Configuration file for SDPC replay providers

The configuration file is used to configure the player to print, send, and plot data from the Connected Vehicle SDPC warehouse.

All sections (top level members) are optional and all fields have defaults.

Source information is always needed while all other sections are truly optional.

If destination section is not present then data will not be sent.

If other.verbose is set to false (default) then data will not be printed.

If renderer is not specified (set to null) when the replay-provider class is instantiated, the data will not be plotted.

Configuration files fields:

source specifies source for the data such as host, port, Mongo database, collection, query, and query options

host Mongo database server name. Default: *localhost*

port Mongo database port. Default: *27017*

database Mongo database name. Default: *cvdb*

collection Mongo database collection. Default: *vehSitDataMessage*

queryStr Mongo query as string. Fallback for *query* or *queryFile* if any

query inline query. Default: *{“$query”:{},”$orderby”:{“deCreatedAt”:-1}}*

queryFile Name of file containing Mongo query. Fallback for *query* or *queryFile*

skip Number of records to skip before processing. Default: *0*

limit Max of records to process. Default: *-1* (unlimited)

destination specifies target host, port, and reply port for trust establishment

host target server name or IPv4/IPv6 address. Default: *localhost*

port target port. Default: *46751*

replyPort reply to port. Default: *46752*

trust provides disposition for trust establishment

ignore ignore trust establishment failure. Default: *true*

attempts maximum trust establishment retries. Default: *3*

timeout socket receive timeout in milliseconds. Default: *3000* (3 seconds)

other miscellaneous options

processor Mongo database record processor subsection

className fully qualified class name of the record processor class. Default: *gov.usdot.desktop.apps.provider.sdpc.MongoDbSdpcDbRecordProcessor*

config provider specific configuration options. Default: null (none, n/a)

delay delay between sent messages in milliseconds. Default: *500* (.5 sec)

verbose pretty print messages being sent. Default: *false*

groupID groupID to use in dialogs. Default: *0* (i.e. unused or undefined)

The sender class is *gov.usdot.desktop.apps.provider.sdpc.MongoDbSdpcSenderProvider*.

Records fetched from Mongo database are processed via a database record processor that is specified by *other.processor.className* option.

The default record processor uses database record *encodeMsg* value that contains the original BER message as a source for messages being printed or sent out. Additionally, for plotting, *lat* and *long* fields from the record are used to create a geo point that is fed into renderer (if any).

Custom database record processor that allows changing original record’s requestID is *gov.usdot.desktop.apps.provider.sdpc.MongoDbSdpcCustomRequestIdDbRecordProcessor*. Configuration JSON field *other.processor.config.requestID* can be used to specify the desired ID. Default is *0xA0A0A0A0*.

Example: Replay data using sdpc\_veh\_sit\_data\_config.json configuration file:

java -cp fedgov-cv-desktop-apps-1.0.0-SNAPSHOT-jar-with-dependencies.jar gov.usdot.desktop.apps.provider.sdpc.MongoDbSdpcSenderProvider sdpc\_veh\_sit\_data\_config.json

Several sample batch and configuration files are available under:

fedgov-cv-desktop-apps/src/test/resources/

To run replay with mapping using desktop mapping application use run\_replay\_demo.bat. When running with the mapping application a new simple query for all collection data in a specific region may be requested by drawing a rectangle on the map using the left mouse button press-and-drag. This dynamic query is not persisted on exit. To use the dynamic query: click stop button, then draw a rectangle, then click start button.

Sample configuration file sdpc\_veh\_sit\_data\_request\_id\_config.json:

{

"source":{

"host":"10.118.209.100",

"port":27017,

"database":"cvdb",

"collection":"vehSitDataMessage",

"query":{

"$query":{

"location":{

"$geoWithin":{

"$box":[

[

-83.49163055419922,

42.47678161860101

],

[

-83.4550666809082,

42.49589666159403

]

]

}

}

},

"$orderby":{

"deCreatedAt":-1

}

},

"skip":5,

"limit":10000

},

"destination":{

"host":"10.98.65.120",

"port":46751,

"replyPort":46752

},

"trust":{

"ignore":true,

"attempts":3,

"timeout":3000

},

"other":{

"processor":{

"className":"gov.usdot.desktop.apps.provider.sdpc.MongoDbSdpcCustomRequestIdDbRecordProcessor",

"config":{

"requestID":3735928559

}

},

"delay":500,

"verbose":true

}

}