

FMW MapViewer 11g Frequently Asked Questions

This FAQ addresses frequently asked questions relating to availability, certification, and key messages of MapViewer in Oracle Application Server 11g and WebLogic Server.

Frequently Asked Questions

What is MapViewer?

MapViewer is a Java-based visualization tool that is used to render, in map form, location based content and spatial data stored using the spatial feature of Oracle Database. It includes It can also render map and related content from ESRI Shape Files, real-time XML feeds such as GeoRSS, and geographic web services including themes from OpenGeospatial Consortium Web Feature Services.

MapViewer can be used to:

- Create customized maps that show geographic features such as roads, city areas, waterways and other transportation networks.
- Display map themes such as national, state and local boundaries.
- Visualize business data (e.g. population demographics, psychodemographics, sales metrics, etc.), to portray and explore relationships that can often best be expressed graphically as geographic maps.
- Complement an applications workflow, providing interaction with mapped data.
- Deliver custom maps over the Internet as a component of JDeveloper or as a standalone tool.

What are the new features in MapViewer 11g?

- Among the many new features and capabilities of MapViewer 11g are:

- Certification on WebLogic Server version 10 and 10.3
- Powerful and open JavaScript/AJAX mapping API for interactive client side mapping
- Support for Safari desktop browser
- Support for ESRI Shape Files
- Support for Google Map tiles (requires a Google Maps API key)
- Interface for 3rd party map tile servers (in JavaScript API)
- Heatmaps
- Secure map rendering (role based map content display)
- Support for OGC Web Feature Server themes and Annotation Text
- Improved Labeling, text styles, and feature rendering
- PDF output support
- Improved Non Spatial Data Provider and External Spatial Data Provider APIs

How is MapViewer positioned in Fusion Middleware?

Fusion Middleware MapViewer is one of the J2EE components included in all editions of WebLogic Server, Oracle Application Server, JDeveloper/ADF, and TopLink.

Why was MapViewer developed?

MapViewer was developed to simplify the development of applications that render and present location data as part of web, mobile, public sector and business applications. It is currently used by numerous Oracle applications and customer implementations.

FMW MapViewer 11g Frequently Asked Questions

What functionality does MapViewer deliver to developers?

MapViewer provides an XML request/response vocabulary, Java Client API, and JavaScript API Libraries to enable application developers to embed map-rendering capability directly into existing applications. More control of the image and the application interaction with the map is afforded through the JavaScript/AJAX and Java Client APIs that support map interaction such as pan, zoom, locate, re-center, clickable feature of interest etc. The XML map request API allows full control of MapViewer's functionality.

What are the primary benefits of MapViewer?

MapViewer saves money by reducing development time through tight integration with the ADF environment. MapViewer increases the value of location data in the Oracle database by providing a tightly coupled tool to visualize these data. It is can also be used as a powerful "mash-up" component to integrate standards-based and commodity mapping services (e.g.: OGC Web Services, GoogleMaps, Virtual Earth, Map24, Where2GetIt, etc.) with application data stored in Oracle Database and Oracle BI EE sources. MapViewer improves applications summarizing complex business and geographic data and relationships in an easily understood, universally recognized format - a map.

Packaging and Availability

How is MapViewer Licensed?

MapViewer is licensed as a feature of the all Fusion Middleware Application Server products (WebLogic Server and Oracle Application Server Editions) as well as the TopLink/ADF Deployment option.

How is MapViewer Delivered?

MapViewer is available for download from OTN and MyOracleSupport (formerly Metalink). It will also be

packaged on the Oracle Fusion Middleware Companion DVD for deployment in all supported, licensed environments. Supported deployment environments (J2EE servers) include: Oracle Weblogic Server, Oracle Application Server, and standalone OC4J. The full list is available at http://www.oracle.com/technology/products/mapviewer/htdocs/j2ee_server_support.html

Can I download MapViewer from Oracle.com?

Yes, MapViewer can be downloaded from its OTN web site:
<http://www.oracle.com/technology/products/mapviewer/index.html>

Features

What features does MapViewer provide?

