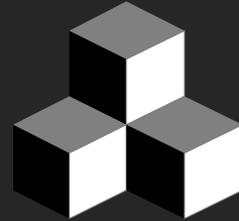




abapGit

&



apm

**Taking your development to the next level
with open-source ABAP**

Marc Bernard - November 2024

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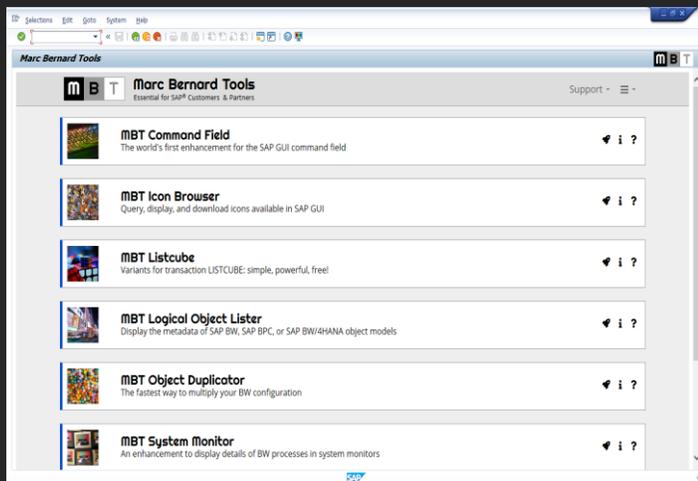
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Marc Bernard

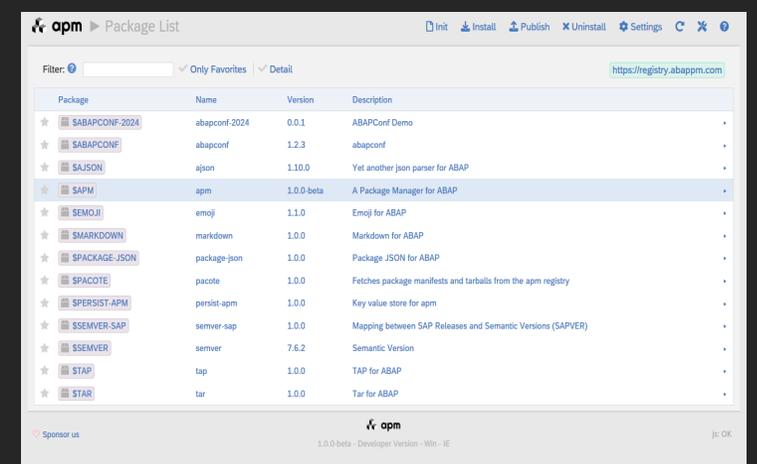
Building awesome open-source tools for SAP customers, partners, and developers



Marc Bernard Tools



Top Contributor to abapGit

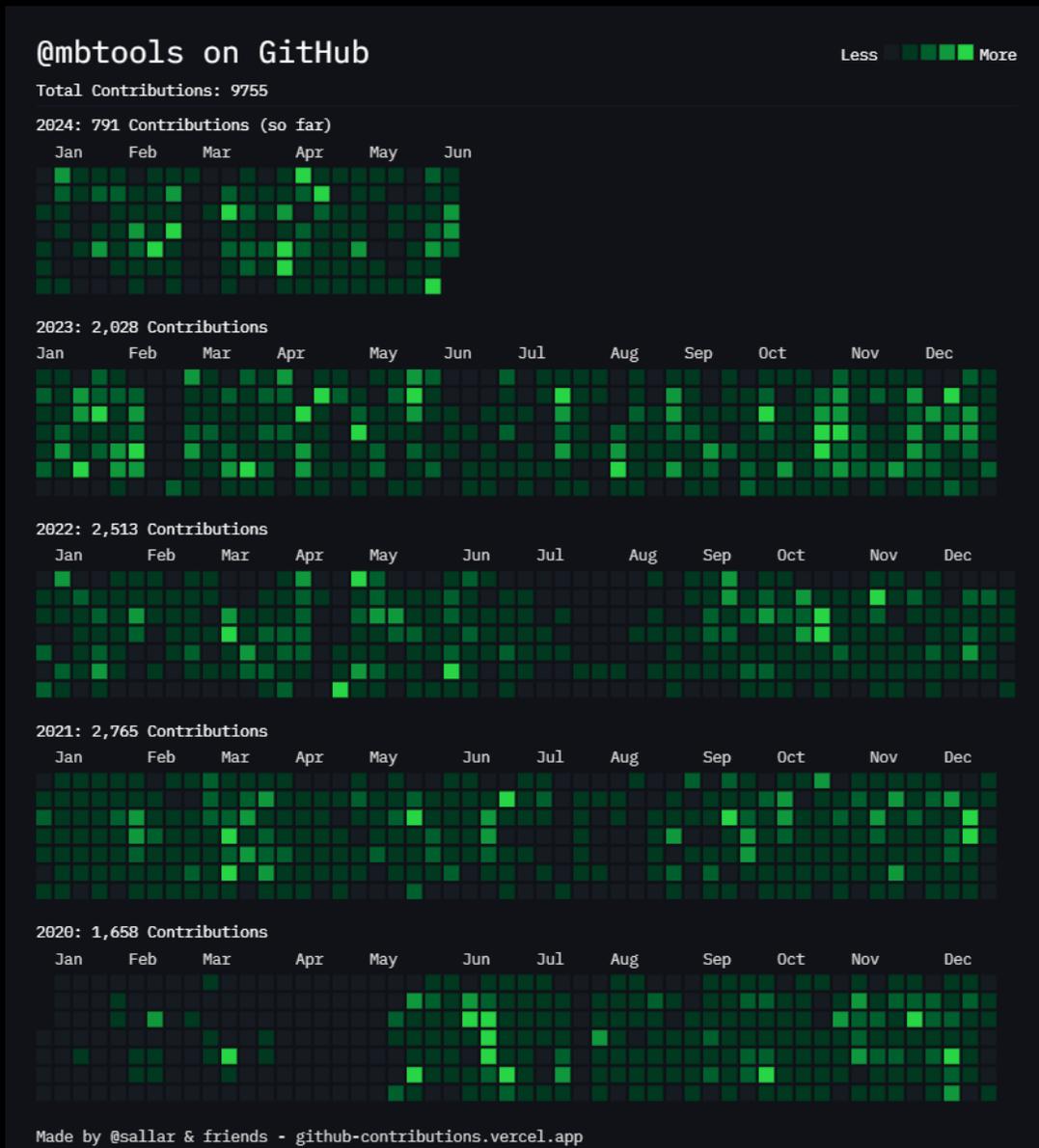


The screenshot shows the abapGit Package List. The table lists various packages with their names, versions, and descriptions:

Package	Name	Version	Description
SABAPCONF-2024	abapconf-2024	0.0.1	ABAPConf Demo
SABAPCONF	abapconf	1.2.3	abapconf
SAJSON	ajson	1.10.0	Yet another json parser for ABAP
SAPM	apm	1.0.0-beta	A Package Manager for ABAP
SEMOJI	emoji	1.1.0	Emoji for ABAP
SMARKDOWN	markdown	1.0.0	Markdown for ABAP
SPACKAGE-JSON	package-json	1.0.0	Package JSON for ABAP
SPACOTE	pacote	1.0.0	Fetches package manifests and tarballs from the apm registry
SPERSIST-APM	persist-apm	1.0.0	Key value store for apm
SSEMVER-SAP	semver-sap	1.0.0	Mapping between SAP Releases and Semantic Versions (SAPVER)
SSEMVER	semver	7.6.2	Semantic Version
STAP	tap	1.0.0	TAP for ABAP
STAR	tar	1.0.0	Tar for ABAP

Creator of apm



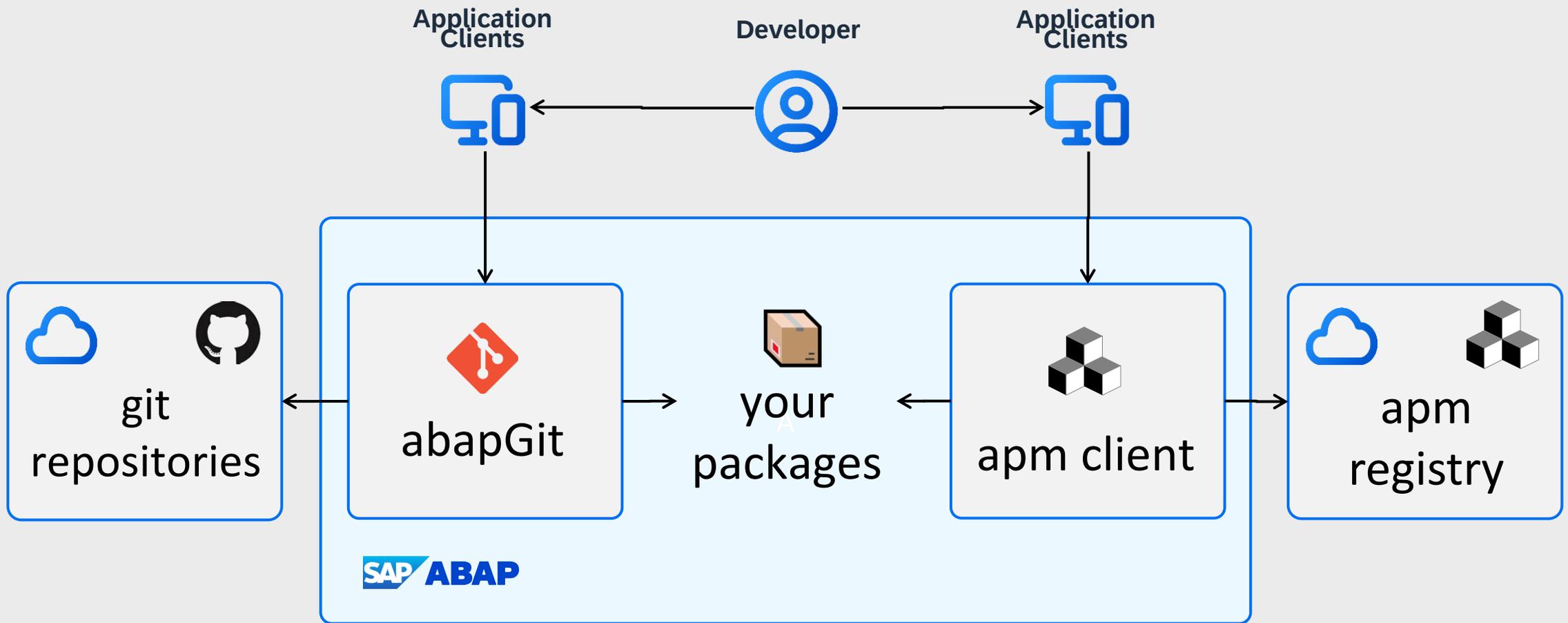


My Open-Source Contributions

- [abapGit](#) - Too many to count
- [abaplint](#) - Some little additions and improvements
- [ajson](#) - Added diff and sort utilities
- [ABAP Logger](#) - Maintenance, fixes, down ports
- [ABAP Mime Editor](#) - Added editor for W3MI objects
- [Monaco](#) - Update to ABAP 7.5x language syntax
- [Shields](#) - Added badges for "[ClearlyDefined Score](#)" and "[GitHub Check Runs](#)"
- [TODO to Issue Action](#) - Added support for ABAP
- [Exercism](#) - One of the initial creators of the ABAP Track and contributor to several exercises
- [Verdaccio](#) - Improving the UI theme, docs, and more
- [SPDX](#) - Improving notes about GPL licenses
- [Suffusion](#) - Lead maintainer of WordPress Theme
- [React JSON View](#) - Clipboard integration
- [npm](#) - Improving docs, fixing bugs, replacing dependencies ([cli](#), [semver](#), [pacote](#), [npm-registry-fetch](#), [promise-spawn](#))



Overview Diagram





abapGit



What is git ?

High-quality version control system

Installed locally (rather than in the cloud)

Specially designed for text files

Sophisticated branching model

Is **free** and open source



What is GitHub ?

Hosting service for Git repositories

Exclusively cloud-based

Intuitive, graphically represented user interface

Built-in control and task-management tools

For-profit but offers a **free** tier



What is abapGit ?

Git client for ABAP (started in 2014 by Lars Hvam)

Works with GitHub, GitLab, Assembla, Bitbucket, abapGit-Server, AWS, TFS, Azure DevOps and more

ABAP version 7.02 or higher

It's **free** and open source



Demo: abapGit on GitHub



Welcome

abapGit is an open source git client for ABAP, maintained and built by the community.

