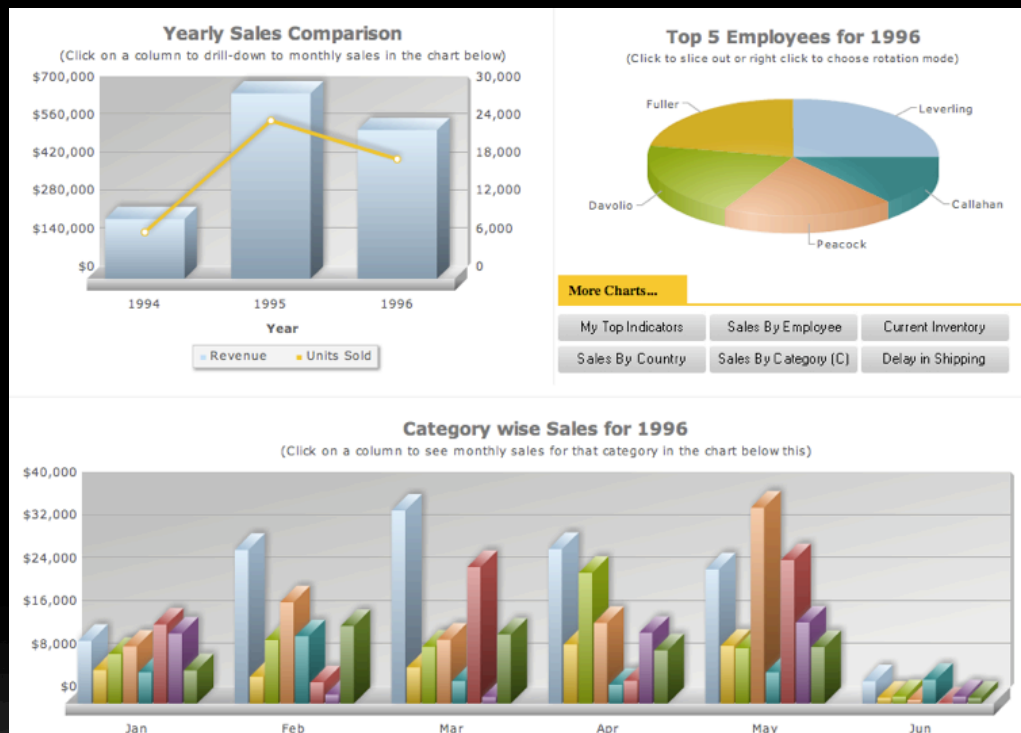


Collaborate 2008 - Denver

Advanced Charting in Application Express



- Co-founder of Apex Evangelists
- Used Oracle since version 7
- Oracle Consultant for over 4 years
- Vice President of the IOUG APEX SIG
- Creator of the ‘famous’
World Cup 2006 Application
- ‘Dimitri.Gielis@AE’ in the Application Express forums
- Presenter at IOUG, ODTUG, OOW, UKOUG, ...
- OCP 8i/9i/10g



- Who's using APEX 3.1?
- Who knows charts in APEX?

