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Rational Test RealTime XRD File Format v1.0



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1. Generality

An XRD file is an XML file and it is composed of two parts. The first part is the xrod:node element to qualify a set of APIDOC items by a test semantic. The second part is the APIDOC items that describe a presentation of a report document.

An XRD file always begins by the two tags <XROD><APIDOC> and finishes by the two tags </APIDOC></XROD>. Another element appears between this tags.

An XRD file can be shown in the Report Viewer by opening a .xrd file in the Test RealTime's Studio GUI.

2. XROD node

A XROD:node is used to show a node in the report tree and to qualify a part of the report document by semantic test value. The XROD:node indicates that two followings thing :

- this part of a document is wrong or correct.
- this part of the document describes a test, a message or any user type.

The report viewer can only show the wrong part of a report document or show only the part of a document related to a particular type.

```
<xrod:node name="foo" type="message" state="OK" icone="good.xpm">  
<text>bla bla bla</text>  
</xrod:node>
```



It contains four attributes.

- **Name** : the name that appears in the tree.
- **Type** : a string which gives the type of the part of the XRD.
- **State** : the state of the piece of document (OK|KO|?).
- **Icone** : the file name of an icon (cf. [image item](#)) before the name in the tree.



3. APIDOC items

The attributes written in *italic* & **bold** are required. All tags and their attributes must be written in upper case.

3.1 Color

```
<COLOR ID="black" R="0" G="0" B="0" />
```

The color tag defines a new color into the XRD document .
It contains four attributes.

- ***Id*** : is an identifier of the color. It should be an unique name in the XRD
- R, G, B : is the red, green and blue value defined between 0 and 255

3.2 Font

```
<FONT ID="arial-10" NAME="arial" SIZE="10" STYLE="0" />
```

The font tag defines a new font into the XRD document . It contains four attributes.

- ***Id*** : is an identifier of the font. It should be an unique name in the XRD
- Name : is a name of the font's family (arial, courier ...)
- Size : is the size of the font in point (pixel)
- Style : is the style of the font (normal=0, italic=1, bold=2, underline=4). You can combine value to create a font with bold + italic style.

3.3 Style

```
<STYLE NAME="Normal" FONT="arial-10" FORECOLOR="black"  
BACKCOLOR="white">
```

The style tag defines a new style into the XRD document . A Style is associated to an apidoc element to give its color and font. It contains four attributes.

- ***Id*** : is an identifier of the font. It should be an unique name in the XRD
- Font : the style's font (is equal to a valid font id).
- Forecolor : the color of the text (is equal to a valid color id).
- Backcolor: : the color of the background text (is equal to a valid color id).



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3.4 Document

```
<DOCUMENT TITLE="foo" TAG="doc1" STYLE="Normal">...</DOCUMENT>
```

This tag starts a new document in the XRD. A document is made of by several [Sections](#). It has three attributes:

- **Title** : is a string that gives the title of the document.
- **Tag** : an identifier to reference a document in a [link](#).
- **Style** : the style of the document (is equal to a valid [style](#) id).

3.5 Section

```
<SECTION TAG="sec1" STYLE="Normal">...</SECTION>
```

This tag starts a new section in a [document](#). A section contains one or more [paragraphs](#). It has two attributes:

- **Tag** : an identifier to reference a section in a [link](#).
- **Style** : the style of the section (is equal to a valid [style](#) id).

3.6 Header & Footer

```
<HEADER STYLE="Normal">...</HEADER>
<FOOTER STYLE="Normal">...</FOOTER>
```



Printed page

These tags start a new header or footer in a [section](#). A header or a footer can contain every APIDOC tags except a document or section tag. There is only one header or footer in a section.

It has one attribut:

- **Style** : the style of the header/footer (is equal to a valid [style](#) id).

3.7 Title

```
<TITLE LEVEL="0" tag="sec1" STYLE="Normal">...</TITLE>
```

1 -Report Information
 It was a little ship



Reference : RATL\ST\EM\101\2003-1

This tag starts a new title in a [section](#). A title can contain [text](#), [image](#), [data](#), [graphic](#), [link](#) and [popup-link](#) items. It has three attributes:

- **Level** : the level of the title is used to number automatically the hierarchical title in a document
- **Tag** : an identifier to reference a title in a [link](#).
- **Style** : the style of the link (is equal to a valid [style](#) id).

