



Azul Zulu builds of OpenJDK

January 2024 Quarterly Update

Release Notes

Revision 1.1

Table of Contents

Revision History	1
Release Details	1
What's New	2
Configuration Changes	2
Dropped Support for OpenJSSE and Legacy8uJSSE.....	3
Encryption Configuration Changes for FIPS-enabled Configurations	3
New configurations of Azul Zulu with CRaC Support.....	4
IANA Time Zone Database Version	4
Supported Platforms	4
Azul Zulu Builds of OpenJDK Without and With OpenJFX	4
Azul Zulu Builds of OpenJDK With CRaC.....	8
Fixed Issues	9
Fixed Common Vulnerabilities and Exposures	9
Non-CVE Security Fixes	11
OpenJDK Fixes and Enhancements.....	11
OpenJFX Fixes and Enhancements	51
Fixes and Enhancements Specific to Azul Zulu Builds of OpenJDK	52
Fixes and Enhancements Specific to Azul Zulu Builds of OpenJDK With JavaFX ...	57

Revision History

Revision	Date	Description
0.1	January 16, 2024	Initial version of the document.
1.0	January 16, 2024	Added CVE info.
1.1	January 24, 2024	Update of configuration changes.

Release Details

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

The following table lists detailed information on the Azul Zulu versions released with the current update.

Azul Zulu Version (*)	Update Type (**)	JDK Version	Based on		JavaFX Version
			Azul Zulu Version	JDK Version	
21.31.16 (SA)	CPU	21.0.1.0.101+3	21.30	21.0.1+12	21.0.1.0.101+100
21.32.17 (CA) 21.32.18 (SA)	PSU	21.0.2+13	21.31	21.0.1.0.101+3	21.0.2+101
17.47.16 (SA)	CPU	17.0.9.0.101+3	17.46	17.0.9+9	21.0.1.0.101+100
17.48.15 (CA) 17.48.16 (SA)	PSU	17.0.10+7	17.47	17.0.9.0.101+3	21.0.2+101
11.69.14 (SA)	CPU	11.0.21.0.101+2	11.68	11.0.21+9	19.0.5.0.101+100
11.70.15 (CA) 11.70.16 (SA)	PSU	11.0.22+7	11.69	11.0.21.0.101+2	19.0.6+101
8.75.0.16 (SA)	CPU	8u401-b03	8.74	8u392-b08	8u401-b01
8.76.0.17 (CA) 8.76.0.18 (SA)	PSU	8u402-b06	8.75	8u401-b03	8u402-b02

7.67.0.16 (SA)	CPU	7u411-b03	7.65	7u401-b01	N/A
6.61.0.16 (SA)	CPU	6b161	6.59	6b159	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

Configuration Changes

We reduced the testing cycles for the following environment targeting its end of life, and this is no longer supported:

- Windows Server 2012 R2

If you're still using this platform, we will be providing Azul Platform Core versions for you and can help you if issues would arise! Please email us at support@azul.com.

NOTE

Although previously announced in V1.0 of this document, macOS 12 Monterey and RHEL 7.x are longer supported and testing is not reduced yet for these platforms.

Dropped Support for OpenJSSE and Legacy8uJSSE

OpenJSSE is a JSSE provider that was ported from Java 11 to Azul Zulu 8 to add support for TLS 1.3, because OpenJDK 8 did not support TLS 1.3 at the time. Later, OpenJSSE was integrated into the SunJSSE provider of OpenJDK 8u272 and became part of Java SE 8 specification.

Legacy8uJSSE is a JSSE provider that falls back to legacy TLS 1.2 protocol implementation and was added to Azul Zulu 8 for compatibility reasons.

Although earlier announced that they would be removed in January 2022, the two JSSE implementations got supported until this release, but will now be gradually dropped:

- The January 2024 **PSU** Builds of OpenJDK no longer support OpenJSSE and Legacy8uJSSE.
- The January 2024 **CPU** Builds are the last with OpenJSSE and Legacy8uJSSE.

Encryption Configuration Changes for FIPS-enabled Configurations

With the update of BCFIPS library from version 1.0.2.3 to 1.0.2.4, the following changes took place: PKCS 1.5 RSA encryption, Triple-DES encryption, and MD5 digest are now disabled in the `ApprovedOnlyMode` by default.

These algorithms can be enabled for internal usage by the BCFIPS library with the following system properties:

```
org.bouncycastle.tripledes.allow_drbg
org.bouncycastle.tripledes.allow_prf
org.bouncycastle.tripledes.allow_wrap
org.bouncycastle.tripledes.allow_enc
org.bouncycastle.rsa.allow_pkcs15_enc
org.bouncycastle.jsse.enable_md5
```

New configurations of Azul Zulu with CRaC Support

- Zulu Builds with CRaC are now available for Alpine Linux (musl libc).
- In the following weeks, downloads will be available for Windows and macOS of Azul Zulu Builds of OpenJDK with CRaC support for development purposes. With these runtimes you will be able to simulate the CRaC functionality. When a checkpoint is requested, it will be created and immediately restored without dumping the checkpoint to disk. This enables you to develop and test the CRaC functionality on these platforms, so you can deploy your application with confidence on Linux.

IANA Time Zone Database Version



This release of Azul Zulu comes with **IANA Time Zone Database version 2023c**, the same as in the release of October 2023.

Supported Platforms

This section provides information about the operating systems that are supported in this update 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
Windows (x86 32/64-bit)						
Windows Server 2022	✓	✓	✓✓	✓✓	✓✓	✓✓ [1]
Windows Server 2019	✓	✓	✓✓	✓✓	✓✓	✓✓ [1]
Windows Server 2016	✓	✓	✓✓	✓✓	✓✓	✓✓ [1]
Windows 11	✓	✓	✓✓	✓✓	✓✓	✓✓ [1]
Windows 10	✓	✓	✓✓	✓✓	✓✓	✓✓ [1]
Windows (ARM 64-bit)						
Windows 11	n/a	n/a	n/a	n/a	✓	n/a
Windows 10	n/a	n/a	n/a	n/a	✓	n/a
Linux (x86 32/64-bit)						
RHEL 9.x	n/a	✓	✓✓	✓✓	✓✓	✓✓ [1]
RHEL 8.x	✓	✓	✓✓	✓✓	✓✓	✓✓ [1]
RHEL 7.x	✓	✓	✓✓	✓✓	✓✓	✓✓ [1]
SLES 15	✓	✓	✓✓	✓✓	✓✓	✓✓ [1]
SLES 12	✓	✓	✓✓	✓✓	✓✓	✓✓ [1]
CentOS Stream	✓	✓	✓✓	✓✓	✓✓	✓✓ [1]
Ubuntu 22.04	✓	✓	✓✓	✓✓	✓✓	✓✓ [1]
Ubuntu 20.04	✓	✓	✓✓	✓✓	✓✓	✓✓ [1]
Ubuntu 18.04	✓	✓	✓✓	✓✓	✓✓	✓✓ [1]
Debian 12	✓	✓	✓✓	✓✓	✓✓	✓✓ [1]

Debian 11								[1]
Debian 10								[1]
Wind River 8.x	n/a			n/a	n/a	n/a		
CoreOS	n/a							n/a
Alpine Linux 3.11 or later	n/a	n/a						
Amazon Linux 2023	n/a	n/a						n/a
Linux (ARM 64-bit)								
Ubuntu 22.04	n/a	n/a						
Ubuntu 20.04	n/a	n/a						
Ubuntu 18.04	n/a	n/a			n/a	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						n/a
Linux with kernel 3.10.x and glibc 2.23 [2] [3]	n/a	n/a			n/a	n/a		
Linux (ARM 32-bit Hard-Float)								
Ubuntu 18.04 [4]	n/a	n/a						n/a
Raspbian 10 Buster [4]	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		
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		
Debian 7 Wheezy [8]	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		

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
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
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
QNX (ARMv7 32-bit Hard-Float ABI)						
QNX 7.0	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
Solaris 10	n/a	✓	✓	n/a	n/a	n/a
AIX (ppc64)						
AIX 7.3	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 will 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 version 17 and 21 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	
	x86 64-bit	ARM 64-bit	x86 64-bit	ARM 64-bit
Linux				
Alpine Linux 3.11+				
Windows		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
CVE-2024-20932	Security	Multiple	Yes	7.5	Network	Low	None	None	Unchanged	None	High	None	17	Note 1
CVE-2024-20918	Hotspot	Multiple	Yes	7.4	Network	High	None	None	Unchanged	High	High	None	21, 17, 11, 8	Note 2
CVE-2024-20952	Security	Multiple	Yes	7.4	Network	High	None	None	Unchanged	High	High	None	21, 17, 11, 8, 7, 6	Note 1
CVE-2024-20919	Hotspot	Multiple	Yes	5.9	Network	High	None	None	Unchanged	None	High	None	21, 17, 11, 8, 7, 6	Note 3
CVE-2024-20921	Hotspot	Multiple	Yes	5.9	Network	High	None	None	Unchanged	High	None	None	21, 17, 11, 8, 7, 6	Note 2
CVE-2024-20926	Scripting	Multiple	Yes	5.9	Network	High	None	None	Unchanged	High	None	None	11, 8	Note 2
CVE-2024-20945	Security	None	No	4.7	Local	High	Low	None	Unchanged	High	None	None	21, 17, 11, 8, 7, 6	Note 1
CVE-2024-20923	JavaFX	Multiple	Yes	3.1	Network	High	None	Required	Unchanged	Low	None	None	21, 17, 11, 8	Note 1
CVE-2024-20925	JavaFX	Multiple	Yes	3.1	Network	High	None	Required	Unchanged	None	Low	None	21, 17, 11, 8	Note 1
CVE-2024-20922	JavaFX	None	No	2.5	Local	High	None	Required	Unchanged	None	Low	None	21, 17, 11, 8	Note 1
CVE-2023-44487	Oracle GraalVM for JDK: Node (Node.js)	HTTP	Yes	7.5	Network	Low	None	None	Unchanged	None	None	High	None	

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-2023-5072	Oracle GraalVM for JDK, Oracle GraalVM Enterprise Edition: Tools (JSON-java)	Multiple	Yes	7.5	Network	Low	None	None	Unchanged	None	None	High	None	
CVE-2024-20955	Oracle GraalVM for JDK, Oracle GraalVM Enterprise Edition: Compiler	Multiple	Yes	3.7	Network	High	None	None	Unchanged	Low	None	None	None	

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.
3	This vulnerability can only be exploited by supplying data to APIs in the specified Component without using Untrusted applications, such as through a web service.