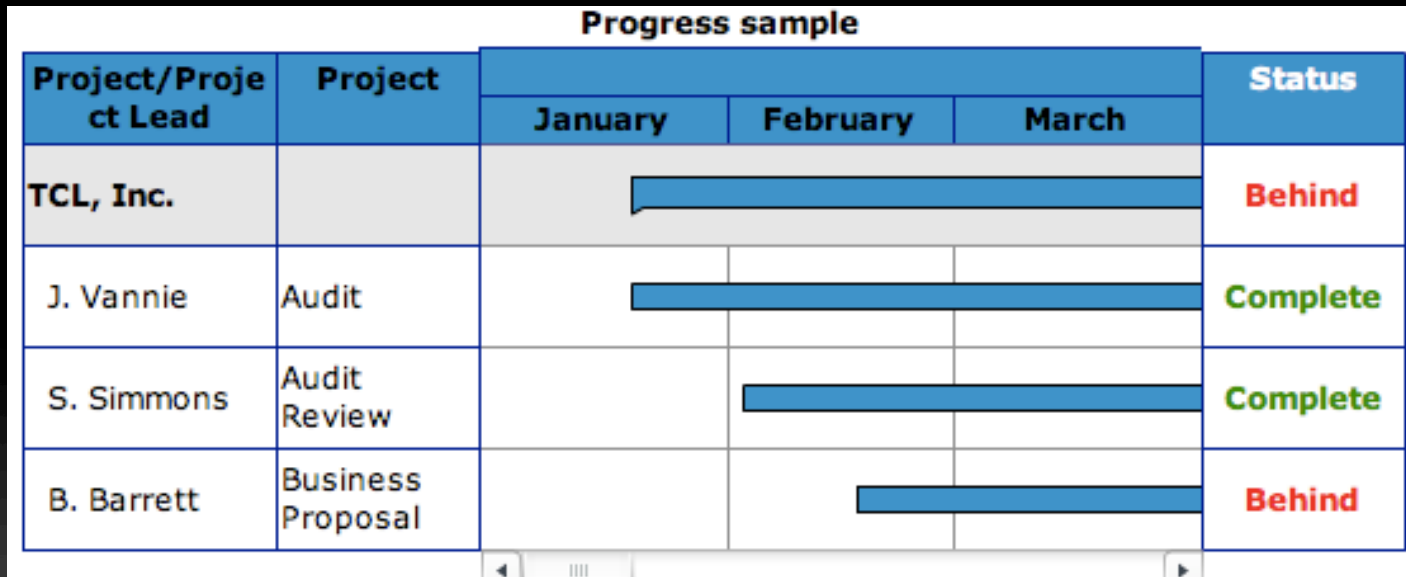
- Goals
 - Explanation of Charts in Oracle Application Express
 - Give an example to have nicer charts by using a 3rd Party integration of charts