3.8 Break Page

```
<BREAKPAGE />
```

Inserts a break page in a [section](#). This tag is used by the print driver to print the follow of the document on another page.

3.9 Paragraph

```
<PARAGRAPH ALIGN="LEFT" STYLE="Normal">...</PARAGRAPH>
```

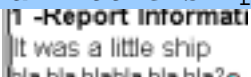
Adds a new paragraph in a [section](#). A paragraph can contain [text](#), [image](#), [data](#), [graphic](#), [link](#), [popup](#), [popup-link](#), [table](#), [tag](#), [summary](#), [index](#) items.

It has two attributes:

- **Align** : sets the alignment of the paragraph (LEFT, RIGHT, CENTER)
- **Style** : the style of the link (is equal to a valid [style](#) id).

3.10 Text

```
<TEXT STYLE="Normal">It was a little ship</TEXT>
```



Inserts a new piece of text. A text is a string of character.

It has one attribut:

- **Style** : the style of the link (is equal to a valid [style](#) id).

3.11 Image

```
<IMAGE NAME="cvi_magglass.xpm" STYLE="Normal" />
```



Inserts an image in the document. It has two attribut:



Reference : RATL\ST\EM\101\2003-1

- **Name** : name of the image file. This name is used by the GUI report viewer to find the pixmap file in its directory (TestRealTime directory/lib/pixmap). You can use xpm and png image file format.
- **Style** : the style of the link (is equal to a valid [style](#) id).

3.12 Table

```
<TABLE BORDER="1" WIDTH="70,10,10,10" STYLE="Normal">
<ROW>
  <CELL>
    <PARAGRAPH ALIGN="CENTER"><TEXT>Variable</TEXT></PARAGRAPH>
  </CELL>
  <CELL_TEXT>init</CELL_TEXT>
  <CELL_TEXT>ev</CELL_TEXT>
  <CELL_TEXT>ov</CELL_TEXT>
</ROW>
<ROW>
  <CELL><PARAGRAPH ALIGN="CENTER">
    <IMAGE NAME="cvi_magglass.xpm" />
    <TEXT>index</TEXT></PARAGRAPH>
  </CELL>
  <CELL_TEXT>0</CELL_TEXT>
  <CELL_TEXT>1</CELL_TEXT>
  <CELL_TEXT>2</CELL_TEXT>
</ROW>
</TABLE>
```

Variable	init	ev	ov
index	0	1	2

Inserts table in the document. A table contains several rows.

It has three attributes:

- **Border** : size in pixel of the table and cell border. To hide the border set to 0.
- **Width** : contains a list of numbers separated by comma and set the percent of each column.
- **Style** : the style of the link (is equal to a valid [style](#) id).

3.12.1 Row

```
<ROW STYLE="Normal">
  <CELL>
    <PARAGRAPH ALIGN="CENTER"><TEXT>Variable</TEXT></PARAGRAPH>
  </CELL>
  <CELL_TEXT>init</CELL_TEXT>
  <CELL_TEXT>ev</CELL_TEXT>
  <CELL_TEXT>ov</CELL_TEXT>
```




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</ROW>

Adds a row in the [table](#).

It has two attributes:

- Style : the style of the link (is equal to a valid [style](#) id).

3.12.2 Cell

```
<TABLE BORDER="1">
<ROW>
<CELL ROWSPAN="0" COLSPAN="0" STYLE="Normal">
  <PARAGRAPH ALIGN="CENTER"><TEXT>Col1</TEXT></PARAGRAPH>
</CELL>
<CELL ROWSPAN="0" COLSPAN="0" STYLE="Normal">
  <PARAGRAPH ALIGN="CENTER"><TEXT>Col2</TEXT></PARAGRAPH>
</CELL>
</ROW>
<ROW>
<CELL ROWSPAN="0" COLSPAN="1" STYLE="Normal">
  <PARAGRAPH ALIGN="CENTER"><TEXT>Hi, I write in the right cell
</TEXT></PARAGRAPH>
</CELL>
</ROW>
</TABLE>
```

	Col1	Col2
	Hi, I write in the right cell	

Adds a cell in the [row](#). A cell can contain 0 or more [paragraphs](#) and all paragraph's items.

