

Oracle Utilities Customer Self Service

Whitepaper:

Using Google Maps™

Release 2.1.0 Service Pack 2

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Table of Contents

- Overview4**
 - Additional Resources4
- Configuration5**
 - Assumptions5
 - MapView Configuration5
 - Google Maps Configuration6
 - MapView Metadata Configuration for Google Maps6
 - Additional MapViewer Metadata Configuration8

Chapter 1

Overview

This document provides an overview of using the base map provided by Google Maps service in conjunction with the Oracle Utilities Customer Self Service (OUCSS) Outage Map screen.

Additional Resources

Resource	Location
Oracle Map Viewer User Guide	http://www.oracle.com/technetwork/middleware/mapviewer/documentation/index.html
Oracle ADF Mobile Browser documentation	http://docs.oracle.com/cd/E28280_01/web.1111/e10140/toc.htm
Oracle Fusion Developers Guide (JDeveloper and ADF)	http://docs.oracle.com/cd/E28280_01/web.1111/b31974/toc.htm

Note: This document and the documentation mentioned above is subject to revision and updating. For the most recent version of this and related documentation, as well as information on functionality and known issues for other Oracle products that may be required for installation and proper functionality of this product, check the Oracle Utilities Customer Self Service section of the [Oracle Utilities Documentation](http://www.oracle.com/technetwork/apps-tech/utilities/documentation/index.html) area on the Oracle Technology Network (OTN) web site (<http://www.oracle.com/technetwork/apps-tech/utilities/documentation/index.html>).

Chapter 2

Configuration

This section describes how to reconfigure your existing installation of Oracle Utilities Customer Self Service to work with the Google Maps service.

Assumptions

Google Maps is used to draw the base map (roads, geographic features, etc.); but city, county, and zip geometry data must be available for the MapViewer component to overlay the base map with areas in which outages occur.

For illustrative purposes this document assumes that NAVTEQ data is used for city, county and zip; the data can be obtained elsewhere, provided that it is loaded into the schema that is available to MapViewer and contains city, county, and zip geometry information.

Note: This document also contains a procedure that should be performed to make the spatial data available to MapViewer. For more information about configuring MapViewer refer to the "Configuring MapViewer" section in the *Oracle Utilities Customer Self Service Installation Guide* Release 2.1.0.2.

MapViewer Configuration

Configuration comprises three steps:

- Enabling the Google Maps service using Google configuration screens.
- Configuration of MapViewer metadata.
- Adjustment of OUCSS settings.

Google Maps Configuration

Follow the steps outlined in ‘Obtaining an API Key’ chapter in the *Google Developers* document at: <https://developers.google.com/maps/documentation/javascript/v2/introduction#Intro>.

After completing the procedure, the Google Maps (version 2) service should be enabled and the API key should be ready for subsequent setup steps.

Note: Google Maps version 2 is used, since version 3 is not compatible with the version of ADF used in the current OUCSS installation.

MapViewer Metadata Configuration for Google Maps

This procedure configures the MapViewer to use the base map from Google Maps and use overlay data from the local database.

- 1 Create a new datasource as described in the “Configuring MapViewer” section of the *OUCSS Installation Guide*. The name of this datasource will later be used to adjust **SS_Configuration** parameters.

ORACLE MapViewer Administration Console 11g

The screenshot shows the 'Manage MapViewer' interface. On the left is a navigation menu with options: Configuration, Datasources, Geometry Cache, Create Tile Layer, Manage Tile Layers, Monitoring, and View Logs. A 'Refresh' button is located above the main content area. The main content area is titled 'Existing data sources' and contains buttons for 'Edit', 'Delete', and 'Purge cached metadata'. Below these buttons is a table with the following data:

Select	Name	User	Container DS
<input type="radio"/>	NAVTEQ_SF	NAVTEQ_SF	

- 2 A new tile should be created to be used with Google Maps. To create the new tile, click the **Create Tile Layer** link under **Manage MapViewer**.

The screenshot shows the 'Manage MapViewer' interface. On the left is a navigation menu with options: Configuration, Datasources, Geometry Cache, Create Tile Layer, Manage Tile Layers, Monitoring, and View Logs. A 'Refresh' button is located above the main content area. The main content area is titled 'Existing map tile layers' and contains buttons for 'Edit / View details' and 'View map / Ma'. Below these buttons is a table with the following data:

Select	Name	Data Sc
<input type="radio"/>	ELOCATION	NAVTEC
<input type="radio"/>	ELOCATION_MAP	NAVTEC
<input type="radio"/>	NAVTEQ_WORLD_MAP	NAVTEC

3 In the **Select type of map source** dropdown list, select **Google Maps**.

- Configuration
- Datasources
- Geometry Cache
- Create Tile Layer
- Manage Tile Layers

TIP You must first specify where the map tile images will come from. Choose Internal if this MapViewer

Select type of map source: Google Maps ▼

Continue

4 Select the datasource defined in Step 1 and leave other parameters as is (otherwise, you may have a problem saving the input).

5 Save the new map tile layer.

6 In the **Manage Tile Layers** list, select the newly-created tile layer and edit it:

Manage MapViewer

- Configuration
- Datasources
- Geometry Cache
- Create Tile Layer
- **Manage Tile Layers**
- Monitoring
- View Logs

Cancel XML mode Submit

Name: OUCSS_GOOGLE_MAP
Data source: NAVTEQ_SF
Copyright text:

Adapter Settings
Adapter properties Add

Select name	value
<input type="radio"/> version	2
<input type="radio"/> lib_url	http://maps.google.com/maps?file=api&v=
<input type="radio"/> key	AlzaSy8AB33zr8KTErKQ0VFrwaFPsOdi
<input type="radio"/> map_type_values	MVGoogleTileLayer.MAP_TYPE_ROAD;M
<input type="radio"/> map_type_names	Road;Hybrid;Shaded;Satellite

Coordinate System Definition
Zoom Level Definition

Cancel XML mode Submit

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- For `lib_url` use the following URL:

`http://maps.google.com/maps?file=api&v=2&key=<your_GOOGLE_API_key>&`

This URL ensures that the ADF component will fetch the Google Maps version 2 API. Also note that it contains the Google API key that was obtained in the previous “Google Maps Configuration” procedure.

- For the `version` parameter, use ‘2’.
- For the `key` parameter, use the previously-obtained Google API key.

7 Save your changes.

Additional MapViewer Metadata Configuration

Values in the default ("out-of-the-box") table must be adjusted to match the datasource name, tile layer name, and geometry theme name that were created in the previous procedures.

- 1 **'outage.map.base.map'** should contain the value `<Datasource_Name>.<Tile_Layer_Name>`. For example, `NAVTEQ_SF.GOOGLE_WORLD_MAP`.
- 2 **'outage.map.color.theme'** should contain the name of geometry theme. For example, `'GOOGLE_ZIP'`.
- 3 **'outage.map.color.theme.loc'** points to the column in the table with postal codes. It should match the one that was used during creation of a text style. For example, `'POSTALCODE'`.
- 4 **'outage.map.srid'** should reflect the spatial reference system identifier of the data.
- 5 Restart the OUCSS servers and verify that the Outage Map shows the base map from the Google Map service, as well as the outage data overlay.

