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Logback News

You can receive logback-related announcements by subscribing to the [QOS.ch announce](#) mailing list.

In Logback 1.3.x, few **optional** components depend on Java EE, whereas in logback versions 1.4.x/1.5.x, these optional components depend on Jakarta EE. The 1.5.x series continues the 1.4.x series, but with logback-access relocated to its own repository.

On the 1.5.x series

The 1.5.x series is a direct descendant of and a drop-in replacement for the 1.4.x series. It contains few optional components such as SMTPAppender and LogbackServletContextListener which depend on Jakarta EE (jakarta.* namespace). The 1.5.x series differs from the 1.4.x series by the relocation of the *logback-access* module which was moved to its [own separate github repository](#).

Here is a summary of 1.5.x dependencies:

Logback version	github branch	SLF4J version	JDK at runtime	JDK during build	Enterprise Edition (optional components)
1.5.x	master	2.0.x	11	21	Jakarta EE (jakarta.* namespace)

On the 1.3.x and 1.4.x series (END-OF-LIFE)

Few **optional** components such as SMTPAppender and LogbackServletContextListener depend on Java EE in logback version 1.3.x whereas in logback 1.4.x/1.5.x these components depend on Jakarta EE. Here is a summary of the differences:

Logback version	github branch	SLF4J version	JDK	Enterprise Edition (optional components)
1.3.x	branch_1.3.x	2.0.x	8	Java EE (javax.* namespace)
1.4.x	branch_1.4.x	2.0.x	11	Jakarta EE (jakarta.* namespace)

Logback components written for logback 1.2 should work without change in version 1.3. However, Joran, logback's configuration system, has been rewritten to use an internal representation model which can be processed separately. Thus, code depending on Joran needs to be adapted to changes in Joran (logback's internal configuration mechanism).

As a result of enhancements to Joran, logback configuration scripts are now largely order-free. For example, appenders can now be defined after they are first referenced in a logger. Moreover, unreferenced appenders are no longer instantiated.

On the 1.2.x series (END-OF-LIFE)

The 1.2.x series has been deprecated for several years and is no longer maintained. As such, use of the 1.2.x series is discouraged.

For those using Spring-boot 2.7 or earlier, it is possible to upgrade to a more recent version of logback by setting the `org.springframework.boot.logging.LoggingSystem` system property to `none`.

Reproducible builds



Reproducible Builds

Starting early 2022, logback artifacts for versions 1.3.x and later are binary reproducible, as [independently attested](#) by reproducible-central.

2026-06-23 Release of logback version 1.5.35

- The 'condition' attribute in `<if>` elements now rejects unicode escape sequences (`\u` and `\U`). This closes a bypass of the existing prohibition on the new operator in Janino-evaluated conditions. This issue was reported by lcySun (lcySun@qq.com) and registered as [CVE-2026-13006](#).
- Added `ConfiguratorRank.AUTHENTICATING` (rank 100), the highest configurator rank, for certified/authenticating configurators discovered via the `ServiceLoader` mechanism. `ContextInitializer` now requires that at most one such configurator exist on the classpath; if more than one is found, initialization aborts with an error.
- `ConsoleCharsetPropertyDefiner` is no longer shipped. The Java 21 multi-release compilation of `logback-core` has been disabled, which removes this class from the published artifact. Configurations that referenced `ch.qos.logback.core.property.ConsoleCharsetPropertyDefiner` will need an alternative approach for console charset detection.
- The `logback-examples` module is now included in the set of artifacts published to Maven Central.
- `JoranConfigurator.makeAnotherInstance()` and `DefaultJoranConfigurator.performMultiStepConfigurationFileSearch()` are now protected, allowing derived configurators to override these methods.
- A bitwise identical binary of this version can be reproduced by building from [source code](#) at commit `08bd1598d565d83444f72983935e7da4746783b7` associated with the tag `v_1.5.35`. Release built using Java "21" 2023-10-17 LTS build 21.0.1.+12-LTS-29 under Linux Debian 11.6.

2026-06-01 Release of logback version 1.5.34

- In case certain `StackTraceElement` values returned by the `Throwable.getStackTrace` method are null, `StackTraceElementProxy` substitutes a dummy instance instead of throwing an `IllegalArgumentException`. This resolves [issues #1040](#), reported by Naotsugu Kobayashi.
- `HardenedObjectInputStream` will now throw an `InvalidClassException` during deserialization attempts of Proxy classes. This change addresses potential deserialization whitelist bypass vulnerability reported by [York Shen](#) and registered as [CVE-2026-10532](#).

- A bitwise identical binary of this version can be reproduced by building from [source code](#) at commit `e62272ac152469aec1ede056c3c7d0d7314e7bfe` associated with the tag `v_1.5.34`. This release was built using Java "21" 2023-10-17 LTS build 21.0.1.+12-LTS-29 under Linux Debian 11.6.

2026-05-27 Release of logback version 1.5.33

- `PropertiesConfiguratorModelHandler` now registers properties file URLs to the `ConfigurationWatchList` when scan is enabled (via local `scan="true"` attribute or top-level configuration scan), ensuring changes are detected and reconfiguration occurs. This problem was reported in [issues/1034](#).
- When processing `<conversionRule>` elements and both `class` and `converterClass` attributes are specified, silently use the class attribute without issuing a warning. However, if the attribute values differ, a warning will be issued. This change was requested in [issues/1031](#).
- `HardenedModelInputStream` will no longer accept to deserialize all classes located under the "java.lang" and "java.util" packages but only a limited number of explicitly authorized classes in those packages. This potential deserialization whitelist bypass vulnerability was reported by [York Shen](#) and registered as [CVE-2026-9828](#).
- SSL parameters for `SSLSocketAppender` now enable hostname verification by default. Moreover, the default protocol is now "TLSv1.2". This potential vulnerability was reported by [York Shen](#).
- When printing the status message field, `ViewStatusMessagesServletBase` now escapes special characters such as "&" as character entities. This potential vulnerability was reported by [York Shen](#).
- A bit-wise identical binary of this version can be reproduced by building from [source code](#) at commit `124e8b49b55ac34d08743a0646bd463410192647` associated with the tag `v_1.5.33`. Release built using Java "21" 2023-10-17 LTS build 21.0.1.+12-LTS-29 under Linux Debian 11.6.

2026-05-19 Release of logback-scoped-mdc version 1.0.0-rc0

- Initial release candidate of [logback-scoped-mdc](#) module. This module offers ScopedValue-based MDC for logback-classic. It is designed for virtual threads and structured concurrency on Java 25+. Contributed by Filip Egeric.
- A bit-wise identical binary of this version can be reproduced by building from [source code](#) at commit `49ed8c3375d8f47579a6f064b3aff0084a7991c5` associated with the tag `v_1.0.0-rc0`. Release built using Java "25" 2026-01-20 LTS build 25.0.2+10-LTS-69 under Linux Debian 11.6.

2026-03-17 Release of logback-db version 1.5.32

- All *logback-db* modules now require JDK 11.
- All *logback-db* modules now depend on *logback-core* version 1.5.32.
- The *logback-db-access* module now depends on *logback-access-common* version 2.0.12.
- The *logback-db-access* module now depends on *jakarta.servlet* version 6.0.0 instead of *javax.servlet*.

- A bit-wise identical binary of this version can be reproduced by building from [source code](#) at commit `f892ba56dcd9c0aa6493b6770fa7a0ce4092d994` associated with the tag `v_1.5.32`. Release built using Java "21" 2023-10-17 LTS build 21.0.1.+12-LTS-29 under Linux Debian 11.6.
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2026-02-16 Release of logback-access version 2.0.12

- Bumped logback-core dependency to version 1.5.32. This fixes [logback-access/issues/34](#).
 - A bit-wise identical binary of this version can be reproduced by building from [source code](#) at commit `1c9905623cef1c883f0b1e52aea6e47583f6d97b` associated with the tag `v_2.0.9`. Release built using Java "21" 2023-10-17 LTS build 21.0.1.+12-LTS-29 under Linux Debian 11.6.
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2026-02-16 Release of logback version 1.5.32

- In `DefaultProcessor`, fixed incorrect check for dependencies contained within a parent model. Previous only the direct children were scanned. This fixes [logback-access/issues/34](#).
 - A bit-wise identical binary of this version can be reproduced by building from [source code](#) at commit `e807335a67535b4eacce94e942c0bcb649665d93` associated with the tag `v_1.5.32`. Release built using Java "21" 2023-10-17 LTS build 21.0.1.+12-LTS-29 under Linux Debian 11.6.
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2026-02-14 Release of logback-access version 2.0.11

- Bumped logback-core dependency to version 1.5.31.
 - Fixed incorrect version information in `logback-access-tomcat` module.
 - A bit-wise identical binary of this version can be reproduced by building from [source code](#) at commit `853d5641a4d0014d02502edeb34339d88dda6e69` associated with the tag `v_2.0.9`. Release built using Java "21" 2023-10-17 LTS build 21.0.1.+12-LTS-29 under Linux Debian 11.6.
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2026-02-14 Release of logback version 1.5.31

- Fixed missing `META-INF/services` directory in `logback-classic.jar`. This issue rendered logback-classic version 1.5.30 unusable with SLF4J.
 - A bit-wise identical binary of this version can be reproduced by building from [source code](#) at commit `168e42f9f9a18a3ffdf31eb2bfe80a71e33ecd8b` associated with the tag `v_1.5.31`. Release built using Java "21" 2023-10-17 LTS build 21.0.1.+12-LTS-29 under Linux Debian 11.6.
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2026-02-14 Release of logback-access version 2.0.10

- Bumped logback-core dependency to version 1.5.30.
- Version checking code updated to conform to the standard defined in logback-core 1.5.30.
- Updated license to Eclipse Public License version 2.0 from version 1.0, retaining the GPL 2.1 dual-license.

- A bit-wise identical binary of this version can be reproduced by building from [source code](#) at commit c0b6a4d9287e18b4065ee3c8e25954155e355f90 associated with the tag v_2.0.9. Release built using Java "21" 2023-10-17 LTS build 21.0.1.+12-LTS-29 under Linux Debian 11.6.
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2026-02-14 Release of logback version 1.5.30

- In this version, *logback-classic.jar* was missing the *META-INF/services* directory, making it unusable with SLF4J. Version 1.5.31 (released later on the same day) fixes this issue.
 - Fix scanning issue when an included file becomes available at a later time. This problem was reported in [issues/1021](#) by Sergey Nazarov.
 - Standardized code for version checking across modules.
 - A bit-wise identical binary of this version can be reproduced by building from [source code](#) at commit 44164f10ca3fb44ce0e68519f13564b87e3aca61 associated with the tag v_1.5.30. Release built using Java "21" 2023-10-17 LTS build 21.0.1.+12-LTS-29 under Linux Debian 11.6.
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2026-02-09 Release of logback version 1.5.29

- In response to [issues/1017](#), appender names and appender references are once again subject to variable substitution, reverting the change introduced in version 1.5.29.
 - A bit-wise identical binary of this version can be reproduced by building from [source code](#) at commit 5db1146b85a4547e9189834e189042b82a97694b associated with the tag v_1.5.28. Release built using Java "21" 2023-10-17 LTS build 21.0.1.+12-LTS-29 under Linux Debian 11.6.
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2026-02-06 Release of logback version 1.5.28

- Appender names or appender references are no longer subject to variable substitution.
 - Fixed issue with configurations with conditionals encompassing appenders. This was reported in [issues/1016](#) reported by Sergey Sazonov.
 - The `<propertyConfigurator>` element now admits a 'scan' attribute which can be used to override the 'scan' attribute in the `<configuration>` element.
 - Fixed `NullPointerException` thrown by `VersionUtil.checkForVersionEquality` method occurring with GraalVM Native Images. This issue was reported in [issues/1014](#).
 - A bit-wise identical binary of this version can be reproduced by building from [source code](#) at commit e7a1855ab562bb102333f754603ff89359bf3cfc associated with the tag v_1.5.28. Release built using Java "21" 2023-10-17 LTS build 21.0.1.+12-LTS-29 under Linux Debian 11.6.
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2026-01-30 Release of logback version 1.5.27

- Updated license to Eclipse Public License version 2.0 from version 1.0, retaining the GPL 2.1 dual-license.
- Fixed missing MDC data transmitted by `SocketAppender` reported in [issues/1010](#) by Lars Vogel.

- Removed all `Receiver` classes and components which were already disabled for several years.
 - Refactored file scanning code for improved clarity.
 - In `SizeAndTimeBasedRollingPolicy` modified `totalSizeCap` and `maxFileSize` comparison to taking into account file compression. This fixes [issues/1007](#).
 - A bit-wise identical binary of this version can be reproduced by building from [source code](#) at commit `3618eb01aad6672f9cd250dccf7546a69cbe982f` associated with the tag `v_1.5.27`. Release built using Java "21" 2023-10-17 LTS build 21.0.1.+12-LTS-29 under Linux Debian 11.6.
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2026-01-25 Release of logback-access version 2.0.9

- Bumped logback-core dependency to version 1.5.26.
 - Fixed missing `AppenderModel` to `AppenderDeclarationAnalyser` link in `ModelClassToModelHandlerLinker`. This issue was reported in [issues/33](#) by Alexander Schepp.
 - Aligned version check code with the functionality available in logback-core 1.5.26.
 - A bit-wise identical binary of this version can be reproduced by building from [source code](#) at commit `42fd491ce26dbf27a81066012361d6d782d4fa5c` associated with the tag `v_2.0.9`. Release built using Java "21" 2023-10-17 LTS build 21.0.1.+12-LTS-29 under Linux Debian 11.6.
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2026-01-25 Release of logback version 1.5.26

- `InsertFromJNDIModelHandler` was accessing `javax.naming` package forcing the inclusion of the optional `java.naming` module. This problem was raised in [issues/1003](#) by Marius Hanl who also provided the relevant PR.
 - In applications using shadow/fat/shade jars, module or package information could be lost. Thus, in the absence of version information, logback-classic would warn about version mismatches. Logback components now ship with properties files containing version information that survive shadow/fat/shade jars. This issue was reported in [issues/1002](#) by Christoph Gritschenberger.
 - A bit-wise identical binary of this version can be reproduced by building from [source code](#) at commit `33deb54506bbfaf1ff151f26f3a5f86936011619` associated with the tag `v_1.5.26`. Release built using Java "21" 2023-10-17 LTS build 21.0.1.+12-LTS-29 under Linux Debian 11.6.
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2026-01-17 Release of logback version 1.5.25

- When processing configuration files, logback-core will now only instantiate components compatible with the class expected by the encapsulating class. This fixes an ACE vulnerability recorded as [CVE-2026-1225](#).
- In configuration files, referencing a single undeclared appender would cause all referenced appenders to be skipped. This issue was discovered in [issues/997](#).
- Added `VersionUtil` class to logback-core. This utility class checks for version compatibility issues and alerts the user if need be.

- Added [EpochConverter](#) to output milliseconds/seconds since epoch. This enhancement was requested by Duncan Jauncey in [issues/1000](#) who also provided the relevant implementation PR.
 - A bit-wise identical binary of this version can be reproduced by building from [source code](#) at commit f426e0002800cfb507f393fcacffe0761a425220 associated with the tag v_1.5.25. Release built using Java "21" 2023-10-17 LTS build 21.0.1.+12-LTS-29 under Linux Debian 11.6.
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2026-01-08 Release of logback-access version 2.0.8

- Bumped logback-core dependency to version 1.5.24.
 - File name collisions are now aligned with changes in logback-core 1.5.23. In other words, file name collisions are detected at configuration time by analyzing the configuration file and no longer at appender run time.
 - A bit-wise identical binary of this version can be reproduced by building from [source code](#) at commit cfc81112a20cf321413c598f33d84037845999bd associated with the tag v_2.0.8. Release built using Java "21" 2023-10-17 LTS build 21.0.1.+12-LTS-29 under Linux Debian 11.6.
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2026-01-06 Release of logback version 1.5.24

- Added [ExpressionPropertyCondition](#) a [PropertyCondition](#) that can evaluate boolean expressions similar to Java. See [the relevant documentation](#) for further details.
 - A bit-wise identical binary of this version can be reproduced by building from [source code](#) at commit 62bc5fc245dd3a52f3dd45e232733f4cefb4806d associated with the tag v_1.5.24. Release built using Java "21" 2023-10-17 LTS build 21.0.1.+12-LTS-29 under Linux Debian 11.6.
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2025-12-21 Release of logback version 1.5.23

- In response to [issues/959](#) file name collisions are detected at configuration time by analyzing the configuration file and no longer at run time. This avoids the [ConcurrentModificationException](#) reported in the issue.
 - ZIP and XZ compression now use a [BufferedOutputStream](#) when writing to the compressed file. This issue was reported in [issues/988](#).
 - A bit-wise identical binary of this version can be reproduced by building from [source code](#) at commit 0bcc3feb54a6d99caac70969ee5f8334aad1fbaf associated with the tag v_1.5.23. Release built using Java "21" 2023-10-17 LTS build 21.0.1.+12-LTS-29 under Linux Debian 11.6.
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2025-12-11 Release of logback version 1.5.22

- In order to prevent involuntary information leakage, Logback will no longer output the value of a substituted variable if the variable name contains any of the case-insensitive strings "password", "secret" or "confidential". This issue was reported by Chintan Rohila in [issues/986](#).
- Logback now takes the overridden [toString\(\)](#) method of [Throwable](#) subclasses into account when printing stack traces. This issue was reported in [LOGBACK-543](#) by Alvin Chee, with a fix provided in [PR 404](#) by Brett Kail.

- Instead of limit-counting guard, Logback now uses a tumbling-window guard to rate limit internal error messages.
 - A bit-wise identical binary of this version can be reproduced by building from [source code](#) at commit 572379aab2f672b49593e4020696c624541e5b0 associated with the tag v_1.5.22. Release built using Java "21" 2023-10-17 LTS build 21.0.1.+12-LTS-29 under Linux Debian 11.6.
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2025-11-10 Release of logback version 1.5.21

- Invocations of turbo filters in `isDebugEnabled`, `isInfoEnabled()`... remain as they were, untouched. However, any installed instances of `TurboFilter` are now invoked also from within the `log(LoggingEvent)` method of `Logger` with the contents of the `LoggingEvent`, typically via the fluent API. This fixes [issues/871](#).
 - Removed reentry-guard in most sub-classes of `UnsynchronizedAppenderBase` where it was not needed.
 - [Initialization procedure](#) has been simplified by removing the step instantiating a `SerializedModelConfigurator`. However, it is still possible to set up `SerializedModelConfigurator` as a custom configurator.
 - `JsonEncoder` is now friendlier to derivation by sub-classes as requested in [issues/979](#).
 - Fixed `XMLLayout` thread safety issue reported in [LOGBACK-427](#).
 - Removed superfluous buffering in Zip, GZ and XZ compression code.
 - A bit-wise identical binary of this version can be reproduced by building from [source code](#) at commit fed6f37ffe3449e40f6a9ffe050936a33116bd1 associated with the tag v_1.5.21. Release built using Java "21" 2023-10-17 LTS build 21.0.1.+12-LTS-29 under Linux Debian 11.6.
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2025-10-29 Release of logback version 1.3.16

- Back-ported the fix that disallows the `new` operator in the `'condition'` attribute of `<if>` elements in configuration files. This addresses an ACE vulnerability ([CVE-2025-11226](#)) by applying the fix from version [1.5.19](#) to the 1.3.x series.
 - A bit-wise identical binary of this version can be reproduced by building from [source code](#) at commit b91509f0a0bfc9f5f16606a8c738a70849bef8c7 associated with the tag v_1.3.16. Release built using Java "21" 2023-10-17 LTS build 21.0.1.+12-LTS-29 under Linux Debian 11.6.
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2025-10-29 Release of logback-access version 2.0.7

- Added support for multiple headers with the same name. This addition was proposed by Robert Elliot in [PR 23](#).
- Bumped logback-core dependency to version 1.5.20.
- Bumped Tomcat 10 dependency to version 10.1.48 and Tomcat 11 dependency to version 11.0.13.

