Return of the Code Quality Inquisition
CON3258

JavaOne 2015 San Francisco, 25-29.10.2015

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Space Systems
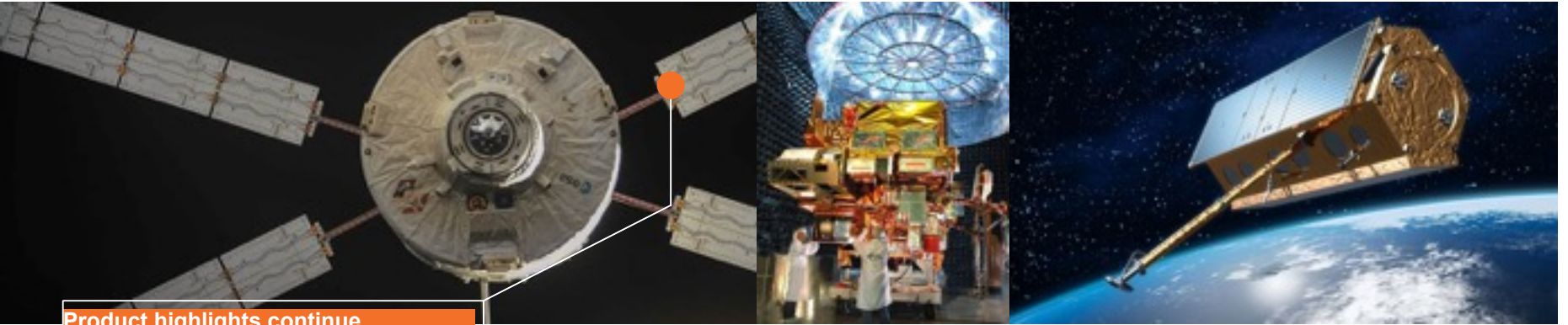
Earth Observation, Navigation and Science satellites and spacecraft, probes and rovers. Design and production of Earth Observation, Navigation and Science satellites. Leveraging a wide range of highly versatile satellite systems, optical and microwave instruments; ground segment.

Telecom satellites. Tailored solutions for a full range of missions, from fixed services and broadcast to mobile and broadband applications. Total satellite communications system capability: from design, manufacture, test, launch and operations to the provision of complete communications system infrastructure.

Defence. We deliver a full range of space-based security and defence systems and services for reconnaissance and surveillance, secure communications, early warning, and ballistic defence.

Propulsion. Rocket engines, complete space propulsion systems, sub-systems and components.

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About Me

- System Engineer @ Airbus Defence & Space

- Founder and Leader of JUG Bodensee

- Member of NetBeans Dream Team

- NetBeans Community Acceptance Testing (NetCAT)

- Duke's Choice Award Winner
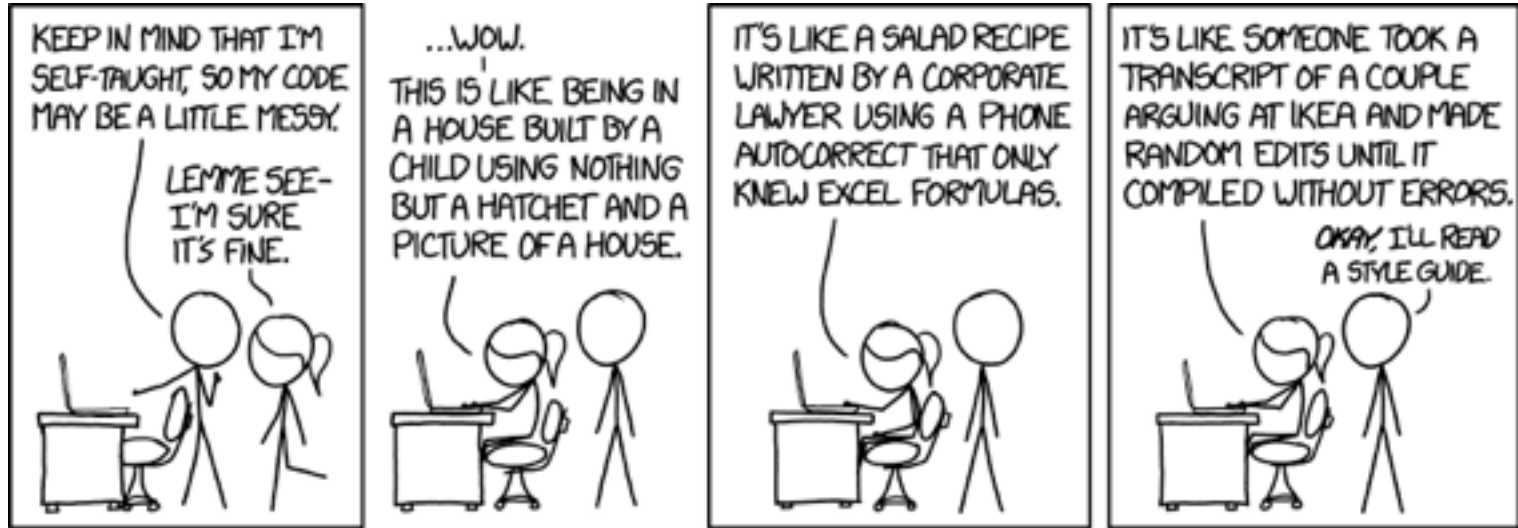
- Java One Content Committee

- Java Champion

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Code Quality - What? Why?

