`Underwriter` Class Cheat Sheet

The `Underwriter` call signature follows the corresponding DecL clauses, using prefixes for exposure (including limit sub-clause), severity, occurrence reinsurance, frequency, aggregate reinsurance, and note. `sev_xs`, `sev_ps` equal `dsev` outcomes and probabilities, and `(occ|agg)_reins` clauses are lists of (share, limit, attachment) triples.

m `Severity(name, exp_el=0, exp_premium=0, exp_lr=0, exp_en=0, exp_attachment=0, exp_limit=np.inf, sev_name=", sev_a=np.nan, sev_b=0, sev_mean=0, sev_cv=0, sev_loc=0, sev_scale=0, sev_xs=None, sev_ps=None, sev_wt=1, sev_conditional=True, occ_reins=None, occ_kind=", freq_name=", freq_a=0, freq_b=0, freq_zm=False, freq_p0=np.nan, agg_reins=None, agg_kind=", note=")`[0]

The following tables show all m `methods`, and fields or properties (used interchangeably). Comments elucidate the meaning of more obscure entries.

1. Specification & creation

None

2. Update

`knowledge`, `lexer`, `log2`, `parser`, m `read_database`, m `read_databases`, m `safe_lookup`, `update`, m `write`, m `write_from_file`,

3. Moments

None

4. Statistical functions

None

5. Validation

m `interpret_program`, m `interpreter_file`, m `interpreter_line`, m `interpreter_list`, m `interpreter_test_suite`, m `test_suite`,

6. Output dataframes

None

7. Reinsurance

None

8. Visualization

None

9. Risk and pricing

None

10. Approximations

None

11. Meta

m `build`, `case_dir`, `databases`, `debug`, `default_dir`, m `dir`, m `factory`, m `logger_level`, m `more`, `name`, m `qlist`, m `qshow`, m `show`, `site_dir`, `template_dir`, `test_suite_file`, `version`,

Notes:

[0]: Arguments `sev_pick_attachments=None`, `sev_pick_losses=None`, omitted; see help.

[1]: matches `Portfolio`

Any vectorizable input accepts numeric or iterable datatypes.

Abbreviations: gcn=gross (subject), ceded, and net; stats: m=mean, cv=coefficient of variation, sd=standard deviation, var=variance, skew(ness); VaR=value-at-risk

`aggregate 0.18.0`
2023-07-16