



Azul Zulu builds of OpenJDK

October 2024 Quarterly Update

Release Notes

Revision 1.1

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Revision History

Revision	Date	Description
0.1	October 15, 2024	Initial version of the document.
1.0	October 15, 2024	Added CVE info.
1.1	October 18, 2024	<ul style="list-style-type: none"> • Added missing issues to the OpenJDK table. • Added TPL for BSD-2-Clause used in CRaC Warp. • Extended description of the FIPS changes.

Release Details

This release is the October 2024 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	
23.30.13 (CA) 23.30.14 (SA)	PSU	23.0.1+11	23.28	23.0.0+37	23.0.1+102
21.37.12 (SA)	CPU	21.0.4.0.101+1	21.36	21.0.4+7	22.0.2.0.101+101
21.38.21 (CA) 21.38.22 (SA)	PSU	21.0.5+11	21.37	21.0.4.0.101+1	22.0.2+101
17.53.12 (SA)	CPU	17.0.12.0.101+1	17.52	17.0.12+7	22.0.2.0.101+101
17.54.21 (CA) 17.54.22 (SA)	PSU	17.0.13+11	17.53	17.0.12.0.101+1	22.0.3+102
11.75.12 (SA)	CPU	11.0.24.0.101+1	11.74	11.0.24+8	19.0.8.0.101+101

11.76.21 (CA) 11.76.22 (SA)	PSU	11.0.25+9	11.75	11.0.24.0.101+1	19.0.9+101
8.81.0.12 (SA)	CPU	8u431-b01	8.80	8u422-b05	8u431-b02
8.82.0.21 (CA) 8.82.0.22 (SA)	PSU	8u432-b06	8.81	8u431-b01	8u432-b02
7.73.0.14 (SA)	CPU	7u441-b02	7.71	7u431-b04	N/A
6.67.0.12 (SA)	CPU	6b167	6.65	6b165	N/A

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

- **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 use doesn't contaminate the code or intellectual property of such software with any license requirements.
- **CA** 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

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. Today's implementation of FIPS is based on Bouncy Castle 1.0.2.3. 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, Azul will integrate version 2.0.0 which has the latest set of features included and is FIPS 140-3 certified.

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

The migration from Bouncy Castle 1.x to 2.0 is a breaking change, which will be rolled out gradually. With this message, we announce these changes so that you have time to prepare for them.

If you need to test the EA version of Azul Zulu with FIPS 140-3 compliant implementation, please contact support@azul.com.

If you want to use Azul Zulu Builds of OpenJDK bundled with FIPS support, please contact your support or sales contact.

The following breaking changes will be 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.

In the January 2025 CPU/PSU Release, the FIPS-enabled builds of Zulu will have Bouncy Castle 2.0 instead of 1.X.

Changes in System Properties

This release includes the following new or changed system properties.

New in java.net

A new system property `jdk.http.maxHeaderSize` is added to define the maximum header field section size that a client is prepared to accept. This value gets computed as the sum of:

- The size of the uncompressed header name.
- The size of the uncompressed header value.
- An overhead of 32 bytes for each field section line.

If a peer sends a field section that exceeds maximum defined header size, a `java.net.ProtocolException` is raised. This applies to all versions of the HTTP protocol. A value of zero or a negative value means no limit. If left unspecified, the default value is `393216` bytes.

Affected releases: Zulu 6 till 23.

Change in javax.naming

The default value of `com.sun.jndi.ldap.object.trustSerializedData` is changed to `false`. This prevents the deserialization of Java objects from the `javaSerializedData` and the `javaRemoteLocation` LDAP attributes.

Additionally, the scope of this system property is extended to cover the creation of RMI remote objects from the `javaRemoteLocation` LDAP attribute.

Affected releases: Zulu 6 till 17.

Change in java.security

The `java.security.manager` system property now supports `allow` and `disallow`, as described in [JDK-8301251](#). Prior to this change, on JDK versions earlier than JDK 12, if these options are specified, the runtime attempts to load a SecurityManager implementation with the classname `allow` or `disallow`, which results in an Error and the application preventing to start up. To solve this, if the `java.security.manager` system property is set to `allow` or `disallow` on the Java command line, it is silently ignored. With this change, you can use the same command line across multiple versions of the JDK.

Affected releases: Zulu 8 and 11.

CRaC in User-Space (Non-Privileged) Mode

Zulu with CRaC has been extended with an extra engine, Warp, which no longer needs root privileges. The initial implementation, based on CRIU, which is available since May 2023, requires root privileges for checkpoint operation, as it requires operation at the process level. This makes it harder to use CRaC in containers and to some cloud environments.

See [CRaC Engines](#) for more information on how to use this new engine.

FTP Changes for Customer CPU Builds

Customers can get Zulu Builds from an FTP server. To make it easier to find CPU builds,

a new directory on the FTP server has been created, without introducing breaking changes to your existing automation tools.

The structure is now:

- Existing folders are unchanged, e.g. `ZuluCatalog/Zulu8/8.45`.
- A new directory is added for CPU builds, e.g. `ZuluCPUCatalog/Zulu8/8.45`.

Upcoming Changes

Certificate Changes

In the next release (January 2025), Azul Zulu Builds will no longer provide Mozilla certificates in the collection of trusted root certificates from various Certificate Authorities (CAs). The OpenJDK CA root certificates will be used in Azul Zulu for all Java versions, including 6 and 7.

Toolchain Changes for macOS

In the next release (January 2025), the toolchain for building Azul Zulu 7 on macOS x86_64 will be upgraded from Xcode 11.3.1 to Xcode 12.3.

JavaFX Support Changes

Starting from the next release (January 2025), JavaFX support for Linux distributions will be limited to the vendor-supported versions:

- RHEL, CentOS, and Alma Linux: 8, 9
- Ubuntu: 20.04, 22.04, 24.04
- Debian: 11, 12

Please notice, there are no 32-bit versions of these operating systems, so we are not able to provide JavaFX updates for Linux x86-32.

NOTE



While Azul Zulu Builds of OpenJDK With JavaFX may not be available for certain platforms, Zulu without JavaFX is available for more platforms. See [Supported Platforms](#).

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 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 7.x						 [1]	 [1]
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	n/a	n/a
CoreOS	n/a					n/a	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	n/a	n/a
Linux (ARM 32-bit Hard-Float)									
Ubuntu 18.04 [4]	n/a	n/a				n/a	n/a	n/a	n/a
Raspbian 10 Buster [4]	n/a	n/a				n/a	n/a	n/a	n/a
Raspbian 9 Stretch [4]	n/a	n/a			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	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 12+	n/a	✓	✓	✓	✓	✓	✓
MacOS (Apple Silicon)							
macOS 12+	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 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 3.11+	✓	✓	✓	✓	✓	✓
Windows	✓	n/a	✓	n/a	✓	n/a
macOS	✓	✓	✓	✓	✓	✓

IANA Time Zone Data Version

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

Known Issue

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
CVE-2023-42950	JavaFX (WebKitGTK)	Multiple	Yes	7.5	Network	High	None	Required	Unchanged	High	High	High	23, 21, 17, 11, 8	Note 1
CVE-2024-25062	JavaFX (libxml2)	Multiple	Yes	7.5	Network	Low	None	None	Unchanged	None	None	High	23, 21, 17, 11, 8	Note 1
CVE-2024-21235	Hotspot	Multiple	Yes	4.8	Network	High	None	None	Unchanged	Low	Low	None	23, 21, 17, 11, 8, 7, 6	Note 2
CVE-2024-21208	Networking	Multiple	Yes	3.7	Network	High	None	None	Unchanged	None	None	Low	23, 21, 17, 11, 8, 7, 6	Note 1
CVE-2024-21210	Hotspot	Multiple	Yes	3.7	Network	High	None	None	Unchanged	None	Low	None	23, 21, 17, 11, 8, 7, 6	Note 2
CVE-2024-21217	Serialization	Multiple	Yes	3.7	Network	High	None	None	Unchanged	None	None	Low	23, 21, 17, 11, 8, 7, 6	Note 2
CVE-2024-36138	Oracle GraalVM for JDK: Node (Node.js)	Multiple	Yes	8.1	Network	High	None	None	Unchanged	High	High	High	None	
CVE-2024-21211	Oracle Java SE, Oracle GraalVM for JDK, Oracle GraalVM Enterprise Edition: Compiler	Multiple	Yes	3.7	Network	High	None	None	Unchanged	None	Low	None	None	Note 2

Notes:

ID	Notes
1	This vulnerability 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. This vulnerability does not apply to Java deployments, typically in servers, that load and run only trusted code (e.g., code installed by an administrator).
2	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
JDK-8307383	11, 17, 21, 23	Enhance DTLS connections	CPU,PSU
JDK-8307769	6, 7, 8, 11, 17, 21	Improve Exception support	CPU,PSU
JDK-8311208	17, 21, 23	Improve CDS Support	CPU,PSU
JDK-8328726	6, 7, 8, 11, 17, 21, 23	Better Kerberos support	CPU,PSU
JDK-8330282	8, 11, 17, 21, 23	Upgrade SQLite	CPU,PSU
JDK-8332643	6, 7, 8, 11, 17	Better Location requests	CPU,PSU
JDK-8335713	6, 7, 8, 11, 17, 21, 23	Enhance vectorization analysis	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
JDK-8179502	17	Enhance OCSP, CRL and Certificate Fetch Timeouts	CPU,PSU
JDK-8189131	7	Open-source the Oracle JDK Root Certificates	CPU,PSU
JDK-8189949	7	Remove Baltimore Cybertrust Code Signing CA	CPU,PSU
JDK-8191031	7	Remove several Symantec Root CAs	CPU,PSU
JDK-8191844	7	Remove SECOM root (secomevrootca1)	CPU,PSU
JDK-8195774	7	Add Entrust root certificates	CPU,PSU
JDK-8195793	7	Remove GTE CyberTrust Global Root	CPU,PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8196141	7	Add GoDaddy root certificates	CPU,PSU
JDK-8199779	7	Add T-Systems, GlobalSign and Starfield services root certificates	CPU,PSU
JDK-8204923	7	Restore Symantec root verisignclass2g2ca	CPU,PSU
JDK-8209506	7	Add Google Trust Services GlobalSign root certificates	CPU,PSU
JDK-8210432	7	Add additional TeliaSonera root certificate	CPU,PSU
JDK-8216577	7	Add GlobalSign's R6 Root certificate	CPU,PSU
JDK-8222136	7	Remove two Comodo root CA certificates that are expiring	CPU,PSU
JDK-8222137	7	Remove T-Systems root CA certificate	CPU,PSU
JDK-8223499	7	Remove two DocuSign root certificates that are expiring	CPU,PSU
JDK-8223555	7	Cleanups in cacerts tests	CPU,PSU
JDK-8224768	7	Test ActalisCA.java fails	CPU,PSU
JDK-8225068	7	Remove DocuSign root certificate that is expiring in May 2020	CPU,PSU
JDK-8225069	7	Remove Comodo root certificate that is expiring in May 2020	CPU,PSU
JDK-8225072	7	Add LuxTrust certificate that is expiring in March 2021 to list of allowed but expired certs	CPU,PSU
JDK-8225081	7	Remove Telia Company CA certificate expiring in April 2021	CPU,PSU
JDK-8225082	7	Remove IdenTrust certificate that is expiring in September 2021	CPU,PSU
JDK-8225083	7	Remove Google certificate that is expiring in December 2021	CPU,PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8225128	7	Add exception for expiring DocuSign root to VerifyCACerts test	CPU,PSU
JDK-8225130	7	Add exception for expiring Comodo roots to VerifyCACerts test	CPU,PSU
JDK-8232019	7	Add LuxTrust certificate updates to the existing root program	CPU,PSU
JDK-8233223	7	Add Amazon Root CA certificates	CPU,PSU
JDK-8233364	6, 7, 8	Fix undefined behavior in Canonicalizer::do_ShiftOp	CPU,PSU
JDK-8234245	7	sun/security/lib/cacerts/VerifyCACerts.java fails due to wrong checksum	CPU,PSU
JDK-8239105	7	Add exception for expiring Digicert root certificates to VerifyCACerts test	CPU,PSU
JDK-8242999	11	HTTP/2 client may not handle CONTINUATION frames correctly	CPU,PSU
JDK-8243320	7	Add SSL root certificates to Oracle Root CA program	CPU,PSU
JDK-8243321	7	Add Entrust root CA - G4 to Oracle Root CA program	CPU,PSU
JDK-8243559	7	Remove root certificates with 1024-bit keys	CPU,PSU
JDK-8245654	7	Add Certigna Root CA	CPU,PSU
JDK-8256421	7	Add 2 HARICA roots to cacerts truststore	CPU,PSU
JDK-8258630	7	Add expiry exception for QuoVadis root certificate	CPU,PSU
JDK-8259312	7	VerifyCACerts.java fails as soneraclass2ca cert will expire in 90 days	CPU,PSU
JDK-8259338	7	Add expiry exception for identrustdstx3 alias to VerifyCACerts.java test	CPU,PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8268678	7	LetsEncryptCA.java test fails as Let's Encrypt Authority X3 is retired	CPU,PSU
JDK-8268916	7	Tests for AffirmTrust roots	CPU,PSU
JDK-8270280	7	security/infra/java/security/cert/CertPathValidator/certification/LetsEncryptCA.java OCSP response error	CPU,PSU
JDK-8272708	7	[Test]: Cleanup: test/jdk/security/infra/java/security/cert/CertPathValidator/certification/BypassCA.java no longer needs ocspEnabled	CPU,PSU
JDK-8277488	7	Add expiry exception for Digicert (geotrustglobalca) expiring in May 2022	CPU,PSU
JDK-8288132	7	Update test artifacts in QuoVadis CA interop tests	CPU,PSU
JDK-8290367	6, 7, 8, 11, 17	Update default value and extend the scope of com.sun.jndi.ldap.object.trustSerialData system property	CPU,PSU
JDK-8292044	11, 17	HttpClient doesn't handle 102 or 103 properly	CPU,PSU
JDK-8295894	7	Remove SECOM certificate that is expiring in September 2023	CPU,PSU
JDK-8296410	11, 17	HttpClient throws java.io.IOException: no statuscode in response for HTTP2	CPU,PSU
JDK-8297955	7	LDAP CertStore should use LdapName and not String for DN's	CPU,PSU
JDK-8299234	17	JMX Repository.query performance	CPU,PSU
JDK-8304760	7	Add 2 Microsoft TLS roots	CPU,PSU
JDK-8305975	7	Add TWCA Global Root CA	CPU,PSU
JDK-8307134	7	Add GTS root CAs	CPU,PSU
JDK-8308592	7	Framework for CA interoperability testing	CPU,PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8312126	7	NullPointerException in CertStore.getCRLs after 8297955	CPU,PSU
JDK-8313626	6, 7, 8	C2 crash due to unexpected exception control flow	CPU,PSU
JDK-8314960	7	Add Certigna Root CA - 2	CPU,PSU
JDK-8316138	7	Add GlobalSign 2 TLS root certificates	CPU,PSU
JDK-8317373	7	Add Telia Root CA v2	CPU,PSU
JDK-8317374	7	Add Let's Encrypt ISRG Root X2	CPU,PSU
JDK-8318759	7	Add four DigiCert root certificates	CPU,PSU
JDK-8319187	7	Add three eMudhra emSign roots	CPU,PSU
JDK-8321408	7	Add Certainly roots R1 and E1	CPU,PSU
JDK-8328825	7	Google CAInterop test failures	CPU,PSU
JDK-8333724	7, 8, 11, 17, 21	Problem list security/infra/java/security/cert/CertPathValidator/certification/CAInterop.java#teliasonerarootcav1	CPU,PSU
JDK-4660158	8	TTY: NumberFormatException while trying to set values by 'set' command	PSU
JDK-6355567	21	AdobeMarkerSegment causes failure to read valid JPEG	PSU
JDK-6544871	8	java/awt/event/KeyEvent/KeyTyped/CtrlASCII.html fails from jdk b09 on windows.	PSU
JDK-6967482	21, 23	TAB-key does not work in JTables after selecting details-view in JFileChooser	PSU
JDK-7022325	17, 21	TEST_BUG: test/java/util/zip/ZipFile/ReadLongZipFileName.java leaks files if it fails	PSU
JDK-7026262	17	HttpServer: improve handling of finished HTTP exchanges	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-7124313	11, 17	[macosx] Swing Popups should overlap taskbar	PSU
JDK-7156347	11	javax/swing/JList/6462008/bug6462008.java fails	PSU
JDK-7188098	8	TEST_BUG: closed/javax/sound/midi/Synthesizer/Receiver/bug6186488.java fails	PSU
JDK-8005885	17	enhance PrintCodeCache to print more data	PSU
JDK-8021775	8	compiler/8009761/Test8009761.java "Failed: init recursive calls: 51. After deopt 50"	PSU
JDK-8030204	8	com/sun/jdi/JdbExprTest.sh: Required output "Can\\t convert 2147483648 to int" not found	PSU
JDK-8030795	8	java/nio/file/Files/probeContentType/ForceLoad.java failing with ServiceConfigurationError without jtreg -agentvm option	PSU
JDK-8035395	8	sun/management/jmxremote/startstop/JMXStartStopTest.java fails intermittently: Port already in use	PSU
JDK-8051959	17, 21	Add thread and timestamp options to java.security.debug system property	PSU
JDK-8073061	21	(fs) Files.copy(foo, bar, REPLACE_EXISTING) deletes bar even if foo is not readable	PSU
JDK-8078725	11	method adjustments can be done just once for all classes involved into redefinition	PSU
JDK-8145919	8	sun/management/jmxremote/bootstrap/RmiSslBootstrapTest failed with Connection failed for no credentials	PSU
JDK-8152207	8	Perform array bound checks while getting a length of bytecode instructions	PSU
JDK-8166352	21, 23	FilePane.createDetailsView() removes JTable TAB, SHIFT-TAB functionality	PSU


OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8170817	17, 21	G1: Returning MinTLABSize from unsafe_max_tlab_alloc causes TLAB flapping	PSU
JDK-8183227	17	read/write APIs in class os shall return ssize_t	PSU
JDK-8193547	17	Regression automated test '/open/test/jdk/java/awt/Toolkit/DesktopProperties/rfe4758438.java' fails	PSU
JDK-8193682	8	Infinite loop in ZipOutputStream.close()	PSU
JDK-8196770	8	Add JNDI test com/sun/jndi/ldap/blits/AddTests/AddNewEntry.java	PSU
JDK-8205076	11	[17u] Inet6AddressImpl.c: <code>lookupIfLocalHost</code> accesses <code>int</code> <code>InetAddress.preferIPv6Address</code> as a boolean	PSU
JDK-8206440	11	Remove javac -source/-target 6 from jdk regression tests	PSU
JDK-8210338	11	Better output for GenerationTests.java	PSU
JDK-8211847	21	[aix] java/lang/ProcessHandle/InfoTest.java fails: "reported cputime less than expected"	PSU
JDK-8211854	21	[aix] java/net/ServerSocket/AcceptInheritHandle.java fails: read times out	PSU
JDK-8211920	11	Close server socket and cleanups in test/jdk/javax/naming/module/RunBasic.java	PSU
JDK-8221903	8	PIT: javax/swing/RepaintManager/IconifyTest/IconifyTest.java fails on ubuntu18.04	PSU
JDK-8222005	11	ClassRedefinition crashes with: guarantee(false) failed: OLD and/or OBSOLETE method(s) found	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8222884	11, 17, 21	ConcurrentClassDescLookup.java times out intermittently	PSU
JDK-8224081	11	SOCKS v4 tests require IPv4	PSU
JDK-8227122	11	[TESTBUG] Create Docker sidecar test cases	PSU
JDK-8228856	21	jvm_attach_thread_func() is broken if Control Flow Guard is enabled	PSU
JDK-8229822	11	ThrowingPushPromises tests sometimes fail due to EOF	PSU
JDK-8231427	11	Warning cleanup in tests of java.io.Serializable	PSU
JDK-8233725	17	ProcessTools.startProcess() has output issues when using an OutputAnalyzer at the same time	PSU
JDK-8236917	11	TestInstanceKlassSize.java fails with "The size computed by SA for java.lang.Object does not match"	PSU
JDK-8238169	11, 17, 21	BasicDirectoryModel getDirectories and DoChangeContents.run can deadlock	PSU
JDK-8238274	8	(sctp) JDK-7118373 is not fixed for SctpChannel	PSU
JDK-8240226	11	DeflateIn_InflateOut.java test incorrectly assumes size of compressed file	PSU
JDK-8241550	17, 21	[macOS] SSLSocketImpl/ReuseAddr.java failed due to "BindException: Address already in use"	PSU
JDK-8242564	21	javadoc crashes:: class cast exception com.sun.tools.javac.code.Symtab\$6	PSU
JDK-8249097	11	test/lib/jdk/test/lib/util/JarBuilder.java has a bad copyright	PSU
JDK-8249772	11	(ch) Improve sun/nio/ch/TestMaxCachedBufferSize.java	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8249826	11	5 javax/net/ssl/SSLEngine tests use @ignore w/o bug-id	PSU
JDK-8251188	8, 11	Update LDAP tests not to use wildcard addresses	PSU
JDK-8253207	11	enable problemlists jcheck's check	PSU
JDK-8255898	11, 17	Test java/awt/FileDialog/FilenameFilterTest/FilenameFilterTest.java fails on Mac OS	PSU
JDK-8255913	11	Decrease number of iterations in TestMaxCachedBufferSize	PSU
JDK-8255969	11	Improve java/io/BufferedInputStream/LargeCopyWithMark.java using jtreg tags	PSU
JDK-8256291	17	RunThese30M fails "assert(!_class_unload ? true : (JfrTraceIdBits::load(class_loader_klass & 1 << 4) << 8 != 0))) failed: invariant"	PSU
JDK-8257540	17	javax/swing/JFileChooser/8041694/bug8041694.java failed with "RuntimeException: The selected directory name is not the expected 'd ' but 'D '."	PSU
JDK-8259274	11	Increase timeout duration in sun/nio/ch/TestMaxCachedBufferSize.java	PSU
JDK-8259866	17	two java.util tests failed with "IOException: There is not enough space on the disk"	PSU
JDK-8260633	11, 17, 21	[macos] java/awt/dnd/MouseEventAfterStartDragTest/MouseEventAfterStartDragTest.html test failed	PSU
JDK-8261433	11, 17, 21	Better pkcs11 performance for libpkcs11:C_EncryptInit/libpkcs11:C_DecryptInit	PSU
JDK-8262017	8	C2: assert(n != __null) failed: Bad immediate dominator info.	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8263031	11, 17	HttpClient throws Exception if it receives a Push Promise that is too large	PSU
JDK-8264328	8	Broken license in javax/swing/JComboBox/8072767/bug8072767.java	PSU
JDK-8265919	17	RunThese30M fails "assert !((((JfrTraceIdBits::load(value & 1 << 4) << 8 != 0)))) failed: invariant"	PSU
JDK-8266149	11	mark hotspot compiler/startup tests which ignore VM flags	PSU
JDK-8266150	11	mark hotspot compiler/arguments tests which ignore VM flags	PSU
JDK-8266153	11	mark hotspot compiler/onSpinWait tests which ignore VM flags	PSU
JDK-8266154	11	mark hotspot compiler/oracle tests which ignore VM flags	PSU
JDK-8266248	8	Compilation failure in PLATFORM_API_MacOSX_MidiUtils.c with Xcode 12.5	PSU
JDK-8268906	11	gc/g1/mixedgc/TestOldGenCollectionUsage.java assumes that GCs take 1ms minimum	PSU
JDK-8269428	11, 17, 21	java/util/concurrent/ConcurrentHashMap/ToArray.java timed out	PSU
JDK-8269616	11	serviceability/dcmd/framework/VMVersionTest.java fails with Address already in use error	PSU
JDK-8269657	17, 21	Test java/nio/channels/DatagramChannel/Loopback.java failed: Unexpected message	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8272232	17	javax/swing/JTable/4275046/bug4275046.java failed with "Expected value in the cell: 'rededited' but found 'redEDITED'."	PSU
JDK-8272558	17	IR Test Framework README misses some flags	PSU
JDK-8272777	17	Clean up remaining AccessController warnings in test library	PSU
JDK-8273135	11	java/awt/color/ICC_ColorSpace/MTTransformReplacedProfile.java crashes in liblcms.dylib with NULLSeek+0x7	PSU
JDK-8273216	17	JCMD does not work across container boundaries with Podman	PSU
JDK-8273430	17	Suspicious duplicate condition in java.util.regex.Grapheme#isExcludedSpacingMark	PSU
JDK-8273541	17	Cleaner Thread creates with normal priority instead of MAX_PRIORITY - 2	PSU
JDK-8275851	11, 17	Deproblemlist open/test/jdk/javax/swing/JComponent/6683775/bug6683775.java	PSU
JDK-8276036	11	The value of full_count in the message of insufficient codecache is wrong	PSU
JDK-8276306	11	jdk/jshell/CustomInputToolBuilder.java fails intermittently on storage acquisition	PSU
JDK-8276660	17	Scalability bottleneck in java.security.Provider.getService()	PSU
JDK-8276819	11	javax/print/PrintServiceLookup/FlushCustomClassLoader.java fails to free	PSU
JDK-8277042	17	add test for 8276036 to compiler/codecache	PSU
JDK-8278794	8	Infinite loop in DeflaterOutputStream.finish()	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8279068	17	IGV: Update to work with JDK 16 and 17	PSU
JDK-8279164	8, 11, 17	Disable TLS_ECDH_* cipher suites	PSU
JDK-8279222	17	Incorrect legacyMap.get in java.security.Provider after JDK-8276660	PSU
JDK-8279337	11, 17	The MToolkit is still referenced in a few places	PSU
JDK-8279641	17	Create manual JTReg tests for Swing accessibility	PSU
JDK-8279878	17	java/awt/font/JNICheck/JNICheck.sh test fails on Ubuntu 21.10	PSU
JDK-8280034	17	ProblemList jdk/jfr/api/consumer/recordingstream/TestOnEvent.java on linux-x64	PSU
JDK-8280120	21	[IR Framework] Add attribute to @IR to enable/disable IR matching based on the architecture	PSU
JDK-8280392	11, 17, 21	java/awt/Focus/NonFocusableWindowTest/NonfocusableOwnerTest.java failed with "RuntimeException: Test failed."	PSU
JDK-8280970	17	Cleanup dead code in java.security.Provider	PSU
JDK-8280982	17	[Wayland] [XWayland] java.awt.Robot taking screenshots	PSU
JDK-8280988	17, 21	[XWayland] Click on title to request focus test failures	PSU
JDK-8280990	17, 21	[XWayland] XTest emulated mouse click does not bring window to front	PSU
JDK-8280993	17	[XWayland] Popup is not closed on click outside of area controlled by XWayland	PSU
JDK-8280994	17	[XWayland] Drag and Drop does not work in java  wayland app direction	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8281944	17	JavaDoc throws java.lang.IllegalStateException: ERRONEOUS	PSU
JDK-8282354	17	Remove dependancy of TestHttpServer, HttpTransaction, HttpCallback from open/test/jdk/tests	PSU
JDK-8282526	17	Default icon is not painted properly	PSU
JDK-8283223	21	gc/stringdedup/TestStringDeduplicationFullGC.java#Parallel failed with "RuntimeException: String verification failed"	PSU
JDK-8283728	17	jdk.hotspot.agent: Wrong location for RISC64ThreadContext.java	PSU
JDK-8284316	17	Support accessibility ManualTestFrame.java for non SwingSet tests	PSU
JDK-8284585	11, 17	PushPromiseContinuation test fails intermittently in timeout	PSU
JDK-8284771	8	java/util/zip/CloseInflaterDeflaterTest.java failed with "AssertionError: Expected IOException to be thrown, but nothing was thrown"	PSU
JDK-8285497	17	Add system property for Java SE specification maintenance version	PSU
JDK-8286781	11	Replace the deprecated/obsolete gethostbyname and inet_addr calls	PSU
JDK-8287325	21	AArch64: fix virtual threads with -XX:UseBranchProtection=pac-ret	PSU
JDK-8288568	17	Reduce runtime of java.security microbenchmarks	PSU
JDK-8289182	17	NMT: MemTracker::baseline should return void	PSU
JDK-8290966	17	G1: Record number of PLAB filled and number of direct allocations	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8291760	17	PipelineLeaksFD.java still fails: More or fewer pipes than expected	PSU
JDK-8291809	21	Convert compiler/c2/cr7200264/TestSSE2IntVect.java to IR verification test	PSU
JDK-8292739	17	Invalid legacy entries may be returned by Provider.getServices() call	PSU
JDK-8292948	17	JEditorPane ignores font-size styles in external linked css-file	PSU
JDK-8293862	17	javax/swing/JFileChooser/8046391/bug8046391.java failed with 'Cannot invoke "java.awt.Image.getWidth(java.awt.image.ImageObserver)" because "retVal" is null'	PSU
JDK-8293872	17	Make runtime/Thread/ThreadCountLimit.java more robust	PSU
JDK-8294148	11, 17, 21	Support JSplitPane for instructions and test UI	PSU
JDK-8294691	17	dynamicArchive/RelativePath.java is running other test case	PSU
JDK-8294994	17	Update Jarsigner and Keytool i18n tests to validate i18n compliance	PSU
JDK-8295111	17	dpkg appears to have problems resolving symbolically linked native libraries	PSU
JDK-8296812	17	sprintf is deprecated in Xcode 14	PSU
JDK-8297878	17	KEM: Implementation	PSU
JDK-8298381	17	Improve handling of session tickets for multiple SSLContexts	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8298596	17	vmTestbase/nsk/sysdict/vm/stress/chain/chain008/chain008.java fails with "NoClassDefFoundError: Could not initialize class java.util.concurrent.ThreadLocalRandom"	PSU
JDK-8298809	17	Clean up vm/compiler/InterfaceCalls JMH	PSU
JDK-8298873	11	Update IllegalRecordVersion.java for changes to TLS implementation	PSU
JDK-8298887	8	On the latest macOS+XCode the Robot API may report wrong colors	PSU
JDK-8299058	11, 17, 21	AssertionError in sun.net.httpserver.ServerImpl when connection is idle	PSU
JDK-8299254	17	Support dealing with standard assert macro	PSU
JDK-8299378	17	sprintf is deprecated in Xcode 14	PSU
JDK-8299395	17	Remove metaprogramming/removeCV.hpp	PSU
JDK-8299396	17	Remove metaprogramming/removeExtent.hpp	PSU
JDK-8299397	17	Remove metaprogramming/isFloatingPoint.hpp	PSU
JDK-8299398	17	Remove metaprogramming/isConst.hpp	PSU
JDK-8299399	17	Remove metaprogramming/isArray.hpp	PSU
JDK-8299402	17	Remove metaprogramming/isVolatile.hpp	PSU
JDK-8299479	17	Remove metaprogramming/decay.hpp	PSU
JDK-8299481	17	Remove metaprogramming/removePointer.hpp	PSU
JDK-8299482	17	Remove metaprogramming/isIntegral.hpp	PSU
JDK-8299487	11, 17, 21	Test java/net/httpclient/whitebox/SSLTubeTestDriver.java timed out	PSU
JDK-8299635	17	Hotspot update for deprecated sprintf in Xcode 14	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8299677	8	Formatter.format might take a long time to format an integer or floating-point	PSU
JDK-8299779	17	Test tools/jpackage/share/jdk/jpackage/tests/MainClassTest.java timed out	PSU
JDK-8299790	21	os::print_hex_dump is racy	PSU
JDK-8299813	17, 21, 23	java/nio/channels/DatagramChannel/Disconnect.java fails with jtreg test timeout due to lost datagram	PSU
JDK-8299971	17	Remove metaprogramming/conditional.hpp	PSU
JDK-8299972	17	Remove metaprogramming/removeReference.hpp	PSU
JDK-8300169	17	Build failure with clang-15	PSU
JDK-8300260	17	Remove metaprogramming/isSame.hpp	PSU
JDK-8300264	17	Remove metaprogramming/isPointer.hpp	PSU
JDK-8300265	17	Remove metaprogramming/isSigned.hpp	PSU
JDK-8300910	17	Remove metaprogramming/integralConstant.hpp	PSU
JDK-8301132	17	Test update for deprecated sprintf in Xcode 14	PSU
JDK-8301189	11	validate-source fails after JDK-8298873	PSU
JDK-8301200	17	Don't scale timeout stress with timeout factor	PSU
JDK-8301274	17	update for deprecated sprintf for security components	PSU
JDK-8301279	17	update for deprecated sprintf for management components	PSU
JDK-8301686	17, 21	TLS 1.3 handshake fails if server_name doesn't match resuming session	PSU
JDK-8301704	17	Shorten the number of GCs in UnloadingTest.java to verify a class loader not being unloaded	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8302495	17	update for deprecated sprintf for java.desktop	PSU
JDK-8302800	17	Augment NaN handling tests of FDLIBM methods	PSU
JDK-8303216	11, 17	Prefer ArrayList to LinkedList in sun.net.httpserver.ServerImpl	PSU
JDK-8303466	8, 11, 17	C2: failed: malformed control flow. Limit type made precise with MaxL/MinL	PSU
JDK-8303527	17	update for deprecated sprintf for jdk.hotspot.agent	PSU
JDK-8303617	17	update for deprecated sprintf for jdk.jdwp.agent	PSU
JDK-8303830	17	update for deprecated sprintf for jdk.accessibility	PSU
JDK-8303891	17	Speed up Zip64SizeTest using a small ZIP64 file	PSU
JDK-8303920	17, 21	Avoid calling out to python in DataDescriptorSignatureMissing test	PSU
JDK-8303942	17	os::write should write completely	PSU
JDK-8303965	11, 17	java.net.http.HttpClient should reset the stream if response headers contain malformed header fields	PSU
JDK-8304375	17	jdk/jfr/api/consumer/filestream/TestOrdered.java failed with "Expected at least some events to be out of order! Reuse = false"	PSU
JDK-8304962	17	sun/net/www/http/KeepAliveCache/B5045306.java: java.lang.RuntimeException: Failed: Initial Keep Alive Connection is not being reused	PSU
JDK-8304963	17	HttpServer closes connection after processing HEAD after JDK-7026262	PSU
JDK-8305072	11, 17, 21	Win32ShellFolder2.compareTo is inconsistent	PSU
JDK-8305079	11, 17	Remove finalize() from compiler/c2/Test719030	PSU
JDK-8305081	11, 17	Remove finalize() from test/hotspot/jtreg/compiler/runtime/Test8168712	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8305400	8	ISO 4217 Amendment 175 Update	PSU
JDK-8305825	11, 17, 21	getBounds API returns wrong value resulting in multiple Regression Test Failures on Ubuntu 23.04	PSU
JDK-8305906	11	HttpClient may use incorrect key when finding pooled HTTP/2 connection for IPv6 address	PSU
JDK-8305931	8	jdk/jfr/jcmd/TestJcmdDumpPathToGCRoots.java failed with "Expected chains but found none"	PSU
JDK-8305959	17	x86: Improve itable_stub	PSU
JDK-8306060	11	Open source few AWT Insets related tests	PSU
JDK-8306432	11	Open source several AWT Text Component related tests	PSU
JDK-8306466	11	Open source more AWT Drag & Drop related tests	PSU
JDK-8306489	11	Open source AWT List related tests	PSU
JDK-8306566	11	Open source several clipboard AWT tests	PSU
JDK-8306583	17	Add JVM crash check in CDSTestUtils.executeAndLog	PSU
JDK-8306850	11	Open source AWT Modal related tests	PSU
JDK-8306929	17	Avoid CleanClassLoaderDataMetaspaces safepoints when previous versions are shared	PSU
JDK-8306946	17	jdk/test/lib/process/ProcessToolsStartProcessTest.java fails with "wrong number of lines in OutputAnalyzer output"	PSU
JDK-8307091	11, 17	A few client tests intermittently throw ConcurrentModificationException	PSU
JDK-8307193	17, 21	Several Swing jtreg tests use class.forName on L&F classes	PSU
JDK-8307352	17, 21	AARCH64: Improve itable_stub	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8307448	17	Test RedefineSharedClassJFR fail due to wrong assumption	PSU
