Reporting Tool P6 Visualizer

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Biography

- **Industry / Company Employment**
  - Cobec Consulting Inc. (2017 – Present)
  - Kitchell (2008 – 2017)
  - Freescale Semiconductor (2004-2007)
- **Education / Certification**
  - BS, Chemical Engineering, KU
  - EIT, PMP, PSP
- **Professional Experience**
  - Sr. Consultant, Cobec, FAA TAMR program
- **Something You Don't Know About Me**
  - Avid user of MOS (My Oracle Support)

Introduction

- Release 8.3 of Oracle® Primavera P6℠ in 2013 introduces P6 Visualizer℠.
- P6 Visualizer is a graphical reporting tool:
    - Gantt charts with Grid option
    - Timescaled Logic Diagram (TSLD)
    - Schedule Comparison (former Claim Digger)
- This overview is not exhaustive, but rather focuses on a few selected Visualizer features:
    - Stacked columns in Grid
    - List of steps as a field in the activity table
    - Zoomed area within existing timescale in TSLD
    - Formatted bars and labels

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Introduction

- Layouts are created using
  - P6 Visualizer with Primavera P6 Professional 18.8.2
  - P6 database hosted in MS SQL Server 2014
  - Sample P6 data for engineering and construction
- Also applicable to:
  - Oracle Primavera EPPM
  - Oracle P6 database
  - SQLite P6 database
- P6 users can follow instructions in this presentation using P6 Visualizer release 16.1 and later

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Presentation Outline

- ## P6 Visualizer Overview
  - Launching & Access Options
  - Features & Issues Resolved

- ## P6 Visualizer Layouts
  - Gantt 'Activities with Steps and Notes'
  - TSLD 'Baseline Comparison'
  - Schedule Comparison

- ## P6 Visualizer Print Options
  - XML & batch file samples
  - List of steps as a field in the activity table
  - Automation via Windows Task Scheduler

- ## Conclusion
- ## Questions / Comments

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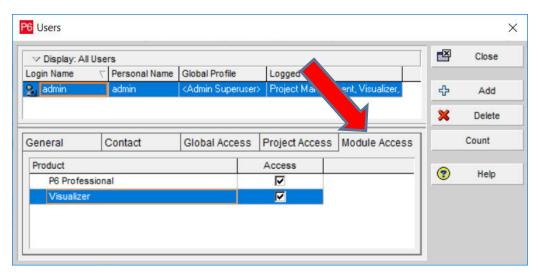## CONSULTING

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P6 Visualizer Overview

Launching & Access Options
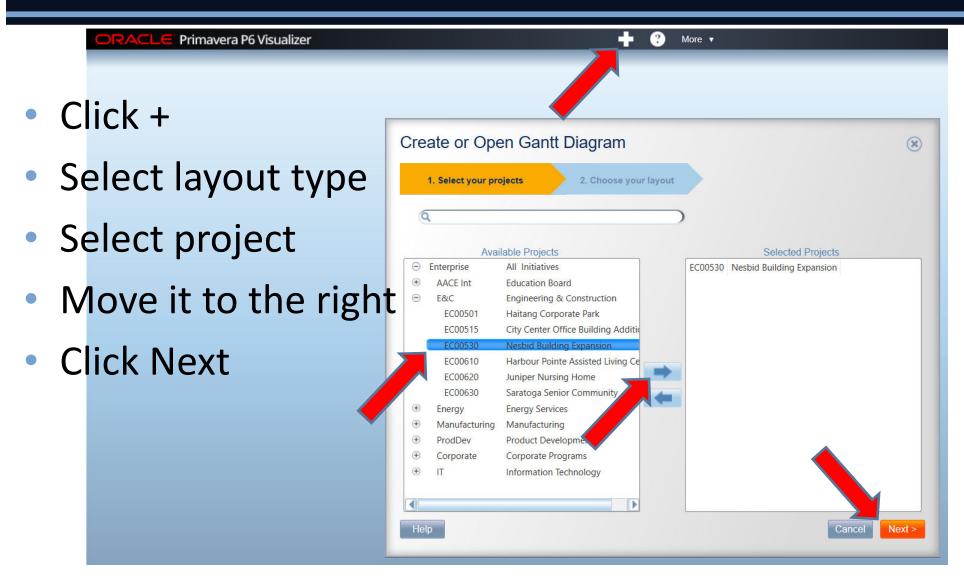Features & Issues Resolved

Launching & Access Options

- Visualizer is a desktop application included as part of P6 installation.