Documentation



GitHub



Latest build



Eclipse plugin

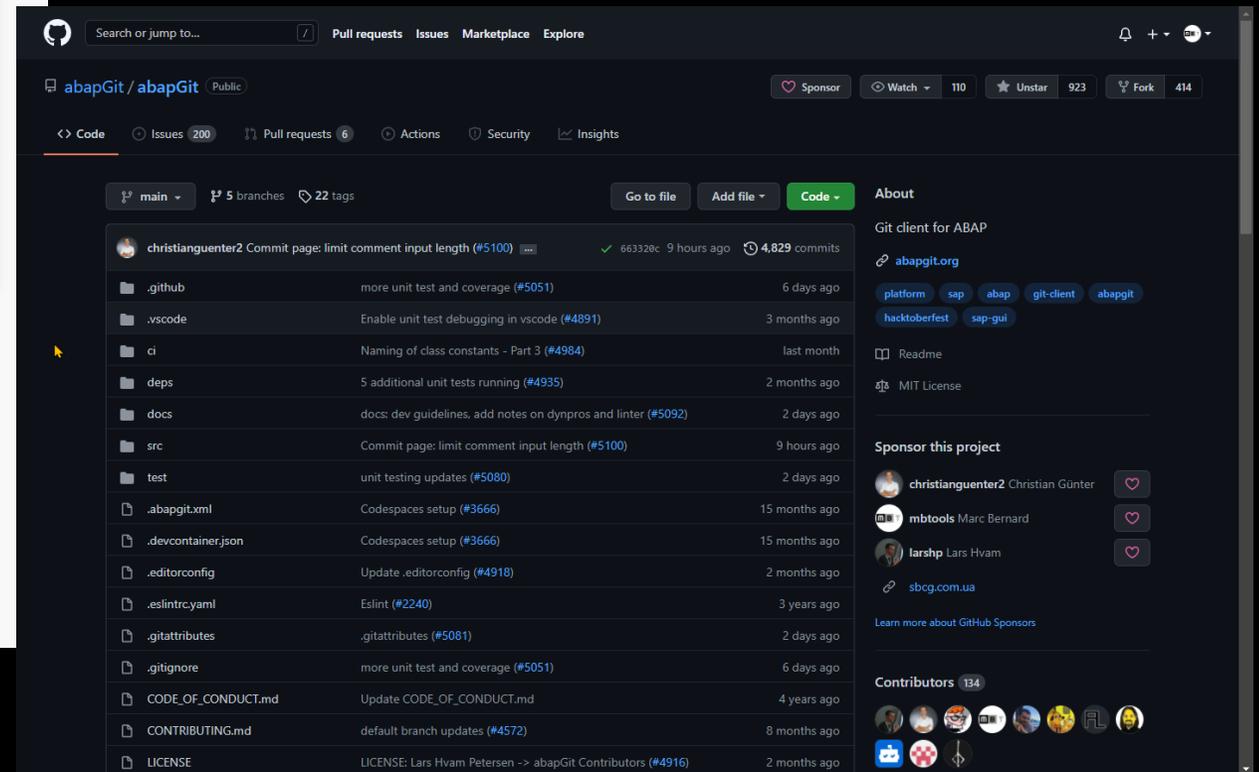


dotabap.org



<https://abapgit.org>

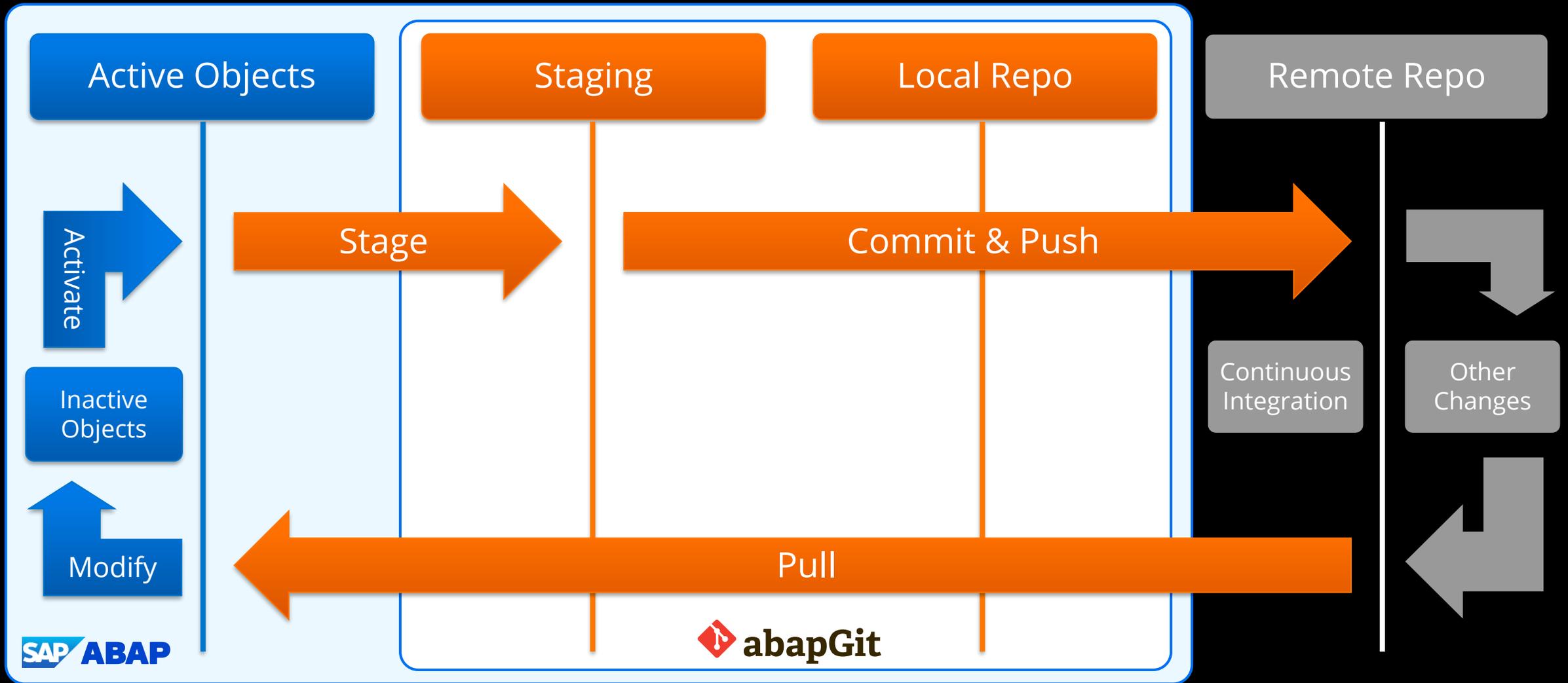
<https://github.com/abapGit/abapGit>



The screenshot shows the GitHub repository page for `abapGit/abapGit`. The repository is public and has 110 watchers, 923 stars, and 414 forks. It contains 200 issues, 6 pull requests, and 4,829 commits. The repository is currently on the `main` branch, with 5 other branches and 22 tags. The file list shows various configuration files and source code directories, including `.github`, `.vscode`, `ci`, `deps`, `docs`, `src`, and `test`. The most recent commit is by `christianguent2` with the message "Commit page: limit comment input length (#5100)" and was made 9 hours ago. The repository also has a README, a MIT License, and several sponsors.



Continuous Development



ABAP Open Source



ABAP Open Source Projects

Projects: 294

Total: 1.9m

 Cron passing

gwtools *created by attilaberencsi 3 years ago*
Gateway Tools
MIT License

Git <https://github.com/attil>

★ 18 966 2024/11/10