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-8308204	6, 7, 8, 11, 17, 21	Enhanced certificate processing	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-8066103	6	C2's range check smearing allows out of bound array accesses	CPU,PSU
JDK-8276123	17	ZipFile::getEntry will not return a file entry when there is a directory entry of the same name within a Zip File	CPU,PSU
JDK-8302017	6, 7, 8, 11, 17	Allocate BadPaddingException only if it will be thrown	CPU,PSU
JDK-8320597	6, 7, 8, 11, 17, 21	RSA signature verification fails on signed data that does not encode params correctly	CPU,PSU
JDK-6381945	11	(cal) Japanese calendar unit test system should avoid multiple static imports	PSU
JDK-6445283	11, 17	ProgressMonitorInputStream not large file aware (>2GB)	PSU
JDK-6528710	8	sRGB-ColorSpace to sRGB-ColorSpace Conversion	PSU
JDK-8026393	11	jarsigner never shows a warning in badKeyUsage case	PSU
JDK-8029995	8	accept yes/no for boolean krb5.conf settings	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8038244	21	(fs) Check return value of malloc in Java_sun_nio_fs_AixNativeDispatcher_getmntctl()	PSU
JDK-8041447	11, 17	Test javax/swing/dnd/7171812/bug7171812.java fails with java.lang.RuntimeException: Test failed, scroll on drag doesn't work	PSU
JDK-8053479	11	(dc) DatagramChannel.read() throws exception instead of discarding data when buffer too small	PSU
JDK-8061729	17	Update java/net tests to eliminate dependency on sun.net.www.MessageHeader and some other internal APIs	PSU
JDK-8067250	11	[mlvm] vm/mlvm/mixed/stress/regression/b6969574 fails and perf regression	PSU
JDK-8153090	11	TAB key cannot change input focus after the radio button in the Color Selection dialog	PSU
JDK-8161536	17, 21	sun/security/pkcs11/sslecc/ClientJSSSEServerJSS E.java fails with ProviderException	PSU
JDK-8168408	11	Test java/awt/Focus/ActualFocusedWindowTest/ActualFocusedWindowBlockingTest.java fails intermittently on windows	PSU
JDK-8168469	17	Memory leak in JceSecurity	PSU
JDK-8176567	17	nsk/jdi/ReferenceType/instances/instances002: TestFailure: Unexpected size of referenceType.instances(nsk.share.jdi.TestInterfaceImplementer1): 11, expected: 10	PSU
JDK-8183374	11	Refactor java/lang/Runtime shell tests to java	PSU
JDK-8185531	11	[TESTBUG] Improve test configuration for shared strings	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8193543	17	Regression automated test '/open/test/jdk/java/awt/TrayIcon/SystemTrayInstance/SystemTrayInstanceTest.java' fails	PSU
JDK-8195589	11	T6587786.java failed after JDK-8189997	PSU
JDK-8197825	11	[Test] Intermittent timeout with javax/swing JColorChooser Test	PSU
JDK-8198668	17	MemoryPoolMBean/isUsageThresholdExceeded/is exceeded001/TestDescription.java still failing	PSU
JDK-8202790	17	DnD test DisposeFrameOnDragTest.java does not clean up	PSU
JDK-8202931	17	[macos] java/awt/Choice/ChoicePopupLocation/ChoicePo popupLocation.java fails	PSU
JDK-8205467	11	javax/management/remote/mandatory/connectio n/MultiThreadDeadLockTest.java possible deadlock	PSU
JDK-8207166	11, 17	jdk/jshell/JdiHangingLaunchExecutionControlTest. java - launch timeout	PSU
JDK-8207404	8	MulticastSocket tests failing on AIX	PSU
JDK-8209115	8	adjust libsplashscreen linux ppc64le builds for easier libpng update	PSU
JDK-8210168	11	JCK test .vm.classfmt.ins.code 002.code00201m1.code__00201m1 hangs with -noverify	PSU
JDK-8210265	11	Crash in HSpaceCounters::update_used()	PSU
JDK-8211045	11	[Testbug] Fix for 8144279 didn't define a test case!	PSU
JDK-8212677	8	X11 default visual support for IM status window on VNC	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8212997	11	[TESTBUG] Remove defmeth tests for class file versions 50 and 51	PSU
JDK-8213898	11	CDS dumping of springboot asserts in G1ArchiveAllocator::alloc_new_region	PSU
JDK-8214694	11	cleanup rawtypes warnings in open jndi tests	PSU
JDK-8217329	11	JTREG: Clean up, remove unused imports in gc folder	PSU
JDK-8218178	11	vmTestbase/vm/mlvm/mixed/stress/regression/b6969574/INDIFY_Test.java fails with -Xcomp	PSU
JDK-8219652	21	[aix] Tests failing with JNI attach problems.	PSU
JDK-8220083	11	Remove hard-coded 127.0.0.1 loopback address in JDK networking tests	PSU
JDK-8221396	11	Clean up serviceability/sa/TestUniverse.java	PSU
JDK-8223145	11	Replace wildcard address with loopback or local host in tests - part 1	PSU
JDK-8223788	11	[macos] JSpinner buttons in JColorChooser dialog may capture focus using TAB Key.	PSU
JDK-8224035	11	Replace wildcard address with loopback or local host in tests - part 9	PSU
JDK-8224204	11	Replace wildcard address with loopback or local host in tests - part 10	PSU
JDK-8225313	17	serviceability/jvmti/HeapMonitor/MyPackage/HeapMonitorStatObjectCorrectnessTest.java failed with Unexpected high difference percentage	PSU
JDK-8225377	21	type annotations are not visible to javac plugins across compilation boundaries	PSU
JDK-8226825	11	Replace wildcard address with loopback or local host in tests - part 19	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8228990	17	JFR: TestNetworkUtilizationEvent.java expects 2+ Network interfaces on Linux but finding 1	PSU
JDK-8230435	11	Replace wildcard address with loopback or local host in tests - part 22	PSU
JDK-8230858	11	Replace wildcard address with loopback or local host in tests - part 23	PSU
JDK-8231556	11	Wrong font ligatures used when 2 versions of same font used	PSU
JDK-8231931	11	[TESTBUG] serviceability/sa/TestUniverse.java looks for wrong string with Shenandoah	PSU
JDK-8232135	11	Add diagnostic output to test java/util/ProcessBuilder/Basic.java	PSU
JDK-8232513	11	java/net/DatagramSocket/PortUnreachable.java still fails intermittently with BindException	PSU
JDK-8232839	17, 21	JDI AfterThreadDeathTest.java failed due to "FAILED: Did not get expected InterruptedException on a StepRequest.enable()"	PSU
JDK-8232933	11, 17	Javac inferred type does not conform to equality constraint	PSU
JDK-8233000	11	Mark vmTestbase/vm/mlvm/meth/stress/compiler/deoptimize test as stress test	PSU
JDK-8233847	11	(sctp) Fix link-local IPv6 scope handling and test cleanup.	PSU
JDK-8237858	11	PlainSocketImpl.socketAccept() handles EINTR incorrectly	PSU
JDK-8238740	11	java/net/httpclient/whitebox/FlowTestDriver.java should not specify a TLS protocol	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8239365	8	ProcessBuilder test modifications for AIX execution	PSU
JDK-8239801	17	[macos] java/awt/Focus/UnaccessibleChoice/AccessibleChoiceTest.java fails	PSU
JDK-8240235	11	jdk.test.lib.util.JarUtils updates jar files incorrectly	PSU
JDK-8240604	11	Rewrite sun/management/jmxremote/bootstrap/CustomLauncherTest.java test to make binaries from source file	PSU
JDK-8240754	11	Instrument FlowTest.java to provide more debug traces.	PSU
JDK-8242330	8, 11	Arrays should be cloned in several JAAS Callback classes	PSU
JDK-8244289	17	fatal error: Possible safepoint reached by thread that does not allow it	PSU
JDK-8244508	11	JFR: FlightRecorderOptions reset date format	PSU
JDK-8247351	17	[aarch64] NullPointerException during stack walking (clhsdb "where -a")	PSU
JDK-8249812	11	java/net/DatagramSocket/PortUnreachable.java still fails intermittently with SocketTimeoutException	PSU
JDK-8249826	17	5 javax/net/ssl/SSLEngine tests use @ignore w/o bug-id	PSU
JDK-8251177	11	[macosx] The text "big" is truncated in JTabbedPane	PSU
JDK-8252713	11	jtreg time out of CtrlASCII.java seems to hang the Xserver.	PSU
JDK-8254711	11	Add java.security.Provider.getService JFR Event	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8255548	11	Missing coverage for javax.xml.crypto.dom.DOMCryptoContext	PSU
JDK-8258914	11	javax/net/ssl/DTLS/RespondToRetransmit.java timed out	PSU
JDK-8258951	17	java/net/httpclient/HandshakeFailureTest.java failed with "RuntimeException: Not found expected SSLHandshakeException in java.io.IOException"	PSU
JDK-8259266	11	com/sun/jdi/JdbOptions.java failed with "RuntimeException: 'prop[boo] = >foo 2<' missing from stdout/stderr"	PSU
JDK-8260035	11	Deproblemlist few problemlisted test	PSU
JDK-8260431	11	com/sun/jdi/JdbOptions.java failed with "RuntimeException: 'prop[boo] = >foo<' missing from stdout/stderr"	PSU
JDK-8262186	17	Call X509KeyManager.chooseClientAlias once for all key types	PSU
JDK-8262901	17	[macos_aarch64] NativeCallTest expected:3.8194101E18> but was:<3.02668882E10>	PSU
JDK-8263530	11	sun.awt.X11.ListHelper.removeAll() should use clear()	PSU
JDK-8265586	11, 17	[windows] last button is not shown in AWT Frame with BorderLayout and MenuBar set.	PSU
JDK-8265678	11	Test java/awt/Focus/ActualFocusedWindowTest/ActualFocusedWindowBlockingTest.java fails intermittently on windows	PSU