- With release 15.1, P6 Administrators can control permission to Visualizer via **Module Access**:

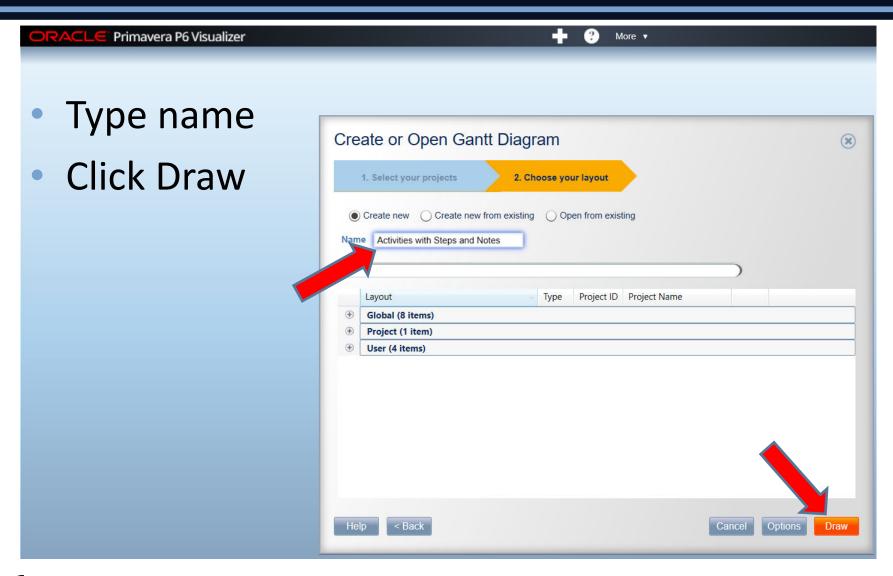- Launch from Start menu or via P6 Tools -> Visualizer.

Launching & Access Options

- Click +
- Select layout type
- Select project
- Move it to the right
- Click Next

Launching & Access Options

- Type name
- Click Draw

Features

- Oracle Learning Library (OLL) contains training content for Visualizer: https://oracle.com/goto/oll

Version	Visualizer New Features
8.3	New tool is released to enable creation of customizable Gantt charts and timescaled logic diagrams for time-based reporting.
8.4	New functionality enables user to add legends to headers and footers, add shifts as date intervals, copy chart bar settings, and manage multiple layouts simultaneously.
15.1	Access to Visualizer can now be granted via Module Access section for P6 users; Visualizer layouts can be exported/imported in .vlf file type, as well as imported from P6 layout files with the .plf file type.
16.1	Schedule Comparison (formerly known as Claim Digger) is launched in P6 Visualizer.

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Issues Resolved

- All subsequent patch sets include the fixes from prior patch sets.

- These four bugs have been corrected across several releases of P6:

Version	Bug ID	Title/Issues Resolved
17.12.1	**27332090**	Error when removing search in Visualizer then selecting Add
16.2.12.0	**27332080**	
17.12.1	**27294403**	Visualizer grouping in Group & Sort disappears at refresh after choosing blank
16.2.12.0	**27294333**	
15.2.17.0	**24965437**	
17.11.0	**26819889**	Filter is not applied in the Visualizer layout
16.2.10.0	**26115433**	
16.2.10.0	**26647087**	Visualizer fails to connect to database over SSL protocol (db direct connection)
15.2.16	**25741977**	

