

PS.09

P5 to P-Sixes: Transition from P5 to P6

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Primavera Systems has established itself as an industry leader in construction project management (CPM) scheduling software. Consequently, when it announced its upgrade from the standard Primavera Project Planner (P3) format to P3 e/c version 5.0, (referred to as P5), P3 users took note. P3 worked successfully for thousands of clients for many years, but there were limitations that could be improved. These improvements, coupled with Primavera's announcement that it would discontinue support of P3, drove the migration from P3 to P5.

Subsequently, in August 2007, Primavera released its first major overhaul of P5. Because of the number of changes, Primavera opted to release this version as Primavera 6.0 (referred to as P6) instead of a service pack. Primavera touted the new version as "...the best thing that's ever happened to project management!" Newly added features include web-based project management, interactive Gantt charts and screen layouts, resource "buckets" and "dashboard" user interfaces.

This paper is written in third person of a mythical person we'll call "Tom." Tom is educated in his trade, is an experienced CPM scheduler and has used P3 for many years. He works for a company who has successfully used P3 for many projects. His company recently upgraded to P5 for a project and has been dealing with some of the bugs and features of the software for several months. He is reluctant to upgrade to P6, because, for all of the advertised benefits, Tom is concerned that he does not have the time or resources on the project to learn new software features. Finally, after waiting several months, Tom has decided to make the switch, hoping that that P6 will resolve some of the issues of P5. Indeed, Tom represents many of you, the readers, who likewise fit Tom's description.

BACKGROUND

Tom's company has been working on a large seven year contract to construct a self-anchored suspension bridge, the Oakland version of the 'Golden Gate Bridge.' The project has significant public visibility and will yield a beautiful state of the art structure built to modern seismic code. At the beginning of the job, Tom was assigned to head up the scheduling efforts for the project. He was given a budget and approached Primavera to acquire P3 licenses as required by contract with the public owner, Caltrans. A sales representative informed Tom that Primavera would no longer support P3 just two years into the planned seven of the contract, and instead presented P5 as the new version that would receive support throughout the project duration. New features of P5 were also presented, features that overcome some of P3's limitations and provide new ways to track and record project data. Key features of P5 that led to the decision included the following.

- Primavera support of P5 throughout the life of the project.
- Capabilities to have multiple users simultaneously share access and modify the same database in real time over the internet. The intent was to allow the contractor and the owner to view the same data together in executing the work.
- Enhancements and use of work breakdown structure features.
- Expanded field lengths for project names, activity descriptions and activity codes. And,
- Allowance for greater filtering combinations.

Having reached the decision jointly, both parties opted to use P5 for the project.

THE SWITCH

Now, almost two years into the project, Primavera announced the release of P6 while also stating that they have extended its support of P3 indefinitely, with a goal to discontinue support by 2010. The baseline schedule has been created, submitted and accepted by the owner and the team is working on the revising and statusing the schedule. Tom is reluctant to upgrade to P6 on the project. He remembers that the actual implementation and use of P5 proved to be much more difficult than originally anticipated. Many hours were lost in trying to execute seemingly simple tasks because of differences between P3 and P5. Where P5 had been sold as the improved generation of Primavera's CPM scheduling software, Tom and his team quickly discovered that despite some noticeable and appreciated improvements, P5 was actually incomplete, riddled with software 'bugs' and lacking in basic functionality conducive to the project environment.

Some of the advertised features in the release of P6 include the following.

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- improved resource display and data entry;
- additional display options for layouts and printouts;
- improved program navigability;
- data import and export using xml file format;
- project specific filters and layouts;
- improved 'what If' analysis capabilities; and,
- web-based project management

For all of its benefits and upgrades, Tom is worried that he does not have the time or resources to learn another software version while still meeting the project scheduling needs. Finally, Tom decided to make the upgrade to P6 hoping that the new release will resolve some of the bugs in P5 without requiring a dramatic learning curve for his team. After feeling the "pangs of progress" during the baseline schedule development, Tom hopes that the upgrade to P6 doesn't come out 'all sixes.' If something is all sixes, it doesn't matter how it's done; it's the same as 'six of one and half a dozen of the other'.

ON YOUR MARKS, GET SET, STOP!

