

SAP Open
Source

WEBINAR

June 22nd, 2021

Clean ABAP

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THE BEST RUN



AGENDA

01 Why Clean ABAP?

02 GitHub demo

03 Clean ABAP Ecosystem

01 Why?

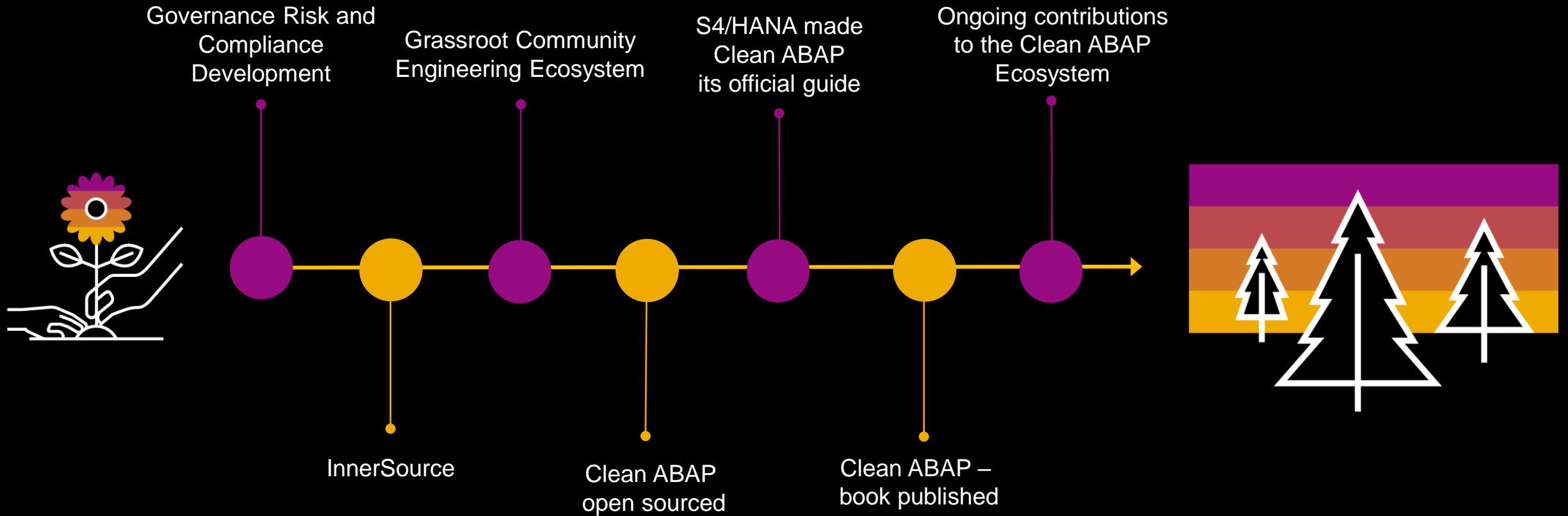
A yellow line graphic that starts as a horizontal line from the left edge of the slide, extends across the middle, and then angles upwards to the right towards the top right corner.

Why Clean ABAP?

- More readable, testable and maintainable code
- Optimized for the reader:
 - We spend more time reading than writing code
- ABAP has evolved over a long time with backward-compatibility in mind



Clean ABAP Evolution



02 GitHub

A yellow line graphic that starts as a horizontal line from the left edge of the slide, then turns diagonally upwards to the right, ending at the top right corner.

GitHub demo – Clean ABAP

Unwatch 152 Unstar 833

Pull requests 8 Actions Projects Wiki Security Insights Settings

main styleguides / clean-abap / CleanABAP.md Go to file ...

HrFlorianHoffmann [Link to Code Pal \(#191\)](#) ✓ Latest commit 8511811 on Apr 8 [History](#)

23 contributors +11

4922 lines (3673 sloc) | 176 KB Raw Blame 📄 ✎ 🗑️

Clean ABAP

[English](#) · [中文](#) · [Français](#) · [Deutsch](#) · [日本語](#)

