

PRIMAVERA WEB SERVICES



DISCOVER UNLIMITED
POSSIBILITIES BY
INTEGRATING WITH
EXISTING BUSINESS
SYSTEMS

FEATURES

- Back-office and front-office systems connectivity
- Language independent
- Operating system independent
- WS-* standards use
- Distributed environment deployable

BENEFITS

- Leverage your existing IT investments.
- Improve project team productivity.
- Create a single BPM portal.
- Integrate Primavera P6 Enterprise Project Portfolio Management with your ERP systems.

Oracle's Primavera Web Services provides enterprise-level integration capabilities to connect Primavera solutions to existing line-of-business systems, which will increase productivity and project success. Primavera Web Services allows organizations to combine project data and dashboards from other Primavera applications into the organization's existing portal strategy. This enables custom applications to be created from internal systems, for example, ticketing systems, inventory systems, and mashups from internet-based services such as Google Maps.

Integrating with Existing Business Systems

From enterprise resource planning (ERP) systems to financial systems to desktop productivity tools such as Microsoft Outlook and Microsoft Excel, Primavera Web Services enables a complete, enterprisewide integration strategy that will help you reach your business objectives, as shown in Figure 1.

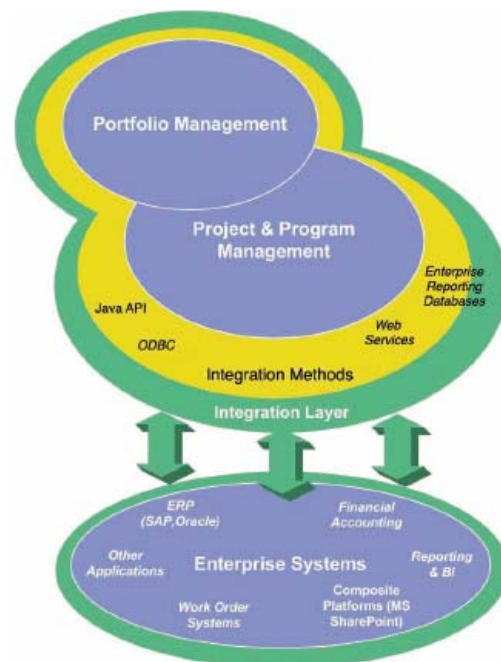


Figure 1. Integration strategy for Primavera applications

Leverage Your Existing IT Investments

By adopting industry standard Web services as the primary interface with the Primavera P6 version 6.2 platform, Oracle has made it easy to further leverage existing IT investments in areas such as ERP; ticketing; maintenance, repair, and

overhaul; reporting; and portals. By using Web services standards for security, messaging, and XML specifications, a Web services API allows users to integrate with Primavera P6 Enterprise Project Portfolio Management from any programming language supporting Web services, including .NET and Java—and is not dependent upon any specific operating system platform. This gives users the ability to connect SAP systems running on Sun Solaris to Primavera P6 Enterprise Project Portfolio Management running on Microsoft Windows Server 2003, by using any .NET programming language to connect to Primavera Web Services. Or, use Java to build a custom JavaServer Pages dashboard with Primavera P6 Enterprise Project Portfolio Management project key performance indicators (KPIs), budgets in Excel, and remedy trouble tickets, and then deploy to Oracle portals. Users can integrate systems securely—either in real time or in bulk at specific times. These are just a few examples of creative integration capabilities that Primavera Web Services makes possible (see Figure 2).

Activity ID	Start Date	Finish Date	Actual Labor Cost
Maint. Plan: Sol. Office	04/13/2007	10/14/2007	\$9.00
ReGrid Product Development Process	04/18/2007	10/14/2007	\$9.00
LCD control systems M/C	01/21/2008	03/21/2008	\$9.00
Analyze System	01/21/2008	09/07/2007	\$9.00
Implement full system	09/03/2007	09/18/2007	\$9.00
Perform Test Rollout	09/03/2007	10/04/2007	\$9.00
e-Conference Site	04/09/2008	06/11/2007	\$20,549.48
Design and Planning	04/09/2008	04/30/2007	\$12,095.00
Implementation	04/09/2008	05/14/2007	\$5,443.40
Product Opportunity Review A	09/21/2007	10/11/2007	\$9.00
PP Standard Project Framework	05/21/2007	10/15/2007	\$9.00

Primavera P6 Calendar View

August, 2008

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
27	28	29	30	31	1	2

Figure 2. Sample site that demonstrates Microsoft SharePoint Web Parts using Primavera Web Services API

Improve Project Team Productivity

Keeping the project team focused and as productive as possible is key to successful project delivery. Improve productivity by keeping project budget data in Excel, listing activities in Outlook, or assigning due dates in a Lotus Notes calendar. With Primavera Web Services, users have all the tools needed to combine these systems to create a more-natural environment for employees to keep pace with the project lifecycle in their common front-office tools.

Business Performance Management from a Single Portal

A growing practice in driving continuous business improvement is managing organizations by business objectives. A business performance management (BPM)

portal is a vital tool in that process. Typically, this is presented to project team members as a series of KPI reports showing recent trends and forecast values. This ensures the health and performance of the business is directly represented to the team members responsible for driving the business. With Primavera Web Services, data can be displayed in a representational graph, allowing users to report on metrics, including schedule performance, cost performance, and schedule variance. These graphs can be exposed to a Microsoft SharePoint portal via a Web Part, which can also include graphs and KPIs for other areas of a business such as product lifecycle, sales, and customer data, as shown in Figure 3.