Before implementing P6 on a project wide basis, Tom wanted to start out by testing the software on one computer. After completing the installation, Tom thinks to himself 'that was fairly easy.' He expected to have to jump through more hoops to complete the upgrade.

So, Tom attempts to open his project file only to be met with his first obstacle. The Primavera dialog window opens and says "The application and database versions do not match. Click Exit to close the application." Tom not only has to update the software on his computer, but he also has to upgrade the database. Since the schedule is running on a network server, it means that if he converts the database without updating the other computers, they will not be able to open or access the schedule. Luckily, one of lessons that Tom had learned from P5 was how to make a copy of the existing database and restore it to his computer (refer to issue 6 below).

Converting an existing P5 database to P6 is a 12 step process requiring the following:

- the SQL system admin name (default 'sa');*
- the SQL system password (default 'Prima123Vera');*
- the server name ('\\computer name\primavera');
- database name; and,
- P6 CD1 (run the command '\\install\database\ConfigAsst.exe')

* These are the Primavera defaults for P6. These may have been changed by your system administrator.

THE ISSUES

During the development of the Baseline schedule, Tom kept a log of the quirks of P5 and how he was able to deal with them. The following subsections identify some of the fundamental nuances and deficiencies encountered while implementing the P5 software and developing the baseline schedule. For each issue a description is first given followed by a solution suggested by Primavera. Next, a work around solution developed by Tom and his team is presented. Finally Tom listed whether or not the issue was addressed in P6 and if so, to what degree.

The authors' intent here is to assist others in resolving similar problems they too will encounter in their use of P5 and detail whether or not these issues are addressed in the release of P6. The author includes a rating, analogous to baseball terms, on how Primavera addressed the issue with the release of P6. The rating scale is as follows:

- Home Run – Completely addressed the issue.
- Base Hit – They tried and it was somewhat addressed.
- Swing and a Miss – Primavera tried something, but either they addressed the wrong issue or made things worse. And,
- Did Not Play (DNP) – Primavera ignored the issue

Issue #1	Sharing of Data Between the Parties	
Description	Architectural structure proved incompatible with the individual goals of the contractor and owner. The contractor desired confidentiality when investigating possible schedule acceleration scenarios, just as the owner also did when evaluating the contractor's officially submitted schedules. The basic architecture of P5, which allowed all users to see the same data from the same database simultaneously, was simply not conducive to meeting both parties' desires. Furthermore, the owner had different personnel who each desired to run their own scenarios on the schedule, which meant that even within their own organization they could not share the same database. This ability is not provided within P5 nor disclosed by Primavera.	
Version	P5	P6
Primavera Solution	None Provided	Same as P5.
Work Around	Backup the P5 database up and copied to individual PCs with active P5 licenses for the owner, whereas the same database could reside on a licensed server for the contractor's team. (Refer to Issue 6 below).	Same as P5 solution
Comment	This issue was partially addressed with the release of P6. P6 no longer uses MSDE as the database server for the stand along installation, but uses Microsoft SQL Server 2005. SQL Server 2005 has its own "backup" and "restore" commands for the database. While it easier to copy and restore the database in P6 than P5, it is still not a simple process and again there is the possibility of making inadvertent changes to database. And, it does not change the fundamental design feature missing in P6; how to share data with a client on the same server while still allowing each party to have secure locations to keep notes, perform what-ifs and make modifications to the schedules.	
Result	Base hit	

Issue #2	Spell Check	
Description	The P5 dictionary is limited and misspelled words can be overlooked using the spell check application. Words like "submittal" and "install" are not included in the dictionary.	

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In addition, the P5 dictionary does not allow the user to add words to the dictionary, as allowed in other software. Also, there are instances when Project Management freezes when using Spell Check and typing text in the 'Change To' field.

Version Primavera Solution	P5 When installed, the P5 dictionary file defaults to read only. This can only be changed by finding and changing the attributes to read.	P6 This issue was partially addressed with the release of P6.
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Work Around	Export activity descriptions into Excel and use MS spell check. This process is tedious and cumbersome rather than being able to do spell check in real time. In addition, as with all imports and exports, there is always the possibility of error.	Same as P5.
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Comment The spell check feature is improved from P5 to P6, but there are still areas that need to be addressed. The dictionary no longer defaults to read-only, but misspelled words can still be overlooked. Also, while the word "install" has been added to the dictionary but "submittal" and "compaction" are still not included. In addition, when the user upgrades to P6, the software overwrites the P5 dictionary. So any words that have been added to the P5 dictionary will need to be added again in P6.

