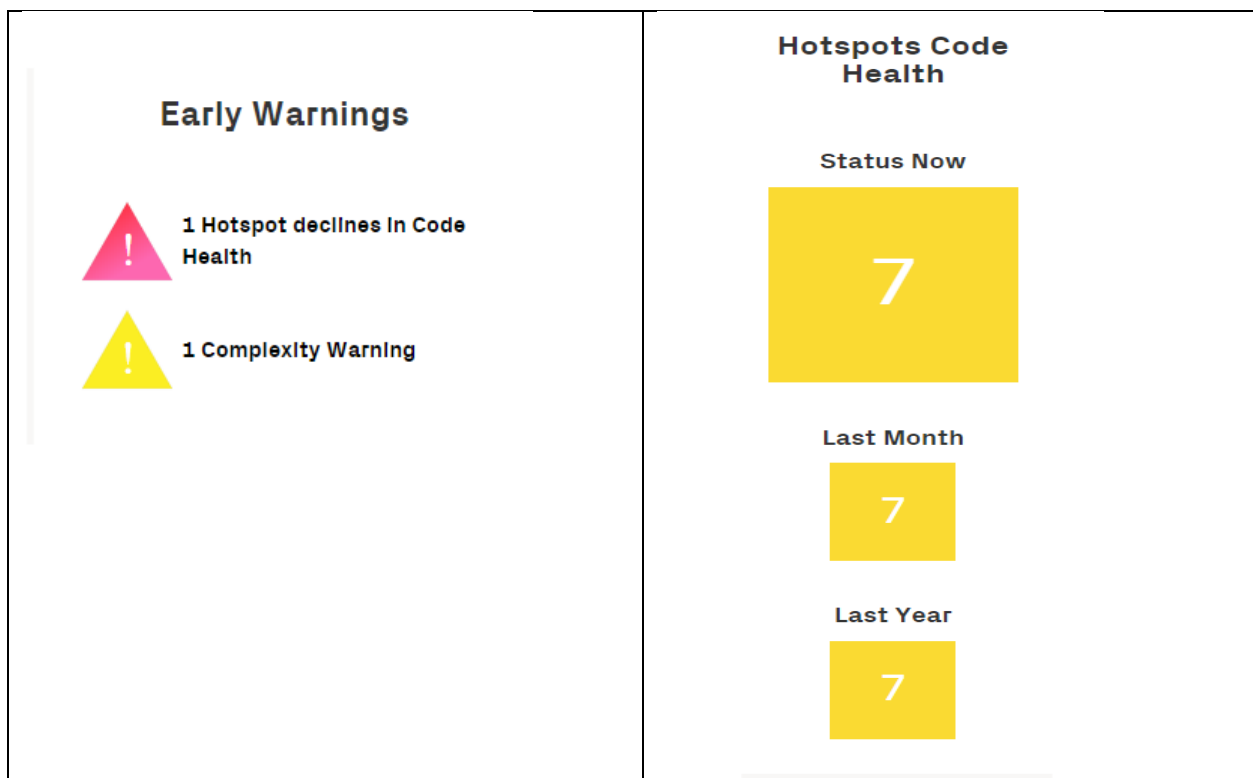**Metric 5: Code churn** is a measure that tells you the rate at which your code evolves.