JDK-8266249	11	javax/swing/JPopupMenu/7156657/bug7156657.java fails on macOS	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8266593	17	vmTestbase/nsk/jvmti/PopFrame/popframe011 fails with "assert(java_thread == _state.get_thread()) failed: Must be"	PSU
JDK-8267502	21	JDK-8246677 caused 16x performance regression in SynchronousQueue	PSU
JDK-8267509	21	Improve IllegalAccessException message to include the cause of the exception	PSU
JDK-8267860	11	Off-by-one bug when searching arrays in AlpnGreaseTest	PSU
JDK-8268433	17	serviceability/dcmd/framework/VMVersionTest.java fails with Unable to send object throw not established PipeIO Listener Thread connection	PSU
JDK-8268916	11, 17, 21	Tests for AffirmTrust roots	PSU
JDK-8269425	17	2 jdk/jfr/api/consumer/streaming tests failed to attach	PSU
JDK-8270199	17	Most SA tests are skipped on macosx-aarch64 because all executables are signed	PSU
JDK-8270447	17	[IR Framework] Add missing compilation level restriction when using FlipC1C2 stress option	PSU
JDK-8271073	17	Improve testing with VM option VerifyArchivedFields	PSU
JDK-8271519	11	java/awt/event/SequencedEvent/MultipleContexts FunctionalTest.java failed with "Total [200] - Expected [400]"	PSU
JDK-8271566	17	DSA signature length value is not accurate in P11Signature	PSU
JDK-8271824	17	mark hotspot runtime/CompressedOops tests which ignore external VM flags	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8271826	17	mark hotspot runtime/conddy tests which ignore external VM flags	PSU
JDK-8271828	17	mark hotspot runtime/classFileParserBug tests which ignore external VM flags	PSU
JDK-8271829	17	mark hotspot runtime/Throwable tests which ignore external VM flags	PSU
JDK-8271838	8	AmazonCA.java interop test fails	PSU
JDK-8271886	17	mark hotspot runtime/InvocationTests tests which ignore external VM flags	PSU
JDK-8271887	17	mark hotspot runtime/CDSCompressedKPtrs tests which ignore external VM flags	PSU
JDK-8271890	17	mark hotspot runtime/Dictionary tests which ignore external VM flags	PSU
JDK-8271891	17	mark hotspot runtime/Safepoint tests which ignore external VM flags	PSU
JDK-8271892	17	mark hotspot runtime/PrintStringTableStats/PrintStringTableStatsTest.java test as ignoring external VM flags	PSU
JDK-8271893	17	mark hotspot runtime/PerfMemDestroy/PerfMemDestroy.java test as ignoring external VM flags	PSU
JDK-8271904	17	mark hotspot runtime/ClassFile tests which ignore external VM flags	PSU
JDK-8271905	17	mark hotspot runtime/Metaspace tests which ignore external VM flags	PSU
JDK-8272099	17	mark hotspot runtime/Monitor tests which ignore external VM flags	PSU
JDK-8272291	17	mark hotspot runtime/logging tests which ignore external VM flags	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8272551	17	mark hotspot runtime/modules tests which ignore external VM flags	PSU
JDK-8272552	17	mark hotspot runtime/cds tests which ignore external VM flags	PSU
JDK-8272998	17	ImageIO.read() throws incorrect exception type	PSU
JDK-8273456	17	Do not hold ttyLock around stack walking	PSU
JDK-8273522	17	Rename test property vm.cds.archived.java.heap to vm.cds.write.archived.java.heap	PSU
JDK-8273629	17	compiler/uncommontrap/TestDeoptOOM.java fails with release VMs	PSU
JDK-8273804	11	Platform.isTieredSupported should handle the no-compiler case	PSU
JDK-8273831	17	PrintServiceLookup spawns 2 threads in the current classloader, getting orphaned	PSU
JDK-8273921	17	Refactor NSK/JDI tests to create thread using factory	PSU
JDK-8274211	17	Test man page that options are documented	PSU
JDK-8275329	11, 17	ZGC: vmTestbase/gc/gctests/SoftReference/soft004/soft004.java fails with assert(_phases.length() > 1000) failed: Too many recored phases?	PSU
JDK-8275333	11, 17	Print count in "Too many recored phases?" assert	PSU
JDK-8275440	17	Remove VirtualSpaceList::is_full()	PSU
JDK-8275509	17	ModuleDescriptor.hashCode isn't reproducible across builds	PSU
JDK-8276036	17	The value of full_count in the message of insufficient codecache is wrong	PSU
JDK-8276054	17	JMH benchmarks for Fences	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8276711	17	compiler/codecache/cli tests failing when SegmentedCodeCache used with -Xint	PSU
JDK-8276819	17	javax/print/PrintServiceLookup/FlushCustomClassLoader.java fails to free	PSU
JDK-8277307	17	Pre shared key sent under both session_ticket and pre_shared_key extensions	PSU
JDK-8278456	11	Define jtreg jdk_desktop test group time-based sub-tasks for use by headful testing.	PSU
JDK-8279856	17	Parallel: Use PreservedMarks to record promotion-failed objects	PSU
JDK-8280004	11	DCmdArgument<jlong>::parse_value() should handle NULL input	PSU
JDK-8281015	17	Further simplify NMT backend	PSU
JDK-8281149	17	(fs) java/nio/file/FileStore/Basic.java fails with java.lang.RuntimeException: values differ by more than 1GB	PSU
JDK-8281874	17	Can't unpack msi installers from test/jdk/tools/jpackage/windows/test/jdk/tools/jpackage/windows/WinShortcutPromptTest.java test	PSU
JDK-8282011	17	test/jdk/tools/jpackage/windows/WinL10nTest.java test fails if light.exe is not in %PATH%	PSU
JDK-8282017	17	sun/net/www/protocol/https/HttpsURLConnection/B6216082.java fails with "SocketException: Unexpected end of file from server"	PSU
JDK-8282143	11	Objects.requireNonNull should be ForceInline	PSU
JDK-8282404	11	DrawStringWithInfiniteXform.java failed with "RuntimeException: drawString with InfiniteXform transform takes long time"	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8283441	8	C2: segmentation fault in ciMethodBlocks::make_block_at(int)	PSU
JDK-8283670	17	gtest os.release_multi_mappings_vm is still racy	PSU
JDK-8284047	17	Harmonize/Standardize the SSLSocket/SSLEngine/SSLSocketSSLEngine test templates	PSU
JDK-8284331	11	Add sanity check for signal handler modification warning.	PSU
JDK-8284910	8, 11, 17	Buffer clean in PasswordCallback	PSU
JDK-8285398	8	Cache the results of constraint checks	PSU
JDK-8285516	17	clearPassword should be called in a finally try block	PSU
JDK-8285612	11	Remove jtreg tag manual=yesno for java/awt/print/PrinterJob/ImagePrinting/ClippedImages.java	PSU
JDK-8285687	11	Remove jtreg tag manual=yesno for java/awt/print/PrinterJob/PageRangesDlgTest.java	PSU
JDK-8285696	8	AlgorithmConstraints:permits not throwing IllegalArgumentException when 'alg' is null	PSU
JDK-8285785	17	CheckCleanerBound test fails with PasswordCallback object is not released	PSU
JDK-8285867	17	Convert applet manual tests SelectionVisible.java to Frame and automate	PSU
JDK-8286473	17	Drop --enable-preview from Record related tests	PSU
JDK-8286474	17	Drop --enable-preview from Sealed Classes related tests	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8286475	17	Drop --enable-preview from instanceof pattern matching related tests	PSU
JDK-8286503	8, 11, 17, 21	Enhance security classes	PSU
JDK-8286707	11	JFR: Don't commit JFR internal jdk.JavaMonitorWait events	PSU
JDK-8286969	17	Add a new test library API to execute kinit in SecurityTools.java	PSU
JDK-8287596	17	Reorg jdk.test.lib.util.ForceGC	PSU
JDK-8287671	17	Adjust ForceGC to invoke System::gc fewer times for negative case	PSU
JDK-8287867	17	Bad merge of jdk/test/lib/util/ForceGC.java causing test compilation error	PSU
JDK-8288325	11, 17	[windows] Actual and Preferred Size of AWT Non-resizable frame are different	PSU
JDK-8288415	11	java/awt/PopupMenu/PopupMenuLocation.java is unstable in MacOS machines	PSU
JDK-8288961	17	jpackage: test MSI installation fix	PSU
JDK-8288993	11, 17	Make AwtFramePackTest generic by removing @requires tag	PSU
JDK-8289077	11	Add manual tests to open	PSU
JDK-8289238	11	Refactoring changes to PassFailJFrame Test Framework	PSU
JDK-8289547	11	Update javax/swing/Popup/TaskbarPositionTest.java	PSU
JDK-8289584	11, 17	(fs) Print size values in java/nio/file/FileStore/Basic.java when they differ by > 1GiB	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8289745	11, 17	JfrStructCopyFailed uses heap words instead of bytes for object sizes	PSU
JDK-8289917	11	Metadata for regionsRefilled of G1EvacuationStatistics event is wrong	PSU
JDK-8290067	11	Show stack dimensions in UL logging when attaching threads	PSU
JDK-8290469	11	Add new positioning options to PassFailJFrame test framework	PSU
JDK-8290909	17	MemoryPoolMBean/isUsageThresholdExceeded tests failed with "isUsageThresholdExceeded() returned false, and is still false, while threshold = MMMMMMMM and used peak = NNNNNNNN"	PSU
JDK-8291154	17	Create a non static nested class without enclosing class throws VerifyError	PSU
JDK-8291550	17	RISC-V: jdk uses misaligned memory access when AvoidUnalignedAccess enabled	PSU
JDK-8291911	17	java/io/File/GetXSpace.java fails with "53687091200 != 161051996160"	PSU