- Non-Goals
 - Know all types of charts

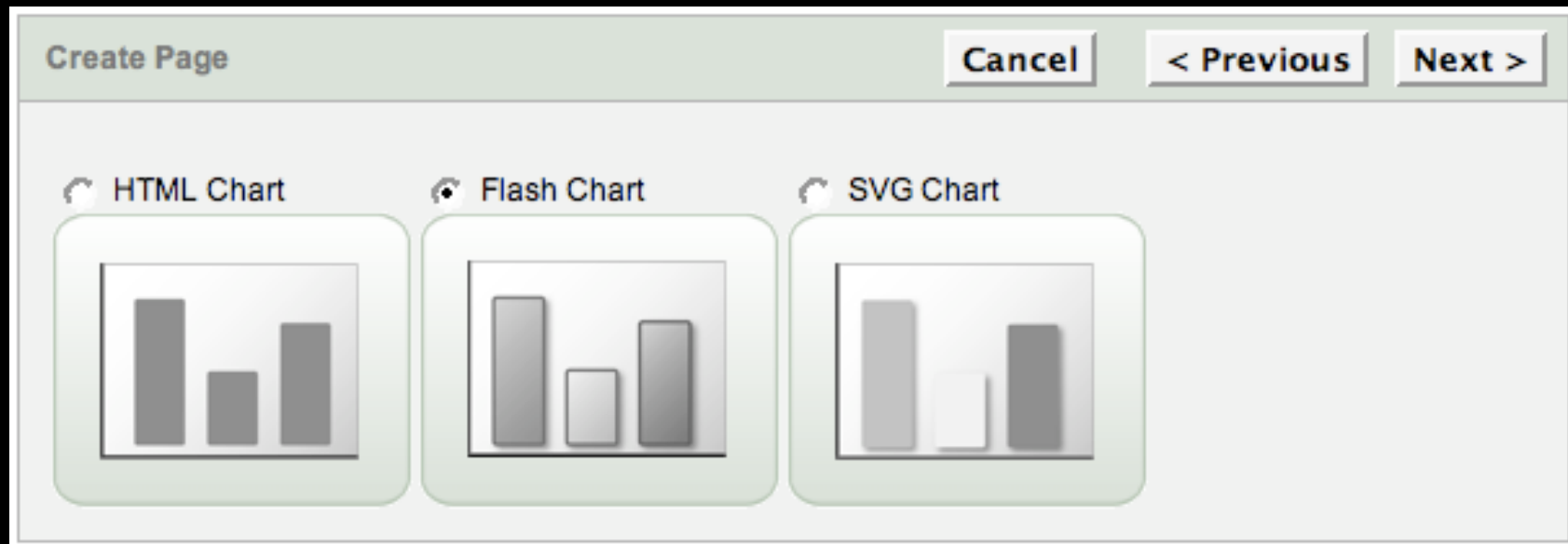


- Insights into the out-of-the-box charting possibilities in APEX
- Learn how to fully use the Flash charting potential of APEX
- What if you want more? Charting beyond APEX

- More and more people prefer to have a graphical representation about their data
- A picture shows more than thousand words

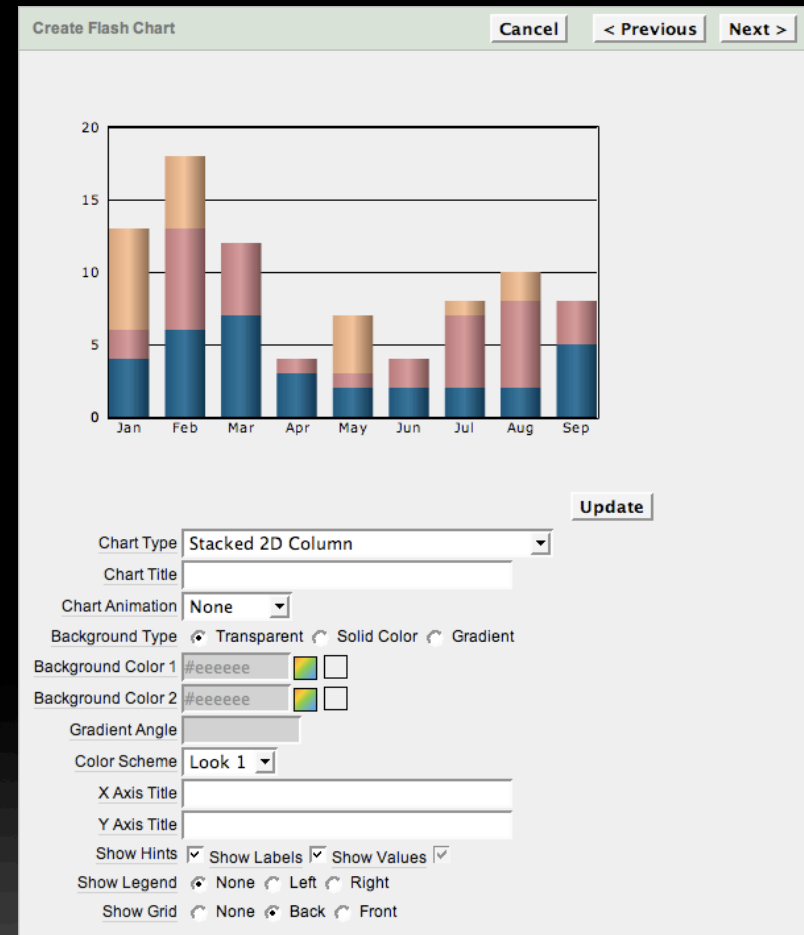


Create a Flash Chart region



Customize the chart with

- a title
- an animation
- color
- X and Y axis titles
- hints, labels and values
- a legend and a grid



Add a Serie to get data in the chart:

- SQL Query
- PL/SQL function returning a SQL Query

Create Region Cancel < Previous Next > Create Region

Page: 5 - Chart 5
Region Title: e

* Enter SQL Query or PL/SQL function returning a SQL Query:

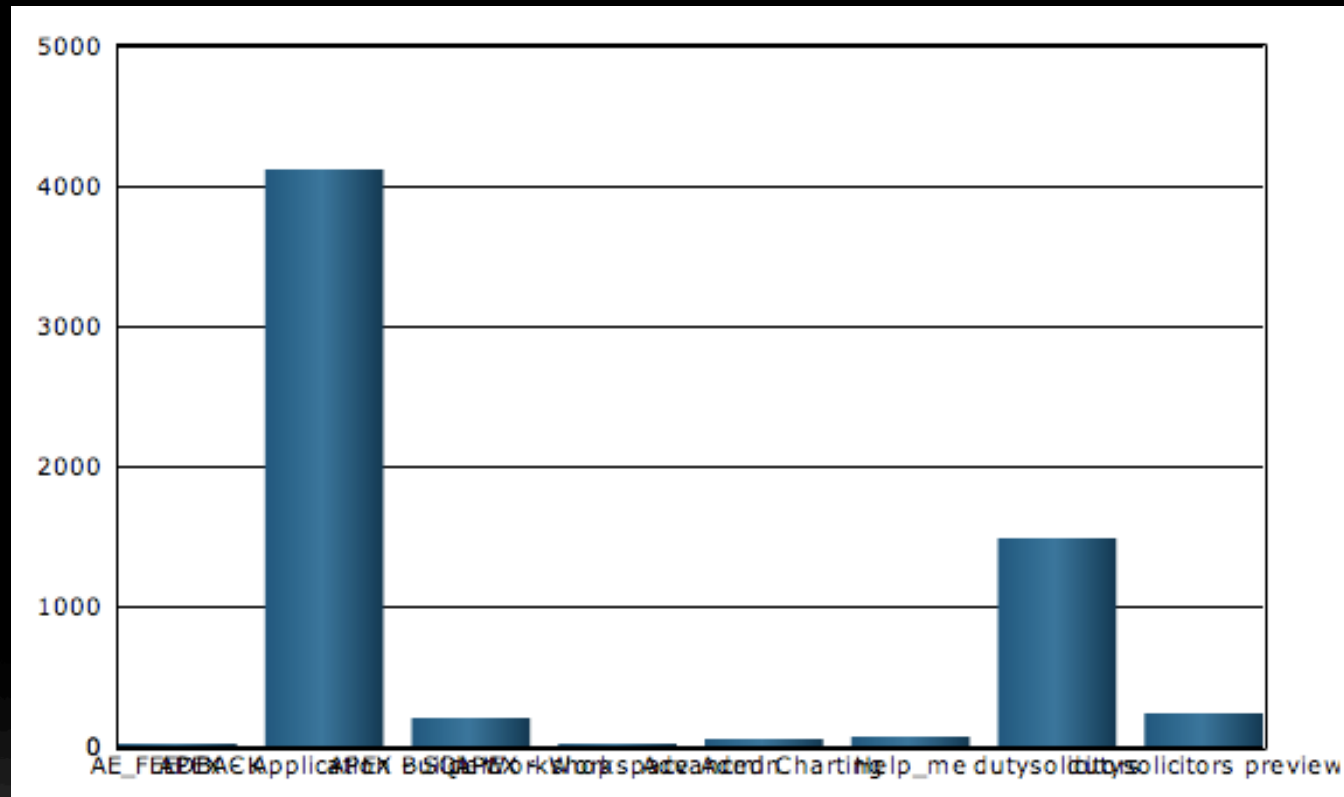
```
select null as link, application_name as label, count(*) as clicks
from apex_workspace_activity_log
group by application_name
order by application_name
```

Build Query

When No Data Found Message
No data found.