- A bit-wise identical binary of this version can be reproduced by building from [source code](#) at commit da08a9649da67b2a13148060a438454da4c82a24 associated with the tag v_2.0.7. Release built using Java "21" 2023-10-17 LTS build 21.0.1.+12-LTS-29 under Linux Debian 11.6.
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2025-10-27 Release of logback-tyler version 1.0.3

- Added support for `<condition>` element in config files introduced in logback version 1.5.20. It follows that this version of logback-tyler requires logback-core version 1.5.20.
 - A bit-wise identical binary of this version can be reproduced by building from [source code](#) at commit 2b899a39849712f4d9a71f7ffa2f21c205a45a8b associated with the tag v_1.0.3. Release built using Java "21" 2023-10-17 LTS build 21.0.1.+12-LTS-29 under Linux Debian 11.6.d
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2025-10-19 Release of logback version 1.5.20

- Due to potential vulnerabilities associated with dynamic, i.e. runtime, java code compilation and execution (using Janino), the 'condition' attribute within the `<if>` element is deprecated and will be removed in 2027.

An online [migration service](#) is provided to help with the transition.

The `<condition>` element, new in this version, admits custom `PropertyEvaluator` as a recommended alternative. See also the updated documentation on [conditional configuration](#).

- Initialization procedure was **incorrectly** reported as having been simplified in this version, i.e. version 1.5.20 by removing the step instantiating a `SerializedModelConfigurator`. The actual simplification was done in version 1.5.21
 - A bit-wise identical binary of this version can be reproduced by building from [source code](#) at commit 930fb15c993a4344bcecc6ba2225c12a2c38e676 associated with the tag v_1.5.20. Release built using Java "21" 2023-10-17 LTS build 21.0.1.+12-LTS-29 under Linux Debian 11.6.
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2025-09-30 Release of logback version 1.5.19

- Disallow "new" operator in the `condition` attribute of `<if>` elements. This fixes an ACE vulnerability recorded as [CVE-2025-11226](#).
 - At initialization time, slightly better reporting about watched configuration files.
 - Softer message regarding usage of `ConsoleAppender` and its potential impact on performance.
 - In `ViewStatusMessagesServlet`, restrict processing of "Clear" button to POST method. This change was proposed by Ralf Wiebicke who also provided the [relevant PR](#).
 - A bit-wise identical binary of this version can be reproduced by building from [source code](#) at commit e572d4f87f06674788eb3ca7148e8d1dff615fa associated with the tag v_1.5.19. Release built using Java "21" 2023-10-17 LTS build 21.0.1.+12-LTS-29 under Linux Debian 11.6.
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2025-03-18 Release of logback version 1.5.18

- Added [support for XZ compression](#) for archived log files. Note that XZ compression requires Tukaani project's [XZ library for Java](#). In case XZ compression is requested but the XZ library is missing, then logback will substitute GZ compression as a fallback. This feature was requested in [issues/755](#).
 - Removed references to `java.security.AccessController` class. This class has been deprecated for some time and is slated for removal in future JDK versions.
 - A bit-wise identical binary of this version can be reproduced by building from [source code](#) at commit `b2a02f065379a9b1ba5ff837fc08913b744774bc` associated with the tag `v_1.5.18`. Release built using Java "21" 2023-10-17 LTS build 21.0.1.+12-LTS-29 under Linux Debian 11.6.
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2025-02-25 Release of logback version 1.5.17

- Fixed Jansi 2.4.0 color-coded output not working on Windows CMD.exe console when the default terminal application is set to "Windows Console Host". This problem was reported in [issues/753](#) by Michael Lyubkin.
 - Fixed race condition occurring in case `MDC` class is initialized while `org.slf4j.LoggerFactory` is initializing logback-classic's `LoggerContext`. When this race conditions occurs, the `MDCAdapter` instance used by `MDC` would not match the instance used by logback-classic. This issue was reported in [SLF4J issues/450](#). While logback-classic version 1.5.17 remains compatible with SLF4J versions in the 2.0.x series, fixing this particular MDC issue requires SLF4J version 2.0.17.
 - A bit-wise identical binary of this version can be reproduced by building from [source code](#) at commit `10358724ed723b3745c010aa40cb02a2dfed4593` associated with the tag `v_1.5.17`. Release built using Java "21" 2023-10-17 LTS build 21.0.1.+12-LTS-29 under Linux Debian 11.6.
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2024-12-17 Release of logback-tyler version 1.0.2

- Fixed issue with incorrect translation for `AsyncAppender`. This issue was raised by Lewis Birks in [issues/7](#).
 - A bit-wise identical binary of this version can be reproduced by building from [source code](#) at commit `20ea4c50fe46a79a7e125b62386908a6932a20c6` associated with the tag `v_1.0.2`. Release built using Java "21" 2023-10-17 LTS build 21.0.1.+12-LTS-29 under Linux Debian 11.6.d
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2025-01-07 Release of logback-access version 2.0.6

- Added [StubEventEvaluator](#) as a default nested component rule for `<evaluator>`. Without this rule, configuration files previously defaulting to `JaninoEventEvaluator` would raise exceptions.
- Added [RequestURIEvaluator](#) and [StatusCodeEventEvaluator](#) as sample evaluators.
- Bumped logback-core dependency to version 1.5.16.
- A bit-wise identical binary of this version can be reproduced by building from [source code](#) at commit `d580d904bec59338ee5fe57985e6ba62418f982c` associated with the tag `v_2.0.6`. Release built using Java "21" 2023-10-17 LTS build 21.0.1.+12-LTS-29 under Linux Debian 11.6.

2025-01-05 Release of logback version 1.5.16

- In order to ease the migration of configuration files depending on `JaninoEventEvaluator`, logback-classic will emit a warning about the removal of `JaninoEventEvaluator` in version 1.5.13 and suggest an [online migration tool](#).
 - A bit-wise identical binary of this version can be reproduced by building from [source code](#) at commit `74c9ebd0e784d9e9ffc6c627cf5016d0157956b2` associated with the tag `v_1.5.16`. Release built using Java "21" 2023-10-17 LTS build 21.0.1.+12-LTS-29 under Linux Debian 11.6.
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2024-12-28 Release of logback version 1.3.15

- Backported the removal of `JaninoEventEvaluator` thus addressing CVE-2024-12798.
 - Backported changes to `SaxEventRecorder` in order to address CVE-2024-12801.
 - A bit-wise identical binary of this version can be reproduced by building from [source code](#) at commit `81f8c25e2a2fae99f45029c27dc793bdaa8cb079` associated with the tag `v_1.3.15`. Release built using Java "21" 2023-10-17 LTS build 21.0.1.+12-LTS-29 under Linux Debian 11.6.
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2024-12-21 Release of logback version 1.5.15

- In case logback-core and logback-classic versions are not identical, logback-classic will warn the user about this discrepancy at initialization time in order signal eventual incompatibility problems.
 - A bit-wise identical binary of this version can be reproduced by building from [source code](#) at commit `c32c92a2acf4befa0609003b4add00398818bbb9` associated with the tag `v_1.5.15`. Release built using Java "21" 2023-10-17 LTS build 21.0.1.+12-LTS-29 under Linux Debian 11.6.
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2024-12-19 Release of logback-access version 2.0.5

- Fixed non-optional dependencies in logback-access-Tomcat. This problem was raised in [issues/17](#) by Jonatan Ivanov.
 - Bumped logback-core dependency to version 1.5.14 and removed `JaninoEventEvaluator` in order to mitigate [CVE-2024-12798](#).
 - A bit-wise identical binary of this version can be reproduced by building from [source code](#) at commit `09a2cdd0a09467692129aac96b55e8392b02b72b` associated with the tag `v_2.0.5`. Release built using Java "21" 2023-10-17 LTS build 21.0.1.+12-LTS-29 under Linux Debian 11.6.
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2024-12-19 Release of logback version 1.5.14

- Fixed compatibility issue with downstream users who access the pattern rule registry through the logging context, most notably Spring-Boot. This issue was reported in [issues/885](#) by Stéphane Nicoll.

- A bit-wise identical binary of this version can be reproduced by building from [source code](#) at commit 3ddf27b2c76682f5d77e249f384c323582418575 associated with the tag v_1.5.14. Release built using Java "21" 2023-10-17 LTS build 21.0.1.+12-LTS-29 under Linux Debian 11.6.
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2024-12-18 Release of logback version 1.5.13

- `PatternLayout` now internally uses a mapping of conversion words to converter instance suppliers instead of conversion words to converter class names. This change was suggested in [issues/803](#) by Eric Norman. The old map in `PatternLayout` is deprecated but still exists to preserve backward compatibility.
 - `ConsoleAppender` now prints a status statement warning the user about the high cost of logging on the console.
 - Logback delegates certain asynchronous tasks to a `ThreadPoolExecutor`. This executor now uses `LinkedBlockingQueue` instead of `SynchronousQueue`. This has the effect of queuing jobs immediately regardless of their number and have them run by `CORE_POOL_SIZE` (currently 4) concurrent threads. This new strategy is appropriate as long as jobs to arrive at a slower pace compared to their duration. If they arrive faster than they can be completed, the queue size will increase indefinitely but will be accepted. In the previous strategy, if more than `CORE_POOL_SIZE` (2 previously) arrived, new jobs would be refused.
 - `JaninoEventEvaluator` was removed in order to prevent arbitrary code execution (ACE) attacks made possible by malicious configuration files. Successful attacks require significant amount of existing privilege, sign of an already compromised system. This change is intended to prevent an escalation of an existing flaw to a higher threat level. This issue was discovered by 7asecurity and reported under the reference [CVE-2024-12798](#).
 - To prevent Server-Side Request Forgery (SSRF) attacks, `SaxEventRecorder` was modified to ignore external DTD files specified in DOCTYPE declarations in configuration files written in XML. This issue was discovered by 7asecurity and reported under the reference [CVE-2024-12801](#).
 - A bit-wise identical binary of this version can be reproduced by building from [source code](#) at commit 32638aa7e99c0135cb1b81806ed05352e6bfe27f associated with the tag v_1.5.13. Release built using Java "21" 2023-10-17 LTS build 21.0.1.+12-LTS-29 under Linux Debian 11.6.
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2024-12-17 Release of logback-tyler version 1.0.1

- The `TylerConfigurator` classes produced by logback-tyler now have the `public` modifier. The missing public modifier was raised by Mark Stewart in [issues/6](#).
 - A bit-wise identical binary of this version can be reproduced by building from [source code](#) at commit 900ae7efac3f89d7b7dfc817bb6d8477a1aaa196 associated with the tag v_1.0.1. Release built using Java "21" 2023-10-17 LTS build 21.0.1.+12-LTS-29 under Linux Debian 11.6.d
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2024-10-25 Release of logback version 1.5.12

- `RollingFileAppender` now takes into account the size of any previously existing log file being written to. This issue was raised in [issues/867](#).

- In the very unusual case where the logger invocation ended with two exceptions, the penultimate exception was not treated as a parameter but an exception. This issue was reported in [issues/876](#) by Michael Rasmussen who also provided the relevant test case.
 - A bit-wise identical binary of this version can be reproduced by building from [source code](#) at commit 3a64b51c5af2920e48104165700188b7b34013e3 associated with the tag v_1.5.12. Release built using Java "21" 2023-10-17 LTS build 21.0.1.+12-LTS-29 under Linux Debian 11.6.
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2024-10-20 Release of logback-tyler version 1.0.0

- Internal refactorings, more javadocs in generated code.
 - A bit-wise identical binary of this version can be reproduced by building from [source code](#) at commit 2fb8f250a51f6803bda53b8d663233d26ab1e670 associated with the tag v_1.0.0. Release built using Java "21" 2023-10-17 LTS build 21.0.1.+12-LTS-29 under Linux Debian 11.6.d
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2024-10-15 Release of logback-tyler version 0.9

- Fixed method output order in case of watched configuration files is in properties format.
 - Added support for `InsertFromJNDIModel` conversion.
 - A bit-wise identical binary of this version can be reproduced by building from [source code](#) at commit 0f42ee760d177a2abbb0dc5991fa052539ed2c72 associated with the tag v_0.9. Release built using Java "21" 2023-10-17 LTS build 21.0.1.+12-LTS-29 under Linux Debian 11.6.d
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2024-10-15 Release of logback version 1.5.11

- Minor refactoring to allow `InsertFromJNDIModelHandler` functionality to be callable by logback-tyler.
 - A bit-wise identical binary of this version can be reproduced by building from [source code](#) at commit 3aa07304c1cfcfcc15321e814a2a015390401ce2 associated with the tag v_1.5.11. Release built using Java "21" 2023-10-17 LTS build 21.0.1.+12-LTS-29 under Linux Debian 11.6.
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2024-10-12 Release of logback-tyler version 0.8.0

- Added the capability to scan for changes in properties configuration files.
 - For further documentation on logback-tyler see the [logback-tyler repository](#).
 - A bit-wise identical binary of this version can be reproduced by building from [source code](#) at commit 52c99b9f5f4952181d7a198a00e6ba5407b7c5de associated with the tag v_0.8.0. Release built using Java "21" 2023-10-17 LTS build 21.0.1.+12-LTS-29 under Linux Debian 11.6.
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2024-10-12 Release of logback version 1.5.10

- Fixed issue with `JSONEncoder` producing invalid JSON when certain fields are disabled, in particular the field named `throwable`. This problem was reported in [issues/866](#) by Ben Hurwitz.

- Minor refactoring to allow `ConfigurationModelHandlerFull` and `PropertiesConfiguratorModelHandler` functionality to be callable by `logback-tyler`.
 - A bit-wise identical binary of this version can be reproduced by building from [source code](#) at commit `56ec7b2e0f6047aef077dbefc34a57ed38881a54` associated with the tag `v_1.5.10`. Release built using Java "21" 2023-10-17 LTS build 21.0.1.+12-LTS-29 under Linux Debian 11.6.
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2024-10-08 Release of logback-access version 2.0.4

- Given that `logback-access` artifacts are often imported manually into the servlet container's `lib/` directory, `logback-access` artifact names such as `common-2.0.x.jar` or `tomcat-2.0.x.jar` can be very confusing. To alleviate this issue, all `logback-access` artifacts are now prefixed with the string `"logback-access-"`. This issue was reported in [logback-access/issues/21](#) by Francisco A. Lozano.
 - A bit-wise identical binary of this version can be reproduced by building from [source code](#) at commit `510ebd56047e781ae5f95262b51eca90d8233bbe` associated with the tag `v_2.0.4`. Release built using Java "21" 2023-10-17 LTS build 21.0.1.+12-LTS-29 under Linux Debian 11.6.
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2024-10-08 Release of logback version 1.5.9

- Fixed issue in version 1.5.7 causing incorrect header output by `RollingFileAppender` as reported in [issues/857](#) reported by Carl Mai who also provided the relevant patch.
 - `PropertiesConfigurator` now supports reading files and watching changes in configuration files in properties format. The contents can be located in a file or via a URL using HTTP/HTTPS protocols.
 - Fixed issue with `PropertiesConfigurator` thrashing logger names of same length.
 - Fixed issue with `PropertiesConfigurator` incorrectly handling level strings `INHERITED` and `NULL`.
 - Fixed bug with incorrect escaping of reverse solidus, i.e. the backslash character. This issue was raised in [issues/861](#) by "zooway".
 - A bit-wise identical binary of this version can be reproduced by building from [source code](#) at commit `49663a8898b6efdf061603a9caf35996462b0c4c` associated with the tag `v_1.5.9`. Release built using Java "21" 2023-10-17 LTS build 21.0.1.+12-LTS-29 under Linux Debian 11.6.
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2024-09-06 Release of logback version 1.5.8

- `SizeAndTimeBasedRollingPolicy` now uses an internal size counter instead of occasionally calling the OS to obtain file size. The new approach is more precise and with less jitter.
- In relation to the aforementioned change, `SizeAndTimeBasedFNATP` class was renamed as `SizeAndTimeBasedFileNamingAndTriggeringPolicy`. Thus, earlier configuration files using `SizeAndTimeBasedFNATP` will no longer work. However, given that `SizeAndTimeBasedRollingPolicy` offers a simpler configuration structure, the documentation ceased to mention `SizeAndTimeBasedFNATP` since 2016.

- Introducing a new `PropertiesConfigurator` component to configure logger levels from a properties file. The reconfiguration on change task supports watching the designated properties file(s).
 - A bit-wise identical binary of this version can be reproduced by building from [source code](#) at commit `92e1a5ea0adc3bc215fc9441fb711fb5726974e4` associated with the tag `v_1.5.8`. Release built using Java "21" 2023-10-17 LTS build 21.0.1.+12-LTS-29 under Linux Debian 11.6.
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2024-08-16 Release of logback-access version 2.0.3

- Bumped logback-core version to 1.5.7 and adapted `LogbackValve.getConfigurationLock()` method to align with logback-core.
 - A bit-wise identical binary of this version can be reproduced by building from [source code](#) at commit `f5d5f162953c348cf7dde2a59b1b09e3aeeda3a1` associated with the tag `v_2.0.3`. Release built using Java "21" 2023-10-17 LTS build 21.0.1.+12-LTS-29 under Linux Debian 11.6.
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2024-08-15 Release of logback version 1.5.7

- Confirmed solution of issue with incorrect synchronization in `RollingFileAppender`. Issue reported in [LOGBACK-1711](#) by Gili Tzabari.
- Fixed race condition occurring during configuration reloading. This problem was reported in [LOGBACK-1362](#) by Alexander Kudrevatykh who also provided the relevant test case.
- Fixed issue with adding properties following the `valueOf` convention into collections. This issue was reported in [LOGBACK-1445](#) by Steve Lessard who also provided the relevant PR.
- In configuration files, migrated processing of "conversion rule" elements to model based processing. This solves [LOGBACK-1547](#) reported by Allen Chow.
- Added `ConsoleCharsetPropertyDefiner` which computes the charset of the console. However, since certain methods in the computation require Java 17, the code is available only in Java 21. This addresses [LOGBACK-1642](#) reported by Garret Wilson.
- The default pattern for `date converter` is `"yyyy-MM-dd HH:mm:ss,SSS"` which can be shortened to just the string `"ISO8601"`. However, the ISO8601 date format specification requires that the date and time parts be separated by the letter 'T'. However, at the time, logback had opted for a less strict but more human readable option of separating the date and time with a space. In [LOGBACK-262](#) many users asked to change the default to strictly comply with ISO8601. Due to backward compatibility restrictions, this is not possible. Nevertheless, the shorthand `STRICT` was added to partially address this issue.
- In case a variable substitution occurs during configuration, it will be reported as a status message. This should help users track how their `logback.xml` configuration file is interpreted. Added test cases regarding substitution of variable in level attribute or level elements. This addresses [LOGBACK-1519](#) reported by Phil Adams.
- Added `%maskedKvp` converter which behaves similarly to `%kvp` except that it will mask values for specified keys at no additional computational cost. This was indirectly requested in [issues/828](#) by Vinit Kumar.

