E-DECIDER KML Generator Service Guide

KML generator service produces KML/KMZ files contain FEMA Hazus inventory data and other data products from E-DECIDER geospatial data server.

Quick Start Guide

KML generator service has four input parameters:

- **epicenter**: epicenter as latitude and longitude pair, e.g. epicenter=33.35,-115.71
- **radius**: search radius, e.g. radius=40miles
- **layers**: Hazus data layers, e.g. layers=hzAll
- **mode**: type of KML/KMZ, e.g. mode=download

Users can request three different versions of KML/KMZ by specifying "**mode**" parameter.

mode	Packed with Data	File Type	Target Viewer
server	No	KML	Google Earth
download	Yes	KMZ	Google Earth
googlemap	Yes	KMZ	Goolge Map

Sample URLs:

For example: epicenter: 33.35, -115.71, radius: 40 miles, and layers: hzAll (return all layers)

Service URL to generate the simple kml file points to GeoServer:

http://gf2.ucs.indiana.edu/insartool/hazuskml?epicenter=33.35,-115.71&radius=40miles&layers=hzAll&mode=server

Service URL to download the data packed with all Hazus layers as one kmz file:

http://gf2.ucs.indiana.edu/insartool/hazuskml?epicenter=33.35,-115.71&radius=40miles&layers=hzAll&mode=download

Service URL to generate a special version for Google Map

http://gf2.ucs.indiana.edu/insartool/hazuskml?epicenter=33.35,-115.71&radius=40miles&layers=hzAll&mode=googlemap

How to use service URLs:

For **mode=server** and **mode=download**, it generates KML targeted for Google Earth, there are two ways to use service URLs:

- Open URL in web browser, and save the KML/KMZ to local disk, then open it with Google Earth
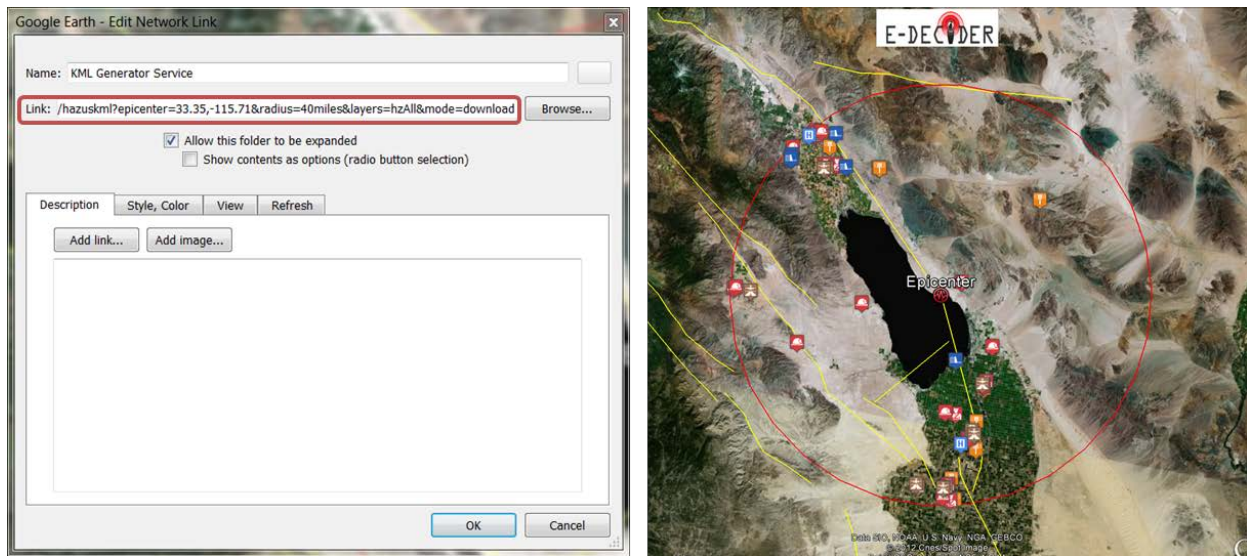- Add URL directly as "Network Link" under "Add" menu in Google Earth

Figure 1 Add "Network Link" and Screenshot of the sample output in Google Earth

For **mode=googlemap**, it generates a simplified KMZ for Google Map, since Google Map only has limited supports for KML specifications. To use the URL, paste the URL directly into search box, then click "search" in http://maps.google.com
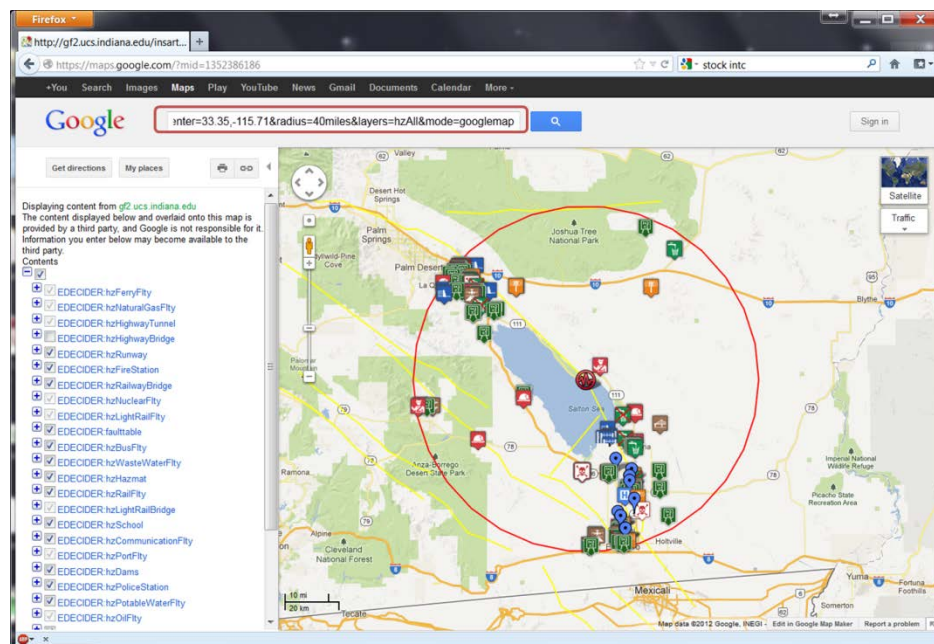

Figure 2 Use sample URL with Google Map

Sever URL format: http://gf2.ucs.indiana.edu/insartool/hazuskml?[parameters]

Example:

http://gf2.ucs.indiana.edu/insartool/hazuskml?epicenter=33.35,-115.71&radius=40miles&layers=hzAll&mode=server

Required parameters: epicenter, radius

epicenter: the latitude and longitude of epicenter, epicenter=lat,lon

radius: distances to epicenter, multiple radius and different units are supported, radius=r1,r2,r3unit, unit can be either "miles" or "kms", e.g. radius=20,40,60miles

Optional parameters: mode, layers

mode: "server" ,"download" or "googlemap". The default value is "server". "download" will pull data from GeoServer and pack all the data into one kmz file for Google Earth; "googlemap" will generate kmz file that able to be displayed with Google Map. It may take up to several minutes for large regions in populated urban areas.

layers: specify Hazus layers, layers=hzlayer1,hzlayer2,hzlay3 …, notice: all the layers names are case-insensitive when used in service URL.

Layer	Hazus Layer
hzAll	grab 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