JDK-8292067	17	Convert test/sun/management/jmxremote/bootstrap shell tests to java version	PSU
JDK-8292072	17	NMT: repurpose Tracking overhead counter as global malloc counter	PSU
JDK-8292261	17	adjust timeouts in JLI GetObjectSizeIntrinsicsTest.java	PSU
JDK-8292381	17	java/net/httpclient/SpecialHeadersTest.java fails with "ERROR: Shutting down connection: HTTP/2 client stopped"	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8292407	11	Improve Weak CAS VarHandle/Unsafe tests resilience under spurious failures	PSU
JDK-8292636	17	(dc) Problem listing of java/nio/channels/DatagramChannel/Unref.java has incorrect issue ID	PSU
JDK-8292683	11	Remove BadKeyUsageTest.java from Problem List	PSU
JDK-8292713	11	Unsafe.allocateInstance should be intrinsified without UseUnalignedAccesses	PSU
JDK-8293156	17	Dcmd VM.classloaders fails to print the full hierarchy	PSU
JDK-8293166	11	jdk/jfr/jvm/TestDumpOnCrash.java fails on Linux ppc64le and Linux aarch64	PSU
JDK-8293335	17	sun/management/jmxremote/bootstrap/RmiBootstrapTest.java#id1 failed with "Agent communication error: java.io.EOFException"	PSU
JDK-8293343	17	sun/management/jmxremote/bootstrap/RmiSslNoKeyStoreTest.java failed with "Agent communication error: java.io.EOFException"	PSU
JDK-8293466	11	libjsig should ignore non-modifying sigaction calls	PSU
JDK-8293563	17	[macos-aarch64] SA core file tests failing with sun.jvm.hotspot.oops.UnknownOopException	PSU
JDK-8293579	17	tools/jpackage/share/jdk/jpackage/tests/UnicodeArgsTest.java fails on Japanese Windows platform	PSU
JDK-8293811	11	Provide a reason for PassFailJFrame.forceFail	PSU
JDK-8294156	21	Allow PassFailJFrame.Builder to create test UI	PSU
JDK-8294158	21	HTML formatting for PassFailJFrame instructions	PSU
JDK-8294402	17	Add diagnostic logging to VMProps.checkDockerSupport	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8294427	11, 17, 21	Check boxes and radio buttons have rendering issues on Windows in High DPI env	PSU
JDK-8294535	21	Add screen capture functionality to PassFailJFrame	PSU
JDK-8294673	11	JFR: Add SecurityProviderService#threshold to TestActiveSettingEvent.java	PSU
JDK-8294881	17	test/hotspot/jtreg/vmTestbase/nsk/jdi/VirtualMachine/dispose/dispose003/TestDescription.java fails	PSU
JDK-8295068	21	SSLEngine throws NPE parsing CertificateRequests	PSU
JDK-8295424	17	adjust timeout for another JLI GetObjectSizeIntrinsicsTest.java subtest	PSU
JDK-8295555	21	Primitive wrapper caches could be <code>@Stable</code>	PSU
JDK-8295685	8	Update Libpng to 1.6.38	PSU
JDK-8296275	11, 17	Write a test to verify setAccelerator method of JMenuItem	PSU
JDK-8296437	17	NMT incurs costs if disabled	PSU
JDK-8296581	11, 17	Better system proxy support	PSU
JDK-8296821	17	compiler/jvmci/jdk.vm.ci.code.test/src/jdk/vm/ci/code/test/NativeCallTest.java fails after JDK-8262901	PSU
JDK-8297142	17	jdk/jfr/event/runtime/TestShutdown.java fails on Linux ppc64le and Linux aarch64	PSU
JDK-8297296	11, 17	java/awt/Mouse/EnterExitEvents/DragWindowTest.java fails with "No MouseReleased event on label!"	PSU
JDK-8297367	17	disable TestRedirectLinks.java in slowdebug mode	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8297640	11, 17	Increase buffer size for buf (insert_features_names) in Abstract_VM_Version::insert_features_names	PSU
JDK-8297798	17	Timeout with DTLSOverDatagram test template	PSU
JDK-8297856	8, 11, 17	Improve handling of Bidi characters	PSU
JDK-8297958	17	NMT: Display peak values	PSU
JDK-8298298	17	NMT: count deltas are printed with 32-bit signed size	PSU
JDK-8298619	17	java/io/File/GetXSpace.java is failing	PSU
JDK-8298735	17	Some tools/jpackage/windows/* tests fails with jtreg test timeout	PSU
JDK-8298867	17	Basics.java fails with SSL handshake exception	PSU
JDK-8298868	17	Update EngineCloseOnAlert.java for changes to TLS implementation	PSU
JDK-8298869	17	Update ConnectionTest.java for changes to TLS implementation	PSU
JDK-8298872	17	Update CheckStatus.java for changes to TLS implementation	PSU
JDK-8298873	17	Update IllegalRecordVersion.java for changes to TLS implementation	PSU
JDK-8298874	17	Update TestAllSuites.java for TLS v1.2 and 1.3	PSU
JDK-8298905	11, 17	Test "java/awt/print/PrinterJob/ImagePrinting/PrintARGBImage.java" fails because the frames of instruction does not display	PSU
JDK-8298974	11, 17	Add ftcolor.c to imported freetype sources	PSU
JDK-8299075	17	TestStringDeduplicationInterned.java fails because extra deduplication	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8299207	17	[Testbug] Add back test/jdk/java/awt/Graphics2D/DrawPrimitivesTest.java	PSU
JDK-8299241	17	jdk/jfr/api/consumer/streaming/TestJVMCrash.java generates unnecessary core file	PSU
JDK-8299255	11, 17	Unexpected round errors in FreetypeFontScaler	PSU
JDK-8299614	21	Shenandoah: STW mark should keep nmethod/oops referenced from stack chunk alive	PSU
JDK-8299677	17	Formatter.format might take a long time to format an integer or floating-point	PSU
JDK-8299748	17	java/util/zip/Deinflate.java failing on s390x	PSU
JDK-8300259	11, 17	Add test coverage for processing of pending block files in signed JARs	PSU
JDK-8300272	11, 17	Improve readability of the test JarWithOneNonDisabledDigestAlg	PSU
JDK-8300405	11	Screen capture for test JFileChooserSetLocationTest.java, failure case	PSU
JDK-8300663	21	java/util/concurrent/SynchronousQueue/Fairness.java failed with "Error: fair=true i=0 j=1"	PSU
JDK-8300727	17	java/awt/List/ListGarbageCollectionTest/AwtListGarbageCollectionTest.java failed with "List wasn't garbage collected"	PSU
JDK-8301065	11, 17	Handle control characters in java_lang_String::print	PSU
JDK-8301167	11	Update VerifySignedJar to actually exercise and test verification	PSU
JDK-8301189	17	validate-source fails after JDK-8298873	PSU
JDK-8301247	17, 21	JPackage app-image exe launches multiple exe's in JDK 17+	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8301341	21	LinkedTransferQueue does not respect timeout for poll()	PSU
JDK-8301377	17	adjust timeout for JLI GetObjectSizeIntrinsicsTest.java subtest again	PSU
JDK-8301455	17	comments in TestTypeAnnotations still refer to resolved JDK-8068737	PSU
JDK-8301457	17, 21	Code in SendPortZero.java is uncommented even after JDK-8236852 was fixed	PSU
JDK-8301489	17, 21	C1: ShortLoopOptimizer might lift instructions before their inputs	PSU
JDK-8301570	11, 17	Test runtime/jni/nativeStack/ needs to detach the native thread	PSU
JDK-8301701	17	java/net/DatagramSocket/DatagramSocketMulticast.java should be hardened	PSU
JDK-8301846	21	Invalid TargetDataLine after screen lock when using JFileChooser or COM library	PSU
JDK-8302109	17	Trivial fixes to btree tests	PSU
JDK-8302525	11, 17	Write a test to check various components send Events while mouse and key are used simultaneously	PSU
JDK-8302607	17	increase timeout for ContinuousCallSiteTargetChange.java	PSU
JDK-8303384	8	Improved communication in CORBA	PSU
JDK-8303607	11, 17	SunMSCAPI provider leaks memory and keys	PSU
JDK-8303737	21	C2: Load can bypass subtype check that enforces it's from the right object type	PSU
JDK-8304174	17	Remove delays from httpserver tests	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8304954	17	SegmentedCodeCache fails when using large pages	PSU
JDK-8305502	17	adjust timeouts in three more M&M tests	PSU
JDK-8305505	17	NPE in javazic compiler	PSU
JDK-8305646	17	compile error on Alpine with gcc12 after 8298619 in libGetXSpace.c	PSU
JDK-8305815	8, 11, 17	Update Libpng to 1.6.39	PSU
JDK-8306134	11	Open source some AWT tests relating to Button and a few other classes	PSU
JDK-8306135	11	Clean up and open source some AWT tests	PSU
JDK-8306280	11, 17	Open source several choice AWT tests	PSU
JDK-8306372	11	Open source AWT CardLayout and Checkbox tests	PSU
JDK-8306430	11	Open source some AWT tests related to TextComponent and Toolkit	PSU
JDK-8306561	21	gtest/NMTGtests.java#nmt crashes with SIGSEGV on AIX	PSU
JDK-8306575	11	Clean up and open source four Dialog related tests	PSU
JDK-8306765	11	Some client related jtreg problem list entries are malformed	PSU
JDK-8306881	8, 11, 17	Update FreeType to 2.13.0	PSU
JDK-8306883	11	Thread stacksize is reported with wrong units in os::create_thread logging	PSU
JDK-8307079	11	Update test java/awt/Choice/DragOffNoSelect.java	PSU
JDK-8307123	17	Fix deprecation warnings in DPrinter	PSU
JDK-8307165	11	java/awt/dnd/NoFormatsDropTest/NoFormatsDropTest.java timed out	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8307278	8, 11, 17, 21	Upgrade Libpng	PSU
JDK-8307286	8, 11, 17, 21	Upgrade FreeType	PSU
JDK-8307311	17	Timeouts on one macOS 12.6.1 host of two Swing JTableHeader tests	PSU
