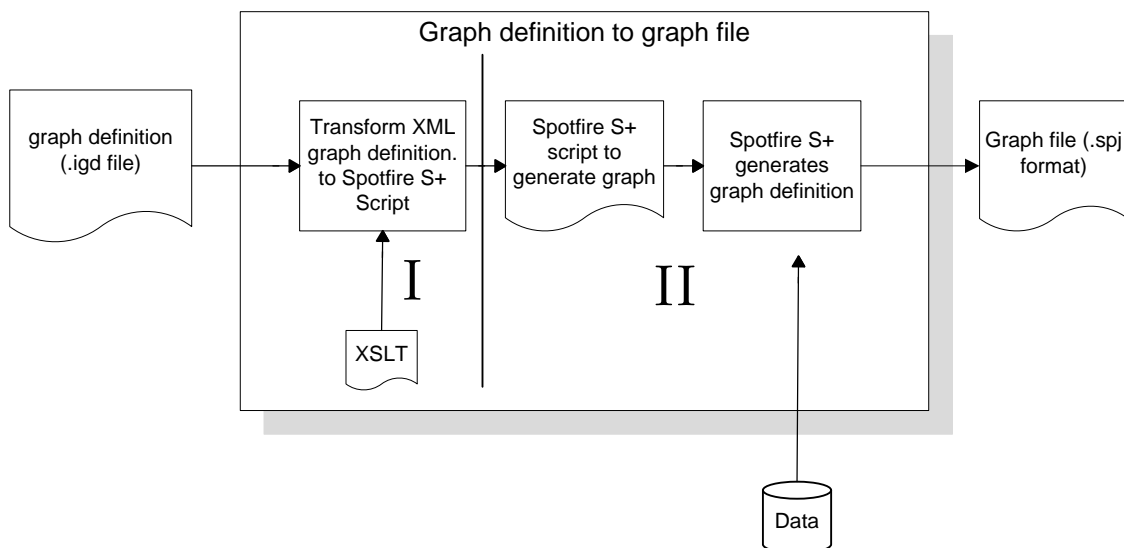


Figure 2: Graph Definition to SPJ file

- I. The graph definition file is the input for an XML transform, and the XML transform produces a Spotfire S+ script. The transformation is governed by an XSLT file that is easily configurable and extensible to fit into the customer data management framework. No changes in compiled code or Spotfire S+ packages are required.
- II. The Spotfire S+ engine (with the GOM package loaded) runs the Spotfire S+ script created in step I, and outputs the graph definition file in the tagged .spj format.

Production Overrides of the XML Graph Definition

Graph definitions from TSCG are designed to fit seamlessly into an automated production environment. Validation efforts are eased because the graph definitions—and the calls to the GOM libraries within them—are traceable in the definition document, in the generated Spotfire S+ script, and in the file for graph rendering. All calls are made to validated libraries. There is no custom code, only custom commands to the library.

The TSCG environment provides a flexible mechanism to use an existing graph definition to add, delete, or replace existing parameter values. For example, within the guidelines, operating procedures, and rules of your organization, it is possible to:

- Provide a path to new or updated data.
- Change the X or Y variable.
- Add or remove grouping.
- Change the Axis ranges.
- Change the Axis labels or label size.
- Add, change, or remove annotations or reference lines.
- Add, change, or remove style information.
- Add, change, or remove header or footer content.
- Add or remove a smoother to the output.
- Add, change, or remove the title, subtitle.
- Change the legend location.

You can accomplish all of these tasks in an auditable and traceable manner, without altering the underlying `.igd` (graph definition file). That is, the overrides you apply are not stored in the `.igd` file. For example, if an `.igd` file is created with no defined footer, you can add a footer by overriding it during a production run.

The application managing the production process assembles a file of calling parameters. The file includes the name of the graph definition to call, the name of the data set to use, the format of the output graph file, the location, and other override parameters to use in generating and rendering the graph output file.

The S+ Connector for SAS provides a set of SAS macros that creates the file of override parameters and calls the Spotfire Statistics Services. In a common flow, SAS creates a data set then builds a XML graph job specification file containing the location of that data set and all other parameters (mentioned above). The macros then issue a request to the Spotfire Statistics Services to create the graph. The macros manage the call to the processes required to create and retrieve the file, monitor the creation of the graph output file and log the results of those processes.

The file of override parameters is fully auditable because it includes explicit calls to the graph objects described in the graph definition file. The transformed graph definition file created when the override parameters are applied to the original graph definition file is also fully auditable. The process for generating the Spotfire S+ script from the transformed file and the Spotfire S+ script are fully auditable and traceable. You can view the resulting Spotfire S+ script in the Spotfire S+ Workbench. In all of these environments, the output graph can be generated as part of any audit process.

The graph object model (GOM):

- Supports auditable production run-time overrides.
- Supports identifying graph objects, which the TSCG client (and potentially other programs) can interpret.

Examples of override files and the transformed graph definition file that results are available in [Production Graph Job Specification File](#).

Using OverrideParameterList20.xml

Many of the macros in the TSCG Connector for SAS library perform the same action as a production override. If you provide appropriate values in the `tscg_addparameter` macro, the corresponding item in the `OverrideParameterList20.xml` file is specified.

The production environment requires the file `OverrideParameterList20.xml`. This file defines the `<OverrideParameterList>` containing friendly names for paths. In this file, you can define friendly path names to use in production mode. TSCG reads the `OverrideParameterList20.xml` file and translates the friendly name to its specified path. For example:

```
<OverrideParameterList>
  <OverrideParameter Name="Datasource"
Path="/GraphJobSpec/GraphJobSpec.GraphObjectModel/GraphSpec/@DataSource" />
  <OverrideParameter Name="OutputFileName"
Path="/GraphJobSpec/@OutputFileName" />
</OverrideParameterList>
```

Using the above friendly name, you can specify your data source as follows:

```
<GraphJobSpec.OverrideParameters>
  <OverrideParameterList Capacity='1'>
    <OverrideParameter Name='Datasource'
      Index='0'Value='http://server/dataname.sas7bdat' />
  </OverrideParameterList>
</GraphJobSpec.OverrideParameters>
```

Alternatively, you can provide the entire path:

```
<GraphJobSpec.OverrideParameters>
  <OverrideParameterList Capacity='1'>
    <OverrideParameter Name='/GraphJobSpec/
      GraphJobSpec.GraphObjectModelGraphSpec/@DataSource'
      Index='0'Value='http://server/dataname.sas7bdat' />
  </OverrideParameterList>
</GraphJobSpec.OverrideParameters>
```

Override Parameters

This topic describes the high-level groups of override parameters contained in the `OverrideParameterList20.xml` file. For a detailed list of override parameters, see the following sections in the `Override Parameter List Items` appendix.

General Override Parameters

You use the general override parameters to control commonly used parameters.

Page Layout Override Parameters

You use page layout override parameters to address page layout details including page size along with margins, headers, footers, and graph table layout.

Graph-Level Override Parameters

You use the graph-level override parameters to control elements that are common to all plots. This includes parameters for controlling graph titles and subtitles, legend layout, margin elements and axes scales and labels.

Parameters Specific to Plot Type

You use the override parameters in this group to control aspects related to specific plot types. The override parameter name is comprised of the plot type followed by the particular detail that you want to specify.

Parameters Associated with Optional Plot Elements

You use the override parameters in this group to control various optional plot elements. Some of these override parameters only apply to a specific plot type.

Reference Plot Elements

You use these override parameters to control the appearance of reference plot elements such as reference arrows or reference lines.

Not Implemented

This section lists the filter-related parameters that you cannot use as an override parameter.

Note: For additional information on a specific item, see the gom (graph object model) Users Guide under TSCG Advanced Reading and References.

Production Graph Job Specification file

The graph job specification file must contain the following XML attributes that specify the graph definition file to be used and location and format of the output file:

- `GraphDocumentName`: The name of an existing IGD file.
- `OutputFileName`: An output target file path. The output file must have one of the following file extensions `.pdf`, `.png`, `.wmf`, `.spj` or `.jpg`. The file extension determines the output format.

The graph specification file can optionally specify the following override parameters:

- DataSource: A data source to replace the data source specified in the IGD file.
- SplusScriptName: A file path for the S-Plus script the server created to produce the graph.
- A list of parameters to override the values saved within the IGD file.