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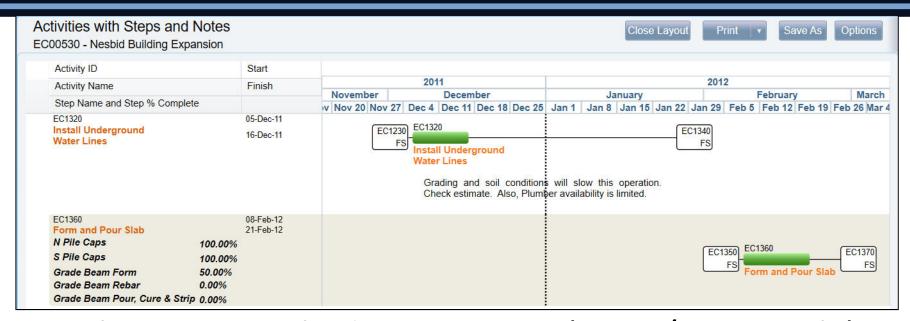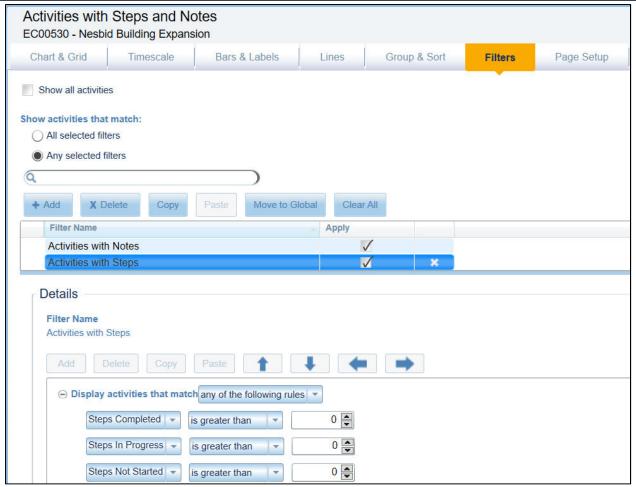
P6 Visualizer Layouts

Gantt 'Activities with Steps and Notes'
TSLD 'Two Week Look Ahead'
Schedule Comparison
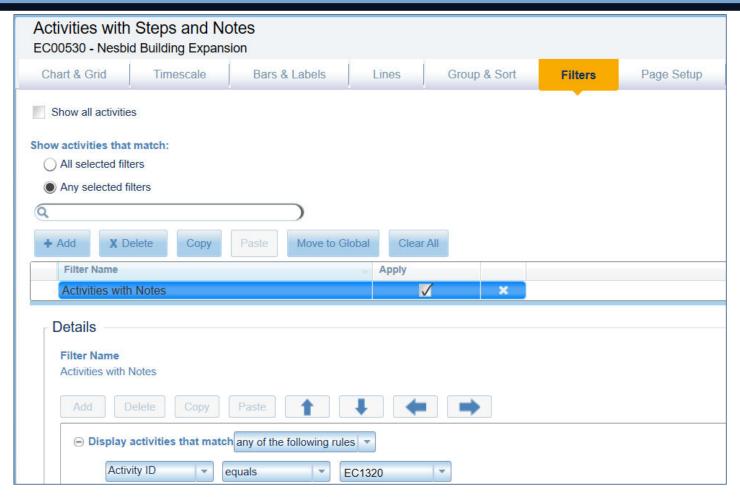
'Activities with Steps and Notes'

- Filters are applied to activities (steps/notes only)
- Activities filtered out are shown as a reference
- Custom formatting is applied to labels
- Timescale is customized
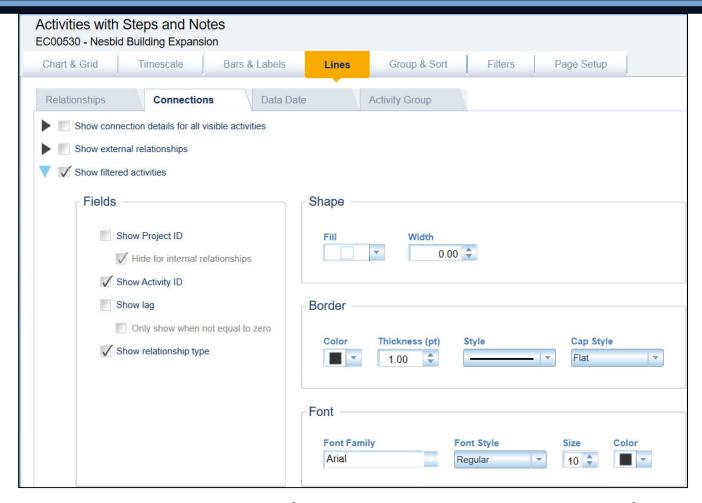- Grid columns are stacked