ValueObjects *created by rob786541 23 days ago*
ABAP value objects
MIT License

Git <https://github.com/rob>

★ 0 2.4k 2024/11/10



abap2UI5 *created by abap2UI5 2 years ago*
Developing UI5 Apps
Purely in ABAP
MIT License

Git <https://github.com/aba>

★ 298 35k 2024/11/10



ZAP *created by abeljohny 7 years ago*
Tiny DSL in ABAP for rapid report prototyping
GNU General Public License v2.0

Git <https://github.com/abe>

★ 2 687 2024/11/09



abap-dev-utilities *created by jrodriguez-rc 4 years ago*
ABAP Development Utilities
MIT License

Git <https://github.com/jroc>

★ 70 10.3k 2024/11/08



abap-odata-test *created by bluefunda 8 days ago*
ABAP OData Test Tools
MIT License

Git <https://github.com/blu>

★ 1 1.2k 2024/11/07

Reasons Developers ❤️ Open Source

Collaboration & Community

Flexibility & Customization

Learning & Development

Innovation

Cost

Quality



What's Missing

Centralized Source of Packages

Version Management

Dependency Management

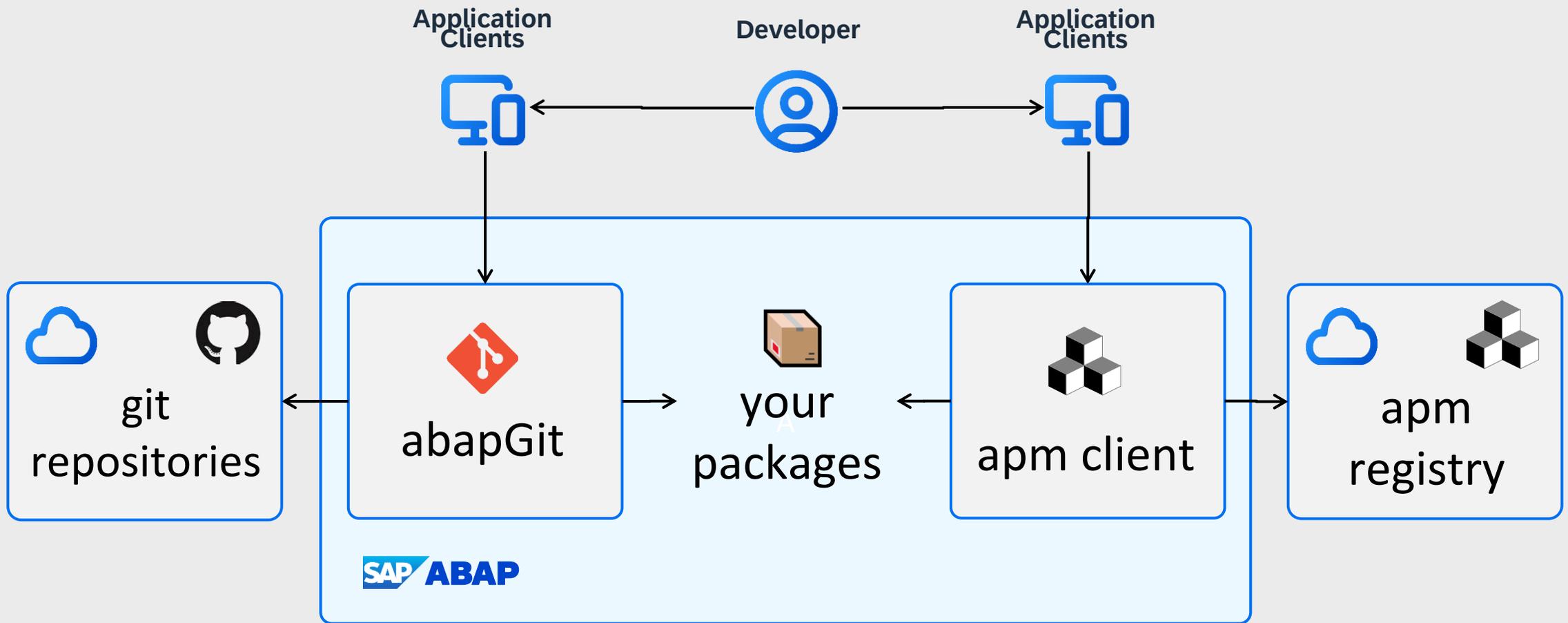
Ease of Use

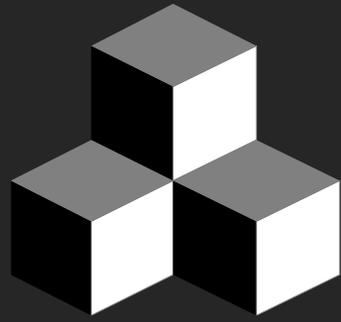
Collaboration & Sharing

Simplified Deployment



Overview Diagram





apm



What is apm?