The following shows an example XML file that overrides the Data Source, Title content, and Reference Line values in the .igd file GraphDocumentFromGraphJobTest.igd.

```
<GraphJobSpec
  OutputFileName=http://TSCG_Srv1/Results/scatterplot1638.jpg
  GraphDocumentName="D:/Tst/GraphDocumentFromGraphJobTest.igd"
  SplusScriptName="D:/Tst/GeneratedSplusScript_refGraphDoc.ssc">
<GraphJobSpec.OverrideParameters>
  <OverrideParameterList Capacity="3">
    <OverrideParameter Name="DATASOURCE"
      Value="http://TSCG_Srv1/DS/Phenobarb.sas7bdat" />
    <OverrideParameter Name="TITLE" Value="LFT at Visit" />
    <OverrideParameter Name="VERTICALREFERENCELINESCALC"
      Value="Q25, median, Q75" />    <!-- 1st, 3rd quartiles -->
  </OverrideParameterList>
</GraphJobSpec.OverrideParameters>
</GraphJobSpec>
```

The SAS connector handles the creation of this XML file for the user based on parameters provided to the macro calls.

Production Override Scenario

In the typical situation for overriding parameters, a TSCG user creates a graph using the TSCG client and saves the IGD. The user decides he wants to change the data source specified by the IGD. In a call to SAS, the user provides the additional XML, which is used during the S-PLUS script generation, to overlay the new data source value.

The XML specifying the new data source resembles the following:

```
<GraphJobSpec.OverrideParameters>
  <OverrideParameterList Capacity='1'>
    <OverrideParameter Name='/GraphJobSpec/
      GraphJobSpec.GraphObjectModel/GraphSpec/@DataSource'
      Index='0'Value='http://server/dataname.sas7bdat' />
  </OverrideParameterList>
</GraphJobSpec.OverrideParameters>
```

A user can add multiple OverrideParameters to a GraphJobSpec simply by adding them to the GraphJobSpec.OverrideParameters' OverrideParameterList. (Note that you must update Capacity to reflect the number of OverrideParameters).

In addition to supporting changing a single value, such as a data source, TSCG's override parameter feature supports:

- Indexing the XPath, which you can use to change an Annotation, for example. For more information about indexing, see [Indexing](#).
- Removing Attributes or Nodes (allowing S defaults to take over).
- Adding previously nonexistent Attributes or Nodes.

Each `OverrideParameter` has the following:

| | |
|---------------|---|
| Action | <p>Optional. If you omit Action, then the default is to replace the attribute specified by Value (if it already exists). Otherwise, must be one of the following:</p> <ul style="list-style-type: none"> ▪ Add: Indicates a new Attribute or Node to be added according to the XPath specified in Name. <ul style="list-style-type: none"> ○ For Attributes, the text stored in the Value attribute is added based on the Name attribute. The XPath should follow this form: <code>/a/b/c/@AttributeToAdd</code>. For example: <pre><OverrideParameter Action='Add' Name='/a/b/@AttributeToAdd' Value='AddedAttributeValue' /></pre> ○ For Nodes, the child of the <code>OverrideParameter</code> is added as specified in the Name attribute. For example: <pre><OverrideParameter Action='Add' Name='/a/b/NodeToAdd'> <NodeToAdd>Can Contain Any Valid XML <Including> <SubTrees /> </Including> </NodeToAdd> </OverrideParameter></pre> ▪ Delete: Indicates the Attribute or Node specified in the XPath attribute will be deleted. <ul style="list-style-type: none"> ○ Attributes should follow this form: <pre><OverrideParameter Action='Delete' Name='/a/b/@AttributeToDelete' /></pre> ○ Nodes should follow this form: <pre><OverrideParameter Action='Delete' Name='/a/b/NodeToDelete' /></pre> |
| Name | <p>Can be one of the following:</p> <ul style="list-style-type: none"> ▪ An XPath describing the attribute to be replaced ▪ One of a set of preassigned names found in TSCG_HOME/library/TSCG/XML/OverrideParameterList.xml (DataSource, OutputFileName by default) that have had their XPaths precreated. |
| Value | The value to replace the existing value. |
| Index | Ignored. |

Indexing

To support indexing, the user must create an unambiguous XPath. For example, here is a GraphSpec with multiple Annotations:

```
<GraphJobSpec OutputFileName="mygraph.spj">
  <GraphJobSpec.GraphObjectModel>
    <GraphSpec DataSource="barley.csv" ...>
      ...
      <GraphSpec.Page>
        <PageSpec StartingPageNumber="1" AlternateBinding="False">
          <PageSpec.Annotations>
            <AnnotationList Capacity="2">
              <TextBoxSpec Text="first" SideLocation="LeftTop" XLocation="0.8"
YLocation="0.6" ... />
              <TextBoxSpec Text="second" SideLocation="LeftTop" XLocation="0.8"
YLocation="0.5" ... />
            ...
          ...
        ...
      ...
    ...
  ...
</GraphJobSpec>
```

To modify the text of the first Annotation, the Override Parameter XML looks like the following:

```
<OverrideParameter Name="/GraphJobSpec/GraphJobSpec.GraphObjectModel/GraphSpec/
GraphSpec.Page/PageSpec/PageSpec.Annotations/AnnotationList/
TextBoxSpec[1]/@Text" Value="New First Annotation" />
```

To modify the text of the second Annotation, the Override Parameter XML looks like the following:

```
<OverrideParameter Name="/GraphJobSpec/GraphJobSpec.GraphObjectModel/GraphSpec
/GraphSpec.Page/PageSpec/PageSpec.Annotations/AnnotationList/
TextBoxSpec[2]/@Text" Value="New Second Annotation" />
```

Note Indices are specified in a 1-based indexing system (meaning that the first element is specified as [1]). Indexing is understood only to clear up ambiguity. Therefore:

- XPath selection techniques like `/a/b/c[@AttributeToTest = 'testValue']` **do not work.**
- Index values are required and acceptable **only if** there are multiple items from which to select. (In the above GraphJobSpec, an XPath that includes `/GraphJobSpec[1]/...` or `/GraphJobSpec/.../TextBoxSpec/@Text` does not match anything.)

Note The **Index** property of `OverrideParameter` is not used for indexing.

Calling During Production

During production, you can apply the override parameters using an HTTP call. This HTTP call can include all of the override parameters in-line, or it can reference a file containing the override parameters as XML. In the following example, the HTTP call replaces the data source.

```
http:// servername:8080/SpplusServer/api/function/TSCG/TSCGCreateGraph?xml=
"<GraphJobSpec OutputFileName='/opt1/TIBCO/spluserver81/data/tscg/
```

```
files/Graphs/Users/username/graphname.PDF' GraphDocumentName='/opt1/TIBCO/
splusserver81/data/tscg/files/Graphs/Users/username/graphname.igd'>
<GraphJobSpec.OverrideParameters><OverrideParameterList
Capacity='1'><OverrideParameter Name='/GraphSpec/@DataSource'
Index='0'Value='http://servername:8080/PlusServer/
webdav/tscg/files/DataSources/Users/username/dataname.sas7bdat' />
</OverrideParameterList></GraphJobSpec.OverrideParameters></GraphJobSpec>"
```

Below, the same result is achieved with a separate XML file and HTTP call. (The TSCG Connector for SAS macro library uses this approach.)

XML job specification file, for example:

/opt1/TIBCO/spluser81/data/tscg/files/Graphs/Users/username/graphname.xml:

```
<GraphJobSpec
  OutputFileName="/opt1/TIBCO/spluser81/data/tscg/files/Graphs/Users/username/graphname.PDF"
  GraphDocumentName="/opt1/TIBCO/spluser81/data/tscg/files/Graphs/Users/username/graphname.igd">
  <OverrideParameters>
    <OverrideParameterList Capacity="1">
      <OverrideParameter
        Name="DATASOURCE"
        Action="Replace"
        Value="http://servername:8080/PlusServer/webdav/tscg/files/DataSources/Users/username/dataname.sas7bdat" />
    </OverrideParameterList>
  </OverrideParameters>
</GraphJobSpec>

http://servername:8080/PlusServer/api/function/TSC/TSCGCreateGraph?xml="/opt1/TIBCO/spluser81/data/tscg/files/Graphs/Users/username/graphname.xml"
```

Tracing objects into the S-PLUS code

Because TSCG sets all parameters explicitly, they are verbose. The TSCG-generated Spotfire S+ script of a simple scatter plot is more than 150 lines. This is larger than a script coded by hand from the Spotfire S+ Workbench, but does not affect performance, and it enhances traceability and reuse.

You can export the TSCG generated Spotfire S+ script, remove the TSCG-specific lines, and use the modified script to produce the same graph from the Spotfire S+ workbench. Once an exported script is manually edited for use in Spotfire S+, it loses all association to TSCG and the benefits of the controlled TSCG environment.