'Activities with Steps and Notes'

- Options -> Filters tab
  - Custom filter 'Activities with Steps'

'Activities with Steps and Notes'

- Options -> Filters tab
  - Custom filter 'Activities with Notes'

'Activities with Steps and Notes'

- Options -> Lines tab -> Connections sub-tab
  - 'Show filtered activities' section

'Activities with Steps and Notes'

- Options -> Bars & Labels tab
  - 'Global Labels' in Available Bars section
  - Add Anticipated Problems under Notebook Topics grouping
  - Set label's position and formatting (as shown)

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'Activities with Steps and Notes'

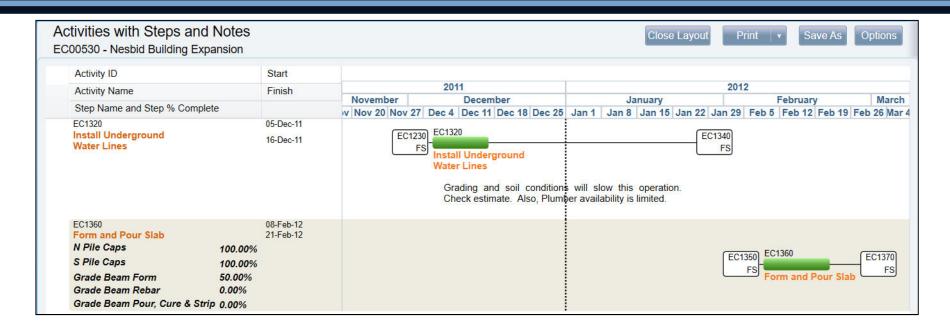

- Options -> Timescale tab
  - Define Start / Finish in General section (as shown)
  - Set 'Date Interval' in Background section

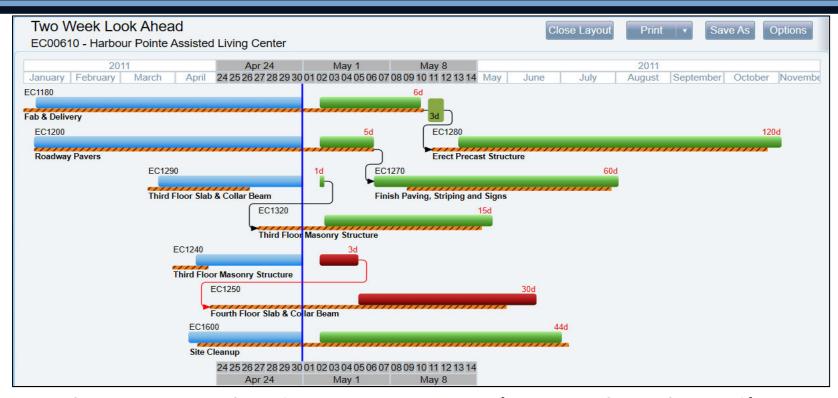# 'Activities with Steps and Notes'

- Options -> Chart & Grid tab -> Content sub-tab
  - Add and stack fields
  - Format fields
- Save & Draw!