Package Manager for ABAP 

apm Website 

apm Registry 



The apm Website

<https://abappm.com>

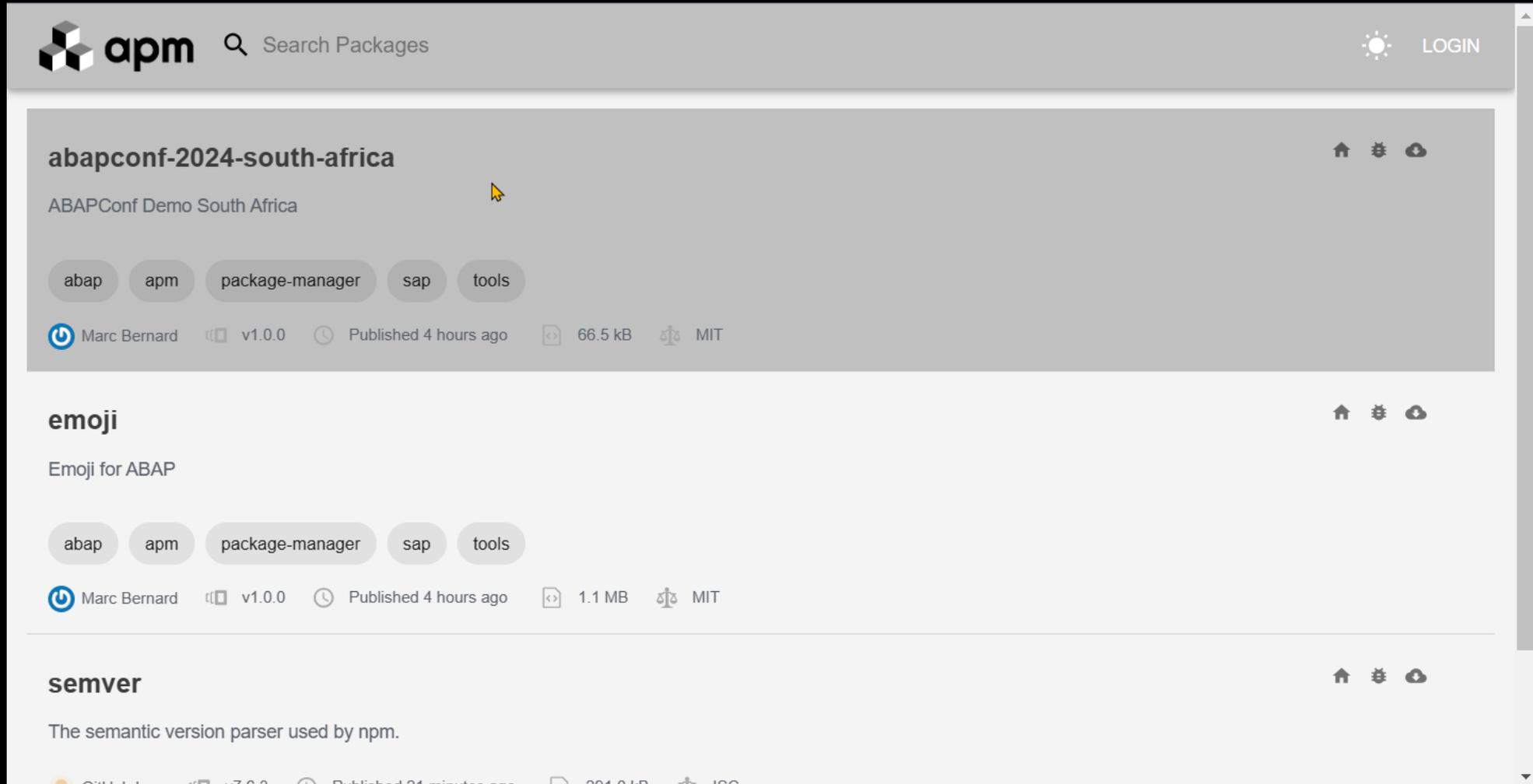
Entry to the
World of Package Management for ABAP

Guides & Documentation

Account Management
(8€/user/month)