- The `isQueueBelowDiscardingThreshold()` method in `AsyncAppenderBase` is now public. This was requested in [LOGBACK-1436](#) by Roberto Tyley with Erik van Oosten providing the relevant PR.
 - In `SMTPAppender`, updated `smtpHost` variable's documentation, thus addressing [LOGBACK-1588](#) reported by Micharl Osipov.
 - `LoggerContext.stop()` operation is now performed within a synchronization lock. When a new shutdown hook is added, any previous hook is automatically removed. This, it no longer possible to add multiple shutdown hooks but at most one. This solves [LOGBACK-1551](#) as reported by Dmytro Lisnichenko.
 - Moved `LevelChangePropagator` tests from `logback-classic` to `logback-classic-blackbox` in relation to [LOGBACK-1578](#) reported by Liro Nykänen.
 - A bit-wise identical binary of this version can be reproduced by building from [source code](#) at commit `5e9f47fc6413386785c09c827814cfcb7095d8da` associated with the tag `v_1.5.7`. Release built using Java "21" 2023-10-17 LTS build 21.0.1.+12-LTS-29 under Linux Debian 11.6.
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2024-07-08 Release of logback-access version 2.0.2

- Fixed issue with "asynchronous" cookies when Jetty 11/12 recycles `Request` objects. This problem was reported in [issues/11](#) by You Aoki.
 - Fixed a bug whereby included configuration files would not be handled properly. This problem was reported in [issues/14](#) by Robert Höglund.
 - In the Jetty 12 module, the constructor of `RequestWrapper` class is now public. This was requested in [issues/12](#) by Christophe Roudet.
 - A bit-wise identical binary of this version can be reproduced by building from [source code](#) at commit `51b2693c2f7f01a463d29599a6363da2bef50929` associated with the tag `v_2.0.2`. Release built using Java "21" 2023-10-17 LTS build 21.0.1.+12-LTS-29 under Linux Debian 11.6.
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2024-04-17 Release of logback version 1.5.6

- Fixed incorrect handling of an included configuration file containing inner conditionals. This issue was reported in [issues/805](#) by Johan Mast.
 - A bit-wise identical binary of this version can be reproduced by checking out the tag `v_1.5.6` from the source code repository (GitHub). Releases built using Java "21" 2023-10-17 LTS build 21.0.1.+12-LTS-29 under Linux Debian 11.6.
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2024-04-12 Release of logback version 1.5.5

- The `@NoAutoStart` annotation can be used to tell Joran not to start the component even if it implements the `Lifecycle` interface. However, the `@NoAutoStart` annotation was ignored on interfaces and parent classes. This issue was reported in [LOGBACK-1583](#) by Bertrand Renuart who also provided the relevant PR.

- Fixed issue where file inclusion would ignore any previously defined variables. This issue was reported in [LOGBACK-1746](#) as well as in [LOGBACK-1732](#), [LOGBACK-1760](#) and [LOGBACK-1746](#).
 - A bit-wise identical binary of this version can be reproduced by checking out the tag v_1.5.5 from the source code repository (GitHub). Releases built using Java "21" 2023-10-17 LTS build 21.0.1.+12-LTS-29 under Linux Debian 11.6.
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2024-04-09 Release of logback-tyler version 0.7

Logback-tyler translates logback-classic XML configuration files (logback.xml) into Java.

- Most but not all logback.xml elements can now be translated.

For more documentation see the [logback-tyler repository](#).

2024-04-09 Release of logback-access version 2.0.1

- In Jetty 12 module, align `RequestURI` attribute creation results with those in Jetty 11. This issue was reported by Mariusz Sondecki who also provided the [relevant PR](#).
 - A bit-wise identical binary of this version can be reproduced by checking out the tag v_2.0.1 from the source code [repository](#) (GitHub). Releases built using Java "21" 2023-10-17 LTS build 21.0.1.+12-LTS-29 under Linux Debian 11.6.
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2024-04-09 Release of logback version 1.5.4

- In `RollingFileAppender`, setting a triggering policy a second time will cause errors. For a more thorough explanation, refer to the [relevant error code](#). This issue is tracked in [LOGBACK-1767](#).
 - `JaninoEvaluator` now supports lists of markers. Moreover, previously disabled injection of a marker in `JaninoEvaluator` has been restored. This fixes [issue/800](#).
 - A bit-wise identical binary of this version can be reproduced by checking out the tag v_1.5.4 from the source code repository (GitHub). Releases built using Java "21" 2023-10-17 LTS build 21.0.1.+12-LTS-29 under Linux Debian 11.6.
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2024-03-29 Release of logback-access version 2.0.0

- This is the first release of logback-access as a distinct project hosted in its own separate [github repository](#).
 - A bit-wise identical binary of this version can be reproduced by checking out the tag v_2.0.0 from the source code [repository](#) (GitHub). Releases built using Java "21" 2023-10-17 LTS build 21.0.1.+12-LTS-29 under Linux Debian 11.6.
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2024-03-04 Release of logback version 1.5.3

- Reintroduced two static methods `setProperty()` and `setProperties()` in `ModelUtil` class that were moved into `PropertyModelHandlerHelper`. This fixes [issues/785](#).
 - A bit-wise identical binary of this version can be reproduced by checking out the tag `v_1.5.3` from the source code repository (GitHub). Releases built using Java "21" 2023-10-17 LTS build 21.0.1.+12-LTS-29 under Linux Debian 11.6.
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2024-03-02 Release of logback-tyler version 0.4

Logback-tyler translates logback-classic XML configuration files (`logback.xml`) into Java.

- Various improvements in the generated code, in particular better javadoc.
- Improved support for Jigsaw.

For more documentation see the [logback-tyler repository](#).

2024-02-28 Release of logback version 1.5.2

- Further internal refactorings in order to avoid code duplication in support of [logback-tyler](#) version 0.4.
- A bit-wise identical binary of this version can be reproduced by checking out the tag `v_1.5.2` from the source code repository (GitHub). Releases built using Java "21" 2023-10-17 LTS build 21.0.1.+12-LTS-29 under Linux Debian 11.6.

2024-02-28 Release of logback-tyler version 0.1

Logback-tyler translates logback-classic XML configuration files (`logback.xml`) into Java.

For more documentation see the [logback-tyler repository](#).

2024-02-28 Release of logback version 1.5.1

- The `setMDCAdapter` method in `LogbackContext` now allows setting and resetting the `mdcAdapter`.
 - Several internal refactorings in order to avoid code duplication in view of the imminent release of [logback-tyler](#).
 - A bit-wise identical binary of this version can be reproduced by checking out the tag `v_1.5.1` from the source code repository (GitHub). Releases built using Java "21" 2023-10-17 LTS build 21.0.1.+12-LTS-29 under Linux Debian 11.6.
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2024-02-16 Release of logback version 1.5.0

- When running under JDK 21 and attempting to use virtual threads `ExecutorServiceUtil` caused `IllegalAccessError` to be thrown, then caught it and fell back to using regular threads. In version 1.5.0, the code fixes this problem via JEP-238, i.e. a multi-release jar. This issue was reported in [issue/779](#) by Joao Silva.

- When the name of the current thread is null, which is typically the case for virtual threads, `LoggingEvent` now extracts the `threadId` to construct the thread name. This solves [issues/710](#) with Danish Nawab providing the relevant code..
 - `JsonEncoder` now allows enabling/disabling of all top-level json members. Moreover, a new member called "formattedMessage" can be enabled but is disabled by default. This fixes [issue/731](#) reported by Madis Pink.
 - `TimeBasedArchiveRemover.ArchiveRemoverRunnable` inner class is now public.
 - A bit-wise identical binary of this version can be reproduced by checking out the tag `v_1.5.0` from the source code repository (GitHub). Releases built using Java "21" 2023-10-17 LTS build 21.0.1.+12-LTS-29 under Linux Debian 11.6.
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2023-12-01 Release of logback version 1.2.13

- Fixes for [CVE-2023-6481](#) as well [CVE-2023-6378](#) were back-ported into the 1.2.x branch. Fixes will be effective only when run under Java 9 and later.

Note that a successful exploitation of [CVE-2023-6378/CVE-2023-6381](#) requires that logback-receiver component is enabled and also reachable by the attacker.

2023-12-01 Release of logback versions 1.3.14 and 1.4.14

- More complete fix for [CVE-2023-6378](#) both for the 1.4.x series and the 1.3.x series. Many thanks to Camilo Aparecido Ferri Moreira for pointing out the incomplete fix via private email. In order to encourage users to upgrade to versions 1.3.14/1.4.14 [CVE-2023-6481](#) has been created even though the underlying vulnerability for both CVE records is identical.

Note that a successful exploitation of [CVE-2023-6378/CVE-2023-6481](#) requires that logback-receiver component is enabled and also reachable by the attacker.

- A bit-wise identical binary of this version can be reproduced by checking out the tag `v_1.3.14` (or `v_1.4.14`) from the source code repository (GitHub). Releases built using Java "21" 2023-10-17 LTS build 21.0.1.+12-LTS-29 under Linux Debian 11.6.

Note that the underlying vulnerability for [CVE-2023-6378](#) and [CVE-2023-6481](#) is identical. The latter CVE record was created in order to encourage users to upgrade to logback versions 1.3.14/.4.14 or later. The fixes require JDK 9 to be effective.

2023-11-28 Release of logback versions 1.3.13 and 1.4.13

- Removed superfluous `System.out.println` call in `ExecutorServiceUtil` class. This problem was reported in [issue 741](#) by Ernst de Haan.
 - A bit-wise identical binary of this version can be reproduced by checking out the tag `v_1.3.13` (or `v_1.4.13`) from the source code repository (GitHub). Releases built using Java "21" 2023-10-17 LTS build 21.0.1.+12-LTS-29 under Linux Debian 11.6.
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2023-11-27 Release of logback versions 1.3.12 and 1.4.12

- Logback will now use virtual threads (new in Java 21) when scheduling a reconfigure on change task and when removing old files. This is part of [issue 737](#).
- Fixed vulnerability of a potential denial of service attack on a centralized logback receiver when a third party controlling a remote appender connects to said receiver and could shut down or slow down logging of events. This problem was reported by Yakov Shafranovich, Amazon Web Services. It has been reported under the reference [CVE-2023-6378](#).

Note that logback versions 1.3.14/1.4.14 provide more complete fixes for this vulnerability, i.e. CVE-2023-6378. Moreover, logback version 1.2.13 also fixes CVE-2023-6378 as well as CVE-2023-6481.

- Better error reporting in case archived log files slated for deletion could not be deleted. This may occur if another process has an open handle on the file under Windows OS.
- Better handling of classloading in case the logback jar files are loaded by the system classloader. This fixes [issue 715](#) reported by [Sylvere Richard](#).
- Added a [checkIncrement](#) property to `SizeAndTimeBasedRollingPolicy`.
- A bit-wise identical binary of this version can be reproduced by checking out the tag `v_1.3.12` (or `v_1.4.12`) from the source code repository (GitHub). Releases built using Java "21" 2023-10-17 LTS build 21.0.1.+12-LTS-29 under Linux Debian 11.6.

2023-08-09 Release of logback versions 1.3.11 and 1.4.11

- Changes made to the `configure` method in the `Configurator` interface in version 1.3.9/1.4.9 were reverted.
- A bit-wise identical binary of this version can be reproduced by checking out the tag `v_1.3.11` (or `v_1.4.11`) from the source code repository (GitHub). Release built using Java "20" 2023-03-21 build 20+36-2344 under Linux Debian 11.6.

2023-08-09 Release of logback versions 1.3.10 and 1.4.10

- The `Configurator` interface is moved back to the logback-classic module instead of logback-core. This reverts the change made in versions 1.3.9/1.4.9.
- A bit-wise identical binary of this version can be reproduced by checking out the tag `v_1.3.10` (or `v_1.4.10`) from the source code repository (GitHub). Release built using Java "20" 2023-03-21 build 20+36-2344 under Linux Debian 11.6.

2023-08-04 Release of logback versions 1.3.9 and 1.4.9

This release was championed by the [Sovereign Tech Fund](#).

- Added an additional configuration step during initialization using `SerializedModelConfigurator`. See [configuration at initialization](#) section in the manual for further details. Configuration from a serialized model file was added because it executes faster and does not require any XML libraries. In conjunction with GraalVM, this may yield smaller executables that start faster.
 - In `JsonEncoder` added support for throwable "cause" and "suppressed" throwables. This fixes [LOGBACK-1749](#) reported by Christopher Holt.
 - Fixed `OverlappingFileLockException` when using prudent mode. This problem was reported by Christian Habermehl in [LOGBACK-1754](#).
 - Fixed incorrect status message printed by `Compressor.gzipCompress()` method. This issue was reported by Marko Mitrović in [LOGBACK-1750](#) who also provided the relevant PR.
 - The default implementation of `getInstant` method in `ILoggingEvent` now returns `Instant.ofEpochMills(getTimeStamp())` instead of `null`. This issue was reported in [LOGBACK-1735](#) by "wreulicke" who also provided the relevant PR.
 - The "logback.statusListenerClass" system property now admits the case insensitive string "STDOUT" in addition to the string "SYSOUT" as shorthands for the class name "ch.qos.logback.core.status.OnConsoleStatusListener".
 - A bit-wise identical binary of this version can be reproduced by checking out the tag `v_1.3.9` (or `v_1.4.9`) from the source code repository (GitHub). Release built using Java "20" 2023-03-21 build 20+36-2344 under Linux Debian 11.6.
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2023-06-13 Release of logback versions 1.3.8 and 1.4.8

- Logback now ships with `JsonEncoder` which outputs logging events in Newline delimited JSON (ndjson) format. This enhancement was requested in [LOGBACK-1734](#) by Oleksandr Gavenko.
 - OSGi service-loader requirement for `spi.Configurator` is now optional. This fixes [LOGBACK-1736](#) reported by Hannes Wellmann who also provided the relevant PR.
 - Fixed `NoSuchMethodError` issue in `ConsoleAppender` under java 8. This fixes [LOGBACK-1737](#) reported by Wolfgang F. Riedl.
 - The `LogbackMDCAdapter` instance associated with a `LogbackServiceProvider` is now accessible/set via `LoggerContext` and not only via `MDC`. This makes tests simpler. See also [LOGBACK-1742](#).
 - A bit-wise identical binary of this version can be reproduced by checking out the tag `v_1.3.8` (or `v_1.4.8`) from the source code repository (GitHub). Release built using Java "20" 2023-03-21 build 20+36-2344 under Linux Debian 11.6.
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2023-04-19 Release of logback versions 1.3.7 and 1.4.7

- Add support for Jansi library version 2.4.0. This was requested in [LOGBACK-1595](#) by Nils Renaud with Benjamin Marwell providing the relevant PR.

- Fixed incorrect OSGi execution-environment requirements in MANIFEST.MF files. This issue was reported in [LOGBACK-1728](#) by Hannes Well who also provided the relevant PR.
 - Added OSGi Service Loader Mediator entries to load logback Configurators. This enhancement was requested in [LOGBACK-1729](#) by Hannes Well who also provided the relevant PR.
 - Fixed incorrect use of `ExecutionService` preventing `ServerSocketAppender` from serving requests. This issue was reported in [LOGBACK-1716](#) by Grzegorz Grzybek.
 - A bit-wise identical binary of this version can be reproduced by checking out the tag `v_1.3.7` (or `v_1.4.7`) from the source code repository (GitHub). Release built using Java "20" 2023-03-21 build 20+36-2344 under Linux Debian 11.6.
-

2023-03-23 Release of logback versions 1.2.12

- Fixed NPE in `ThrowableProxy` if `extractSuppressedThrowables` method returns null. This fixes [LOGBACK-1623](#) reported by Oyvind Horneland.
 - Fixed incorrect use of `HttpServletResponse.getStatus` in logback-access as reported in [LOGBACK-1580](#) by Joakim Erdfelt who also provided the relevant PR.
 - Fixed incorrect use of `HttpServletRequest.getParameterNames()` logback-access as reported in [LOGBACK-1581](#) by Joakim Erdfelt who also provided the relevant PR.
 - Fixed incorrect SCP URL in Maven `pom.xml`. This issue was reported in [LOGBACK-1633](#) by Rayk Bajohr who also provided the relevant PR.
 - A bit-wise identical binary of this version can be reproduced by checking out the tag `v_1.2.12` from the source code repository (GitHub). Release built using Java "1.8.0_311" build 1.8.0_311-b11 under Linux Debian 9.5.
-

2023-03-15 Release of logback versions 1.3.6 and 1.4.6

This release was kindly championed by [LVM Versicherung](#).

- Nesting a `SiftingAppender` within a conditional, that is within an `<if>` element, is now supported. This fixes [LOGBACK-1713](#) reported by Andree Worthmuth with valuable input from Sébastien Philippon and Frank Upgang.
 - During variable substitution, an empty default value is now interpreted as an empty string. This fixes [LOGBACK-1712](#).
 - In [LOGBACK-1696](#) Marty Ewings reported that the expected date format did not match actual output in case the system locale was different then the desired locale. Issue was fixed by adding a third optional locale parameter to the [date converter](#).
 - A bit-wise identical binary of this version can be reproduced by checking out the tag `v_1.3.6` (or `v_1.4.6`) from the source code repository (GitHub). Release built using Java "19" 2022-09-20 build 19+36-2038 under Linux Debian 9.5.
-

2022-11-18 Release of logback versions 1.3.5 and 1.4.5

- Fixed incomplete handling of `insertFromJNDI` element in logback-classic configuration files. This fixes [LOGBACK-1706](#) reported by Ove Hiltwein.
 - Removed spurious warning message regarding nested appender within `SiftingAppender`. This fixes [LOGBACK-1698](#).
 - Added missing exports `ch.qos.logback.classic.model` in `module-info.java` in the logback-classic module. This fixes [LOGBACK-1703](#).
 - A bit-wise identical binary of this version can be reproduced by checking out the tag `v_1.3.5` (or `v_1.4.5`) from the source code repository (GitHub). Release built using Java "19" 2022-09-20 build 19+36-2038 under Linux Debian 9.5.
-

2022-10-07 Release of logback versions 1.3.4 and 1.4.4

- Fixed spurious "transitive" modifier in the requires declaration on `javax.mail/jakarta.mail` in the logback-core module. This issue was reported in [LOGBACK-1693](#) by Sebastian Stenzel.
 - Fixed a compilation problem in the `logback-core-blackbox` module. This issue is described in [LOGBACK-1694](#).
 - Added an "export missing for `ch.qos.logback.core.layout`" declaration in logback-core module. This fixes [LOGBACK-1695](#) as reported by Jeremy Landis.
 - A bit-wise identical binary of this version can be reproduced by checking out the tag `v_1.3.4` (or `v_1.4.4`) from the source code repository (GitHub). Release built using Java "19" 2022-09-20 build 19+36-2038 under Linux Debian 9.5. See also [the relevant entry](#) in `reproducible-central`.
-

2022-10-02 Release of logback versions 1.3.3 and 1.4.3

- Removed spurious `System.out.println` calls in `ClassicEnvUtil` and `ContextInitializer` classes, fixing [LOGBACK-1690](#).
 - A bit-wise identical binary of this version can be reproduced by checking out the tag `v_1.3.3` (or `v_1.4.3`) from the source code repository (GitHub). Release built using Java "19" 2022-09-20 build 19+36-2038 under Linux Debian 9.5.
-

2022-10-02 Release of logback versions 1.3.2 and 1.4.2

- Significantly improved the performance of `LogbackMDCAdapter`, i.e. logback's implementation of `org.slf4j.spi.MDCAdapter`. This was requested in [LOGBACK-1684](#) by Sami Korhonen.
- Fixed issue with `<appender-ref>` elements embedded within `<if/><then/><else>` blocks. This fixes [LOGBACK-1673](#) reported by Juan Pablo Santos Rodriguez.
- Fixed issue with sub-elements of `>shutdownHook<` element in configuration files. Joran now correctly handles these elements. This fixes [LOGBACK-1672](#) reported by Juan Pablo Santos Rodriguez.

