# R-Universe: towards a unifying infrastructure and global catalog for the wider R ecosystem

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R-universe is rOpenSci's evolving platform for improving publication and discovery of research software in R, and currently developed as a top-level R-consortium project. It fills a need for modern, scalable, user-friendly publishing in the R ecosystem.

At first glance, R-universe serves as a global catalog of software, articles, and datasets found on CRAN, BioConductor, as well as self-published repositories. It aids discovery through a powerful search engine that indexes and ranks all content using R specific criteria, and by cross referencing related projects based on authorship and topics. For each package, extensive information is made available through attractive webpages and APIs that include rendered documentation, health and activity metrics, binaries and installation instructions, and a wealth of other material to learn about a project and get started using it.



For developers, R-universe serves as a publication platform providing a fully automated pipeline for testing, building, and publishing R packages. In this sense R-universe can be seen as a meta-repository and common infrastructure for both individuals or organizations to manage custom R package repositories using their own approach to curation, release management, and quality control. The build system is based on the inherently scalable GitHub Actions infrastructure, making it easy and maintain and extend. This way R-Universe enhances R's promise as a multi-repository-by-design ecosystem, reducing the barrier to entry for groups of all scales.