'Activities with Steps and Notes'
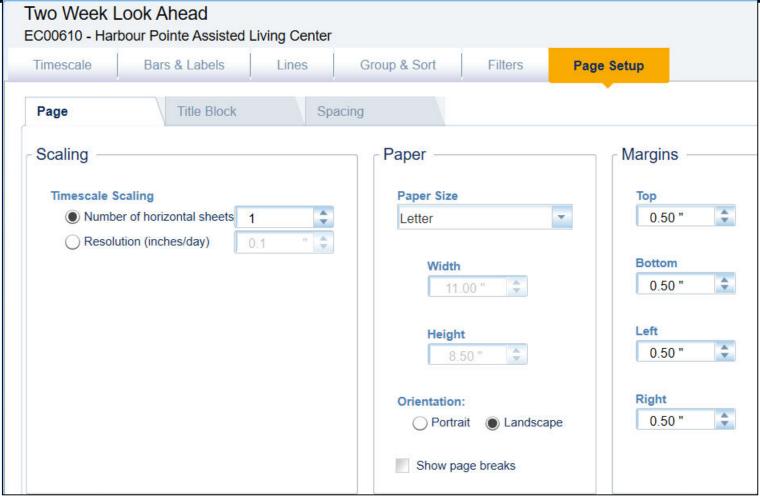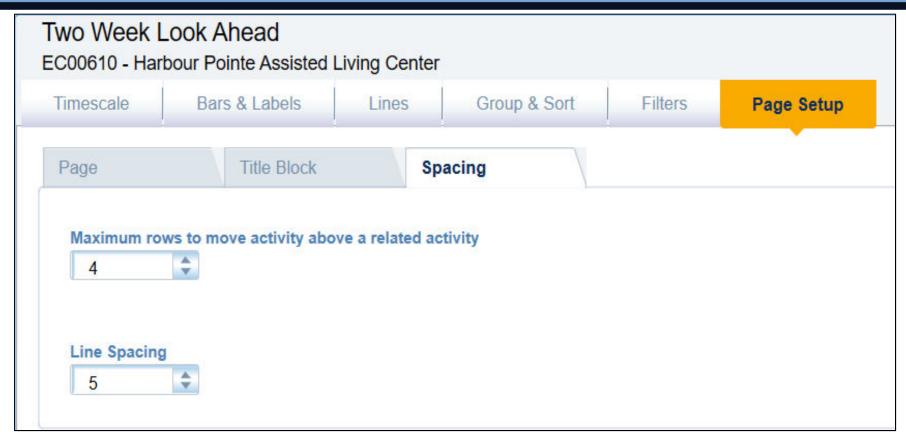
'Two Week Look Ahead'

- Filter is applied to activities (2 weeks ahead)
- Zoomed area within timescale is displayed
- Activities are sorted in specified order
- Custom formatting is applied to labels and bars

'Two Week Look Ahead'

- Options -> Page Setup tab -> Page sub-tab
  - Scale to 1 'Letter' sized sheet

'Two Week Look Ahead'

Two Week Look Ahead

EC00610 - Harbour Pointe Assisted Living Center

| Timescale | Bars & Labels | Lines | Group & Sort | Filters | **Page Setup** |

| Page | Title Block | **Spacing** |

Maximum rows to move activity above a related activity

4

Line Spacing

5

- Options -> Page Setup tab -> Spacing sub-tab
  - Set Line Spacing to '5' to maximize vertical space on the diagram

'Two Week Look Ahead'

- Options -> Filters tab
  - Custom filter '2 Weeks Ahead'

'Two Week Look Ahead'

- Options -> Group & Sort tab -> Sort sub-tab
  - Specify the order of activities displayed (as shown)

'Two Week Look Ahead'

- Options -> Lines tab -> Connections sub-tab
  - 'Show connection details for all visible activities'

'Two Week Look Ahead'

- Options -> Bars & Labels tab -> Bars View
  - New bar with type 'Project Baseline' in Properties section
  - Set Row to '2' in Arrangement section
  - Set Height to '5' in Shape section (not shown)
  - Customize formatting in Fill section (as shown)

'Two Week Look Ahead'

- **Options -> Bars & Labels tab -> Labels View**

  - Set Height to '15' for 'Critical Remaining Work' bar

  - Extend Activity Name's Maximum Label Width to '175'

  - Add and format Remaining Duration label (as shown)

'Two Week Look Ahead'

- Options -> Timescale tab -> Primary sub-tab
  - Define Start / Finish in General section (as shown)
  - Uncheck Top box for Date Interval 'Week'
  - Click + to the right of the Primary sub-tab to create Zoom Area 1

'Two Week Look Ahead'

- ## Options -> Timescale tab -> Zoom Area 1 sub-tab
  - Define Start / Finish in General section (as shown)
  - Set Background Color to 'grey' in Styling section
  - Set Row 1 and Row 2 in Background section (as shown)
  - Save & Draw!

