

Guava Release 12.0: Release Notes

Release 12.0 was released on April 30, 2012. Release 12.0.1 was released on July 10, 2012. (See [ReleaseHistory](#).)

[Full API Documentation](#)

Using Guava in your project

This release will be identified in the Maven Central repository as [com.google.guava:guava:12.0.1](#) and [com.google.guava:guava-gwt:12.0.1](#)

See `UseGuavaInYourBuild` for help integrating Guava into your build environment.

If you don't use managed dependencies, you can also just manually download JARs of the classes, sources and documentation from:

- [guava-12.0.1.jar](#)
- [guava-gwt-12.0.1.jar](#) (for GWT users)
- [guava-12.0.1-javadoc.jar](#) (Javadoc)
- [guava-12.0.1-sources.jar](#) (Source)

Issues resolved

[43 issues](#) are resolved in this release (a record, among somewhat on-time releases).

Notably, [FinalizableReferenceQueue no longer keeps unused ClassLoader alive](#), [an OGSi bundle is included](#), and [CacheBuilder users must opt in to stats collection](#).

Changes between 12.0 and 12.0.1

Resolved a major [performance regression](#) in `LoadingCache`.

API Changes

[Full JDiff Report](#) of changes since release 11.0.2

To build a combined report of the API changes between release 12.0 and any older release, check out our docs tree and run `jdiff/jdiff.sh` with the previous release number as argument (example: `jdiff.sh 5.0`).

CacheBuilder Cache stats

`CacheBuilder` users who use the `Cache stats()` method must now opt in by calling `recordStats()` (as of 12.0-rc2).

JDK6 APIs

Guava 12.0 is the first release to require JDK6. Users requiring JDK5 compatibility may continue to use Guava 11.0.2 - or contact us about maintaining a backport.

Here are the new APIs introduced along with our JDK6 dependency:

`ImmutableSortedSet` implements `NavigableSet`; `ImmutableSortedMap` implements `NavigableMap`.

Added forwarding classes for `Deque`, `NavigableMap`, `NavigableSet`.

Added type-inferring factory methods: `newArrayDeque`, `newLinkedBlockingDeque`, `newCopyOnWriteArrayList`, `newCopyOnWriteArraySet`.

Added `Maps.unmodifiableNavigableMap`, `Sets.unmodifiableNavigableSet`.

Other significant API additions

Introducing `common.reflect`, especially `TypeToken`, a better `java.lang.Class`.

Introducing `MediaType` (which may be split into `MediaType`+`MediaRange` someday).

Introducing `FluentIterable`.

Introducing `CacheBuilderSpec`; see `CacheBuilder.from(CacheBuilderSpec)` and `CacheBuilder.from(String)` to make use of it.

Introducing `ImmutableSortedMultiset`.

Added `Enums.getField`, `getIfPresent`.

Added `HashCodes`.

Added `BloomFilter.copy`, `equals`, `hashCode`; plus, `put` now returns `boolean`.

Added `Optional.transform`.

Added `ToStringHelper.omitNullValues`.

Added `Collections2.permutations`, `orderedPermutations`.

Added `FowardingSet.standardRemoveAll`.

Added `Cache.putAll`.

Added `JdkFutureAdapters.listenInPoolThread` with custom executor.

Other significant API changes

`Sink` is renamed to `PrimitiveSink`. Implementations of `Funnel` will need to be updated.

`AbstractLinkedIterator` has been deprecated in favor of the identical `AbstractSequentialIterator`.

`ByteStreams` and `Files` `getDigest` methods have been deprecated in favor of new hash methods.

`ComparisonChain.compare(boolean, boolean)` has been deprecated in favor new `compareFalseFirst/compareTrueFirst` methods.

OSGi support

As of 12.0-rc2, Guava contains OSGi metadata.