It has three attributes:

- Rowspan : number or row that the cell is expanded.
- Colspan : number or cell that the cell is expanded on the right.
- Style : the style of the link (is equal to a valid [style](#) id).

3.12.3 Cell Text

```
<CELL_TEXT>init</CELL_TEXT>
```

Adds a cell text in the [row](#). A cell text is an optimization of the cell. A CELL_TEXT is a cell that just contains a text.

It has the same attributes of a cell:



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3.13 List

```
<LIST TYPE="BULLETED" STYLE="Normal">
<PARAGRAPH><TEXT>1st item</TEXT></PARAGRAPH>
<TEXT>2nd item</TEXT>
<IMAGE NAME="cvi_magglass.xpm" STYLE="Normal" />
</LIST>

<LIST TYPE="NUMBERED" STYLE="Normal">
<PARAGRAPH><TEXT>1st item</TEXT></PARAGRAPH>
<TEXT>2nd item</TEXT>
<TEXT>3rd item </TEXT>
</LIST>
```

Inserts a list in the document. A list can contains [paragraphs](#) and all paragraph's items. Each item or paragraph in a list is written on a line. The prefix of a list item depends of the *Type* 's value
 It has two attributes:

- **Type** : type of the list item's prefix (BULLETED, NUMBERED)
- **Style** : the style of the link (is equal to a valid [style](#) id).

3.14 Link

```
<LINK TARGET="here1" STYLE="Normal">
<TEXT>go to</TEXT>
<IMAGE NAME="cvi_magglass.xpm" />
</LINK>
```



Inserts a list in the document. A list can contains [paragraphs](#) and all paragraph's items. Each item or paragraph in a list is written on a line. The prefix of a list item depends of the *Type* 's value
 It has two attributes:

- **Target** : the target with the following syntax :
 <document tag>:<section tag>:<tag>
 section and document are implied
- **Style** : the style of the link (is equal to a valid [style](#) id).



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3.15 Popup & popup link

3.15.1 Popup definition

```
<POPOP TAG="popup1" STYLE="Normal" >
<PARAGRAPH><TEXT>1st item</TEXT></PARAGRAPH>
<text>2nd item</text>
<IMAGE NAME="cvi_magglass.xpm" />
</POPOP>
```

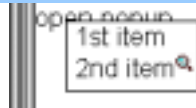
Inserts a popup definition. A popup is a piece of document that appears on the document only if the popup link is clicked. The content of the popup is shown in another window. A popup can contain all [APIDOC items](#) except document, section, index, summary, header and footer.

It has two attributes:

- **Tag** : identifier of the popup to reference it in a popup link.
- **Style** : the style of the link (is equal to a valid [style id](#)).

3.15.2 Popup use

```
<PLINK TARGET="popup1" METHOD="POINTER" STYLE="Normal" >open
popup</PLINK>
```



Inserts a popup link that references a [popup definition](#). A popup is a piece of document that appears on the document only if the popup link is clicked. The content of the popup is shown in another window. A popup can contain all [APIDOC items](#) except document, section, index, summary, header and footer.

It has two attributes:

- **Tag** : identifier of the popup definition
- **method** : defines how the popup has to be opened.
 - DETACHED : in another document view
 - POINTER : in a popup window when the user click with the pointer on the link.
 - TOOLTIP : in a popup window when the user move the mouse on the link.
- **Style** : the style of the link (is equal to a valid [style id](#)).

3.16 Tag

```
<TAG NAME="here" />
```



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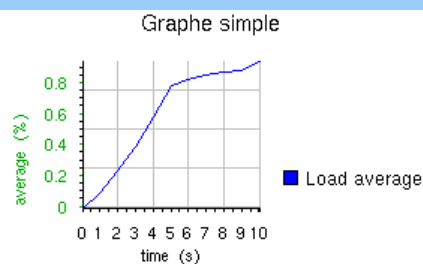
Inserts a label in the document to reference a part of the document. The report viewer can scroll to show this part of the document. A Tag can be referenced by a [link](#).

It has one attribute:

- **Name** : identifier of the tag.