JDK-8307778	21	com/sun/jdi/cds tests fail with jtreg's Virtual test thread factory	PSU
JDK-8307779	8, 11, 17	Relax the java.awt.Robot specification	PSU
JDK-8307788	21	vmTestbase/gc/gctests/LargeObjects/large003/TestDescription.java timed out	PSU
JDK-8307848	17	update for deprecated sprintf for jdk.attach	PSU
JDK-8307850	17	update for deprecated sprintf for jdk.jdi	PSU
JDK-8308022	17	update for deprecated sprintf for java.base	PSU
JDK-8308144	17	Uncontrolled memory consumption in SSLFlowDelegate.Reader	PSU
JDK-8308184	11, 17	Launching java with large number of jars in classpath with java.protocol.handler.pkgs system property set can lead to StackOverflowError	PSU
JDK-8308286	21	Fix clang warnings in linux code	PSU
JDK-8308660	21	C2 compilation hits 'node must be dead' assert	PSU
JDK-8308801	17	update for deprecated sprintf for libnet in java.base	PSU
JDK-8308891	17	TestCDSVMCrash.java needs @requires vm.cds	PSU
JDK-8309067	21	gtest/AsyncLogGtest.java fails again in stderrOutput_vm	PSU
JDK-8309138	8	Fix container tests for jdks with symlinked conf dir	PSU
JDK-8309241	17	ClassForNameLeak fails intermittently as the class loader hasn't been unloaded	PSU
JDK-8309621	17, 21	[XWayland][Screencast] screen capture failure with sun.java2d.uiScale other than 1	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8309685	21	Fix -Wconversion warnings in assembler and register code	PSU
JDK-8309703	17	AIX build fails after JDK-8280982	PSU
JDK-8309756	17	Occasional crashes with pipewire screen capture on Wayland	PSU
JDK-8309894	21	compiler/vectorapi/VectorLogicalOpIdentityTest.java fails on SVE system with UseSVE=0	PSU
JDK-8310070	17	Test: javax/net/ssl/DTLS/DTLSWontNegotiateV10.java timed out	PSU
JDK-8310072	21	JComboBox/DisabledComboBoxFontTestAuto: Enabled and disabled ComboBox does not match in these LAFs: GTK+	PSU
JDK-8310108	17, 21	Skip ReplaceCriticalClassesForSubgraphs when EnableJVMCI is specified	PSU
JDK-8310201	11, 17, 21	Reduce verbose locale output in -XshowSettings launcher option	PSU
JDK-8310334	17, 21	[XWayland][Screencast] screen capture error message in debug	PSU
JDK-8310628	17, 21	GcInfoBuilder.c missing JNI Exception checks	PSU
JDK-8310683	17, 21	Refactor StandardCharset/standard.java to use JUnit	PSU
JDK-8310906	21	Fix -Wconversion warnings in runtime, oops and some code header files.	PSU
JDK-8310923	11	Refactor Currency tests to use JUnit	PSU
JDK-8311306	21	Test com/sun/management/ThreadMXBean/ThreadCpuTimeArray.java failed: out of expected range	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8311666	8, 11, 17, 21	Disabled tests in test/jdk/sun/java2d/marlin	PSU
JDK-8311989	21	Test java/lang/Thread/virtual/Reflection.java timed out	PSU
JDK-8312049	17, 21	runtime/logging/ClassLoadUnloadTest can be improved	PSU
JDK-8312111	21	open/test/jdk/java/awt/Robot/ModifierRobotKey/ModifierRobotKeyTest.java fails on ubuntu 23.04	PSU
JDK-8312140	11, 17, 21	jdk/jshell tests failed with JDI socket timeouts	PSU
JDK-8312200	21	Fix Parse::catch_call_exceptions memory leak	PSU
JDK-8312229	17, 21	Crash involving yield, switch and anonymous classes	PSU
JDK-8313256	17	Exclude failing multicast tests on AIX	PSU
JDK-8313394	17	Array Elements in OldObjectSample event has the incorrect description	PSU
JDK-8313674	17, 21	(fc) java/nio/channels/FileChannel/BlockDeviceSize.java should test for more block devices	PSU
JDK-8313697	17, 21	[XWayland][Screencast] consequent getPixelColor calls are slow	PSU
JDK-8313873	17	java/nio/channels/DatagramChannel/SendReceiveMaxSize.java fails on AIX due to small default RCVBUF size and different IPv6 Header interpretation	PSU
JDK-8313901	17	[TESTBUG] test/hotspot/jtreg/compiler/codecache/CodeCacheFullCountTest.java fails with java.lang.VirtualMachineError	PSU
JDK-8313983	21	jmod create --target-platform should replace existing ModuleTarget attribute	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8314163	21	os::print_hex_dump prints incorrectly for big endian platforms and unit sizes larger than 1	PSU
JDK-8314225	21	SIGSEGV in JavaThread::is_lock_owned	PSU
JDK-8314476	17	TestJstatdPortAndServer.java failed with "java.rmi.NoSuchObjectException: no such object in table"	PSU
JDK-8314515	21	java/util/concurrent/SynchronousQueue/Fairness.java failed with "Error: fair=false i=8 j=0"	PSU
JDK-8314614	11, 17, 21	jdk/jshell/ImportTest.java failed with "InternalError: Failed remote listen"	PSU
JDK-8314837	17	5 compiled/codecache tests ignore VM flags	PSU
JDK-8315024	17, 21	Vector API FP reduction tests should not test for exact equality	PSU
JDK-8315031	21	YoungPLABSize and OldPLABSize not aligned by ObjectAlignmentInBytes	PSU
JDK-8315117	8	Update Zlib Data Compression Library to Version 1.3	PSU
JDK-8315362	17	NMT: summary diff reports threads count incorrectly	PSU
JDK-8315422	11, 17, 21	getSoTimeout() would be in try block in SSLSocketImpl	PSU
JDK-8315437	11, 17	Enable parallelism in vmTestbase/nsk/monitoring/stress/classload tests	PSU
JDK-8315442	11, 17	Enable parallelism in vmTestbase/nsk/monitoring/stress/thread tests	PSU
JDK-8315505	21	CompileTask timestamp printed can overflow	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8315559	17	Delay TempSymbol cleanup to avoid symbol table churn	PSU
JDK-8315576	17, 21	compiler/codecache/CodeCacheFullCountTest.java fails after JDK-8314837	PSU
JDK-8315651	17	Stop hiding AIX specific multicast socket errors via NetworkConfiguration (aix)	PSU
JDK-8315684	17	Parallelize sun/security/util/math/TestIntegerModuloP.java	PSU
JDK-8315774	17	Enable parallelism in vmTestbase/gc/g1/unloading tests	PSU
JDK-8315804	11, 17, 21	Open source several Swing JTabbedPane JTextArea JTextField tests	PSU
JDK-8315898	11	Open source swing JMenu tests	PSU
JDK-8315923	21	pretouch_memory by atomic-add-0 fragments huge pages unexpectedly	PSU
JDK-8315936	17	Parallelize gc/stress/TestStressG1Humongous.java test	PSU
JDK-8315965	11, 17, 21	Open source various AWT applet tests	PSU
JDK-8315969	21	compiler/rangechecks/TestRangeCheckHoistingScaledIV.java: make flagless	PSU
JDK-8316104	11, 17, 21	Open source several Swing SplitPane and RadioButton related tests	PSU
JDK-8316131	21	runtime/cds/appcds/TestParallelGCWithCDS.java fails with JNI error	PSU
JDK-8316193	17, 21	jdk/jfr/event/oldobject/TestListenerLeak.java java.lang.Exception: Could not find leak	PSU
JDK-8316211	11, 17, 21	Open source several manual applet tests	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8316240	11, 17, 21	Open source several add/remove MenuBar manual tests	PSU
JDK-8316285	11, 17, 21	Opensource JButton manual tests	PSU
JDK-8316306	11, 17, 21	Open source and convert manual Swing test	PSU
JDK-8316328	8, 11, 17, 21	Test jdk/jfr/event/oldobject/TestSanityDefault.java times out for some heap sizes	PSU
JDK-8316361	21	C2: assert(!failure) failed: Missed optimization opportunity in PhaselterGVN with -XX:VerifyIterativeGVN=10	PSU
JDK-8316387	17	Exclude more failing multicast tests on AIX after JDK-8315651	PSU
JDK-8316389	17, 21	Open source few AWT applet tests	PSU
JDK-8316462	11	sun/jvmstat/monitor/MonitoredVm/MonitorVmStartTerminate.java ignores VM flags	PSU
JDK-8316468	17	os::write incorrectly handles partial write	PSU
JDK-8316756	21	C2 EA fails with "missing memory path" when encountering unsafe_arraycopy stub call	PSU
JDK-8316973	11, 17	GC: Make TestDisableDefaultGC use createTestJvm	PSU
JDK-8317112	17, 21	Add screenshot for Frame/DefaultSizeTest.java	PSU
JDK-8317128	21	java/nio/file/Files/CopyAndMove.java failed with AccessDeniedException	PSU
JDK-8317228	11, 17	GC: Make TestXXXHeapSizeFlags use createTestJvm	PSU
JDK-8317240	21	Promptly free OopMapEntry after fail to insert the entry to OopMapCache	PSU
JDK-8317288	11, 17, 21	[macos] java/awt/Window/Grab/GrabTest.java: Press on the outside area didn't cause ungrab	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8317299	21	safepoint scalarization doesn't keep track of the depth of the JVM state	PSU
JDK-8317316	11, 17	G1: Make TestG1PercentageOptions use createTestJvm	PSU
JDK-8317343	11, 17	GC: Make TestHeapFreeRatio use createTestJvm	PSU
JDK-8317358	11, 17	G1: Make TestMaxNewSize use createTestJvm	PSU
JDK-8317360	17, 21	Missing null checks in JfrCheckpointManager and JfrStringPool initialization routines	PSU
JDK-8317372	17, 21	Refactor some NumberFormat tests to use JUnit	PSU
JDK-8317446	21	ProblemList gc/arguments/TestNewSizeFlags.java on macosx-aarch64 in Xcomp	PSU
JDK-8317449	21	ProblemList serviceability/jvmti/stress/StackTrace/NotSuspended/GetStackTraceNotSuspendedStressTest.java on several platforms	PSU
JDK-8317635	17, 21	Improve GetClassFields test to verify correctness of field order	PSU
JDK-8317696	21	Fix compilation with clang-16	PSU
JDK-8317738	21	CodeCacheFullCountTest failed with "VirtualMachineError: Out of space in CodeCache for method handle intrinsic"	PSU
JDK-8317831	17, 21	compiler/codecache/CheckLargePages.java fails on OL 8.8 with unexpected memory string	PSU
JDK-8318071	21	IgnoreUnrecognizedVMOptions flag still causes failure in ArchiveHeapTestClass	PSU
JDK-8318089	17	Class space not marked as such with NMT when CDS is off	PSU
JDK-8318474	17	Fix memory reporter for thread_count	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8318479	17, 21	[jmh] the test security.CacheBench failed for multiple threads run	PSU
JDK-8318605	17, 21	Enable parallelism in vmTestbase/nsk/stress/stack tests	PSU
JDK-8318696	17	Do not use LFS64 symbols on Linux	PSU
JDK-8318951	8	Additional negative value check in JPEG decoding	PSU
JDK-8318986	17	Improve GenericWaitBarrier performance	PSU
JDK-8319103	17	Popups that request focus are not shown on Linux with Wayland	PSU
JDK-8319406	17, 21	x86: Shorter movptr(reg, imm) for 32-bit immediates	PSU
JDK-8319713	17	Parallel: Remove PSAdaptiveSizePolicy::should_full_GC	PSU
JDK-8319773	21	Avoid inflating monitors when installing hash codes for LM_LIGHTWEIGHT	PSU
JDK-8319793	21	C2 compilation fails with "Bad graph detected in build_loop_late" after JDK-8279888	PSU
JDK-8319817	21	Charset constructor should make defensive copy of aliases	PSU
JDK-8319818	21	Address GCC 13.2.0 warnings (stringop-overflow and dangling-pointer)	PSU
JDK-8320079	11, 17, 21	The ArabicBox.java test has no control buttons	PSU
JDK-8320212	21	Disable GCC stringop-overflow warning for affected files	PSU
JDK-8320379	17, 21	C2: Sort spilling/unspilling sequence for better ld/st merging into ldp/stp on AArch64	PSU
JDK-8320570	11	NegativeArraySizeException decoding >1G UTF8 bytes with non-ascii characters	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8320602	11, 17, 21	Lock contention in SchemaDVFactory.getInstance()	PSU
JDK-8320608	17, 21	Many jtreg printing tests are missing the @printer keyword	PSU
JDK-8320655	17, 21	awt screencast robot spin and sync issues with native libpipewire api	PSU
JDK-8320675	21	PrinterJob/SecurityDialogTest.java hangs	PSU
JDK-8320692	17	Null icon returned for .exe without custom icon	PSU
JDK-8320945	11, 17, 21	problemlist tests failing on latest Windows 11 update	PSU
JDK-8320964	8	sun/tools/native2ascii/Native2AsciiTests.sh fails on Japanese	PSU
JDK-8321025	17, 21	Enable Neoverse N1 optimizations for Neoverse V2	PSU
JDK-8321176	17, 21	[Screencast] make a second attempt on screencast failure	PSU
JDK-8321206	21	Make Locale related system properties <code>StaticProperty</code>	PSU
JDK-8321220	17, 21	JFR: RecordedClass reports incorrect modifiers	PSU
JDK-8321278	21	C2: Partial peeling fails with assert "last_peel != first_not_peeled"	PSU
JDK-8321480	8	ISO 4217 Amendment 176 Update	PSU
JDK-8321509	21	False positive in get_trampoline fast path causes crash	PSU
JDK-8321933	21	TestCDSVMCrash.java spawns two processes	PSU
JDK-8322008	17, 21	Exclude some CDS tests from running with -Xshare:off	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8322062	21	com/sun/jdi/JdwpAllowTest.java does not perform negative testing with prefix length	PSU
JDK-8322330	11, 17, 21	JavadocHelperTest.java OOMs with Parallel GC and ZGC	PSU
JDK-8322726	17, 21	C2: Unloaded signature class kills argument value	PSU
JDK-8322743	21	C2: prevent lock region elimination in OSR compilation	PSU
JDK-8322766	21	Micro bench SSLHandshake should use default algorithms	PSU
JDK-8322881	21	java/nio/file/Files/CopyMoveVariations.java fails with AccessDeniedException due to permissions of files in /tmp	PSU
JDK-8322971	17, 21	KEM.getInstance() should check if a 3rd-party security provider is signed	PSU
JDK-8322996	21	BoxLockNode creation fails with assert(reg < CHUNK_SIZE) failed: sanity	PSU
JDK-8323122	17, 21	AArch64: Increase itable stub size estimate	PSU
JDK-8323196	21	jdk/jfr/api/consumer/filestream/TestOrdered.java failed with "Events are not ordered! Reuse = false"	PSU
JDK-8323274	21	C2: array load may float above range check	PSU
JDK-8323552	21	AbstractMemorySegmentImpl#mismatch returns -1 when comparing distinct areas of the same instance of MemorySegment	PSU
JDK-8323577	21	C2 SuperWord: remove AlignVector restrictions on IR tests added in JDK-8305055	PSU
JDK-8323584	17, 21	AArch64: Unnecessary ResourceMark in NativeCall::set_destination_mt_safe	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8323670	11, 17, 21	A few client tests intermittently throw ConcurrentModificationException	PSU
JDK-8323682	21	C2: guard check is not generated in Arrays.copyOfRange intrinsic when allocation is eliminated by EA	PSU
JDK-8323782	21	Race: Thread::interrupt vs. AbstractInterruptibleChannel.begin	PSU
JDK-8323801	17, 21	<s> tag doesn't strikethrough the text	PSU
JDK-8323972	21	C2 compilation fails with assert(!xmas_Loop()is_loop_nest_inner_loop()) failed: loop was transformed	PSU
JDK-8324174	21	assert(mis_entered(current)) failed: invariant	PSU
JDK-8324577	17, 21	[REDO] - [IMPROVE] OPEN_MAX is no longer the max limit on macOS >= 10.6 for RLIMIT_NOFILE	PSU
JDK-8324580	21	SIGFPE on THP initialization on kernels < 4.10	PSU
JDK-8324632	8	Update Zlib Data Compression Library to Version 1.3.1	PSU
JDK-8324641	21	[IR Framework] Add Setup method to provide custom arguments and set fields	PSU
JDK-8324646	17	Avoid Class.forName in SecureRandom constructor	PSU
JDK-8324648	17	Avoid NoSuchMethodError when instantiating NativePRNG	PSU
JDK-8324668	17, 21	JDWP process management needs more efficient file descriptor handling	PSU
JDK-8324753	17	[AIX] adjust os_posix after JDK-8318696	PSU
JDK-8324755	11, 17, 21	Enable parallelism in vmTestbase/gc/gctests/LargeObjects tests	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8324781	21	runtime/Thread/TestAlwaysPreTouchStacks.java failed with Expected a higher ratio between stack committed and reserved	PSU
JDK-8324808	21	Manual printer tests have no Pass/Fail buttons, instructions close set 3	PSU
JDK-8324933	17	ConcurrentHashMap::statistics_calculate synchronization is expensive	PSU
JDK-8324969	21	C2: prevent elimination of unbalanced coarsened locking regions	PSU
JDK-8324983	21	Race in CompileBroker::possibly_add_compiler_threads	PSU
JDK-8325022	11, 17, 21	Incorrect error message on client authentication	PSU
JDK-8325037	21	x86: enable and fix hotspot/jtreg/compiler/vectorization/TestRoundVectFloat.java	PSU
JDK-8325083	21	jdk/incubator/vector/Double512VectorTests.java crashes in Assembler::vex_prefix_and_encode	PSU
JDK-8325179	11, 17, 21	Race in BasicDirectoryModel.validateFileCache	PSU
JDK-8325218	21	gc/parallel/TestAlwaysPreTouchBehavior.java fails	PSU
JDK-8325382	21	(fc) FileChannel.transferTo throws IOException when position equals size	PSU
JDK-8325384	17, 21	sun/security/ssl/SSLSessionImpl/ResumptionUpdateBoundValues.java failing intermittently when main thread is a virtual thread	PSU
JDK-8325469	21	Freeze/Thaw code can crash in the presence of OSR frames	PSU
JDK-8325494	21	C2: Broken graph after not skipping CastII node anymore for Assertion Predicates after JDK-8309902	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8325520	21	Vector loads and stores with indices and masks incorrectly compiled	PSU