Result Base hit

Issue #3 Software Functionality / Finest Hour

Description All P5 / P6 activities are based on the finest hour (units in minutes); even though it appears that they are based on days. The calendars define the work day which controls the start / stop time for the activity. For example, an activity has a calendar that defines the work day ending at 4:00 PM and the successor activity shows the work day ending at 5:00 PM, the successor activity will start at 4:00 PM. Therefore all of the calendars must have the same work day hours or the successor activities will not start on the correct day.

Version	P5	P6
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Primavera Solution	All calendars must have the same work periods or else P5 will give erroneous start / finish date calculations which can cause erroneous start dates / end dates if calendars are not defined the same, even for a single work day.	Same as P5.
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Work Around	No known work around.	Same as P5
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Comment This is a fundamental flaw in the P5/P6 basic architecture. Primavera does not have plans to address this issue as of the date of this paper.

Result DNP

Issue #4 Finish Milestones

Description Occasionally when using Finish Milestones for intermediate milestones, the successor activity starts at 8:01 AM as opposed to 8:00 AM as is typical. Since P5 / P6 is based on finest hour, the 1 minute error compounding each successive day, eventually causing the start dates and end dates to be incorrect by one day.

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Version	P5	P6
Primavera Solution	Primavera recommends placing all Finish Milestones on a 24-hour calendar. However, when activities are placed on a 24-hour calendar, successor dates are still calculated incorrectly. In addition, under this scenario, float is then calculated in hour-increments instead of days.	Same as P5
Work Around	Use Start Milestones instead of Finish Milestones. Only use Finish Milestones for the final schedule milestones. Because this error is intermittent, it is frustrating not being able to trust use of Finish Milestones. The only way to be sure that date is scheduled correctly is to use Start Milestones.	Same as P5
Comment	This is another fundamental flaw in the P5/P6 basic architecture. Primavera does not have plans to address this issue as of the date of this paper in fact, when Primavera was contacted about this problem, it stated that the problem was resolved with P5 service Pack 2. The author was able to recreate this problem after P5 service Pack 2 and with P6. The author also sent the database file to Primavera for analysis and has not received a response.	
Result	DNP	

Issue #5 Real-Time Refresh

Description Real-time refresh does not always show the updated, reorganized view.

Version	P5	P6
Primavera Solution	Use Shift-F2 or Tools Menu: Reorganize Now to refresh the view.	Same as P5
Work Around	None found. It was also discovered that Shift-F2 is disabled on some computers.	Same as P5
Comment	This issue appears to be related to the speed, memory and graphics card of the user's computer. This happens less frequently with faster computers, (minimum core duo processor with 2 GB or RAM).	
Result	DNP	

Issue #6 Backup and Restore Database

Description P5 does not have a backup or restore feature for the database.

Version	P5	P6
Primavera Solution	None offered	Same as P5.
Work Around	Use MSDE and SQL commands to backup and restore the database.	Use Microsoft SQL Server 2005 Commands to backup and resolve the

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	This approach provides direct access to the database through the operating system (not thru P3) and it is possible to inadvertently overwrite and/or delete the database. In addition, this is not a simple process and requires SQL programming knowledge.	database. This allows us to have the same layouts and filters.
Comment	This continues to be an issue with P5 and P6. While the Microsoft SQL Server 2005 backup and restore commands function adequately, it still is a software command outside of the Primavera environment.	
Result	Swing and a Miss	
Issue #7	Export Projects	
Description	In P5 When using the .xer file format to export schedules, the layout does not export with the file. This means that when the file is imported, the new user will not see the same view as the previous user.	
Version	P5	P6
Primavera Solution	Export the layout file separately. If there are multiple layouts, each layout must be exported individually.	Same as P5.
Work Around	Use MSDE and SQL commands to backup and restore the entire database. This allows users to have the same layouts and filters. This solution allows direct access to the database and it is possible to inadvertently overwrite and/or delete the database. In addition, this is not a simple process and requires SQL knowledge and programming knowledge	Use Microsoft SQL Server 2005 commands to backup and restore the database. This allows users to have the same layouts and filters
Comment	This issue was to be addressed with the release of P6, but is now expected to be a feature added in version 7. Some of the Primavera literature states that P6 was to include the ability to export layouts and filters. While P6 does allow the user to create project specific layouts that can be copied with the project under the EPS structure, the layouts and filters cannot be exported or imported using .xer files.	
Result	Swing and a Miss	
Issue #8	Export Filters	
Description	The filters do not export with the layout files as a separate file that will be shown in the filter menu. The filter is applied to contents of the schedule, but P5 does not show that the data is being filtered on the filter list. It shows that all activities are being displayed. When using an import layout that contains a filter, the user may end up using a filter that cannot be seen, making it so data may be filtered without the knowledge of the user.	
Version	P5	P6

