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Ring Accumulation Basics & Configuration

SpatialKey's dynamic ring model has 2 basic types: Magic Ring or Target analysis.

1. The Magic Ring uses a spider approach that applies dozens of rings (or concentric rings) that run along a grid to calculate your peak accumulation within a chosen radius—including a ring centered around the prospective risk. Those rings are deduplicated and narrowed down, leaving one worst-case ring for each schedule location. The resulting ring is determined by calculating the greatest exposure from the schedule and portfolio locations that fall within it.

2. The Target analysis centers a ring (or concentric rings) on the schedule locations and returns your exposure from the schedule and portfolio locations that fall within it.

Configuration

Models are configurable by the following:

- **Peril/Title:** Terrorism or Flood are the most common

- **Magic Ring and/or Target Analysis:** The magic ring runs a spider analysis whereas the target ring centers the ring (or concentric rings) on the schedule locations.

  - **% Ring Overlap**: For the magic ring options, the default ring overlap is 12.5% but can be adjusted to 25%.

- **Radius:** Single or up to three concentric rings

- **Damage factor** on each ring. Default is 100%

- **Global Capacity Threshold** for exposed limit to see an over/under flag in the report (optional)

> 💡 **TIP!** You can run an analysis against your prospective risk alone or against new risks AND in-force portfolio. The model can also take policy terms and facultative reinsurance into consideration. The analysis degrades gracefully depending on how much information the user has given.

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How to run a Ring Accumulation

As submissions come to your desk, use Underwriting Ring Accumulations to analyze whether adding them to your book of business will create adverse concentrations of risk.

1. Enter a **single address or multiple addresses**.

2. Or **upload a schedule of locations** that has been prepared.

3. Optional: **Enter insured values (TIV)** for the data you want to analyze. When uploading a schedule, you will be able to select a column that represents insured value.

4. Optional: **Enter policy terms** for the prospective risk(s) you are evaluating.

5. Optional: **Select in-force portfolio** to understand the impact of adding the new location(s) to existing concentrations

💡 **TIP!** The more financial information you can provide, the more accurate your exposure calculation will be. Don't know the financials yet? The analysis will still provide the best look at your exposure and degrade gracefully depending on how much information you've entered.

Visualize and understand results

1. If you ran more than 1 location in your analysis, you'll initially see a summary of your schedule based on whether the new locations added enough exposure to existing concentrations to go over the threshold set for your organization. This view provides a high-level look at where to focus your analysis.

2. Use the map to visualize schedule locations, colored by over/under your threshold.

3. Click the 📄 report icon in each row or on the location point on the map to dive into each schedule location and see a zoomed in view of the accumulation along with a detailed list of all the locations, and your total exposure.

4. Each schedule location will display a detailed table reporting total exposure for all locations that fell within the ring broken down by new schedule locations and in force portfolio locations.

5. Export a CSV list of the locations that fell in the ring along with your total exposure.

💡 **TIP!** Results can also be returned via API