The apm Website

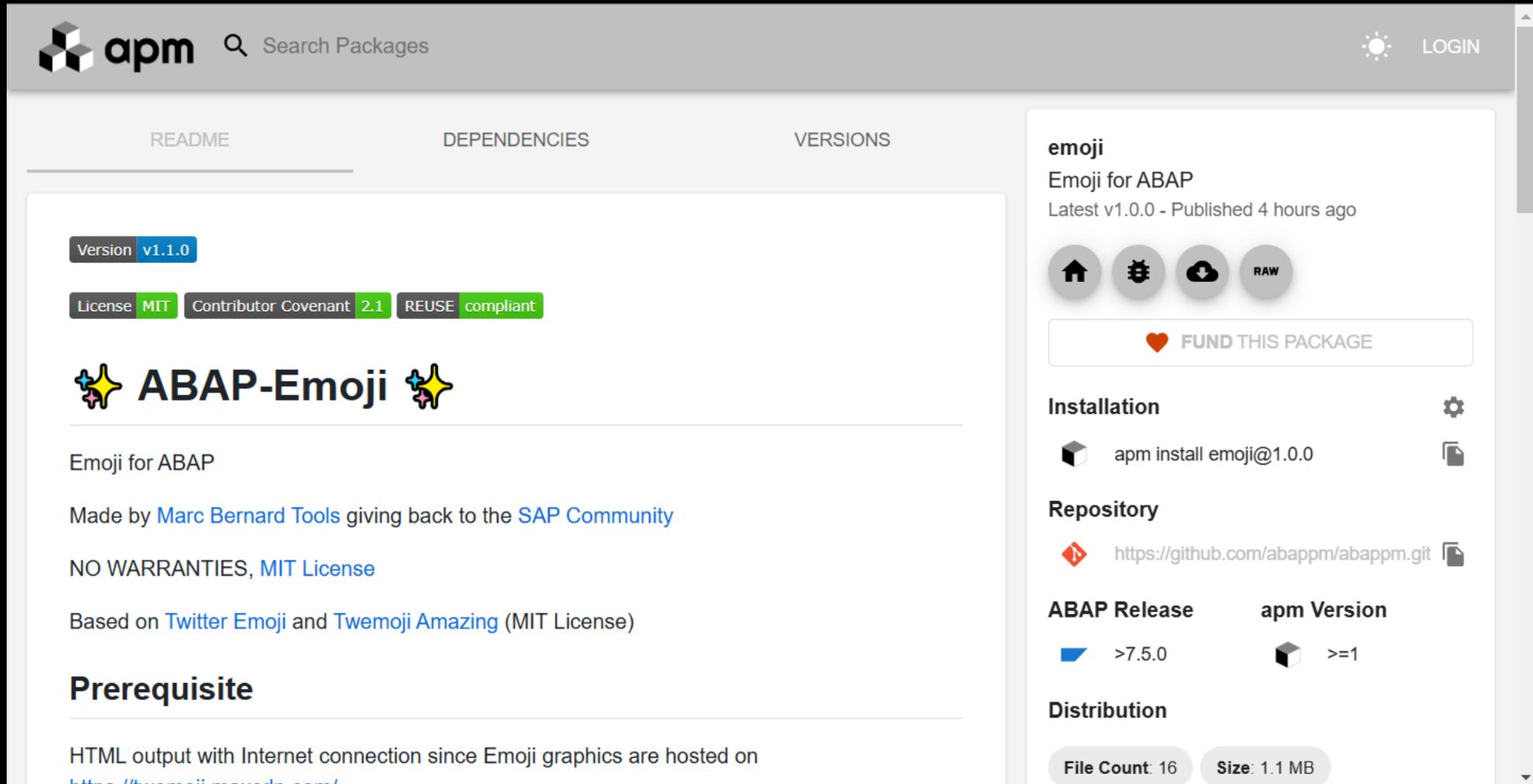


The screenshot displays the apm website interface. At the top left is the apm logo and a search bar labeled "Search Packages". At the top right is a "LOGIN" button. The main content area shows three package cards:

- abapconf-2024-south-africa**: ABAPConf Demo South Africa. Tags: abap, apm, package-manager, sap, tools. Author: Marc Bernard. Version: v1.0.0. Published: 4 hours ago. Size: 66.5 kB. License: MIT.
- emoji**: Emoji for ABAP. Tags: abap, apm, package-manager, sap, tools. Author: Marc Bernard. Version: v1.0.0. Published: 4 hours ago. Size: 1.1 MB. License: MIT.
- semver**: The semantic version parser used by npm. Author: GitLab Inc. Version: v7.6.3. Published: 21 minutes ago. Size: 291.0 kB. License: ISC.



The apm Website



The screenshot shows the APM website interface for the 'emoji' package. The top navigation bar includes the APM logo, a search bar with the text 'Search Packages', and a 'LOGIN' button. Below the navigation bar, there are three tabs: 'README', 'DEPENDENCIES', and 'VERSIONS'. The 'README' tab is active, displaying the package's details. The package name is 'emoji', and its description is 'Emoji for ABAP'. The latest version is 'v1.0.0', published 4 hours ago. There are icons for home, GitHub, download, and RAW. A 'FUND THIS PACKAGE' button is visible. The 'Installation' section shows the command 'apm install emoji@1.0.0'. The 'Repository' section shows the URL 'https://github.com/abappm/abappm.git'. The 'ABAP Release' section shows '>7.5.0' and the 'apm Version' section shows '>=1'. The 'Distribution' section shows 'File Count: 16' and 'Size: 1.1 MB'. The main content area shows the package name 'ABAP-Emoji' with star icons, a description 'Emoji for ABAP', and a link to the SAP Community. It also mentions 'NO WARRANTIES, MIT License' and 'Based on Twitter Emoji and Twemoji Amazing (MIT License)'. A 'Prerequisite' section is partially visible at the bottom.

apm Search Packages LOGIN

README DEPENDENCIES VERSIONS

Version v1.1.0

License MIT Contributor Covenant 2.1 REUSE compliant

 **ABAP-Emoji** 

Emoji for ABAP

Made by [Marc Bernard Tools](#) giving back to the [SAP Community](#)

NO WARRANTIES, [MIT License](#)

Based on [Twitter Emoji](#) and [Twemoji Amazing](#) (MIT License)

Prerequisite

HTML output with Internet connection since Emoji graphics are hosted on <https://twemoji.maxcdn.com/>

emoji
Emoji for ABAP
Latest v1.0.0 - Published 4 hours ago

 **FUND THIS PACKAGE**

Installation 

 `apm install emoji@1.0.0` 

Repository

 <https://github.com/abappm/abappm.git> 

ABAP Release **apm Version**

 `>7.5.0`  `>=1`

Distribution

File Count: 16 **Size:** 1.1 MB



Sidenote

All JavaScript Developers, Repeat After Me...

apm ne npm

npm !== apm



The apm Registry

<https://registry.abappm.com>

Database for
Package Metadata, Readmes, and Tarballs

API for apm Client

Free to Browse,
Fee to Download & Publish



The apm Client

Standalone and developer versions (like abapGit)

Runs in SAP GUI (like abapGit)

ABAP version 7.50 or higher
(down-ports planned)

Free and open source



Package List

The screenshot shows the APM Package List interface. At the top, there is a navigation bar with the APM logo and the text 'Package List'. To the right of the navigation bar are several icons: 'Init', 'Install', 'Publish', 'Uninstall', 'Settings', a refresh icon, a close icon, and a help icon. Below the navigation bar, there is a filter section with a search input field, a dropdown menu for 'Only Favorites', and a dropdown menu for 'Detail'. To the right of the filter section is a URL input field containing 'https://registry.abappm.com'. The main content area is a table with the following columns: 'Package', 'Name', 'Version', and 'Description'. The table lists 13 packages, with the 'apm' package highlighted in blue. At the bottom of the interface, there is a footer with the APM logo, the text 'Sponsor us', the version information '1.0.0-beta - Developer Version - Win - IE', and the text 'js: OK'.