Note that after you export a TSCG-generated script, it is no longer possible to open and edit it using the TSCG user interface. In addition, the validation inherited from the TSCG system is no longer applicable.

Troubleshooting While Working In Production Mode

The TSCG User Interface provides certain protections from common errors and more immediate feedback to the user when the user makes an error. This is not the case when you work in production mode.

Working with Blinded and Unblinded Data

When you work in production, you might encounter a data set that lacks group and/or Trellis columns that are in the original data set. In this case, TSCG provides a warning and generates the plot, ignoring the missing columns. For example, if the group column is missing from the production data set, TSCG produces an ungrouped plot.

If a column in the data set is missing, or if TSCG cannot evaluate an expression, the call returns a warning; however, if the missing column is a position variable (that is, x or y), then the request will fail and provide a message giving the names available.

Checking Data Types

You might encounter a situation where your graph definition tries to provide an incorrect data type. For example, when you set upper and lower interval bounds, they must be provided as numerics, providing a categorical results in an error.

Errors are reported in the server Command Log. See your system administrator for information about reviewing the Command Log.

Override Warnings and Errors

When you are working in the production environment, occasionally you might override a parameter that results in a warning or error generated from one of the TSCG code packages. For example, if you override the page margins and mistakenly set them to a value that exceeds the page size, TSCG displays warning ID-GOM-33, "Alert: Size of {side} bounding margins exceeds page size - no room for graph table."

A handful of common warnings and errors are documented in the TSCG Help (provided via Eclipse Infocenter, and available in a browser window. By default, this is http://<servername>:8080/help/topic/com.insightful.icg.eclipse.help/html/reference/warnings_ref.html.

Appendix

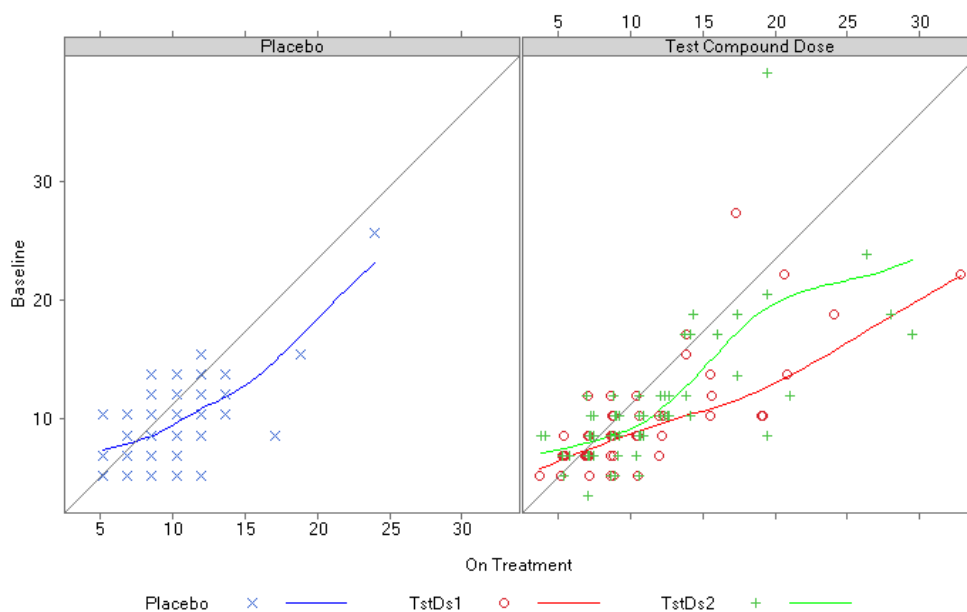
Sample Graph Definition Documents

In the sections below there is a Shift Plot of Bilirubin values from baseline to on treatment. The data is grouped by Treatment Arm Code and is included in two Trellis panels: one for the patients receiving the placebo, the other for the groups receiving the two doses of the compound being investigated. A Loess Smoother is added for each treatment arm to show the trend of the values shift.

Following the graph are side by side comparisons of snippets from the GraphSpec.xml and Spotfire S+ code. The snippets show the transformation of the

- Data source location specification.
- Graph definition (Primary Element) to graph formula.
- Loess Smoother (Optional Element) to a panel formula.

Following the Loess Smoother transformation map is a snippet of the Graph file (.spj) which defines the three tagged vectors.



Data Source Location

| GraphSpec.xml format | Spotfire S+ .ssc format |
|---|---|
| <pre><GraphSpec DataSource= "http://<servername>:8080/SplusServer/webdav/ TSCG/files /DataSources/Examples/prepost_subjid.csv" ColNameCaseSensitive="True" ...></pre> | <pre>data = TSCGGetDataSet('http://<servername>:8080/SplusServer/webdav /TSCG/files/DataSources/Examples/ prepost_subjid.csv', TRUE);</pre> |

Graph Definition

| GraphSpec.xml format | Spotfire S+ .ssc format |
|---|--|
| <pre><GraphSpec.XColumns> <ColumnList Capacity="4"> <s:String>BILI.POST</s:String> </ColumnList> </GraphSpec.XColumns> <GraphSpec.YColumns> <ColumnList Capacity="4"> <s:String>BILI.PRE</s:String> </ColumnList> </GraphSpec.YColumns> <GraphSpec.TrellisColumns> <ColumnList Capacity="4"> <s:String>ARM</s:String> </ColumnList> </GraphSpec.TrellisColumns> <GraphSpec.GroupColumns> <ColumnList Capacity="4"> <s:String>ARMCD</s:String> </ColumnList> </GraphSpec.GroupColumns></pre> | <pre>gom(formula = TSCGCreateFormula(dataColNames=names(data), rhsCols=c('BILI.POST'), colNameCaseSensitive=TRUE, lhsCols=c('BILI.PRE'), trellisCols=c('ARM')), data = data, groups = TSCGCreateFormula(dataColNames=names(data), rhsCols=c('ARMCD'), colNameCaseSensitive=TRUE), ...)</pre> |

Loess Smoother

| GraphSpec.xml format | Spotfire S+ .ssc format |
|---|---|
| <pre> <igompe:LoessFitPlotElement Span="0.75" Degree="linear" Family="symmetric" Group="True" ElementName="ge.loessfit" Title="Loess Smoother" Include="True"> <igompe:LoessFitPlotElement.Args> <NamedList> <s:String x:Key="loessfitDegree">linear</s:String> <s:Boolean x:Key="loessfitDoGroup">True</s:Boolean> <s:Int32 x:Key="loessfitEvaluation">50</s:Int32> <s:String x:Key="loessfitFamily">symmetric</s:String> <s:Double x:Key="loessfitSpan">0.75</s:Double> </NamedList> </igompe:LoessFitPlotElement.Args> <igompe:LoessFitPlotElement.ClientArgs> <NamedList /> </igompe:LoessFitPlotElement.ClientArgs> </pre> | <pre> panel = list(ge.loessfit(loessfitDegree='linear', loessfitDoGroup=TRUE, loessfitEvaluation=50, loessfitFamily='symmetric', loessfitSpan=0.75), ...), </pre> |

Graphlet (.spj) file

The tagging in the .spj supports the TSCG client serving users the parameters of the Loess Fit line as defined in the Graph Definition XML document. Once retrieved and served the user can edit the values and update the Graph Definition XML document prior to re-rendering the graph with the new values.

```

...
<GROUP CLASS="LoessFit0" ID="Group1" TAG="Placebo">
  <LINES RGBA="#0000FF" COLOR=1 CLIP="0,0,1,1"
  PLOT="0.018182,0.117647,0.963636,0.74183" USR="0,1,1,-1" WIDTH=1 DASH=1>
    <X D="0.292531,0.32234,0.352149"/>
    <Y D="-0.015419,-0.015419,-0.015419"/>
  </LINES>
</GROUP>
<GROUP CLASS="LoessFit0" ID="Group2" TAG="TstDs1">
  <LINES RGBA="#FF0000" COLOR=1 CLIP="0,0,1,1"
  PLOT="0.018182,0.117647,0.963636,0.74183" USR="0,1,1,-1" WIDTH=1 DASH=1>
    <X D="0.54054,0.570349,0.600157"/>
    <Y D="-0.015419,-0.015419,-0.015419"/>
  </LINES>
</GROUP>
<GROUP CLASS="LoessFit0" ID="Group3" TAG="TstDs2">
  <LINES RGBA="#00FF00" COLOR=1 CLIP="0,0,1,1"
  PLOT="0.018182,0.117647,0.963636,0.74183" USR="0,1,1,-1" WIDTH=1 DASH=1>
    <X D="0.788548,0.818357,0.848166"/>
    <Y D="-0.015419,-0.015419,-0.015419"/>
  </LINES>
</GROUP>
...

