

Package Organisation

GAP Workshop
Braunschweig

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Outline of the Talk

- package formalism
- *referee process*
- packages update

The Concept of a Package

Everybody is invited to contribute to GAP in any form.

Advantages of a GAP package:

- For a user: Integration of code and documentation goes smoothly with the main system.
- For the authors: Good chance of wider recognition of their work.
- For the GAP group: Easier maintenance of redistribution.

Formal Basics of a Package

Mandatory

- `init.g` / `read.g`
- `PackageInfo.g`
- `documentation` / `README`
- `homepage`

Optional

- `test files`
- `Copyright`
- `'Changes' file`

The Referee Process

- Does the package do what it claims to?
- Is its functionality a significant addition to GAP?
- Does the package interact smoothly with the existing GAP library and packages?
- Does the package employ appropriate GAP functions and data structures?
- Is the main documentation clear and complete enough?

Current Packages

- 44 accepted packages
- 24 deposited packages
- 17 in referee process

Getting new Package Version

reading PackageInfo.g file at known url

- PackageInfo.g has to be up to date
- a new homepage is unknown at first

if archive url changed → get new package archives

- a new version needs a new version number
- the numbers should agree

Testing new Package Version

installation of the package

- following installation instructions in the manual
- under Linux only

load the package

test the functionality

- just with the test files provided
- OR: examples from the manual

look at the documentation

- consider all three formats
- random comparison

check file permissions

make some standard GAP tests with all packages

Preparing new Package Version

change PackageInfo.g

- change version number - everywhere!
- change release date

test the package

- test the new archive you built
- test it with latest released version of GAP
- test without other packages loaded

documentation

update homepage

- archive files, PackageInfo.g, README
- test PackageInfo.g with Frank's tool on www.gap-system.org/Packages/Authors/authors.html

Thank you for your attention.