

Oracle Calendar Development Tools

Fact Sheet
June 2004

Oracle Calendar Development Tools

Introduction	3
Resources	3
Documentation	3
OTN forums	3
Oracle Calendar SDK	4
Oracle Calendar Web services toolkit	4
Development Tools Roadmap	6
Oracle Calendar SDK	6
Oracle Calendar Web services toolkit	6

Oracle Calendar Development Tools

INTRODUCTION

Oracle Calendar provides a complete infrastructure supporting multiple clients and access methods. This document outlines our development and integration platform solutions, which include:

- Oracle Calendar SDK
- Oracle Calendar Web services toolkit

Oracle Calendar offers these two distinct solutions, which leverage the Oracle Calendar server and application system to allow for custom application development and portal integration.

RESOURCES

Documentation

The official Oracle Calendar Developer's guide contains the list of functions for both packages:

http://otn.oracle.com/pls/cs904/cs904.show_toc?partno=b10893&remark=drilldown&word=developer%27s+guide

OTN forums

The Oracle Calendar developer tools discussion forums offer customers the ability to collaborate and exchange information with a variety of audiences. Peer-to-peer discussion enables customers to work together to solve issues, exchange ideas and share code. These forums also act as channels for corresponding with Oracle Consulting and Development, where customers can receive coding tips and troubleshooting help directly from the source.

For Product Management, the forums serve as the primary feedback channel from customers, enabling PMs to analyze and validate business requirements and evaluate the impact on product direction.

Both forums can be found here:

<http://forums.oracle.com/forums/index.jsp?cat=31>

ORACLE CALENDAR SDK

The Oracle Calendar SDK (also known as CSDK or CAPI) is a set of functions, written in C/C++, that allows a developer to create applications for use with Oracle Calendar. Using a native C interface, the package allows for implementation using any language that can call C functions natively.

The Oracle Calendar SDK contains:

- A shared library implementing the APIs
- A 'C' header file
- Oracle Calendar client libraries
- Event operations (Oracle Calendar event API)
- Task operations (VTODO iCal objects)
- Contact operations (VCARD iCal objects)
- Corresponding Java functions with JNI (Java native interface)
- Remote designate operations
- Connection pooling design
- Sample/Demo programs.

Using standard *iCalendar* objects to represent meetings and events, a developer can use CSDK functions to create programs that read/write calendar data, storing the information on the Oracle Calendar server.

Examples might be a custom interface to the Calendar server from a third-party application, or migration utilities that allow for data extraction from any other system capable of producing *iCalendar* output.

Connection pooling adds configuration options for the connection model used by the CSDK. This greatly enhances resource usage and efficiency when implementing various applications (especially Web-based and multi-threaded environments), and promotes reuse of existing connections.

ORACLE CALENDAR WEB SERVICES TOOLKIT

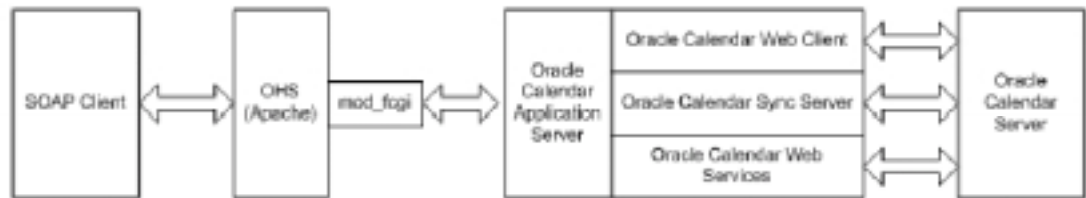
Oracle Calendar Web services is a component of the Oracle Calendar application system, which handles application level services. Web services allows applications to retrieve, through common XML queries, calendaring data for display in any portal, client application, or backend server. iCal data is coded in XML, wherein iCal becomes xCal. SOAP is used to encapsulate the messages for delivery. The calendaring data Web services SOAP is stored directly on the Calendar Server store. This is in effect the CWSL, or Calendar Web services Language.

Oracle Calendar Web services is comprised of three main areas. The first is SOAP, providing the communication protocol by which a client and server exchange "objects" over HTTP. The second is the Web service Description Language (WSDL), with which third-party integrators can query the Web Service for a description of its functionality (similar to IDL). The final element of Web services is the registry where a Web Service can be published and located by a client. This element is known as Universal Description, Discovery and Integration (UDDI).

The Web services toolkit uses an approach that leverages XML interoperability to allow for developers to use the included Java classes (ours is the Calendarlet, and others are included for dependency reasons) to create an application that can retrieve, through common queries, filtered information for display in a Web environment.

The same iCal format is used, only encapsulated in XML for recognition by other systems that act as retrieval or posting stations for these messages.

The Oracle Calendar application system, of which Web services is a part, also includes the Oracle Calendar Web client and Oracle Sync Server.



The Oracle Calendar Web services toolkit gives SOAP access to the Calendar server database through a series of Java classes, known as the Calendarlet. This allows developers to use a Java IDE and abstracts the XML structure required to build applications.

Use the Calendarlet to create your own clients and integrate calendaring data into your own applications. This release of the Oracle Calendar Web services toolkit contains functionality to search, create, modify, and delete calendar events, as well as search tasks.

To integrate calendaring data within any portal, client application, or backend server, one requires the ability to make an HTTP connection to the Web server hosting the Web services, generate SOAP messages and parse the SOAP responses (using any technology that can send and receive HTTP strings), and make use of an existing XML toolkit to generate outgoing and parse incoming HTTP strings with a SOAP client toolkit.

Contents of the client CD download package for the Oracle Calendar Web services toolkit (Oracle Collaboration suite Release 2) include:

- `Calendarlet.tar`: The Calendar JAR file.
- `Javadoc.tar`: The Javadoc HTML documentation for the Calendar.
- `ws_testtool.tar`: The Java source for the Calendar Web services toolkit testing tool.

DEVELOPMENT TOOLS ROADMAP

We are currently planning new features to enhance our existing packages and extend the functionality we provide for integration and development projects in the next release (see below). Our longer-term goal is to provide seamless integration between an organization's disparate applications and across corporate boundaries, as we follow emerging Web services standards for trusted routing and message delivery. Both the CSDK and the Web services toolkit will continue to take advantage of Oracle's evolving Time Management Platform offering.

Oracle Calendar SDK

- Preference support (user/resource settings)
- Personal annotations and per-instance details
- Reminder and preference support (Meeting creation)
- Extension of available properties
- Additional sample code and documentation

Oracle Calendar Web services toolkit

- New Calendar portlet
- Personal annotations and per-instance details
- Reminder and preference support (Meeting creation)
- Meeting creation with attendee support
- Additional sample code and documentation



Oracle Calendar Development Tools

June 2004

Jean-Marc Robillard

Product Manager – Time Management Platform

Oracle Corporation

World Headquarters

500 Oracle Parkway

Redwood Shores, CA 94065

U.S.A.

Worldwide Inquiries:

Phone: +1.650.506.7000

Fax: +1.650.506.7200

www.oracle.com

Oracle Corporation provides the software
that powers the internet.

Oracle is a registered trademark of Oracle Corporation. Various
product and service names referenced herein may be trademarks
of Oracle Corporation. All other product and service names
mentioned may be trademarks of their respective owners.

Copyright © 2002, 2004, Oracle.

All rights reserved.