Hazus Risk Assessment and Export Tools
User Documentation
March 30, 2012

Risk Assessment Tool (version 2)

The Risk Assessment tool pulls data from the Hazus database into a Scenario 360 analysis geodatabase. User-selected S360 components will be generated. This version of the tool is compatible with Hazus 2.0 (ArcMap 10).

For the Risk Assessment button to be enabled, you must open or create a Scenario 360 analysis and verify that the data frame's spatial reference is set.

The Risk Assessment button ( ) is located on the Scenario 360 Decision Tools toolbar. Clicking this button launches the Risk Assessment Wizard.

Page 1 – Select Data Source and Hazards

(handwritten margin notes)
indicated
100 year
Flood event.
?

works
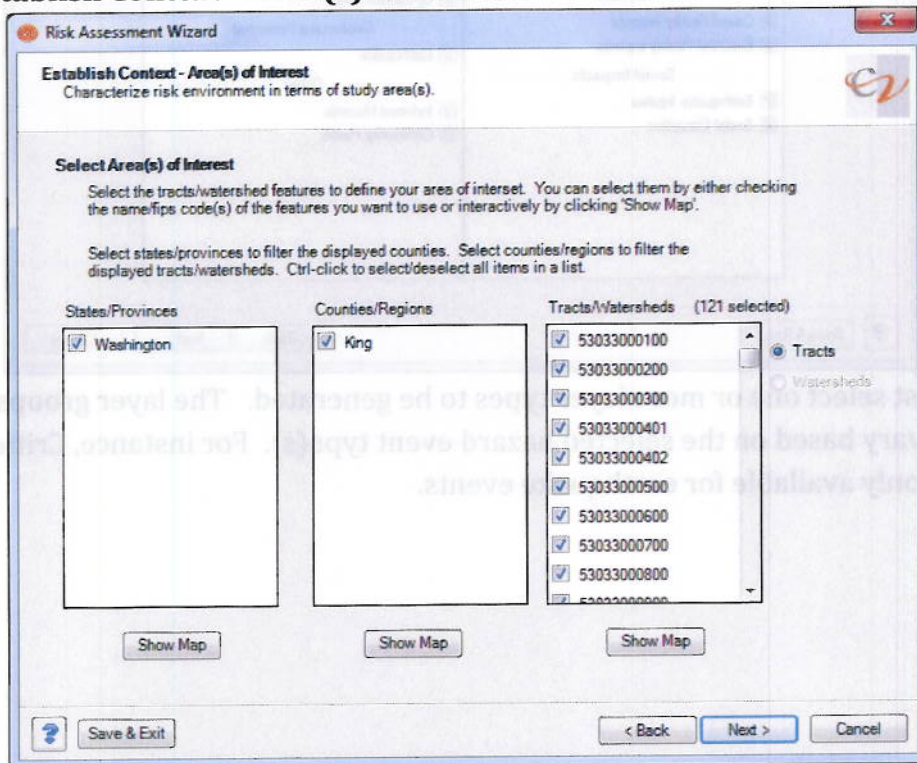with
the Auto
gen. c:hazus-data
\inventory data
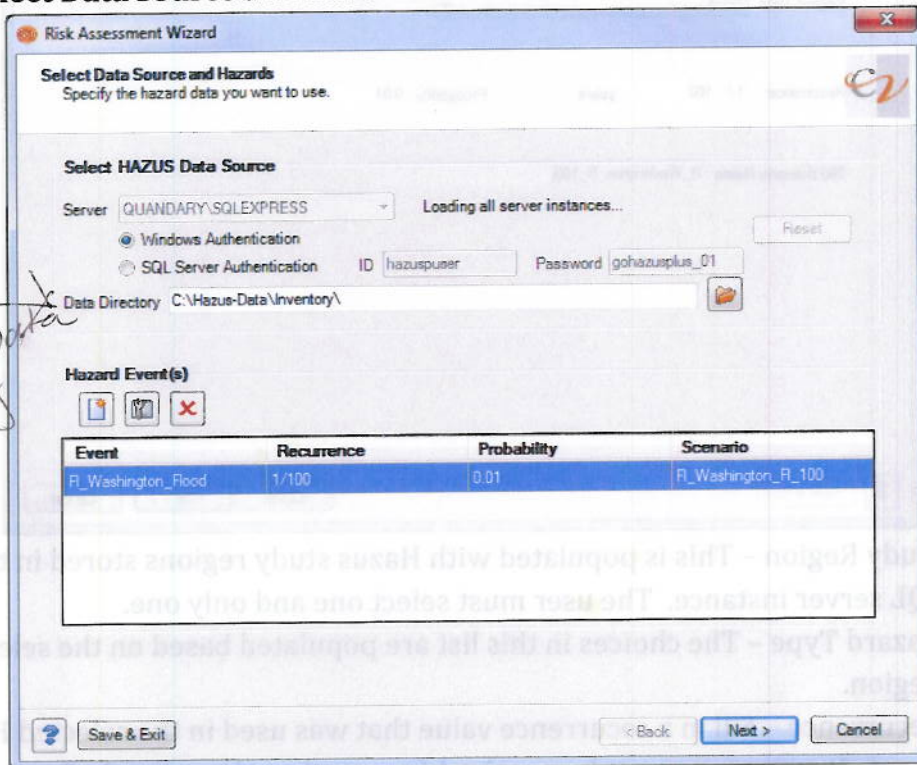
Hazus Server/Data information – These inputs default to the Hazus settings, but can be modified if needed.