3.17 Graphic

```
<GRAPHIC TITLE="Graphe simple" TYPE="XY" STYLE="graph" WIDTH="50"
HEIGHT="33">
  <AXIS NAME="x" UNIT="(s)" TITLE="time" UNITS="1" LINES="2"
DOTS="0.5" STYLE="axis"/>
  <AXIS NAME="y" UNIT="(%)" TITLE="average" UNITS="0.2"
LINES="0.25" DOTS="0.05" STYLE="axis_y"/>
  <CURVE TYPE="LINE" NAME="Load average" STYLE="curve1">
    <POINT x="0" y="0" />
    <POINT x="1" y="0.1" />
    <POINT x="2" y="0.25" />
    <POINT x="3" y="0.4" />
    <POINT x="4" y="0.6" />
    <POINT x="5" y="0.8" />
    <POINT x="6" y="0.84" />
    <POINT x="7" y="0.87" />
    <POINT x="8" y="0.89" />
    <POINT x="9" y="0.90" />
    <POINT x="10" y="0.95" />
  </CURVE>
</GRAPHIC>
```



Inserts a graphic in the document.

This tag has five attributes:

- **Title** : title of the graphic
- **Tag** : identifier used by [link](#) to reference a graphic.
- **Type** : graphic's type (XY | SECTORS | HISTOGRAM | HISTORS | BARGRAPH | XYZ | SURFACE)
- **Display** : to configure the legend's display (GRAPH|LEGEND|NOLEGEND|FULL). You can combine the different value.
- **Width** : the size in percent of document's width.
- **Height** : the size in percent of graphic's width.



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- T : angular Teta radius factor for the view of a 3D graph.
- P : angular Phy radius factor for the view of a 3D graph.
- Style : the style of the link (is equal to a valid [style id](#)).

3.17.1 Graphic Types

XY	SECTORS	HISTOGRAM	HISTORS
<p>Grphe simple</p> <p>average (%)</p> <p>time (s)</p> <p>Load average</p>	<p>Secteur 1</p> <p>0.6% 0.3% 0.2% 0.1% 0.3% 0.8%</p> <p>valeur 1 valeur 2 valeur 3 valeur 4 valeur 5 valeur 6</p>	<p>Histo/Line/Points</p> <p>average (%)</p> <p>time (s)</p> <p>Histo 1 Courbe 2 Points 3</p>	<p>Global Coverage (S)</p> <p>64.6% 74.7% 82.2% 32.1% 43.3% 76.7% 57% 33.4%</p> <p>BS BI BL BA AP CE CC MC</p>
BARGRAPH	XYZ	SURFACE	
<p>Global Coverage (H)</p> <p>Coverage %</p> <p>82 74.7 34.1 33 45.7 67.6 43 32.1</p> <p>Statements Block Decisions Loops Atc Calls Basic Condition Modified Condition Compound Condition</p>	<p>Polar</p> <p>average</p> <p>time</p> <p>PolarTrade</p>	<p>SURFACE</p> <p>ord. (Y)</p> <p>ord. (Z)</p> <p>Reduced Nominal Failure</p>	

3.17.2 Axes

```
<AXIS NAME="x" UNIT="(s)" TITLE="time" UNITS="1" LINES="2"
DOTS="0.5" STYLE="axis"/>
```

Adds an axis in the [graphic](#). A graphic can contain one, two or three axis.

This tag has 9 attributes:

- **Name** : axis name.
- **Title** : axis title.
- **Unit** : unit name.
- **Units** : distance between 2 unit labels
- **Lines** : distance between 2 grid lines
- **Dots** : distance between 2 subdivision of a Units.
- **Min** : minimum value of the axis.
- **Max** : maximum value of the axis.
- **Style** : the style of the link (is equal to a valid [style id](#)).

3.17.3 Curves

```
<CURVE TYPE="LINE" NAME="Load average" STYLE="curvel">
```



Reference : RATL\ST\EM\101\2003-1

```
<POINT x="0" y="0" />  
<POINT x="1" y="0.1" />  
...  
</CURVE>
```

Adds a curve in the [graphic](#). A curve contains several [points](#).
This tag has three attributes:

- Type : axis name.
- **Name** : axis title.
- Style : the style of the link (is equal to a valid [style](#) id).

3.17.4 Points

```
<POINT x="5" y="0.8" ... />
```

Adds a point in a curve. A curve can contain infinite point.
This tags has an attribute per each axis name. For example if you define two axis X and Y in the graphic, you should write two coordinates named x & y to add a point.

3.18 Data

Reserved

3.19 Index

Not yet implemented

3.20 Summary

Not yet implemented