JDK-8325525	23	Create jtreg test case for JDK-8325203	PSU
JDK-8325542	21	CTW: Runner can produce negative StressSeed	PSU
JDK-8325567	17	jspawnhelper without args fails with segfault	PSU
JDK-8325587	21	Shenandoah: ShenandoahLock should allow blocking in VM	PSU
JDK-8325616	21	JFR ZGC Allocation Stall events should record stack traces	PSU
JDK-8325620	17, 21	HTMLReader uses ConvertAction instead of specified CharacterAction for , <i>, <u>	PSU
JDK-8325621	17	Improve jspawnhelper version checks	PSU
JDK-8325754	17, 21	Dead AbstractQueuedSynchronizer\$ConditionNodes survive minor garbage collections	PSU
JDK-8325763	21	Revert properties: vm.opt.x.*	PSU
JDK-8325862	11	set -XX:+ErrorFileToStderr when executing java in containers for some container related jtreg tests	PSU
JDK-8325876	11	crashes in docker container tests on Linuxppc64le Power8 machines	PSU
JDK-8326106	17, 21	Write and clear stack trace table outside of safepoint	PSU
JDK-8326129	21	Java Record Pattern Match leads to infinite loop	PSU
JDK-8326140	11	src/jdk.accessibility/windows/native/libjavaaccessbridge/AccessBridgeJavaEntryPoints.cpp ReleaseStringChars might be missing in early returns	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8326332	17, 21	Unclosed inline tags cause misalignment in summary tables	PSU
JDK-8326351	8	Update the Zlib version in open/src/java.base/share/legal/zlib.md to 1.3.1	PSU
JDK-8326446	17	The User and System of jdk.CPULoad on Apple M1 are inaccurate	PSU
JDK-8326521	8	JFR: CompilerPhase event test fails on windows 32 bit	PSU
JDK-8326529	8	JFR: Test for CompilerCompile events fails due to time out	PSU
JDK-8326717	21	Disable stringop-overflow in shenandoahLock.cpp	PSU
JDK-8326734	17, 21	text-decoration applied to lost when mixed with <u> or <s>	PSU
JDK-8327007	8, 11, 17, 21	javax/swing/JSpinner/8008657/bug8008657.java fails	PSU
JDK-8327040	21	Problemlist ActionListenerCalledTwiceTest.java test failing in macos14	PSU
JDK-8327137	11, 17, 21	Add test for ConcurrentModificationException in BasicDirectoryModel	PSU
JDK-8327312	17	[17u] Problem list ReflectionCallerCacheTest.java due to 8324978	PSU
JDK-8327401	21	Some jtreg tests fail on Wayland without any tracking bug	PSU
JDK-8327423	21	C2 remove_main_post_loops: check if main-loop belongs to pre-loop, not just assert	PSU
JDK-8327424	17, 21	ProblemList serviceability/sa/TestJmapCore.java on all platforms with ZGC	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8327501	21	Common ForkJoinPool prevents class unloading in some cases	PSU
JDK-8327631	11	Update IANA Language Subtag Registry to Version 2024-03-07	PSU
JDK-8327650	17, 21	Test java/nio/channels/DatagramChannel/StressNative Signal.java timed out	PSU
JDK-8327787	11, 17, 21	Convert javax/swing/border/Test4129681.java applet test to main	PSU
JDK-8327840	11, 17, 21	Automate javax/swing/border/Test4129681.java	PSU
JDK-8327990	21	[macosx-aarch64] Various tests fail with -XX:+AssertWXAtThreadSync	PSU
JDK-8328011	11, 17, 21	Convert java/awt/Frame/GetBoundsResizeTest/GetBounds ResizeTest.java applet test to main	PSU
JDK-8328075	17, 21	Shenandoah: Avoid forwarding when objects don't move in full-GC	PSU
JDK-8328110	11, 17, 21	Allow simultaneous use of PassFailJFrame with split UI and additional windows	PSU
JDK-8328115	11, 17, 21	Convert java/awt/font/TextLayout/TestJustification.html applet test to main	PSU
JDK-8328158	11, 17, 21	Convert java/awt/Choice/NonFocusablePopupMenuTest to automatic main test	PSU
JDK-8328218	11, 17, 21	Delete test java/awt/Window/FindOwner/FindOwner.html	PSU
JDK-8328234	11, 17, 21	Remove unused nativeUtils files	PSU
JDK-8328238	11, 17, 21	Convert few closed manual applet tests to main	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8328269	11, 17, 21	NonFocusablePopupMenuTest.java should be marked as headful	PSU
JDK-8328273	11, 17, 21	sun/management/jmxremote/bootstrap/RmiRegistrySslTest.java failed with java.rmi.server.ExportException: Port already in use	PSU
JDK-8328366	21	Thread.setContextClassLoader from thread in FJP commonPool task no longer works after JDK-8327501	PSU
JDK-8328560	11, 17, 21	java/awt/event/MouseEvent/ClickDuringKeypress/ClickDuringKeypress.java imports Applet	PSU
JDK-8328561	11, 17, 21	test java/awt/Robot/ManualInstructions/ManualInstructions.java isn't used	PSU
JDK-8328642	17, 21	Convert applet test MouseDraggedOutCauseScrollingTest.html to main	PSU
JDK-8328647	17, 21	TestGarbageCollectorMXBean.java fails with C1-only and -Xcomp	PSU
JDK-8328697	21	SubMenuShowTest and SwallowKeyEvents tests stabilization	PSU
JDK-8328785	21	IOException: Symbol not found: C_GetInterface for PKCS11 interface prior to V3.0	PSU
JDK-8328895	17, 21, 23	JFileChooser is very slow to open folders with many files	PSU
JDK-8328896	17, 21	Fontmetrics for large Fonts has zero width	PSU
JDK-8328953	11, 17, 21	JEditorPane.read throws ChangedCharSetException	PSU
JDK-8328999	11, 17, 21	Update GIFlib to 5.2.2	PSU
JDK-8329004	11, 17, 21	Update Libpng to 1.6.43	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8329013	11	StackOverflowError when starting Apache Tomcat with signed jar	PSU
JDK-8329088	21	Stack chunk thawing races with concurrent GC stack iteration	PSU
JDK-8329103	11, 17, 21	assert(!thread.in_asgct()) failed during multi-mode profiling	PSU
JDK-8329109	17	Threads::print_on() tries to print CPU time for terminated GC threads	PSU
JDK-8329126	17, 21	No native wrappers generated anymore with -XX:-TieredCompilation after JDK-8251462	PSU
JDK-8329134	17, 21	Reconsider TLAB zapping	PSU
JDK-8329258	21	TailCall should not use frame pointer register for jump target	PSU
JDK-8329510	11, 17, 21	Update ProblemList for JFileChooser/8194044/FileSystemRootTest.java	PSU
JDK-8329559	11, 17, 21	Test javax/swing/JFrame/bug4419914.java failed because The End and Start buttons are not placed correctly and Tab focus does not move as expected	PSU
JDK-8329605	17	hs_errfile generic events - move memory protections and nmethod flushes to separate sections	PSU
JDK-8329663	17	hs_err file event log entry for thread adding/removing should print current thread	PSU
JDK-8329665	21	fatal error: memory leak: allocating without ResourceMark	PSU
JDK-8329667	17, 21	[macos] Issue with JTree related fix for JDK-8317771	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8329995	11, 17, 21	Restricted access to <code>/proc</code> can cause JFR initialization to crash	PSU
JDK-8330027	21	Identity hashes of archived objects must be based on a reproducible random seed	PSU
JDK-8330063	11, 17, 21	Upgrade jQuery to 3.7.1	PSU
JDK-8330133	21	libj2pkcs11.so crashes on some pkcs#11 v3.0 libraries	PSU
JDK-8330146	21	<code>assert(!_thread_is_in_any_VTMS_transition())</code> failed	PSU
JDK-8330415	8	Update system property for Java SE specification maintenance version	PSU
JDK-8330416	11	Update system property for Java SE specification maintenance version	PSU
JDK-8330520	21	linux clang build fails in <code>os_linux.cpp</code> with <code>static_assert</code> with no message is a C++17 extension	PSU
JDK-8330523	11	Reduce runtime and improve efficiency of <code>KeepAliveTest</code>	PSU
JDK-8330524	17	Linux ppc64le compile warning with clang in <code>os_linux_ppc.cpp</code>	PSU
JDK-8330576	21	<code>ZYoungCompactionLimit</code> should have range check	PSU
JDK-8330611	17, 21	AES-CTR vector intrinsic may read out of bounds (x86_64, AVX-512)	PSU
JDK-8330615	17	avoid signed integer overflows in <code>zip_util.c</code> <code>readCen / hashN</code>	PSU
JDK-8330748	21	<code>ByteArrayOutputStream.writeTo(OutputStream)</code> pins carrier	PSU
JDK-8330814	21	Cleanups for <code>KeepAliveCache</code> tests	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8330819	21	C2 SuperWord: bad dominance after pre-loop limit adjustment with base that has CastLL after pre-loop	PSU
JDK-8330849	21	Add test to verify memory usage with recursive locking	PSU
JDK-8330981	21	ZGC: Should not dedup strings in the finalizer graph	PSU
JDK-8331011	17, 21	[XWayland] TokenStorage fails under Security Manager	PSU
JDK-8331063	11, 17, 21	Some HttpClient tests don't report leaks	PSU
JDK-8331077	17, 21	nroff man page update for jar tool	PSU
JDK-8331142	21	Add test for number of loader threads in BasicDirectoryModel	PSU
JDK-8331153	21	JFR: Improve logging of <code>jdk/jfr/api/consumer/filestream/TestOrdered.java</code>	PSU
JDK-8331405	21	Shenandoah: Optimize ShenandoahLock with TTAS	PSU
JDK-8331411	21, 23	Shenandoah: Reconsider spinning duration in ShenandoahLock	PSU
JDK-8331421	21	ubsan: vmreg.cpp checking error member call on misaligned address	PSU
JDK-8331466	11, 17	Problemlist <code>serviceability/dcmd/gc/RunFinalizationTest.java</code> on generic-all	PSU
JDK-8331495	21	Limit <code>BasicDirectoryModel/LoaderThreadCount.java</code> to Windows only	PSU
JDK-8331518	21	Tests should not use the "Classpath" exception form of the legal header	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8331572	21	Allow using OopMapCache outside of STW GC phases	PSU
JDK-8331573	21	Rename CollectedHeap::is_gc_active to be explicitly about STW GCs	PSU
JDK-8331575	21	C2: crash when ConvL2I is split thru phi at LongCountedLoop	PSU
JDK-8331605	17, 21	jdk/test/lib/TestMutuallyExclusivePlatformPredicates.java test failure	PSU
JDK-8331626	21	unsafe.cpp:162:38: runtime error in index_oop_from_field_offset_long - applying non-zero offset 4563897424 to null pointer	PSU
JDK-8331714	21	Make OopMapCache installation lock-free	PSU
JDK-8331731	21	ubsan: relocInfo.cpp:155:30: runtime error: applying non-zero offset to null pointer	PSU
JDK-8331746	11, 17, 21	Create a test to verify that the cmm id is not ignored	PSU
JDK-8331771	21	ZGC: Remove OopMapCacheAlloc_lock ordering workaround	PSU
JDK-8331789	21	ubsan: deoptimization.cpp:403:29: runtime error: load of value 208, which is not a valid value for type 'bool'	PSU
JDK-8331798	11, 17, 21	Remove unused arg of checkErgonomics() in TestMaxHeapSizeTools.java	PSU
JDK-8331854	21	ubsan: copy.hpp:218:10: runtime error: addition of unsigned offset to 0x7fc2b4024518 overflowed to 0x7fc2b4024510	PSU
JDK-8331863	21	DUIterator_Fast used before it is constructed	PSU
JDK-8331885	17, 21	C2: meet between unloaded and speculative types is not symmetric	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8331931	21	JFR: Avoid loading regex classes during startup	PSU
JDK-8331999	21	BasicDirectoryModel/LoaderThreadCount.java frequently fails on Windows in CI	PSU
JDK-8332113	11, 17, 21	Update nsk.share.Log to be always verbose	PSU
JDK-8332154	21	Memory leak in SynchronousQueue	PSU
JDK-8332174	17, 21	Remove 2 (unpaired) RLO Unicode characters in ff_Adlm.xml	PSU
JDK-8332248	17, 21	(fc) java/nio/channels/FileChannel/BlockDeviceSize.java failed with RuntimeException	PSU
JDK-8332424	11, 17, 21	Update IANA Language Subtag Registry to Version 2024-05-16	PSU
JDK-8332431	21	NullPointerException in JTable of SwingSet2	PSU
JDK-8332473	21	ubsan: growableArray.hpp:290:10: runtime error: null pointer passed as argument 1, which is declared to never be null	PSU
JDK-8332490	21	JMH org.openjdk.bench.java.util.zip.InflaterInputStreams.inflaterInputStreamRead OOM	PSU
JDK-8332499	21	Gtest codestrings.validate_vm fail on linux x64 when hsd is present	PSU
JDK-8332524	11, 17, 21, 23	Instead of printing "TLSv1.3," it is showing "TLS13"	PSU
JDK-8332589	21	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
JDK-8332699	21	ubsan: jfrEventSetting.inline.hpp:31:43: runtime error: index 163 out of bounds for type 'jfrNativeEventSetting [162]'	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8332717	21	ZGC: Division by zero in heuristics	PSU
JDK-8332720	21	ubsan: instanceClass.cpp:3550:76: runtime error: member call on null pointer of type 'struct Array'	PSU
JDK-8332818	21, 23	ubsan: archiveHeapLoader.cpp:70:27: runtime error: applying non-zero offset 18446744073707454464 to null pointer	PSU
JDK-8332825	21	ubsan: guardedMemory.cpp:35:11: runtime error: null pointer passed as argument 2, which is declared to never be null	PSU
JDK-8332885	21	Clarify failure_handler self-tests	PSU
JDK-8332894	21	ubsan: vmError.cpp:2090:26: runtime error: division by zero	PSU
JDK-8332898	11, 17, 21	failure_handler: log directory of commands	PSU
JDK-8332903	21	ubsan: opto/output.cpp:1002:18: runtime error: load of value 171, which is not a valid value for type 'bool'	PSU
JDK-8332904	21	ubsan ppc64le: c1_LIRGenerator_ppc.cpp:581:21: runtime error: signed integer overflow: 9223372036854775807 + 1 cannot be represented in type 'long int'	PSU
JDK-8332905	21	C2 SuperWord: bad AD file, with RotateRightV and first operand not a pack	PSU
JDK-8332920	21	C2: Partial Peeling is wrongly applied for CmpU with negative limit	PSU
JDK-8332935	21	Crash: assert(*lastPtr != 0) failed: Mismatched JNINativeInterface tables, check for new entries	PSU
JDK-8332936	11, 17, 21	Test vmTestbase/metaspace/gc/watermark_70_80/TestDescription.java fails with no GC's recorded	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8332959	21	C2: ZGC fails with 'Incorrect load shift' when invoking Object.clone() reflectively on an array	PSU
JDK-8333088	21	ubsan: shenandoahAdaptiveHeuristics.cpp:245:44: runtime error: division by zero	PSU
JDK-8333093	21	Incorrect comment in zAddress_aarch64.cpp	PSU
JDK-8333099	21	Missing check for is_LoadVector in StoreNode::Identity	PSU
JDK-8333149	21	ubsan : memset on nullptr target detected in jvmtiEnvBase.cpp get_object_monitor_usage	PSU
JDK-8333178	21	ubsan: jvmti_tools.cpp:149:16: runtime error: null pointer passed as argument 2, which is declared to never be null	PSU
JDK-8333270	17, 21	HandlersOnComplexResetUpdate and HandlersOnComplexUpdate tests fail with "Unexpected reference" if timeoutFactor is less than 1/3	PSU
JDK-8333277	21	ubsan: mlib_ImageScanPoly.c:292:43: runtime error: division by zero	PSU
JDK-8333353	17, 21	Delete extra empty line in CodeBlob.java	PSU
JDK-8333354	21	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
JDK-8333361	21	ubsan,test : libHeapMonitorTest.cpp:518:9: runtime error: null pointer passed as argument 2, which is declared to never be null	PSU
JDK-8333363	21	ubsan: instanceClass.cpp: runtime error: member call on null pointer of type 'struct AnnotationArray'	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8333366	21	C2: CmpU3Nodes are not pushed back to worklist in PhaseCCP leading to non-fixpoint assertion failure	PSU
JDK-8333398	17, 21	Uncomment the commented test in test/jdk/java/util/jar/JarFile/mrjar/MultiReleaseJar API.java	PSU
JDK-8333462	21	Performance regression of new DecimalFormat() when compare to jdk11	PSU
JDK-8333542	21	Breakpoint in parallel code does not work	PSU
JDK-8333622	21	ubsan: relocInfo_x86.cpp:101:56: runtime error: pointer index expression with base (-1) overflowed	PSU
JDK-8333639	21	ubsan: cppVtables.cpp:81:55: runtime error: index 14 out of bounds for type 'long int [1]'	PSU
JDK-8333652	21, 23	RISC-V: compiler/vectorapi/VectorGatherMaskFoldingTest.java fails when using RVV	PSU
JDK-8333698	17	[17u] TestJstatdRmiPort fails after JDK-8333667	PSU
JDK-8333716	17, 21, 23	Shenandoah: Check for disarmed method before taking the nmethod lock	PSU
JDK-8333804	11, 17, 21	java/net/httpclient/ForbiddenHeadTest.java threw an exception with 0 failures	PSU
JDK-8333837	11	[11u] HexPrinterTest.java javac compile fails illegal start of expression	PSU
JDK-8333839	11	[11u] LingeredAppTest.java fails Can't find source file: LingeredApp.java	PSU
JDK-8333887	21, 23	ubsan: unsafe.cpp:247:13: runtime error: store to null pointer of type 'volatile int'	PSU
JDK-8334078	21	RISC-V: TestIntVect.java fails after JDK-8332153 when running without RVV	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8334123	21, 23	log the opening of Type 1 fonts	PSU
JDK-8334239	21, 23	Introduce macro for ubsan method/function exclusions	PSU
JDK-8334297	17, 21	(so) java/nio/channels/SocketChannel/OpenLeak.java should not depend on SecurityManager	PSU
