

SHIP-HATS Gen-AI Coding Assistant Programme

GitLab Duo

GOVTECH
SINGAPORE



Agenda

01

Journey so far

02

Availability of Tools for Restricted and CCE Source Code

03

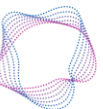
Which tools to choose?

04

What's on the horizon?

05

Q & A



Journey so far ...

Study on Coding Assistants
[\[2409.17434\] Harnessing the
Potential of Gen-AI Coding
Assistants in Public Sector Software
Development](#)

500+

Active Developers
using Coding Assistants and at least
50% active daily



300+ GitHub Copilot



150+ Codeium



30+ GitLab Duo

Right-classification playbook ([link](#))
– to help in navigating source code
classification

**Policy and security work to enable
Restricted+ access**



**Evaluation of Coding Assistants
with 118 respondents**



**Agentic Agents – Under trial
(Windsurf) / evaluation (Cursor)**



What is Available in Feb 2025

Code Class	Device	Tool	Availability	Remarks
Official (Open)	Government managed device (GMD) like SEED or personal devices	Any tool in the market		
Official (Closed)	Only on Government managed devices (GMD) – with training of data turned “off”	Pilot with other tools – 19 users across 8 tools V0.dev, Replit, Lovable.dev, ChatGPT Plus, Claude + Artifact, CursorAI, Win dSurf and Zed	Pilot for “Open” Classification	Available from Feb to May 2025
		Windsurf (trial)	Trial	Part of {build} Hackathon
		Amazon Q Dev (pre-trial stage)	Trial – not available yet	
Restricted	Only on Government managed devices (GMD)	GitHub CoPilot	Available	
		Codeium (SaaS)	Available	
		GitLab Duo	Trial -> Available	
Confidential (Cloud -Eligible)	Only on Government managed devices (GMD)	Codeium (Self-Hosted)	Available	
Confidential	Secured devices like GSIB / Comet	Codeium (GCC+; coming up in Q1FY25)	Not available yet	

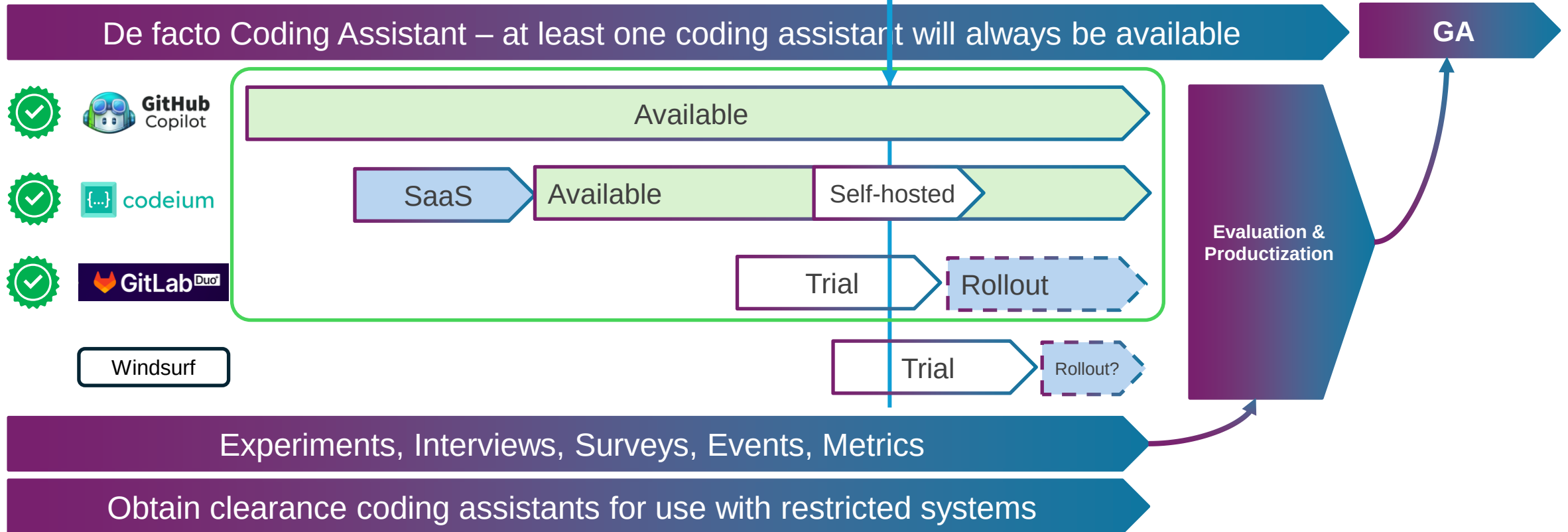
What is on the horizon?