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Primavera Solution	No solution	This issue was addressed with the release of P6.
Work Around	Use MSDE and SQL commands to backup and restore the entire database. This allows users to have the same layouts and filters. This solution allows direct access to the database and it is possible to inadvertently overwrite and/or delete the database. In addition, this is not a simple process and requires SQL knowledge and programming knowledge	N/A
Comment	This issue was addressed with the release of P6, even though Primavera allows the user to export the filter with the layout, in order to ensure that each party has all the same layouts and filters the user must use the SQL Server 2005 commands to backup and restore the database.	
Result	Base Hit	
Issue #9	Activity Code Dictionaries	
Description	P5 does not allow the import of Activity Code Dictionaries	
Version Primavera Solution	P5 Primavera has created an Excel spreadsheet entitled "Dictionary 501.xls" that uses Visual Basic and Macros to bypass the P5 front end and allows the user to enter data directly to the SQL database via standard spreadsheet input. This requires the installation of the SDK feature from Primavera.	P6 Same as P5, but the user must get the updated "Dictionary60.xls" from Primavera.
Work Around	No known solution. Because the spreadsheet bypasses the P5 front end; it renders the user susceptible to making data entry errors. The spreadsheet allows duplicate entries and data can be easily erased.	Same as P5.
Comment	The user must obtain the updated Dictionary60.xls file from Primavera and install SDK driver. Importing of Activity codes is currently an enhancement request and may be available in version 7 or version 8.	
Result	DNP	
Issue #10	Calendars	
Description	P5 does not allow the import of Calendars.	
Version Primavera Solution	P5 Primavera has created an Excel spreadsheet entitled "Dictionary 501.xls" that uses Visual Basic and Macros to bypass the P5 front end and allows the	P6 Same as P5, but the user must get the updated "Dictionary60.xls" from Primavera.

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user to enter data directly to the SQL database via standard spreadsheet input. This requires the installation of the SDK feature from Primavera.

Work Around	No known solution. Because the spreadsheet bypasses the P5 front end; it renders the user susceptible to making data entry errors. The spreadsheet allows duplicate entries and data can be easily erased.	Same as P5.
Comment	The user must obtain the updated Dictionary60.xls file from Primavera and install SDK driver. Importing of Activity codes is currently an enhancement request and may be available in version 7 or version 8.	
Result	DNP	

Issue #11
Description **Activity Codes**
P5 does not allow the import of Activity Code Dictionaries.

Version	P5	P6
Primavera Solution	Primavera has created an Excel spreadsheet entitled "Dictionary501.xls" that uses Visual Basic and Macros to bypass the P5 front end and allows the user to enter data directly to the SQL database via standard spreadsheet input. This requires the installation of the SDK feature from Primavera.	Same as P5, but the user must get the updated "Dictionary60.xls" from Primavera.

Work Around	No known solution. Because the spreadsheet bypasses the P5 front end; it renders the user susceptible to making data entry errors. The spreadsheet allows duplicate entries and data can be easily erased.	Same as P5.
Comment	The user must obtain the updated Dictionary60.xls file from Primavera and install SDK driver. Importing of Activity codes is currently an enhancement request and may be available in version 7 or version 8.	
Result	DNP	

Issue #12
Description **Resource Codes**
P5 does not allow the import of Resource Dictionaries

Version	P5	P6
Primavera Solution	Primavera has created an Excel spreadsheet entitled "Dictionary501.xls" that uses Visual Basic and Macros to bypass the P5 front end and allows the user to enter data	Same as P5, but the user must get the updated "Dictionary60.xls" from Primavera.