JDK-8334332	17, 21	TestIOException.java fails if run by root	PSU
JDK-8334333	17, 21	MissingResourceCauseTestRun.java fails if run by root	PSU
JDK-8334335	11, 17	[TESTBUG] Backport of 8279164 to 11u & 17u includes elements of JDK-8163327	PSU
JDK-8334339	17, 21	Test java/nio/file/attribute/BasicFileAttributeView/CreationTime.java fails on alinux3	PSU
JDK-8334418	11, 17, 21	Update IANA Language Subtag Registry to Version 2024-06-14	PSU
JDK-8334421	21	assert(!oldbox.is_unbalanced()) failed: this should not be called for unbalanced region	PSU
JDK-8334482	17, 21	Shenandoah: Deadlock when safepoint is pending during nmethods iteration	PSU
JDK-8334592	21	ProblemList serviceability/jvmti/stress/StackTrace/NotSuspended/GetStackTraceNotSuspendedStressTest.java in jdk21 on all platforms	PSU
JDK-8334594	21	Generational ZGC: Deadlock after OopMap rewrites in 8331572	PSU
JDK-8334600	17, 21	TEST java/net/MulticastSocket/IPMulticastIF.java fails on linux-aarch64	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8334653	8, 11, 17, 21, 23	ISO 4217 Amendment 177 Update	PSU
JDK-8334711	11	[TEST_BUG] Compilation failed of MimeFormatsTest/MimeFormatsTest.java	PSU
JDK-8334769	17, 21	Shenandoah: Move CodeCache_lock close to its use in ShenandoahConcurrentNMethodIterator	PSU
JDK-8334867	21	Add back assertion from JDK-8325494	PSU
JDK-8334905	8	[8u] The test java/awt/Mixing/AWT_Mixing/JButtonOverlapping.java started to fail after 8159690	PSU
JDK-8335007	21	Inline OopMapCache table	PSU
JDK-8335134	21	Test com/sun/jdi/BreakpointOnClassPrepare.java timeout	PSU
JDK-8335150	21	Test LogGeneratedClassesTest.java fails on rpmbuild mock environment	PSU
JDK-8335237	21	ubsan: vtableStubs.hpp is_vtable_stub exclude from ubsan checks	PSU
JDK-8335283	21	Build failure due to 'no_sanitize' attribute directive ignored	PSU
JDK-8335409	21	Can't allocate and retain memory from resource area in frame::oops_interpreted_do oop closure after 8329665	PSU
JDK-8335493	21	check_gc_overhead_limit should reset SoftRefPolicy::_should_clear_all_soft_refs	PSU
JDK-8335536	17, 21, 23	Fix assertion failure in IdealGraphPrinter when append is true	PSU
JDK-8335552	8	[8u] JDK-8303466 backport to 8u requires 3::Identity signature fixes	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8335743	21	jhsdb jstack cannot print some information on the waiting thread	PSU
JDK-8335775	17, 21, 23	Remove extraneous 's' in comment of rawmonitor.cpp test file	PSU
JDK-8335803	11	SunJCE cipher throws NPE for un-extractable RSA keys	PSU
JDK-8335808	17	update for deprecated sprintf for jfrTypeSetUtils	PSU
JDK-8335851	8	[8u] Test JMXStartStopTest.java fails after JDK-8334415	PSU
JDK-8335894	8	[8u] Fix SupplementalJapaneseEraTest.java for jdks with symlinked conf dir	PSU
JDK-8335904	21	Fix invalid comment in ShenandoahLock	PSU
JDK-8335918	17	update for deprecated sprintf for jvmti	PSU
JDK-8335967	17, 21	"text-decoration: none" does not work with "A" HTML tags	PSU
JDK-8336284	21	Test TestCihbdbJstackLock.java/TestJhsdbJstackLock.java fails with -Xcomp after JDK-8335743	PSU
JDK-8336301	11, 17, 21, 23	test/jdk/java/nio/channels/AsyncCloseAndInterrupt.java leaves around a FIFO file upon test completion	PSU
JDK-8336926	21	jdk/internal/util/ReferencedKeyTest.java can fail with ConcurrentModificationException	PSU
JDK-8337038	17, 21	Test java/nio/file/attribute/BasicFileAttributeView/CreationTime.java should set as /native	PSU
JDK-8337110	8	[8u] TestNoEagerReclaimOfHumongousRegions.java should be in gc/g1 directory	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8337312	8	[8u] Windows x86 VS2010 build broken by JDK-8320097	PSU
JDK-8337622	21	IllegalArgumentException in java.lang.reflect.Field.get	PSU
JDK-8337664	8, 11, 17, 21, 23	Distrust TLS server certificates issued after Oct 2024 and anchored by Entrust Root CAs	PSU
JDK-8337669	17	[17u] Backport of JDK-8284047 missed to delete a file	PSU
JDK-8338139	11, 17, 21	{ClassLoader,Memory}MXBean::isVerbose methods are inconsistent with their setVerbose methods	PSU
JDK-8338696	17, 21, 23	(fs) BasicFileAttributes.creationTime() falls back to epoch if birth time is unavailable (Linux)	PSU
JDK-8339869	17, 21	[21u] Test CreationTime.java fails with UnsatisfiedLinkError after 8334339	PSU
JDK-8341057	8, 11, 17, 21, 23	Add 2 SSL.com TLS roots	PSU
JDK-8341059	8, 11, 17, 21, 23	Change Entrust TLS distrust date to November 12, 2024	PSU
JDK-8341989	21	[21u] Back out JDK-8327501 and JDK-8328366	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
JDK-8282359	11	Intermittent WebKit build failure on Windows: C1090: PDB API call failed, error code 23	CPU,PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8328994	8, 11, 17, 21, 23	Update WebKit to 619.1	CPU,PSU
JDK-8331765	8, 11, 17, 21, 23	Websocket callbacks are not executed after WebKit 617.1 update	CPU,PSU
JDK-8334713	8, 11, 17, 21, 23	WebKit build failed on LoongArch64 because currentStackPointer is undefined	CPU,PSU
JDK-8335548	8, 11, 17, 21, 23	testCookieEnabled fails with WebKit 619.1	CPU,PSU
JDK-8336798	8, 11, 17, 21, 23	DRT test cssrounding.html test for linear layout fails with WebKit 619.1	CPU,PSU
JDK-8338306	8, 11, 17, 21, 23	WebView Drag and Drop fails with WebKit 619.1	CPU,PSU
JDK-8338307	8, 11, 17, 21, 23	Additional WebKit 619.1 fixes from WebKitGTK 2.44.3	CPU,PSU
JDK-8338478	17, 21, 23	[macos] Crash in CoreText with certain strings using JDK 22 or later	CPU,PSU
JDK-8087444	21	CornerRadii with different horizontal and vertical values treated as uniform	PSU
JDK-8088172	21	Mac: On German keyboard, pressing <+><q> inserts two apostrophes instead of one	PSU
JDK-8088923	21	IOOBE when adding duplicate categories to the BarChart	PSU
JDK-8089373	21	Translation from character to key code is not sufficient	PSU
JDK-8089803	21	[Mac, TextArea] Japanese IME, caret moves to the next line when pressing Return to select a candidate.	PSU
JDK-8090267	21	JFXPanel Input Problem	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8092102	21	Labeled: textTruncated property	PSU
JDK-8146918	21	ConcurrentModificationException in MediaPlayer	PSU
JDK-8186188	21	TableColumnHeader: initial auto-size broken if has graphic	PSU
JDK-8193286	21	IntegerSpinnerFactory does not wrap value correctly	PSU
JDK-8198830	21	BarChart: auto-range of CategoryAxis not working on dynamically setting data	PSU
JDK-8207379	21	Robot screen capture test fails with HiDPI at some screen locations	PSU
JDK-8242553	21	IntegerSpinner and DoubleSpinner do not wrap around values correctly in some cases	PSU
JDK-8255679	21	RegionBackgroundImageUITest.unalignedImage_Cover fails because of wrong color	PSU
JDK-8260013	21	Snapshot does not work for nodes in a subscene	PSU
JDK-8267565	21	Support "@3x" and greater high-density image naming convention	PSU
JDK-8270996	21	javadoc: missing comments in serialized classes	PSU
JDK-8271865	21	SortedList::getViewIndex behaves not correctly for some index values	PSU
JDK-8273349	21	Check uses of Stream::peek in controls and replace as needed	PSU
JDK-8273657	21	TextField: all text content must be selected initially	PSU
JDK-8278021	21	Fix warnings in macOS glass native code and treat warnings as errors	PSU
JDK-8279140	21	ComboBox can lose selected value on item change via setAll	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8282999	21	Add support for EXT-X-MEDIA tag in HTTP Live Streaming	PSU
JDK-8289115	21	Touch events is not dispatched after upgrade to JAVAFX17+	PSU
JDK-8295945	21	Revert unintended change to copyright start year	PSU
JDK-8299738	21	ISE if Platform::exit called with fullScreen Stage on macOS 13	PSU
JDK-8301900	21	TextArea: Committing text with ENTER in an IME window inserts newline	PSU
JDK-8306322	21	JDK8130122Test fails intermittently	PSU
JDK-8307117	21	TextArea: wrapText property ignored when changing font	PSU
JDK-8307980	21	Rotate Transformation never invalidates inverseCache	PSU
JDK-8308955	21	MediaPlayer/AudioClip skip data on seek/loop	PSU
JDK-8311124	21	[Windows] User installed font 8281327 fix does not work for all cases	PSU
JDK-8311895	21	CSS Transitions	PSU
JDK-8312603	21	ArrayIndexOutOfBoundsException in Marlin when scaleX is 0	PSU
JDK-8313138	21	Scrollbar Keyboard enhancement	PSU
JDK-8314215	21	Trailing Spaces before Line Breaks Affect the Center Alignment of Text	PSU
JDK-8314754	21	Minor ticks are not getting updated both the axes in LineChart	PSU
JDK-8316372	21	Monkey Tester Application Part 3	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8319779	17, 21, 23	SystemMenu: memory leak due to listener never being removed	PSU
JDK-8319844	21	Text/TextFlow.hitTest() is incorrect in RTL orientation	PSU
JDK-8320563	21	Remove D3D9 code paths in favor of D3D9Ex	PSU
JDK-8320912	21	IME should commit on focus change	PSU
JDK-8320965	21	Scrolling on a touch enabled display fails on Wayland	PSU
JDK-8321603	21	Bump minimum JDK version for JavaFX to JDK 21	PSU
JDK-8322215	21	[win] OS events that close the stage can cause Glass to reference freed memory	PSU
JDK-8322619	21	Parts of SG no longer update during rendering - overlapping - culling - dirty	PSU
JDK-8322748	21	Caret blinking in JavaFX should only stop when caret moves	PSU
JDK-8322784	21	JFXPanel calls InputMethodRequests on wrong thread	PSU
JDK-8322964	21	Optimize performance of CSS selector matching	PSU
JDK-8323511	21	Scrollbar Click jumps inconsistent amount of pixels	PSU
JDK-8323543	21	NPE when table items are set to null	PSU
JDK-8323615	21	PopupControl.skin.setSkin(Skin) fails to call dispose() on discarded Skin	PSU
JDK-8323787	17, 21, 23	Mac System MenuBar throws IOB exception	PSU
JDK-8324182	21	Deprecate for removal SimpleSelector and CompoundSelector classes	PSU
JDK-8324232	21	KeyEvent.getCode() is null inside JFXPanel	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8324237	21	Typo in comment in GlassApplication.m	PSU
JDK-8324239	21	JFXPanelHiDPITest fails on Windows 11	PSU
JDK-8324270	21	Update boot JDK to 21.0.2	PSU
JDK-8324327	21	ColorPicker shows a white rectangle on clicking on picker	PSU
JDK-8324658	21	Allow animation play/start/stop/pause methods to be called on any thread	PSU
JDK-8324797	21	Code example in JavaDoc of ObservableValue#when doesn't compile	PSU
JDK-8324879	21	Platform-specific preferences keys are incorrect for Windows toolkit	PSU
JDK-8324939	21	Editable TableView loses focus after commit	PSU
JDK-8325073	21	javadoc warnings: missing @param tags and other issues	PSU
JDK-8325075	21	Enable -Werror for javadoc to fail on any warnings	PSU
JDK-8325093	21	Update CONTRIBUTING.md for build jdk version	PSU
JDK-8325402	21	TreeTableRow updateItem() does not check item with isItemChanged(..) unlike all other cell implementations	PSU
JDK-8325445	21, 23	[macOS] Colors are not displayed in sRGB color space	PSU
JDK-8325566	21	[TestBug] Util.shutdown() to hide ALL Windows	PSU
JDK-8325591	21	[Mac] DRAG_DONE reports null transferMode when destination is external	PSU
JDK-8325798	21	Spinner throws uncatchable exception on tab out from garbled text	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8325873	21	Update JDK_DOCS property to point to JDK 21 docs	PSU
JDK-8325900	21	Emit a warning on macOS if AWT has set the NSAppearance	PSU
JDK-8326618	21	Replace usage of deprecated method getId() in Thread	PSU
JDK-8326619	21	Stage.sizeToScene() on maximized/fullscreen Stage breaks the Window	PSU
JDK-8326712	21	Robot tests fail on XWayland	PSU
JDK-8327255	21	javac lint warnings: removal, missing-explicit-ctor	PSU
JDK-8327471	21	RTLTextFlowCharacterIndexTest fails on Linux	PSU
JDK-8327482	21	Fix missing image resource in HelloImage toy app	PSU
JDK-8327727	21	Changing the row factory of a TableView does not recreate the rows	PSU
JDK-8328399	21	Add hs_err_pid* to .gitignore	PSU
JDK-8328400	21	Minor Cleanup	PSU
JDK-8328577	21	Toolbar's overflow button overlaps the items	PSU
JDK-8328603	21	HLS video stream fails to render consistently	PSU
JDK-8328667	21	[Testbug] Enable ignored Spinner unit tests	PSU
JDK-8328718	21	Remove unused imports in javafx.controls	PSU
JDK-8328739	21	Remove unused imports in javafx.graphics	PSU
JDK-8328742	21	Remove unused imports in manual tests	PSU
JDK-8328745	21	Remove unused imports in system tests	PSU
JDK-8328746	21	Remove unused imports in demo apps	PSU
JDK-8328750	21	[TestBug] Improve Stub Font Support	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8328751	21	Fix missing @Overrides in modules except javafx.web	PSU
JDK-8328754	21	Fix missing @Overrides in test	PSU
JDK-8328811	21	Fix missing @Overrides in demos	PSU
JDK-8328818	21	Fix Decora JSL to remove missing @Override warnings	PSU
JDK-8328820	21	Remove unused imports in javafx.swing	PSU
JDK-8329821	21	[Linux] When using i3 WM, menus are incorrectly sized	PSU
JDK-8330304	21	MenuBar: Invisible Menu works incorrectly with keyboard arrows	PSU
JDK-8330590	21	TextInputControl: previous word fails with Bhojpuri characters	PSU
JDK-8330701	21	Fix Eclipse project in tests/manual/text	PSU
JDK-8331214	21	Doc: update spec for SpinnerFactory classes	PSU
JDK-8331319	21	IME Window breaks after popup menu	PSU
JDK-8331603	21	Cleanup native AbstractSurface methods getRGBImpl, setRGBImpl	PSU
JDK-8331616	21	ChangeListener is not triggered when the InvalidationListener is removed	PSU
JDK-8332251	21	javadoc: incorrect method references in Region and PopupControl	PSU
JDK-8332313	21	Update code review guidelines	PSU
JDK-8332732	21	Clean up non-standard use of /// comments in JavaFX	PSU
JDK-8332748	21	Grammatical errors in animation API docs	PSU
JDK-8332863	21	Crash in JPEG decoder if we enable MEM_STATS	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8333147	21	update maven classifier syntax to recent gradle version	PSU
JDK-8334124	21, 23	Rendering issues with CSS "text-shadow" in WebView	PSU
JDK-8334138	21	Suppress removal warnings for sun.misc.Unsafe memory access methods	PSU
JDK-8334143	21	Suppress remaining removal warnings for internal methods and classes	PSU
JDK-8334161	21	Enable -Werror for javac tasks to fail on any warnings	PSU
JDK-8334656	11, 17, 21	Enable issuestitle check	PSU
JDK-8334657	11, 17, 21	Enable binary check	PSU
JDK-8334731	21	GHA: build on macOS / aarch64	PSU
JDK-8334739	21	XYChart and (Stacked)AreaChart properties return incorrect beans	PSU
JDK-8334874	17, 21, 23	Horizontal scroll events from touch pads should scroll the TabPane tabs	PSU
JDK-8335216	21	[windows] Missing error check for GetSystemDirectory in glass	PSU
JDK-8335630	21	Crash if Platform::exit called with fullScreen Stage on macOS 14	PSU
JDK-8335633	21	Missing @Override in Dimension	PSU
JDK-8336272	21	SizeToSceneTest: fullScreen tests fail on Ubuntu 22.04	PSU
JDK-8336277	21, 23	Colors are incorrect when playing H.265/HEVC on Windows 11	PSU
JDK-8336938	21, 23	Update libFFI to 3.4.6	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8336939	21, 23	Update Glib to 2.80.4	PSU
JDK-8336940	21, 23	Update GStreamer to 1.24.6	PSU
JDK-8336941	21, 23	Update libxslt to 1.1.42	PSU
JDK-8337481	21, 23	File API: file.name contains path instead of name	PSU
JDK-8338701	21, 23	Provide media support for libavcodec version 61	PSU
JDK-8338886	21, 23	JavaFX debug builds fail on macOS	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-63270	7	fastdebug build: java -version fails with ClassNotFoundException	CPU,PSU
ZULU-65256	21	Verify statx permissions	CPU,PSU
ZULU-65659	8, 17, 21, 23	Component info fails to build for jfx zulu23.0.0+101	CPU,PSU
ZULU-66513	8	TestMissingSafepointOnTryCatch needs a correct Util	CPU,PSU
ZULU-66617	6, 7, 8	Improve freetype TPL processing	CPU,PSU
ZULU-54282	17, 21	Support C/R through Minicriu	PSU
ZULU-59319		Minicriu restoree is not debuggable	PSU
ZULU-63336	11	solaris: libawt fails to use isinf() after JDK-8210988	PSU
ZULU-63513	8, 17	Workaround: conditionally force FT_LOAD_RENDER	PSU
ZULU-63749	17, 21	VirtualAllocCommitUncommitRecommit.java sometimes hangs	PSU