➤ Chart Query Example for Stacked 2D Column
➤ Items

Run the page



Charts in APEX

- Based on Anychart 3

Remark: Anychart 4.2 is already out

- Exists out of 2 parts:
 - swf-file (Flash file)
 - data in xml format

Understanding the code (swf-file in HTML)

```
<object classid="clsid:D27CDB6E-AE6D-11cf-96B8-444553540000"
  codebase="http://download.macromedia.com/pub/shockwave/cabs/flash/swflash.cab#version=6,0,0,0"
  width="600"
  height="400"
  id="c805338521098862158"
  align="">
<param name="movie" value="/i/flashchart/Stacked2DColumn.swf?XMLFile=http://apex.shellprompt.net/pls/apex/apex_util.flash?
p=1100:5:121584562325720:FLOW_FLASH_CHART_R805338521098862158_en-us">
<param name="quality" value="high">
<param name="allowScriptAccess" value="sameDomain">
<param name="allowNetworking" value="all">
<param name="scale" value="noscale">
<param name="wmode" value="transparent">
<param name="FlashVars" value="waiting=Loading data. Please wait.&loading=Loading data...">
<embed src="/i/flashchart/Stacked2DColumn.swf?XMLFile=http://apex.shellprompt.net/pls/apex/apex_util.flash?
p=1100:5:121584562325720:FLOW_FLASH_CHART_R805338521098862158_en-us"
  quality="high"
  width="600"
  height="400"
  name="c805338521098862158"
  scale="noscale"
  align=""
  allowScriptAccess="sameDomain"
  allowNetworking="all"
  type="application/x-shockwave-flash"
  pluginspage="http://www.macromedia.com/go/getflashplayer"
  wmode="transparent"
  FlashVars="waiting=Loading data. Please wait.&loading=Loading data...">
</embed>
</object>
<script type="text/javascript" language="javascript">
function chart_r805338521098862158_InitRefresh(pNow) {
  setTimeout("chart_r805338521098862158_InitRefresh(true)",10000);
  if (pNow){apex_RefreshChart (5, '805338521098862158', 'en-us');}
}
apex_SWFFormFix('c805338521098862158');
</script>
```

Understanding the code (xml data)

```
- <root>
- <type>
- <chart type="Stacked 2DColumn" minimum_value="0" maximum_value="5000">
  <animation enabled="no"/>
  <hints auto_size="yes">
    <text>{NAME}, {VALUE}</text>
    <font type="Verdana" size="10" color="0x"/>
  </hints>
  <names show="no"/>
  <values show="no" prefix="" postfix="" decimal_separator="." decimal_places="0"/>
  <arguments show="no"/>
  <column_chart column_space="3" block_space="12">
    <border enabled="no"/>
    <block_names enabled="yes" placement="chart" position="bottom">
      <font type="Verdana" size="10" color="0x"/>
    </block_names>
    <background type="gradient">
      + <alphas></alphas>
      + <ratios></ratios>
    </background>
  </column_chart>
</chart>
- <workspace>
  <background enabled="yes" type="solid" color="0xffffffff" alpha="0"/>
  <base_area enabled="no"/>
  <chart_area enabled="yes" x="60" y="50" width="490" height="300" deep="0">
    <background enabled="no"/>
    <border enabled="yes" size="1"/>
  </chart_area>
  <grid>
    <values lines_step="1000">
      <captions>
        <font type="Verdana" size="10" color="0x"/>
      </captions>
    </values>
  </grid>
</workspace>
<legend enabled="no"/>
</type>
- <data>
- <block name="AE_FEEDBACK">
  <set name="Clicks" value="23" color="0x005381">
    + <background type="gradient"></background>
  </set>
</block>
```

To see the xml data:

- **Go to url:** http://apex.shellprompt.net/pls/apex/apex_util.flash?p=1100:5:121584562325720:FLOW_FLASH_CHART_R805338521098862158_en-us
- XML tree exists out of:
 - **Type:** describes the chart type and how the chart needs to look like inside
 - **Data:** contains blocks of data that will be used to draw the chart
- **Tip:** A complete XML reference for the Flash Charting Component can be found on the Anychart website

Live Demo

Live Demo

Implementing other 3rd party charts is
There're also other 3rd party charting
facilities

- Anychart / AnyMap / AnyGantt
- Fusion Charts / Fusion Gadgets
- Maani XML/SWF Charts

- How is Anychart integrated into Oracle Application Express
- How to create a Flash chart in APEX
- How to enhance it
- How to get more out of the charting

Q & A

- More information

- Websites

- Oracle Application Express Homepage: <http://apex.oracle.com>
 - Anychart website: <http://www.anychart.com/home/>
 - Fusion Charts: <http://www.fusioncharts.com/>
 - Fusion Gadgets: <http://www.fusioncharts.com/gadgets/Gallery.asp>
 - Maani XML/SWF Charts: http://www.maani.us/xml_charts/

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