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directly to the SQL database via standard spreadsheet input. This requires the installation of the SDK feature from Primavera.

Work Around	No known solution. Because the spreadsheet bypasses the P5 front end; it renders the user susceptible to making data entry errors. The spreadsheet allows duplicate entries and data can be easily erased.	Same as P5
Comment	The user must obtain the updated Dictionary60.xls file from Primavera and install SDK driver. Importing of Activity codes is currently an enhancement request and may be available in version 7 or version 8.	
Result	DNP	

Issue #13 Group and Sort
 Description The sort under the Group and Sort feature does not always sort the data correctly. This is most apparent with user added columns such as activity codes.

Version	P5	P6
Primavera Solution	No known solution.	Same as P5.
Work Around	No known work around	Same as P5
Comment	This issue was not addressed in the release of P6. Even after specifying the sort criteria P6 will sometimes still display the activities in a seemingly random order.	
Result	DNP	

Issue #14 Editing Reports
 Description The report editor is not user friendly and not intuitive to use. Customizing reports is very difficult

Version	P5	P6
Primavera Solution	No known solution.	Same as P5.
Work Around	Trial and error approach proved sufficient, but took more time than reasonably expected to complete seemingly simple tasks.	Same as P5.
Comment	There are no significant differences between the P5 and P6 report editors. Both are difficult to use.	
Result	DNP	

Issue #15 Data Changes
 Description When working in a network environment, changes are not committed to the database and cannot be viewed by other users until the user entering the changes presses the F5 key

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Version	P5	P6
Primavera Solution	No known solution.	Same as P5.
Work Around	No known work around other than to hit the F5 key frequently.	Same as P5.
Comment	This is not listed as an issue to be addressed by Primavera.	
Result	DNP	
Issue #16 Finish Constraints		
Description	Finish constraints default to 14:59 PM for finish time.	
Version	P5	P6
Primavera Solution	Primavera states that this error was corrected in Service Pack 2 and should not occur once Service Pack 2 is installed.	This issue was addressed with the release of P6.
Work Around	Even after upgrading to Service Pack 2, this was still found to be an issue. Because P5 is based in finest hour, this error changes Start / End dates for successor activities. Check constraint times when constraints are added.	N/A
Comment	This issue was addressed with the release of P6	
Result	Home Run	
Issue #17 Start Constraints		
Description	Finish constraints default to 8:01 AM for start time.	
Version	P5	P6
Primavera Solution	Primavera states that this error was corrected in Service Pack 2 and should not occur once Service Pack 2 is installed.	This issue was addressed with the release of P6.
Work Around	Even after upgrading to Service Pack 2, this was still found to be an issue. Because P5 is based in finest hour, this error changes Start / End dates for successor activities. Check constraint times when constraints are added.	N/A
Comment	This issue was addressed with the release of P6	
Result	Home Run	

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Issue #18	Date Calculations	
Description	Unlike P3, P5 does not automatically change the end date of an activity when the original duration is changed.	
Version	P5	P6
Primavera Solution	The user must reschedule (press F9) to see the results of the duration change.	This issue was addressed with the release of P6.
Work Around	No known work around. Rescheduling the project requires waiting while the software calculates the schedule. If the user is working in a network environment with a slow network connection, this can cause the user to lose hours of productivity.	N/A
Comment	This issue was addressed with the release of P6.	
Result	Home Run	
Issue #19	Float Calculations	
Description	P5 calculates total float on a project by project basis only, not across multiple projects. P5 allows the user to have multiple projects under the same EPS structure and to create logic links between activities in differing projects. Even though P5 allows the activities to be linked together across different projects under the same EPS, the calculated float values do not carry from one project to the next because logic links crossing to a different project are treated as constraints.	
Version	P5	P6
Primavera Solution	No known solution	This issue was address in the release of P6.
Work Around	Place the projects into a single project file and use the first layer of the WBS as the name of each project. This approach allows total float to be calculated correctly. With this solution, the float is calculated correctly, but the user loses some of the flexibility and functionality of the software.	N/A
Comment	This issue was addressed in the release of P6.	
Result	Home Run	
Issue #20	Printing	
Description	The print engine in P5 is slow and requires a large amount of memory to spool the print jobs.	
Version	P5	P6
Primavera Solution	No Solution	This issue was partially addressed in the release of P6.