JDK-8307403	17	java/util/zip/Deflate.java timed out	PSU
JDK-8308047	17	java/util/concurrent/ScheduledThreadPoolExecutor/BasicCancelTest.java timed out and also had jcmd pipe errors	PSU
JDK-8308103	17, 21	Massive (up to ~30x) increase in C2 compilation time since JDK 17	PSU
JDK-8308116	17	jdk.test.lib.compiler.InMemoryJavaCompiler.compile does not close files	PSU
JDK-8308223	17	failure handler missed jcmd.vm.info command	PSU
JDK-8308452	21	Extend internal Architecture enum with byte order and address size	PSU
JDK-8308479	21	[s390x] Implement alternative fast-locking scheme	PSU
JDK-8308592	11, 17, 21	Framework for CA interoperability testing	PSU
JDK-8308593	17, 21	Add KEEPALIVE Extended Socket Options Support for Windows	PSU
JDK-8308910	11, 17	Allow executeAndLog to accept running process	PSU
JDK-8309032	17	jpackage does not work for module projects unless --module-path is specified	PSU
JDK-8309088	8	security/infra/java/security/cert/CertPathValidator/certification/AmazonCA.java fails	PSU
JDK-8309095	11	Remove UTF-8 character from TaskbarPositionTest.java	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8309104	17	[JVMCI] compiler/unsafe/UnsafeGetStableArrayElement test asserts wrong values with Graal	PSU
JDK-8309209	21	C2 failed "assert(_stack_guard_state == stack_guard_reserved_disabled) failed: inconsistent state"	PSU
JDK-8309216	17	Cast from jchar* to char* in test java/io/GetXSpace.java	PSU
JDK-8309258	17	RISC-V: Add riscv_hwprobe syscall	PSU
JDK-8309305	21	sun/security/ssl/SSLSocketImpl/BlockedAsyncClose.java fails with jtreg test timeout	PSU
JDK-8309502	17	RISC-V: String.indexOf intrinsic may produce misaligned memory loads	PSU
JDK-8309545	21	Thread.interrupted from virtual thread needlessly resets interrupt status	PSU
JDK-8309663	21	test fails "assert(check_alignment(result)) failed: address not aligned: 0x00000008baadbabe"	PSU
JDK-8309778	17, 21	java/nio/file/Files/CopyAndMove.java fails when using second test directory	PSU
JDK-8309966	8, 11, 17, 21	Enhanced TLS connections	PSU
JDK-8309974	17, 21	some JVMCI tests fail when VM options include -XX:+EnableJVMCI	PSU
JDK-8310233	17	Fix THP detection on Linux	PSU
JDK-8310239	21	Add missing cross modifying fence in nmethod entry barriers	PSU
JDK-8310265	11, 17	(process) jspawnhelper should not use argv[0]	PSU
JDK-8310268	17	RISC-V: misaligned memory access in String.Compare intrinsic	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8310512	21	Cleanup indentation in jfc files	PSU
JDK-8310549	11	avoid potential leaks in KeystoreImpl.m related to JNU_CHECK_EXCEPTION early returns	PSU
JDK-8310596	21	Utilize existing method frame::interpreter_frame_monitor_size_in_bytes()	PSU
JDK-8310656	17	RISC-V: <i>builtin_clear_cache</i> can fail silently.	PSU
JDK-8310687	17	JDK-8303215 is incomplete	PSU
JDK-8310982	21	jdk/internal/util/ArchTest.java fails after JDK-8308452 failed with Method isARM()	PSU
JDK-8311261	21	[AIX] TestAlwaysPreTouchStacks.java fails due to java.lang.RuntimeException: Did not find expected NMT output	PSU
JDK-8311285	11	report some fontconfig related environment variables in hs_err file	PSU
JDK-8311511	17	Improve description of NativeLibrary JFR event	PSU
JDK-8311514	17, 21	Incorrect regex in TestMetaSpaceLog.java	PSU
JDK-8311585	17, 21	Add JRadioButtonMenuItem to bug8031573.java	PSU
JDK-8311591	21	Add SystemModulesPlugin test case that splits module descriptors with new local variables defined by DedupSetBuilder	PSU
JDK-8311592	17	ECKeySizeParameterSpec causes too many exceptions on third party providers	PSU
JDK-8311630	21	[s390] Implementation of Foreign Function & Memory API (Preview)	PSU
JDK-8311631	17, 21	When multiple users run tools/jpackage/share/LicenseTest.java, Permission denied for writing /var/tmp/*.files	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8311680	21	Update the release version after forking Oct CPU23_10	PSU
JDK-8311681	21	Update the Jan CPU24_01 release date in master branch after forking Oct CPU23_10	PSU
JDK-8311813	8, 11, 17, 21	C1: Uninitialized PhiResolver::_loop field	PSU
JDK-8312065	11, 17	Socket.connect does not timeout when profiling	PSU
JDK-8312078	17, 21	[PPC] JcmdScale.java Failing on AIX	PSU
JDK-8312126	11, 17, 21	NullPointerException in CertStore.getCRLs after 8297955	PSU
JDK-8312166	21	(dc) DatagramChannel's socket adaptor does not release carrier thread when blocking in receive	PSU
JDK-8312174	21	missing JVMTI events from vthreads parked during JVMTI attach	PSU
JDK-8312182	17	THPs cause huge RSS due to thread start timing issue	PSU
JDK-8312191	21	ColorConvertOp.filter for the default destination is too slow	PSU
JDK-8312248	17, 21	Enhanced archival support redux	PSU
JDK-8312367	8, 11, 17, 21	Enhance security classes	PSU
JDK-8312394	17	[linux] SIGSEGV if kernel was built without hugepage support	PSU
JDK-8312395	17	Improve assertions in growableArray	PSU
JDK-8312433	21	HttpClient request fails due to connection being considered idle and closed	PSU
JDK-8312434	21	SPECjvm2008/xml.transform with CDS fails with "can't seal package nu.xom"	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8312440	17, 21	assert(cast != nullptr) failed: must have added a cast to pin the node	PSU
JDK-8312489	8, 11, 17	Increase jdk.jar.maxSignatureFileSize default which is too low for JARs such as WhiteSource/Mend unified agent jar	PSU
JDK-8312535	8, 11, 17	MidiSystem.getSoundbank() throws unexpected SecurityException	PSU
JDK-8312573	11, 17	Failure during CompileOnly parsing leads to ShouldNotReachHere	PSU
JDK-8312585	17	Rename DisableTHPStackMitigation flag to THPStackMitigation	PSU
JDK-8312592	17, 21	New parentheses warnings after HarfBuzz 7.2.0 update	PSU
JDK-8312612	17, 21	Handle WideCharToMultiByte return values	PSU
JDK-8312620	17	WSL Linux build crashes after JDK-8310233	PSU
JDK-8312625	17	Test serviceability/dcmd/vm/TrimLibcHeapTest.java failed: RSS use increased	PSU
JDK-8312909	17	C1 should not inline through interface calls with non-subtype receiver	PSU
JDK-8313164	17, 21	src/java.desktop/windows/native/libawt/windows/awt_Robot.cpp GetRGBPixels adjust releasing of resources	PSU
JDK-8313206	21	PKCS11 tests silently skip execution	PSU
JDK-8313252	17, 21	Java_sun_awt_windows_ThemeReader_paintBackground release resources in early returns	PSU
JDK-8313322	17, 21	RISC-V: implement MD5 intrinsic	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8313368	21	(fc) FileChannel.size returns 0 on block special files	PSU
JDK-8313575	21	Refactor PKCS11Test tests	PSU
JDK-8313576	11, 17	GCC 7 reports compiler warning in bundled freetype 2.13.0	PSU
JDK-8313616	21	support loading library members on AIX in os::dll_load	PSU
JDK-8313626	11, 17	C2 crash due to unexpected exception control flow	PSU
JDK-8313643	21	Update HarfBuzz to 8.2.2	PSU
JDK-8313656	21	assert(!JvmtiExport::can_support_virtual_threads()) with -XX:-DoJVMTIVirtualThreadTransitions	PSU
JDK-8313657	11, 17	com.sun.jndi.ldap.Connection.cleanup does not close connections on SocketTimeoutErrors	PSU
JDK-8313691	11, 17	use close after failing os::fdopen in vmError and ciEnv	PSU
JDK-8313756	21	[BACKOUT] 8308682: Enhance AES performance	PSU
JDK-8313760	21	[REDO] Enhance AES performance	PSU
JDK-8313779	17, 21	RISC-V: use andn / orn in the MD5 intrinsic	PSU
JDK-8313781	17, 21	Add regression tests for large page logging and user-facing error messages	PSU
JDK-8313782	17, 21	Add user-facing warning if THPs are enabled but cannot be used	PSU
JDK-8313792	11, 17, 21	Verify 4th party information in src/jdk.internal.le/share/legal/jline.md	PSU
JDK-8313815	11	The exception messages printed by jcmd ManagementAgent.start are corrupted on Japanese Windows	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8313873	21	java/nio/channels/DatagramChannel/SendReceiveMaxSize.java fails on AIX due to small default RCVBUF size and different IPv6 Header interpretation	PSU
JDK-8314045	17, 21	ArithmeticException in GaloisCounterMode	PSU
JDK-8314063	11, 17	The socket is not closed in Connection::createSocket when the handshake failed for LDAP connection	PSU
JDK-8314094	11, 17, 21	java/lang/ProcessHandle/InfoTest.java fails on Windows when run as user with Administrator privileges	PSU
JDK-8314120	21	Add tests for FileDescriptor.sync	PSU
JDK-8314121	17, 21	test tools/jpackage/share/RuntimePackageTest.java#id0 fails on RHEL8	PSU
JDK-8314139	17	TEST_BUG: runtime/os/THPsInThreadStackPreventionTest.java could fail on machine with large number of cores	PSU
JDK-8314144	17	gc/g1/ihop/TestIHOPStatic.java fails due to extra concurrent mark with -Xcomp	PSU
JDK-8314191	21	C2 compilation fails with "bad AD file"	PSU
JDK-8314226	21	Series of colon-style fallthrough switch cases with guards compiled incorrectly	PSU
