

# SLF4J project

Ceki Gülcü  
ceki@qos.ch

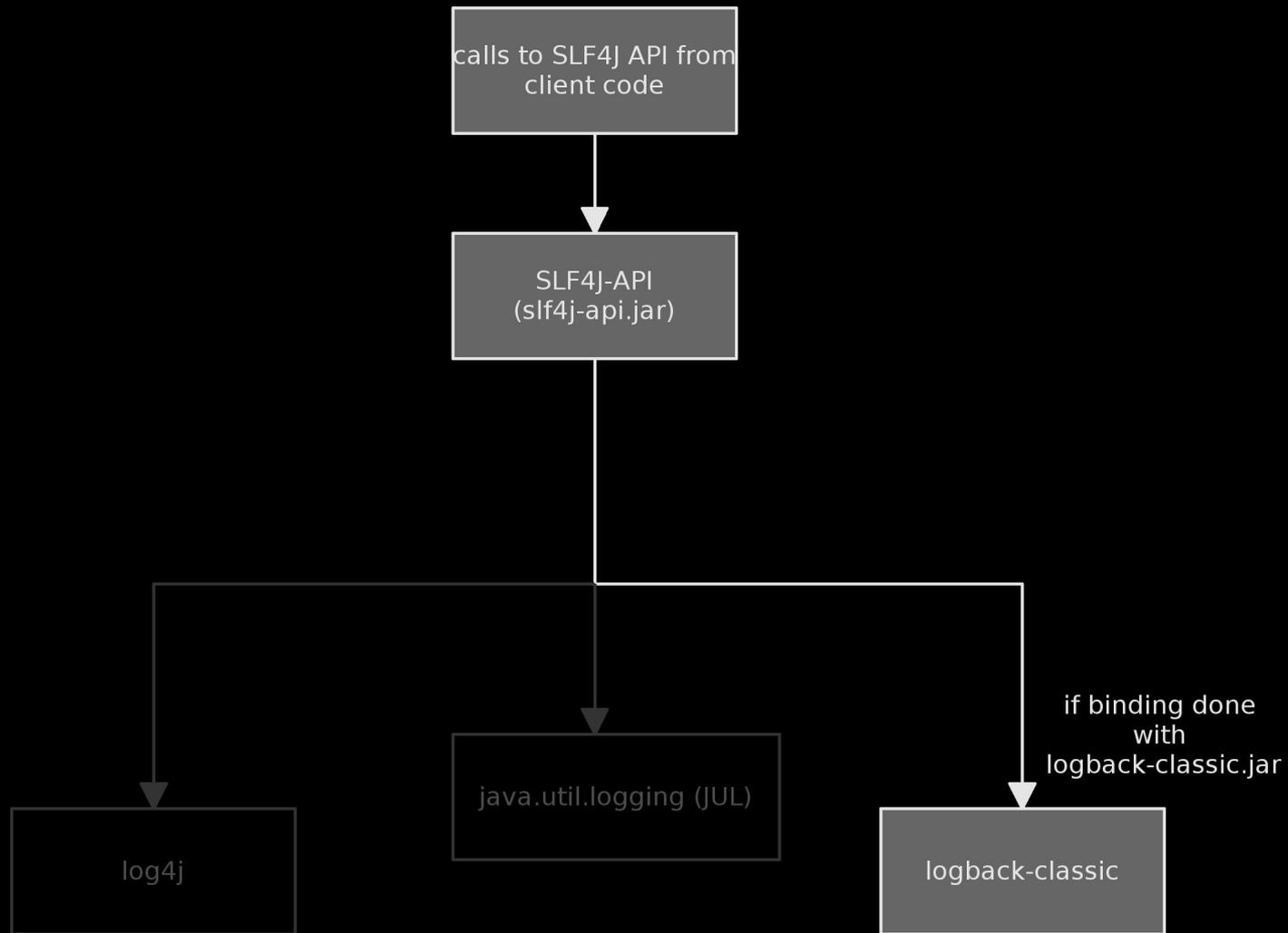
# Jakarta Commons Logging (JCL)

- Same problem domain
- Well-established library
- So why do we re-invent the wheel?

Because details of  
implementation matter.

# SLF4J

- SLF4J: Simple Logging Façade for Java
- Problem definition:
  1. Abstract logging frameworks
  2. ~~Automatically statically has already selected logging~~ logging framework (in [SLF4J](#))



# The API

```
1: import org.slf4j.Logger;
2: import org.slf4j.LoggerFactory;
3:
4: public class Wombat {
5:
6:     final Logger logger = LoggerFactory.getLogger(Wombat.class);
7:     Integer t;
8:     Integer oldT;
9:
10:    public void setTemperature(Integer temperature) {
11:
12:        oldT = t;
13:        t = temperature;
14:
15:        logger.debug("Temperature set to {}. Old temperature was {}.", t,
oldT);
16:
17:        if(temperature.intValue() > 50) {
18:            logger.info("Temperature has risen above 50 degrees.");
19:        }
20:    }
21: }
```