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Work Around	Buy and work on faster computers with more memory.	Same as P5.
Comment	In P6, the speed of the print engine was improved. The P5 print engine would take over 15 minutes to create a 400 page .pdf file, while the P6 print engine will create it in just under 10 minutes. So, while the speed is improved a faster computer with more memory is still recommended.	
Result	Base Hit	
Issue #21	Timescale	
Description	P5 does not allow dynamic scaling of the timescale as P3 did.	
Version	P5	P6
Primavera Solution	Wide screen displays were found better accommodating to this limitation.	This issue was addressed in the release of P6
Work Around	None	N/A
Comment	This issue was addressed with the release of P6	
Result	Home Run	
Issue #22	Import / Export of Activity Notes	
Description	P5 does not allow the user to import or export notes for activities.	
Version	P5	P6
Primavera Solution	Run a report which shows notebook topics and saving it to ASCII format topics and saving it to ASCII format as a .csv file, which can then be opened in Excel. This solution does not, however allow for importing of notes.	Same as P5.
Work Around	Create a user-defined text column for notes. This column can then be imported and exported.	Same as P5.
Comment	This is an existing Enhancement Request, but Primavera has not stated if or when it will be addressed.	
Result	DNP	
Issue #23	Inserting Activities / Reorganize Automatically	
Description	P5 automatically reorganizes the data whenever an activity is added, or pasted in. It will also automatically assign activity IDs based on available ID numbers. So, if the user attempts to paste a block of activities in a certain area of the project and say, for example, that the sort is based on activity IDs, these newly added activities will automatically be spread throughout the project chronologically based on their numerical values. Regrouping this block of activities is tedious and time consuming.	
Version	P5	P6
Primavera Solution	Turn off the auto-reorganize feature.	Same as P5.

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Work Around	Even though there is a check box that allows the user to disable the auto-reorganize feature, this setting only works about half of the time. Complaints to Primavera of such were met with disbelief and no solution. Therefore, use of Excel imports was adopted as the primary means for adding blocks of activities.	Same as P5.
Comment	This issue was not addressed with the release of P6	
Result	DNP	
Issue #24	Project View	
Description	P5 will automatically expand previously collapsed data categories of the WBS when certain commands are executed.	
Version	P5	P6
Primavera Solution	None	This issue was addressed with the release P6.
Work Around	Unfortunately, none. Here's a common case scenario: You now have the exact view that you want, you've minimized the WBS portions that you do not need to see and you add an activity. You use Shift-F2 to reorganize the project and all of a sudden every part of the WBS is expanded and you've lost the view that you want. This unwelcomed event happens when using Shift-F2 (to reorganize the data), when editing the activity code dictionary, when changing column widths and in executing many other commands. With activity counts exceeding several thousands, losing your place in a database via a computer screen takes time to scroll back and find your prior working area.	N/A
Comment	This issue was addressed with the release of P6	
Result	Home Run	
Issue #25	Summary Bar Float Values	
Description	Summary bar float values are meaningless. They do not consistently show the high or low values for the float values for activities summarized.	
Version	P5	P6
Primavera Solution	None	P6 has provided an option of whether or not to show the summary values.