- SaaS Coding Assistants (Copilot, Codeium, Duo) cleared for Restricted / Sensitive Normal
- Self-hosted Coding Assistants cleared for Confidential / Cloud-Eligible

Jul 2024

Feb 2025

Jul 2025*

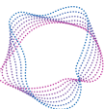


*Dates and information above are estimates and subjected to change due to rapidly changing landscape of AI tools



Milestones in 2025

✓ Codeium (Self-hosted) enabling ✓ GitLab Duo enabling ✓ TRA & Restricted+ Policy Clearance ✓ Metric Dashboard ✓ Data Analysis ▪ Evaluation: Windsurf / Amazon Dev Q ▪ {build} Hackathon	▪ Results and recommendations ▪ Selection of coding assistants for productization ▪ Start of productization of coding assistant offering (e.g. automation of provisioning via portal, pricing model, documentation ...)	▪ GA with Coding Assistants	▪ Continuous evaluation of the coding assistant space
Q1	Q2	Q3	Q4



We observed 21-28% improved coding speed with use of Coding Assistants in Public Sector

Demographics



500+

Developers onboarded

- 44+ Agencies
- 60% GovTech
- 80% Public Officer

Observations in 2025

- Observed **further improvements** in 2025 from the 21-28% increase coding speed observed previously in 2024.
- **Frequent usage strongly correlates** with gaining more productivity benefits
- Increased positive sentiments on productivity, learning, test coverage and code quality at both **individual** and **team level**



YES

Gain productivity



YES

Improve satisfaction



YES

Code Quality Improvements



YES

Better Test Coverage

New



YES

Learn Rapidly

Updated



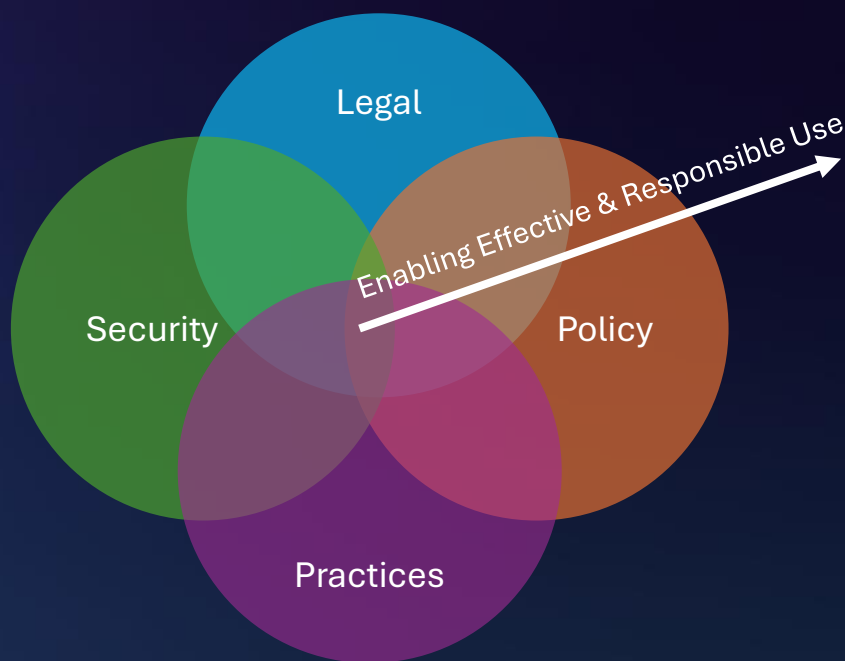
NO

Expose vulnerabilities early



2024 Study Publication

Policy and Security Challenges remain but can be addressed



We **centrally** addressed the challenges in responsible use of AI coding assistants in public sector to unlock productivity gains for our developers in a scalable manner