# Parameterized logging

old style:

```
if (logger.isDebugEnabled()) {  
    logger.debug("Hello "+name);  
}
```

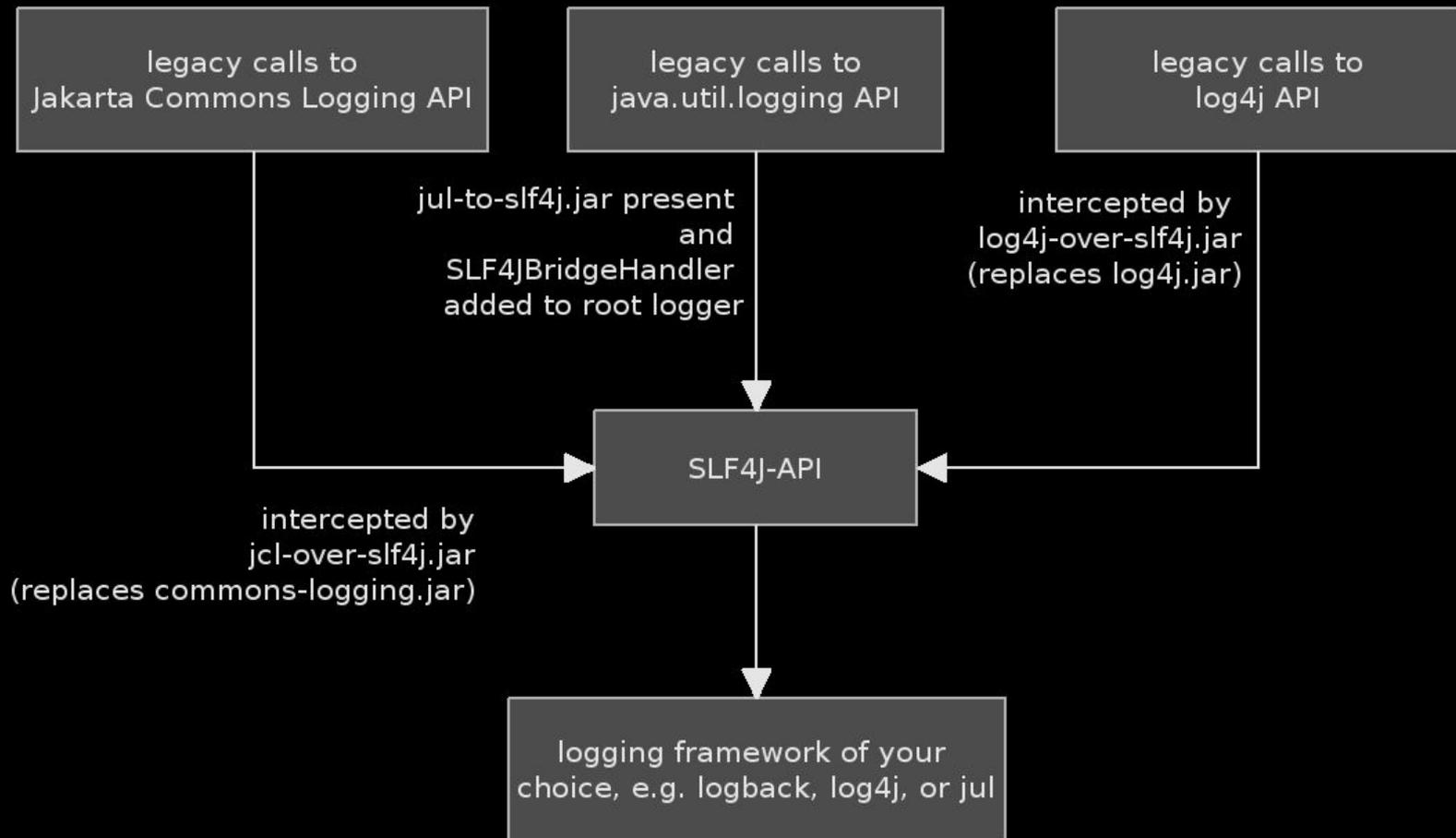
new style:

```
logger.debug("Hello {}", name);
```