- Server – This is populated with any SQL Server instances on the local network. The user must choose one.

- You can click the 'Properties' button 📖 or double-click an item to view or edit details of an event in the table. It will open the same Hazard Identification page above, but with information populated based on the selected item.
- Click the 'Delete' button ✗ to remove the selected event from this Risk Assessment analysis.

After at least one event has been added to the 'Hazard Event' table, you will be able to proceed to the next page of the wizard.

Page 2 – Establish Context – Area(s) of Interest

You must select one or more tracts (which are populated from those for which the Hazus analysis was run).

Clicking the 'Show Map' button opens a separate form with a simple map control that contains one layer (states/provinces, counties/regions, or tracts, depending on the list above the clicked button). You can interactively select one or more features through this form, if desired.

Page 4 - Summary
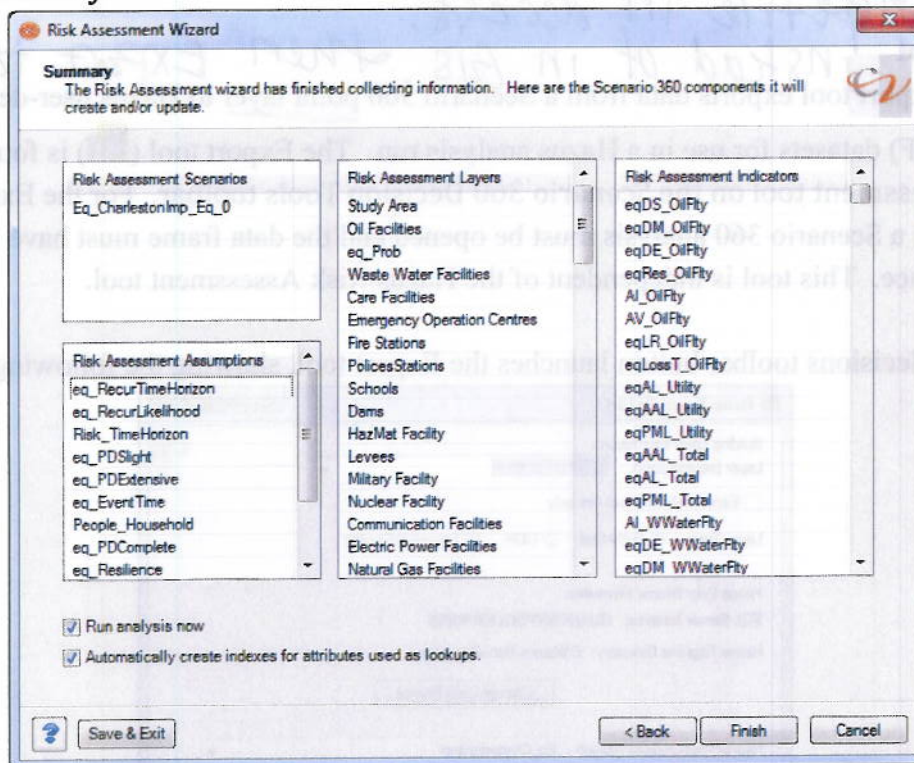
The lists shown here contain a summary of the 360 components that will be created, or modified if they already exist in this analysis. These lists are not editable; if you want to make changes, you will need to go back to the appropriate page in the wizard.

Clicking 'Finish' on the wizard:
1. Creates the relevant 360 components.
2. Imports data from Hazus into the analysis geodatabase.
3. Runs an update on all the new components, if you selected to do so.

features land use designation, building use, and potentially dwelling units range. See below for more on the Advanced Settings form.

Export Process

Once all inputs are set and verified, clicking 'Export' performs the following:

1. Inputs and settings are validated:
   a. The selected build-out layer is searched for required fields (see table below). If any of the required fields are not found, the export process stops.
   b. The Hazus user-defined facility feature class and SQL tables are identified. If they cannot be found, you are notified and the process stops.
   c. Each land-use designation in the buildings layer must have a corresponding Hazus occupancy code. If one or more do not, you are prompted to set them.
2. Building point features from the active scenario are copied to the feature class hzUserDefFlty in the UDS geodatabase, which is found in the selected Hazus study region folder. The tract id for each feature is determined spatially.
3. The sql tables are populated: hzUserDefinedFlty and the hazard-specific table (e.g. eqUserDefinedFlty).

Refer to the Community Viz Buildout to Hazus User Defined Facilities Data Conversion document for details on how these tables are populated and the system default settings.

Advanced Settings Form

The following screenshot is an example of the table generated for a build-out layer; it has different columns for an essential facilities layer.

The first two columns are not editable; they are the unique combination of the two in the selected buildings layer. This information is pre-populated from standard build-out land use types, but