Issue ID	Azul Zulu Version	Synopsis	CPU/PSU
ZULU-64014	21	[CRaC] jdk/crac/fileDescriptors/PollerTest.java test hangs on any windows host in builds 22.32+15-crac, 22.32+16-crac, 21.36+17-crac, 21.36+18-crac	PSU
ZULU-64029	17, 21	[CRaC] jdk/crac/fileDescriptors/JrtFsTest.java test fails on all windows hosts in builds 17.52-crac, 21.36-crac, 22.32-crac	PSU
ZULU-64052		Enable license IDs reporting in SBOM	PSU
ZULU-64308	21	move jfx23 linux builds to AlmaLinux8	PSU
ZULU-64312	8, 11, 17	Bouncy Castle FIPS 2 implementation	PSU
ZULU-64314	21	Enable ControlFlowGuard for windows builds	PSU
ZULU-65158	17, 21	CRaC engine cannot be executed on Windows	PSU
ZULU-65271	21	Verify statx permissions	PSU
ZULU-65281	8	Use build-tools for embedded builds	PSU
ZULU-65283	8	Fix CPE verification procedure	PSU
ZULU-65284	8	Stripped source bundle generation	PSU
ZULU-65287		Google Cloud Run: intermittent Can't open 1/clear_refs	PSU
ZULU-65419		[warp] Install brk seccomp filter even if prctl fails	PSU
ZULU-65420	21, 23	Handle boot-id not ending with newline	PSU
ZULU-65421	23	Use alternative CRaC restore parameters storage	PSU
ZULU-65433	8	zulu8 jar is not compressed by default	PSU
ZULU-65474	8	SA build failure after 8075511	PSU
ZULU-65577	8	CR/PREH product build failures	PSU
ZULU-65593	17, 21	Fix CPUFeatures breakage of clang compilation	PSU
ZULU-65656		JDK-8299234: JMX Repository.query performance	PSU

