

# ASReml v4.2: Release Notes

## ASReml 4 Version History

- ASReml 4.2 is the current released version
- The documentation folder contains the User Guide and What's New documentation

### v4.2nb (Beta 11th December 2020)

- Upgraded Ci reordering for more efficiency
- Improvements to the efficiency for fitting xfa x grm models
- Improvements for grm group processing
- Fix to parsing when using GINDEX
- Fix to parsing when using predict

### v4.2nb (Beta 24th September 2020)

- Improved speed for GDENSE
- !LDET as GIV line qualifier.
- Fix to calculation of GINDEX standard errors.
- Allow diagonal GRM in .grm file.
- Fix to ARMA model.

### v4.2na (Beta 15th April 2020)

- Changes to equation order and other routines for greater efficiency and speed.
- Memory access has been increased; ASReml 4.2 can utilise up to 96GB of workspace if available.
- The variance function rrk(f) has been added as an alias to xfak(f) with all the specific variances set to 0.
- The ability to fit bivariate GL(M)M models has been added.
- Rao-Blackwellized Gibbs sampling is available to facilitate the analysis of large cross classified data sets.
- New design functions: hs(f,k), ref(f,k) and zero(k). See What's New documentation for more details.
- !ARLIMIT to set boundary limit for the magnitude of the AR parameter in spatial models.
- !WVR reports working variables to a .wvr file.
- !WORKSPACE m specifies the size of the workspace in GBytes.
- OMP parallel processing has been implemented for some of the major loops.
- Improvements to !PRESENT in predict to speed up calculation.
- More pedigree qualifiers have been added to remove unnecessary individuals.
- Hierarchical Generalized Linear (Mixed) Models have been implemented and made available for user testing.