JDK-8314242	11, 17, 21	Update applications/scimark/Scimark.java to accept VM flags	PSU
JDK-8314246	21	javax/swing/JToolBar/4529206/bug4529206.java fails intermittently on Linux	PSU
JDK-8314263	11, 17, 21	Signed jars triggering Logger finder recursion and StackOverflowError	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8314330	21	java/foreign tests should respect vm flags when start new processes	PSU
JDK-8314476	21	TestJstatdPortAndServer.java failed with "java.rmi.NoSuchObjectException: no such object in table"	PSU
JDK-8314551	21	More generic way to handshake GC threads with monitor deflation	PSU
JDK-8314580	21	PhaseldealLoop::transform_long_range_checks fails with assert "was tested before"	PSU
JDK-8314632	21	Intra-case dominance check fails in the presence of a guard	PSU
JDK-8314649	17, 21	Enhanced archival support redux	PSU
JDK-8314679	17	SA fails to properly attach to JVM after having just detached from a different JVM	PSU
JDK-8314759	21	VirtualThread.parkNanos timeout adjustment when pinned should be replaced	PSU
JDK-8314883	17, 21	Java_java_util_prefs_FileSystemPreferences_lockFile0 write result errno in missing case	PSU
JDK-8314935	21	Shenandoah: Unable to throw OOME on back-to-back Full GCs	PSU
JDK-8315026	21	java/lang/ProcessHandle/TreeTest.java fails intermittent on AIX in TreeTest.test5	PSU
JDK-8315082	21	[REDO] Generational ZGC: Tests crash with assert(index == 0 is_power_of_2(index))	PSU
JDK-8315088	21	C2: assert(wq.size() - before == EMPTY_LOOP_SIZE) failed: expect the EMPTY_LOOP_SIZE nodes of this body if empty	PSU
JDK-8315135	8	Memory leak in the native implementation of Pack200.Unpacker.unpack()	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8315195	17, 21	RISC-V: Update hwprobe query for new extensions	PSU
JDK-8315206	17, 21	RISC-V: hwprobe query is_set return wrong value	PSU
JDK-8315213	21	java/lang/ProcessHandle/TreeTest.java test enhance output of children	PSU
JDK-8315214	11, 17, 21	Do not run sun/tools/jhsdb tests concurrently	PSU
JDK-8315362	21	NMT: summary diff reports threads count incorrectly	PSU
JDK-8315377	17, 21	C2: assert(u❯find_out_with(Op_AddP) == nullptr) failed: more than 2 chained AddP nodes?	PSU
JDK-8315383	21	jlink SystemModulesPlugin incorrectly parses the options	PSU
JDK-8315415	17, 21	OutputAnalyzer.shouldMatchByLine() fails in some cases	PSU
JDK-8315437	21	Enable parallelism in vmTestbase/nsk/monitoring/stress/classload tests	PSU
JDK-8315442	21	Enable parallelism in vmTestbase/nsk/monitoring/stress/thread tests	PSU
JDK-8315452	21	Erroneous AST missing modifiers for partial input	PSU
JDK-8315506	8	C99 compatibility issue in LinuxNativeDispatcher	PSU
JDK-8315545	21	C1: x86 cmove can use short branches	PSU
JDK-8315549	17, 21	CITime misreports code/total nmethod sizes	PSU
JDK-8315554	21	C1: Replace "cmp reg, 0" with "test reg, reg" on x86	PSU
JDK-8315578	21	PPC builds are broken after JDK-8304913	PSU
JDK-8315579	21	SPARC64 builds are broken after JDK-8304913	PSU
JDK-8315606	17, 21	Open source few swing text/html tests	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8315612	21	RISC-V: intrinsic for unsignedMultiplyHigh	PSU
JDK-8315644	17, 21	increase timeout of sun/security/tools/jarsigner/Warning.java	PSU
JDK-8315651	21	Stop hiding AIX specific multicast socket errors via NetworkConfiguration (aix)	PSU
JDK-8315683	11, 17, 21	Parallelize java/util/concurrent/tck/JSR166TestCase.java	PSU
JDK-8315684	21	Parallelize sun/security/util/math/TestIntegerModuloP.java	PSU
JDK-8315692	11, 17, 21	Parallelize gc/stress/TestStressRSetCoarsening.java test	PSU
JDK-8315696	11, 17, 21	SignedLoggerFinderTest.java test failed	PSU
JDK-8315702	21	jcmm Thread.dump_to_file slow with millions of virtual threads	PSU
JDK-8315706	21	com/sun/tools/attach/warnings/DynamicLoadWarningTest.java real fix for failure on AIX	PSU
JDK-8315735	21	VerifyError when switch statement used with synchronized block	PSU
JDK-8315751	17, 21	RandomTestBsi1999 fails often with timeouts on Linux ppc64le	PSU
JDK-8315766	11, 17, 21	Parallelize gc/stress/TestStressIHOPMultiThread.java test	PSU
JDK-8315770	11, 17, 21	serviceability/sa/TestJmapCoreMetaspace.java should run with -XX:-VerifyDependencies	PSU
JDK-8315774	21	Enable parallelism in vmTestbase/gc/g1/unloading tests	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8315862	11	[11u] Backport 8227337: javax/management/remote/mandatory/connection/ReconnectTest.java NoSuchObjectException no such object in table	PSU
JDK-8315869	21	UseHeavyMonitors not used	PSU
JDK-8315920	21	C2: "control input must dominate current control" assert failure	PSU
JDK-8315931	21	RISC-V: xxxMaxVectorTestsSmokeTest fails when using RVV	PSU
JDK-8315936	21	Parallelize gc/stress/TestStressG1Humongous.java test	PSU
JDK-8315937	11, 17, 21	Enable parallelism in vmTestbase/nsk/stress/numeric tests	PSU
JDK-8315942	21	Sort platform enums and definitions after JDK-8304913 follow-ups	PSU
JDK-8315960	21	test/jdk/java/io/File/TempDirDoesNotExist.java leaves test files behind	PSU
JDK-8315971	21	ProblemList containers/docker/TestMemoryAwareness.java on linux-all	PSU
JDK-8316003	21	Update FileChooserSymLinkTest.java to HTML instructions	PSU
JDK-8316017	21	Refactor timeout handler in PassFailJFrame	PSU
JDK-8316025	21	Use testUI() method of PassFailJFrame.Builder in FileChooserSymLinkTest.java	PSU
JDK-8316030	21	Update Libpng to 1.6.40	PSU
JDK-8316031	21	SSLFlowDelegate should not log from synchronized block	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8316060	21	test/hotspot/jtreg/runtime/reflect/ReflectOutOfMemoryError.java may fail if heap is huge	PSU
JDK-8316087	11, 17, 21	Test SignedLoggerFinderTest.java is still failing	PSU
JDK-8316113	21	Infinite permission checking loop in java/net/spi/InetAddressResolverProvider/RuntimePermissionTest	PSU
JDK-8316123	21	ProblemList serviceability/dcmd/gc/RunFinalizationTest.java on AIX	PSU
JDK-8316130	21	Incorrect control in LibraryCallKit::inline_native_notify_jvmti_funcs	PSU
JDK-8316142	21	Enable parallelism in vmTestbase/nsk/monitoring/stress/lowmem tests	PSU
JDK-8316156	21	ByteArrayInputStream.transferTo causes MaxDirectMemorySize overflow	PSU
JDK-8316178	11, 17, 21	Better diagnostic header for CodeBlobs	PSU
JDK-8316179	21	Use consistent naming for lightweight locking in MacroAssembler	PSU
JDK-8316181	21	Move the fast locking implementation out of the .ad files	PSU
JDK-8316199	21	Remove sun/tools/jstatd/TestJstatd* tests from problemlist for Windows.	PSU
JDK-8316206	11, 17, 21	Test StretchedFontTest.java fails for Baekmuk font	PSU
JDK-8316304	21	(fs) Add support for BasicFileAttributes.creationTime() for Linux	PSU
JDK-8316337	21	(bf) Concurrency issue in DirectByteBuffer.Deallocator	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8316341	21	sun/security/pkcs11/PKCS11Test.java needs adjustment on Linux ppc64le Ubuntu 22	PSU
JDK-8316380	11	[11u] Backport 8170089: nsk/jdi/EventSet/resume/resume008: ERROR: suspendCounts don't match for : Common-Cleaner	PSU
JDK-8316387	21	Exclude more failing multicast tests on AIX after JDK-8315651	PSU
JDK-8316396	21	Endless loop in C2 compilation triggered by AddNode::Ideall	PSU
JDK-8316399	21	Exclude java/net/MulticastSocket/Promiscuous.java on AIX	PSU
JDK-8316400	21	Exclude jdk/jfr/event/runtime/TestResidentSetSizeEvent.java on AIX	PSU
JDK-8316401	21	sun/tools/jhsdb/JStackStressTest.java failed with "InternalError: We should have found a thread that owns the anonymous lock"	PSU
JDK-8316411	21	compiler/compilercontrol/TestConflictInlineCommands.java fails intermittent with force inline by CompileCommand missing	PSU
JDK-8316414	21	C2: large byte array clone triggers "failed: malformed control flow" assertion failure on linux-x86	PSU
JDK-8316415	21	Parallelize sun/security/rsa/SignedObjectChain.java subtests	PSU
JDK-8316418	21	containers/docker/TestMemoryWithCgroupV1.java get OOM killed with Parallel GC	PSU
JDK-8316436	21	ContinuationWrapper uses unhandled nullptr oop	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8316468	21	os::write incorrectly handles partial write	PSU
JDK-8316514	11, 17, 21	Better diagnostic header for VtableStub	PSU
JDK-8316540	21	StoreReproducibilityTest fails on some locales	PSU
JDK-8316566	21	RISC-V: Zero extended narrow oop passed to Atomic::cmpxchg	PSU
JDK-8316581	21	Improve performance of Symbol::print_value_on()	PSU
JDK-8316585	21	[REDO] runtime/InvocationTests spend a lot of time on dependency verification	PSU
JDK-8316645	17, 21	RISC-V: Remove dependency on libatomic by adding cmpxchg 1b	PSU
JDK-8316659	21	assert(LockingMode != LM_LIGHTWEIGHT flag == CCR0) failed: bad condition register	PSU