```

Contents of the Graph Definition (.igd) file

The .Graph Definition file is created using the Open Packaging Convention (OPC), which is also used by the Open Office XML. It uses the OPC standard relationships, content types and packaging conventions. By using this model, TSCG supports its client and other applications finding graph definitions via metadata searches. This model supports extensibility on a custom basis.

The graph definition file is a zipped file containing XML files that describe the graph (including the **GraphSpec.XML**), the graph's metadata, and the graph's version information, among other details. For more information about the contents of the graph definition file, see the topic **The IGD File** in the TSCG Help.

Override Parameter List Items

This appendix contains all of the override parameters contained in `OverrideParameterList20.xml`.

General Override Parameters

You use general override parameters to control commonly used parameters.

| DataSource | Name of the data source to use for the graph |
|--|---|
| XColumns | Column(s) to use for graph X axis |
| YColumns | Column(s) to use for graph Y axis |
| GroupColumns | Column(s) to use for graph grouping |
| TrellisColumns | Column(s) to use for graph trellising |
| ColNameCaseSensitive | Boolean value for case sensitivity when processing column names |
| DropUnusedLevels | Boolean value for dropping unused levels of a variable being treated as an S-PLUS factor |
| StackColumns | Not supported |
| KeyColumns | Not supported |
| PageByColumns | Controls page breaks according to values, levels, or categories in the specified column(s). |
| StyleSetName | Style set control |
| Styles | CSS style string |
| SubsetExpression | |
| Sort Sort.Decode Sort.SmallToLarge Sort.SortByColumnName Sort.SortWithinColumnLevel Sort.SortWithinColumnName Sort.SummaryFunction Sort.TargetColumnName Sort.InputOrder | Sorting control (used for grouping, trellis or categorical axes, etc.) |

| | |
|------------------|--|
| Sort.CustomOrder | |
|------------------|--|

Page Layout Override Parameters

You use page layout override parameters to address page layout details including page size along with margins, headers, footers, and graph table layout.

| Layout Level | Parameter Name |
|--------------|-------------------------------------|
| Page Layout | Page.AlternateBinding |
| | Page.BindingMargin.Bottom |
| | Page.BindingMargin.Bottom.Unit |
| | Page.BindingMargin.Left |
| | Page.BindingMargin.Left.Unit |
| | Page.BindingMargin.Right |
| | Page.BindingMargin.Right.Unit |
| | Page.BindingMargin.Top |
| | Page.BindingMargin.Top.Unit |
| | Page.Height |
| | Page.Height.Unit |
| | Page.IncludePageXofY |
| | Page.OuterMargin.Bottom |
| | Page.OuterMargin.Bottom.Unit |
| | Page.OuterMargin.Left |
| | Page.OuterMargin.Left.Unit |
| | Page.OuterMargin.Right |
| | Page.OuterMargin.Right.Unit |
| | Page.OuterMargin.Top |
| | Page.OuterMargin.Top.Unit |
| | Page.StartingPageNumber |
| | Page.Width |
| | Page.Width.Unit |
| Graph Table | GraphTable.ColumnRatio |
| | GraphTable.ColumnSpacing |
| | GraphTable.EnableCellBorders |
| | GraphTable.Height |
| | GraphTable.Height.Unit |
| | GraphTable.Layout |
| | GraphTable.NumberOfColumns |
| | GraphTable.NumberOfPages |
| | GraphTable.NumberOfRows |
| | GraphTable.OuterMargins.Bottom |
| | GraphTable.OuterMargins.Bottom.Unit |
| | GraphTable.OuterMargins.Left |
| | GraphTable.OuterMargins.Left.Unit |
| | GraphTable.OuterMargins.Right |
| | GraphTable.OuterMargins.Right.Unit |

| | |
|--------|---|
| | GraphTable.OuterMargins.Top |
| | GraphTable.OuterMargins.Top.Unit |
| | GraphTable.PlotAspectRatio |
| | GraphTable.PlotInnerMargins.Bottom |
| | GraphTable.PlotInnerMargins.Bottom.Unit |
| | GraphTable.PlotInnerMargins.Left |
| | GraphTable.PlotInnerMargins.Left.Unit |
| | GraphTable.PlotInnerMargins.Right |
| | GraphTable.PlotInnerMargins.Right.Unit |
| | GraphTable.PlotInnerMargins.Top |
| | GraphTable.PlotInnerMargins.Top.Unit |
| | GraphTable.RowRatio |
| | GraphTable.RowSpacing |
| | GraphTable.Width |
| | GraphTable.Width.Unit |
| Header | Header.FontSize |
| | Header.Justify |
| | Header.Side |
| | Header.Text |
| Footer | Footer.FontSize |
| | Footer.Justify |
| | Footer.Side |
| | Footer.Text |

Graph-Level Override Parameters

You use the graph-level override parameters to control elements that are common to all plots. This includes parameters for controlling graph titles and subtitles, legend layout, margin elements and axes scales and labels.

| Item | Parameter Name |
|----------|-------------------------------|
| Title | MainTitle.FontSize |
| | MainTitle.Justify |
| | MainTitle.Side |
| | MainTitle.Text |
| Subtitle | SubTitle.FontSize |
| | SubTitle.Justify |
| | SubTitle.Side |
| | SubTitle.Text |
| Legend | Legend.Adjustment |
| | Legend.Align |
| | Legend.Angle |
| | Legend.Between |
| | Legend.ColumnHeightMultiplier |
| | Legend.ColumnSpacing |
| | Legend.Density |

| | |
|--------------------|---------------------------------|
| | Legend.Divide |
| | Legend.ElementsOrder |
| | Legend.EnableGrid |
| | Legend.EnableTitle |
| | Legend.FontSize |
| | Legend.IncludeAllGroups |
| | Legend.IncludeFitLines |
| | Legend.IncludeIntervalLines |
| | Legend.InsideLegend |
| | Legend.KeyLineWidthMultiplier |
| | Legend.KeyPointSizeMultiplier |
| | Legend.KeyTextSizeMultiplier |
| | Legend.KeyTextWidthMultiplier |
| | Legend.Location |
| | Legend.MakeMarginRoom |
| | Legend.NumberOfColumns |
| | Legend.NumberOfRows |
| | Legend.Orientation |
| | Legend.PageLegend |
| | Legend.PageNumber |
| | Legend.Size |
| | Legend.Text |
| | Legend.TextFirst |
| | Legend.Title |
| | Legend.TitleAdjustment |
| | Legend.TitleFontSize |
| | Legend.Type |
| | Legend.Visible |
| | Legend.XCorner |
| | Legend.XLocation |
| | Legend.YCorner |
| | Legend.YLocation |
| X and Y Axis Label | XAxisLabel.Enabled |
| | XAxisLabel.FontSize |
| | XAxisLabel.Format.FormatString |
| | XAxisLabel.Format.Justify |
| | XAxisLabel.Format.MaxCharacters |
| | XAxisLabel.Format.Prefix |
| | XAxisLabel.Format.PrefixSep |
| | XAxisLabel.Format.Suffix |
| | XAxisLabel.Format.SuffixSep |
| | XAxisLabel.Format.ToLower |
| | XAxisLabel.Format.ToUpper |
| | XAxisLabel.Side |
| | XAxisLabel.Text |

