



## Azul Zulu builds of OpenJDK

January 2025 Quarterly Update

Release Notes

Revision 1.3

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## Revision History

Revision	Date	Description
0.1	January 21, 2025	Initial version of the document.
1.0	January 21, 2025	Added CVE info.
1.1	January 23, 2025	Added GC Log Analyzer.
1.2	February 19, 2025	Added property <code>skipUniqueLargeIcons</code> .
1.3	February 19, 2025	Updated JavaFX TPL info.

## Release Details

This release is the January 2025 quarterly update release for Azul Zulu Builds of OpenJDK version 23, 21, 17, 11, 8, 7, and 6.

The following table describes which Azul Zulu versions are published with this release.

Azul Zulu Version (*)	Update Type (**)	JDK Version	Based on		JavaFX Version
			Azul Zulu Version	JDK Version	
23.32.11 (CA) 23.32.12 (SA)	PSU	23.0.2+7	23.30	23.0.1+11	23.0.2+101
21.39.14 (SA)	CPU	21.0.5.0.101+1	21.38	21.0.5+11	23.0.1.0.101+100
21.40.17 (CA) 21.40.18 (SA)	PSU	21.0.6+7	21.39	21.0.5.0.101+1	23.0.2+101
17.55.14 (SA)	CPU	17.0.13.0.101+1	17.54	17.0.13+11	22.0.3.0.101+100
17.56.15 (CA) 17.56.16 (SA)	PSU	17.0.14+7	17.55	17.0.13.0.101+1	22.0.4+102
11.77.14 (SA)	CPU	11.0.25.0.101+1	11.76	11.0.25+9	19.0.9.0.101+100
11.78.15 (CA) 11.78.16 (SA)	PSU	11.0.26+4	11.77	11.0.25.0.101+1	19.0.10+101

8.83.0.12 (SA)	CPU	8u441-b01	8.82	8u432-b06	8u441-b01
8.84.0.15 (CA) 8.84.0.16 (SA)	PSU	8u442-b06	8.83	8u441-b01	8u442-b02
7.75.0.14 (SA)	CPU	7u451-b02	7.73	7u441-b02	N/A
6.69.0.14 (SA)	CPU	6b169	6.67	6b167	N/A

(\*) Azul provides two types of distribution packages for each Java version:

- **Subscriber Availability (SA)** distributions are tested, certified, and commercially supported Azul Zulu Builds of OpenJDK. Azul ensures that the software that uses the Accessible APIs of the product doesn't have to include specific licenses and that such a use doesn't contaminate the code or intellectual property of such software with any license requirements. SA builds may support configurations and features that are unavailable to free users.
- **Community Availability (CA)** distributions are Azul Zulu Builds of OpenJDK that are free to download and use.

#### NOTE

Both SA and CA distributions may contain Early Access builds noted with `-ea-` in their filename. Early Access builds may not be TCK certified.

(\*\*) Update type:

- **CPU** (Critical Patch Updates) contain fixes to security vulnerabilities and critical bug fixes. Azul Zulu CPU releases are generally based on prior-cycle PSU releases, with only security fixes applied. They provide a low-risk vehicle for the potentially urgent deployment of security fixes when issues of sufficient severity arise. CPU releases are available in SA distributions.
- **PSU** (Patch Set Updates) incorporates all fixes in the corresponding CPU, as well as additional non-security bug fixes. Azul Zulu PSU releases incorporate both security fixes and other changes that align the release contents with the associated OpenJDK project quarterly release. PSU releases are available in SA and CA distributions.

# What's New

## GC Log Analyzer with OpenJDK support

Azul customers can now use the GC Log Analyzer tool, created by Azul, to investigate Garbage Collector logs. More information about this tool, how to create logs, how to analyze these logs, etc. is available on the [GC Log Analyzer documentation](#).

## Support for FIPS 140-3 compliance with BouncyCastle 2.0

Federal Information Processing Standards (FIPS) are publicly announced standards developed by the United States federal government for use by all non-military government agencies and by government contractors. Special builds of Azul Zulu (only for Java 8) are available with integrated FIPS functionality. As announced in the October 2024 release, the FIPS implementation of FIPS is changed to version Bouncy Castle 2.0 (FIPS 140-3 certified), because of [the expiration of the FIPS 140-2 certification for Bouncy Castle 1.X](#), and additional functionality provided in newer versions of Bouncy Castle.

**NOTE**

If you don't use the FIPS functionality, this change doesn't impact you.

For more information about FIPS, check [Federal Information Processing Standards in Zulu](#).

The following breaking changes are introduced with BouncyCastle 2.0:

- The SHA-1 algorithm is fully disabled and cannot be used by the application or internally by the FIPS provider itself.
- The MD5 digest algorithm is disabled by default, but can be enabled with the `org.bouncycastle.jsse.enable_md5=true` system option.
- DES-EDE: encryption is disabled, but decryption is still enabled.
- RSA PKCS#1.5: encryption is disabled, but decryption is still enabled.
- Zulu 8 in FIPS compliance mode uses the BCJSSE provider for TLS connections. The application can experience some behavior differences caused by the difference in the

TLS implementation:

- All RSA KeyExchange cipher suites are disabled by default, but they can be enabled with the `org.bouncycastle.jsse.fips.allowRSAKeyExchange=true` system option.
- TLS renegotiation is disabled by default, but can be enabled with the `org.bouncycastle.jsse.client.acceptRenegotiation=true` system option.

## Certificate Changes

Starting with this release, all Zulu builds, including 6 and 7, use OpenJDK CA root certificates and no longer include Mozilla certificates in the collection of trusted root certificates from various Certificate Authorities (CAs).

### Fallback Path

In the highly unlikely event that this change causes an issue, the following errors may occur in Java applications, particularly when interacting with external services over

HTTPS: `javax.net.ssl.SSLHandshakeException`,  
`java.security.cert.CertificateException`,  
`sun.security.validator.ValidatorException`, among others.

You can use the certificate file from a previous Zulu release to address these errors which can be found in the following locations, depending on the Zulu version:

- For Zulu 6, 7, 8 (JDK): `<zulu_path>/jre/lib/security/cacerts`
- For Zulu 6, 7, 8 (JRE): `<zre_path>/lib/security/cacerts`
- For Zulu 11 and above: `<zulu_path>/lib/security/cacerts`

### Using Previous `cacerts` File With New Zulu Builds

You can apply the `cacerts` file from the previous Zulu release in one of the following ways:

- Use command line options to specify the path to the previous `cacerts` file using JVM options:

```
java -Djavax.net.ssl.trustStore=<ZULU_2024_10_CACERTS>
```

Optionally, it may also be necessary to specify the `trustStorePassword` option if the previous `cacerts` file has a non-default password (the default password is `changeit`):

```
-Djavax.net.ssl.trustStorePassword=<PASSWORD>
```

- Replace the `cacerts` file in the new Zulu build with the one from the previous release. This file in the Zulu builds of the January 2025 release is located in the same places as indicated above.

## New JAR Command Related to Unpacking

The `jar` tool's extract operation has been enhanced to allow the `--keep-old-files` or the `-k` options to be used to prevent existing files from being overwritten. Example usage to extract `foo.jar` and not overwrite files with the same that already exist in the target directory:

```
jar xkf foo.jar
# Or
jar --extract --keep-old-files --file foo.jar
```

## New Property to Improve File Chooser Load

A new property has been added as a solution for [JDK-8328895: JFileChooser is very slow to open folders with many files](#) in OpenJDK 17 and newer. By using the new property `-Djdk.compatibility.win32.skipUniqueLargeIcons=true`, the average time to display the Windows file chooser for a location with a large number of files and directories can be reduced from multiple seconds to below one second. This is especially seen in use-cases where there are many different file icons.

## IANA Time Zone Data Version

This release of Azul Zulu comes with IANA Time Zone Database version **2024b**.





## Supported Platforms

This section provides information about the operating systems that are supported in this release of Azul Zulu.




































### Azul Zulu Builds of OpenJDK Without and With OpenJFX

Some versions of Azul Zulu are available in different packages for specific platforms, as indicated in this overview table with:

-  : Build of OpenJDK without OpenJFX.
-  : Build of OpenJDK without and with OpenJFX.

#### NOTE

The list of supported configurations and platform includes, but is not limited to, the table below. Don't hesitate to [contact Support](#) if you have issues with Azul Zulu Builds of OpenJDK on any other platform or configuration.

Operating System	Azul Zulu Version						
	6	7	8	11	17	21	23
Windows (x86 32/64-bit)							
Windows Server 2025						 [1]	 [1]
Windows Server 2022						 [1]	 [1]
Windows Server 2019						 [1]	 [1]
Windows Server 2016						 [1]	 [1]
Windows 11						 [1]	 [1]

Windows 10						 [1]	 [1]
Windows (ARM 64-bit)							
Windows 11	n/a	n/a	n/a	n/a			n/a
Linux (x86 32/64-bit)							
RHEL 9.x						 [1]	 [1]
RHEL 8.x						 [1]	 [1]
RHEL 6.x and 7.x	n/a	n/a				n/a	n/a
SLES 15						 [1]	 [1]
SLES 12						 [1]	 [1]
CentOS Stream						 [1]	 [1]
Ubuntu 24.04						 [1]	 [1]
Ubuntu 22.04						 [1]	 [1]
Ubuntu 20.04						 [1]	 [1]
Ubuntu 18.04						 [1]	 [1]
Debian 12						 [1]	 [1]
Debian 11						 [1]	 [1]
Wind River 8.x	n/a			n/a	n/a	n/a	n/a

CoreOS	n/a	✓	✓	✓	✓	n/a	n/a
Alpine Linux 3.11 or later	n/a	n/a	✓	✓	✓	✓	✓ [1]
Amazon Linux 2023	n/a	n/a	✓	✓	✓	✓	✓ [1]
Linux (ARM 64-bit)							
Ubuntu 24.04	n/a	n/a	✓✓	✓✓	✓✓	✓✓	✓✓
Ubuntu 22.04	n/a	n/a	✓✓	✓✓	✓✓	✓✓	✓✓
Ubuntu 20.04	n/a	n/a	✓✓	✓✓	✓✓	✓✓	✓✓
Ubuntu 18.04	n/a	n/a	✓✓	✓✓	✓✓	✓✓	✓
Debian 12	n/a	n/a	✓✓	✓✓	✓✓	✓✓	✓✓
Debian 11	n/a	n/a	✓✓	✓✓	✓✓	✓✓	✓✓
Alpine Linux 3.11 or later	n/a	n/a	✓	✓	✓	✓	✓
Amazon Linux 2023	n/a	n/a	✓	✓	✓	✓	✓
Linux with kernel 3.10.x and glibc 2.23 [2] [3]	n/a	n/a	✓	✓	n/a	n/a	n/a
Linux (ARM 32-bit Hard-Float)							
Ubuntu 18.04 [4]	n/a	n/a	✓	✓	✓	n/a	n/a
Raspbian 10 Buster [4]	n/a	n/a	✓	✓	✓	n/a	n/a
Raspbian 9 Stretch [4]	n/a	n/a	✓	✓	n/a	n/a	n/a
Linux with kernel 3.10.x and glibc 2.9 [4] [5]	n/a	n/a	✓	✓	n/a	n/a	n/a
Linux (ARM 32-bit Soft-Float) [6]							
Linux with kernel 2.6.34 and glibc 2.5 [7]	n/a	n/a	✓	✓	n/a	n/a	n/a
Debian 7 Wheezy [8]	n/a	n/a	✓	✓	n/a	n/a	n/a