MapViewer is a programmable tool for rendering simple maps using spatial data managed by Oracle Spatial and/or Oracle Locator. MapViewer includes components that perform cartographic rendering, interactive scrollable maps, and a map definition tool to manage map metadata and portrayal information.

How does MapViewer work?

MapViewer is primarily a J2EE application that includes the following components:

- A core rendering engine (SDOVIS) that performs cartographic rendering and a servlet to expose the rendering functions to web applications.
- A suite of APIs (in XML, Java, PL/SQL, and AJAX-based JavaScript) that allow programmable access to MapViewer features.
- A graphical Java application, Map Builder, to perform map design-related activities.

FMW MapViewer 11g Frequently Asked Questions

- Oracle Maps, which includes map cache and FOI (feature of interest) servers that facilitate the development of interactive Web mapping applications using the JavaScript API library.

MapViewer is a rendering engine that builds a JPEG or PNG format image for a user specified map defined in the Oracle dictionary. A user first defines a map by picking spatial layers (i.e. SDO_GEOMETRY column names) they would like to associate with a map. A user defines these maps by populating information into Oracle dictionary tables. The Oracle dictionary will also contain metadata associated with symbology, label, and style rules for spatial layers associated with a map. A set of configurable styles and symbols are populated in the Oracle dictionary when MapViewer is installed.

- Dynamic symbol and style definitions, along with SQL statements that return geometries can also be submitted together with a map display request. The geometries returned from the dynamic SQL statements are displayed on the rendered map and displayed in any browser.

Oracle Maps, built on core MapViewer features, uses a map tile server that caches map image tiles, and a feature of interest (FOI) server that streams live data out of a database (or other supported source) to be displayed as interactive features on a map.

From which programming languages can the MapViewer API be called?

The MapViewer XML API can be called from any programming language that can submit and receive XML to/from WebLogic Server or Oracle Application Server (i.e. HTML forms, Java, C, OCI, Pro*C, PL/SQL, etc.). MapViewer will return an XML response that contains a URL to the map image, and additional metadata. MapViewer also provides a thin Java client API for interacting with the rendering engine through the HTTP protocol. MapViewer also

provides a powerful and complete JavaScript/AJAX API for developing highly interactive and performant web mapping applications. This API can be invoked from any web programming languages from HTML to PHP to ASP.NET.

Can MapViewer be used independently of Oracle Fusion Middleware?

MapViewer is licensed only with Oracle Fusion Middleware product. It requires a J2EE container, JDBC, XML parsers and other components supplied with Oracle Fusion Middleware products. In addition, MapViewer applications can be deployed in any standard J2EE container provided the customer has sufficient licenses of Fusion Middleware products (WebLogic Server, Oracle Application Server, and/or TopLink/ADF Deployment option). The list of supported J2EE containers is available from OTN at: http://www.oracle.com/technology/products/mapviewer/htdocs/j2ee_server_support.html

Additional Information

Where can I get additional information about MapViewer?

In addition to this FAQ, Technical White Papers, the MapViewer User's Guide, a MapViewer Discussion Forum and other relevant information are available from OTN.



Oracle Corporation

Worldwide Headquarters

500 Oracle Parkway
Redwood Shores, CA
94065
U.S.A.

Worldwide Inquiries

Phone
+1.650.506.7000
+1.800.ORACLE1

Fax
+1.650.506.7200

oracle.com



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

Copyright © 2009, Oracle and/or its affiliates. All rights reserved. This document is provided for information purposes only and the contents hereof are subject to change without notice. This document is not warranted to be error-free, nor subject to any other warranties or conditions, whether expressed orally or implied in law, including implied warranties and conditions of merchantability or fitness for a particular purpose. We specifically disclaim any liability with respect to this document and no contractual obligations are formed either directly or indirectly by this document. This document may not be reproduced or transmitted in any form or by any means, electronic or mechanical, for any purpose, without our prior written permission.

Oracle is a registered trademark of Oracle Corporation and/or its affiliates. Other names may be trademarks of their respective owners.