Analyzing the Project 1: Apache Commons Codec
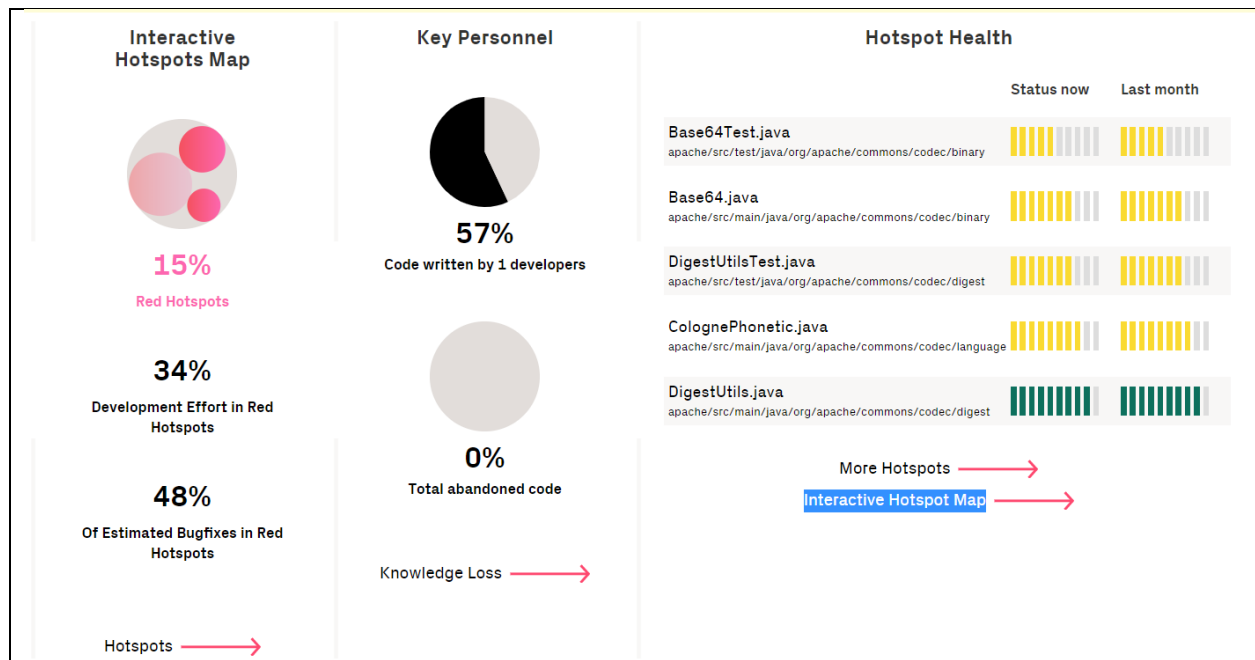
- 32k
- Version: 1.14 (Tag name: commons-codec-1.14)
- Repository: https://github.com/apache/commons-codec
- Issue tracker: https://issues.apache.org/jira/browse/CODEC-259?jql=project%20%3D%20CODEC%20AND%20text%20~%20%22Apache%20Commons%22

Dashboard Data: Monthly

Early Warnings

⚠ 1 Hotspot declines in Code Health

⚠ 1 Complexity Warning

Hotspots Code Health

Status Now

7

Last Month

7

Last Year

7

Branch Delivery Risk

This project does not have multiple branches, or the branch analysis is disabled.

Interactive Hotspots Map

15%
Red Hotspots

34%
Development Effort in Red Hotspots

48%
Of Estimated Bugfixes in Red Hotspots

Hotspots ⟶

Key Personnel

57%
Code written by 1 developers

0%
Total abandoned code

Knowledge Loss ⟶

Hotspot Health

	Status now	Last month
Base64Test.java apache/src/test/java/org/apache/commons/codec/binary		
Base64.java apache/src/main/java/org/apache/commons/codec/binary		
DigestUtilsTest.java apache/src/test/java/org/apache/commons/codec/digest		
ColognePhonetic.java apache/src/main/java/org/apache/commons/codec/language		
DigestUtils.java apache/src/main/java/org/apache/commons/codec/digest		

More Hotspots ⟶

Interactive Hotspot Map ⟶

Analysis Scope: Project information, analysis scope, evolutionary data, and file content metrics.

Project	apache
Includes History From	2003-04-25 17:51:00 (UTC)
Analyzed At	2020-03-26 17:44:09 (UTC)
Duration	1 minute and 9 seconds