- Joran now automatically renames `ch.qos.logback.core.hook.DelayingShutdownHook` class name as `ch.qos.logback.core.hook.DefaultShutdownHook` in configuration files. This fixes [LOGBACK-1678](#).
 - In configuration files, when an `<appender>` element is nested within another `<appender>` element, logback will now emit a warning message. This change was made in response to [LOGBACK-1674](#) reported by Luke Stephenson.
 - In configuration files, when an `<if>` element is nested within an `<appender>`, `<logger>` or `<root>` elements, logback will now emit a warning message. This change is related to the previously mentioned issues.
 - In configuration files, when an appender is nested within another appender, logback will now emit a warning message. This change was made in response to [LOGBACK-1674](#) reported by Luke Stephenson.
 - Unit tests were migrated from Junit 4 to Junit 5. Certain tests are now Jigsaw/JPMS modularized and run on the modules-path. These are located in so called "blackbox" modules, namely *logback-core-blackbox* and *logback-classic-blackbox*.
 - A bit-wise identical binary of this version can be reproduced by checking out the tag `v_1.3.2` (or `v_1.4.2`) from the source code repository (GitHub). Release built using Java "19" 2022-09-20 build 19+36-2038 under Linux Debian 9.5.
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2022-09-14 Release of logback versions 1.3.1 and 1.4.1

- Logback-classic now correctly invokes `DefaultJoranConfigurator` when running in a (JPMS) modular environment. This fixes [LOGBACK-1670](#) reported by Alexey Gavrilov who also provided the relevant test case.
 - Logback will now correctly retrieve its own version information when running in a (JPMS) modular environment. This fixes [LOGBACK-1677](#).
 - Logback version 1.3.1 now correctly declares `javax.servlet.ServletContainerInitializer` as a provided service. This fixes [LOGBACK-1671](#) as reported by Chad Wilson.
 - A bit-wise identical binary of this version can be reproduced by checking out the tag `v_1.3.1` (or `v_1.4.1`) from the source code repository (GitHub). Release built using Java "18" 2022-03-22 build 18+36-2087 under Linux Debian 9.5.
-

2022-08-28 Release of logback versions 1.3.0 and 1.4.0

Here is a list of changes with respect to the previous version.

- Logback-classic now initializes itself using a default `Configurator` provider called `DefaultJoranConfigurator`. Users can override the default configurator by installing their own custom `Configurator` provider as a [loadable service](#).
- The `ch.qos.logback.classic.jmx` package was removed for security reasons and for lack of use.

- Fixed incorrect initialization of `java.time.DateTimeFormatter` in `CachingDateFormat` class. This fixes [LOGBACK-1659](#) kindly reported by Bertrand Renuart.
 - Fixed performance issue in `FileFilterUtil.filesInFolderMatchingStemRegex` method reported in [LOGBACK-1409](#) by Abdy Wilkinson with David Schlosnagle providing the relevant PR.
 - In `logback-access`, fixed the retrieval of the response status using committed state. This issue was reported in [LOGBACK-1580](#) by joakime Joakim Erdfelt who also provided the relevant PR.
 - In `logback-access`, fixed error handling in the `getRequestContent` and `buildRequestParameterMap` methods in `AccessEvent` class. Joakim Erdfelt provided the relevant PR.
 - Fixed a number of issues related to the `nanosecond` field in `LoggingEvent`. These were reported in [LOGBACK-1657](#) [LOGBACK-1661](#) by Bertrand Renuart.
 - Fixed a number of issues related to the `sequenceNumber` field in `LoggingEvent`. These were reported in [LOGBACK-1662](#) [LOGBACK-1663](#) by Bertrand Renuart.
 - `Logback-classic` now prints its version number at initialization. This information is also available via the `logbackVersion()` method in `ch.qos.logback.core.util.EnvUtil`. This feature was requested in [LOGBACK-1597](#) by Gabe Tobias with Bertrand Renuart providing the relevant PR.
 - A bit-wise identical binary of this version can be reproduced by checking out the tag `v_1.3.0` (or `v_1.4.0`) from the source code repository (GitHub). Release built using Java "18" 2022-03-22 build 18+36-2087 under Linux Debian 9.5.
-

2022-08-09 Release of logback version 1.3.0-beta0

- Escape sequences are no longer interpreted for the attribute named `value` defined in the `<variable>` element in configuration files. By escape sequences we mean the escape sequences for Java String literals such as `'\t'` or `'\n'`.

The `value` attribute of the `<variable>` element was the only place such interpretation was performed. However, after reviewing the code, it was determined that there was no need to interpret any such escape sequence. We estimate that this change will be transparent to end-users.

- Better error handling of configuration files with a missing `<if>` element in an if/then pair. See also [LOGBACK-1651](#).
 - Better error handling of configuration files where variables are read from a malformed properties file. See also [LOGBACK-1652](#).
 - A bit-wise identical binary of this version can be reproduced by checking out the tag `v_1.3.0-beta0` from the source code repository (GitHub). Release built using Java "18" 2022-03-22 build 18+36-2087 under Linux Debian 9.5.
-

2022-05-19 Release of logback version 1.3.0-alpha16

- Restored `SiftingAppender` functionality which was removed during the rewrite of `Joran`.

- Second phase filtering of Models is now done by annotation. This fixes [LOGBACK-1638](#) and [LOGBACK-1639](#).

A bit-wise identical binary of this version can be reproduced by checking out the tag v_1.3.0-alpha16 from the source code repository (GitHub). Release built using Java "18" 2022-03-22 build 18+36-2087 under Linux Debian 9.5.

2022-05-09 Release of logback version 1.3.0-alpha15

This release is championed by [commercetools](#), a leader company in digital commerce.

- Restored support for "if/then/else" elements in configuration files. This fixes [LOGBACK-1625](#). When defining XML to Model transformation rules, a new rule has to be passed a `Supplier` of `Action` instances instead of a single (potentially re-used) `Action` instance. This change simplifies the logic of `Action` code, as an `Action` instance will never be reused, making configurations easier to debug.
- Many bugs reported by Google OSS-fuzz have been fixed. These bugs relate to invalid and sometimes even wildly invalid inputs which should not occur in legitimate deployments of logback.
- Fixed NPE in `ThrowableProxy` if `extractSuppressedThrowables` method returns null. This fixes [LOGBACK-1623](#) reported by Oyvind Horneland.

A bit-wise identical binary of this version can be reproduced by checking out the tag v_1.3.0-alpha15 from the source code repository (GitHub). Release built using Java "18" 2022-03-22 build 18+36-2087 under Linux Debian 11.2.

2022-04-20 Release of logback.db version 1.2.11.1

As of logback version 1.2.8 `DBAppender` no longer ships with logback. However, `DBAppender` for logback-classic is available under the following Maven coordinates:

```
ch.qos.logback.db:logback-classic-db:1.2.11.1
```

and for *logback-access* under

```
ch.qos.logback.db:logback-access-db:1.2.11.1
```

Both of these artifacts require `ch.qos.logback.db:logback-core-db:1.2.11.1` which will be pulled in automatically by Maven's transitivity rules.

- This release corrects the artifact name of logback-classic-db fixing [LOGBACK-1631](#) as reported by Juan Pablo Santos Rodriguez.
-

2022-04-15 Release of logback.db version 1.2.11

As of logback version 1.2.8 `DBAppender` no longer ships with logback. However, the logback-db project remedies this omission.

2022-03-05 Release of version 1.2.11

- Backported fix for [LOGBACK-1027](#).
 - Fixed incorrect `String` cast in `JNDIUtil`. This corrects [LOGBACK-1604](#) reported by Chris Cheshire.
 - In `SMTPAppenderBase` empty username parameter is now treated the same `null`. This fixes [LOGBACK-1594](#) reported by Mark Woon who also provided the relevant PR.
-

2021-02-11 Release of version 1.3.0-alpha14

- A bug was introduced in 1.3.0-alpha13 which caused the second appender-ref declaration to be ignored. This issue is described in [LOGBACK-1614](#) based on an initial report by C. Ahlers in the `logback-user` mailing list.
-

2021-01-31 Release of version 1.3.0-alpha13

- Starting with version 1.3.0-alpha13 logback releases are reproducible. This means that anyone checking out the code corresponding to the release version from GitHub and building that local copy, will get obtain an identical binary to the binary found on Maven central. Note that due to [issue MJAR-275](#) with the `module-info.java` produced in earlier java versions, reproducible builds require Java 18.
 - Once the `Model` is created from XML configuration file, `Model` processing is now independent of any XML related code. This fixes [LOGBACK-1613](#).
 - Fixed incorrect `String` cast in `JNDIUtil`. This corrects [LOGBACK-1604](#) reported by Chris Cheshire.
 - In `SMTPAppenderBase` empty username parameter is now treated same as `null`. This fixes [LOGBACK-1594](#) reported by Mark Woon who also provided the relevant PR.
-

2021-12-23 Release of version 1.2.10

- `ContextInitializer` no longer complains about missing `logback.groovy` configuration file. This fixes [LOGBACK-1601](#).
-

2021-12-22 Release of version 1.3.0-alpha12

Note that 1.3.0-alpha12 contains the same security related changes as version 1.3.0-alpha11 and 1.2.9.

- Logback events now store time using `java.time.Instant` which supports nanosecond resolution. This fixes [LOGBACK-1374](#) and also [LOGBACK-1599](#).
- Properties in an unreferenced appender no longer cause warnings from `ImplicitModelHandler`. This fixes [LOGBACK-1572](#).

- Properties in an unreferenced appender no longer cause warnings from `ImplicitModelHandler`. This fixes [LOGBACK-1572](#).
- `ContextInitializer` no longer complains about missing `logback.groovy` configuration file. This fixes [LOGBACK-1601](#).

2021-12-16 Release of version 1.2.9

In response to [CVE-2021-42550](#) (aka [LOGBACK-1591](#)) we have decided to make the following steps.

1) Hardened logback's JNDI lookup mechanism to only honor requests in the `java:` namespace. All other types of requests are ignored. Many thanks to Michael Osipov for suggesting this change and providing the relevant PR.

We note that the vulnerability mentioned in CVE-2021-42550 requires write access to logback's configuration file as a prerequisite. **Please understand that [log4Shell](#) and [CVE-2021-42550](#) are of different severity levels.**

2) `SMTPAppender` was hardened.

3) Temporarily removed DB support for security reasons.

4) Removed Groovy configuration support. As logging is so pervasive and configuration with Groovy is probably too powerful, this feature is unlikely to be reinstated for security reasons.

We note that the aforementioned vulnerability requires write access to logback's configuration file as a prerequisite. Please understand that [log4Shell/CVE-2021-44228](#) and [CVE-2021-42550](#) are of different severity levels. A successful RCE attack with CVE-2021-42550 requires *all* of the following conditions to be met:

1. write access to `logback.xml`
2. use of versions < 1.2.9
3. reloading of poisoned configuration data, which implies application restart or `scan="true"` set prior to attack

As an additional extra precaution, in addition to upgrading to logback version 1.2.9, we also recommend users to set their logback configuration files as read-only.

202-12-16 Release of version 1.3.0-alpha11

Note that 1.3.0-alpha11 contains the same security related changes as version 1.2.9.

- Migrated from `javax.servlet` to `jakarta.servlet`. This entails migration to Tomcat version 10.0.10 and Jetty version 11.0.6 in logback-access. This fixes [LOGBACK-1575](#) reported by Daniel Svensson. Note that Jetty version 11 requires Java version 11 or later.
- Added `hostnameVerification` to property `SSLSocketAppender`. This fixes [LOGBACK-1574](#) as reported by Andrei Komarov with Bruno Harbulot providing the relevant patch.

2021-12-14 Release of version 1.2.8

- In response to [CVE-2021-42550](#) and [LOGBACK-1591](#) we have decided to make the following steps.

1) we have disabled all JNDI lookup code in logback until further notice. This impacts [ContextJNDISector](#) and `<insertFromJNDI>` element in configuration files.

2) we have removed all database (JDBC) related code in the project with no replacement.

2021-11-11 - Release of version 1.2.7

- Added [hostnameVerification](#) to property `SSLSocketAppender`. This fixes [LOGBACK-1574](#) as reported by Andrei Komarov with Bruno Harbulot providing the relevant patch.
-

2021-09-10 Release of version 1.2.6

- To prevent XML eXternal Entity injection (XXE) attacks, Joran no longer reads external entities passed in XML files. This fixes [LOGBACK-1465](#) as reported by Shuibo Ye.
-

2021-08-23 Release of version 1.3.0-alpha10

- `CachingDateFormatter` is now synchronization-free and performs about 30 times faster. This fixes [LOGBACK-1421](#).
 - `AsyncAppenderBase` now drains its buffer in one go, considerably improving throughput. See [benchmarking results](#) for further details.
 - `ThrowableProxy` now supports circular exceptions. This fixes [LOGBACK-1027](#) with Jan S. (jpstotz) providing the relevant patch.
 - `LogbackServiceProvider` now invokes `LoggerContext.start()` method upon completion of initialization. This fixes [LOGBACK-1121](#) reported by Johannes Herr.
 - Better error reporting in case of missing right curly brace during variable substitution. This fixes [LOGBACK-1417](#).
 - Better error reporting in case of unknown properties in components when reading XML configuration files. This fixes [LOGBACK-1570](#).
 - Utility method `ConcerterUtil.setContextForConverters()` now handles `CompositeConverter` instances correctly. This fixes [LOGBACK-1571](#).
-

2021-08-13 Release of version 1.3.0-alpha9

- In `ILoggingEvent`, added a `getMarker()` method with a default implementation returning the first marker in the marker list. This method is deprecated and exists solely for backward compatibility reasons. Logback components should use `getMarkerList()` and cater for all available markers and not only the first marker. This fixes [LOGBACK-1569](#) reported by Pelle Krøgholt .
-

2021-08-12 Release of version 1.3.0-alpha8

- Upped the requested slf4j-api version by `LogbackServiceProvider` to 2.0.99 instead of 1.8.99. This fixes [LOGBACK-1568](#).

2021-08-10 Release of version 1.3.0-alpha7

- `AccessEvent` in the `logback-access` module now tries to get a reference to a given `HttpRequest` session without trying to create it if missing. This fixes [LOGBACK-1219](#) reported by Chris West with Iliya Krapchatov providing the relevant patch.
- To prevent XML eXternal Entity injection (XXE) attacks, Joran no longer reads external entities passed in XML files. This fixes [LOGBACK-1465](#) as reported by Shuibo Ye.
- The `logback-access` module now supports Jetty version 9.4.9 and Tomcat version 9.0.50, the latest versions compatible with Java 8.
- Migrated `SMTPAppender` to use `jakarta.mail` instead of `javax.mail`. This fixes [LOGBACK-1516](#).
- Added the `kvp` conversion word in `logback-classic` in order to support `KeyValuePair`. `KeyValuePair` is part of the fluent API introduced in SLF4J 2.0.
- Patterns with composite converters now correctly detect if child converters handle exceptions. This issue was reported in [LOGBACK-1566](#).
- Removed unused dependency on the `edu.washington.cs.types.checker:checker-framework` artifact. This fixes [LOGBACK-1501](#) reported by Jeremy Landis.

Implementation of `TargetLengthBasedClassNameAbbreviator` has been both simplified and augmented with an LRU cache. This fixes [LOGBACK-1509](#) reported by Michael Skells who also provided a relevant PR.

2021-07-28 Release of version 1.3.0-alpha6

Joran, logback's configuration system, has been rewritten to use an internal representation model which can be processed separately. As a side effect, logback configuration scripts are now largely order-free. For example, appenders can now be defined after they are first referenced in a logger. Moreover, unreferenced appenders are no longer instantiated. Given the breadth of the changes in Joran codebase, support for `SiftingAppender` and Groovy configuration have been dropped temporarily.

In addition to the important Joran and Jigsaw modularization changes mentioned above, this version contains the same fixes as in logback versions 1.2.4 and 1.2.5.

2021-07-26 Release of version 1.2.5

Instead of an `Appender`, the `LayoutWrappingEncoder` now accepts a variable of type `ContextAware` as a parent. This fixes [LOGBACK-1326](#) as reported by Phil Clay who also provided the relevant patch.

2021-07-19 Release of version 1.2.4

Added support for minimum length in %i filename pattern. This fixes [LOGBACK-1248](#) with John Gardiner Myers providing the relevant patch.

For size bound log file archiving, allow `TimeBasedArchiveRemove` to remove files with indexes containing up to 5 digits. This fixes [LOGBACK-1175](#).

Added `%prefix` composite converter which automatically prefixes child converter output with the name of the converter. This feature is quite handy in environments where log files need to be parsed and monitored. tools.

2019-10-11 Release of version 1.3.0-alpha5

`ConsoleAppender` now delegates filtering of ANSI sequences to `Jansi`. This fixes [LOGBACK-1392](#) reported by Alexandre Dutra who also provided the relevant patch.

2018-02-11 Release of version 1.3.0-alpha4

Given that all currently available versions of Groovy are incompatible with Java 9, at least when built with Maven, we have momentarily **dropped support for Groovy configuration**, a.k.a Gaffer. For details refer to [this thread](#) and relevant [jira issue](#).

Due to lack of user interest, `logback-classic` no longer supports [logging separation](#) by way of `ContextSelector`.

Under JPMS (Java 9), module `ch.qos.logback.core` is now able to read module `java.xml`. This fixes [LOGBACK-1381](#) reported by Mark Raynsford.

February 10th, 2018, Release of version 1.3.0-alpha3

Under JPMS (Java 9), allow user code to implement `ch.qos.logback.classic.spi.Configurator` as a service. This fixes [LOGBACK-1380](#) reported by Mark Raynsford.

Fix issue with properties containing JSON strings as reported in [LOGBACK-1101](#).

2018-01-30 Release of version 1.3.0-alpha2

Depend on SLF4J version 1.8.0-beta1 instead of 1.8.0-beta1-SNAPSHOT.

Fix build under Travis.

2018-01-30 Release of version 1.3.0-alpha1

In the absence of a `class` attribute, the `shutdownHook` configuration directive now correctly assumes `ch.qos.logback.core.hook.DefaultShutdownHook` class. This fixes [LOGBACK-1162](#) reported by Alex Selesse.

Logback's internal `ThreadPoolExecutor` now has an initial pool of 1 thread instead of 8 previously.

`TimeBasedArchiveRemover` is now able to deal with indexes over 999. This fixes [LOGBACK-1175](#) reported by Diego Furtado who also provided the relevant PR.

`SizeAndTimeBasedRollingPolicy` will correctly remove archived log files created within a given time period even if the last modified date for said files has been modified since archiving or is otherwise incorrect. This fixes [LOGBACK-1361](#) as reported by Peter Risko.

String to Level conversion now handles strings with trailing spaces. This fixes [LOGBACK-1288](#) reported by Gaurav Khanna.

`MDCFilter` will enforce the presence of `MDCKey` and `value` properties, refusing to start when either property absent. This fixes [LOGBACK-1165](#) reported by Martin Steiger.

Added the feature to update mime message before sending the email. This enhancement was requested in [LOGBACK-1284](#) by Miguel Vale who also provided the relevant PR.

If omitted, the `scanPeriod` attribute in configuration file defaults to 1 minute. The documentation [stated as much](#) but the code had not followed through. This issue was reported in [LOGBACK-1194](#) with F. Buechler providing the appropriate patch.

Updated JavaMail version to 1.6. This fixes [LOGBACK-1094](#) reported by Romain Moreau.

Removed "final" modifier for the `LoggerContext.getLogger(String)` method. This fixes [LOGBACK-1308](#) reported by Richard Sand.

2018-01-18 Release of version 1.3.0-alpha0

Added support for minimum length in `%i` filename pattern. This fixes [LOGBACK-1248](#) with John Gardiner Myers providing the relevant patch.

