

Title

{riskmetric} & {riskassessment}- a two part mini series for end-to-end R package Validation

Abstract

For years, the R Validation Hub has collaborated with organizations to bring consensus and useful tools to the industries with strict regulation regarding software used for analyses. In this two part mini-series, we hope to present an end-to-end look into how the {riskmetric} package and {riskassessment} application can help this audience achieve their risk-based validation goals. In the first session we (re)introduce the {riskmetric} package, it's design principles and a typical user's workflow. We will discuss the differences between different sources of package information as well as how to customize scoring. We will also do a deeper dive into the analysis of CRAN to provide context around a package's score. Lastly, we will discuss ongoing work to improve the package: from creating a better user experience, integrating 3rd party assessments/plugins, and scoring a collection of packages.

In the second session, we'll showcase how the {riskassessment} app enhances the utility of {riskmetric}, providing helpful guiderails for use within an organizational context. Notably, how the app's {shiny}-based interface can serve many users with varying assigned roles to evaluate {riskmetric} assessments over time, adhering to org-level preferences. In addition, users can augment their evaluation with a more "hands-on" module for exploring a package's content, design, & infrastructure. After potential risks are identified, measured, and documented, the app streamlines those findings into a downloadable report, best used for sharing with those who make GxP package inclusion decisions.