



Release Notes

QuBAS 3.1.2

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Approved: See metadata

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Version / Release	31 January 2024
3.1.2 Introduction	3.1.2 is a minor release that is a substantial improvement for large databases.
3.1.2 Upgrade advice and versions supported	<p>3.1.2 is a recommended but not required upgrade from 3.0.1 and 3.1.0. It contains new functions and a number of bug fixes (none of which impacted the reported results). This version is <i>particularly recommended for instances with a large or fast growing database</i>, as it features an improved and more targeted database validation check. There are changes to some of the analysis components so re-validation is recommended. This can easily be done using the in-built revalidation tool.</p> <p>From this release, the supported versions of QuBAS are:</p> <ul style="list-style-type: none"> ❑ 3.0.1 ❑ 3.1.0 <p>If you require help or advice about upgrade please contact support@quantics.co.uk</p>
3.1.2 New features	<p>Database validation for data integrity</p> <ul style="list-style-type: none"> ❑ QuBAS uses an automatic hashing mechanism to guarantee the integrity of all the data (raw data, analysis configuration etc.) going into the analyses done in GMP settings. This mechanism has been greatly optimised to scale better with large databases. Even on moderately large databases, it leads to a better user experience with, for example, faster saving in the development room. <p>Analysis engine improvement</p> <ul style="list-style-type: none"> ❑ Some analyses (<i>e.g.</i> very little data for one of the asymptotes) didn't produce a report due to the instability of the fit. The analysis engine has been improved to generate a report with those extreme datasets more often. This has no impact on previous results; rather some analyses that used to fail now succeed.

	<p>Minor improvement</p> <ul style="list-style-type: none"> ❑ The audit log download button now returns the latest 10'000 entries, rather than the full log. This operation used to hang on large instances.
3.1.2 Bug fixes	<ul style="list-style-type: none"> ❑ Audit report sign-off: a bug on the user interface used to prevent the user to sign-off a report after cancelling the operation first. This is fixed. ❑ Specifying a unit for the x-axis in Interpolation Analyses used to generate an error when running an analysis. This is fixed and the unit is shown on the plots in the reports.
3.1.2 Known Issues	<ul style="list-style-type: none"> ❑ The logging out message from the development room only disappears with a screen refresh. ❑ QuBAS fails to load data files with a path name >260 characters due to Windows default settings. Keep filenames and path to < 260 characters. ❑ Chrome users might see themselves automatically logged out after minimising the window. A couple of workarounds are available at this page: https://www.quantics.co.uk/chrome-settings/.
3.1.2 Testing	<p>The analysis engines have been updated and therefore a full testing program has been undertaken at Quantics.</p> <p>Technical DSCP tests:</p> <ul style="list-style-type: none"> ❑ Approximately 58,000 datasets have been used (291 classes of datasets, each generating about 200 datasets). Some datasets are specifically designed to stress the engine and are not expected to yield 100% DSCP match. The results are compatible with previous releases. <p>User testing:</p> <ul style="list-style-type: none"> ❑ 8 User stories (test cases that are user testable) have been checked twice, by 2 different non-technical Users. <p>Backward-compatibility testing</p> <ul style="list-style-type: none"> ❑ Quantics conducted a backwards compatibility test since there was a change on the analysis engine. <p>About 500 test cases for each of the 8 models (RP and IA) were run in 3.1.0 and 3.1.2 and their results compared.</p>

	Analysis	Model	Works in 3.1.0	Works in 3.1.2	Results are equal	n	Total
	Interpolation Analysis	5PL	TRUE	TRUE	true	495	495
		4PL	TRUE	TRUE	true	500	500
		Linear	TRUE	TRUE	true	500	500
	Relative Potency	Linear	TRUE	TRUE	true	500	500
		5PL	FALSE	FALSE	NA	1	491
			FALSE	TRUE	NA	2	491
			TRUE	TRUE	true	488	491
		4PL	TRUE	TRUE	true	500	500
	In almost all cases, the results from 3.1.0 and 3.1.2 are equal. For 1 case for RP / 5PL, the analysis engine failed in 3.1.0 and still failed in 3.1.2. (Disagreement on whether a fit is singular) For 2 cases for RP / 5PL, the analysis engine failed in 3.1.0 but now works in 3.1.2. This is due to the change introduced in 3.1.2. In conclusion, the analysis engine is backward-compatible.						
3.1.2 Build	QuBAS_3.1.2_38.exe						
3.1.2 Installer	The installer is QuBAS_3.1.2_38.exe						
Checksums	The MD5 is: 15CC7DFBDA5C5F9E4A73534C55B307EA QuBAS_3.1.2_38.exe						