

# Oracle's Primavera Web Services

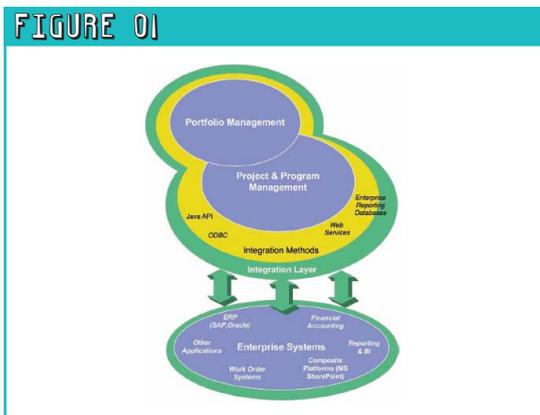
Provides enterprise-level integration capabilities to connect Primavera solutions to existing line-of-business systems to increase productivity and project success.

Oracle's Primavera Web Services (PWS) allows organisations to combine project data and dashboards from other Primavera applications into the organisation'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.

## BENEFITS & FEATURES

- Leverage your existing IT investments
- Integrate Primavera P6 Enterprise Project Portfolio Management with your ERP systems
- Language independent
- Improve project team productivity
- Back-office and front-office systems connectivity
- Operating system independent
- Create a single BPM portal
- WS-\* standards use
- Distributed environment deployable

FIGURE 01



Integration strategy for Primavera applications

### Back-office and front-office systems connectivity

Connect your 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. Any language that supports Web services can be used (for example, C/C++, Ruby, Perl).

### Operating system independent

PWS 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 PWS, 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.

## Integrating with existing business systems

Enables a complete, enterprise-wide integration strategy that will help you reach business objectives such as:

- Enterprise resource planning (ERP) systems
- Financial systems
- Desktop productivity tools such as Microsoft Outlook and Microsoft Excel (figure 1)

## Leverage your existing IT investments

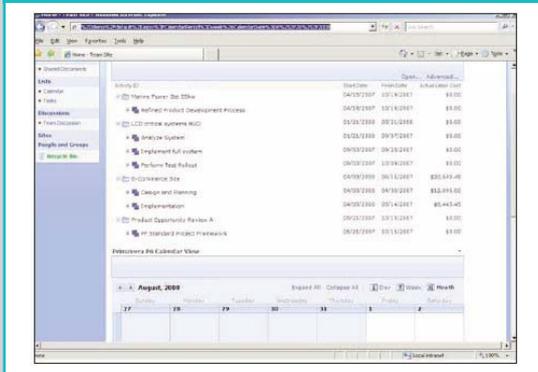
In areas such as ERP; ticketing; maintenance, repair, and overhaul; reporting; and portals. A Web services API allows users to integrate with Primavera P6 Enterprise Project Portfolio Management (EPPM) from any programming language supporting Web services, including .NET and Java—and is not dependent upon any specific operating system platform.

This gives users the ability to connect SAP systems running on Sun Solaris to EPPM running on Microsoft Windows Server 2003, by using any .NET programming language to connect to PWS. Or, use Java to build a custom JavaServer Pages dashboard with EPPM 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. (figure 2)

## Improve team productivity

Keep project budget data in Excel, list activities in Outlook, or assign due dates in a Lotus Notes calendar. 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.

FIGURE 02



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

## Business performance management from a single portal

Ensures the health and performance of the business are directly represented to the team members responsible for driving the business. With PWS, 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.

## Architecture

PWS is based on Web services standards such as Web Services Description Language (WSDL), XML, and SOAP. Using Apache CXF, Primavera WS 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, PWS will grant access to most EPPM data and capabilities to couple into existing business data systems.

## Deployment

To deploy a PWS integration solution, begin by using a J2EE-compliant application server. The PWS 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.