'Two Week Look Ahead'

Schedule Comparison

Project Differences Report

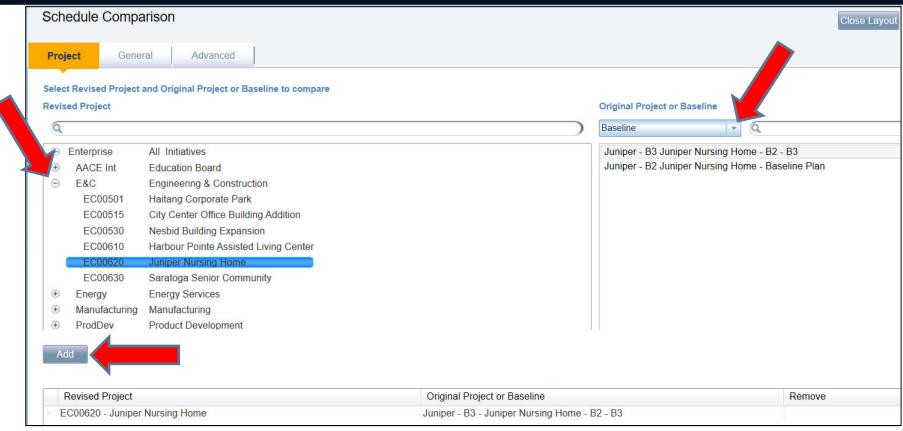Comparing Juniper Nursing Home - B2 - B3 to Juniper Nursing Home
Executed by admin
Date   2019

General Project information

Field Name	[Juniper Nursing Home - B2 - B3] [Juniper - B3]	
Data Date	01-Nov-10	
Start	01-Nov-10	
Finish	13-Dec-13	

	[Substantial Completion - All TCO] [EC2430]
New Late Start Date	**Old Late Start Date**
08-Jan-14	13-Dec-13
New Late Finish Date	**Old Late Finish Date**
08-Jan-14	13-Dec-13
New Early Start Date	**Old Early Start Date**
08-Jan-14	13-Dec-13
New Early Finish Date	**Old Early Finish Date**
08-Jan-14	13-Dec-13
New Planned Start Date	**Old Planned Start Date**
08-Jan-14	13-Dec-13
New Planned Finish Date	**Old Planned Finish Date**
08-Jan-14	13-Dec-13
New Start Date	**Old Start Date**
08-Jan-14	13-Dec-13
New Finish Date	**Old Finish Date**
08-Jan-14	13-Dec-13

Dates comparison (report fragment)

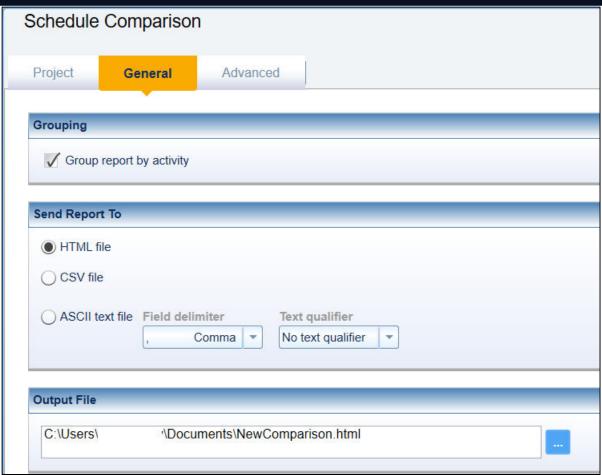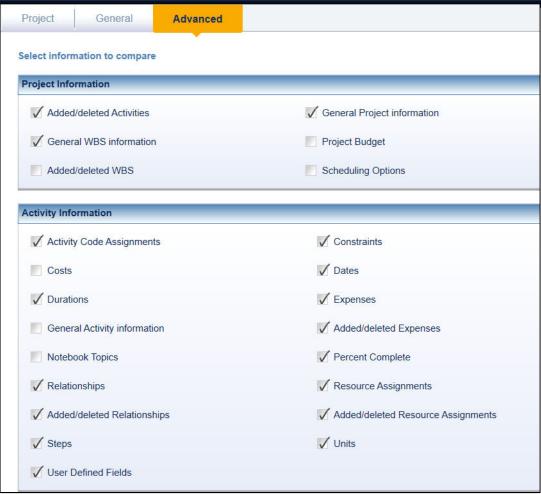# Schedule Comparison