# Other supported features

- MDC (for log4j, logback and j.u.l)
- Markers

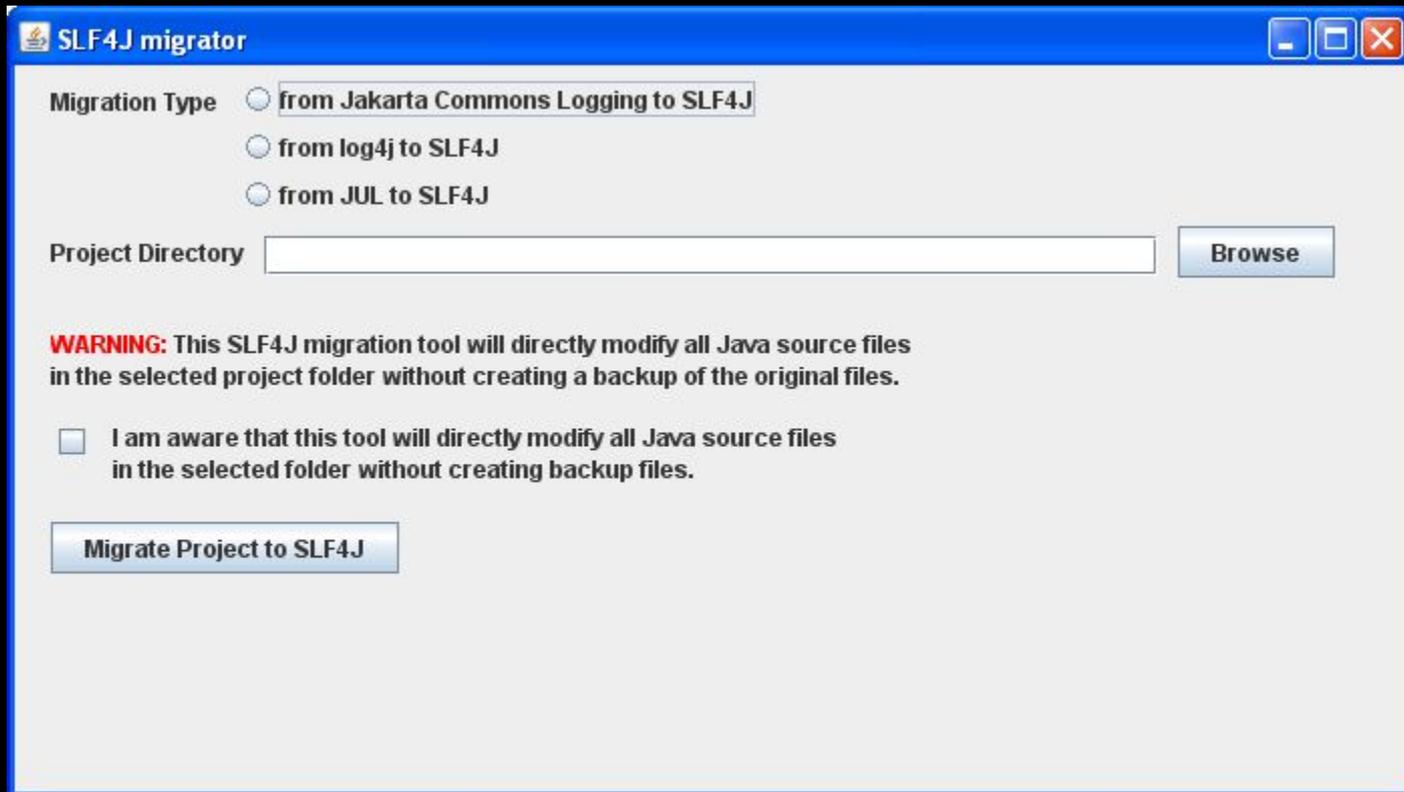
# Bridging legacy systems



# Using SLF4J:

- Apache Archiva
- Apache Directory
- Apache FTPServer
- Apache Geronimo
- Apache Graffito
- Apache Jetspeed
- Apache Jackrabbit
- Apache Mina
- Apache Qpid
- Apache Sling
- Apache Tapestry
- Apache Wicket
- Aperture
- Apogee
- Artifactory
- Bitronix
- DbUnit
- Display tag
- GMaven
- Gradle
- GreenMail
- GumTree
- H2 Database
- HA-JDBC
- Hibernate
- Igenko
- Jabsorb
- Jetty v6
- jLynx
- JMesa
- JODConverter
- JTrac
- JWebUnit 2.x
- LIFERAY
- log4jdbc
- Magnolia
- MRCP4J
- Mindquarry
- Mugshot
- Mule
- Novocode
- NetCDF
- OpenRDF
- Penrose
- Proximity
- PZFileReader
- QuickFIX/J
- SMSJ
- Spring-OSGi
- StreamBase
- TimeFinder
- WTFIGO
- YASL
- Xoactory

# Migrator



The screenshot shows a window titled "SLF4J migrator" with a blue title bar. The window contains the following elements:

- Migration Type:** Three radio buttons are present. The first, "from Jakarta Commons Logging to SLF4J", is selected. The other two are "from log4j to SLF4J" and "from JUL to SLF4J".
- Project Directory:** A text input field is empty, followed by a "Browse" button.
- Warning:** A red text warning states: "WARNING: This SLF4J migration tool will directly modify all Java source files in the selected project folder without creating a backup of the original files."
- Acknowledgment:** A checkbox is unchecked, with the text "I am aware that this tool will directly modify all Java source files in the selected folder without creating backup files."
- Action:** A "Migrate Project to SLF4J" button is located at the bottom left.

# Conclusion

Simplicity is powerful.

-- Evan Williams

Robustness, particularly in the context of logging, is a killer feature and simplicity implies robustness.

Or, come up with *minimal* requirements and write just enough code to satisfy them.