| | |
|--|--|
| | YAxisLabel.Enabled |
| | YAxisLabel.FontSize |
| | YAxisLabel.Format.FormatString |
| | YAxisLabel.Format.Justify |
| | YAxisLabel.Format.MaxCharacters |
| | YAxisLabel.Format.Prefix |
| | YAxisLabel.Format.PrefixSep |
| | YAxisLabel.Format.Suffix |
| | YAxisLabel.Format.SuffixSep |
| | YAxisLabel.Format.ToLower |
| | YAxisLabel.Format.ToUpper |
| | YAxisLabel.Side |
| | YAxisLabel.Text |
| Axis Group and Scale <i>Note: The default plot types do not use X2Scale-X4Scale or Y2Scale-Y4Scale.</i> | AxisGroup |
| | AxisGroup.XColumnName |
| | AxisGroup.YColumnName |
| | AxisGroup |
| | AxisGroup.XColumnName |
| | AxisGroup.YColumnName |
| | AxisGroup |
| | AxisGroup.XColumnName |
| X Scale <i>Note 1: Although we only list XScale, you can control X2Scale-X4Scale by replacing the XScale parameter with the appropriate X#Scale.</i> <i>Note 2: The default plot types do not use X2Scale-X4Scale.</i> | XScale.AlternatingAxes |
| | XScale.AlternatingTicks |
| | XScale.ClipMajorLabels |
| | XScale.EnableMajorGrid |
| | XScale.EnableMajorLabels |
| | XScale.EnableMajorTicks |
| | XScale.EnableMinorGrid |
| | XScale.EnableMinorTicks |
| | XScale.Enabled |
| | XScale.ExtendedLowerLimit |
| | XScale.ExtendedUpperLimit |
| | XScale.ExtensionFactor |
| | XScale.FirstMajorTick |
| | XScale.FontSize |
| | XScale.LastMajorTick |
| | XScale.LogTransform |
| | XScale.LogTransformBase |
| | XScale.LowerLimit |
| | XScale.LowerScaleLimit |
| | XScale.MajorTickInterval |
| | XScale.MajorTickLabel |
| | XScale.MajorTickLabel.Format.BigInterval |
| | XScale.MajorTickLabel.Format.BigMark |

| | |
|---|--|
| | XScale.MajorTickLabel.Format.DecimalMark |
| | XScale.MajorTickLabel.Format.EnableFractions |
| | XScale.MajorTickLabel.Format.EnableMinusSign |
| | XScale.MajorTickLabel.Format.EnablePlusSign |
| | XScale.MajorTickLabel.Format.EnableScientific |
| | XScale.MajorTickLabel.Format.Justify |
| | XScale.MajorTickLabel.Format.MaxNumberOfDigits |
| | XScale.MajorTickLabel.Format.MinNumberOfDigits |
| | XScale.MajorTickLabel.Format.NaSub |
| | XScale.MajorTickLabel.Format.Prefix |
| | XScale.MajorTickLabel.Format.PrefixSep |
| | XScale.MajorTickLabel.Format.ScientificIntervalMax |
| | XScale.MajorTickLabel.Format.ScientificIntervalMin |
| | XScale.MajorTickLabel.Format.ScientificMark |
| | XScale.MajorTickLabel.Format.SmallInterval |
| | XScale.MajorTickLabel.Format.SmallMark |
| | XScale.MajorTickLabel.Format.Suffix |
| | XScale.MajorTickLabel.Format.SuffixSep |
| | XScale.MajorTickLabelSrt |
| | XScale.MajorTickSize |
| | XScale.MinorTickInterval |
| | XScale.MinorTickSize |
| | XScale.MirrorLabels |
| | XScale.MirrorTicks |
| | XScale.NumberOfMajorTicks |
| | XScale.NumberOfMinorTicks |
| | XScale.Relation |
| | XScale.SymmetricLimits |
| | XScale.SymmetricLimitsBase |
| | XScale.TickPositions |
| | XScale.Type |
| | XScale.UpperLimit |
| | XScale.UpperScaleLimit |
| <p>Y Scale</p> <p><i>Note 1: Although we only list YScale, you can control Y2Scale-Y4Scale by replacing the YScale parameter with the appropriate Y#Scale.</i></p> <p><i>Note 2: The default plot types do not use Y2Scale-Y4Scale.</i></p> | YScale.AlternatingAxes |
| | YScale.AlternatingTicks |
| | YScale.ClipMajorLabels |
| | YScale.EnableMajorGrid |
| | YScale.EnableMajorLabels |
| | YScale.EnableMajorTicks |
| | YScale.EnableMinorGrid |
| | YScale.EnableMinorTicks |
| | YScale.Enabled |
| | YScale.ExtendedLowerLimit |
| | YScale.ExtendedUpperLimit |
| | YScale.ExtensionFactor |

| | |
|----------|--|
| | YScale.FirstMajorTick |
| | YScale.FontSize |
| | YScale.LastMajorTick |
| | YScale.LogTransform |
| | YScale.LogTransformBase |
| | YScale.LowerLimit |
| | YScale.LowerScaleLimit |
| | YScale.MajorTickInterval |
| | YScale.MajorTickLabel |
| | YScale.MajorTickLabel.Format.BigInterval |
| | YScale.MajorTickLabel.Format.BigMark |
| | YScale.MajorTickLabel.Format.DecimalMark |
| | YScale.MajorTickLabel.Format.EnableFractions |
| | YScale.MajorTickLabel.Format.EnableMinusSign |
| | YScale.MajorTickLabel.Format.EnablePlusSign |
| | YScale.MajorTickLabel.Format.EnableScientific |
| | YScale.MajorTickLabel.Format.Justify |
| | YScale.MajorTickLabel.Format.MaxNumberOfDigits |
| | YScale.MajorTickLabel.Format.MinNumberOfDigits |
| | YScale.MajorTickLabel.Format.NaSub |
| | YScale.MajorTickLabel.Format.Prefix |
| | YScale.MajorTickLabel.Format.PrefixSep |
| | YScale.MajorTickLabel.Format.ScientificIntervalMax |
| | YScale.MajorTickLabel.Format.ScientificIntervalMin |
| | YScale.MajorTickLabel.Format.ScientificMark |
| | YScale.MajorTickLabel.Format.SmallInterval |
| | YScale.MajorTickLabel.Format.SmallMark |
| | YScale.MajorTickLabel.Format.Suffix |
| | YScale.MajorTickLabel.Format.SuffixSep |
| | YScale.MajorTickLabelSrt |
| | YScale.MajorTickSize |
| | YScale.MinorTickInterval |
| | YScale.MinorTickSize |
| | YScale.MirrorLabels |
| | YScale.MirrorTicks |
| | YScale.NumberOfMajorTicks |
| | YScale.NumberOfMinorTicks |
| | YScale.Relation |
| | YScale.SymmetricLimits |
| | YScale.SymmetricLimitsBase |
| | YScale.TickPositions |
| | YScale.Type |
| | YScale.UpperLimit |
| | YScale.UpperScaleLimit |
| Text Box | TextBox.ColumnSpacing |

| | |
|----------------|----------------------------------|
| | TextBox.Docked |
| | TextBox.EnableGrid |
| | TextBox.FontSize |
| | TextBox.FractionLocation |
| | TextBox.NumberOfColumns |
| | TextBox.SideLocation |
| | TextBox.Text |
| | TextBox.XLocation |
| | TextBox.YLocation |
| | |
| Strip | Strip.Enabled |
| | Strip.FontSize |
| | Strip.Format.FormatString |
| | Strip.Format.Justify |
| | Strip.Format.MaxCharacters |
| | Strip.Format.Prefix |
| | Strip.Format.PrefixSep |
| | Strip.Format.Suffix |
| | Strip.Format.SuffixSep |
| | Strip.Format.ToLower |
| | Strip.Format.ToUpper |
| | Strip.FrameStyle |
| | Strip.LabelRotation |
| | Strip.OuterStrips |
| | Strip.Side |
| | Strip.Text |
| Margin Element | MarginElement.Bottom.Args |
| | MarginElement.Bottom.ElementName |
| | MarginElement.Bottom.Include |
| | MarginElement.Left.Args |
| | MarginElement.Left.ElementName |
| | MarginElement.Left.Include |
| | MarginElement.Right.Args |
| | MarginElement.Right.ElementName |
| | MarginElement.Right.Include |
| | MarginElement.Top.Args |
| | MarginElement.Top.ElementName |
| | MarginElement.Top.Include |

Parameters Specific to Plot Type

You use the override parameters in this group to control aspects related to specific plot types. The override parameter name is comprised of the plot type followed by the particular detail that you want to specify.