- Options -> Project tab
  - Select Revised Project
  - Select Original Project or Baseline
  - Click Add

Schedule Comparison

- Options -> General tab
  - Check 'Group report by activity' in Grouping section
  - Select HTML option in Send Report To section

Schedule Comparison

- **Options -> Advanced tab**
  - Check desired parameters to be compared
- **Save & Draw!**

Schedule Comparison

Project Differences Report

Comparing Juniper Nursing Home - B2 - B3 to Juniper Nursing Home
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General Project information

Field Name	[Juniper Nursing Home - B2 - B3] [Juniper - B3]
Data Date	01-Nov-10
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[Substantial Completion - All TCO] [EC2430]

New Late Start Date	Old Late Start Date
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New Start Date	**Old Start Date**
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P6 Visualizer Print Options

Setup Required
Considerations

Print Options: Setup Required

- TSLD and Gantt reports can be automated via Windows® Task Scheduler

- Instructions are in Visualizer Help under 'Working with P6 Visualizer Reports' section:
  - https://docs.oracle.com/cd/E90748_01/visualizer_help/en_US/index.htm

- There are three setup steps involved:
  - Actions.xml file – specifies format (electronic or physical printout), as well as report(s) and project(s) for which the report is automated;
  - Batch file – contains a series of commands to be executed;
  - Task Scheduler service – automates Visualizer report to run one time, daily, weekly or monthly.

Print Options: Setup Required

- Actions.xml file sample
  - Notepad saved as .xml
  - Highlighted values vary with configuration

```xml
<actions>
<action>
<reportType>TSLDReport</reportType>
<reportCategory>User</reportCategory>
<reportName>Two Week Look Ahead</reportName>
<projects>
<projectId>EC00610</projectId>
</projects>
<outputType>ToXPS</outputType>
<outputName>C:\tmp\HarbourPointeExport.xps</outputName>
</action>
</actions>
```

Print Options: Setup Required

- Batch file sample

  - Notepad saved as .bat

  - Highlighted values vary with configuration

  - Entire string that starts with Primavera.Visualizer.exe is entered on one line (line #s are for reference only)

  - If the process runs successfully, log message 'Application Exits with error 0' is returned

```
1 @echo off
2 cd "C:\Program Files\Oracle\Primavera P6\P6 Professional\18.8.0"
3 Primavera.Visualizer.EXE /username=admin /password=admin /alias=SQLExpress
  /actionScript=C:\tmp\ActionsXPSPrinter.xml /logfile=C:\tmp\LogFile.log
```

Print Options: Setup Required

- Task Scheduler Service (installed with Microsoft operating systems)
  - Launch via **Start** menu
  - Under **Action**, select **Create Task**
  - Under Create Task, **General** tab
    - Check box **Run with highest privileges**
    - Configure for appropriate Windows OS
  - Under Create Task, **Trigger** tab
    - Set Trigger tab to desired frequency / day / time
    - Click Enabled
  - Under Create Task, **Actions** tab
    - In the Action List, select Start a program
    - Browse to the location of .bat file from step two
  - Under Create Task, **Conditions** tab
    - Select **Wake the computer to run this task**

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Print Options: Considerations

- Considerations

    - Check that report name and project ID referenced in step one are accurate and exist in P6 database

    - Avoid using special characters when naming P6 Visualizer report, such as:

        - Divide "/"

        - Ampersand "&"

        Incorrect report name: 'Activities w/Steps & Notes'

        Correct report name: 'Activities with Steps and Notes'

    - Verify 'XPS Writer and Viewer' application is installed on the computer with automated reports.

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Conclusion

Conclusion

- Visualizer is already at P6 Users' disposal:

  - Get familiar with it, using test data loaded into database.

- Automating Visualizer reports is a small step that can have a significant impact on improving communication among project stakeholders.

- Use this presentation as a first step in starting to utilize Visualizer on regular basis.

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QUESTIONS/COMMENTS?

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