Correct parsing of `java.version` system property for Java 9 and later. This fixes [LOGBACK-1260](#) with Patrick Reinhart providing the relevant patch.

`ConsoleAppender` now works with consoles confused by output strings of zero length, e.g. Java Web Start. This fixes issue [LOGBACK-1282](#) reported by Clas Forsberg.

2017-03-30 Release of version 1.2.3

Fix unintentional dependency on `OutputStreamAppender` in `LayoutWrappingEncoder` as reported in [LOGBACK-1287](#).

Fix spurious `System.out.println` in `AsyncAppender`'s worker thread. This issue was reported in [LOGBACK-1292](#) by Nikolas Loutas with Thibault Meyer the relevant patch.

`ConsoleAppender` exception when run under Java WebStart. This problem was reported in [LOGBACK-1282](#) by Clas Forsberg.

2017-03-16 Release of version 1.2.2

`AsyncAppender` no longer drops events when the current thread has its interrupt flag set. This issue was reported in [LOGBACK-1247](#) by Jakob Bergendahl who also provided the relevant pull request.

Removed `JMSQueueAppender` and `JMSTopicAppender`. These appenders were undocumented and had no apparent users.

Remove comment in `logback-classic's META-INF/services/javax.servlet.ServletContainerInitializer` file in order to keep Wildfly 8 happy. This issue was reported in [LOGBACK-1265](#) by Andy Wilkinson.

`FileSize.toString()` now reports files sizes in GB in addition to sizes in MB and KB and Bytes. This fixes issue [LOGBACK-1278](#).

March 1st, 2017, Release of version 1.1.11

Fix thread-safety issue with `PatternLayoutBase` reported in [LOGBACK-1270](#) by Artem Bilan. Note that the fix was already present in the 1.2.x series and was back-ported to the 1.1.x series.

February 9th, 2017, Release of version 1.2.1

To ensure backward compatibility of configuration files, the `immediateFlush` property set for a `LayoutWrappingEncoder` is propagated to the enclosing `OutputStreamAppender`.

2017-02-08 Release of version 1.2.0

Encoder interface has changed and is no longer expected to handle an `OutputStream`.

Encoder interface has changed and is no longer expected to handle an `OutputStream`. This simplification allows finer-grain locking resulting in [significantly improved performance](#).

This release fixes a rather severe serialization vulnerability in `SocketServer` and `ServerSocketReceiver`. Users running these components should upgrade immediately.

Release 1.2.0 fixes a rather severe serialization vulnerability in `SocketServer` and `ServerSocketReceiver`. Users running these components should upgrade immediately.

In `TimeBasedRollingPolicy`, fixed issue with `totalSizeCap` of more than 2^{31} . This problem was reported in [1231](#) by Simon Teng.

Logback-classic now searches for the file `logback-test.xml` first, `logback.groovy` second and `logback.xml` third. In previous versions `logback.groovy` was looked up first which was nonsensical in presence of `logback-test.xml`. This fixes [LOGBACK-1245](#) reported by Joern Huxhorn.

2017-02-05 Release of version 1.1.10

Several changes to improve throughput (see [spreadsheet](#))

1. The `ReentrantLock` in `OutputStreamAppender` is now "unfair". In previous versions of logback, a fair lock was used. Fair locks are much slower. Just as importantly, logback has no mandate to influence thread scheduling.
2. `FileAppender` now offers the `bufferSize` option. Previously, a fixed-size 8K buffer was used. Increasing the `bufferSize`, for example to 256K, significantly reduces thread-contention.
3. Critical parts of the code now use `COWArrayList`, a custom developed allocation-free lock-free thread-safe implementation of the `{@link List}` interface. It is optimized for cases where iterations over the list vastly outnumber modifications on the list. It is based on `CopyOnWriteArrayList` but allows allocation-free iterations over the list.
4. In `PatternLayoutBase` the same `StringBuilder` is used over and over to reduce memory allocation. This is safe as long as the owning appender guarantees serial access to its layout. In the next version of logback, i.e. 1.2.x, the read-write lock will no longer protect access to the layout and there will be no guarantee of serial access.

In web-applications, logback-classic will [automatically install a listener](#) which will stop the logging context and release resources when your web-app is reloaded. This enhancement was requested [LOGBACK-1170](#) by Martin Wegner.

The `AccessEvent.prepareForDeferredProcessing()` method was not idempotent. This caused subtle bugs under Jetty. See [LOGBACK-1189](#) for details. Many thanks to Per Olesen, Evan Meagher, Nick Babcock and Mark Elliot for hunting down this bug.

As it may be time-consuming in certain environments, the `HOSTNAME` property is now computed lazily. This optimization requested in [LOGBACK-1221](#) by Eugene Petrenko.

Joran now supports external XML entities. This feature was requested in [1091](#) and the relevant PR graciously provided by Jonas Neukomm.

2017-01-20 Release of version 1.1.9

Logback's internal executor service had a thread pool size of 2 which could be used up rather quickly, e.g. configuration scanning in addition to an active `ServerSocketAppender`. When both threads were permanently in use, compression could not proceed. To alleviate this problem, the thread pool size has been increased to 8. See issue [LOGBACK-1238](#) for more details.

Fixed issue with `FileAppender` instances embedded within `SiftingAppender` reporting filename collisions after reaching timeout and subsequently restarted. This problem was reported in [LOGBACK-1167](#) by Michael Edgar.

Fixed `SizeAndTimeBasedFNATP` deprecation warning emitted even the replacement, i.e. `SizeAndTimeBasedRollingPolicy`, is in use. See [LOGBACK-1236](#). This issue was reported by Claudius Nicolae.

Added proper implementation for `LogbackValve.getScheduledExecutorService()` method. The missing implementation manifested itself in the form of an `UnsupportedOperationException` thrown by `LogbackValve`. This problem is further described in [LOGBACK-1181](#) reported by Andreas von Roepenack.

2016-12-09 Release of version 1.1.8

Removed the two period safeguard, aka untouchable periods, for archive removal beyond the size specified by `totalSizeCap` in `TimeBasedRollingPolicy`. It turns out the safeguard is not required and is unexpected as attested by [LOGBACK-1166](#).

Fixed issue with Joran incorrectly reporting "Unexpected aggregationType AS_BASIC_PROPERTY_COLLECTION". This issue was raised in [LOGBACK-1158](#) by Christian Hübner.

Gaffer (logback's groovy configurator) now supports the `valueOf` convention. This issue was raised in [LOGBACK-1232](#) by Frans Orsel.

The `org.slf4j.impl.StaticLoggerBinder` class shipping in logback-classic no longer catches `Throwable` but `Exception`. This change was requested in [LOGBACK-1159](#) by David J. M. Karlsen.

`BeanDescriptionFactory` no longer outputs a superfluous warning message in case the class contains bridge methods. This fixes [LOGBACK-1164](#) reported by Phil Clay.

2016-03-29 Release of version 1.1.7

Logback is now [compact3 profile](#) compatible. This improvement was requested in [LOGBACK-1071](#) by Axel Fontaine with Max Urech providing the relevant pull-request.

Fixed `ConcurrentModificationException` being thrown when the `reset()` method is invoked on the `LoggerContext` instance. This issue was reported in [LOGBACK-397](#) by Szczepan Faber with Ross Sargent providing the relevant test case.

`TimeBasedRollingPolicy` now supports the `totalSizeCap` property which allows the user to limit the total size of archived logs.

[SizeAndTimeBasedRollingPolicy](#) offers the same functionality as `SizeAndTimeBasedFNATP` did previously but with a simpler configuration structure.

Archive removal by `RollingFileAppender` is now performed asynchronously.

Unnecessary and incompatible `%i` token in `fileNamePattern` option with `RollingFileAppender/TimeBasedRollingPolicy` is now detected and the user alerted to the misconfiguration problem. This fixes [LOGBACK-1143](#).

Joran can now handle logger names ending with a `$`, i.e. the first character in variable substitution. This issue was raised in [LOGBACK-1149](#) by by Stevo Slavic.

2016-02-29 Release of version 1.1.6

`LogbackValve` (in logback-access) now attempts to load the configuration file as a resource if it cannot be found on the filesystem ([LOGBACK-1069](#)). This is helpful in scenarios where applications are using an embedded Tomcat server.

`JMXConfigurator.reloadDefaultConfiguration()` method now tolerates programmatic configuration without a URL. This change was provided by Vedran Pavic in [PR 302](#).

`RollingFileAppender` will output an error message if the date time pattern in the `%d` token within the `fileNamePattern` is not collision free. This fixes [LOGBACK-1137](#). In a similar vein, every instance of `FileAppender` will now detect if it shares the same `File` option value as given for an appender defined earlier. In addition, `RollingFileAppender` instances now check for colliding `FileNamePattern` values.

Fixed `NullPointerException` thrown by `RollingFileAppender` if the name of the rollover target path did not contain a parent. This issue was reported in [LOGBACK-1054](#) by Paulius Matulionis. Analysis of the problem and the relevant PR was provided by Ferenc Palkovics.

`BasicConfigurator.configure` method call executes significantly faster. Improved documentation for configuration using JDK 1.6 service-provider facility. These changes are in response to [LOGBACK-1141](#) requesting faster logback start-up time.

Fixed issue with variable substitution with the value ending in a colon. This problem was reported in [LOGBACK-1140](#) by Eric Cook.

February 13th, 2016, Release of version 1.1.5

MDC values are no longer inherited by child threads.

Child threads no longer inherit MDC values. In previous versions of logback as well as log4j 1.x, MDC values were inherited by child threads. Several users have argued convincingly that MDC inheritance by child threads was unhelpful and even dangerous. This change fixes [LOGBACK-422](#) and [LOGBACK-624](#)

When the `FileNamePattern` string for `RollingFileAppender/SizeAndTimeBasedFNATP` lacks a `%i` token, then compression for the second archive in the same period cannot occur as the target file already exists. Under those circumstances, logback leaves behind `.tmp` files as reported in [LOGBACK-992](#), [LOGBACK-173](#) and [LOGBACK-920](#). In this release, this particular condition is detected by `RollingFileAppender` which will not start but alert the user instead.

`AsyncAppender` is now configurable to never block. This feature was requested by Jeff Wartes in [LOGBACK-898](#) with Jeff Wartes and Gareth Davis providing the relevant patch.

2016-02-11 Release of version 1.1.4

Logback 1.1.4 requires SLF4J version 1.7.16 or later.

Added event replay support as introduced in SLF4J version 1.7.15. In most circumstances, logback-classic should run fine with earlier versions of `slf4j-api`, including all versions in the 1.6.x and 1.7.x series. However, with a version of `slf4j-api.jar` earlier than 1.7.15 in the classpath, attempting introspection of a `Logger` instance will result in a `NoClassDefFoundError` similar to that shown below.

```
Exception in thread "main" java.lang.NoClassDefFoundError: org/slf4j/event/
    at java.lang.Class.getDeclaredMethods0(Native Method)
```

```
at java.lang.Class.privateGetDeclaredMethods(Class.java:2451)
at java.lang.Class.privateGetPublicMethods(Class.java:2571)
at java.lang.Class.getMethods(Class.java:1429)
at java.beans.Introspector.getPublicDeclaredMethods(Introspector
at java.beans.Introspector.getTargetMethodInfo(Introspector.java
at java.beans.Introspector.getBeanInfo(Introspector.java:414)
at java.beans.Introspector.getBeanInfo(Introspector.java:161)
```

Packaging data (as output in stack traces) is now disabled by default.

In case an application throws exceptions frequently, then computing packaging data can be very costly and will cause the application to run slower. Making bad worse. To alleviate this problem, packaging data is no longer computed by default. It has to be [enabled explicitly](#). In the absence of explicit instructions, i.e. the user has not specified a converter handling exceptions, `PatternLayout` in `logback-classic` will follow the settings defining for the logging environment. If packaging data is disabled, then it add `%ex` as a suffix in the pattern, and if packaging data is enabled then `%xEx` will be added. These changes fix [LOGBACK-730](#) and [LOGBACK-966](#).

Fixed a bug in `TimeBasedFileNamingAndTriggeringPolicyBase` causing time-based rolling policies to always rollover according to the local system time and ignore the time zone passed in the file name pattern. The issue was reported by Lukasz Sanek who also provided the relevant fix.

`AsyncAppenderBase` now restores the current thread's interrupt flag when catching an `InterruptedException`. The issue ([LOGBACK-910](#)) was raised by Henrik Nordvik who also provided the relevant fix.

2015-03-24 Release of version 1.1.3

As of version 1.1.3, all logback modules require JDK 1.6 instead of previously JDK 1.5. This change was put to consultation on the logback mailing lists with no objections raised.

Fixed `FileAppender`'s prudent mode so that it properly recovers from IO Errors ([LOGBACK-1046](#))

Irrelevant or internal stack trace lines can now be omitted. Pull request provided by Tomasz Nurkiewicz ([LOGBACK-540](#)).

`AccessEvent` now creates a copy of request attributes when its `prepareForDeferredProcessing()` method is called. This makes attributes visible even if an appender uses a background thread to process events. ([LOGBACK-1033](#))

All threads opened by `ch.qos.logback.core.util.ExecutorServiceUtil#THREAD_FACTORY` are now daemons, which fixes an application hang on shutdown when `LoggerContext#stop()` is not called ([LOGBACK-929](#)). Note that daemon threads are abruptly terminated by the JVM, which may cause undesirable results, such as corrupted files written by the `FileAppender`. It is still highly recommended for the application to call `LoggerContext#stop()` (e.g., in a shutdown hook) to gracefully shutdown appenders.

Fixed an issue with `RollingFileAppender` where the first rollover file could be unintentionally deleted, depending on the specified filename pattern ([LOGBACK-894](#)).

Fixed an issue with `TeeHttpResponse` where the system default encoding would be used instead of the response encoding when constructing a new writer ([LOGBACK-1023](#)).

Fixed `ConfigurationDelegate.groovy` to allow any appender that implements `AppenderAttachable`, which supports third-party appenders, such as **reactor-logback's** `AsyncAppender` ([LOGBACK-1008](#))

Added support for specifying the callstack depth range in the `PatternLayout`. For example, `%caller{1..2}` displays the first two calls in the callstack.

Added HTTP request method to `MDCInsertingServletFilter`.

Fixed time-zone dependent code in `RollingCalendarTest`. ([LOGBACK-116](#))

Simplified connection logic of `SocketAppender` to reduce multithreading overhead and unnecessary instantiation of `SocketConnector` objects.

Fixed race condition in `SMTPAppenderBase` causing missing or duplicate emails. ([LOGBACK-909](#))

Fixed an issue with `FileAppender` in prudent mode, where an interrupt could prevent further access to the file ([LOGBACK-875](#)).

Fixed `IllegalStateException` when multiple threads write files to same directory ([LOGBACK-128](#)).

Changed queue consumption strategy in `AbstractSocketAppender` from "take" to "peek/remove" in order to avoid losing an event on each socket connection break. Zero is now a deprecated queue size. A queue size of one should be taken instead to indicate synchronous processing. ([LOGBACK-977](#))

`RequestLogImpl` now has an overridable `configure` method to allow extending implementations to configure it via methods other than the `logback-access.xml` file.

Fixed a bug in `AccessEvent` which could cause any `AsyncAppender` based appender to corrupt the request headers, request parameters, or response headers, before logging.

SQL scripts to set up your logback database are now provided as JAR resources ([LOGBACK-948](#)).

Threads created internally by logback are now named `logback-n`, where `n` is an integer. For the first thread `n` is set to 1, for each successive thread `n` is incremented by 1.

Added max runtime parameter to `AsyncAppender` to allow the appender to flush events, up to a maximum delay, during a stop of the `LoggerContext`. This can be used to ensure that all queued events are flushed.

Added new configuration element `shutdownHook` to allow the user to specify a `ShutdownHook` implementation that will stop the Logback context upon JVM exit.

`BasicStatusManager` now prevents adding more than one instance of `OnConsoleStatusListener` as a status listener. This fixes [LOGBACK-976](#).

`TimeBasedRollingPolicy` now accepts a time zone in its `%d` conversion pattern. ([LOGBACK-611](#))

It is now possible to configure the character encoding used by `SyslogAppender` to encode messages using the `setCharset()` method. This fixes [LOGBACK-732](#)

2014-04-02 Release of version 1.1.2

Create an abstract method, `createOutputStream`, as an extension point for subclasses of `SyslogBaseAppender` to create their own `OutputStream`. [LOGBACK-890](#)

Removed deprecated constructors in `SocketAppender` and related classes.

Fixed incorrect date format in `SyslogAppender`. ([LOGBACK-936](#))

Fixed `NullPointerException` when substituting blank variables ([LOGBACK-959](#))

Fixed `NullPointerException` that occurs when stopping a `SyslogAppender` that did not properly initialize, e.g., due to a hostname resolution failure. ([LOGBACK-960](#))

Use fair locking in `OutputStreamAppender`. Patch provided by Sergey Bykov. ([LOGBACK-268](#))

In case of missing included files, `IncludeAction` no longer prints a stack trace but prints a warning instead. ([LOGBACK-954](#))

Fixed character escaping in `XMLLayout` ([LOGBACK-728](#)) and `HTMLLayout` ([LOGBACK-440](#)).

2014-02-05 Release of version 1.1.1

Logback now supports an unlimited level of `variable` resolution graphs rather than being limited to one level deep resolution. This enhancement was requested by Anton Wiedermann in [LOGBACK-943](#) with Eric Dahl providing the relevant pull request.

Fixed [LOGBACK-942](#) which was causing `SocketAppender` to drop events. Eric Dahl provided the relevant pull request.

2014-01-28 Release of version 1.1.0

Previously, logback silently ignored configuration files that did not have the ".xml" or ".groovy" file extension. Now, a `LogbackException` is thrown to flag this error.

Groovy configuration now supports `appenderRef`, which allows the use of `AsyncAppender` in Groovy. ([LOGBACK-269](#))

`SizeAndTimeBasedFNATP` now supports a protected function `#createArchiveRemover` that allows subclasses to specify a custom archive remover used in `RollingFileAppender`. The default archive remover is `SizeAndTimeBasedArchiveRemover`.

`PackagingDataCalculator` now catches and ignores `UnsupportedOperationException` so that it can determine whether the JVM supports `Reflection#getCallerClass()` without printing that exception's stack trace. This only affects Java 7u40+, which removed support for `Reflection#getCallerClass()`. ([LOGBACK-885](#))

To facilitate debugging, `SimpleSocketServer` now names its threads: "**Logback SimpleSocketServer (port PORTNUM)**". `SocketNode` client threads are named: "**Logback SocketNode (client: IPADDR)**".

Fixed silently lost messages from `SyslogAppender` when they exceeded the system datagram size limit. The default max message size was hard coded to 65KB but now matches the system limit (as read from `DatagramSocket#getSendBufferSize()`) unless a nonzero limit is specified via `SyslogAppender#setMaxMessageSize()`. ([LOGBACK-926](#))

Fixed various documentation typos, including [LOGBACK-466](#), [LOGBACK-768](#), [LOGBACK-904](#), [LOGBACK-921](#), and [LOGBACK-927](#).

`ContextBase.setStatusManager` now correctly validates the given status manager. ([LOGBACK-912](#))

The `SocketNode` creates an `ObjectInputStream` using the socket's input stream, which blocks waiting for the stream header. This wait has been moved from the constructor to `SocketNode.run()` so that the node can be created without blocking. ([LOGBACK-350](#))

Fixed `SecurityException` during initialization in Google AppEngine. ([LOGBACK-760](#))

The `<include>` element now allows optional resources (previously, only optional files). ([LOGBACK-928](#))

Added new layout conversion word (`%D` or `%elapsedTime`), which gets the time taken to serve the request. This applies only to Jetty and Tomcat logs via `logback-access`. ([LOGBACK-320](#))

Fixed SMTP error when the subject line contained multiple new-lines. ([LOGBACK-865](#))

Fixed unnecessary re-initialization of the servlet's `LoggerContext` while attempting to destroy it.