JDK-8316671	21	sun/security/ssl/SSLSocketImpl/SSLSocketClose Hang.java test fails intermittent with Read timed out	PSU
JDK-8316679	21	C2 SuperWord: wrong result, load should not be moved before store if not comparable	PSU
JDK-8316710	11, 17, 21	Exclude java/awt/font/Rotate/RotatedTextTest.java	PSU
JDK-8316719	21	C2 compilation still fails with "bad AD file"	PSU
JDK-8316735	21	Print LockStack in hs_err files	PSU
JDK-8316741	21	BasicStroke.createStrokedShape miter-limits failing on small shapes	PSU
JDK-8316743	17, 21	RISC-V: Change UseVectorizedMismatchIntrinsic option result to warning	PSU
JDK-8316746	11, 17, 21	Top of lock-stack does not match the unlocked object	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8316778	17, 21	test hprof lib: invalid array element type from JavaValueArray.elementSize	PSU
JDK-8316859	17, 21	RISC-V: Disable detection of V through HWCAP	PSU
JDK-8316879	21	RegionMatches1Tests fails if CompactStrings are disabled after JDK-8302163	PSU
JDK-8316880	21	AArch64: "stop: Header is not fast-locked" with -XX:-UseLSE since JDK-8315880	PSU
JDK-8316906	11, 17, 21	Clarify TLABWasteTargetPercent flag	PSU
JDK-8316929	21	Shenandoah: Shenandoah degenerated GC and full GC need to cleanup old OopMapCache entries	PSU
JDK-8316933	21	RISC-V: compiler/vectorapi/VectorCastShape128Test.java fails when using RVV	PSU
JDK-8316935	21	[s390x] Use consistent naming for lightweight locking in MacroAssembler	PSU
JDK-8316958	21	Add test for unstructured locking	PSU
JDK-8316967	21	Correct the scope of vmtimer in UnregisteredClasses::load_class	PSU
JDK-8317040	8, 11, 17	Adapt a cleaner test for older releases	PSU
JDK-8317121	17	vector_masked_load instruction is moved too early after JDK-8286941	PSU
JDK-8317136	21	[AIX] Problem List runtime/jni/terminatedThread/TestTerminatedThread.java	PSU
JDK-8317257	21	RISC-V: llvm build broken	PSU
JDK-8317262	21	LockStack::contains(oop) fails "assert(t̄is_Java_thread()) failed: incorrect cast to JavaThread"	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8317291	8	Missing null check for nmethod::is_native_method()	PSU
JDK-8317294	21	Classloading throws exceptions over already pending exceptions	PSU
JDK-8317331	21	Solaris build failed with "declaration can not follow a statement (E_DECLARATION_IN_CODE)"	PSU
JDK-8317335	21	Build on windows fails after 8316645	PSU
JDK-8317336	21	Assertion error thrown during 'this' escape analysis	PSU
JDK-8317373	8, 11, 17, 21	Add Telia Root CA v2	PSU
JDK-8317374	8, 11, 17, 21	Add Let's Encrypt ISRG Root X2	PSU
JDK-8317439	21	Updating RE Configs for BUILD REQUEST 21.0.2+1	PSU
JDK-8317507	21	C2 compilation fails with "Exceeded _node_regs array"	PSU
JDK-8317581	21	[s390x] Multiple test failure with LockingMode=2	PSU
JDK-8317603	21	Improve exception messages thrown by sun.nio.ch.Net native methods (win)	PSU
JDK-8317692	21	jcmm GC.heap_dump performance regression after JDK-8292818	PSU
JDK-8317705	17, 21	ProblemList sun/tools/jstat/jstatLineCountsX.sh on linux-ppc64le and aix due to JDK-8248691	PSU
JDK-8317706	17, 21	Exclude java/awt/Graphics2D/DrawString/RotTransText.java on linux	PSU
JDK-8317711	21	Exclude gtest/GTestWrapper.java on AIX	PSU
JDK-8317736	21	Stream::handleReset locks twice	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8317751	21	ProblemList ConsumeForModalDialogTest.java, MenuItemActivatedTest.java & MouseModifiersUnitTest_Standard.java for windows	PSU
JDK-8317772	17, 21	NMT: Make peak values available in release builds	PSU
JDK-8317790	21	Fix Bug entry for exclusion of runtime/jni/terminatedThread/TestTerminatedThread.java on AIX	PSU
JDK-8317803	21	Exclude java/net/Socket/asyncClose/Race.java on AIX	PSU
JDK-8317818	21	Combinatorial explosion during 'this' escape analysis	PSU
JDK-8317834	17, 21	java/lang/Thread/IsAlive.java timed out	PSU
JDK-8317839	21	Exclude java/nio/channels/Channels/SocketChannelStreams.java on AIX	PSU
JDK-8317920	11, 17, 21	JDWP-agent sends broken exception event with onthrow option	PSU
JDK-8317959	21	Check return values of malloc in native java.base coding	PSU
JDK-8317964	21	java/awt/Mouse/MouseModifiersUnitTest/MouseModifiersUnitTest_Standard.java fails on macosx-all after JDK-8317751	PSU
JDK-8317967	11, 17, 21	Enhance test/jdk/javax/net/ssl/TLSCommon/SSLEngineTestCase.java to handle default cases	PSU
JDK-8317987	21	C2 recompilations cause high memory footprint	PSU
JDK-8318078	21	ADLC: pass ASSERT and PRODUCT flags	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8318089	21	Class space not marked as such with NMT when CDS is off	PSU
JDK-8318137	21	Change milestone to fcs for all releases	PSU
JDK-8318144	21	Match on enum constants with body compiles but fails with MatchException	PSU
JDK-8318183	21	C2: VM may crash after hitting node limit	PSU
JDK-8318240	21	[AIX] Cleaners.java test failure	PSU
JDK-8318415	21	Adjust describing comment of os_getChildren after 8315026	PSU
JDK-8318474	21	Fix memory reporter for thread_count	PSU
JDK-8318525	21	Atomic gtest should run as TEST_VM to access VM capabilities	PSU
JDK-8318528	21	Rename TestUnstructuredLocking test	PSU
JDK-8318562	21	Computational test more than 2x slower when AVX instructions are used	PSU
JDK-8318587	21	refresh libraries cache on AIX in print_vm_info	PSU
JDK-8318591	21	avoid leaks in loadlib_aix.cpp reload_table()	PSU
JDK-8318705	11, 17, 21	[macos] ProblemList java/rmi/registry/multipleRegistries/MultipleRegistries.java	PSU
JDK-8318736	21	com/sun/jdi/JdwpOnThrowTest.java failed with "transport error 202: bind failed: Address already in use"	PSU
JDK-8318759	8, 11, 17, 21	Add four DigiCert root certificates	PSU
JDK-8318855	17	Extra file added by mistake during the backport of JDK-8283326	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8318889	17, 21	C2: add bailout after assert Bad graph detected in build_loop_late	PSU
JDK-8318895	21	Deoptimization results in incorrect lightweight locking stack	PSU
JDK-8318951	21	Additional negative value check in JPEG decoding	PSU
JDK-8318953	17, 21	RISC-V: Small refactoring for MacroAssembler::test_bit	PSU
JDK-8318955	21	Add ReleaseIntArrayElements in Java_sun_awt_X11_XlibWrapper_SetBitmapShape XlbWrapper.c to early return	PSU
JDK-8318957	21	Enhance agentlib:jdpw help output by info about allow option	PSU
JDK-8318981	21	compiler/compilercontrol/TestConflictInlineCommands.java fails intermittent with 'disallowed by CompileCommand' missing from stdout/stderr	PSU
JDK-8319104	21	GtestWrapper crashes with SIGILL in AsyncLogTest::test_asynclog_raw on AIX opt	PSU
JDK-8319120	21	Unbound ScopedValue.get() throws the wrong exception	PSU
JDK-8319184	17, 21	RISC-V: improve MD5 intrinsic	PSU
JDK-8319187	8, 11, 17, 21	Add three eMudhra emSign roots	PSU
JDK-8319195	21	Move tier 1 vector API regression tests to tier 2	PSU
JDK-8319268	21	Build failure with GCC8.3.1 after 8313643	PSU
JDK-8319339	21	Internal error on spurious markup in a hybrid snippet	PSU
JDK-8319405	8	[s390] [jdk8] Increase javac default stack size for s390x zero	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8319436	21	Proxy.newProxyInstance throws NPE if loader is null and interface not visible from class loader	PSU
JDK-8319525	17, 21	RISC-V: Rename *_riscv64.ad files to *_riscv.ad under riscv/gc	PSU
JDK-8319532	21	jshell - Non-sealed declarations sometimes break a snippet evaluation	PSU
JDK-8319542	21	Fix boundaries of region to be tested with os::is_readable_range	PSU
JDK-8319700	21	[AArch64] C2 compilation fails with "Field too big for insn"	PSU
JDK-8319828	21	runtime/NMT/VirtualAllocCommitMerge.java may fail if mixing interpreted and compiled native invocations	PSU
JDK-8319922	21	libCreationTimeHelper.so fails to link in JDK 21	PSU
JDK-8319958	17, 21	test/jdk/java/io/File/libGetXSpace.c does not compile on Windows 32-bit	PSU
JDK-8319961	21	JvmtiEnvBase doesn't zero _ext_event_callbacks	PSU
JDK-8320001	21	javac crashes while adding type annotations to the return type of a constructor	PSU
JDK-8320209	17, 21	VectorMaskGen clobbers rflags on x86_64	PSU
JDK-8320280	21	RISC-V: Avoid passing t0 as temp register to MacroAssembler::lightweight_lock/unlock	PSU
JDK-8320363	21	ppc64 TypeEntries::type_unknown logic looks wrong, missed optimization opportunity	PSU
JDK-8320601	17, 21	ProblemList java/lang/invoke/lambda/LambdaFileEncodingSerialization.java on linux-all	PSU
JDK-8321067	21	Unlock experimental options in EATests.java	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8322883	21	[BACKOUT] 8225377: type annotations are not visible to javac plugins across compilation boundaries	PSU
JDK-8322985	21	[BACKOUT] 8318562: Computational test more than 2x slower when AVX instructions are used	PSU