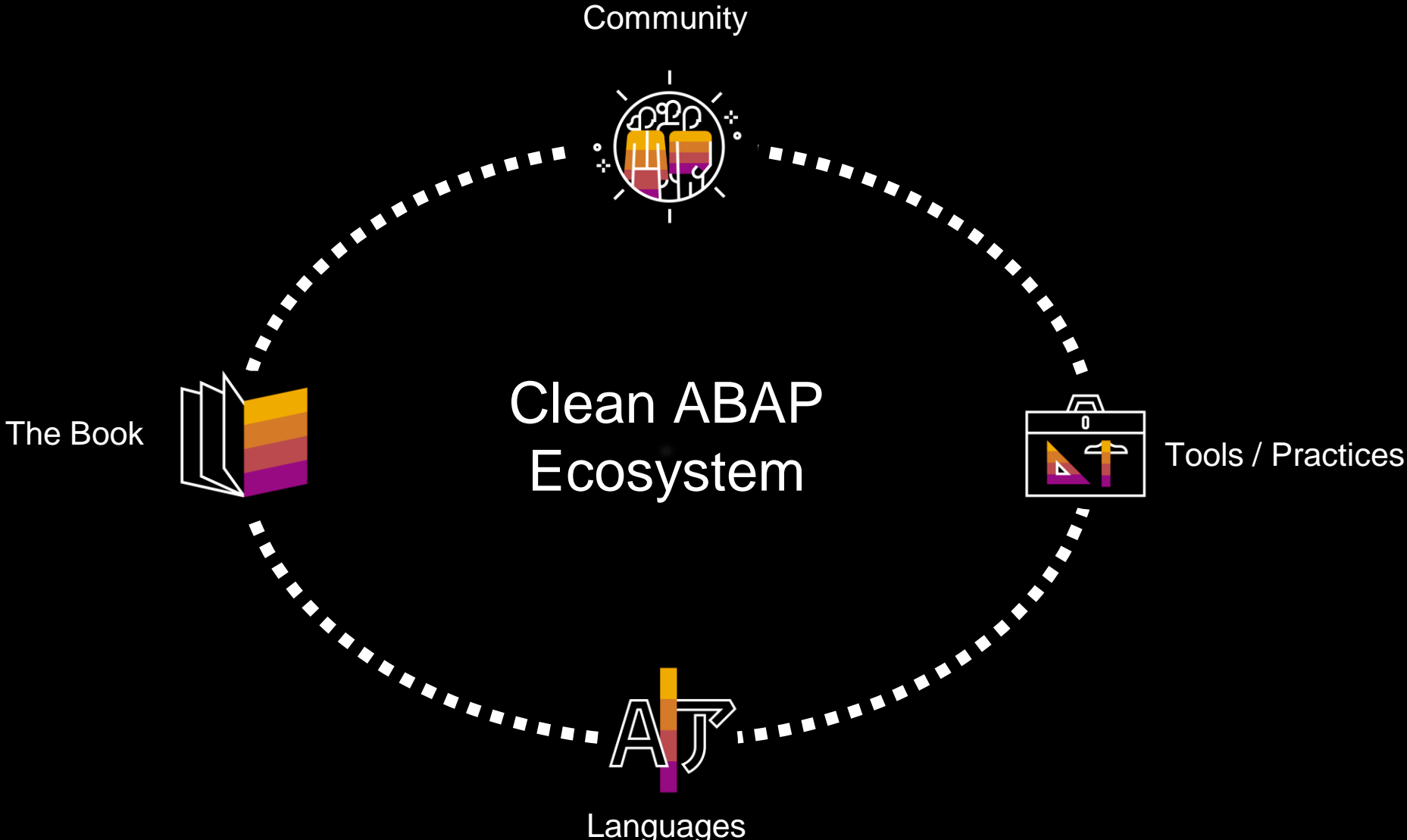
This guide is an adoption of [Robert C. Martin's Clean Code](#) for ABAP.

The [Cheat Sheet](#) is a print-optimized version.

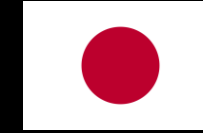
03 Ecosystem

A yellow line graphic that starts as a horizontal line from the left edge of the slide, extends across the width, and then angles upwards to the right towards the top right corner.

Clean ABAP Ecosystem



Clean ABAP Translations



Gabriel Baca: "I really want a future where we no longer have 10,000 lines of code in a single report with no modularization. Unfortunately, most ABAP developers in Mexico and Latin America do not speak English. Most of the codebase you'll find for Mexican companies is written in Spanish. So, translating this guide into Spanish opens up the possibility of reaching a lot more people." (translated from Spanish)

Thanks to Borja Clemente Castanera for reviewing the Pull Request!

Manabu Inoue: "As a beginner in SAP, I was looking for a good way to write ABAP code, and I found this guide based on Uncle Bob's Clean Code which I am familiar with. After reading the guide, I decided to translate it not only to write my own code, but also to spread this modern code style to my company and Japanese ABAPers." (translated from Japanese)

Static Code Checks with Code Pal

FEATURES

Static Code Checks

Additional static code checks for Clean ABAP

Available in ADT

ABAP Development Tools/Eclipse

Execution based

On SCI-Variant(s) or profile(s)

Highly configurable

Thresholds, filter by object creation date

Code Pal for ABAP: Which Checks are available?



Single-Responsibility



Best Practices



Error Prevention



Readability



Deprecated Keywords

Static Code Checks with abaplint



FEATURES

129 rules!