Linux with kernel 3.10.x and glibc 2.9 [8]	n/a	n/a	✓	✓	n/a	n/a	n/a
Linux (MIPS 32-bit) [9]							
Linux with kernel 4.9.59 and glibc 2.9 [10]	n/a	n/a	✓	n/a	n/a	n/a	n/a
Linux (ppc64 Big Endian)							
Linux with kernel 3.8.13 and glibc 2.22 [11]	n/a	n/a	✓	n/a	n/a	n/a	n/a
Linux (ppc32 Hard-float and SPE)							
Linux with kernel 3.12.37 and glibc 2.20 [12]	n/a	n/a	✓	n/a	n/a	n/a	n/a
QNX							
QNX 7.0 ARMv7 32-bit Hard-Float ABI	n/a	n/a	✓	n/a	n/a	n/a	n/a
QNX 7.1 ARMv8 32-bit Hard-Float ABI	n/a	n/a	✓	n/a	n/a	n/a	n/a
MacOS (x86 64-bit)							
macOS 13+	n/a	✓	✓✓	✓✓	✓✓	✓✓	✓✓
MacOS (Apple Silicon)							
macOS 13+	n/a	n/a	✓✓	✓✓	✓✓	✓✓	✓✓
Solaris (x86 and Sparc)							
Solaris 11	n/a	✓	✓	✓	n/a	n/a	n/a
Solaris 10	n/a	✓	✓	n/a	n/a	n/a	n/a

1. Build of OpenJDK (with and without OpenJFX) only for 64-bit.
2. Bundles with the Checkpoint/Restore (with the `criu` suffix) functionality require kernel 4.4.0+.
3. Bundles compiled with GCC 9 (with the `gcc9` suffix) require glibc 2.29.
4. Bundles with the C1 compiler were tested on ARMv6/ARMv7/ARMv8 hardware.




Bundles with both C1 and C2 compilers were tested on ARMv7/ARMv8 hardware.







5. Bundles with the CRaM (with the `cr` suffix) functionality require glibc 2.13.
6. Bundles with the C1 compiler use FPU, if it is present and available, to speed up floating point operations. Bundles with both C1 and C2 compilers require FPU.
7. Bundles with the C1 compiler. Tested on ARMv5 hardware.
8. Bundles with the C1 compiler were tested on ARMv6 and ARMv7 hardware. Bundles with both C1 and C2 compilers were tested on ARMv7 hardware.
9. MIPS32r2 ISA, Big Endian, FPU in 32-bit mode or equivalent emulation.
10. Linux soft-float O32 MIPS ABI
11. Bundles for this platform were tested on QorIQ® T4240-RDB.
12. Hard-Float EABI bundles were tested on QorIQ® T1024RDB. SPE ABI bundles were tested on NXP® P2020RDB.
















## Azul Zulu Builds of OpenJDK With CRaC

### NOTE

Currently, CRaC is only available for the specified Linux systems, in the versions listed below of Azul Zulu Builds of OpenJDK. For development, you can use the CRaC Java library on any platform and simulate the CRaC functionality.

-  : Build of OpenJDK with full CRaC support.
-  : Build of OpenJDK with full CRaC support and the Warp engine. Currently available on Linux on `x86_64` (using `GLIBC`), and as preview (EA) for Alpine Linux.
-  : Build of OpenJDK with CRaC support for development purposes. These provide a simulated checkpoint/restore mechanism to be used for development and testing.

Operating System	Azul Zulu Version					
	17		21		23	
	x86 64-bit	ARM 64-bit	x86 64-bit	ARM 64-bit	x86 64-bit	ARM 64-bit
Linux						

Alpine Linux 3.16						
Windows		n/a		n/a		n/a
macOS						

## Fixed Issues

This section covers all issues that were fixed in this release.

## Fixed Common Vulnerabilities and Exposures

This section summarizes Common Vulnerabilities and Exposures (CVE) fixed in this release.

CVE #	Component	Protocol	Remote Exploit w/o Auth.	Base Score	Attack Vector	Attack Complex	Privileges Req'd	User Interact	Scope	Confidentiality	Integrity	Availability	Azul Zulu Versions Affected	Notes
<a href="#">CVE-2025-21502</a>	Hotspot	Multiple	Yes	4.8	Network	High	None	None	Unchanged	Low	Low	None	23, 21, 17, 11	Note 1
<a href="#">CVE-2025-0509</a>	Install (Sparkle)	Multiple	No	7.3	Adjacent Network	High	High	Required	Changed	High	High	High	None	

### Notes:

ID	Notes
1	This vulnerability can be exploited by using APIs in the specified Component, e.g., through a web service which supplies data to the APIs. This vulnerability also applies to Java deployments, that load and run untrusted code (e.g., code that comes from the internet) and rely on the Java sandbox for security.



## Non-CVE Security Fixes

The following table summarizes non-CVE security fixes implemented in this release.

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
<a href="#">JDK-8335428</a>	6, 7, 8, 11, 17, 21, 23	Enhanced building of processes	CPU,PSU
<a href="#">JDK-8335714</a>	8, 11, 17, 21, 23	Enhance playing MP3s	CPU,PSU
<a href="#">JDK-8335715</a>	8, 11, 17, 21, 23	Improve Direct Show support	CPU,PSU
<a href="#">JDK-8336564</a>	6, 7, 8, 11, 17, 21, 23	Enhance mask blit functionality redux	CPU,PSU
<a href="#">JDK-8337499</a>	6, 7, 8, 11, 17, 21, 23	Improve jar utility handling of existing content	CPU,PSU
<a href="#">JDK-8339180</a>	6, 7, 8, 11, 17, 21, 23	Enhanced Building of Processes: Follow-on Issue	CPU,PSU

## OpenJDK Fixes and Enhancements

The following table describes the OpenJDK changes implemented in this release.

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
<a href="#">JDK-8189131</a>	6	Open-source the Oracle JDK Root Certificates	CPU,PSU
<a href="#">JDK-8189949</a>	6	Remove Baltimore Cybertrust Code Signing CA	CPU,PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
<a href="#">JDK-8191031</a>	6	Remove several Symantec Root CAs	CPU,PSU
<a href="#">JDK-8191844</a>	6	Remove SECOM root (secomevrootca1)	CPU,PSU
<a href="#">JDK-8195774</a>	6	Add Entrust root certificates	CPU,PSU
<a href="#">JDK-8195793</a>	6	Remove GTE CyberTrust Global Root	CPU,PSU
<a href="#">JDK-8196141</a>	6	Add GoDaddy root certificates	CPU,PSU
<a href="#">JDK-8199779</a>	6	Add T-Systems, GlobalSign and Starfield services root certificates	CPU,PSU
<a href="#">JDK-8204923</a>	6	Restore Symantec root verisignclass2g2ca	CPU,PSU
<a href="#">JDK-8209506</a>	6	Add Google Trust Services GlobalSign root certificates	CPU,PSU
<a href="#">JDK-8210432</a>	6	Add additional TeliaSonera root certificate	CPU,PSU
<a href="#">JDK-8216577</a>	6	Add GlobalSign's R6 Root certificate	CPU,PSU
<a href="#">JDK-8222136</a>	6	Remove two Comodo root CA certificates that are expiring	CPU,PSU
<a href="#">JDK-8222137</a>	6	Remove T-Systems root CA certificate	CPU,PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
<a href="#">JDK-8223499</a>	6	Remove two DocuSign root certificates that are expiring	CPU,PSU
<a href="#">JDK-8223555</a>	6	Cleanups in cacerts tests	CPU,PSU
<a href="#">JDK-8225068</a>	6	Remove DocuSign root certificate that is expiring in May 2020	CPU,PSU
<a href="#">JDK-8225069</a>	6	Remove Comodo root certificate that is expiring in May 2020	CPU,PSU
<a href="#">JDK-8225072</a>	6	Add LuxTrust certificate that is expiring in March 2021 to list of allowed but expired certs	CPU,PSU
<a href="#">JDK-8225081</a>	6	Remove Telia Company CA certificate expiring in April 2021	CPU,PSU
<a href="#">JDK-8225082</a>	6	Remove IdenTrust certificate that is expiring in September 2021	CPU,PSU
<a href="#">JDK-8225083</a>	6	Remove Google certificate that is expiring in December 2021	CPU,PSU
<a href="#">JDK-8225128</a>	6	Add exception for expiring DocuSign root to VerifyCACerts test	CPU,PSU
<a href="#">JDK-8225130</a>	6	Add exception for expiring Comodo roots to VerifyCACerts test	CPU,PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
<a href="#">JDK-8232019</a>	6	Add LuxTrust certificate updates to the existing root program	CPU,PSU
<a href="#">JDK-8233223</a>	6	Add Amazon Root CA certificates	CPU,PSU
<a href="#">JDK-8234245</a>	6	sun/security/lib/cacerts/VerifyCACerts.java fails due to wrong checksum	CPU,PSU
<a href="#">JDK-8239105</a>	6	Add exception for expiring Digicert root certificates to VerifyCACerts test	CPU,PSU
<a href="#">JDK-8243320</a>	6	Add SSL root certificates to Oracle Root CA program	CPU,PSU
<a href="#">JDK-8243321</a>	6	Add Entrust root CA - G4 to Oracle Root CA program	CPU,PSU
<a href="#">JDK-8243559</a>	6	Remove root certificates with 1024-bit keys	CPU,PSU
<a href="#">JDK-8245654</a>	6	Add Certigna Root CA	CPU,PSU
<a href="#">JDK-8256421</a>	6	Add 2 HARICA roots to cacerts truststore	CPU,PSU
<a href="#">JDK-8258630</a>	6	Add expiry exception for QuoVadis root certificate	CPU,PSU
<a href="#">JDK-8259312</a>	6	VerifyCACerts.java fails as soneraclass2ca cert will expire in 90 days	CPU,PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
<a href="#">JDK-8259338</a>	6	Add expiry exception for identrustdstx3 alias to VerifyCACerts.java test	CPU,PSU
<a href="#">JDK-8277488</a>	6	Add expiry exception for Digicert (geotrustglobalca) expiring in May 2022	CPU,PSU
<a href="#">JDK-8295894</a>	6	Remove SECOM certificate that is expiring in September 2023	CPU,PSU
<a href="#">JDK-8297955</a>	6	LDAP CertStore should use LdapName and not String for DNs	CPU,PSU
<a href="#">JDK-8304760</a>	6	Add 2 Microsoft TLS roots	CPU,PSU
<a href="#">JDK-8305975</a>	6	Add TWCA Global Root CA	CPU,PSU
<a href="#">JDK-8307134</a>	6	Add GTS root CAs	CPU,PSU
<a href="#">JDK-8312126</a>	6	NullPointerException in CertStore.getCRLs after 8297955	CPU,PSU
<a href="#">JDK-8314960</a>	6	Add Certigna Root CA - 2	CPU,PSU
<a href="#">JDK-8316138</a>	6	Add GlobalSign 2 TLS root certificates	CPU,PSU
<a href="#">JDK-8317373</a>	6	Add Telia Root CA v2	CPU,PSU
<a href="#">JDK-8317374</a>	6	Add Let's Encrypt ISRG Root X2	CPU,PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
<a href="#">JDK-8318759</a>	6	Add four DigiCert root certificates	CPU,PSU
<a href="#">JDK-8319187</a>	6	Add three eMudhra emSign roots	CPU,PSU
<a href="#">JDK-8321408</a>	6	Add Certainly roots R1 and E1	CPU,PSU
<a href="#">JDK-8335912</a>	6, 7, 8, 11, 17, 21, 23	Add an operation mode to the jar command when extracting to not overwriting existing files	CPU,PSU
<a href="#">JDK-8339637</a>	6, 7, 8, 11, 17, 21, 23	(tz) Update Timezone Data to 2024b	CPU,PSU
<a href="#">JDK-8339644</a>	6, 7, 8, 11, 17, 21, 23	Improve parsing of Day/Month in tzdata rules	CPU,PSU
<a href="#">JDK-8339803</a>	8, 11, 17, 21, 23	Acknowledge case insensitive unambiguous keywords in tzdata files	CPU,PSU
<a href="#">JDK-8341057</a>	6, 7, 8, 11, 17, 21, 23	Add 2 SSL.com TLS roots	CPU,PSU
<a href="#">JDK-6942632</a>	21	Hotspot should be able to use more than 64 logical processors on Windows	PSU
<a href="#">JDK-6967482</a>	23	TAB-key does not work in JTables after selecting details-view in JFileChooser	PSU
<a href="#">JDK-7093691</a>	17	Nimbus LAF: disabled JComboBox using renderer has bad font color	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
<a href="#">JDK-8028127</a>	17, 21, 23	Regtest java/security/Security/SynchronizedAccess.java is incorrect	PSU
<a href="#">JDK-8048003</a>	8	test/compiler/8009761/Test8009761.java failed with: java.lang.RuntimeException: static java.lang.Object Test8009761.m3(boolean,boolean) not compiled	PSU
<a href="#">JDK-8058322</a>	8	Zero name_index item of MethodParameters attribute cause MalformedParameterException.	PSU
<a href="#">JDK-8066708</a>	8	JMXStartStopTest fails to connect to port 38112	PSU
<a href="#">JDK-8071693</a>	17	Introspector ignores default interface methods	PSU
<a href="#">JDK-8133287</a>	8	(fs) java/nio/file/Files/probeContentType/ParallelProbes.java should use othervm mode	PSU
<a href="#">JDK-8166352</a>	23	FilePane.createDetailsView() removes JTable TAB, SHIFT-TAB functionality	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
<a href="#">JDK-8179502</a>	17	Enhance OCSP, CRL and Certificate Fetch Timeouts	PSU
<a href="#">JDK-8189687</a>	8	Swing: Invalid position of candidate pop-up of InputMethod in Hi-DPI on Windows	PSU
<a href="#">JDK-8195675</a>	17, 21	Call to insertText with single character from custom Input Method ignored	PSU
<a href="#">JDK-8196770</a>	8	Add JNDI test com/sun/jndi/ldap/blits/AddTests/AddNewEntry.java	PSU
<a href="#">JDK-8202926</a>	17	Test java/awt/Focus/WindowUpdateFocusabilityTest/WindowUpdateFocusabilityTest.html fails	PSU
<a href="#">JDK-8207908</a>	17, 21	JMXStatusTest.java fails assertion intermittently	PSU
<a href="#">JDK-8209023</a>	8	fix 2 compiler tests to avoid JDK-8208690	PSU
<a href="#">JDK-8211920</a>	11	Close server socket and cleanups in test/jdk/javax/naming/module/RunBasic.java	PSU



OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
<a href="#">JDK-8224624</a>	11	Inefficiencies in CodeStrings::add_comment cause timeouts	PSU
<a href="#">JDK-8225045</a>	11	javax/swing/JInternalFrame/8146321/JInternalFrameIconTest.java fails on linux-x64	PSU
<a href="#">JDK-8225220</a>	17, 21	When the Tab Policy is checked, the scroll button direction displayed incorrectly.	PSU
<a href="#">JDK-8232367</a>	11	Update Reactive Streams to 1.0.3 – tests only	PSU
<a href="#">JDK-8233364</a>	8	Fix undefined behavior in Canonicalizer::do_ShiftOp	PSU
<a href="#">JDK-8239312</a>	8	[macOS] javax/swing/JFrame/NSTexturedJFrame/NSTexturedJFrame.java	PSU
<a href="#">JDK-8240343</a>	17, 21	JDI stopListening/stoplis001 "FAILED: listening is successfully stopped without starting listening"	PSU
<a href="#">JDK-8242999</a>	11	HTTP/2 client may not handle CONTINUATION frames correctly	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
<a href="#">JDK-8247706</a>	11	Unintentional use of new Date(year...) with absolute year	PSU
<a href="#">JDK-8251188</a>	8, 11	Update LDAP tests not to use wildcard addresses	PSU
<a href="#">JDK-8254759</a>	17	[TEST_BUG] [macosx] javax/swing/JInternalFrame/4202966/IntFrameCoord.html fails	PSU
<a href="#">JDK-8258734</a>	17	jdk/jfr/event/oldobject/TestClassLoaderLeak.java failed with "RuntimeException: Could not find class leak"	PSU
<a href="#">JDK-8260380</a>	8	Upgrade to LittleCMS 2.12	PSU
<a href="#">JDK-8263031</a>	11, 17	HttpClient throws Exception if it receives a Push Promise that is too large	PSU
<a href="#">JDK-8268364</a>	17	jmethod clearing should be done during unloading	PSU
<a href="#">JDK-8269770</a>	17	nsk tests should start IOPipe channel before launch debuggee - Debuggee.prepareDebuggee	PSU
<a href="#">JDK-8271003</a>	17	hs_err improvement: handle CLASSPATH env setting longer than O_BUFLEN	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
<a href="#">JDK-8271456</a>	17	Avoid looking up standard charsets in "java.desktop" module	PSU
<a href="#">JDK-8271821</a>	17	mark hotspot runtime/MinimalVM tests which ignore external VM flags	PSU
<a href="#">JDK-8271825</a>	17	mark hotspot runtime/LoadClass tests which ignore external VM flags	PSU
<a href="#">JDK-8271836</a>	17	runtime/ErrorHandling/ClassPathEnvVar.java fails with release VMs	PSU
<a href="#">JDK-8272746</a>	17	ZipFile can't open big file (NegativeArraySizeException)	PSU
<a href="#">JDK-8273914</a>	17	Indy string concat changes order of operations	PSU
<a href="#">JDK-8274505</a>	17	Too weak variable type leads to unnecessary cast in java.desktop	PSU
<a href="#">JDK-8276763</a>	17	java/nio/channels/SocketChannel/AdaptorStreams.java fails with "SocketTimeoutException: Read timed out"	PSU
<a href="#">JDK-8278527</a>	17	java/util/concurrent/tck/JSR166TestCase.java fails nanoTime test	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
<a href="#">JDK-8280131</a>	17	jcmm reports "Module jdk.jfr not found." when "jdk.management.jfr" is missing	PSU
<a href="#">JDK-8281379</a>	17	Assign package declarations to all jtreg test cases under gc	PSU
<a href="#">JDK-8282578</a>	17	AIOOBE in javax.sound.sampled.Clip	PSU
<a href="#">JDK-8283214</a>	17, 21	[macos] Screen magnifier does not show the magnified text for JComboBox	PSU
<a href="#">JDK-8283222</a>	17	improve diagnosability of runtime/8176717/TestInheritFD.java timeouts	PSU
<a href="#">JDK-8284291</a>	17	sun/security/krb5/auto/Renew.java fails intermittently on Windows 11	PSU
<a href="#">JDK-8284585</a>	11, 17	PushPromiseContinuation test fails intermittently in timeout	PSU
<a href="#">JDK-8284874</a>	17	Add comment to ProcessHandle/OnExitTest to describe zombie problem	PSU
<a href="#">JDK-8286160</a>	17	(fs) Files.exists returns unexpected results with C:\pagefile.sys because it's not readable	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
<a href="#">JDK-8287003</a>	17	InputStreamReader::read() can return zero despite writing a char in the buffer	PSU
<a href="#">JDK-8288976</a>	17	classfile parser 'wrong name' error message has the names the wrong way around	PSU
<a href="#">JDK-8289184</a>	17	runtime/ClassUnload/DictionaryDependsTest.java failed with "Test failed: should be unloaded"	PSU
<a href="#">JDK-8290023</a>	17	Remove use of IgnoreUnrecognizedVMOptions in gc tests	PSU
<a href="#">JDK-8290269</a>	17	gc/shenandoah/TestVerifyJCStress.java fails due to invalid tag: required after JDK-8290023	PSU
<a href="#">JDK-8290367</a>	8, 11, 17	Update default value and extend the scope of com.sun.jndi.ldap.object.trustSerialData system property	PSU
<a href="#">JDK-8292044</a>	11, 17	HttpClient doesn't handle 102 or 103 properly	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
<a href="#">JDK-8292309</a>	17	Fix java/awt/PrintJob/ConstrainedPrintingTest/ConstrainedPrintingTest.java test	PSU
<a href="#">JDK-8293061</a>	17	Combine CDSOptions and AppCDSOptions test utility classes	PSU
<a href="#">JDK-8293877</a>	17	Rewrite MineField test	PSU
<a href="#">JDK-8294193</a>	17	Files.createDirectories throws FileAlreadyExistsException for a symbolic link whose target is an existing directory	PSU
<a href="#">JDK-8294726</a>	17	Update URLs in minefield tests	PSU
<a href="#">JDK-8295239</a>	17	Refactor java/util/Formatter/Basic script into a Java native test launcher	PSU
<a href="#">JDK-8295344</a>	17	Harden runtime/StackGuardPages/TestStackGuardPages.java	PSU
<a href="#">JDK-8295859</a>	17	Update Manual Test Groups	PSU
<a href="#">JDK-8296410</a>	11, 17	HttpClient throws java.io.IOException: no statuscode in response for HTTP2	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis		CPU/PSU
<a href="#">JDK-8296709</a>	17	<b>WARNING</b>	JNI call made without checking exceptions	PSU
<a href="#">JDK-8296718</a>	17	Refactor bootstrap Test Common Functionalities to test/lib/Utils		PSU
<a href="#">JDK-8296787</a>	17, 21	Unify debug printing format of X.509 cert serial numbers		PSU
<a href="#">JDK-8296972</a>	17, 21	[macos13] java/awt/Frame/MaximizedToIconified/MaximizedToIconified.java: getExtendedState() != 6 as expected.		PSU
<a href="#">JDK-8298513</a>	17	vmTestbase/nsk/jdi/EventSet/suspendPolicy/suspendpolicy009/TestDescription.java fails with usage tracker		PSU
<a href="#">JDK-8299234</a>	17	JMX Repository.query performance		PSU
<a href="#">JDK-8299254</a>	11	Support dealing with standard assert macro		PSU
<a href="#">JDK-8299813</a>	23	java/nio/channels/DatagramChannel/Disconnect.java fails with jtreg test timeout due to lost datagram		PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
<a href="#">JDK-8300416</a>	17	java.security.MessageDigestSpi clone can result in thread-unsafe clones	PSU
<a href="#">JDK-8301379</a>	17	Verify TLS_ECDH_* cipher suites cannot be negotiated	PSU
<a href="#">JDK-8302111</a>	23	Serialization considerations	PSU
<a href="#">JDK-8302225</a>	17	SunJCE Provider doesn't validate key sizes when using 'constrained' transforms for AES/KW and AES/KWP	PSU
<a href="#">JDK-8303697</a>	17	ProcessTools doesn't print last line of process output	PSU
<a href="#">JDK-8303705</a>	17	Field sleeper.started should be volatile JdbLockTestTarg.java	PSU
<a href="#">JDK-8303742</a>	17	CompletableFuture.orTimeout leaks if the future completes exceptionally	PSU
<a href="#">JDK-8303920</a>	11	Avoid calling out to python in DataDescriptorSignatureMissing test	PSU
<a href="#">JDK-8303965</a>	11, 17	java.net.http.HttpClient should reset the stream if response headers contain malformed header fields	PSU



OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
<a href="#">JDK-8304020</a>	17	Speed up test/jdk/java/util/zip/ZipFile/TestTooManyEntries.java and clarify its purpose	PSU
<a href="#">JDK-8304557</a>	17	java/util/concurrent/CompletableFuture/CompletableFutureOrTimeoutExceptionallyTest.java times out	PSU
<a href="#">JDK-8306015</a>	17	Update sun.security.ssl TLS tests to use SSLContextTemplate or SSLEngineTemplate	PSU
<a href="#">JDK-8306446</a>	21	java/lang/management/ThreadMXBean/Locks.java transient failures	PSU
<a href="#">JDK-8307297</a>	17	Move some DnD tests to open	PSU
<a href="#">JDK-8307408</a>	17	Some jdk/sun/tools/jhsdb tests don't pass test JVM args to the debuggee JVM	PSU
<a href="#">JDK-8308429</a>	21	jvmti/StopThread/stopthrd007 failed with "NoClassDefFoundError: Could not initialize class jdk.internal.misc.VirtualThreads"	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
<a href="#">JDK-8309109</a>	17	AArch64: [TESTBUG] compiler/intrinsics/sha/cli/TestUseSHA3IntrinsicsOptionOnSupportedCPU.java fails on Neoverse N2 and V1	PSU
<a href="#">JDK-8309218</a>	21	java/util/concurrent/locks/Lock/OOMEInAQS.java still times out with ZGC, Generational ZGC, and SerialGC	PSU
<a href="#">JDK-8309303</a>	17	jdk/internal/misc/VM/RuntimeArguments test ignores jdk/internal/vm/options	PSU
<a href="#">JDK-8309532</a>	17	java/lang/Class/getDeclaredField/FieldSetAccessibleTest should filter modules that depend on JVMCI	PSU
<a href="#">JDK-8310072</a>	17	JComboBox/DisabledComboBoxFontTest Auto: Enabled and disabled ComboBox does not match in these LAFs: GTK+	PSU
<a href="#">JDK-8310731</a>	17	Configure a javax.net.ssl.SNIMatcher for the HTTP/1.1 test servers in java/net/httpclient tests	PSU
<a href="#">JDK-8311301</a>	21	MethodExitTest may fail with stack buffer overrun	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
<a href="#">JDK-8311656</a>	21	Shenandoah: Unused ShenandoahSATBAndRemarkThreadsClosure::_claim_token	PSU
<a href="#">JDK-8312111</a>	17	open/test/jdk/java/awt/Robot/ModifierRobotKey/ModifierRobotKeyTest.java fails on ubuntu 23.04	PSU
<a href="#">JDK-8312518</a>	21	[macos13] setFullScreenWindow() shows black screen on macOS 13 & above	PSU
<a href="#">JDK-8313626</a>	8	C2 crash due to unexpected exception control flow	PSU
<a href="#">JDK-8313638</a>	17	Add test for dump of resolved references	PSU
<a href="#">JDK-8313854</a>	17	Some tests in serviceability area fail on localized Windows platform	PSU
<a href="#">JDK-8313878</a>	17, 21	Exclude two compiler/rtm/locking tests on ppc64le	PSU
<a href="#">JDK-8314333</a>	17	Update com/sun/jdi/ProcessAttachTest.java to use ProcessTools.createTestJvm(..)	PSU
<a href="#">JDK-8314824</a>	17	Fix serviceability/jvmti/8036666/GetObjectLockCount.java to use vm flags	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
<a href="#">JDK-8314829</a>	17	serviceability/sa/jmap-hprof/JMapHProfLargeHeapTest.java ignores vm flags	PSU
<a href="#">JDK-8314831</a>	17	NMT tests ignore vm flags	PSU
<a href="#">JDK-8315097</a>	17	Rename createJavaProcessBuilder	PSU
<a href="#">JDK-8315406</a>	17	[REDO] serviceability/jdwp/AllModulesCommandTest.java ignores VM flags	PSU
<a href="#">JDK-8315701</a>	21	[macos] Regression: KeyEvent has different keycode on different keyboard layouts	PSU
<a href="#">JDK-8315731</a>	8	Open source several Swing Text related tests	PSU
<a href="#">JDK-8315936</a>	11	Parallelize gc/stress/TestStressG1Humongous.java test	PSU
<a href="#">JDK-8315988</a>	17	Parallel: Make TestAggressiveHeap use createTestJvm	PSU
<a href="#">JDK-8316193</a>	11	jdk/jfr/event/oldobject/TestListenerLeak.java java.lang.Exception: Could not find leak	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
<a href="#">JDK-8316410</a>	17	GC: Make TestCompressedClassFlags use createTestJvm	PSU
<a href="#">JDK-8316428</a>	21	G1: Nmethod count statistics only count last code root set iterated	PSU
<a href="#">JDK-8316446</a>	17	4 sun/management/jdp tests ignore VM flags	PSU
<a href="#">JDK-8316447</a>	17	8 sun/management/jmxremote tests ignore VM flags	PSU
<a href="#">JDK-8316464</a>	17	3 sun/tools tests ignore VM flags	PSU
<a href="#">JDK-8316562</a>	17	serviceability/sa/jmap-hprof/JMapHProfLargeHeapTest.java times out after JDK-8314829	PSU
<a href="#">JDK-8316581</a>	17	Improve performance of Symbol::print_value_on()	PSU
<a href="#">JDK-8316895</a>	21	SeenThread::print_action_queue called on a null pointer	PSU
<a href="#">JDK-8316907</a>	21	Fix nonnull-compare warnings	PSU
<a href="#">JDK-8317042</a>	17	G1: Make TestG1ConcMarkStepDurationMillis use createTestJvm	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
<a href="#">JDK-8317116</a>	17, 21, 23	Provide layouts for multiple test UI in PassFailJFrame	PSU
<a href="#">JDK-8317188</a>	17	G1: Make TestG1ConcRefinementThreads use createTestJvm	PSU
<a href="#">JDK-8317218</a>	17	G1: Make TestG1HeapRegionSize use createTestJvm	PSU
<a href="#">JDK-8317347</a>	17	Parallel: Make TestInitialTenuringThreshold use createTestJvm	PSU
<a href="#">JDK-8317575</a>	21	AArch64: C2_MacroAssembler::fast_lock uses rscratch1 for cmpxchg result	PSU
<a href="#">JDK-8317738</a>	17	CodeCacheFullCountTest failed with "VirtualMachineError: Out of space in CodeCache for method handle intrinsic"	PSU
<a href="#">JDK-8318105</a>	21	[jmh] the test java.security.HSS failed with 2 active threads	PSU
<a href="#">JDK-8318442</a>	21	java/net/httpclient/ManyRequests2.java fails intermittently on Linux	PSU
<a href="#">JDK-8318964</a>	17	Fix build failures caused by 8315097	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
<a href="#">JDK-8319574</a>	17	Exec/process tests should be marked as flagless	PSU
<a href="#">JDK-8319640</a>	17, 21	ClassicFormat::parseObject (from DateTimeFormatter) does not conform to the javadoc and may leak DateTimeException	PSU
<a href="#">JDK-8319651</a>	17	Several network tests ignore vm flags when start java process	PSU
<a href="#">JDK-8319673</a>	21	Few security tests ignore VM flags	PSU
<a href="#">JDK-8319678</a>	21	Several tests from corelibs areas ignore VM flags	PSU
<a href="#">JDK-8319817</a>	17	Charset constructor should make defensive copy of aliases	PSU
<a href="#">JDK-8319933</a>	23	Disable tests for JDK-8280481 on Graal	PSU
<a href="#">JDK-8319960</a>	21	RISC-V: compiler/intrinsics/TestInteger/LongUnsignedDivMod.java failed with "counts: Graph contains wrong number of nodes"	PSU
<a href="#">JDK-8319970</a>	21	AArch64: enable tests compiler/intrinsics/Test(Long Integer)UnsignedDivMod.java on aarch64	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
<a href="#">JDK-8319973</a>	21	AArch64: Save and restore FPCR in the call stub	PSU
<a href="#">JDK-8320192</a>	21	SHAKE256 does not work correctly if n >= 137	PSU
<a href="#">JDK-8320397</a>	21	RISC-V: Avoid passing t0 as temp register to MacroAssembler: cmpxchg_obj_header/cmpxchgptr	PSU
<a href="#">JDK-8320575</a>	21	generic type information lost on mandated parameters of record's compact constructors	PSU
<a href="#">JDK-8320586</a>	17, 21	update manual test/jdk/TEST.groups	PSU
<a href="#">JDK-8320665</a>	17, 21	update jdk_core at open/test/jdk/TEST.groups	PSU
<a href="#">JDK-8320673</a>	17, 21	PageFormat/CustomPaper.java has no Pass/Fail buttons; multiple instructions	PSU
<a href="#">JDK-8320675</a>	17	PrinterJob/SecurityDialogTest.java hangs	PSU
<a href="#">JDK-8320682</a>	21	[AArch64] C1 compilation fails with "Field too big for insn"	PSU
<a href="#">JDK-8320892</a>	21	AArch64: Restore FPU control state after JNI	PSU



OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
<a href="#">JDK-8321163</a>	17	[test] OutputAnalyzer.getExitValue() unnecessarily logs even when process has already completed	PSU
<a href="#">JDK-8321299</a>	17, 21	runtime/logging/ClassLoadUnloadTest.java doesn't reliably trigger class unloading	PSU
<a href="#">JDK-8321470</a>	17, 21	ThreadLocal.nextHashCode can be static final	PSU
<a href="#">JDK-8321474</a>	21	TestAutoCreateSharedArchiveUpgrade.java should be updated with JDK 21	PSU
<a href="#">JDK-8321509</a>	23	False positive in get_trampoline fast path causes crash	PSU
<a href="#">JDK-8321543</a>	17, 21	Update NSS to version 3.96	PSU
<a href="#">JDK-8321550</a>	21	Update several runtime/cds tests to use vm flags or mark as flagless	PSU
<a href="#">JDK-8321616</a>	17, 21	Retire binary test vectors in test/jdk/java/util/zip/ZipFile	PSU
<a href="#">JDK-8321940</a>	21	Improve CDSHeapVerifier in handling of interned strings	PSU
<a href="#">JDK-8322166</a>	21	Files.isReadable/isWritable/isExecutable expensive when file does not exist	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
<a href="#">JDK-8322754</a>	17, 21	click JComboBox when dialog about to close causes IllegalComponentStateException	PSU
<a href="#">JDK-8322766</a>	17	Micro bench SSLHandshake should use default algorithms	PSU
<a href="#">JDK-8322809</a>	17, 21	SystemModulesMap::classNames and moduleNames arrays do not match the order	PSU
<a href="#">JDK-8322830</a>	17, 21	Add test case for ZipFile opening a ZIP with no entries	PSU
<a href="#">JDK-8323562</a>	17, 21	SaslInputStream.read() may return wrong value	PSU
<a href="#">JDK-8323688</a>	17, 21, 23	C2: Fix UB of jlong overflow in PhaseldealLoop::is_counted_loop()	PSU
<a href="#">JDK-8324672</a>	23	Update jdk/java/time/tck/java/time/TCKInstant.java now() to be more robust	PSU
<a href="#">JDK-8324808</a>	17	Manual printer tests have no Pass/Fail buttons, instructions close set 3	PSU
<a href="#">JDK-8324841</a>	17, 21	PKCS11 tests still skip execution	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
<a href="#">JDK-8324861</a>	21	Exceptions::wrap_dynamic_exception() doesn't have ResourceMark	PSU
<a href="#">JDK-8325038</a>	17, 21	runtime/cds/appcnds/ProhibitedPackage.java can fail with UseLargePages	PSU
<a href="#">JDK-8325399</a>	21	Add tests for virtual threads doing Selector operations	PSU
<a href="#">JDK-8325506</a>	21	Ensure randomness is only read from provided SecureRandom object	PSU
<a href="#">JDK-8325525</a>	17, 21, 23	Create jtreg test case for JDK-8325203	PSU
<a href="#">JDK-8325587</a>	17	Shenandoah: ShenandoahLock should allow blocking in VM	PSU
<a href="#">JDK-8325610</a>	17, 21	CTW: Add StressIncrementalInlining to stress options	PSU
<a href="#">JDK-8325616</a>	17	JFR ZGC Allocation Stall events should record stack traces	PSU
<a href="#">JDK-8325762</a>	17, 21	Use PassFailJFrame.Builder.splitUI() in PrintLatinCJKTest.java	PSU
<a href="#">JDK-8325851</a>	17, 21	Hide PassFailJFrame.Builder constructor	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
<a href="#">JDK-8325906</a>	21	Problemlist vmTestbase/vm/mlvm/meth/stress/compiler/deoptimize/Test.java#id1 until JDK-8320865 is fixed	PSU
<a href="#">JDK-8325937</a>	23	runtime/handshake/HandshakeDirectTest.java causes "monitor end should be strictly below the frame pointer" assertion failure on AArch64	PSU
<a href="#">JDK-8326100</a>	17, 21	DeflaterDictionaryTests should use Deflater.getBytesWritten instead of Deflater.getTotalOut	PSU
<a href="#">JDK-8326121</a>	17, 21	vmTestbase/gc/g1/unloading/tests/unloading_keepRef_rootClass_inMemoryCompilation_keep_cl failed with Full gc happened. Test was useless.	PSU
<a href="#">JDK-8326611</a>	17, 21	Clean up vmTestbase/nsk/stress/stack tests	PSU
<a href="#">JDK-8326616</a>	23	tools/javac/patterns/Exhaustiveness.java intermittently Timeout signalled after 480 seconds	PSU
<a href="#">JDK-8326898</a>	17, 21	NSK tests should listen on loopback addresses only	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
<a href="#">JDK-8326948</a>	17	Force English locale for timeout formatting	PSU
<a href="#">JDK-8327401</a>	17	Some jtreg tests fail on Wayland without any tracking bug	PSU
<a href="#">JDK-8327474</a>	17	Review use of java.io.tmpdir in jdk tests	PSU
<a href="#">JDK-8327924</a>	17, 21	Simplify TrayIconScalingTest.java	PSU
<a href="#">JDK-8328021</a>	17, 21	Convert applet test java/awt/List/SetFontTest/SetFontTest.html to main program	PSU
<a href="#">JDK-8328242</a>	17, 21	Add a log area to the PassFailJFrame	PSU
<a href="#">JDK-8328300</a>	11	Convert PrintDialogsTest.java from Applet to main program	PSU
<a href="#">JDK-8328303</a>	17, 21	3 JDI tests timed out with UT enabled	PSU
<a href="#">JDK-8328379</a>	17, 21	Convert URLDragTest.html applet test to main	PSU
<a href="#">JDK-8328402</a>	17, 21	Implement pausing functionality for the PassFailJFrame	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
<a href="#">JDK-8328619</a>	17, 21	sun/management/jmxremote/bootstrap/SSLConfigFilePermissionTest.java failed with BindException: Address already in use	PSU
<a href="#">JDK-8328642</a>	11	Convert applet test MouseDraggedOutCauseScrollingTest.html to main	PSU
<a href="#">JDK-8328665</a>	21	serviceability/jvmti/vthread/PopFrameTest failed with a timeout	PSU
<a href="#">JDK-8328697</a>	17	SubMenuShowTest and SwallowKeyEvents tests stabilization	PSU
<a href="#">JDK-8328895</a>	21, 23	JFileChooser is very slow to open folders with many files	PSU
<a href="#">JDK-8328957</a>	17	Update PKCS11Test.java to not use hardcoded path	PSU
<a href="#">JDK-8329353</a>	21	ResolvedReferencesNotNullTest.java failed with Incorrect resolved references array, quxString should not be archived	PSU
<a href="#">JDK-8329533</a>	21	TestCDSVMCrash fails on libgraal	PSU
<a href="#">JDK-8330278</a>	17, 21	Have SSLSocketTemplate.doClientSide use loopback address	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
<a href="#">JDK-8330464</a>	17	hserr generic events - add entry for the before_exit calls	PSU
<a href="#">JDK-8330621</a>	17, 21	Make 5 compiler tests use ProcessTools.executeProcess	PSU
<a href="#">JDK-8330702</a>	23	Update failure handler to don't generate Error message if cores actions are empty	PSU
<a href="#">JDK-8330814</a>	17	Cleanups for KeepAliveCache tests	PSU
<a href="#">JDK-8331142</a>	17	Add test for number of loader threads in BasicDirectoryModel	PSU
<a href="#">JDK-8331391</a>	17, 21, 23	Enhance the keytool code by invoking the buildTrustedCerts method for essential options	PSU
<a href="#">JDK-8331393</a>	21	AArch64: u32 _partial_subtype_ctr loaded/stored as 64	PSU
<a href="#">JDK-8331405</a>	17	Shenandoah: Optimize ShenandoahLock with TTAS	PSU
<a href="#">JDK-8331411</a>	17, 23	Shenandoah: Reconsider spinning duration in ShenandoahLock	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
<a href="#">JDK-8331495</a>	17	Limit BasicDirectoryModel/LoaderThreadCount.java to Windows only	PSU
<a href="#">JDK-8331626</a>	17	unsafe.cpp:162:38: runtime error in index_oop_from_field_offset_long - applying non-zero offset 4563897424 to null pointer	PSU
<a href="#">JDK-8331789</a>	17	ubsan: deoptimization.cpp:403:29: runtime error: load of value 208, which is not a valid value for type 'bool'	PSU
<a href="#">JDK-8331863</a>	17	DUIterator_Fast used before it is constructed	PSU
<a href="#">JDK-8331864</a>	17, 21	Update Public Suffix List to 1cbd6e7	PSU
<a href="#">JDK-8331999</a>	17	BasicDirectoryModel/LoaderThreadCount.java frequently fails on Windows in CI	PSU
<a href="#">JDK-8332112</a>	21	Update nsk.share.Log to don't print summary during VM shutdown hook	PSU
<a href="#">JDK-8332113</a>	23	Update nsk.share.Log to be always verbose	PSU
<a href="#">JDK-8332340</a>	17, 21	Add JavacBench as a test case for CDS	PSU



OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
<a href="#">JDK-8332461</a>	21, 23	ubsan : dependencies.cpp:906:3: runtime error: load of value 4294967295, which is not a valid value for type 'DepType'	PSU
<a href="#">JDK-8332473</a>	17	ubsan: growableArray.hpp:290:10: runtime error: null pointer passed as argument 1, which is declared to never be null	PSU
<a href="#">JDK-8332524</a>	23	Instead of printing "TLSv1.3," it is showing "TLS13"	PSU
<a href="#">JDK-8332589</a>	17	ubsan: unix/native/libjava/ProcessImpl_md.c:562:5: runtime error: null pointer passed as argument 2, which is declared to never be null	PSU
<a href="#">JDK-8332697</a>	23	ubsan: shenandoahSimpleBitMap.inline.hpp:68:23: runtime error: signed integer overflow: -9223372036854775808 - 1 cannot be represented in type 'long int'	PSU
<a href="#">JDK-8332699</a>	23	ubsan: jfrEventSetting.inline.hpp:31:43: runtime error: index 163 out of bounds for type 'jfrNativeEventSetting [162]'	PSU

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<a href="#">JDK-8332720</a>	17	ubsan: instanceKlass.cpp:3550:76: runtime error: member call on null pointer of type 'struct Array'	PSU
<a href="#">JDK-8332724</a>	17, 21	x86 MacroAssembler may over-align code	PSU
<a href="#">JDK-8332777</a>	17, 21	Update JCTest suite	PSU
<a href="#">JDK-8332818</a>	23	ubsan: archiveHeapLoader.cpp:70:27: runtime error: applying non-zero offset 18446744073707454464 to null pointer	PSU
<a href="#">JDK-8332825</a>	17	ubsan: guardedMemory.cpp:35:11: runtime error: null pointer passed as argument 2, which is declared to never be null	PSU
<a href="#">JDK-8332866</a>	17, 21	Crash in ImageIO JPEG decoding when MEM_STATS is enabled	PSU
<a href="#">JDK-8332901</a>	17, 21, 23	Select{Current,New}ItemTest.java for Choice don't open popup on macOS	PSU
<a href="#">JDK-8332903</a>	17, 23	ubsan: opto/output.cpp:1002:18: runtime error: load of value 171, which is not a valid value for type 'bool'	PSU

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<a href="#">JDK-8332904</a>	17	ubsan ppc64le: c1_LIRGenerator_ppc.cpp:581:21: runtime error: signed integer overflow: 9223372036854775807 + 1 cannot be represented in type 'long int'	PSU
<a href="#">JDK-8332935</a>	17	Crash: assert(*lastPtr != 0) failed: Mismatched JNINativeInterface tables, check for new entries	PSU
<a href="#">JDK-8333088</a>	23	ubsan: shenandoahAdaptiveHeuristics.cpp:245:4 4: runtime error: division by zero	PSU
<a href="#">JDK-8333098</a>	21, 23	ubsan: bytecodeInfo.cpp:318:59: runtime error: division by zero	PSU
<a href="#">JDK-8333108</a>	21	Update vmTestbase/nsk/share/DebuggeeProcess.java to don't use finalization	PSU
<a href="#">JDK-8333144</a>	21	docker tests do not work when ubsan is configured	PSU
<a href="#">JDK-8333235</a>	21	vmTestbase/nsk/jdb/kill/kill001/kill001.java fails with C1	PSU