Commits	1,357
Entities	161
Changed entities	3,918
Authors	29
Active Authors	4

File Content

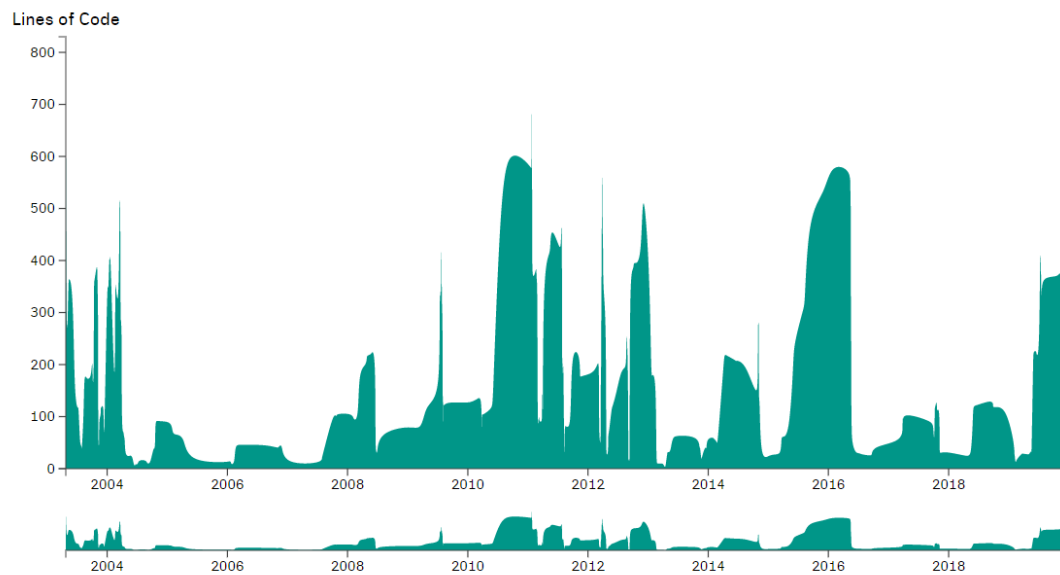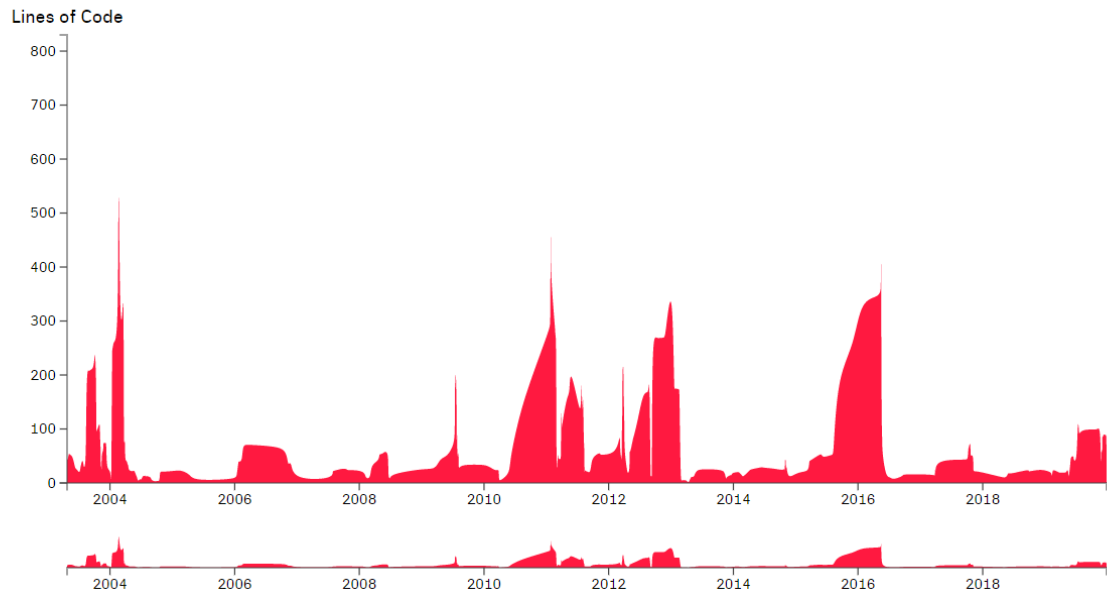| Language	Files	Code	Comment	Blank
Java	133	22,410	14,328	3,539
Text	132	7,780	0	945
XML	14	1,688	340	102
Markdown	2	187	0	36
HTML	8	137	112	34
YAML	1	16	14	5
Ignored	6	0	0	0