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Work Around	Ignore the float values in the summary bars and instead, rely upon the actual activity data, with caution as to the use of constraints as mentioned earlier herein.	Same as P5
Comment	P6 allows the user to the option of not showing the values on the summary bands. This will make it easier for the user to ignore these values, but the values are still meaningless.	
Result	Swing and Miss	
Issue #26	Row Heights	
Description	P5 will randomly ‘forget’ the assigned row heights, even if they are set within the layout. In addition, P5 does not allow the user to define the row height for different categories, such as levels of the WBS.	
Version	P5	P6
Primavera Solution	None	This issue was addressed with the release of P6.
Work Around	None	N/A
Comment	This issue was partially addressed with the release of P6. P6 still has quirky row height assignments that will sometime give unexpected results. For example, you can only resize the grouping band heights if you first change the display options (i.e. – deselect “Show Group Totals”). These row heights will stay in place until you hit the “Apply” button on the “Table, Font and Row” menu. If you hit this button, it will minimize these bands to the minimum height for their font size, even if you have the “Keep Current Row Heights” toggle on. As far as the author can tell, this toggle has no impact on the function of this menu and is therefore meaningless.	
Result	Swing and a Miss	
Issue #27	Vertical Group and Sort Bands	
Description	The vertical group and sort bands cannot be narrowed. This takes up the usable visible space on the left side of the screen and wastes real estate on the printouts.	
Version	P5	P6
Primavera Solution	None	This issue was addressed with the release of P6.
Work Around	None	N/A
Comment	P6 allows the user to “Shrink” the vertical grouping bands. While this is an improvement, the author would prefer to the option to reduce them even further or even remove them completely from the print outs and layouts.	
Result	Base hit	
Issue #28	Microsoft Vista	
Description	Microsoft's Vista operating system is not tested or supported for Primavera version 5.0.	
Version	P5	P6
Primavera	Wait for P6.	This issue was addressed with the release of

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Solution		P6.
Work Around	Do not upgrade to Microsoft Vista until after Primavera has made P5 compatible with it.	N/A
Comment	Even though Primavera states that P6 is compatible with Microsoft Vista, the author has not tested this feature as he is still using Microsoft XP Pro.	
Result	Base hit (The author cannot rule this one a home run until he has tested it himself.)	

THE SCORE CARD

P5 Issues How they were addressed with the release of P6	
Level	Number of Issues
Homerun (Completely addressed the issue)	6
Base Hit (They tried and it was somewhat addressed)	6
Swing and a Miss (They tried something, but either they addressed the wrong issue or made things worse)	4
Did Not Play (DNP) – (They did not even attempt to address the issue)	12
Total Issues	28

BUCKETS, CURTAINS AND DASHBOARDS (NEW FEATURES IN P6)

Primavera stated that P6 was "...the best thing that's ever happened to project management!" This section of the paper will discuss the advertised features of P6 and rate their effectiveness. The list of new features was taken from Primavera Marketing information. [1]

Feature #1: Future period bucket planning

Description: This is a new feature that combines the resource assignments and time period. Primavera uses the term "bucket" to refer to the time period in which the date is entered in a spreadsheet. *For example, if the Resource Usage Spreadsheet is configured to display a Week/Day timescale, the daily timescale intervals in which you can enter data are referred to as "daily buckets."*[2]. This feature mimics some spreadsheet capabilities allowing for easier data entry.

Effectiveness: High. Anything that makes data entry easier is going to get a high grade, even though it is still likely that most data entry will be done in spreadsheets and then imported into P6.

Feature #2: Display or suppress grouping band totals

Description: Suppress values on grouping bands.

Effectiveness: Low. This was discussed above. Instead of being able to suppress the values on the grouping bands, it would have been more effective to make the values a meaningful planning tool.

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- Feature #3: Narrow & wide setting for grouping bands**
Description: The user can narrow the vertical bands shown in layouts.
Effectiveness: Moderate. While there is an improvement, there should still be the option to reduce them further or remove them completely.
- Feature #4: Search in pop-up dialogs**
Description: Pop-up search dialogs when assigning activity codes, resources, calendars, etc.
Effectiveness: High. Primavera should also look at adding the pop-up search feature to the editing menus for the same values.
- Feature #5: Type-ahead in dropdowns**
Description: Also known as 'Find as you Type', this feature filters the information viewed by the characters that are typed.
Effectiveness: High. This feature also reduces the need for the pop-up search dialogs that were added with P6.
- Feature #6: New options for saving screens and layouts**
Description: P6 allows the user to save expanded and collapsed rows, adjusted row heights and box positions in chart views.
Effectiveness: Moderate. Even though there were improvements (as discussed above), there are still some times that the row heights will not save or allow the user to set them as desired.
- Feature #7: Project specific layouts**
Description: Allows the user to save layouts specific to the project instead of just global and user specific layouts.
Effectiveness: Moderate. This feature would have been more effective if Primavera had provided the ability to export and import the layouts with the .xer files.
- Feature #8: Filters saved and exported with layouts**
Description: Filters are saved and exported with the layout.
Effectiveness: Low. It is nice to be able to export the filter with the layout, but since layouts do not export with the .xer file, this still means that the user may have to export multiple layout files.
- Features #9: Improved Copy Project**
Description: Additional options when copying projects within the EPS structure such as: copy associated baselines, project layouts and project filters.
Effectiveness: Moderate. These features should also be available for with the .xer imports and exports and not just within the same EPS structure.
- Feature #10: Reflection (Improved What If Analysis)**
Description: Reflections allow the user to copy a project, make changes and all project changes and specify which, if any, should be merged back into the original project. Reflections can also be used to collect and review activity progress information from project team members.
Effectiveness: High. This feature can be further enhanced by use of the Primavera Web application.