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<a href="#">JDK-8333248</a>	21, 23	VectorGatherMaskFoldingTest.java failed when maximum vector bits is 64	PSU
<a href="#">JDK-8333277</a>	23	ubsan: mlib_ImageScanPoly.c:292:43: runtime error: division by zero	PSU
<a href="#">JDK-8333306</a>	23	gc/arguments/TestParallelGCergo.java fails when largepage are enabled	PSU
<a href="#">JDK-8333317</a>	17, 21, 23	Test sun/security/pkcs11/sslecc/ClientJSSEServerJSSE.java failed with: Invalid ECDH ServerKeyExchange signature	PSU
<a href="#">JDK-8333354</a>	23	ubsan: frame.inline.hpp:91:25: and src/hotspot/share/runtime/frame.inline.hpp:88:29: runtime error: member call on null pointer of type 'const struct SmallRegisterMap'	PSU
<a href="#">JDK-8333361</a>	23	ubsan,test : libHeapMonitorTest.cpp:518:9: runtime error: null pointer passed as argument 2, which is declared to never be null	PSU
<a href="#">JDK-8333363</a>	23	ubsan: instanceKlass.cpp: runtime error: member call on null pointer of type 'struct AnnotationArray'	PSU

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<a href="#">JDK-8333391</a>	23	Test com/sun/jdi/InterruptHangTest.java failed: Thread was never interrupted during sleep	PSU
<a href="#">JDK-8333427</a>	21	langtools/tools/javac/newlines/NewLineTest.java is failing on Japanese Windows	PSU
<a href="#">JDK-8333522</a>	23	JFR SwapSpace event might read wrong free swap space size	PSU
<a href="#">JDK-8333639</a>	23	ubsan: cppVtables.cpp:81:55: runtime error: index 14 out of bounds for type 'long int [1]'	PSU
<a href="#">JDK-8333652</a>	23	RISC-V: compiler/vectorapi/VectorGatherMaskFoldingTest.java fails when using RVV	PSU
<a href="#">JDK-8333716</a>	23	Shenandoah: Check for disarmed method before taking the nmethod lock	PSU
<a href="#">JDK-8333728</a>	21, 23	ubsan: shenandoahFreeSet.cpp:1347:24: runtime error: division by zero	PSU

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<a href="#">JDK-8333730</a>	23	ubsan: FieldIndices/libFieldIndicesTest.cpp:276:1 1: runtime error: null pointer passed as argument 2, which is declared to never be null	PSU
<a href="#">JDK-8333754</a>	21, 23	Add a Test against ECDSA and ECDH NIST Test vector	PSU
<a href="#">JDK-8333791</a>	23	Fix memory barriers for @Stable fields	PSU
<a href="#">JDK-8333824</a>	17, 21, 23	Unused ClassValue in VarHandles	PSU
<a href="#">JDK-8333887</a>	23	ubsan: unsafe.cpp:247:13: runtime error: store to null pointer of type 'volatile int'	PSU
<a href="#">JDK-8334057</a>	17, 21, 23	JLinkReproducibleTest.java support receive test.tool.vm.opts	PSU
<a href="#">JDK-8334123</a>	23	log the opening of Type 1 fonts	PSU
<a href="#">JDK-8334147</a>	23	Shenandoah: Avoid taking lock for disabled free set logging	PSU
<a href="#">JDK-8334229</a>	23	Optimize InterpreterOopMap layout	PSU
<a href="#">JDK-8334239</a>	23	Introduce macro for ubsan method/function exclusions	PSU

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<a href="#">JDK-8334332</a>	11	TestIOException.java fails if run by root	PSU
<a href="#">JDK-8334405</a>	17, 21, 23	java/nio/channels/Selector/SelectWithConsumer.java#id0 failed in testWakeupDuringSelect	PSU
<a href="#">JDK-8334475</a>	21	UnsafeIntrinsicsTest.java#ZGenerationalDebug assert(!assert_on_failure) failed: Has low-order bits set	PSU
<a href="#">JDK-8334482</a>	23	Shenandoah: Deadlock when safepoint is pending during nmethods iteration	PSU
<a href="#">JDK-8334560</a>	21, 23	[PPC64]: postalloc_expand_java_dynamic_call_scheduled does not copy all fields	PSU
<a href="#">JDK-8334562</a>	17, 21, 23	Automate com/sun/security/auth/callback/TextCallbackHandler/Default.java test	PSU
<a href="#">JDK-8334564</a>	23	VM startup: fatal error: FLAG_SET_ERGO cannot be used to set an invalid value for NonNMethodCodeHeapSize	PSU
<a href="#">JDK-8334567</a>	17, 21, 23	[test] runtime/os/TestTracePageSizes move ppc handling	PSU
<a href="#">JDK-8334653</a>	23	ISO 4217 Amendment 177 Update	PSU

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<a href="#">JDK-8334719</a>	21	(se) Deferred close of SelectableChannel may result in a Selector doing the final close before concurrent I/O on channel has completed	PSU
<a href="#">JDK-8334769</a>	23	Shenandoah: Move CodeCache_lock close to its use in ShenandoahConcurrentNMethodIterator	PSU
<a href="#">JDK-8335007</a>	23	Inline OopMapCache table	PSU
<a href="#">JDK-8335142</a>	17, 21, 23	compiler/c1/TestTraceLinearScanLevel.java occasionally times out with -Xcomp	PSU
<a href="#">JDK-8335150</a>	23	Test LogGeneratedClassesTest.java fails on rpmbuild mock environment	PSU
<a href="#">JDK-8335172</a>	21, 23	Add manual steps to run security/auth/callback/TextCallbackHandler/Password.java test	PSU
<a href="#">JDK-8335237</a>	23	ubsan: vtableStubs.hpp is_vtable_stub exclude from ubsan checks	PSU
<a href="#">JDK-8335267</a>	17, 21, 23	[XWayland] move screencast tokens from .awt to .java folder	PSU
<a href="#">JDK-8335283</a>	23	Build failure due to 'no_sanitize' attribute directive ignored	PSU



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<a href="#">JDK-8335344</a>	17, 21, 23	test/jdk/sun/security/tools/keytool/NssTest.java fails to compile	PSU
<a href="#">JDK-8335397</a>	23	Improve reliability of TestRecursiveMonitorChurn.java	PSU
<a href="#">JDK-8335449</a>	17, 21, 23	runtime/cds/DeterministicDump.java fails with File content different at byte ...	PSU
<a href="#">JDK-8335493</a>	17, 23	check_gc_overhead_limit should reset SoftRefPolicy::_should_clear_all_soft_refs	PSU
<a href="#">JDK-8335530</a>	17, 21, 23	Java file extension missing in AuthenticatorTest	PSU
<a href="#">JDK-8335536</a>	23	Fix assertion failure in IdealGraphPrinter when append is true	PSU
<a href="#">JDK-8335664</a>	21, 23	Parsing jsr broken: assert(bci >= 0 && bci < cmethod().code_size()) failed: index out of bounds	PSU
<a href="#">JDK-8335709</a>	17, 21, 23	C2: assert(!loop.is_member(get_loop(useblock))) failed: must be outside loop	PSU
<a href="#">JDK-8335743</a>	23	jhsdb jstack cannot print some information on the waiting thread	PSU

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<a href="#">JDK-8335775</a>	23	Remove extraneous 's' in comment of rawmonitor.cpp test file	PSU
<a href="#">JDK-8335789</a>	23	[TESTBUG] XparColor.java test fails with Error. Parse Exception: Invalid or unrecognized bugid: @	PSU
<a href="#">JDK-8335904</a>	17, 23	Fix invalid comment in ShenandoahLock	PSU
<a href="#">JDK-8336148</a>	23	Test runtime/locking/TestRecursiveMonitorChurn.java failed: Unexpected Inflation	PSU
<a href="#">JDK-8336240</a>	17, 21, 23	Test com/sun/crypto/provider/Cipher/DES/PerformanceTest.java fails with java.lang.ArithmeticException	PSU
<a href="#">JDK-8336257</a>	17, 21	Additional tests in jmxremote/startstop to match on PID not app name	PSU
<a href="#">JDK-8336284</a>	23	Test TestClhsdbJstackLock.java/TestJhsdbJstackLock.java fails with -Xcomp after JDK-8335743	PSU

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<a href="#">JDK-8336301</a>	23	test/jdk/java/nio/channels/AsyncCloseAndInterrupt.java leaves around a FIFO file upon test completion	PSU
<a href="#">JDK-8336315</a>	17, 21, 23	tools/jpackage/windows/WinChildProcessTest.java Failed: Check is calculator process is alive	PSU
<a href="#">JDK-8336413</a>	17, 21, 23	gtk headers : Fix typedef redeclaration of GMainContext and GdkPixbuf	PSU
<a href="#">JDK-8336640</a>	21, 23	Shenandoah: Parallel worker use in parallel_heap_region_iterate	PSU
<a href="#">JDK-8336692</a>	23	Redo fix for JDK-8284620	PSU
<a href="#">JDK-8336854</a>	17, 21, 23	CAInterop.java#actalisauthenticationrootca conflicted with /manual and /timeout	PSU
<a href="#">JDK-8336911</a>	21	ZGC: Division by zero in heuristics after JDK-8332717	PSU
<a href="#">JDK-8336914</a>	23	Shenandoah: Missing verification steps after JDK-8255765	PSU
<a href="#">JDK-8336926</a>	23	jdk/internal/util/ReferencedKeyTest.java can fail with ConcurrentModificationException	PSU

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<a href="#">JDK-8336942</a>	23	Improve test coverage for class loading elements with annotations of different retentions	PSU
<a href="#">JDK-8337066</a>	17, 21, 23	Repeated call of StringBuffer.reverse with double byte string returns wrong result	PSU
<a href="#">JDK-8337067</a>	21, 23	Test runtime/classFileParserBug/Bad_NCDFE_Msg.java won't compile	PSU
<a href="#">JDK-8337124</a>	21	(fs) sun.nio.fs.WindowsSecurity.enablePrivilege should pin when continuations supported	PSU
<a href="#">JDK-8337320</a>	17, 21, 23	Update ProblemList.txt with tests known to fail on XWayland	PSU
<a href="#">JDK-8337331</a>	21, 23	crash: pinned virtual thread will lead to jvm crash when running with the javaagent option	PSU
<a href="#">JDK-8337410</a>	17, 21	The makefiles should set problemlist and adjust timeout basing on the given VM flags	PSU

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<a href="#">JDK-8337622</a>	23	IllegalArgumentException in java.lang.reflect.Field.get	PSU
<a href="#">JDK-8337664</a>	23	Distrust TLS server certificates issued after Oct 2024 and anchored by Entrust Root CAs	PSU
<a href="#">JDK-8337753</a>	23	Target class of upcall stub may be unloaded	PSU
<a href="#">JDK-8337780</a>	17, 21, 23	RISC-V: C2: Change C calling convention for sp to NS	PSU
<a href="#">JDK-8337795</a>	23	Type annotation attached to incorrect type during class reading	PSU
<a href="#">JDK-8337810</a>	17, 21, 23	ProblemList BasicDirectoryModel/LoaderThreadCount. java on Windows	PSU
<a href="#">JDK-8337826</a>	21	Improve logging in OCSPTimeout and SimpleOCSPResponder to help diagnose JDK-8309754	PSU
<a href="#">JDK-8337851</a>	17, 21	Some tests have name which confuse jtreg	PSU
<a href="#">JDK-8337876</a>	21, 23	[IR Framework] Add support for IR tests with @Stable	PSU