Package	Name	Version	Description
★ \$ABAPCONF-2024	abapconf-2024	0.0.1	ABAPConf Demo
★ \$ABAPCONF	abapconf	1.2.3	abapconf
★ \$AJSON	ajson	1.10.0	Yet another json parser for ABAP
★ \$APM	apm	1.0.0-beta	A Package Manager for ABAP
★ \$EMOJI	emoji	1.1.0	Emoji for ABAP
★ \$MARKDOWN	markdown	1.0.0	Markdown for ABAP
★ \$PACKAGE-JSON	package-json	1.0.0	Package JSON for ABAP
★ \$PACOTE	pacote	1.0.0	Fetches package manifests and tarballs from the apm registry
★ \$PERSIST-APM	persist-apm	1.0.0	Key value store for apm
★ \$SEMVER-SAP	semver-sap	1.0.0	Mapping between SAP Releases and Semantic Versions (SAPVER)
★ \$SEMVER	semver	7.6.2	Semantic Version
★ \$TAP	tap	1.0.0	TAP for ABAP
★ \$STAR	tar	1.0.0	Tar for ABAP



Version Management

Semantic Versioning of Packages

`"version": "1.2.4"`

Semantic Version Ranges for
Specifying Dependencies

`"asjson": ">=1.10.0 >=2"`



Dependencies

“dependencies”

Your package requires dependency in system namespace
(**installed together**)

“devDependencies”

Your package requires dependency
but **not** in test or production systems



Dependencies

“peerDependencies”

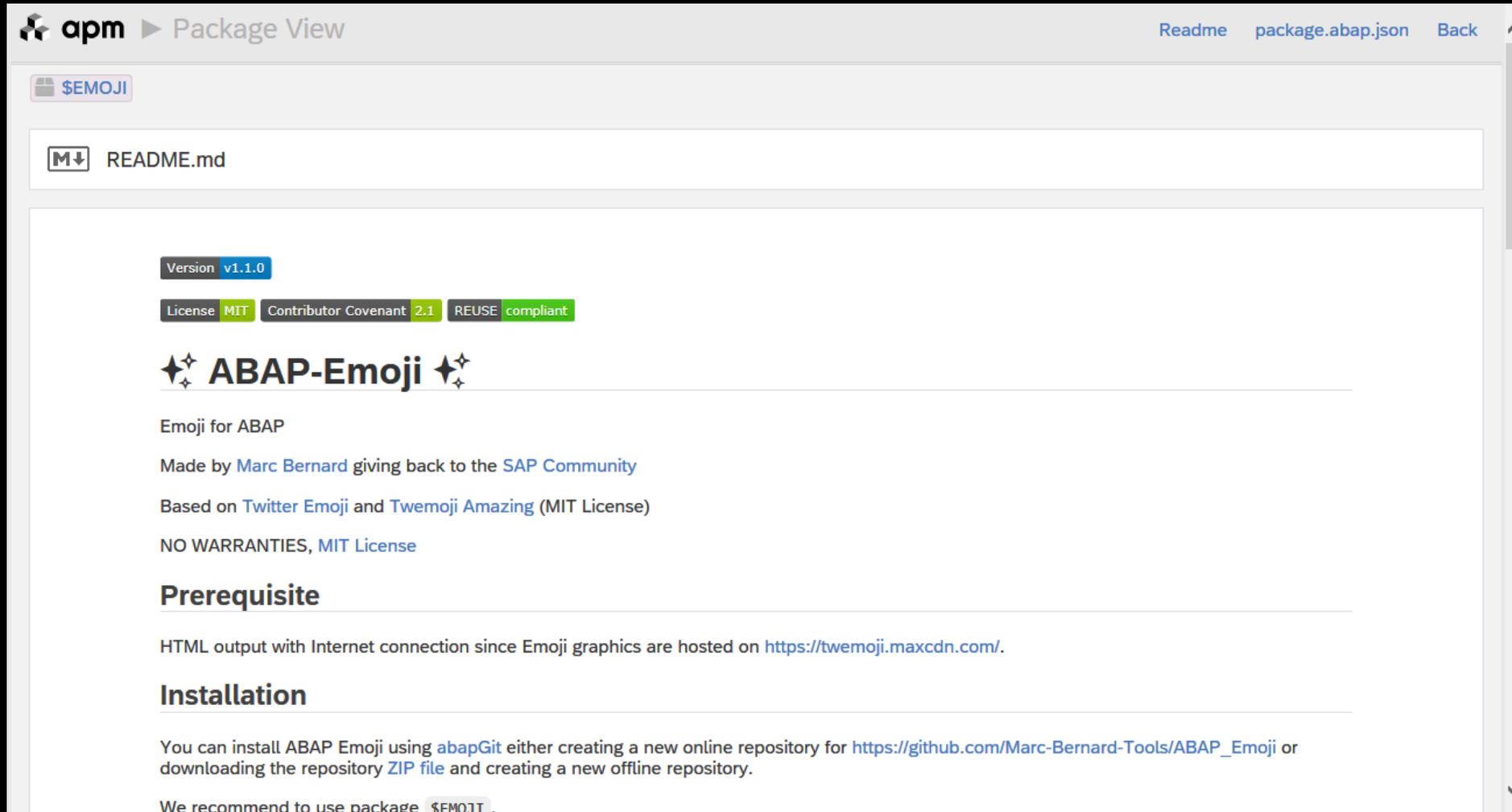
Your package requires dependency in system namespace
(**installed separately**)

“bundleDependencies”

Dependency is included in your package
(**imported and renamed**)



Package View > Readme



The screenshot shows the APM Package View for the package `$EMOJI`. The breadcrumb navigation at the top indicates the path: `apm` > Package View > `package.abap.json` > Readme > Back. The package name `$EMOJI` is displayed in a blue box. Below it, the file `README.md` is selected and shown in a white box with a download icon. The main content area displays the following information:

- Version: `v1.1.0`
- License: `MIT`
- Contributor Covenant: `2.1`
- REUSE: `compliant`

✨ ABAP-Emoji ✨

Emoji for ABAP

Made by [Marc Bernard](#) giving back to the [SAP Community](#)

Based on [Twitter Emoji](#) and [Twemoji Amazing](#) (MIT License)

NO WARRANTIES, [MIT License](#)

Prerequisite

HTML output with Internet connection since Emoji graphics are hosted on <https://twemoji.maxcdn.com/>.

