



R PACKAGE DEVELOPMENT AND VALIDATION

Modes of Validation

Welcome

- Modes of R Package Validation
 - 3rd party
 - Source
 - Install
 - Re-validation
 - Build



THIRD PARTY

vt_validate_report()

- Uses only packages already installed on system
- Report can be generated at any time
- Best for: validation of packages the org is consuming but not developing



SOURCE

vt_validate_source()

- Temporarily installs the package and executes the validation Rmd
- For release of source code
- Users have access to install as necessary
- Report can be generated at any time
- Best for:
 - Checking validation during package development
 - c.i. integration
 - Sending report PDFs to a shared drive location



BUILD

vt_validate_build()

- Temporarily installs the package and executes the validation Rmd
- Copies contents into “output” directory – inst/validation
- Builds source code, includes all components of validation into tarball
- For release of source code with controlled versions
- Users have access to install as necessary



INSTALL

vt_validate_install()

- Temporarily installs the package and executes the validation Rmd
- Copies contents into “output” directory – inst/validation
- Builds source code, includes all components of validation into tarball
- Installs and runs validation report on installed system
- Best for:
 - Installation is controlled by IT Administration
 - Validation Report needs co-located with installed package



RE-VALIDATION

vt_validate_installed_package()

- ONLY works for packages installed via
`vt_validate_install()` or installed from tarball created by
`vt_validate_build()`
- Run when environment has changed, but installation has not
- Best for:
 - Installation is controlled by IT Administration
 - Users who need to verify that environment changes does not affect validation performance

Modes of Validation & Validation Report Generation

- `vt_validate_report()` – Also for validation packets
- `vt_validate_source()` – Intended for internal packages
- `vt_validate_build()`
- `vt_validate_install()`
- `vt_validate_installed_package()`



COMPLETE EXERCISE 06