Commit Activity Trend:
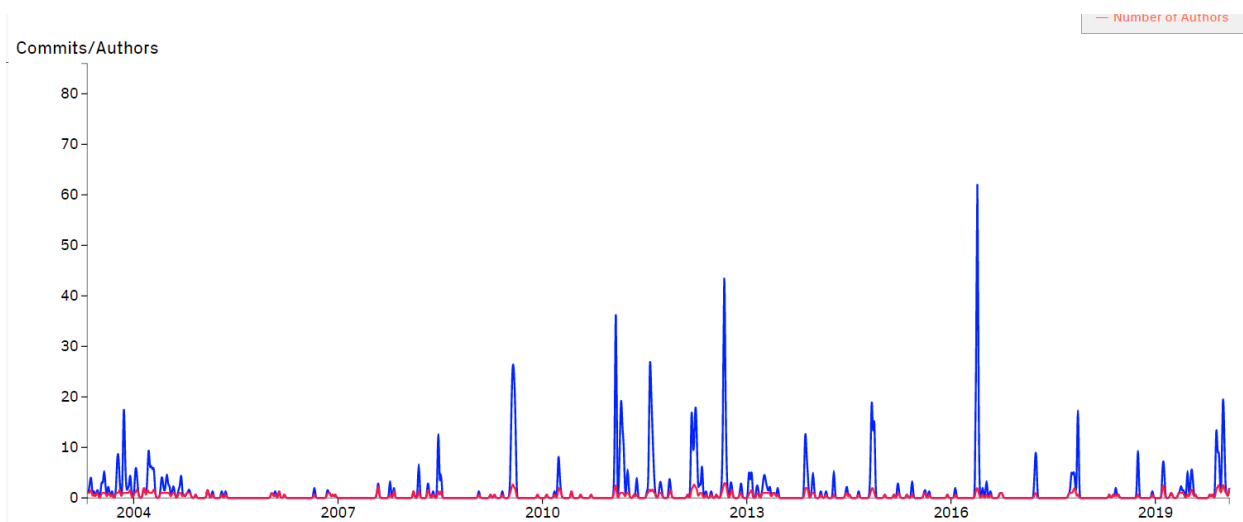
Active Contributors:
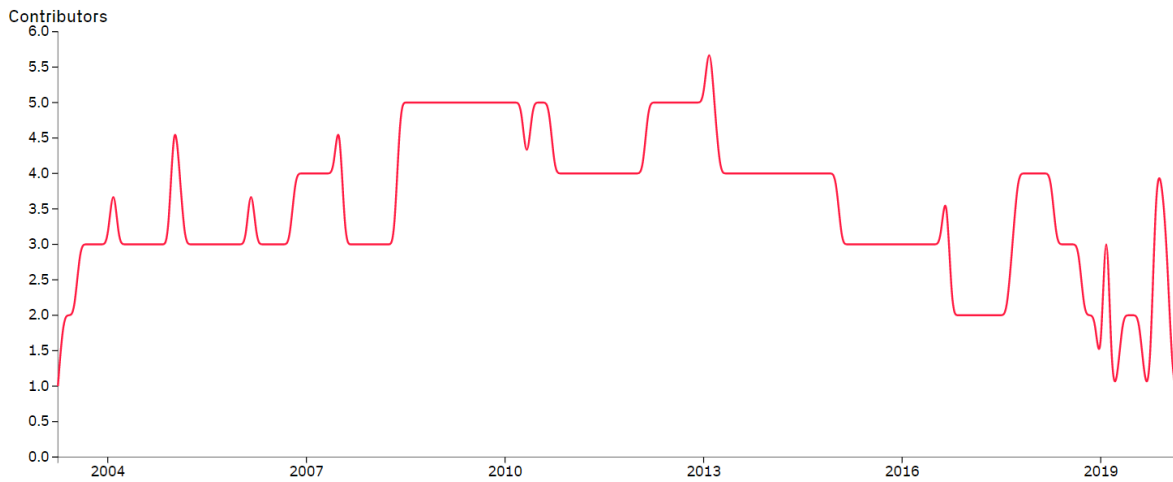
Added Lines of Code

Deleted Lines of Code

Lines of Code

Absolute Churn Over Time

The following graph shows the raw, absolute number of churned lines of code over time.

Raw Code Churn