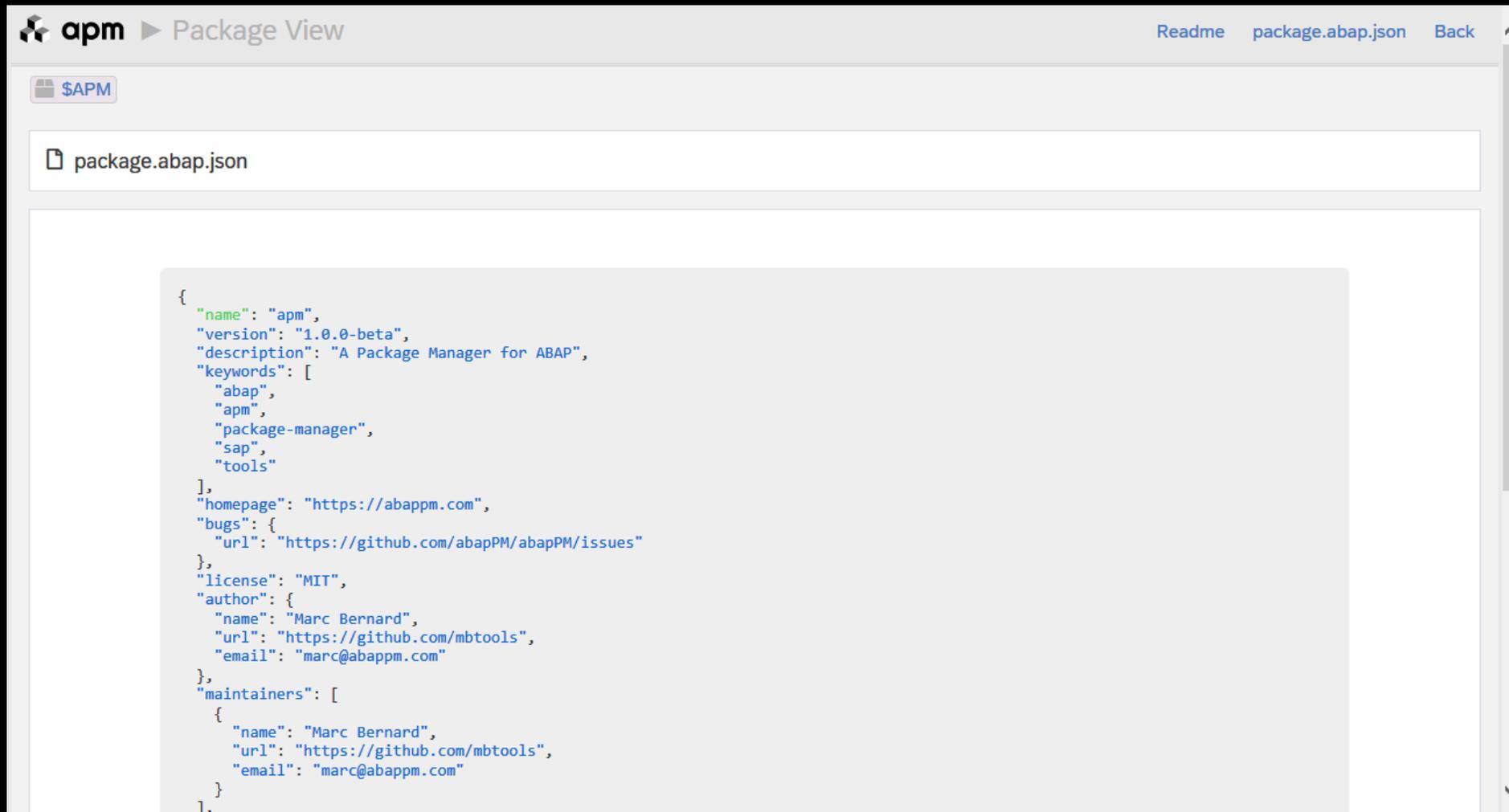
Installation

You can install ABAP Emoji using [abapGit](#) either creating a new online repository for https://github.com/Marc-Bernard-Tools/ABAP_Emoji or downloading the repository [ZIP file](#) and creating a new offline repository.

We recommend to use package `$EMOJI`.



Package View > Manifest



The screenshot shows the SAPM Package View Manifest page. The breadcrumb navigation is 'apm > Package View'. The package name is '\$APM'. The file being viewed is 'package.abap.json'. The manifest content is as follows:

```
{
  "name": "apm",
  "version": "1.0.0-beta",
  "description": "A Package Manager for ABAP",
  "keywords": [
    "abap",
    "apm",
    "package-manager",
    "sap",
    "tools"
  ],
  "homepage": "https://abappm.com",
  "bugs": {
    "url": "https://github.com/abapPM/abapPM/issues"
  },
  "license": "MIT",
  "author": {
    "name": "Marc Bernard",
    "url": "https://github.com/mbtools",
    "email": "marc@abappm.com"
  },
  "maintainers": [
    {
      "name": "Marc Bernard",
      "url": "https://github.com/mbtools",
      "email": "marc@abappm.com"
    }
  ]
},
```



Init Package

 **apm** ▶ Init Package

Package *
 ...

Name *

Version *

Description

Labels (comma-separated, allowed chars: "-_., a-zA-Z0-9")
 ...

Private Package (will not become public)



 **apm** js: OK

1.0.0-beta - Developer Version - Win - IE

[♥ Sponsor us](#)



Install Package

 **apm** ▶ Install Package

Package *
 ...

Name *

Version *

Install Only Dependencies

 [Install Package](#) [Create Package](#) [Back](#)

[♥ Sponsor us](#)  **apm** js: OK

1.0.0-beta - Developer Version - Win - IE



Publish Package

 **apm** ▶ Publish Package

Package *

Name

Version

 [Publish Package](#) [Back](#)

 [Sponsor us](#)

 **apm**

1.0.0-beta - Developer Version - Win
- IE

js: OK



Give it a try!

<https://abapgit.org/>



Call to Action

Sign Up!

<https://abappm.com/>

More from me...

ABAPConf 2021:

[abapGit for Beginners](#) [[recording](#)]

ABAPConf 2022:

[4 abapGit Use Cases That Will Blow Your Mind](#) [[recording](#)]

ABAPConf 2024:

[Addressing the Future of ABAP:](#)

[The Power of Open Source](#) [[recording](#)]

SAP “The Open-Source Way” Podcast: [abapGit](#)



Thank You!

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marc@abappm.com

<https://github.com/marcfbe>

<https://linkedin.com/in/marcfbe>





IKAMVAYOUTH
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HOME ▾

ABOUT ▾

IMPACT

JOIN US ▾

MEDIA ▾

CONTACT ▾

RESOURCES

DONATE



THE FUTURE IS IN OUR HANDS

Vision

A world where young people have opportunities to create sustainable livelihoods.

Mission

We use cutting-edge educational approaches to create pathways for young people from under-resourced communities to pull themselves and each other into sustainable livelihoods.

<https://ikamvayouth.org/>

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