

Delivering commercial advantage through R

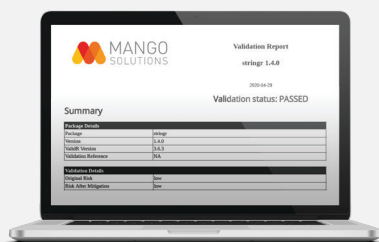
It's no wonder R is one of the most popular analytic languages in the world today, based on its flexibility, capability and commercial advantage for an ever-expanding range of industries. Driven by a global community of innovative coders and members of the R community, the power of R arises due to the volume and limitless scope of additional packages made available via several public repositories.

“ ValidR provides standardisation and assurance for organisations ”

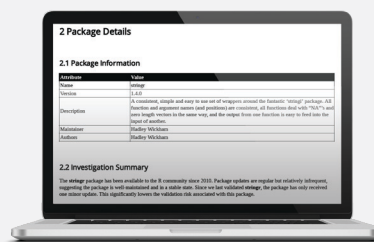
Exposing the challenges of open source

There's just one problem. When you welcome the wealth of their cumulative expertise into your organisation, an inherent level of risk is introduced. Minimal quality checks are enforced on packages submitted to any of these repositories, and less than 30% of packages on CRAN have a visible formal test framework. Package quality can also vary considerably meaning that without careful control, businesses expose themselves to increased risk, from efficiency-draining bugs to malicious attacks.

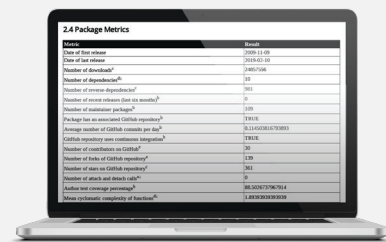
This may lead to a reluctance of trust in use of R as Data Practitioners are unable to satisfy their IT and Compliance teams; causing unnecessary time and resources being dedicated to monitoring or approving R packages.



The assessment of the R package follows a fully-audited, quality controlled process to determine whether a package is able to be validated



The stringent validation process followed for each package is fully documented and provides assurance that the ValidR delivery is both robust and stable



Metrics are gathered during the validation process to assess each package's maturity and quality

Introducing ValidR

Developed to help organisations have confidence in the use and application of R open-source software by practitioners and business stakeholders, ValidR offers the security of a carefully curated group of the top 150 of the most frequently used and industry leading packages including package collections such as the Tidyverse. These curated packages have been selected and extensively validated, tested and peer reviewed using a rigorous and industry best practice, 7-step framework. These packages are supplemented with validation reports to prove their authenticity for deployment into the business environment, allowing organisations to undertake their work with greater confidence, assurance, and certainty.

Integrates with RStudio Package Manager

ValidR can be deployed with RStudio Package Manager (RSPM), the leading repository management server, allowing organisations centralised accessibility to validated R packages across the organisation. This presents reliable and consistent package management for teams who use R and accessibility to all the benefits of repository management that RSPM brings.

What can ValidR bring to your organisation?

Mango's heritage and expertise in R software and validation, means we are uniquely placed to assess the quality, risk of R packages in accordance to ISO 9001 quality requirements, R Foundation for Statistical Computing guidance on regulatory compliance and validation issues.

ValidR reduces industry risk by validation of:

- 150 of the most essential and requested R packages on CRAN today
- Industry 'must-haves' and core packages across all industry sectors
- Commonly used and defacto collections, including the Tidyverse
- Mango's unique expertise and analysis of CRAN and client validation requests

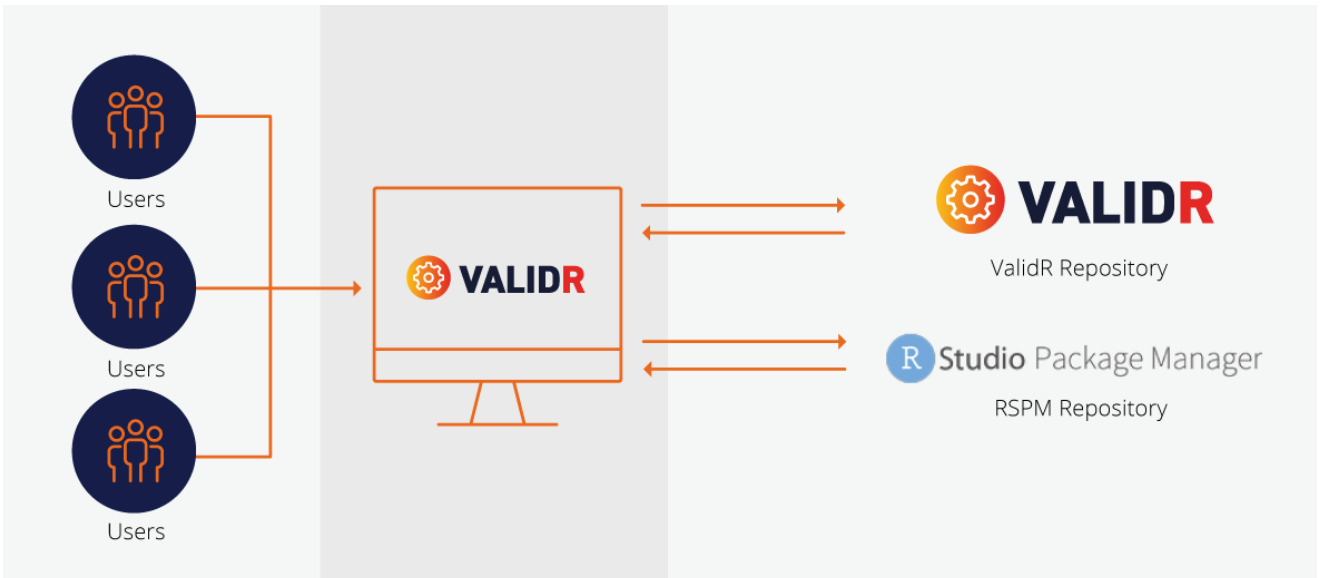
ValidR provides teams with a comprehensive range of functionality and capability in accordance to their challenges:

 For data science professionals	 For Quality, legal and InfoSec teams	 For IT and Ops teams
<ul style="list-style-type: none"> • Accessibility to a robust set of packages • Provide additional certainty and reproducibility of results across the team 	<ul style="list-style-type: none"> • Confidence of best practice adoption within the business • Documented assurance and standards 	<ul style="list-style-type: none"> • Save time and resources mitigating the risks of adopting and managing open-source software • Ensures standardisation and consistency across deployments and systems

ValidR Specification

Validation Level	150 commonly used packages
Package Sources	CRAN
Supported Operating Systems	RedHat/CentOS 7
Package validation reports	✓
RStudio Package Manager integration	✓

How ValidR complements your existing IT systems



Delivery

As an annual subscription, the ValidR packages and validation reports can be integrated into your existing infrastructure and environment, including the ability to integrate with RStudio Package Manager.

For more information please contact info@mango-solutions.com or visit www.mango-solutions.com