Figure 3. BPM portal with KPI reports from Primavera P6 Enterprise Project Portfolio Management using Primavera Web Services

Architecture

Primavera Web Services is based on Web services standards such as Web Services Description Language (WSDL), XML, and SOAP. Using Apache CXF, Primavera Web Services can be deployed through several Java 2 Platform, Enterprise Edition (J2EE) application servers, including JBoss, Oracle WebLogic, Server and IBM WebSphere. With proper permissions and security, Primavera Web Services will grant access to most Primavera P6 Enterprise Project Portfolio Management data and capabilities to couple into existing business data systems.

Deployment

To deploy a Primavera Web Services integration solution, begin by using a J2EE-compliant application server. The Primavera Web Services distribution files include WSDL files describing the series of services that are available to programmers. Users can then authenticate and connect to the product services that are shared over the secure HTTPS protocol to build an integration solution (see Figure 4).

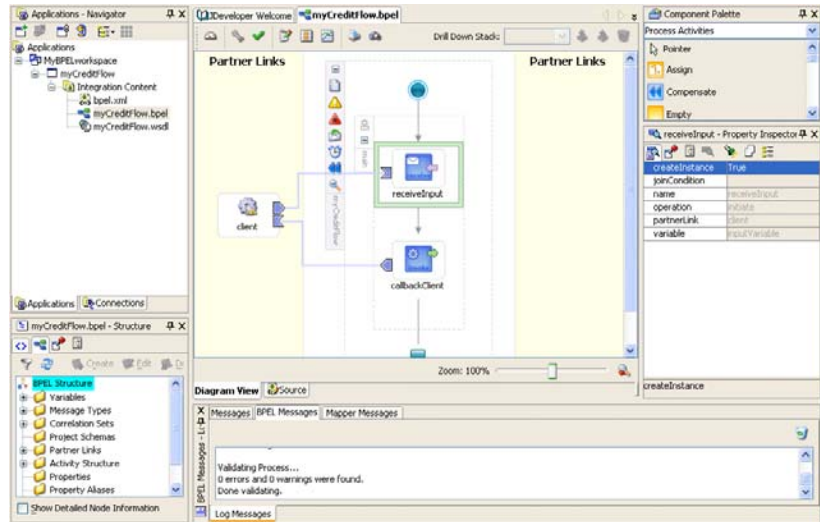


Figure 4. Sample BPEL workflow using Primavera Web Services in Oracle JDeveloper

Key Features

- **Back-office and front-office systems connectivity.** Primavera Web Services is a toolset that allows users to connect their Primavera applications into existing investments to create a rich, productive environment for project teams.
- **Language independent.** Create integration solutions using your programming language of choice. Although Java and .NET are the most common, any language that supports Web services can be used (for example, C/C++, Ruby, Perl).
- **Operating system independent.** Primavera Web Services is not bound to any operating system. It can run on the J2EE server from Linux, UNIX, or Windows, and users can distribute solutions across different platforms.
- **WS-* standards use.** By leveraging the standard specifications for Web services through Apache CXF, programmers can use their existing knowledge and understanding of security, messaging, and other areas of the WS-* specifications.
- **Distributed environment deployable.** By leveraging the power of Primavera Web Services, the HTTPS protocol, and XML, users can create a series of lightly coupled solutions that execute independently or within a J2EE application server in a distributed environment.

RELATED PRODUCTS

Primavera Web Services provides enterprise-level integration capabilities to connect Primavera solutions to existing line-of-business systems. The following related products are also available:

- Primavera P6 Enterprise Project Portfolio Management
- Primavera P6 Professional Project Management

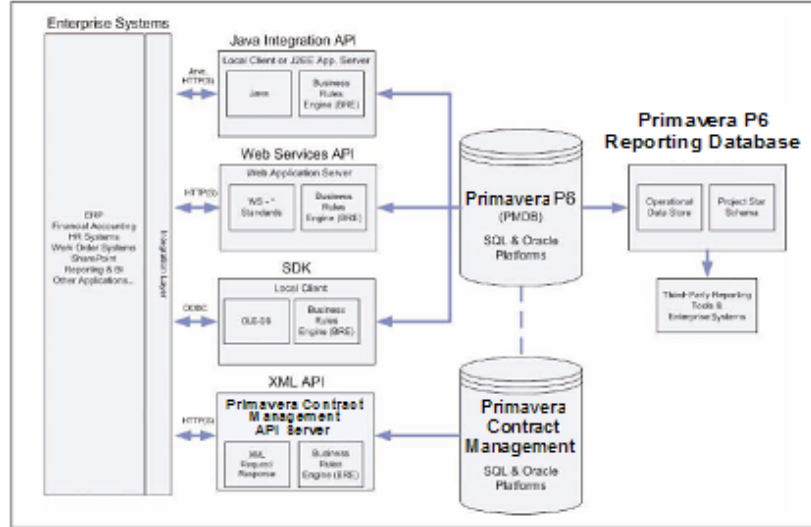


Figure 5. Technical overview of Primavera integration paths

Contact Us

For more information about Oracle’s Primavera Web Services, please visit oracle.com or call +1.800.ORACLE1 to speak to an Oracle representative.

 Oracle is committed to developing practices and products that help protect the environment

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