| Plot Type | Plot Element Override Parameter Name |
|---------------|--------------------------------------|
| Area Bar Plot | AreaBarPlotElement |

| | |
|-----------|--|
| | AreaBarPlotElement.BaseGroupLevel |
| | AreaBarPlotElement.DoGroup |
| | AreaBarPlotElement.Include |
| | AreaBarPlotElement.LabelsDigits |
| | AreaBarPlotElement.LabelsOffset |
| | AreaBarPlotElement.LabelsOuter |
| | AreaBarPlotElement.LabelsRotation |
| | AreaBarPlotElement.LabelsSide |
| | AreaBarPlotElement.LabelsSuffix |
| | AreaBarPlotElement.LabelsVisible |
| | AreaBarPlotElement.SubGroupsColumnName |
| | AreaBarPlotElement.SubGroupsLabelsRotation |
| | AreaBarPlotElement.SubGroupsLabelsSide |
| | AreaBarPlotElement.SubGroupsLabelsVisible |
| | AreaBarPlotElement.TypeX |
| | AreaBarPlotElement.TypeY |
| Area Plot | AreaPlotElement |
| | AreaPlotElement.Base |
| | AreaPlotElement.DoGroup |
| | AreaPlotElement.Include |
| | AreaPlotElement.LabelColumnName |
| | AreaPlotElement.LabelPositionMethod |
| | AreaPlotElement.LabelRotation |
| | AreaPlotElement.LabelSide |
| | AreaPlotElement.LabelTilt |
| | AreaPlotElement.LabelVisible |
| | AreaPlotElement.LabelXOffset |
| | AreaPlotElement.LabelYOffset |
| | AreaPlotElement.Type |
| Bar Plot | BarPlotElement |
| | BarPlotElement.Base |
| | BarPlotElement.Include |
| | BarPlotElement.LabelsColumnName |
| | BarPlotElement.LabelsDigits |
| | BarPlotElement.LabelsOffset |
| | BarPlotElement.LabelsOuter |
| | BarPlotElement.LabelsRotation |
| | BarPlotElement.LabelsSide |
| | BarPlotElement.LabelsSuffix |
| | BarPlotElement.LabelsVisible |
| | BarPlotElement.StackedGroupLeveBase |
| | BarPlotElement.TotalsLabelColumnName |
| | BarPlotElement.TotalsLabelDigits |
| | BarPlotElement.TotalsLabelRotation |
| | BarPlotElement.TotalsLabelSide |

| | |
|--------------|---------------------------------------|
| | BarPlotElement.TotalsLabelVisible |
| | BarPlotElement.Type |
| | BarPlotElement.Width |
| Box Plot | BoxPlotElement |
| | BoxPlotElement.DoGroup |
| | BoxPlotElement.Include |
| | BoxPlotElement.IqrSpan |
| | BoxPlotElement.OutlierPointsVisible |
| | BoxPlotElement.OutlierSegmentsVisible |
| | BoxPlotElement.Percentiles |
| | BoxPlotElement.QuantileMethod |
| | BoxPlotElement.Type |
| | |
| Bubble Plot | BubblePlotElement |
| | BubblePlotElement.DoGroup |
| | BubblePlotElement.Include |
| | BubblePlotElement.JitterX |
| | BubblePlotElement.JitterY |
| | BubblePlotElement.LabelDigits |
| | BubblePlotElement.LabelPrefix |
| | BubblePlotElement.LabelRotation |
| | BubblePlotElement.LabelsColumnName |
| | BubblePlotElement.LabelSide |
| | BubblePlotElement.LabelSuffix |
| | BubblePlotElement.LabelsVisible |
| | BubblePlotElement.LabelXOffset |
| | BubblePlotElement.LabelYOffset |
| | BubblePlotElement.MaxRadius |
| | BubblePlotElement.MinRadius |
| | BubblePlotElement.NumberOfEdges |
| | BubblePlotElement.RotateAngle |
| | BubblePlotElement.SizeType |
| | BubblePlotElement.SymbolSize |
| Contour Plot | ContourPlotElement |
| | ContourPlotElement.ImageLevelVisible |
| | ContourPlotElement.Include |
| | ContourPlotElement.LabelsVisible |
| | ContourPlotElement.LinesVisible |
| | ContourPlotElement.NLevels |
| | ContourPlotElement.Value |
| Delta Plot | DeltaPlotElement |
| | DeltaPlotElement.BarsWidth |
| | DeltaPlotElement.Base |
| | DeltaPlotElement.ChangeRefLineVisible |
| | DeltaPlotElement.DoGroup |
| | DeltaPlotElement.Include |

| | |
|---------------|--|
| | DeltaPlotElement.LabelsDigits |
| | DeltaPlotElement.LabelsOffset |
| | DeltaPlotElement.LabelsOuter |
| | DeltaPlotElement.LabelsRotation |
| | DeltaPlotElement.LabelsSide |
| | DeltaPlotElement.LabelsSuffix |
| | DeltaPlotElement.LabelsVisible |
| | DeltaPlotElement.SortAscending |
| Density Plot | DensityPlotElement |
| | DensityPlotElement.DoGroup |
| | DensityPlotElement.Include |
| | DensityPlotElement.Type |
| | DensityPlotElement.Width |
| | DensityPlotElement.Window |
| Dot Plot | DotPlotElement |
| | DotPlotElement.DodgeFactor |
| | DotPlotElement.DoGroup |
| | DotPlotElement.Include |
| | DotPlotElement.JitterX |
| | DotPlotElement.JitterY |
| Duration Plot | DurationPlotElement |
| | DurationPlotElement.DoGroup |
| | DurationPlotElement.DurationColumnName |
| | DurationPlotElement.DurationType |
| | DurationPlotElement.EventTypeColumnName |
| | DurationPlotElement.ExtendUnknownEnd |
| | DurationPlotElement.ExtendUnknownStart |
| | DurationPlotElement.Include |
| | DurationPlotElement.PeriodMaxColumnName |
| | DurationPlotElement.PeriodMinColumnName |
| | DurationPlotElement.ShadowLinesVisible |
| | DurationPlotElement.UnknownEndSymbol |
| | DurationPlotElement.UnknownStartSymbol |
| Empirical CDF | EmpiricalCdfPlotElement |
| | EmpiricalCdfPlotElement.Include |
| | EmpiricalCdfPlotElement.ShadowLinesVisible |
| Forest Plot | ForestPlotElement |
| | ForestPlotElement.CombinedLevel |
| | ForestPlotElement.CombinedSymbol |
| | ForestPlotElement.doGroup |
| | ForestPlotElement.Include |
| | ForestPlotElement.IncludeSampleSize |
| | ForestPlotElement.IntervalLowerColumnName |
| | ForestPlotElement.IntervalUpperColumnName |
| | ForestPlotElement.SampleSizeColumn |

| | |
|-------------------|---|
| | ForestPlotElement.WeightColumnName |
| | ForestPlotElement.WeightType |
| Histogram | HistogramPlotElement |
| | HistogramPlotElement.BarWidth |
| | HistogramPlotElement.BinMethod |
| | HistogramPlotElement.BinNumber |
| | HistogramPlotElement.BinUnit |
| | HistogramPlotElement.Breaks |
| | HistogramPlotElement.Discrete |
| | HistogramPlotElement.DoGroup |
| | HistogramPlotElement.EqualWidth |
| | HistogramPlotElement.Include |
| | HistogramPlotElement.LabelsDigits |
| | HistogramPlotElement.LabelsOffset |
| | HistogramPlotElement.LabelsOuter |
| | HistogramPlotElement.LabelsRotation |
| | HistogramPlotElement.LabelsSide |
| | HistogramPlotElement.LabelsSuffix |
| | HistogramPlotElement.LabelsVisible |
| | HistogramPlotElement.Type |
| Interval Plot | IntervalPlotElement |
| | IntervalPlotElement.DodgeFactor |
| | IntervalPlotElement.DoGroup |
| | IntervalPlotElement.Geometry |
| | IntervalPlotElement.Include |
| | IntervalPlotElement.JitterX |
| | IntervalPlotElement.JitterY |
| | IntervalPlotElement.LowerX |
| | IntervalPlotElement.LowerY |
| | IntervalPlotElement.Subset |
| | IntervalPlotElement.SubsetValue |
| | IntervalPlotElement.UpperX |
| | IntervalPlotElement.UpperY |
| Kaplan-Meier Plot | KaplanMeierPlotElement |
| | KaplanMeierPlotElement.CensorMarks |
| | KaplanMeierPlotElement.CiLevel |
| | KaplanMeierPlotElement.CiType |
| | KaplanMeierPlotElement.DodgeFactor |
| | KaplanMeierPlotElement.DoGroup |
| | KaplanMeierPlotElement.Include |
| | KaplanMeierPlotElement.IntervalGeometry |
| Line Plot | LinePlotElement |
| | LinePlotElement.DodgeFactor |
| | LinePlotElement.DoGroup |
| | LinePlotElement.Include |

