

# Making *Sense* of Microservices

@russmiles



GEEK  
HARLEY  
DNA

sort of ... #NOSLIDES

# The *Challenge* of the Modern Software Developer?

sonar-intellij > src > main > java > org > sonarlint > intellij

Project: SonarLintAnalysisConfigurator.java, SonarLintConsole.java

```
public void info(String msg) { getConsoleView().print(msg + "\n", ConsoleViewContentTy  
public void error(String msg) { getConsoleView().print(msg + "\n", ConsoleViewContentT  
public void error(String msg, Throwable t) {  
    error(msg);  
    StringWriter errors = new StringWriter();  
    t.printStackTrace(new PrintWriter(errors));  
    error(errors.toString());  
}  
public void clear() { getConsoleView().clear(); }  
public ConsoleView getConsoleView() { return this.consoleView; }  
}
```

SonarLint: Issues Log

Scope: Project

- SonarLintAnalysisConfigurator.java (3 issues)
  - (146, 13) Exception handlers should preserve the original excep
  - (232, 10) Control flow statements "if", "for", "while", "switch" an
  - (151, 24) Methods should not be too complex 42 minutes ago
- SonarLintConsole.java (1 issue)
  - (70, 6) Throwable.printStackTrace(...) should not be called 42 m

Throwable.printStackTrace(...) prints a throwable and its stack trace to some stream.

Loggers should be used instead to print throwables, as they have many advantages:

- Users are able to easily retrieve the logs.
- The format of log messages is uniform

6: TODO 9: Version Control Terminal SonarLint 2 Event Log

The image shows a screenshot of an IDE window with the following components:

- Project Explorer:** Located on the left, showing a package structure: `java` > `org.sonarlint.intell` > `actions`. Files listed include `AbstractSc`, `package-info`, `SonarAnal`, `SonarCanc`, `SonarClea`, `SonarConf`, `ToolWindc`, `analysis`, `DefaultInp`, `DefaultSo`, `JobQueue`, and `package-info`.
- Code Editor:** Displays the source code for `SonarLintConsole.java`. Visible methods include:

```
public void info(String msg) { getConsoleView().print(msg + "\n", ConsoleViewContentTy  
public void error(String msg) { getConsoleView().print(msg + "\n", ConsoleViewContentT  
public void error(String msg, Throwable t) {  
    error(msg);  
    StringWriter errors = new StringWriter();  
    printStackTrace(new PrintWriter(errors));  
    error(errors.toString());  
}  
public void clear() { getConsoleView().clear(); }  
public ConsoleView getConsoleView() { return this.consoleView; }
```
- Watermark:** A large, white, semi-transparent word "Code" is overlaid across the center of the code editor.
- SonarLint Issues Panel:** Located at the bottom, it shows a list of issues. The "Scope" is set to "Project".
  - SonarLintAnalysisConfigurator.java (3 issues):**
    - (146, 13) Exception handlers should preserve the original excep
    - (232, 10) Control flow statements "if", "for", "while", "switch" an
    - (151, 24) Methods should not be too complex 42 minutes ago
  - SonarLintConsole.java (1 issue):**
    - (70, 6) Throwable.printStackTrace(...) should not be called 42 m
- Issue Detail Panel:** On the right side of the issues panel, it provides a tip: "Throwable.printStackTrace(...) prints a throwable and its stack trace to some stream. Loggers should be used instead to print throwables, as they have many advantages:"
  - Users are able to easily retrieve the logs.
  - The format of log messages is uniform
- Bottom Bar:** Contains tabs for "6: TODO", "9: Version Control", "Terminal", "SonarLint", and "2 Event Log".

But...











Microsoft Azure

Search resources

Dashboard

- All resources
- Service health
- Marketplace
- Help + support

Resource groups

- All resources
- Recent
- App Services
- Virtual machines (classic)
- Virtual machines
- SQL databases
- Cloud services (classic)
- Security Center
- Subscriptions

amazon web services Training and Certification

### DevOps Engineering on AWS

DevOps Engineering on AWS demonstrates how to use the most common DevOps patterns to develop, deploy and maintain applications on AWS. The course covers the core principles of the DevOps methodology and examines a number of use cases applicable to startup, small-medium business, and enterprise development scenarios.

Show advanced filters Search

List Calendar

Showing classes 1 to 15 of 136

Location	Date	Duration	Type	Language	Sold By
Neuwegein (Iepenhoeve 5)	12 October, 2015 @ 09:00 AM	3 days	Classroom	English	Global Knowledge Netherlands
Live Online - Eastern	12 October, 2015 @ 11:30 AM	3 days	Virtual Classroom	English	Global Knowledge
Live Online - Central	12 October, 2015 @ 10:30 AM	3 days	Virtual Classroom	English	Global Knowledge
Live Online - Pacific	12 October, 2015 @ 08:30 AM	3 days	Virtual Classroom	English	Global Knowledge
Live Online - Pacific	12 October, 2015 @ 08:30 AM	3 days	Virtual Classroom	English	Global Knowledge
Dallas, TX (US)	13 October, 2015 @ 08:00 AM	3 days	Classroom	English	ExitCertified
Ottawa, ON (CA)	13 October, 2015 @ 09:00 AM	3 days	Classroom	English	ExitCertified
Montreal, QC (CA)	13 October, 2015 @ 09:00 AM	3 days	Classroom	English	ExitCertified

APPDYNAMICS

Custom Dashboards Docker Monitor-Unix1

Dashboard Time Range last 15 minutes

Total vs Running Containers

Total Containers - 14

Total Images - 192

Total CPU %

Memory Usage %

Network Transmit MB Per Minute

Network Receive MB Per Minute

Etc, etc...

and *then*...?

It gets worse...

