KML Generator User Guide

Overview

E-DECIDER KML Generator provides web service APIs to enable users to access [FEMA HAZUS](#) data inventory and other [QuakeSim](#)/[E-DECIDER](#) products from Google Map, Google Earth and web applications.

E-DECIDER KML Generator enables on-demand data request by user defined spatial query, it supports different incident types which can be defined as Point, Line and Polygon geometry.

E-DECIDER KML Generator is powered by open-source Geospatial tools and Cloud Computing technology.

API

Basic Structure

RESTful API

Service URL:

> http://gf2.ucs.indiana.edu/insartool/hazuskml?

Parameters

geometry (required)

> specify geometry type: **point, line, polygon**

coordinates (required)

> lists of coordinates in longitude, latitude: lon1,lat1,lon2,lat2...

radius (required)

> search radius with unit: e.g. 10miles, 16kms

layers (optional)

> specify HAZUS layers, default value is set to "hzAll" (return data from all HAZUS layers), see Table 1 in Appendix for the details

mode (optional)

> specify KML/KMZ generation mode: **server, download, goolgemap**
> **server** (default): KML contains no real data, and data are pulled from E-DECIDER GeoServer dynamically
> **download**: KMZ packed with the data, and designed for Google Earth
> **googlemap**: special tailored KMZ file for Goolge Map.

Examples

Geometry

Point type of incident

l http://gf2.ucs.indiana.edu/insartool/hazuskml?
geometry=point&coordinates=-115.501603,32.772068&radius=10miles&mode=download
[Click to test this url](#)

Line type of incident

http://gf2.ucs.indiana.edu/insartool/hazuskml?
geometry=line&coordinates=-115.668295,32.769645,-115.600117,32.775922,-115.550659,32.770754,-115.474928,32.771425,-115.422545,3
[Click to test this url](#)

Polygon type of incident

http://gf2.ucs.indiana.edu/insartool/hazuskml?
geometry=polygon&coordinates=-115.623153,32.793255,-115.640356,32.769450,-115.583340,32.755346,-115.539885,32.756041,-115.5078
[Click to test this url](#)

Mode

"server" mode is designed for testing and debugging the application, it generates the plain KML file with urls points to E-DECIDER Geoserver.

"download" mode generates standalone KMZ files packed with the data, which works with Google Earth. It also can be downloaded directly from Google Earth by adding url as "Network Link".

"goolgemap" mode generates special KMZ works with Google Map, since Goolge Map has limited support on KML format. To test a url, paste it into the search box for maps.google.com.
[Click to test this url with Google Map](#)

Version History

Current Version 2.0.0

Notes: version 2.0 and 1.0 are supported at the same time
version 2.0 is designed for general incident type
version 1.0 is tailored for earthquake

Version 2.0.0, release date: Feb. 11, 2013
-- spatial query support, point/line/polygon incident type
-- download [User Guider for v2.x](#)

Version 1.0.0, release date: Oct. 10, 2012
-- first release for earthquake event
-- download [User Guide for v1.x](#)

Contact

For more information, please visits [E-DECIDER Website](#)

On General Issues, please contact:

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On Specific Programming Issue, please contact:

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Appendix

Table 1 HAZUS Layers

Layer Name	HAZUS Layer
hzAll	all HAZUS layers
hzHPLF	High potential loss facilities
hzTRANSP	Transportation layers
hzEF	Emergency facilities
hzUTL	Utilities layers
hzAirportFlty	Airport Facility
hzBusFlty	Bus Facility
hzCareFlty	Care Facility
hzCommunicationFlty	Communication Facility
hzDams	Dams
hzElectricPowerFlty	Electric Power Facility
hzEmergencyCtr	Emergency Center
hzFerryFlty	Ferry Facility
hzFireStation Fire	Station
hzHazmat	Hazardous Material Facility
hzHighwayBridge	Highway Bridge
hzHighwayTunnel	Highway Tunnel
hzLightRailBridge	LightRail Bridge
hzLightRailFlty	LightRail Facility
hzNaturalGasFlty	Natural Gas Facility
hzNuclearFlty Nuclear	Power Plant
hzOilFlty	Oil Facility
hzPoliceStation	Police Station
hzPortFlty	Port Facility
hzPotableWaterFlty	Potable Water Facility
hzRailFlty	Railway Facility
hzRailwayBridge	Railway Bridge
hzRunway	Runway
hzSchool	School
hzWasteWaterFlty	Waste Water Facility