

# Atelier B Professional Edition 23.02 Release Notes

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## 1 Announcement

1. *Maintenance Edition* has changed to *Professional Edition*.
2. Version numbering is now based on the year and the month of the release.

## 2 Added functionalities

1. Added new method to verify proof rules.
2. Added custom proof obligation generator for optional Event-B proof obligations. This program is used on Event-B components when :
  - B resource `ATB*POG*XSL_Processor` is not equal to Saxon instead of Qt's XSL processor AND
  - Event-B specific proof obligations have been selected at project level.
3. Error messages shown in the component editor can be copied to the clipboard.
4. Added button to copy to the clipboard the command to start `bbatch` with a given workspace.
5. The dialog to save the interactive proofs in the `User_Pass` theory now includes check boxes to save in the component PMM file, in the component PUP file or in the project PatchProver file. If a file is unchecked and the file contained a `User_Pass` theory, this theory is not deleted.
6. Added project resource `ATB*ATB*Generate_UserPass_In_PUP`, updated project creation wizard to include the choice to set the resource to True or False.
7. Added setting to display host name in the title of the main window.

## 3 Documentation

1. Documentation for Event-B support has been updated with closing implementations (syntax and proof obligations).

## 4 Miscellaneous changes

1. The user may now cancel closing the interactive prover (if some interactive proof commands have been issued).
2. Open workspaces are now displayed in bold.

## 5 Bug fixes

1. Arguments to the `bb (loop)` command in interactive proof are now saved in the correct order.
2. Improved type inference in B compiler.
3. Fixed Linux installer to avoid failures in more recent distributions.
4. Fixed constant values in `pptransmt` translator.

5. The size of the horizontal scroll bar for the proof tree view is now correct.
6. XML output for `bbatch` for interactive prover command `gs` is now well balanced.
7. GUI does not crash when receiving corrupted XML data from `bbatch` in internal interactions, producing diagnostic information instead.
8. Improved selection of hypotheses in translator `pptranssmt`.
9. `Force(Rapide)` is now handled for projects in NG mode (i.e., in the format `pos`).
10. Operator `iterate` is now correctly rendered from the proof obligation view in the component editor.
11. Fix in rules created by SMT hammer in interactive proof.
12. Improved support for inlined operation calls and imports in NGOP.
13. Fixed encoding issue in the proof mechanism writer `ppTransSmt`.
14. Added support for miscellaneous B operators in the proof mechanism writer `ppTransSmt`.
15. Checking B0 conditions in the type checking phase is disabled for system projects.
16. Fixed tool path in Atelier B configuration for Windows.
17. Several fixes in creation and extraction of project archives.
18. Improved integration of arithmetic prover in simplification and normalization of proof obligations.
19. When using the new POG on implementations with import clauses, the corresponding proof obligations are now accessible in the interactive prover.