Added the following syslog facilities to `SyslogStartConverter`: NTP, AUDIT, ALERT, CLOCK ([LOGBACK-754](#))

Fixed `NullPointerException` when setting a JUL logger's level to null, which should have reset the logger level to the parent's effective level. ([LOGBACK-906](#))

Added support to get suppressed exceptions. This is currently only implemented for `RootCauseFirstThrowableProxyConverter` and `ThrowableProxyConverter`. ([LOGBACK-516](#))

Fixed problem of Janino classes not found in some environments (axis2, GWT, etc.). ([LOGBACK-832](#))

Fixed various unit tests, including modifications for consistent results in Jenkins. ([LOGBACK-842](#))

Allow Gaffer to read the `logback.debug` system property to enable verbose output during Groovy-based configuration. Also added debug statements to Gaffer.

Fixed `IllegalArgumentException` when missing periods and dollar signs in the logger name. ([LOGBACK-384](#))

Fixed `NullPointerException` during JNDI lookup.

Fixed dangling data source connections from `DBAppender` that caused *"maximum open cursors exceeded"*.

Fixed incorrect stack trace depth when specifying `%throwable` with argument. ([LOGBACK-160](#))

Fixed MySQL setup script to use lower-case table name to match the references in the file. This had caused an error on systems where case sensitivity matters.

Fixed `NullPointerException` when getting code source in `PackagingDataCalculator`.

The search path for `logback-access.xml` is now `${catalina.base}` and then `${catalina.home}` if not found. ([LOGBACK-844](#))

The `LoggingEvent` constructor delays message formatting so that it can be computed lazily by the `getFormattedMessage` method. This fixes [LOGBACK-873](#) and re-fixes [LOGBACK-495](#).

`PackagingDataCalculator` now checks for the case where the caller has no protection domain. This fixes [LOGBACK-617](#) reported by Yuri de Wit. The relevant fix was provided by Mikhail Mazursky.

2013-05-10 Release of version 1.0.13

In `logback-access` MANIFEST file, imports of Jetty and Tomcat are now optional. This fixes [LOGBACK-300](#) reported by Christian Brensing who also provided the appropriate pull request.

Logback will now correctly parse variables with a default separator string nested within accolades, e.g. `"{a:-b}"`. Such strings resemble variable references but lack the `$` prefix, e.g. `"${a:-b}"`. This fixes [LOGBACK-859](#) reported by Yoni Moses.

In `InterpretationContext` class replaced code using JDK 1.6 API with code using JDK 1.5. This fixes [LOGBACK-860](#) reported by Bas Stoker.

Updated the "org.fusesource.jansi:jansi" dependency to version 1.9.

2013-04-26 Release of version 1.0.12

A new `SSLSocketAppender` extends the basic `SocketAppender` providing the ability to deliver logging events over the Secure Socket Layer (SSL). The corresponding `SimpleSSLSocketServer` extends the classic `SimpleSocketServer` as a basic logging server application that receives logging events from a `SSLSocketAppender`.

While `SimpleSocketServer` (and its new SSL-enabled counterpart, `SimpleSSLSocketServer`) provide an easy-to-use standalone logging server application, a new component type known as a *receiver* allows any application to receive logging events from remote appenders over a TCP/IP network connection, using Logback Classic. Receiver components are configured in `logback.xml` just like any other logback component.

Receiver components are configured in `logback.xml` just like any other logback component.

A receiver can either listen passively for connections from remote `SocketAppender` components acting as clients, or it can assume the client role, initiating a connection to a remote appender acting

as a server. The receiver components shipped with Logback include full support for logging event delivery over the Secure Sockets Layer (SSL).

All of the new socket-based receiver and appender components were contributed by Carl Harris. See [Receivers](#) in the Logback Manual for more information on configuring receiver components. See [SocketAppender](#) and [ServerSocketAppender](#) for information on configuring appenders as event sources for receiver components.

`RollingFileAppender` will now detect when `file` property collides with `fileNamePattern`, emit an error message and refuse to initialize. This was requested in [LOGBACK-796](#) by Karl Pietrzak who also provided a patch.

In configuration files, the `<include>` element now admits the `optional` attribute. This fixes [LOGBACK-230](#) reported by Attila Kiraly. Many thanks to Tommy Becker who contributed a patch.

In response to [LOGBACK-829](#), serialization of `Logger` instances has been significantly simplified and much unnecessary bloat removed. As an added bonus, the new serialization of `Logger` objects is also compatible with serialization streams using older `Logger` instances. `Logger` instances serialized by logback 1.0.11 and earlier can be read by logback version 1.0.12 and later and *vice-versa*.

The code detecting whether Groovy is available on the class path deals with the case where logback binaries are installed as endorsed libraries. This fixes [LOGBACK-831](#).

In response to [LOGBACK-244](#), [LOGBACK-724](#) and in particular patches provided by Tommy Becker and David Roussel component tracking code has been simplified and completely re-written.

Groovy configurator no longer supports `SiftingAppender`.

`SiftingAppender` now supports the `timeout` and `maxAppenderCount` parameters. As a direct consequence of modifications to component tracking code, the groovy configurator no longer supports `SiftingAppender`.

`SiftingAppender` now propagates properties defined elsewhere in the configuration file into the configuration process of nested appenders. This fixes [LOGBACK-833](#) with David Roussel providing the appropriate patch.

As all other actions affecting properties, `TimestampAction` now inserts the user-specified property into the local scope by default. The property was inserted into the context scope in earlier versions of logback. This fixes [LOGBACK-835](#) with David Roussel providing the appropriate patch.

Logback is now able to retrieve the name of localhost when running under OS X and Java 7. This issue was reported by [LOGBACK-749](#) by Oliver Schrenk with patches provided by Ralph Goers and Pavel Valodzka.

The `mdc` converter can now handle default values. This feature was requested in [LOGBACK-246](#) by Michael Osipov with Denis Bazhenov providing a patch.

`DBAppender` in logback-classic module no longer assumes that caller information is always available. This fixes [LOGBACK-805](#) reported by Daris Cooper who also provided a corrective patch.

In order to simplify our build, several unit tests have been ported from Scala to Java. It follows that logback no longer depends on Scala, not even during the test phase of the build.

2013-03-25 Release of version 1.0.11

Under Unix*, the basic/quick file rename method supplied by Java does not work if the source and target files are on different file systems. This problem was reported in [LOGBACK-108](#) by Daniel Potter. In order to deal with this issue, logback now will perform rename by copying if the source and target files are on different file systems and the host JDK is version 1.7 or later. See also the related [error code](#).

The "cn" conversion word now correctly maps to `ContextNameConverter` class. This fixes [LOGBACK-463](#) reported by Michael Osipov with Mark A. Ziesemer providing the appropriate patch.

Added gray to the list of [ANSI colors supported by logback](#). The relevant pull request was kindly provided by Craig P. Motlin.

The `discoverConnectionProperties()` method in class `ConnectionSourceBase` no longer leaks connections. This fixes [LOGBACK-798](#) reported by Sayevskiy Viacheslav. Many thanks to Ivan (Wee-Willie-Winkie) who contributed the appropriate fix.

In logback-access, more correct determination of whether contents of an `HttpServletRequest` are URL encoded or not. The [bug fix](#) was submitted by David Schneider. The same issue was later independently reported by Grzegorz Kuligowski in [LOGBACK-814](#).

Both `SocketAppenderBase` and `SimpleSocketServer` now use a socket factory to create sockets. These changes were asked in [LOGBACK-815](#) and [LOGBACK-816](#) by Carl Harris who also contributed the relevant patch.

2013-03-15 Release of version 1.0.10

Upgraded the (optional) groovy dependency to version 2.0.7 (from 2.0.0).

The logger cache field in `LoggerContext` now uses a `ConcurrentHashMap` instead of a regular `HashMap`. This dramatically improves the speed of logger retrieval and incidentally fixes [LOGBACK-142](#).

In `SysLogAppender` allow [suffixPattern](#) to begin with literal text. This issue was reported Bruno Polaco in [LOGBACK-782](#) who also provided the relevant patch.

In order to reduce unnecessary boilerplate several common types and packages are now [imported automatically](#). This feature was contributed by Joris Kuipers.

Computation of caller information now takes into account Groovy frames (if running under Groovy). This fixes [LOGBACK-811](#).

2012-12-05 Release of version 1.0.9

Removed an erroneous compile-time dependency on Tomcat in the logback-classic module. This issue was reported by Arnaud Heritier.

2012-12-04 Release of version 1.0.8

logback-classic updated to use SLF4J version 1.7.2 instead of version 1.6.6.

The logback-classic module now uses SLF4J version 1.7.2 instead of version 1.6.6. This only impacts projects running under an OSGi platform as SLF4J versions 1.7.x and 1.6.x are 100% binary compatible.

Fixed incorrect `BufferStream` assignment after recovery in `ResilientFileOutputStream`. This issue was reported in [LOGBACK-765](#) by David Markwick.

Fixed incorrect parsing of variables in case of colon character followed by a dollar character. This issue was reported in [LOGBACK-744](#).

`SyslogAppender` now sends out the header line of stack traces. This issue was reported [LOGBACK-411](#) and separately as [LOGBACK-750](#).

A `StatusListener` implementing `LifeCycle` interface was not started if specified via the `logback.statusListenerClass` system property. This issue was reported in [LOGBACK-767](#) by Adam Sokowicz.

In order to avoid duplication, automatic status printing will be disabled if the user explicitly registers a status listener.

Added `OnErrorConsoleStatusListener` to print status messages on the error console, i.e. on `System.err`. This feature was requested in [LOGBACK-292](#) by Abraham Lin.

Added `NopStatusListener` class which simply drops incoming status messages. By [explicitly registering](#) a `NopStatusListener` listener, automatic status printing can be turned off.

2012-08-24 Release of version 1.0.7

Janino library upgraded to version 2.6.1.

As of Janino version 2.6.0, in addition to `janino.jar`, `commons-compiler.jar` needs to be on the class path as well. Please see the [Janino setup](#) instructions.

Groovy dependency upgraded to version 2.0.0.

Please see the [Groovy setup](#) instructions.

The code handling variable substitution has been completely re-written. As requested in [LOGBACK-729](#), variables can now be nested arbitrarily, even within the default value section. For example, `${a${b: -c}: -${d: -e}}` is now a valid logback variable expression yielding "e", assuming variables with the keys 'd', 'b' and 'ac' are undefined. The new variable substitution code is designed to be backward compatible with existing configuration files.

Substitution properties are now correctly recognized by `scan` and `scanPeriod` attributes of `<configuration>` element in configuration files. This fixes [LOGBACK-396](#) reported by Oh Chin Boon

The color-related conversion words now set the default color correctly. Xu Huisheng provided the relevant patch.

Fixed a race-condition in `AsyncAppender` and its worker thread. This issue was reported in [LOGBACK-720](#) by Arnd Hannemann who also supplied the relevant patch.

If a `PropertyDefiner` implements `LifeCycle`, then its `start()` method will now be invoked.

Added the `includeCallerData` property in `SMTPAppender` to precompute caller data before storing events for future transmission. This property addresses [LOGBACK-734](#) reported by Patrick Hogarty.

7th of June, 2012 Release of version 1.0.6

`SMTPAppender` now supports the retrieval of a `javax.mail.Session` resource from JNDI. This feature was requested in [LBCLASSIC-332](#) by Hrotko Gabor.

Listeners passed to `statusListener()` method in `GafferConfigurator` (the groovy configurator) are now correctly started.

2012-06-06 Release of version 1.0.5

`ConsoleAppender` can now activate the `Jansi library` for ANSI color code support on Windows systems. Unix-based operating systems such as Linux and Mac OS X already support ANSI color codes by default.

`PatternLayout` now supports [composite conversion specifiers for coloring](#).

2012-05-31 Release of version 1.0.4

Added `AsyncAppender` for asynchronous invocation of nested appenders. This was a long-standing and popular request as attested by [LBCLASSIC-177](#), [LBCORE-92](#) and [LBCLASSIC-242](#).

`SMTPAppender` now admits the `asynchronousSending` property, set to 'true' by default. However, it can be set to 'false' for synchronous email transmission. This property was requested in [LBCLASSIC-323](#) by Patrick Houk.

It is now possible to set a system property called "`logback.debug`" in order to force printing of internal status messages on the console regardless of the value of the `debug` attribute found within the `<configuration>` element. This behavior was requested in [LBCLASSIC-225](#) by Aaron Digulla with the relevant patch kindly provided by Antony Stubbs.

`MarkerFilter` now correctly recognizes nested markers. This issue was reported in [LBCLASSIC-295](#) by Paolo Mazzoncini who also provided the relevant patch.

Fixed invalid multiple configuration warning when deployed under Weblogic. This issue was reported in [LBCLASSIC-159](#) by Hontvári József and with the appropriate patch provided by Derek Mahar.

`SyslogAppender` now admits the `throwableExcluded` property allowing the exclusion of throwable data if so desired. This solves [LBCLASSIC-327](#) reported by Don Faulkner.

`SyslogAppender` now admits the `stackTracePattern` property allowing the customization of the string appearing just before each stack trace line. This fixes [LBCLASSIC-333](#) reported by Ingebrigt Berg who also provided the relevant patch.

`DBAppender` now supports SQLite. This feature was requested in [LBGENERAL-53](#) by Tony Trinh who also provided the relevant patch.

2012-05-04 Release of version 1.0.3

`PatternLayoutEncoder` class now admits the `immediateFlush` property (set to true by default). By setting this property to 'false', logging throughput can be quintupled, although your mileage may vary. This enhancement was requested in [LBCORE-243](#).

In order to facilitate parsing of log files, logback can now [output the pattern](#) used for the log output at the top of log files as a header. This feature was requested by James Strachan in [LBCORE-234](#).

`SMTPAppender` failed to transmit messages under JDK 1.5. After some investigation, Dave discovered that this was due to setting the `corePoolSize` parameter of the relevant `ThreadPoolExecutor` to 0. Setting `corePoolSize` to a higher value, e.g. 1, under JDK 1.5 solves the problem and fixes [LBCLASSIC-323](#) reported by Lutz Huehnken.

`LevelChangePropagator` now retains references to j.u.l. loggers whose level it sets. This fixes garbage collection issues reported in [LBCLASSIC-256](#) by Samuel Stanojevic who also provided the appropriate patch.

2012-04-26 Release of version 1.0.2

BREAKING CHANGE PARTIALLY REVERTED IN 1.0.3

By default `PatternLayout` will now output its pattern at the top of log files

This feature, although still available, is no longer enabled by default. See release notes for version 1.0.3 for details.

`ReconfigureOnChangeFilter` will avoid excessive synchronization in case of CPU intensive applications. This fixes [LBCLASSIC-234](#), a recalcitrant bug reported by Uri Unger who also provided the key steps for reproducing it.

`RollingFileAppender` now creates missing directories for compressed archive files. This fixes [LBCORE-169](#) reported by Tomasz Nurkiewicz with patches supplied by Paulo Andrade and Mats Henrikson.

`SizeAndTimeBasedFNATP` will now remove files with indexes higher than 99. It will also correctly compute the highest index value when an application is restarted. This fixes bug [LBCORE-221](#) reported by Dieter Mueller and Dawid Chodura.

2012-03-07 Release of version 1.0.1

Setting the debug attribute to true in the `<configuration>` element now registers a `OnConsoleStatusListener` with the `StatusManager`. Thus, problems occurring during the

lifetime of your application, well after logback is initialized, can be reported when the `debug` attribute is set. This behavior is closer to what users expect.

Added new property the `cleanHistoryOnStart` to `TimeBasedRollingPolicy`. By setting this property to `true`, history removal will work as expected even in the case of short-lived applications. This fixes [LBCORE-226](#) reported by Bruce E. Irving.

It is now possible to specify multiple `%d` tokens in the file name pattern of `TimeBasedRollingPolicy`. Auxiliary `%d` tokens must be marked as such by passing the `AUX` parameter. This feature was requested in [LBCORE-242](#) by Thomas Corte.

Logback now supports suppressed exceptions introduced in Java 7. This fixes [LBCLASSIC-276](#).

`SMTPAppender` clears the relevant cyclic buffer before asynchronous transmission. This corrects [LBCLASSIC-221](#) as reported by Chris Cheshire.

`SiftingAppender` will consider stale and consequently remove nested appenders which are closed or improperly started. This caters for the use case described in [LBCLASSIC-316](#) by Guus Bloemsmas.

`RequestLogImpl` can now lookup for the logback-access configuration file as a class path resource. This feature was requested in [LBACCESS-26](#) by Marshall Pierce.

Updated the Janino dependency to version 2.5.16. In addition, the code checking for the availability of Janino on the class path was updated to take Janino 2.6 into account, thus fixing [LBCORE-210](#).

2011-11-01 Release of version 1.0.0

The logback-access module now targets Tomcat 7.x and Jetty 7.x & 8.x as its servlet container platforms. This fixes [LBACCESS-17](#) reported by Grzegorz Grzybek.

Breaking change: properties are no longer automatically inserted into the context

Properties now have a scope. Previously, the definition of a property added it to the context. As of version 1.0, properties are local, i.e. transient by default. For further details, please refer to the [documentation on properties](#).

Environment variables are now looked up during property substitution. This feature was requested in [LBCORE-212](#) by Alexandre Garnier.

`SMTPAppender` now sends emails asynchronously.

Investigation of [LBCORE-224](#) reported by Cesar Alvarez Nunez points to bug in the JVM rather than in logback. A workaround has been found by using `CopyOnWriteArrayList` instead of the apparently buggy `ReadWriteLock`.

In `STARTTLS` mode, "mail.smtp.auth" property is no longer set automatically. This fixes [LBCORE-225](#) reported by Mark Woon.

Logback-access now supports conditional configuration. This fixes [LBACCESS-27](#) reported by Marshall Pierce.

Logback-access now supports inclusion of configuration files. See the [chapter about configuration](#) in the logback's online manual for more information.

Added `ch.qos.logback.core.read` to "Import-Package" declaration in logback-classic's manifest file. This fixes [LBCLASSIC-131](#) reported by Michal Prihoda and Thomas Jaeckle.

Fixed infinitely recursive calls in `AccessConverter#addError` methods as reported in [LBACCESS-25](#) by Pierre Queinnec.

Fixed incorrect switch fallthrough while selecting between the H2 and HSQL dialects as reported in [LBCORE-218](#) by Pierre Queinnec.

2011-09-21 Release of version 0.9.30

Archive removal can now deal with prolonged periods of application inactivity and application stop and restarts. The issue is described in [LBCORE-147](#) reported by Rafael Diaz Maurin.

Logback-classic now supports printing stack traces "root cause first" instead of the standard "root cause last". See the documentation for `%rootException` converter for further details. The `%rootException` converter was contributed by Tomasz Nurkiewicz in relation with [LBCLASSIC-217](#).

In the `ILoggingEvent` interface the `getMDC` method is now deprecated and replaced by `getMDCPropertyMap`. The latter method was already part of the `ILoggingEvent` interface in prior versions of logback-classic. Furthermore, the value returned by `ILoggingEvent.getMDCPropertyMap` can now be an empty map but never null.

`LoggingEvent` no longer assumes that `LogbackMDCAdapter` is the only possible implementation of the `MDCAdapter` interface. This fixes [LBCLASSIC-275](#) reported by Chris Dolan.