| | |
|----------------|---|
| | LinePlotElement.JitterX |
| | LinePlotElement.JitterY |
| | LinePlotElement.LabelColumnName |
| | LinePlotElement.LabelPositionMethod |
| | LinePlotElement.LabelRotation |
| | LinePlotElement.LabelSide |
| | LinePlotElement.LabelTilt |
| | LinePlotElement.LabelVisible |
| | LinePlotElement.LabelXOffset |
| | LinePlotElement.LabelYOffset |
| | LinePlotElement.Method |
| | LinePlotElement.SortOnX |
| | LinePlotElement.Subset |
| | LinePlotElement.Subset.Value |
| | LinePlotElement.Type |
| Pyramid Plot | PyramidPlotElement |
| | PyramidPlotElement.BinMethod |
| | PyramidPlotElement.BinNumber |
| | PyramidPlotElement.BinUnit |
| | PyramidPlotElement.Discrete |
| | PyramidPlotElement.DoGroup |
| | PyramidPlotElement.Include |
| | PyramidPlotElement.LabelsDigits |
| | PyramidPlotElement.LabelsOffset |
| | PyramidPlotElement.LabelsOuter |
| | PyramidPlotElement.LabelsRotation |
| | PyramidPlotElement.LabelsSide |
| | PyramidPlotElement.LabelsSuffix |
| | PyramidPlotElement.LabelsVisible |
| | PyramidPlotElement.Type |
| Q-Q Math Plot | QQMathPlotElement |
| | QQMathPlotElement.Distribution |
| | QQMathPlotElement.DoGroup |
| | QQMathPlotElement.Envelope |
| | QQMathPlotElement.EnvelopeLevel |
| | QQMathPlotElement.Include |
| | QQMathPlotElement.RefLineVisible |
| | QQMathPlotElement.RefLineXspan |
| Q-Q Plot | QQPlotElement |
| | QQPlotElement.DoGroup |
| | QQPlotElement.Include |
| Survival Curve | SurvivalCurvePlotElement |
| | SurvivalCurvePlotElement.CensorColumnName |
| | SurvivalCurvePlotElement.CensorMarks |
| | SurvivalCurvePlotElement.DoGroup |

| | |
|--------------|---|
| | SurvivalCurvePlotElement.Include |
| | SurvivalCurvePlotElement.IntervalGeometry |
| | SurvivalCurvePlotElement.LowerColumnName |
| | SurvivalCurvePlotElement.UpperColumnName |
| Treemap Plot | TreemapPlotElement |
| | TreemapPlotElement.AspectThreshold |
| | TreemapPlotElement.ColorLevelsColumnName |
| | TreemapPlotElement.ColorLevelsN |
| | TreemapPlotElement.ColorLevelsRange |
| | TreemapPlotElement.GroupsLabelSide |
| | TreemapPlotElement.GroupsLabelVisible |
| | TreemapPlotElement.Include |
| | TreemapPlotElement.SubGroupsColumnName |
| | TreemapPlotElement.SubGroupsLabelColumnName |
| | TreemapPlotElement.SubGroupsLabelSide |
| | TreemapPlotElement.SubGroupsLabelVisible |
| | TreemapPlotElement.SubGroupsSort |

Parameters Associated with Optional Plot Elements

You use the override parameters in this group to control various optional plot elements. Some of these override parameters only apply to a specific plot type.

| Optional Plot Element | Override Parameter Name |
|------------------------------------|--|
| Confidence Interval Plot Element | ConfidenceIntervalPlotElement |
| | ConfidenceIntervalPlotElement.DoGroup |
| | ConfidenceIntervalPlotElement.DodgeFactor |
| | ConfidenceIntervalPlotElement.Function |
| | ConfidenceIntervalPlotElement.FunctionArgs |
| | ConfidenceIntervalPlotElement.Include |
| | ConfidenceIntervalPlotElement.IntervalGeometry |
| | ConfidenceIntervalPlotElement.Jitter |
| | ConfidenceIntervalPlotElement.QuantileMethod |
| | ConfidenceIntervalPlotElement.Subset |
| | ConfidenceIntervalPlotElement.SubsetValue |
| CustomPlotElement | CustomPlotElement |
| | CustomPlotElement.Args |
| | CustomPlotElement.ElementName |
| | CustomPlotElement.Include |
| FriedmansSuperSmoothFitPlotElement | FriedmansSuperSmoothFitPlotElement |
| | FriedmansSuperSmoothFitPlotElement.Cv |
| | FriedmansSuperSmoothFitPlotElement.DoGroup |
| | FriedmansSuperSmoothFitPlotElement.Include |
| | FriedmansSuperSmoothFitPlotElement.Span |
| GroupReferenceLinePlotElement | GroupReferenceLinePlotElement |
| | GroupReferenceLinePlotElement.At |

| | |
|---------------------------------------|--|
| | GroupReferenceLinePlotElement.Between |
| | GroupReferenceLinePlotElement.DodgeFactor |
| | GroupReferenceLinePlotElement.Include |
| KernelSmootherFitPlotElement | KernelSmootherFitPlotElement |
| | KernelSmootherFitPlotElement.DoGroup |
| | KernelSmootherFitPlotElement.Include |
| | KernelSmootherFitPlotElement.Kernel |
| | KernelSmootherFitPlotElement.Span |
| LeastSquaresFitPlotElement | LeastSquaresFitPlotElement |
| | LeastSquaresFitPlotElement.Include |
| | LeastSquaresFitPlotElement.Kernel |
| | LeastSquaresFitPlotElement.Xspan |
| LinePlotConfidenceIntervalPlotElement | LinePlotConfidenceIntervalPlotElement |
| | LinePlotConfidenceIntervalPlotElement.DoGroup |
| | LinePlotConfidenceIntervalPlotElement.Function |
| | LinePlotConfidenceIntervalPlotElement.FunctionArgs |
| | LinePlotConfidenceIntervalPlotElement.Include |
| | LinePlotConfidenceIntervalPlotElement.IntervalGeometry |
| LoessFitPlotElement | LoessFitPlotElement |
| | LoessFitPlotElement.Degree |
| | LoessFitPlotElement.DoGroup |
| | LoessFitPlotElement.Evaluation |
| | LoessFitPlotElement.Family |
| | LoessFitPlotElement.Include |
| | LoessFitPlotElement.Span |
| MatrixOptions | MatrixOptions.ComparativeScale |
| | MatrixOptions.HalfMatrix |
| | MatrixOptions.MatrixLayout |
| PointPlotElement | PointPlotElement |
| | PointPlotElement.DodgeFactor |
| | PointPlotElement.DoGroup |
| | PointPlotElement.Include |
| | PointPlotElement.JitterX |
| | PointPlotElement.JitterY |
| | PointPlotElement.Subset |
| | PointPlotElement.SubsetValue |
| PolynomialFitPlotElement | PolynomialFitPlotElement |
| | PolynomialFitPlotElement.Degree |
| | PolynomialFitPlotElement.DoGroup |
| | PolynomialFitPlotElement.Include |
| | PolynomialFitPlotElement.Xspan |
| RobustLtsFitPlotElement | RobustLtsFitPlotElement |
| | RobustLtsFitPlotElement.DoGroup |
| | RobustLtsFitPlotElement.Include |
| | RobustLtsFitPlotElement.Xspan |

| | |
|-------------------------|--|
| RobustMmFitPlotElement | RobustMmFitPlotElement |
| | RobustMmFitPlotElement.DoGroup |
| | RobustMmFitPlotElement.Include |
| | RobustMmFitPlotElement.Xspan |
| SplineFitPlotElement | SplineFitPlotElement |
| | SplineFitPlotElement.Cv |
| | SplineFitPlotElement.Df |
| | SplineFitPlotElement.DoGroup |
| | SplineFitPlotElement.Include |
| SummaryLabelPlotElement | SummaryLabelPlotElement |
| | SummaryLabelPlotElement.Digits |
| | SummaryLabelPlotElement.DodgeFactor |
| | SummaryLabelPlotElement.DoGroup |
| | SummaryLabelPlotElement.Include |
| | SummaryLabelPlotElement.Method |
| | SummaryLabelPlotElement.Offset |
| | SummaryLabelPlotElement.PositionMethod |
| | SummaryLabelPlotElement.Prefix |
| | SummaryLabelPlotElement.Rotation |
| | SummaryLabelPlotElement.Side |
| | SummaryLabelPlotElement.Subset |
| | SummaryLabelPlotElement.SubsetValue |
| | SummaryLabelPlotElement.Suffix |
| SummaryTablePlotElement | SummaryTablePlotElement |
| | SummaryTablePlotElement.ColumnMethod |
| | SummaryTablePlotElement.DataColumnEdges |
| | SummaryTablePlotElement.DataRowEdges |
| | SummaryTablePlotElement.Digits |
| | SummaryTablePlotElement.DoGroup |
| | SummaryTablePlotElement.HeaderJustification |
| | SummaryTablePlotElement.HeaderVisible |
| | SummaryTablePlotElement.Include |
| | SummaryTablePlotElement.OverallVisible |
| | SummaryTablePlotElement.RowHeaderJustification |
| | SummaryTablePlotElement.RowHeaderVisible |
| | SummaryTablePlotElement.Stats |
| | SummaryTablePlotElement.Subset |
| | SummaryTablePlotElement.SubsetValue |
| | SummaryTablePlotElement.XPosition |
| | SummaryTablePlotElement.YPosition |
| TextPlotElement | TextPlotElement |
| | TextPlotElement.DodgeFactorX |
| | TextPlotElement.DodgeFactorY |
| | TextPlotElement.DoGroup |
| | TextPlotElement.Include |

| | |
|--|-----------------------------|
| | TextPlotElement.Labels |
| | TextPlotElement.OffsetX |
| | TextPlotElement.OffsetY |
| | TextPlotElement.Subset |
| | TextPlotElement.SubsetValue |