DevOps

Unmanageable *so...*



Microservices!

X x 100

alt-Tab should *not* be a  
key skill!

We have an  
embarrassment of riches...

Modern Software Development  
is a  
*Cognitive Overhead Problem*

*What* to notice?

*Where* to notice it?

*Where* to find what you  
need to decide?



*What* to do next?

To the *rescue*?

“chat ... ?”

WTF! Chat????

Well, no...

...but maybe!!

The *Problem* of Chat.

Noise *Amplifier!*





A detailed view of a military aircraft cockpit instrument panel. The panel is densely packed with various instruments, including analog gauges for speed, altitude, fuel, and engine performance, as well as numerous control switches and buttons. A central yoke is visible in the foreground. The text "in Slack?" is overlaid in a large, white, sans-serif font across the center of the image. The overall lighting is dim, highlighting the metallic and plastic textures of the cockpit components.

in Slack?



Please, good, no!

It has to be more than just  
*'show'*

Chat is about  
*collaboration*

Make me *aware*

Help me *act*

Show me *what I need to know*

Help me *Figure It Out*

*Observe*

Help me *act*

Show me *what I need to know*

Help me *Figure It Out*

*Observe*

Help me *act*

*Orient*

Help me *Figure It Out*



*Observe*

Help me *act*

*Orient*

*Decide*

*Observe*

*Act*

*Orient*

*Decide*

Chat gives a unique potential  
for OODA for Modern  
Software Development

What I wanted...

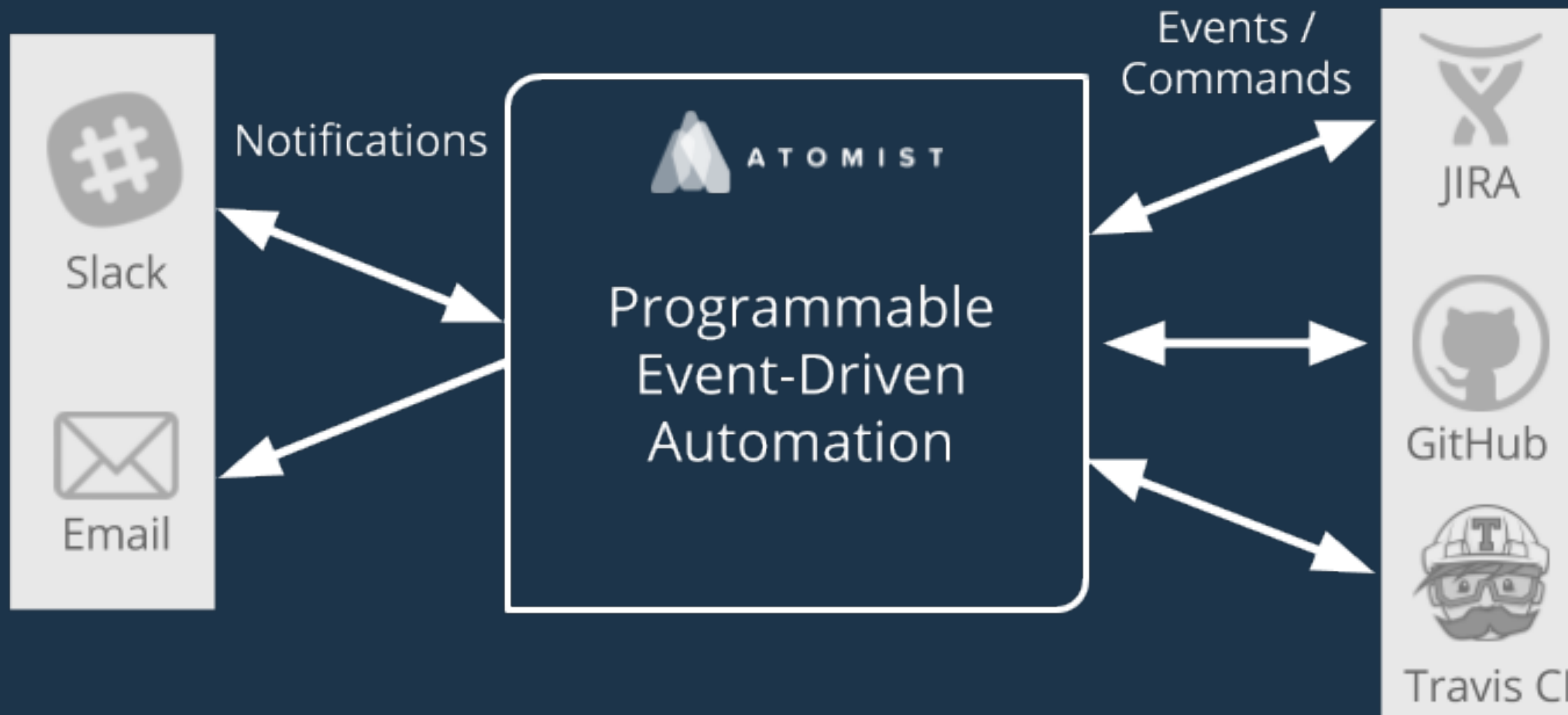
*Visibility and Control to  
Automate Software  
Development*

*or...*

*“OODA for the Modern  
Software Development Flow”*



# CONNECTED, COORDINATED, AUTOMATED







# WHAT'S IN IT?

Brain: Model and Integrations

Ears: Handlers (Command and Event)

Eyes: Reviewers

Hands: Editors and Generators

A little demo of what / use

# Skill 1 - Creating new microservices

# Skill 2 - Evolving Microservices

Skill 3 - Knowing when  
something has changed

Skill 4 - Telling others  
what I've been up to ;)

Any Questions ...  
And Thanks!

[join.atomist.com](http://join.atomist.com)