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Code Quality 101

http://xkcd.com/1513/

It is not only about style …

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… it is all about Quality

… it is all about Stability

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… it is all about Maintainability

How do we Achieve Code Quality Today?
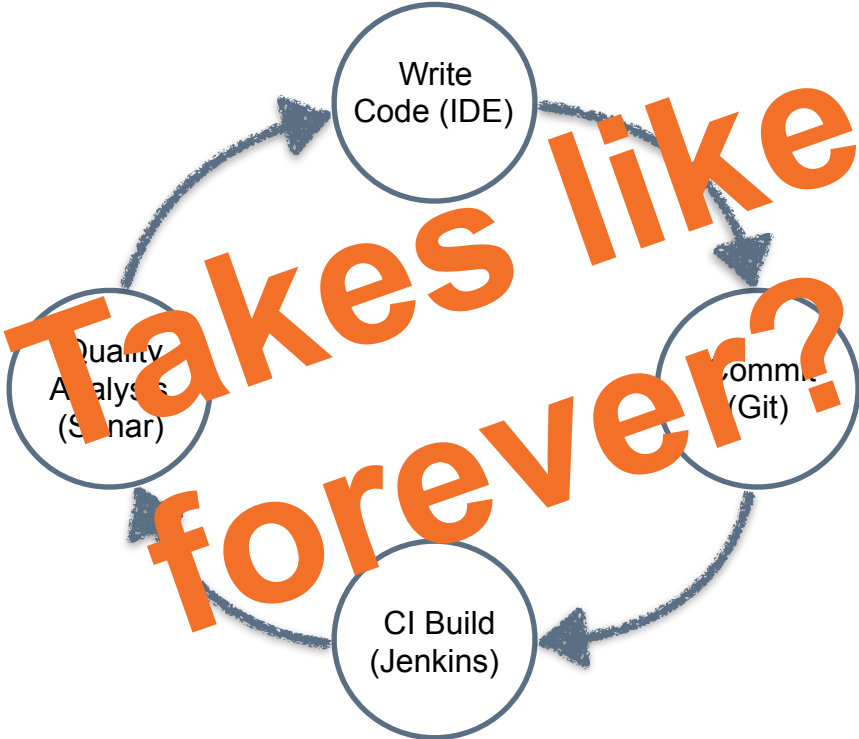
Tools

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The Tools (Java centric, Open Source, Free)

- Code Style Checker
    - Checkstyle
    - PMD

- Issue Detector
    - Javac -Xlint
    - FindBugs

- Unit Tests and Code Coverage
    - JUnit & JaCoCo

- Continuous Integration of results
    - Jenkins
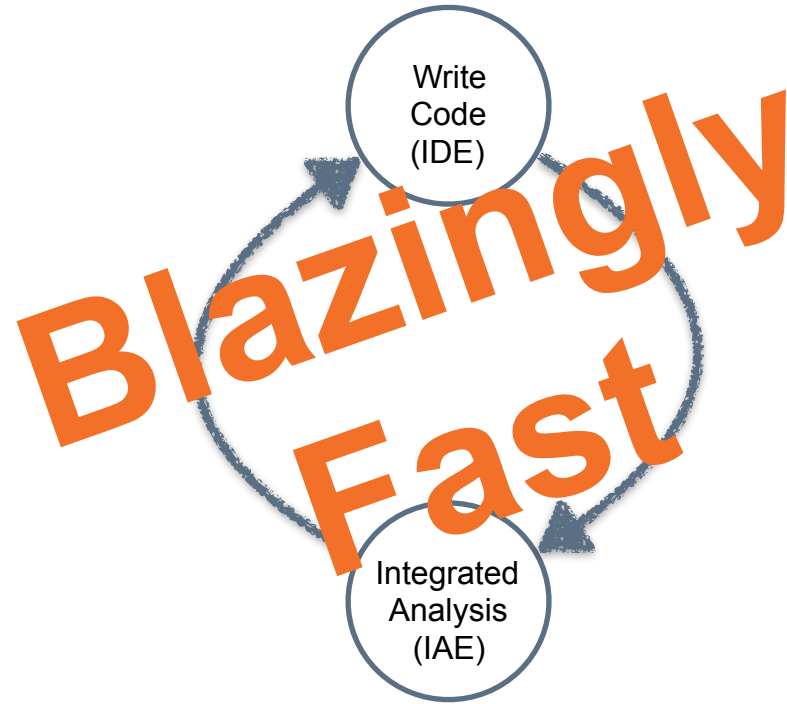
- Reporting / Visualization
    - Sonar

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The Continuous Code Quality Process