Code Classification	Tool Availability
Official Open / Closed	✓ Guidelines for usage ✓ Tools under evaluation
Up to Restricted	✓ GitLab Duo ✓ GitHub CoPilot ✓ Codeium (SaaS)
Up to Confidential (Cloud-Eligible)	✓ Codeium (Self-Hosted)
Confidential	(WIP) Coding Assistant in GCC+

To reap benefits of this fast-moving space, Public Sector usage must continue to adapt ... evolve

Agentic AI – the next productivity frontier?



- Evaluate and study Agentic AI
- Enable secure, responsible and effective use

Bringing AI Coding Assistants to GCC+

- Enable infrastructure in GCC+ for hosting
- Enable user access securely

Want to be part of this?
Join our AI Coding Assistants Programme!



Vendors can now be part of the programme!

- For vendors, the process is to fill up the same form <https://go.gov.sg/coding-assistant>
- Nominate a sponsor (a public officer)
- We strongly encourage participation as a team rather than individuals

Docs Portal Link: [AI coding assistants](#)



Get Started with Coding Assistants

Step1: Sign up

<https://go.gov.sg/coding-assistant>

Register as an individual or as a team

Step 2: Join our AI community

After you onboard the program, join our community to get updates, share experiences, and participate in discussions.



Get Started with Coding Assistants

Step 3: Get Access & Use Regularly

- Start exploring Copilot, Codeium, GitLab Duo, and more.
- Integrate these tools into your workflows to maximize productivity.

Step 4: Share your experiences

- Participate in our User Experience Survey to help us improve.
- Your feedback is essential for shaping the program.



Get Started with Coding Assistants

Step 5: Join Webinars & Meetups

- **Sharing on Coding Assistants (online):** Ask questions, learn directly from the experts, & Share your learnings/findings
- **Best Practices Discussions (online):** Learn how others are leveraging coding assistants.
- **Stack MeetUp (In-person):** Improving Developer Productivity using Coding Assistants
- **Read docs:** Access latest info: <https://go.gov.sg/coding-assistant-docs>



Stay tuned for event announcements on our community channels!



Some best practices when using Coding Assistants

As public officers or vendors working on public projects, we need to be aware that outputs from AI in general or specifically here Coding Assistants have the following potential pitfalls (though low in probability):

1. Potential to **infringe copyrights** (due to training dataset or coincidence resulting in similarities)
2. Potential to introduce unintended **security vulnerabilities** in code
3. Potential to introduce code that is **defective** due to hallucination or insufficient context

Any content generated that is used in development is the responsibility of users and project teams to ensure that:

1. Code is scanned and fixed for copyrights infringement, open-source rules violation, security vulnerabilities and for defects before merging into any productive environments
2. Code is inspected, tested and understood to ensure that logical issues are caught at the development stage and fixed.
3. Code is peer-reviewed before merging into any development, test or production environment.



[GovTechies] Will coding assistants become a default tool?

- We are evaluating this with CIO office
- Please express interest in # if you feel this should be a default tool
- Join [#ai-for-dev](#) slack
- Coding Assistants will be available at {build} hackathon! [Sign up today!](#)





Coding Assistant
Sign Up

<https://go.gov.sg/coding-assistant>



Coding Assistant
Docs

<https://go.gov.sg/coding-assistant-docs>



Share Your
Feedback

<https://go.gov.sg/sgts-fb>

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