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<a href="#">JDK-8337886</a>	23	java/awt/Frame/MaximizeUndecoratedTest.java fails in OEL due to a slight color difference	PSU
<a href="#">JDK-8337958</a>	23	Out-of-bounds array access in secondary_super_cache	PSU
<a href="#">JDK-8337966</a>	17, 21	(fs) Files.readAttributes fails with Operation not permitted on older docker releases	PSU
<a href="#">JDK-8337968</a>	23	Problem list compiler/vectorapi/VectorRebracket128Test.java	PSU
<a href="#">JDK-8337971</a>	23	Problem list several jvmci tests on linux-riscv64 until JDK-8331704 is fixed	PSU
<a href="#">JDK-8337998</a>	23	CompletionFailure in getEnclosingType attaching type annotations	PSU
<a href="#">JDK-8338058</a>	17, 21, 23	map_or_reserve_memory_aligned Windows enhance remap assertion	PSU
<a href="#">JDK-8338101</a>	17, 21, 23	remove old remap assertion in map_or_reserve_memory_aligned after JDK-8338058	PSU

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<a href="#">JDK-8338109</a>	17, 21, 23	java/awt/Mouse/EnterExitEvents/Resizing FrameTest.java duplicate in ProblemList	PSU
<a href="#">JDK-8338110</a>	21, 23	Exclude Fingerprinter::do_type from ubsan checks	PSU
<a href="#">JDK-8338112</a>	21, 23	Test testlibrary_tests/ir_framework/tests/Test PrivilegedMode.java fails with release build	PSU
<a href="#">JDK-8338344</a>	21	Test TestPrivilegedMode.java intermittent fails java.lang.NoClassDefFoundError: jdk/test/lib/Platform	PSU
<a href="#">JDK-8338380</a>	17, 21, 23	Update TLSCommon/interop/AbstractServer to specify an interface to listen for connections	PSU
<a href="#">JDK-8338389</a>	21, 23	[JFR] Long strings should be added to the string pool	PSU
<a href="#">JDK-8338449</a>	21	ubsan: division by zero in sharedRuntimeTrans.cpp	PSU
<a href="#">JDK-8338550</a>	21	Do libubsan1 installation in test container only if requested	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
<a href="#">JDK-8338696</a>	23	(fs) BasicFileAttributes.creationTime() falls back to epoch if birth time is unavailable (Linux)	PSU
<a href="#">JDK-8338748</a>	17, 21	[17u,21u] Test Disconnect.java compile error: cannot find symbol after JDK-8299813	PSU
<a href="#">JDK-8338751</a>	17, 21, 23	ConfigureNotify behavior has changed in KWin 6.2	PSU
<a href="#">JDK-8338759</a>	17, 21, 23	Add extra diagnostic to java/net/InetAddress/ptr/Lookup.java	PSU
<a href="#">JDK-8338924</a>	21, 23	C1: assert(0 ≤ i && i < _len) failed: illegal index 5 for length 5	PSU
<a href="#">JDK-8339133</a>	8	[8u] Profiler crashes at guarantee(is_result_safe    is_in_asgct()): unsafe access to zombie method	PSU
<a href="#">JDK-8339154</a>	23	Cleanups and JUnit conversion of test/jdk/java/util/zip/Available.java	PSU
<a href="#">JDK-8339248</a>	17, 21, 23	RISC-V: Remove li64 macro assembler routine and related code	PSU
<a href="#">JDK-8339384</a>	17, 21, 23	Unintentional IOException in jdk.jdi module when JDWP end of stream occurs	PSU



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<a href="#">JDK-8339386</a>	21, 23	Assertion on AIX - original PC must be in the main code section of the compiled method	PSU
<a href="#">JDK-8339416</a>	21, 23	[s390x] Provide implementation for resolve_global_jobject	PSU
<a href="#">JDK-8339470</a>	11, 17	[17u] More defensive fix for 8163921	PSU
<a href="#">JDK-8339487</a>	17, 21, 23	ProcessHandleImpl os_getChildren sysctl call - retry in case of ENOMEM and enhance exception message	PSU
<a href="#">JDK-8339560</a>	17, 21, 23	Unaddressed comments during code review of JDK-8337664	PSU
<a href="#">JDK-8339648</a>	21, 23	ZGC: Division by zero in rule_major_allocation_rate	PSU
<a href="#">JDK-8339725</a>	21, 23	Concurrent GC crashed due to GetMethodDeclaringClass	PSU
<a href="#">JDK-8339731</a>	17, 21, 23	java.desktop/share/classes/javafx/swing/text/html/default.css typo in margin settings	PSU
<a href="#">JDK-8339741</a>	17, 21, 23	RISC-V: C ABI breakage for integer on stack	PSU

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<a href="#">JDK-8339787</a>	17, 21, 23	Add some additional diagnostic output to <code>java/net/ipv6tests/UdpTest.java</code>	PSU
<a href="#">JDK-8339882</a>	8	Replace <code>ThreadLocalStorage::thread</code> with <code>Thread::current_or_null</code> in jdk8 backport of JDK-8183925	PSU
<a href="#">JDK-8339892</a>	17, 21	Several security shell tests don't set <code>TESTJAVA_OPTS</code>	PSU
<a href="#">JDK-8339931</a>	17	Update problem list for <code>WindowUpdateFocusabilityTest.java</code>	PSU
<a href="#">JDK-8340007</a>	17, 21, 23	Refactor <code>KeyEvent/FunctionKeyTest.java</code>	PSU
<a href="#">JDK-8340008</a>	17, 21, 23	<code>KeyEvent/KeyTyped/Numpad1KeyTyped.java</code> has 15 seconds timeout	PSU
<a href="#">JDK-8340073</a>	23	Support "%z" time zone abbreviation format in TZ files	PSU
<a href="#">JDK-8340109</a>	21, 23	Ubsan: <code>ciEnv.cpp:1660:65: runtime error: member call on null pointer of type 'struct CompileTask'</code>	PSU
<a href="#">JDK-8340210</a>	17, 21, 23	Add <code>positionTestUI()</code> to <code>PassFailJFrame.Builder</code>	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
<a href="#">JDK-8340214</a>	21, 23	C2 compilation asserts with "no node with a side effect" in PhaseldealLoop::try_sink_out_of_loop	PSU
<a href="#">JDK-8340230</a>	17, 21, 23	Tests crash: assert(is_in_encoding_range    k␣is_interface()    k␣is_abstract()) failed: sanity	PSU
<a href="#">JDK-8340306</a>	17, 21, 23	Add border around instructions in PassFailJFrame	PSU
<a href="#">JDK-8340308</a>	17, 21, 23	PassFailJFrame: Make rows default to number of lines in instructions	PSU
<a href="#">JDK-8340313</a>	23	Crash due to invalid oop in nmethod after C1 patching	PSU
<a href="#">JDK-8340365</a>	17, 21, 23	Position the first window of a window list	PSU
<a href="#">JDK-8340383</a>	21, 23	VM issues warning failure to find kernel32.dll on Windows nanoserver	PSU
<a href="#">JDK-8340387</a>	17, 21, 23	Update OS detection code to recognize Windows Server 2025	PSU
<a href="#">JDK-8340398</a>	21, 23	[JVMCI] Unintuitive behavior of UseJVMCICompiler option	PSU
<a href="#">JDK-8340461</a>	17, 21, 23	Amend description for logArea	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
<a href="#">JDK-8340466</a>	17, 21, 23	Add description for PassFailJFrame constructors	PSU
<a href="#">JDK-8340586</a>	23	JdkJfrEvent::get_all_klasses stores non-strong oops in JNI handles	PSU
<a href="#">JDK-8340590</a>	21, 23	RISC-V: C2: Small improvement to vector gather load and scatter store	PSU
<a href="#">JDK-8340632</a>	17, 21	ProblemList java/nio/channels/DatagramChannel/ for MacOS	PSU
<a href="#">JDK-8340657</a>	17, 21, 23	[PPC64] SA determines wrong unextendedSP	PSU
<a href="#">JDK-8340684</a>	17, 21, 23	Reading from an input stream backed by a closed ZipFile has no test coverage	PSU
<a href="#">JDK-8340785</a>	17, 21, 23	Update description of PassFailJFrame and samples	PSU
<a href="#">JDK-8340799</a>	17, 21, 23	Add border inside instruction frame in PassFailJFrame	PSU
<a href="#">JDK-8340801</a>	21	Disable ubsan checks in some awt/2d coding	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
<a href="#">JDK-8340812</a>	17, 21, 23	LambdaForm customization via MethodHandle::updateForm is not thread safe	PSU
<a href="#">JDK-8340824</a>	23	C2: Memory for TypeInterfaces not reclaimed by hashcons()	PSU
<a href="#">JDK-8340899</a>	17, 21, 23	Remove wildcard bound in PositionWindows.positionTestWindows	PSU
<a href="#">JDK-8340923</a>	21, 23	The class LogSelection copies uninitialized memory	PSU
<a href="#">JDK-8341127</a>	23	Extra call to MethodHandle::asType from memory segment var handles fails to inline	PSU
<a href="#">JDK-8341146</a>	17, 21, 23	RISC-V: Unnecessary fences used for load-acquire in template interpreter	PSU
<a href="#">JDK-8341235</a>	17, 21, 23	Improve default instruction frame title in PassFailJFrame	PSU
<a href="#">JDK-8341261</a>	21, 23	Tests assume UnlockExperimentalVMOptions is disabled by default	PSU
<a href="#">JDK-8341554</a>	23	Shenandoah: Missing heap lock when updating usage for soft ref policy	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
<a href="#">JDK-8341562</a>	17, 21, 23	RISC-V: Generate comments in -XX:+PrintInterpreter to link to source code	PSU
<a href="#">JDK-8341635</a>	17	[17u] runtime/ErrorHandler/ClassPathEnvVar test ignores external VM flags	PSU
<a href="#">JDK-8341658</a>	23	RISC-V: Test DateFormatProviderTest.java run timed out	PSU
<a href="#">JDK-8341668</a>	23	Shenandoah: assert(tail_bits < (idx_t)BitsPerWord) failed: precondition	PSU
<a href="#">JDK-8341688</a>	17, 21, 23	Aarch64: Generate comments in -XX:+PrintInterpreter to link to source code	PSU
<a href="#">JDK-8341722</a>	21	Fix some warnings as errors when building on Linux with toolchain clang	PSU
<a href="#">JDK-8341881</a>	23	[REDO] java/nio/file/attribute/BasicFileAttributeView/CreationTime.java#tmp fails on alinux3	PSU
<a href="#">JDK-8341927</a>	17, 21	Replace hardcoded security providers with new test.provider.name system property	PSU
<a href="#">JDK-8341966</a>	23	Broken annotated module may lead to an exception in javac	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
<a href="#">JDK-8341997</a>	17, 21, 23	Tests create files in src tree instead of scratch dir	PSU
<a href="#">JDK-8342014</a>	21, 23	RISC-V: ZStoreBarrierStubC2 clobbers rflags	PSU
<a href="#">JDK-8342063</a>	21	[21u][aix] Backport introduced redundant line in ProblemList	PSU
<a href="#">JDK-8342145</a>	23	File libCreationTimeHelper.c compile fails on Alpine	PSU
<a href="#">JDK-8342181</a>	17, 21	Update tests to use stronger Key and Salt size	PSU
<a href="#">JDK-8342183</a>	17, 21	Update tests to use stronger algorithms and keys	PSU
<a href="#">JDK-8342188</a>	17, 21	Update tests to use stronger key parameters and certificates	PSU
<a href="#">JDK-8342409</a>	21	[s390x] C1 unwind_handler fails to unlock synchronized methods with LM_MONITOR	PSU
<a href="#">JDK-8342426</a>	11	[11u] javac/naming/module/RunBasic.java javac compile fails	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
<a href="#">JDK-8342489</a>	23	compiler/c2/irTests/TestVectorizationMismatchedAccess.java fails on big-endian platforms	PSU
<a href="#">JDK-8342496</a>	17, 21, 23	C2/Shenandoah: SEGV in compiled code when running jcstress	PSU
<a href="#">JDK-8342607</a>	21	Enhance register printing on x86_64 platforms	PSU
<a href="#">JDK-8342612</a>	23	Increase memory usage of compiler/c2/TestScalarReplacementMaxLiveNodes.java	PSU
<a href="#">JDK-8342669</a>	17, 21	[21u] Fix TestArrayAllocatorMallocLimit after backport of JDK-8315097	PSU
<a href="#">JDK-8342681</a>	17, 21, 23	TestLoadBypassesNullCheck.java fails improperly specified VM option	PSU
<a href="#">JDK-8342701</a>	17, 21, 23	[PPC64] TestOSRLotsOfLocals.java crashes	PSU
<a href="#">JDK-8342765</a>	21	[21u] RTM tests assume UnlockExperimentalVMOptions is disabled by default	PSU
<a href="#">JDK-8342822</a>	8	jdk8u432-b06 does not compile on AIX	PSU



OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
<a href="#">JDK-8342823</a>	21	Ubsan: ciEnv.cpp:1614:65: runtime error: member call on null pointer of type 'struct CompileTask'	PSU
<a href="#">JDK-8342905</a>	21, 23	Thread.setContextClassLoader from thread in FJP commonPool task no longer works after JDK-8327501 redux	PSU
<a href="#">JDK-8342962</a>	17, 21, 23	[s390x] TestOSRLotsOfLocals.java crashes	PSU
<a href="#">JDK-8343285</a>	17, 21	java.lang.Process is unresponsive and CPU usage spikes to 100%	PSU
<a href="#">JDK-8343506</a>	21	[s390x] multiple test failures with ubsan	PSU
<a href="#">JDK-8343687</a>	17	[17u] TestAntiDependencyForPinnedLoads requires UTF-8	PSU
<a href="#">JDK-8343724</a>	21	[PPC64] Disallow OptoScheduling	PSU
<a href="#">JDK-8343848</a>	17, 21	Fix typo of property name in TestOAEPPadding after 8341927	PSU
<a href="#">JDK-8343877</a>	17, 21	Test AsyncClose.java intermittent fails - Socket.getInputStream().read() wasn't preempted	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
<a href="#">JDK-8343884</a>	21	[s390x] Disallow OptoScheduling	PSU
<a href="#">JDK-8344164</a>	21	[s390x] ProblemList hotspot/jtreg/runtime/NMT/VirtualAllocCommitMerge.java	PSU
<a href="#">JDK-8344628</a>	21	Test TestEnableJVMCIProduct.java run with virtual thread intermittent fails	PSU
<a href="#">JDK-8344993</a>	21	[21u] [REDO] Backport JDK-8327501 and JDK-8328366 to JDK 21	PSU
<a href="#">JDK-8345055</a>	21	[21u] ProblemList failing rtm tests on ppc platforms	PSU

## OpenJFX Fixes and Enhancements

The following table describes the JavaFX changes implemented in this release.

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
<a href="#">JDK-8336939</a>	8, 11, 17	Update Glib to 2.80.4	CPU,PSU
<a href="#">JDK-8336940</a>	8, 11, 17	Update GStreamer to 1.24.6	CPU,PSU
<a href="#">JDK-8346228</a>	8, 11, 17, 21, 23	Update GStreamer to 1.24.10	CPU,PSU
<a href="#">JDK-8346229</a>	8, 11, 17, 21, 23	Update Glib to 2.82.4	CPU,PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
<a href="#">JDK-8295945</a>	8, 11, 17	Revert unintended change to copyright start year	PSU
<a href="#">JDK-8306328</a>	11	Update libFFI to 3.4.4	PSU
<a href="#">JDK-8311806</a>	11	Class ButtonAccessibility is implemented twice	PSU
<a href="#">JDK-8317508</a>	11	Provide media support for libavcodec version 60	PSU
<a href="#">JDK-8318388</a>	11	Update libxslt to 1.1.39	PSU
<a href="#">JDK-8331603</a>	8, 11, 17	Cleanup native AbstractSurface methods getRGBImpl, setRGBImpl	PSU
<a href="#">JDK-8331616</a>	17	ChangeListener is not triggered when the InvalidationListener is removed	PSU
<a href="#">JDK-8333374</a>	11, 17, 21, 23	Cannot invoke "com.sun.prism.RTTexture.contentsUseful()" because "this.txt" is null	PSU
<a href="#">JDK-8334124</a>	8, 11, 17	Rendering issues with CSS "text-shadow" in WebView	PSU
<a href="#">JDK-8335469</a>	21, 23	[XWayland] crash when an AWT ScreenCast session overlaps with an FX ScreenCast session	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
<a href="#">JDK-8336938</a>	8, 11	Update libFFI to 3.4.6	PSU
<a href="#">JDK-8336941</a>	8, 11	Update libxslt to 1.1.42	PSU
<a href="#">JDK-8337481</a>	8, 11, 17	File API: file.name contains path instead of name	PSU
<a href="#">JDK-8337827</a>	21, 23	[XWayland] Skip failing tests on Wayland	PSU
<a href="#">JDK-8338701</a>	8, 11	Provide media support for libavcodec version 61	PSU
<a href="#">JDK-8338886</a>	8, 11, 17	JavaFX debug builds fail on macOS	PSU
<a href="#">JDK-8340208</a>	8, 11, 21, 23	Additional WebKit 619.1 fixes from WebKitGTK 2.44.4	PSU
<a href="#">JDK-8340954</a>	21, 23	Add SECURITY.md file	PSU
<a href="#">JDK-8341920</a>	8, 11, 21, 23	Intermittent WebKit build failure on Windows generating PDB files in 619.1	PSU
<a href="#">JDK-8342917</a>	21, 23	GHA: Intermittent build failure on Linux while downloading ant	PSU
<a href="#">JDK-8343630</a>	11, 17, 21, 23	Pass AccessControlContext to/from WebKit as opaque object	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
<a href="#">JDK-8343760</a>	21, 23	GHA: macOS / aarch64 builds depend on Xcode 14 which will be removed	PSU

## Fixes and Enhancements Specific to Azul Zulu Builds of OpenJDK

The following table describes the Azul Zulu changes implemented in this release.

Issue ID	Azul Zulu Version	Synopsis	CPU/PSU
ZULU-60674	7	Change to Xcode 12.3 for building on macOS x86_64	CPU,PSU
ZULU-69000	8	Update OPENJFX_THIRD_PARTY_README with latest version of 3d party components.	CPU,PSU
ZULU-70248	8	Remove timezone links for HST/EST/MST	CPU,PSU
ZULU-70692	6, 7	[7u] TimeZone.getTimeZone(String) does not recognize HST with tzdata 2024b	CPU,PSU
ZULU-70702	6, 7	Test java/util/TimeZone/TimeZoneTest.java fails on all platforms	CPU,PSU
ZULU-71515	8	Update JFX to zulu8u441-b02	CPU,PSU
ZULU-71517	11	Update JFX to zulu19.0.9.0.101+101	CPU,PSU

Issue ID	Azul Zulu Version	Synopsis	CPU/PSU
ZULU-71519	17	Update JFX to zulu22.0.3.0.101+101	CPU,PSU
ZULU-71521	21	Update JFX to zulu23.0.1.0.101+101	CPU,PSU
ZULU-37081	N/A	Complete TPLs with 3rd-party	PSU
ZULU-56726	23	Support enabling JMX when it was not up before checkpoint	PSU
ZULU-60759	N/A	Warp ARM64 implementation	PSU
ZULU-62373	17, 21	Simplify CPUFeatures code	PSU
ZULU-67091	N/A	Improve CRS TPL processing	PSU
ZULU-68091	21, 23	Update JFX to zulu23.0.2+100	PSU
ZULU-68194	21	Update libffi staging build for win32	PSU
ZULU-68202	N/A	LibFFI should be component	PSU
ZULU-68664	8	OJREG QNX7.1 java/util/zip/ZipFile/ReadLongZipFileName.java	PSU
ZULU-68899	8	Clean up non-component FIPS code	PSU
ZULU-69188	17, 21, 23	Intermittent failure in crac-containers test	PSU

Issue ID	Azul Zulu Version	Synopsis	CPU/PSU
ZULU-69743	21	jdk21 libffi: foreign/capturecallstate/TestCaptureCallState.java foreign/trivial/TestTrivial.java	PSU
ZULU-69746	21	jdk21 libffi: foreign/TestIllegalLink.java	PSU
ZULU-69747	21	jdk21 libffi: foreign/TestVarArgs.java	PSU
ZULU-69784	N/A	Add full license text of OpenJDK 3rd-party components to SBOM	PSU
ZULU-69818	17, 21, 23	[CRaC] Massive crac test failures on recently updated Debian12 host	PSU
ZULU-70008	17	Conditionally disable a part of JDK-8182043 with a system property	PSU
ZULU-70018	21	fix \$WITH_LIBFFI	PSU
ZULU-70033	21	Add sanity check for MSVC compiler issue	PSU
ZULU-70038	21	libffi32: Remove a needless change in g1Arguments.cpp	PSU
ZULU-70039	21	\$WITH_LIBFFI: Use a release tag	PSU
ZULU-70189	8	Improve JNF TPL processing	PSU
ZULU-70494	11, 17	process fips tpls from component	PSU

Issue ID	Azul Zulu Version	Synopsis	CPU/PSU
ZULU-70743	8	remove WITH_FIPS from zulu8 dependencies	PSU
ZULU-71513	8	Update JFX to zulu8u442-b03	PSU
ZULU-71516	11	Update JFX to zulu19.0.10+102	PSU
ZULU-71518	17	Update JFX to zulu22.0.4+103	PSU
ZULU-71520	21, 23	Update JFX to zulu23.0.2+102	PSU

## Fixes and Enhancements Specific to Azul Zulu Builds of OpenJDK With JavaFX

There are no resolved issues specific to Azul Zulu Builds of OpenJDK With JavaFX associated with this release.



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