OpenJFX Fixes and Enhancements

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

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8181084	11	JavaFX show big icons in system menu on macOS with Retina display	CPU,PSU
JDK-8251240	11, 17, 21	Menus inaccessible on Linux with i3 wm	PSU
JDK-8284544	8	[Win] Name-Property of Spinner cannot be changed	PSU
JDK-8292922	11	[Linux] No more drag events when new Stage is created in drag handler	PSU
JDK-8307536	17, 21	FileAlreadyExistsException from NativeLibLoader when running concurrent applications with empty cache	PSU
JDK-8313321	8, 17, 21	Set minimum python version in WebKit cmake scripts	PSU
JDK-8313648	17, 21	JavaFX application continues to show a black screen after graphic card driver crash	PSU
JDK-8314484	17, 21	Update Gradle to 8.3	PSU
JDK-8314486	17, 21	JavaFX build uses deprecated features that will be removed in gradle 8	PSU
JDK-8315074	8, 17, 21	Possible null pointer access in native glass	PSU

OpenJDK Patch ID	Azul Zulu Version	Synopsis	CPU/PSU
JDK-8315958	8, 17, 21	Missing range checks in GlassPasteboard	PSU
JDK-8317370	17, 21	JavaFX runtime version is wrong at runtime	PSU
JDK-8317508	8, 17, 21	Provide media support for libavcodec version 60	PSU
JDK-8318115	17, 21	Webkit build fails after gradle 8.4	PSU
JDK-8318386	17, 21	Update Glib to 2.78.0	PSU
JDK-8318387	17, 21	Update GStreamer to 1.22.6	PSU
JDK-8318984	17, 21	Update to Xcode 14.3.1 on macOS	PSU
JDK-8319066	8, 11, 17, 21	Application window not activated in macOS 14 Sonoma when launched from command line	PSU
JDK-8319079	17, 21	Missing range checks in decora	PSU
JDK-8319231	11, 17, 21	Unrecognized "minimum" key in .jcheck/conf causes /reviewers command to be ignored	PSU
JDK-8319669	17, 21	[macos14] Running any JavaFX app prints Secure coding warning	PSU
JDK-8319762	17, 21	Update to Visual Studio 2022 version 17.6.5 on Windows	PSU
JDK-8319996	17, 21	Update to GCC 13.2.0 on Linux	PSU
JDK-8320267	11, 17, 21	WebView crashes on macOS 11 with WebKit 616.1	PSU

Fixes and Enhancements Specific to Azul Zulu Builds of OpenJDK

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

Issue ID	Azul Zulu Version	Synopsis	CPU/PSU
ZULU-56016	8, 11, 17	BCFIPS should be updated to version 1.0.24	CPU,PSU
ZULU-56533	6	Do selective changes re: transfer of LT and LV currencies to EUR	CPU,PSU

Issue ID	Azul Zulu Version	Synopsis	CPU/PSU
ZULU-29744	8	fix compilation issues for gcc9.3	PSU
ZULU-34602	21	Failure in vmTestbase/nsk/jdi/ReferenceType/instances/instances003/instances003.java - com.sun.jdi.ObjectCollectedException	PSU
ZULU-34883	21	integrate CRS agent to Zulu17	PSU
ZULU-34955	21	Failure in about 50 security tests - LinkageError occurred while loading main class com.sun.javatest.regtest.agent.MainWrapper	PSU
ZULU-35818	21	CDS tests fails with assertion if CRS enabled	PSU
ZULU-35819	21	regression tests runtime/SelectionResolution/* failed: SIGSEGV	PSU
ZULU-35876	21	Failure in java/lang/SecurityManager/CheckAccessClassInPackagePermissions.java - Module module com.azul.crs.client has not been granted ("java.lang.RuntimePermission" "accessClassInPackage.com.azul.tooling.in")	PSU
ZULU-37416	21	ClassNotFoundException com.azul.tooling.Handler	PSU
ZULU-37449	21	Add a configurable delay for starting of CRS code which has side effects on JDK initialization	PSU
ZULU-37617	21	High CPU load when CRS is enabled	PSU
ZULU-37651	21	JVM crashes in CI runs	PSU
ZULU-37670	21	CRS related renamings accordingly to PMM-282	PSU
ZULU-37671	21	Failure in 19 tests in serviceability/sa/ and sun/tools/jhsdb/ - Unable to deduce type of thread from address	PSU

Issue ID	Azul Zulu Version	Synopsis	CPU/PSU
ZULU-37720	21	[REGRESSION] Test jdk/modules/etc/VerifyModuleDelegation.java fails with NPE	PSU
ZULU-38273	21	drainQueues() after disableCRS() crashes VM	PSU
ZULU-38294	21	Failure in java/lang/ClassLoader/securityManager/ClassLoaderTest.java - IllegalStateException: getSystemClassLoader cannot be called during the system class loader instantiation	PSU
ZULU-38301	21	Failure in several regression tests sun/security/krb5/auto/* and java/time/tck/java/time/chrono/* - Unexpected exit from test [exit code: -1073740791]	PSU
ZULU-38367	21	Fix for ZULU-38294 breaks zulu build	PSU
ZULU-38448	21	Failures in six various tests on all (and only) "non-CRS" platforms	PSU
ZULU-38511	21	All CRS modules should be loaded by boot class loader (again)	PSU
ZULU-40762	21	Zulu fastdebug failed to start with CRS enabled	PSU
ZULU-40964	21	Processing of VM_METHOD_FIRST_CALLED at client side	PSU
ZULU-40966	21	Fix 2 Address Sanitizer (ASAN) sscanf buffer overflows - any testcase	PSU
ZULU-43110	21	notify_class_load should be configurable by CrsClassLoaderMessage::should_notify()	PSU
ZULU-43971	21	Update CRS client to version 1.0.11	PSU
ZULU-45003	21	CRS agent without -XX:+UnlockExperimentalVMOptions/UnlockExperimentalCRS	PSU

Issue ID	Azul Zulu Version	Synopsis	CPU/PSU
ZULU-45268	21	Add sending of VM_METHOD_FIRST_CALLED to all supported JVMs	PSU
ZULU-46703	21	Use CRS Agent 1.0.26	PSU
ZULU-47172	17, 21	[CRaC] jdk/jdk/crac jtreg tests failed on CentOS 8	PSU
ZULU-48353	8	restore proper JNF bunding	PSU
ZULU-48356	21	Failure in com/sun/management/DiagnosticCommandMBean/DcmdMBeanPermissionsTest.java - SecurityException: ("java.lang.RuntimePermission" "getClassLoader")	PSU
ZULU-48669	21	unnecessary call of hash.cpp/sha256 method when CRS is not intended to be started	PSU
ZULU-48695	21	adding heuristic: report compilation events as VM_METHOD_FIRST_CALLED event	PSU
ZULU-48967	21	AVD agent to be used: 1.0.30	PSU
ZULU-49206	21	AVD agent to be used: 1.0.32	PSU
ZULU-51813	17	Enable BCFIPS provider configuration	PSU
ZULU-51814	11	FIPS for Zulu 11	PSU
ZULU-51913	8	JBOSS EAP 7.4.0 fails with Zulu 8.74.0.11	PSU
ZULU-52197	21	AVD for Zulu 21	PSU
ZULU-52231	11	Move zulu11 aarch32 builds to ent jenkins env	PSU
ZULU-52236	21	Fix partial initialization warning for _listener_address	PSU
ZULU-53286		Rename linux-arm to linux-armhf in build matrix	PSU
ZULU-53497	8	Improve zoich build infra	PSU
ZULU-53520	21	Upgrade boot jdk for zulu21	PSU

Issue ID	Azul Zulu Version	Synopsis	CPU/PSU
ZULU-53750	17, 21	Checkpoint while debugging	PSU
ZULU-54108	17, 21	Could not find criuengine for zulu with crac for win & mac	PSU
ZULU-54275	8, 11, 17, 21	AVD code inventory does not work properly on Zulu17	PSU
ZULU-54288	11, 17	Add UseBCFIPS option for Zulu11	PSU
ZULU-54295	17	libGetXSpace.c fails to compile on win32	PSU
ZULU-54628	8	[OJ-reg] "com/sun/jdi/StepTest.java" test failed with "java.lang.IllegalArgumentException: Bad method name/signature: com.azul.crac.Core.go:()V"	PSU
ZULU-54881	17, 21	[CRaC] 4 jdk/crac jtreg tests fail on macosx in Zulu 17.46 and Zulu 21.30 builds	PSU
ZULU-54882	17, 21	[JCK21] Multiple "api/java_lang/" tests failed with "java.lang.NullPointerException"	PSU
ZULU-54890	17, 21	[CRaC] sun/misc/SunMiscSignalTest.java test fails on macosx in Zulu 17.46.27, 17.46.28, 21.30.19, 21.30.20 CRaC builds	PSU
ZULU-54928		22 EA fails to sign correctly after 22.0.51+	PSU
ZULU-55359	21	CI for CRaC	PSU
ZULU-55361		Update base images for armv6hf-sdk and armv5sf-sdk	PSU
ZULU-55363	21	Backport test fixes from upstream	PSU
ZULU-55547	8	Remove OpenJSSE and Legacy8uJSSE from Zulu8	PSU
ZULU-55559	17, 21	JMX cannot be enabled after restore	PSU
ZULU-55562		linux-armsf started to fail after transition to ent build env	PSU

Issue ID	Azul Zulu Version	Synopsis	CPU/PSU
ZULU-55812	21	Change to Xcode 14.3 for building on macOS	PSU
ZULU-55843	17, 21	Zulu CRaC + GC log	PSU
ZULU-56027	17, 21	Zulu21 CRaC build does not work with CRS on Windows	PSU
ZULU-56028	17, 21	CRS: --disable-precompiled-headers fails to compile	PSU
ZULU-56029	8, 11, 17, 21	review references to slackoverflow	PSU
ZULU-56061	17, 21	CRaC: OSX: --disable-precompiled-headers fails to compile	PSU
ZULU-56146	8	Mass build failures after 8138694	PSU
ZULU-56164	8	Update .dependencies file with freetype for custom aarch64 compiler	PSU
ZULU-56206	17, 21	CRaC code has bad words	PSU
ZULU-56211	8	Fix PPC family builds	PSU
ZULU-56430	21	Allow Merge PRs in CI	PSU
ZULU-6566	21	Modules without classes can not be imported into jre image	PSU

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

The following table describes the Azul ZuluFX bug fixes implemented in this release.

Issue ID	Azul Zulu Version	Synopsis	CPU/PSU
ZULU-55389	8	jfx8: typo in Mesa 3-D Graphics Library version	CPU,PSU
ZULU-52487	8, 17, 21	Use VS2022-17.6.5 for WebKit v616.1	PSU
ZULU-52980	17, 21	win32: webkit build is broken after 8238650	PSU

Issue ID	Azul Zulu Version	Synopsis	CPU/PSU
ZULU-55581	17, 21	win32: glib build is broken after JDK-8318386	PSU