

Differences between R3.12 and R3.13

/Acquiring CADiZ

1. Changes to L^AT_EX mark-up for conformance to draft Standard Z:

- a) change `\begin{zedsection}` to `\begin{zsection}`;
- b) change `\end{zedsection}` to `\end{zsection}`;
- c) change keyword `\zsection` to `\SECTION`;
- d) change keyword `\zlet` to `\LET`;
- e) `\vdash?` is accepted as a synonym for `\thrm`.

2. Other changes required by draft Standard Z:

- a) Z sections can now be cited as parents before they are defined;
- b) it is no longer possible to override toolkit sections, due to a change in the interpretation of the CADIZPATH environment variable;
- c) operator templates can now share operator words, so long as the common words share the same parsing token, e.g. the same postfix bracket symbol can be used by several different operators.

3. Improvements to the theorem prover:

- a) the *permutation* command has a new case to permute expressions within a set extension;

- b) the *heuristicdecision* and *heuristicsolution* commands can now solve problems involving enumerated types;
- c) there is a new command called *simplification tac*, which performs simplifications of core Z notation as specified by the explicit tactics in *sectionsimplification*;
- d) the *rewrite by section* command now exploits *simplification tac* in deciding the side-conditions of rewrite rules;
- e) in the tactic language, there is a new type of joker for rename lists, called *renms*;
- f) there is a new command called *scriptmanager*, which reports the statuses of proof scripts.

4. Other changes:

- a) in \LaTeX mark-up, $\backslash znewpage$ can now be used within formal Z paragraphs to force a page-break in the output when typeset by \LaTeX ;
- b) the elementary *rules of the refinement editor* have been made to work; a new student is working on defining additional rules via tactics;
- c) the *filename* sub-menu of the right-button menu now contains a list of all files that contribute sections to the specification.

5. And bug fixes too numerous to enumerate.