The Quality Feedback Loop

Solution

Code Quality as You Type

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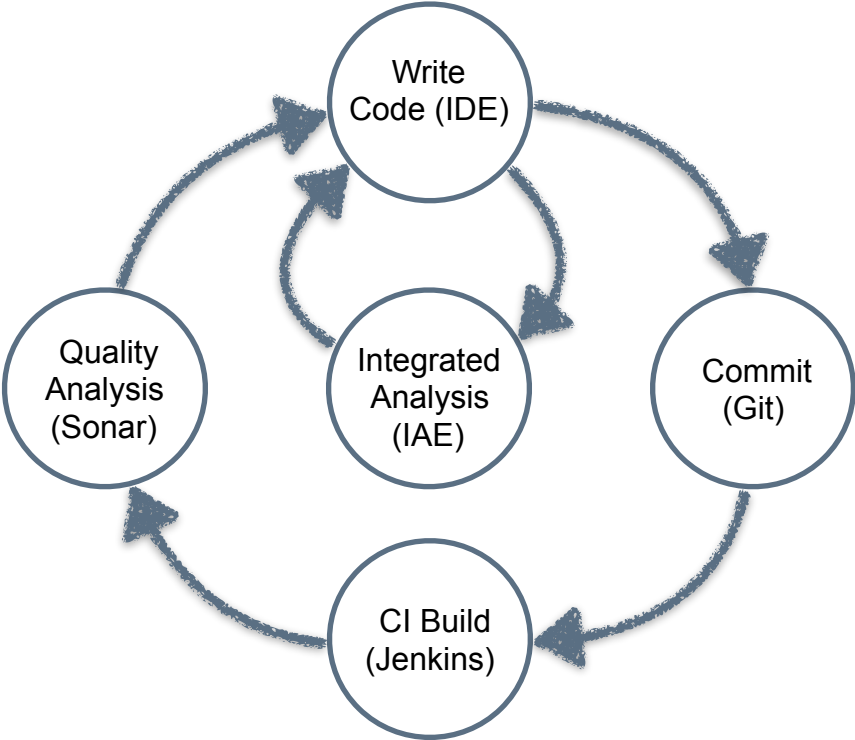DEFENCE & SPACE

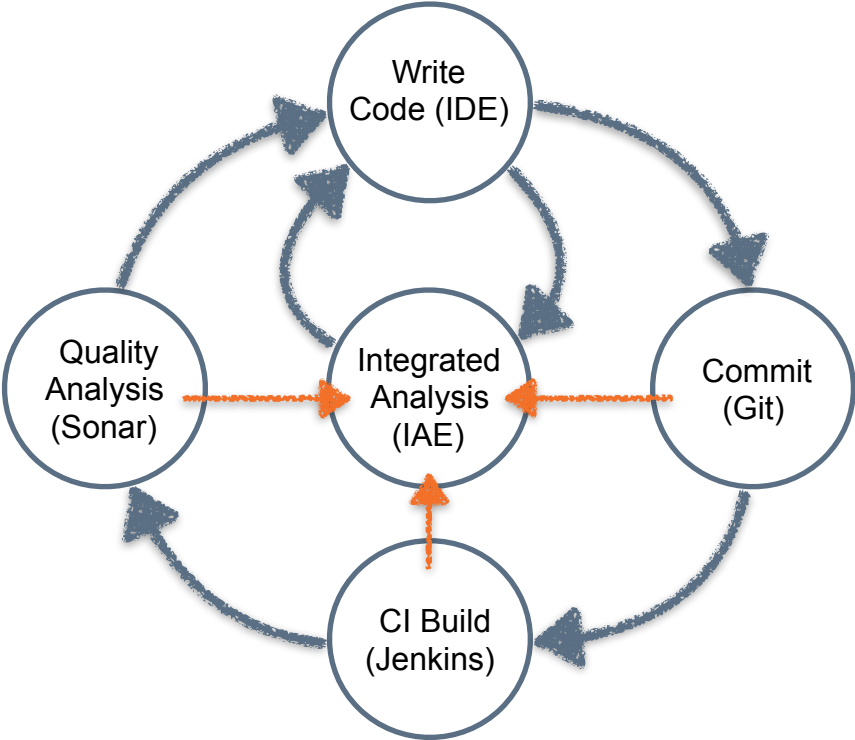# The Instantaneous Quality Feedback Loop

The Combined Quality Feedback Loop
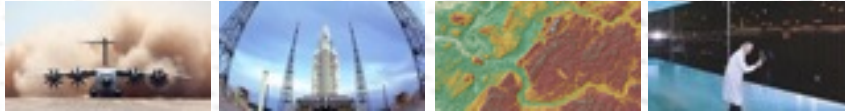
The Enhanced Combined Quality Feedback Loop

Demo

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Looking into the Crystal Ball

Q&A

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PIONEERING THE FUTURE TOGETHER

Contact:

Name: Sven Reimers
Title: System Engineer, User & Control Groundsegments FHN
E-mail: sven.reimers@airbus.com

Twitter: @svennb

Contact:

Name: Florian Vogler
Title: System Engineer, User & Control Groundsegments FHN
E-mail: florian.vogler@airbus.com

Twitter: @floriannb

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