# Requirements for Quartz Site Visualisation Tool

Intention is for this tool to support small exposure sets - ideally < 100 locations, certainly < 1000. AF: Agreed. Intention is to be used mainly for Fac, for Engineering/Industrial, and for a few locations that are part of a worldwide account (i.e. to map US exposures where there are only a few US locations covered under a non-US account)

Tool to be driven from a csv file/simple table (in excel? AF: Agree: Have a standard input template that we could use to import data into the tool)

This data to be created by hand, manipulated from broker data or exported (another tool) from EDM/CEDE.

Key fields of the data would be (AF: what is the minimum location resolution that would be required?):

* Location Id (unique)
* Location Name
* Country
* State/Cresta
* County/Sub-Cresta
* Street Address (AF: is detailed street address required, or can it also function with postal code? Will not be as precise but will give u/w indication of location)
* Latitude (AF: to be looked up by tool based on address)
* Longitude (AF: to be looked up by tool based on address)
* Attribute 1 .. n (could be things like value, limit, etc…)
* Info 1 .. n (additional associated info such as nominal amounts, % distribution, etc. Other nice to have but not hard requirement: User able to tailor-make logic to build views (i.e. year over year comparison, % of total TIV, etc…)
* Ability to visualize worldwide locations (i.e. for regions for which there is no vendor model )
* Ability to be used for perils: EQ, Windstorm, Flood
* Nice to have but not hard requirement: Able to add contract information, labels?
* Nice to have but not hard requirement: Geographical features (bodies of water, rivers)

The ability to view the above info using already implemented visualization techniques, along with the ability to correct/improve this data using the interactive abilities in the visualization tool prototype will be beneficial. This latter ability is likely to be most relevant to FAC underwriting and the Risk Browser tool.

If Integration with Risk Browser proves possible (this is a ‘stage 2’ requirement but worth thinking about even now) then one can imagine the ability to nominate an account that is being manipulated with Risk Browser (which is stored in a regular EDM) and have the visualization tool jump in to display (and possibly allow spatial correction) the account locations. (AF: agreed this is desirable: the ability to drill from aggregate data to individual locations and vice versa).

The initial intent for this tool is as an interactive tool for underwriters and risk analysts ( AF: strongly agree: want to be able to use without having modellers do any pre-processing as we don’t want to waste their time if we are not sure we want to quote) but for ‘stage 2’ we could also consider the ability to get these visualizations into a static document. Note, this is not a hard requirement – we should review once the stage 1 version gets some use. (AF: Agree; Desirable for the output to be sharable, to export and save reports)

Initially we have agreed that the generation of textual info to drive this tool will be the analyst teams responsibility AF agreed.(once given a definition of the format, related to the field list described above – note this may not be exhaustive so please treat it as indicative only) I think there could be a natural evolution of this facility into QMD where the analyst can use a GUI similar to the exposure filtering (for activation/deactivation) recently implemented to generate files suitable for use with this visualization tool. For example, we could request ‘all Florida locations’ and just these would be extracted from the EDM into a visualization tool format file. Note that this only works for small accounts and ***we should be careful here of overlap with the Quartz Visualisation services also in development***.

For exposure tracking, would be useful for visualization tools to view exposure on both an individual deal basis (i.e. TT number) and also on aggregate basis (i.e. group of TT numbers, a portfolio for a given underwriter, a region, an office). The underwriter would find this useful in order to see how much capacity we have remaining in a certain region. ***This would give a visual picture of aggregates. However, you may already have this ability in another tool.***

Nice to haves but not requirement. Maybe at a later stage: To have overlays showing hazard intensity zones (Hazard maps: seismic intensities, flood plains, wind footprint). And historical Cat events , storm tracks