Reference Plot Elements

You use these override parameters to control the appearance of reference plot elements such as reference arrows or reference lines.

| Element Type | Override Parameter Name |
|-----------------|--|
| Reference Arrow | ReferenceArrowPlotElement |
| | ReferenceArrowPlotElement.EndHeadAspectRatio |
| | ReferenceArrowPlotElement.EndHeadOpen |
| | ReferenceArrowPlotElement.EndHeadSize |
| | ReferenceArrowPlotElement.EndHeadVisible |
| | ReferenceArrowPlotElement.Include |
| | ReferenceArrowPlotElement.Label |
| | ReferenceArrowPlotElement.LabelOuter |
| | ReferenceArrowPlotElement.LabelSide |
| | ReferenceArrowPlotElement.LabelVisible |
| | ReferenceArrowPlotElement.LabelXOffset |
| | ReferenceArrowPlotElement.LabelYOffset |
| | ReferenceArrowPlotElement.StartHeadAspectRatio |
| | ReferenceArrowPlotElement.StartHeadOpen |
| | ReferenceArrowPlotElement.StartHeadSize |
| | ReferenceArrowPlotElement.StartHeadVisible |
| | ReferenceArrowPlotElement.UseXAxisUnits |
| | ReferenceArrowPlotElement.UseYAxisUnits |
| | ReferenceArrowPlotElement.XEndPositions |
| | ReferenceArrowPlotElement.XStartPositions |
| | ReferenceArrowPlotElement.YEndPositions |
| | ReferenceArrowPlotElement.YStartPositions |
| Reference Curve | ReferenceCurvePlotElement |
| | ReferenceCurvePlotElement.Include |
| | ReferenceCurvePlotElement.Label |
| | ReferenceCurvePlotElement.LabelPositionMethod |
| | ReferenceCurvePlotElement.LabelRotation |
| | ReferenceCurvePlotElement.LabelSide |
| | ReferenceCurvePlotElement.LabelTilt |
| | ReferenceCurvePlotElement.LabelVisible |
| | ReferenceCurvePlotElement.LabelXOffset |
| | ReferenceCurvePlotElement.LabelYOffset |
| | ReferenceCurvePlotElement.XColumnName |
| | ReferenceCurvePlotElement.YColumnName |

| | |
|-----------------|---|
| Reference Point | ReferencePointPlotElement |
| | ReferencePointPlotElement.Include |
| | ReferencePointPlotElement.LabelDigits |
| | ReferencePointPlotElement.LabelPrefix |
| | ReferencePointPlotElement.LabelRotation |
| | ReferencePointPlotElement.LabelSide |
| | ReferencePointPlotElement.LabelSuffix |
| | ReferencePointPlotElement.LabelXOffset |
| | ReferencePointPlotElement.LabelYOffset |
| | ReferencePointPlotElement.Labels |
| | ReferencePointPlotElement.LabelsColumnName |
| | ReferencePointPlotElement.XColumnName |
| | ReferencePointPlotElement.XPositions |
| | ReferencePointPlotElement.YColumnName |
| | ReferencePointPlotElement.YPositions |
| Reference Text | ReferenceTextPlotElement |
| | ReferenceTextPlotElement.Include |
| | ReferenceTextPlotElement.LabelDigits |
| | ReferenceTextPlotElement.LabelPrefix |
| | ReferenceTextPlotElement.LabelRotation |
| | ReferenceTextPlotElement.LabelSide |
| | ReferenceTextPlotElement.LabelSuffix |
| | ReferenceTextPlotElement.LabelXOffset |
| | ReferenceTextPlotElement.LabelYOffset |
| | ReferenceTextPlotElement.Labels |
| | ReferenceTextPlotElement.LabelsColumnName |
| | ReferenceTextPlotElement.XColumnName |
| | ReferenceTextPlotElement.XPositions |
| | ReferenceTextPlotElement.YColumnName |
| | ReferenceTextPlotElement.YPositions |
| Reference Area | ReferenceXAreaPlotElement |
| | ReferenceXAreaPlotElement.Column |
| | ReferenceXAreaPlotElement.ColumnStats |
| | ReferenceXAreaPlotElement.ColumnStatsFactor |
| | ReferenceXAreaPlotElement.Include |
| | ReferenceXAreaPlotElement.Positions |
| | ReferenceYAreaPlotElement |
| | ReferenceYAreaPlotElement.Column |
| | ReferenceYAreaPlotElement.ColumnStats |
| | ReferenceYAreaPlotElement.ColumnStatsFactor |
| | ReferenceYAreaPlotElement.Include |
| | ReferenceYAreaPlotElement.Positions |
| Reference Line | ReferenceAbLinePlotElement |
| | ReferenceAbLinePlotElement.Include |
| | ReferenceAbLinePlotElement.Intercept |

| |
|--|
| ReferenceAbLinePlotElement.Label |
| ReferenceAbLinePlotElement.LabelVisible |
| ReferenceAbLinePlotElement.Position |
| ReferenceAbLinePlotElement.Rotation |
| ReferenceAbLinePlotElement.Side |
| ReferenceAbLinePlotElement.Slope |
| ReferenceDegreesLinePlotElement |
| ReferenceDegreesLinePlotElement.Angle |
| ReferenceDegreesLinePlotElement.Include |
| ReferenceDegreesLinePlotElement.Label |
| ReferenceDegreesLinePlotElement.LabelPosition |
| ReferenceDegreesLinePlotElement.LabelRotation |
| ReferenceDegreesLinePlotElement.LabelSide |
| ReferenceDegreesLinePlotElement.LabelVisible |
| ReferenceXLinePlotElement |
| ReferenceXLinePlotElement.Column |
| ReferenceXLinePlotElement.ColumnStats |
| ReferenceXLinePlotElement.ColumnStatsFactor |
| ReferenceXLinePlotElement.ColumnStatsLabel |
| ReferenceXLinePlotElement.ColumnStatsLabelPosition |
| ReferenceXLinePlotElement.ColumnStatsLabelRotation |
| ReferenceXLinePlotElement.ColumnStatsLabelSide |
| ReferenceXLinePlotElement.Include |
| ReferenceXLinePlotElement.Positions |
| ReferenceXLinePlotElement.PositionsLabel |
| ReferenceXLinePlotElement.PositionsLabelPosition |
| ReferenceXLinePlotElement.PositionsLabelRotation |
| ReferenceXLinePlotElement.PositionsLabelSide |
| ReferenceYLinePlotElement |
| ReferenceYLinePlotElement.Column |
| ReferenceYLinePlotElement.ColumnStats |
| ReferenceYLinePlotElement.ColumnStatsFactor |
| ReferenceYLinePlotElement.ColumnStatsLabel |
| ReferenceYLinePlotElement.ColumnStatsLabelPosition |
| ReferenceYLinePlotElement.ColumnStatsLabelRotation |
| ReferenceYLinePlotElement.ColumnStatsLabelSide |
| ReferenceYLinePlotElement.Include |
| ReferenceYLinePlotElement.Positions |
| ReferenceYLinePlotElement.PositionsLabel |
| ReferenceYLinePlotElement.PositionsLabelPosition |
| ReferenceYLinePlotElement.PositionsLabelRotation |
| ReferenceYLinePlotElement.PositionsLabelSide |

Not Implemented

This section lists the filter-related parameters that you cannot use as an override parameter.

| Parameter |
|---------------------------|
| Filter.Direction |
| Filter.DirectionN |
| Filter.FilterByColumnName |
| Filter.IncludeLower |
| Filter.IncludeUpper |
| Filter.LowerValue |
| Filter.TargetColumnName |
| Filter.UpperValue |

Technical Support

For technical support, please visit <http://spotfire.tibco.com/support> and register for a support account.