`LogbackMDCAdapter` now synchronizes over its thread local map. This prevents `ConcurrentModificationException` from occurring while a child thread copies the map from the parent. This fixes [LBCLASSIC-289](#) reported by Josh Oddman.

It is now possible to specify multiple destination addresses separated by commas in the `to` property of `SMTPAppender`. This fixes [LBCORE-213](#) reported by Alexandre Garnier who also provided the relevant patch. In previous versions of logback multiple destination addresses could only be specified by using multiple `to` properties. As of version 0.9.30 both comma separated addresses and multiple `to` properties are supported.

When debug attribute is set to true within the `<configuration>` element, status messages are printed on the console after Joran (re)configures logback. Previously, all status messages were printed. With this release, only status messages created during (re)configuration are printed. This change fixes [LBCLASSIC-273](#) reported by Joern Huxhorn.

Single quotes within a date conversion specifier in filename patterns are now handled correctly. This fixes [LBCORE-214](#) reported by Derek Libby.

2011-06-09 Release of version 0.9.29

Fixed [LBCLASSIC-254](#), a performance issue in `LogbackMDCAdapter` as reported by Michael Franz.

Given that events reference a snapshot of the current MDC map, the snapshot should not be cleared upon invocation of the MDC.clear operation. This issue was reported in [LBCLASSIC-253](#) by Tommy Becker and independently fixed by the changes designated to fix LBCLASSIC-254.

As reported by Deepak Vadgama in [LBCORE-199](#), the entry in every zip file created by `FixedWindowRollingPolicy` had the same name. The issue was solved by adding a timestamp to the name of the entry in the zip files as suggested by a Benoit Xhenseval.

`ConfigurationWatchList` no longer emits an error message when it encounters a configuration file placed in a jar file, fixing [LBCLASSIC-246](#) as reported by Joern Huxhorn. This release also fixes [LBCLASSIC-247](#) reported by Michael Franz.

Logback now emits a clearer error message in case a conversion pattern misses a closing parenthesis or if an opening parenthesis is misplaced. This fixes [LBCORE-193](#) reported by B. K. Oxley.

Fixed thread safety issue in `LRUMessageCache` reported in [LBCLASSIC-255](#) by César Álvarez Núñez.

The `AccessEvent` class in logback-access module now implements the `IAccessEvent` interface. This fixes [LBACCESS-12](#) reported by Joern Huxhorn.

January 25th, 2011 Release of version 0.9.28

Breaking change: In the `Context` interface, the previously misspelled property `bithTime` is now renamed as `birthTime`.

In the `Context` interface, the previously misspelled property `bithTime` is now renamed as `birthTime`. This is a backward-incompatible change. All pre-existing references to "bithTime" property now need to be referenced as "birthTime".

Fixed [issue 238](#) reported by Robert Elliot. `GEventEvaluator`'s `start` method now correctly sets the state of the instance.

`JaninoEventEvaluator` now expects Java blocks instead of boolean expressions. For even moderately complex logical statements, blocks can be more convenient to read or to write compared with boolean expressions. To ensure backward compatibility, existing boolean expressions are converted into blocks on the fly.

Corrected handling of null valued arguments by `DBAppender`. This fixes [LBCLASSIC-239](#) reported by Artyom Kalita.

It is now possible to use the context birth time as the time reference for the `<timestamp>` element in configuration files.

Logback can now scan for included files as well. This solves [LBCLASSIC-245](#).

December 22nd, 2010 Release of version 0.9.27

Added a new section in the documentation about [real-world inspired recipes](#).

`PatternLayout` now supports compound conversion words of which "[%replace](#)" is one example. This change involved a significant re-write of the pattern tokenizer, the pattern parser and the pattern compiler. However, the changes should be backward compatible as far as users are concerned.

The `to` option of `SMTPAppender` now admits a pattern and is evaluated dynamically.

`TeeServletInputStream` no longer chokes on input over 8K in size. This fixes [LBACCESS-10](#) as reported by Augusto Rodriguez.

`TeeFilter` now takes include and exclude parameters so that it can be enabled or disabled by host. This solves [LBACCESS-15](#).

Fixed [LBCLASSIC-231](#) as reported by Jeff Skjonsby. When configuring `SizeAndTimeBasedFNATP`, `GaggerConfigurator` (Groovy) will no longer throw a `NullPointerException`.

Every context now returns its own name when asked for the property `CONTEXT_NAME`. This fixes [LBCORE-178](#) as requested by Michael Osipov.

20th of October, 2010 Release of version 0.9.26

Fixed [LBCLASSIC-183](#) as reported by Anthony Whitford. Upon application restart, Tomcat should no longer complain about `ThreadLocal` variables created internally by logback.

`SMTPAppender` now lets users set a custom buffer size for the outgoing messages. This fixes [LBCORE-170](#) as requested by Peter Royal.

When stopped, `RollingFileAppender` now calls `stop()` on its policy objects, fixing [LBCORE-114](#) reported by Anders Wallgren.

Added mapping for OFF and ALL levels in `JULHelper` as requested in [LBCLASSIC-226](#) by Christian Brensing.

October 13th, 2010 Release of version 0.9.25

Logback-classic now supports [propagation of level changes from logback-classic onto the j.u.l. framework](#). This significantly reduces the performance impact of disabled log statements making it reasonable for real-world applications to use the [jul-to-slf4j bridge](#).

The `<appender - ref>` element now supports [variable substitution](#), thus fixing [LBCLASSIC-224](#) as reported by David Harrigan.

As reported in [LBCORE-164](#), `SizeAndTimeBasedFNATP` would cause previous logging files with indexes over nine to be overwritten on application restart. This complex bug was reported and precisely diagnosed by Dieter Mueller. He has also proposed a fix which was subsequently adopted as is.

June 30th, 2010 Release of version 0.9.24

Fixed `NullPointerException` thrown by `MDCBasedDiscriminator` in case the MDC map is null.

Fixed issue with `SizeAndTimeBasedFNATP` in presence of application stop/restart and non-null file property. This issue was reported by Tom Liu in [LBCORE-131](#).

June 29th, 2010 Release of version 0.9.23

Fixed Groovy runtime dependency problem with `ReconfigureOnChangeFilter`, i.e. the auto-scan filter, when using non-groovy configuration files. This problem was reported in [LBCLASSIC-214](#) by Alvin Chee.

Fixed `MDCBasedDiscriminator` so that it supports deferred processing. This issue was reported in [LBCLASSIC-213](#) by Torsten Juergeleit.

June 21st, 2010 Release of version 0.9.22

Logback now supports [configuration files written in Groovy](#) which are more convenient than configuration files written in XML. We have also developed a tool to [automatically migrate your logback.xml files to logback.groovy](#).

Inspired by the functionality offered by `SiftingAppender`, `SMTPAppender` now can [track multiple buffers according to selection information returned by a discriminator](#).

Fixed synchronization issue in `ConsoleAppender` as reported in [LBCORE-158](#) by David Roussel who also supplied a corrective patch.

May 8th, 2010 Release of version 0.9.21

SLF4J dependency upgraded to 1.6.0

Fixed concurrency problem in `SiftingAppender` as reported in [LBCLASSIC-203](#) by Ellen Strnod.

Added `GEventEvaluator` which processes boolean expression written in the Groovy language.

Fixed rollover problem occurring when the target directory was missing as reported in [LBCORE-151](#) by Torsten Juergeleit. A closely related problem was reported in [LBCLASSIC-167](#) by Rick Janda.

April 2nd, 2010 Release of version 0.9.20

Fixed issue related to charsets in `LayoutWrappingEncoder` not being recognized in config files.

Logback now supports [conditional processing](#) of configuration files.

A new extension point for [defining properties on the fly](#) has been added. The code for this enhancement was provided by Aleksey Didik in [LBCLASSIC-182](#).

Logback now provides [an answer](#) to the longstanding logging separation problem for static logger references in shared libraries. This fixes [LBCLASSIC-166](#) and [LBCLASSIC-87](#).

Removed the previously deprecated `getFirstFilter` method in `FilterAttachable` interface.

March 24, 2010 Release of version 0.9.19

Breaking change: FileAppender now expects an Encoder

In response to [LBCORE-128](#), `WriterAppender` has been renamed as `OutputStreamAppender`, `FileAppender` now subclassing the latter. `OutputStreamAppender` and subclasses now take an `Encoder` instead of a `Layout`.

Contrary to layouts which simply transform a logging event into a `String`, an encoder is responsible for writing the actual event or more accurately the representation of the event onto the output stream. The role of the enclosing appender is now limited to managing the output stream (opening/closing) but not writing actual contents onto the stream. This change will require [modifications to existing configuration files](#). We hope to make up for this inconvenience with cool new features which are only possible using encoders. **During a transition period, layouts passed as parameter will be automatically wrapped by an encoder so that configuration files in the old format (using a layout instead of encoder) will continue to work unmodified.**

Breaking change: DBAppender in logback-classic expects four additional columns

Instead of lumping log request arguments into a field, `DBAppender` (in `logback-classic`) now outputs up to four arguments in the logging request in separate columns, named `arg0`, `arg1`, `arg2` and `arg4`. This solves [LBCLASSIC-187](#) reported by Greg Thomas.

Existing databases can be migrated to the new table structure by altering the existing tables. Here is how it would be done in PostgreSQL and MySQL.

```
ALTER TABLE logging_event ADD COLUMN arg0 VARCHAR(254);
ALTER TABLE logging_event ADD COLUMN arg1 VARCHAR(254);
ALTER TABLE logging_event ADD COLUMN arg2 VARCHAR(254);
ALTER TABLE logging_event ADD COLUMN arg3 VARCHAR(254);
```

In Oracle:

```
ALTER TABLE logging_event ADD arg0 VARCHAR(254);
ALTER TABLE logging_event ADD arg1 VARCHAR(254);
ALTER TABLE logging_event ADD arg2 VARCHAR(254);
ALTER TABLE logging_event ADD arg3 VARCHAR(254);
```

`FileAppender` and derived classes can now gracefully deal with IO failures and recover quickly after the original cause of the IO failure is corrected. For example, if the log file is located on a [network-attached storage \(NAS\)](#), and the connection to the NAS server is lost, `FileAppender` and derived classes will recover quickly after the connection to the server is re-established.

The packages under `ch.qos.logback.classic` namespace no longer depend on `org.slf4j.impl`. This fixes [LBCLASSIC-184](#) reported by Gunnar Wagenknecht.

Fixed [LBCLASSIC-193](#). `SyslogAppender` will no longer shutdown when messages over 256Kb cause an `IOException`.

Added [OnMarkerEvaluator](#) which evaluates to true in the presence of user-specified markers. When used with `SMTPAppender`, it can trigger an outgoing email message when an event matches user-

specified marker.

Request header names in `AccessEvent` (logback-access) are now stored in a case-insensitive way as specified in RFC 2616. This prevents compatibility issues, in particular with recent versions of Tomcat which store request header names in lower-case.

Fixed [LBCORE-134](#) reported by Michael Franz. While reading configuration files (in XML), the event handler will correctly process body text, in particular spaces, even when delivered in multiple chunks. The previous behavior of trimming leading and trailing white space has been preserved. Moreover, body text consisting of white space surrounding child elements is ignored.

`SiftingAppender` now exposes its `AppenderTracker`. Moreover, the `stopAndRemoveNow(String key)` method was added to `AppenderTracker`, allowing immediate removal of a nested appender.

Fixed [LBCORE-130](#). `FileNamePattern` no longer treats parenthesis as special.

The `CharsetEncoder` property in `SMTPAppender` can now be accessed and set from configuration files. This fixes [LBCLASSIC-194](#).

Instead of sending its output to the `System.out/err` reference that was effective at initialization, `ConsoleAppender` will now seek the most current `System.out/err` reference and send its output there. This fixes [LBCORE-143](#) as reported by Tom SH Liu.

`DBAppender` now outputs exception class and message. It will also output root causes, fixing [LBCLASSIC-170](#) reported by Tomasz Nurkiewicz.

You can now override table and column names in `DBAppender`. This feature was requested in [LBCLASSIC-188](#) reported by Tomasz Nurkiewicz.

Fixed missing `EVENT_ID` column problem on PostgreSQL as reported in [LBCORE-126](#) by Brian Edwards.

Event id values in `DBAppender` are now 64bit instead of 32. This change was requested in [LBCLASSIC-198](#) by Michael Lynch.

Added Sybase SQLAnywhere support in `DBAppender`. This feature was requested by Michael Lynch in [LBCLASSIC-197](#).

Added H2 support in `DBAppender`.

Fixed [LBSITE-36](#) reported by John Jimenez.

3rd of December 2009 Release of version 0.9.18

After a very long investigation resulting in somewhat a better understanding of licensing issues, logback is now [dual-licensed](#) under the EPL 1.0 and LGPL 2.1.

Due to a clerical error [LBCORE-26](#) has re-raised its ugly head. It has now been tamed for good.

Fixed `Private-Package` and `Export-Package` sections in `logback-classic.jar` MANIFEST as reported in [LBCLASSIC-165](#) and [LBCLASSIC-121](#) by applying the relevant patches supplied by Hugues Malphettes.

Made the OSGi import declarations for Janino and javax optional as proposed by David Varnes in [LBCORE-101](#).

`ReconfigureOnChangeFilter` did not pick up changes for configuration files containing spaces. This issue was reported in [LBCORE-119](#) by Anders Wallgren.

Added tests cases which run logback artifacts as bundles within Felix. This should solve a series of problems related to OSGi.

When ill-formed configuration files fragments were included in another configuration file, the included file was not closed correctly. This issue was reported in [LBCORE-122](#) by Michael Franz.

`JaninoEventEvaluator` now passes the throwable associated with an event as a `java.lang.Throwable` instead of an `IThrowableProxy`. This fixes [LBCLASSIC-155](#) as reported by Hontvári József. See [EvaluatorFilter documentation](#) for more details.

The name of the log file nested within .zip archives was incorrectly set to be that of the tmp file logback creates during compression. Anders Wallgren reported and posted an appropriate patch for this problem in [LBCORE-98](#). The nested file is now named after the zip archive file. Analysis showed that this was an appropriate strategy in all the cases we considered.

Fixed [LBCLASSIC-149](#). The `ContextNameConverter` now correctly uses the context name of the event instead of its own context name.

When a logger is named after an inner class, the '\$' is used as a separator, instead of the usual '.'. This fixes the level inheritance issue described in [LBCLASSIC-102](#) and as reported by Joern Huxhorn.

Fixed deadlock issue observed with appender which invoke loggers as reported in [LBCLASSIC-154](#) by Andrew Perrine and debugged by Ralph Goers who also proposed the relevant patch.

9th of August 2009 Release of version 0.9.17

`PackagingDataCalculator` now correctly deals with `NoClassDefFoundError` thrown by class loaders. This fixes [LBCLASSIC-125](#) reported by Roland Klein and independently by Didier Besset.

In configuration files, all tags names associated with explicit actions are now case-insensitive. This should diminish case-related errors users may make when writing configuration files. Tag names associated with implicit actions which are closely linked to the actual Java class being configured, still need to follow the camelCase convention. If you are unsure which case to use for a given tag name, just follow the camelCase convention for tag names which should be correct in most cases.

It is now possible to create [uniquely named files by timestamp](#). Such files are appropriate for log files associated with batch applications. This enhancement fulfills [LBCORE-91](#) as requested by Rick Beton and Szel Zoltan.

Append mode is now mandatory in `RollingFileAppender`. This was already the default and truncation mode is unreasonable in most cases. For example, in truncate mode when an application stops and is quickly re-started, any pre-existing log file for the current period will be lost.

The `activeFile` field in `RollingFileAppender` is now properly updated, fixing [LBCORE-90](#) as reported by Valery Shorin.

The `TimeBasedTriggeringPolicy` has been heavily refactored. It is now possible to trigger rolling simultaneously by [time and by size](#), fixing [LBCORE-61](#).

Fixed [LBCLASSIC-145](#) reported by Joern Huxhorn. The `LoggingEventV0` class now correctly populates its `callerData` field if the original `ILoggingEvent` already has it.

15th of July 2009 Release of version 0.9.16

In addition to nifty new features, this release contains several important internal changes. Given the importance of some of those internal changes, *this release may be less stable than previous logback releases*.

In logback-classic, `LoggingEvent` now implements the `ILoggingEvent` interface. All logback-classic components expect to process `ILoggingEvent` instances. Moreover, events which sent to a remote host are now of type `LoggingEventV0`.

Logback-classic will now [automatically re-configure itself](#) when its configuration file is modified. This enhancement was requested in [LBCORE-59](#) by Michael Osipov.

`FileAppender` and its derived class `RollingFileAppender` are now based on a finer-grain synchronization model. This change is aimed at reducing various synchronization related bugs, namely [LBCLASSIC-135](#) and its various sub-tasks.

Fixed a bug in the `localLevelReset()` method in the `Logger` class which inadvertently used the `DEBUG_INT` value in the `org.slf4j.spi.LocationAwareLogger` interface instead of the `DEBUG_INT` value in `ch.qos.logback.classic.Level` class. The issue was first identified by Andy Ruch [in a message](#) to the logback-user list

If the logger name had 12 or more segments, the logger conversion specified would throw an `ArrayIndexOutOfBoundsException` exception. Lukas Zapletal has kindly reported this problem in [LBCLASSIC-110](#) and provided a test case.

A new discriminator class called "ContextBasedDiscriminator" allows `SiftingAppender` to separate logging based on the context name. This fits nicely with the requirements expressed in [LBCLASSIC-117](#) by Rick Janda.

When a context is reset, then its object and property maps are now cleared. This fixes [LBCORE-104](#) reported by Johan Bos.

Fixed [LBCORE-105](#). Configuration files placed in jar files will no longer lock the jar file. This issue was initially reported for log4j in [bug 47465](#) Mark Thomas.

Fixed [LBCORE-94](#). While configuring a `RollingFileAppender`, if the `File` property is declared after any rolling or triggering policies, then logback will now generate an error status message.

Fixed [LBCLASSIC-134](#) reported by Darryl Smith. `DuplicateMessageFilter` will now behave correctly when invoked via `Logger.isXXXEnabled` methods.

Fixed [LBCORE-107](#), incorrectly set context information for the `NestedBasicPropertyIA` instance in `Joran`, reported by Lóránt Pintér.

Fixed [LBCLASSIC-109](#), reported by Andrew Ruch when a logger context was reset, the trace level was erroneously enabled.

12th of February 2009 Release of version 0.9.15

When the `reset()` method in `LoggerContext` is called, registered turbo filters are first stopped before being unregistered. This fixes [LBCLASSIC-89](#) reported by Alexis Morillo.

Added a servlet for viewing internal status messages as an HTML table. Two separate implementations are available; one for [logback-classic](#) and the other for [logback-access](#).

Added the `clear()` method to the `StatusManager` interface. After reconfiguration, it may be desirable to clear the status list maintained by a `StatusManager`. This change was requested by Alexis Morillo in [LBCORE-77](#).

Fixed problem [LBCLASSIC-104](#) related to loss of MDC information in deferred logging events.

Fixed issue [LBCLASSIC-101](#). Logback jar files now include full OSGi bundle information in their manifests. This information is automatically added by Apache Felix' Maven bundle plug-in. The generated manifest files contain an appropriate `Bundle-RequiredExecutionEnvironment` directive, fixing [LBGENERAL-8](#).

The setter and getter methods for the layout property in `AppenderBase` class now have reasonable default implementations, instead of `nop` previously. This change was requested by Thilo Tanner in [LBCORE-56](#).

Added *log4j.dtd* compatible `XMLLayout` as requested in [LBCLASSIC-22](#).

New chapter [on Joran](#).