Issue ID	Azul Zulu Version	Synopsis	CPU/PSU
ZULU-66014	21, 23	Automatic CRaC support for LinuxWatchService	PSU
ZULU-66461	11	[zulu11] Hash of jdk.scripding.nashorn differs to expected hash recorded in java.base	PSU
ZULU-66481	8	Build failure after removing duplicate license files	PSU
ZULU-66523	8	[zulu8] BCFIPS v2.0.0 causes failures for Sun* algorithms	PSU
ZULU-66614	8	[8u] configure option --with-sysroot clears --with-extra-cflags	PSU
ZULU-66624	8	zulu8-emb: wrong ADLC compiler flags for old GCC	PSU
ZULU-66635	8, 11, 17	Build flag to select FIPS 1.x / 2.x	PSU
ZULU-66652	8	JDK-8301118: Ignore allow and disallow options for java.security.manager System Property	PSU
ZULU-66653	11	JDK-8301118: Ignore allow and disallow options for java.security.manager System Property	PSU
ZULU-66763	23	All lib*.so are executable, not only warp	PSU
ZULU-66856	17, 21, 23	split Warp components	PSU
ZULU-66858		Warp Alpine support	PSU
ZULU-67092	8, 11, 17, 21	Use CRS component in zulu	PSU
ZULU-67093	11, 17	Use hsdis component in zulu	PSU
ZULU-67234	8	Add WITH_FIPS* to zulu8 .dependencies	PSU

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

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

Issue ID	Azul Zulu Version	Synopsis	CPU/PSU
ZULU-65651	8, 11, 17, 21, 23	Update to GCC 13.2.0 on Linux	CPU,PSU
ZULU-65911	8, 11, 17, 21, 23	SVGTest.testSVGRenderingWithGradient fails on linux-aarch64	CPU,PSU
ZULU-66758	8, 11, 17, 21, 23	Test test.javafx.scene.web.DOMTest.testEventListener Cascade fails on win32	CPU,PSU
ZULU-56899	21	update version test for zulu jfx GA	PSU
ZULU-60353	8	tests in test.javafx.print package fail on wi2019 for zulu8	PSU
ZULU-66482	21, 23	test.scenegraph.functional.mix.SpinnerTest fails	PSU

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