Self contained

Works independently of an SAP system – executed locally on developer device or as web service

Direct integration in GitHub

Facilitates continuous integration and supports Open Source projects

Community driven Open Source project

Initiated by Lars Hvam Peterson, 20 contributors

Several integrations and extensions

VSCoDe extension, SAP code inspector integration

Code Review

- For learning, ensuring quality and fostering a common understanding
- Pull request as foundation for
 - review of change in isolation
 - continuous integration
- Options
 - GIT as secondary persistence for review
 - GIT as primary persistence
- Code review setup and practices in clean ABAP

The screenshot displays a code review interface for an ABAP file named `src/foundation/y_check_base.clas.abap`. The code is shown with line numbers and highlights for changes. The code includes:

```
638 649         threshold = check_configuration-threshold
639 650         apply_on_productive_code = check_configuration-apply_on_productive_code
640 651         apply_on_testcode = check_configuration-apply_on_testcode
652 +         allow_pseudo_comments = check_configuration-allow_pseudo_comments
641 653         FROM DATA BUFFER p_attributes.
642 654         APPEND check_configuration TO check_configurations.
643 655         CATCH cx_root.                                "#EC_NEED_CX_ROOT
@@ -647,12 +659,15 @@ CLASS y_check_base IMPLEMENTATION.
647 659
648 660
649 661         METHOD raise_error.
662 +         DATA(pseudo_comment) = COND sci_pcom( WHEN settings-allow_pseudo_comments = abap_false THEN settings-pseudo_comment
```

Below the code, there are two conversation threads:

This conversation was marked as resolved by eugen-guenther-sap Hide conversation

lucasborin on 7 Apr Member ...
When it allows pseudo comments, then return the pseudo comment. Isn't it?
`abap_false ==> abap_true`

This conversation was marked as resolved by eugen-guenther-sap Hide conversation

lucasborin on 7 Apr Member ...
You can also replace the `sci_pcom` with `#` to keep it dynamically. So, for instance, if in the future someone changes the default `pseudo_comment` type, we do not need to change it here.

The GitHub logo is visible in the bottom right corner.

Code Review Practices

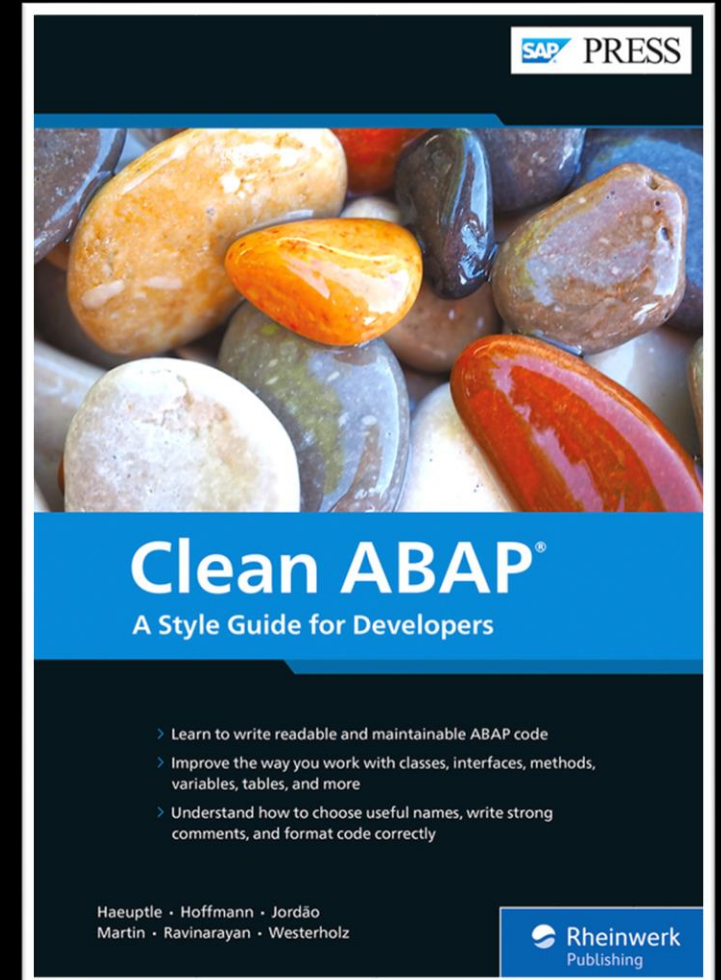
- Value the time of your reviewers, so before the review:
 - Fix static code checks
 - Fix unit test issues
 - Write readable unit tests
 - Apply the Clean ABAP guide and care about readable code
 - Pull request should contain small single purpose changes

More about Code Review practices: [Clean ABAP](#) and <https://google.github.io/eng-practices/>.

Clean ABAP: The Book

Added value:

- More comfortable read
- More context explained
- Additional content on **How to implement Clean ABAP as an individual, a team and an organization**
- https://www.sap-press.com/clean-abap_5190/



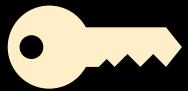
Clean ABAP is from coders for coders!



Clean ABAP is a great fit for every project, team, and code.



There are a lot of tools in the ecosystem that can help you with the adoption.



It's Open Source: You can contribute as well!



More on Clean ABAP

Blog posts: community.sap.com/search/?ct=blog&q=clean+abap

GitHub Repository: github.com/SAP/styleguides/

Public Slack Workspace: sapcodestyleguides.slack.com

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THANK YOU!

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