29th of December 2008 Release of version 0.9.14

Corrected a serious deadlock problem occurring during configuration. It was reported in [LBCLASSIC-81](#) by Holger Mense.

Corrected thread leakage observed with `TimeBasedRollingPolicy's AsynchronousCompressor`. This bug was reported in [LBCORE-78](#) by Szel Zoltan.

Added `DuplicateMessageFilter`, a turbo filter which detects duplicate messages, and beyond a certain number of repetitions, drops repeated messages.

Added a new appender called `SiftingAppender`. As its name intimates, a `SiftingAppender` can be used to separate (or sift) logging according to a given runtime attribute. For example, `SiftingAppender` can separate logging events according to user sessions, so that the logs generated by each user go into distinct log files, one log file per user.

`BasicStatusManager's` internal buffer is now split into two parts, the header part and the tail part. The header part stores the first H status messages whereas the tail part stores the last T messages. At present time $H=T=150$, although these values may change in future releases.

Fixed `NullPointerException` thrown when calling `setContextMap` on a fresh MDC. [Issue was reported by Francois Terrier](#).

Evaluators are now wired into an appender automatically (implicit rules) without the help of `EvaluatorAction`. `EvaluatorAction` is now only needed for global evaluator elements. It follows that name attribute is necessary only for global evaluators. Embedded evaluators no longer need a

name. This change fixes [LBCLASSIC-100](#). In addition, `EvaluatorAction` has been modified to accept evaluators of any type and not just instances of `JaninoEvaluator`.

Logback-classic default configuration process will now automatically print status data on the console in case of warnings as well as errors. Previously, status data was printed only in case of errors.

`ContextInitializer` will now print the url of the configuration it is using. This should help reduce confusion when multiple config files are found on the class path. This change resolves [LBCLASSIC-55](#) reported by Anton Tagunov and Henric Larsson.

In case multiple configuration files are found on the class path, `ContextInitializer` will now emit a warning. This fixes [LBCLASSIC-85](#) filed by Szel Zoltan.

`HTMLLayout` now honors custom conversion words, thus fixing [LBCORE-74](#) as reported by Natan Cox.

Fixed [LBCORE-69](#) as reported by Andrey Rybin. `SMTPAppenderBase` now has support for charset encodings so that email messages can contain characters beyond US-ASCII.

`SMTPAppender` in logback-classic now defaults to `OnErrorEvaluator` instead of a janino-based evaluator. Thus, by default `SMTPAppender` no longer depends on Janino.

Added `UnsynchronizedAppenderBase` class based on Ralph Goers' contribution in [LBCORE-58](#). Note that `AppenderBase` remains unchanged. Appenders which need to handle synchronization on their own can do so by deriving from `UnsynchronizedAppenderBase`.

5th of December 2008 Release of version 0.9.13

A `NullPointerException` was being thrown when the level of a logger was set to null. The logger in question had to have children. This problem was reported in [LBCLASSIC-91](#) by Mateusz Jedruch.

4th of December 2008 Release of version 0.9.12

Fixed bug [LBCORE-26](#) reported by Tsutomu YANO and independently by Hontvári József and Gamaliel Amaudruz. `RollingFileAppender` when used in conjunction with `DateBasedRollingPolicy` will rollover existing log files at initialization if their timestamp warrants it.

Added support for file appending in [prudent mode](#). Thus, multiple `FileAppender` instances running on multiple JVMs can safely write to the same log file. With certain limitations, prudent mode extends to `RollingFileAppender`.

Fixed [LBCLASSIC-83](#). It is now possible to set the level of a logger to null, even if it was previously set to a non-null level. Previously, a `NullPointerException` would be thrown.

In response to [LBCLASSIC-61](#), [LBCLASSIC-33](#), [LBCLASSIC-24](#) and [LBCLASSIC-14](#) `JMXConfigurator` has been redesigned.

Fixed [LBGENERAL-22](#). The [log4j.properties translator](#) web-application has been significantly refactored.

Fixed improvement request [LBCLASSIC-59](#) relation to `StatusListeners`, originally submitted by Anton Tagunov.

The logger and class name converters now consider zero as having special meaning, and will return the simple class name, removing the package name prefix. This feature was asked by Silvano Maffei.

In response to [LBCLASSIC-54](#) support for turbo filters has refactored. The present code is safe under concurrent access while still offering good performance.

Fixed [LBCORE-43](#) reported by Bruno Navert. Configuration files can now look up property files from classpath resources.

Fixed [LBCLASSIC-86](#) related to `AccessControlException` thrown when run in a JVM with a `SecurityManager`.

Invoking the `LoggerContext.reset()` method resets logger levels to their default value, that is `DEBUG` for the root logger and `null` for all other loggers. This was requested in [LBCLASSIC-90](#) by Mateusz Jedruch.

Fixed [bug LBCLASSIC-69](#) reported by Anton Tagunov. The `LevelToSyslogSeverity` now correctly handles the `TRACE` level.

Fixed [bug LBCLASSIC-57](#) reported by Anton Tagunov. `SyslogAppender` could overwhelm the Syslog server with very large messages. `SyslogAppender` now limits its message size to 256K.

Logback now supports [setting the logger context name](#) as well as inserting variables [stored in JNDI](#) as properties.

Fixed issue [LBCLASSIC-49](#) reported by Oliver Lietz. The `getLogger()` method in `LoggerContext` class will now throw an `IllegalArgumentException` when invoked with a null argument.

28th of October 2008 Release of version 0.9.11

Fixed [LBCLASSIC-77](#) reported independently by Gianni Doe, Yannick Haudry and Yossi Shaul. The `childValue()` method of `CopyOnInheritThreadLocal` class part of MDC code no longer throws a `NullPointerException`.

27th of October 2008 Release of version 0.9.10

In case of errors during initialization, logback-classic now *automatically* prints out its internal status. This has been a frequently requested feature.

The `LogbackValve` in logback-access (ensuring integration with Tomcat), will now systematically print its internal status upon initialization, unless told to be quiet. This greatly helps troubleshooting the configuration of logback-access under Tomcat.

Fixed [bug 147](#) which occurred when the user inadvertently attempted to set the layout of a `SyslogAppender`. The code now actively prevents this. Documentation has been updated to reflect the change.

Fixed [bug LBCLASSIC-56](#) originally reported by Michel Colette. Backslash characters are now correctly interpreted in filename patterns.

The `TurboFilterChain` in a `LoggerContext` is [now cleared](#) when the `reset()` method is called. This problem was reported on May 1st, 2008, by Julia Hu on the logback developers list.

Fixed issue [LBCORE-48](#). During rollover, compression of large files would bring all logging to a halt. In this latest release, the rolled over file is first renamed, which is a relatively fast operation, and only then is the renamed file compressed asynchronously (in a separate thread).

Fixed issue [LBCORE-11](#). It is now possible to instruct TimeBasedRollingPolicy to delete old files, thus controlling then number of archived log files.

Fixed issue [LBCORE-42](#). If the parent directory of the log file does not exist, then FileAppender will create it, including any necessary but nonexistent parent directories.

Fixed [LBCORE-15](#) reported by Klaus Unger and others. DBAppender should now work with Oracle 9, 10g and 11g, regardless of the JDBC driver type used.

Fixed issue [LBCORE-17](#) reported by Thorbjørn Ravn Andersen. Logback now relies on Geronimo JMS API specifications instead of Sun's JMS API specification, the latter requiring manual installation. With Geronimo JMS, logback can be built using Maven without needing to manually install any dependencies.

Fixed issue [LBCORE-23](#). In PatternLayout, parenthesis can be used to group conversion patterns. It follows that the '(' and ')' carry special meaning and need to be escaped to be used as literals. This is now properly documented.

The location of the default configuration file can be specified by a system property. This feature was requested in [LBCORE-32](#) by Ted Graham, Matt Fowles, Ivan Biddles and Ralph Goers.

Fixed issue [LBCORE-55](#) reported by Natan Cox. `WriterAppender` now outputs its presentation footer and file footer in the correct order.

Fixed issue [LBCORE-27](#) reported by Peter Royal. `SMTPAppender` now outputs its presentation footer and file footer in the correct order.

Fixed issue [LBCLASSIC-67](#) reported by Alessandro Fustini. `SMTPAppender` now correctly configures the layout used to format the subject line of the outgoing email. It no longer appends a lengthy stack trace to the subject line.

Fixed issue [LBCLASSIC-68](#) reported by Gili Tzabari. In environments where the TCCL (Thread Context Class Loader) was not set, logback was unable to located its default configuration files. Logback now uses the class loader that loaded logback itself to locate its resources instead of the TCCL. This approach is simpler and deemed to cover more environments, i.e. more widely applicable.

Fixed issue [LBGENERAL-24](#) reported by Hung Tang. `SMTPAppender` now supports plain username/password authentication as well as both the STARTTLS command and SSL connections.

Fixed issue [LBCLASSIC-48](#) reported by Peter Royal. `SyslogAppender` now correctly outputs hours as 0-23 and not as 1-12 as previously.

Added a new TurboFilter called `DynamicThresholdFilter` which can filter events depending on MDC values based on a variety of criteria such as company name, product or the end user. This filter was contributed by Ralph Goers in [LBCLASSIC-53](#).

26th of March 2008 Release of version 0.9.9

MDC data is now inherited by child threads. This behaviour was already specified in the javadocs. The issue was raised by Martin Benda in [bug 64](#) and independently by Peter Huber.

Logback no longer includes retro-weaver generated jars for JDK 1.4. There seems to be little of interest in JDK 1.4 builds. Calling retro-weaver increases logback's build time by a few seconds each time – seconds in which we can do more productive things.

Fixed [bug 104](#), silly but nonetheless serious copy-and-paste errors in the `c.q.l.classic.Logger` class, reported by Joern Huxhorn.

Having been replaced by `SimpleSocketServer`, the `SocketServer` class has been removed.

Fixed [bug 105](#), sockets created by `SocketAppenderBase` is now closed, reported by Joern Huxhorn. More generally, `SimpleSocketServer` is much more careful to track open client connections and to close them.

Fixed [bug 110](#) in relation with the `requestParameterMap` field in `AccessEvent` - reported by Joern Huxhorn.

Fixed [SLF4J bug 66](#) in relation with caller data when using `log4j-over-slf4j` - reported by Frnack Routier.

Fixed [bug 129](#) reported by Michael Franz. As a result, Joran now supports nested as well as multiple file inclusions.

Fixed [bug 100](#) reported by Joern Huxhorn. At serialization time, object array passed as parameter, when the `LoggingEvent` is are now serialized as strings.

Fixed [bug 109](#) reported by Joern Huxhorn. There should no longer be any `NullPointerException`s thrown by deserialized `AccessEvent` instances.

Fixed [bug 8](#) reported by Sebastien Pennec. The documentation has been updated to reflect the fact that in the context of conversion patterns the percent sign carries special meaning, in order to include the percent sign as a literal, it must be escaped with a backslash.

Fixed [bug 52](#) reported by Kenichi Masuko. The bug has been fixed on March 8th, 2007. Starting with this release, Joran will support the injection of any enum type, not just `FilterReply`.

22th of August 2007 Release of version 0.9.8

This version of logback synchronizes with SLF4J version 1.4.3. In particular, logback now natively supports SLF4J's MDC API introduced in SLF4J version 1.4.1. If you are using SLF4J version 1.4.1 or later please make sure upgrade to logback version 0.9.8 or later.

Fixed a number of documentation related bugs, in particular [bug 90](#) reported by Luc Maisonobe and [bug 88](#) reported by Sebastian Davids.

It is now possible to include configuration file fragments (in XML) as a resource. Previously, it was only possible to include a file by specifying a path to a file or a URL. This feature was requested by Michael Newcomb in [bug 89](#).

Fixed caller data extraction problem as reported in [bug 78](#) by Hans van der Meer.

The `LoggingEvent` class' constructor now correctly takes into account the argument array passed by the user. This problem was reported in [bug 85](#) by Robert Christian.

29th of May 2007 Release of version 0.9.7

This release corrects packaging bugs [75](#) and [76](#) related to the migration of logback to SLF4J version 1.4.0. There are no other changes.

23rd of May 2007 Release of version 0.9.6

Logback is now aligned and compatible with SLF4J version 1.4.0, thus correcting [bug 73](#) as reported by Andy Gerweck.

Fixed `NoClassDefFoundError` problem when running under JDK 1.4 as reported by Brian Suksomwong.

Fixed [bug 63](#) as reported by La Canea Rosario. Calling `log4j` (bridge) with the trace level will no longer cause an `IllegalStateException` to be thrown.

Fixed [bug 70](#) as reported by Dirk Ooms. The `%throwable` conversion word is now recognized as documented in the logback manual. Moreover, the manual now mentions the `%nopex` word which can be used to force `PatternLayout` to ignore the exception contained in the logging request.

As in most releases, the documentation has been improved.

April 2nd, 2007 Release of version 0.9.5

Fixed methods `isInfoEnabled`, `isWarnEnabled` and `isErrorEnabled` methods in `ch.qos.logback.classic.Logger` class which failed to work correctly. This bug was reported today by Pavel Kral on the `slf4j-user` list.

Contrary to previous versions of logback, the various `Logger.isXYZEnabled(Marker)` methods now take into account the marker information passed as parameter.

As discussed in [bug 54](#), during automatic initialization, it makes better sense to first check for `logback-test.xml` file and only if that fails, to check for `logback.xml`. Maven2 will guarantee that the `logback-test.xml` file, if places under `test/resources` will not be included in the artifact it produces.

March 29th, 2007 Release of version 0.9.4

Significant bug fixes made to `c.q.l.access.TeeFilter` and `Co`. Images and other binary files are now intercepted and replayed correctly. As for "x-www-form-urlencoded" post requests, their input buffer is left untouched. In a best-effort attempt, the input buffer for "x-www-form-urlencoded" post requests is later reconstructed through the request parameters. However, it may differ from the original buffer.

The logback team released today the first version of a plugin for Eclipse that allows developers to visualize logs generated by a running application. It offers several nice features. Please check the [console plugin-in guide](#) for more details.

March 20th, 2007 Release of version 0.9.3

Includes in configuration files are now supported by Joran, logback's configuration framework. A file can contain an *include* element that has a *file* or *url* attribute pointing to a configuration file. See the [chapter about configuration](#) in the logback's online manual for more information.

Corrected bug 53 reported by Wilkins Poe. There is now a [dependencies page](#) that shows the requirements of each of logback's modules.

After a [discussion on the SLF4J mailing list](#) started by Franck Routier, a correction has been made when logging using the *JCL104-over-slf4j* module. Logback now correctly shows the caller location information.

As in most logback releases, the documentation has been improved.

March 5th, 2007 Release of version 0.9.2

The documentation is now in the *docs/* directory to allow an easier access to the logback manual and website for offline viewing.

March 5th, 2007 Release of version 0.9.1

Logback-class now depends on SLF4J version 1.3.0 instead of 1.2.

Numerous improvements to the documentation.

[Bug #46](#) reported by Mark Renyolds has been fixed. The `TimeUtilTest` should now run fine under any time zone.

[Bug #45](#), also reported by Mark Reynolds, has been fixed. There should be no `ClassCastException` thrown anymore when passing an `Object` to the printing methods using the *log4j-bridge* module.

January 31st, 2007 Release of version 0.9

This version contains a new component, namely the `ContextSelector`, that provides context separation and management when logback is used by several web-apps running under the same server. A [new chapter](#) was added to the logback manual to detail the use of the `ContextSelector`, along with its associated components.

The `JMXConfigurator` has been improved. It now shows the context's Status objects, which lets users check the internal state of logback.

The logback manual's chapter 2, about [logback's architecture](#), has been updated with two sections: Under the hood and Performance.

January 23th, 2007 Release of version 0.8.1

This version contains new components in the Access module, allowing users to display the full `HttpServletRequest` or `HttpServletResponse` of an access event.

The documentation section has been updated. The short introduction was split into the chapter 1 and chapter 2 of the logback manual. The chapters about Appenders and Layouts have been updated to document new components of logback.

A demonstration webApp presenting logback's major components is available. A document explains how to run it, and provides a step-by-step visit of the demo.

A first translation of logback jars to JDK1.4 is present in this release.

January 12th, 2007 Release of version 0.8

This version contains a whole new chapter, namely Chapter 3, about logback configuration. Several other documentation pages have been improved.

Logback now uses Generics in many components.

Several new components have been added to logback. A JMX Configurator now allows users to see and modify loggers or reload configuration among other possibilities. A [document](#) about this configurator is available in the [corresponding section](#) of the site. We'd like to thank Sebastian Davids for his ideas and contributions to this component.

A JMSTopicAppender and JMSQueueAppender are now available, as well as two new filters: LevelFilter and ThresholdFilter. A refactoring was done in the filters objects to ease the implementation of custom filters.

December 19th, 2006 Release of version 0.7.1

Version 0.7.1 of logback has been released.

This version contains more detailed information about logback access module, and its JMX components. A [dedicated page](#) explains how to configure and use logback access in Tomcat and Jetty, and access some of its components via JMX.

2006-12-18 Release of version 0.7

Version 0.7 of logback has been released.

Logback now ships with a new module: *log4j-bridge*. This new module can be used to intercept log4j calls and redirects them to logback components. More information about this module can be found in the corresponding [documentation page](#).

The documentation has been vastly updated. Two new chapters, namely Filters and MDC, are available in the manual section.

2006-11-30 Release of version 0.6

Version 0.6 of logback has been released.

Logback classic now supports automatic configuration, allowing test and production environment configuration. [TurboFilters](#) make their first appearance in a logback release. They provide ultra-

fast filtering possibilities. The logging context now supports listeners which will be contacted each time the context is reset or started. `SMTPAppender` allows for much more flexible configuration than before.

In logback access, new Appenders are available, namely `SocketAppender` and `DBAppender`. Logback access now supports filtering and event evaluations. A `CountingFilter` has been added. It provides statistical views of server access, reachable via JMX.

The documentation has also been improved. A complete new chapter has been added about Appenders, the short introduction to logback classic has been updated and a new module, containing many configuration examples has been added.

Logback now uses continuous integration in its development.

Tests have been improved, many new have been added. This release also provides some bug fixes.

2006-10-26 Release of version 0.5

Version 0.5 of logback has been released.

This release offers an important improvements in Joran. In particular, Joran can now replay configuration elements.

As in the previous release, a major area of work is the documentation which is being continuously improved.

2006-10-09 Release of version 0.4

Version 0.3 of logback has been released.

This release includes an improved access module, with specific implementations for the Jetty and Tomcat servers. Documentation was also added to show how to integrate logback-access with Jetty.

As for the classic module, several appenders and layouts have been added or improved. The error reporting of logback has also been enhanced, presenting the user with a link to an online page explaining possible reasons for the error.

Joran documentation was added, with examples in the core module.

2006-09-08 Release of version 0.3

Version 0.3 of logback has been released.

This release offers several new Appenders, support for Mapped Diagnostic Context, improved tests and documentation

In response to a bug report by Rickard Nilsson on the logback mailing list, a bug affecting parametrized logging was fixed.

We also released a [PropertiesTranslator](#) webapp that converts `log4j.properties` files to joran configuration files (in XML format).

2006-08-23 Release of version 0.2.5

Version 0.2.5 of logback has been released.

This release offers better documentation, with a number of corrections made in the short introduction to logback-classic.

2006-08-15 Release of version 0.2

Version 0.2 of logback has been released.

It offers better tests, some more functionality, and enhanced documentation. We also improved the site design to make it simpler and more efficient.

2006-07-26 Release of version 0.1

Version 0.1 of logback has been released.

2006-02-09 Logback web-site goes live

The logback web-site goes live on the 9th of February. At its present state, it is pretty primitive but updates will follow.