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Feature #11: Import and export project includes project specific layouts, filters and baselines post 6.0

Description: Project specific layouts, filters and baselines can be imported and exported.

Effectiveness: None. This is where the user must read the fine print. This feature was advertised as one that would be implemented **POST** version 6.0. It is not included in release 6.1 and may not be a feature until 7.0 or even 8.0.

Feature #12: Granular import security maintains global dictionaries

Description: Global dictionaries maintained with imports.

Effectiveness: Moderate.

Feature #13: Approval of activity status changes made by team members.

Description: Approval of activity status changes made by team members.

Effectiveness: Moderate.

Feature #14: XML Import/Export

Description: Allows the user to import and export data an XML format.

Effectiveness: None. This feature does not work as advertised and can introduce corrupted data.

Feature #15: Curtains

Description: Allows the user to highlight and add notes to c time periods on the Gantt chart displays.

Effectiveness: High.

Feature #16: Dashboards

Description: This feature is used for navigating the web-based Project Management portion of P6. This paper did not evaluate the effectiveness of this feature.

Effectiveness: Unknown

THE RELEASE OF P6.1

Primavera will release service pack 1 (or P6.1) on March 10, 2008. At the time of writing the paper, the service pack was not available. The following is a list of major issues that Primavera states will be addressed this release. This is according to information found on Primavera's website. This is not a complete list, but a few of major issues that were addressed. The author has not been able to determine whether these changes have been implemented or whether they are effective solutions.

- Actual Units spread incorrectly when using 'Override' Rate Source type and Timesheets.
- Vertical scroll bar disappears in Project view of Gantt chart when directory toolbar is disabled.
- Data not being committed and refreshed properly.
- Scheduling freezes at 95 percent.
- Duplicate Resource Assignment After Importing XER.
- Application gets locked and CPU spikes when modifying sitelines or timescale setting.
- Report Editor displays the wrong values for Activity Codes.
- Importing from Excel Spreadsheet does not import Constraints correctly.
- Printing not working from resource assignment spreadsheet view.
- Slow performance and printing large jobs to PDF.
- 'Invalid file name or directory path. Please correct!' when saving a Report.
- 6.0 Report Editor does not show the proper cell properties."

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- Error when trying to 'Save' or 'Save and Close' in P6 Web, under Administration, Manage User Interface Views. And,
- Report dates are wrong for a timesheet whose timescale begins in one calendar year, and ends in the next.

The release of P6 made some necessary improvements to P5 and Primavera has committed to continue to make improvements in future releases. Primavera has added many new features and improved some of the functionality, but there are still numerous software quirks and bugs that need to be addressed. The concern is when they will be addressed. The most important issue addressed with the release of P6 was correcting the cross project float calculations. The most important issue not addressed is the lack of “backup” and “restore” commands for the database. Since filters and layouts cannot be exported with the .xer files, the only way to be certain that all parties are looking at the same information in the same format is to backup, copy and restore the database. While this is easier to accomplish in P6, it still is a feature provided through Microsoft and not Project Management. While the release of P6 corrected some issues, there are many that were partially addressed or not addressed at all. Primavera has stated that some of these issues will not be addressed until P7 or even P8. The release of P6 is a step in the right direction, but it is a small step.

REFERENCES

1. P6 Top New Features, Primavera website, <http://www.primavera.com/p6launch/aboutp6.html>.
2. Project Management Help FAQ.

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