IAITAM ACE 2025

ITAM - Another Brick In The Wall

The Power of 3 – The Magic ITAM Formula to navigating Oracle Java Licensing Concerns

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Simon, as the Senior Vice President of Azul's Global Channel and Alliances, is a seasoned executive with a wealth of experience spanning over three decades in the industry. His expertise encompasses Software Asset Management (SAM), IT Asset Management (ITAM), machine learning, insight engines, data analytics, and information governance.

Beginning his career with humble roots as a project manager at Glaxo Smithkline, Simon has since ascended to various executive roles in renowned organizations such as Symantec, Commvault, Proofpoint, Firemon, Lucidworks, and Nitro.

As an accomplished industry speaker, Simon is a recognizable figure on the global stage, frequently traveling worldwide to support his partners practices. His engagements extend to advising and providing strategic insights to key distribution, value added reseller, integrator and alliances ISV organizations.

You can find more information about Simon at $\underline{www.linkedin.com/in/Simontaylor/}$







What is Java?





Code & Application







A (Very) Brief History Of Java









1995JDK 1.0 - JDK 6

2010 JDK 7 - JDK 22





Where are Companies with Java Licensing?

Paying for Oracle Java

Non-Paying Java Organization

No Idea What They Have



- 1. Understand License Exposure
- 2. Try and Negotiate with Oracle
- 3. Consider Alternatives



- 1. Using Oracle But Not Telling
- 2. Minimize Java Use & Avoid Paying
- Consider Alternatives on Priority and "At Risk" Applications



- 1. Don't Understand Java Licensing
- 2. Are Using Major Java Apps but don't realize the dependencies
- 3. Have DevOps efficiency Issues





How does Oracle Know What You Have?

- Oracle tracks the IP address of computers that download Java (possibly more)
- Java's default installation has a feature enabled where it will "call home" to Oracle to see if there are any new updates
- Java will auto-update itself from a free version to a paid version unless you turn off the auto-updates









What are my Options?



















Face the Facts....

Staying & Paying

- Oracle sales teams threaten audits but really, they "sales calls" to get organizations to respond.
- The Oracle LMS (License Management Team) rarely conduct actual audits however the goal of the sales call is to get data
- Sticking within your existing contract terms.
- Oracle will ask for proof (Audit) of license volumes to maintain existing contract compliance.
- If you don't have a contract, you will be given a bill on the employee license model.
- If Oracle have evidence that downloads, or use of Java has occurred prior to the "sales call" they will push for a 3- or 5-year term to avoid "back taxes".

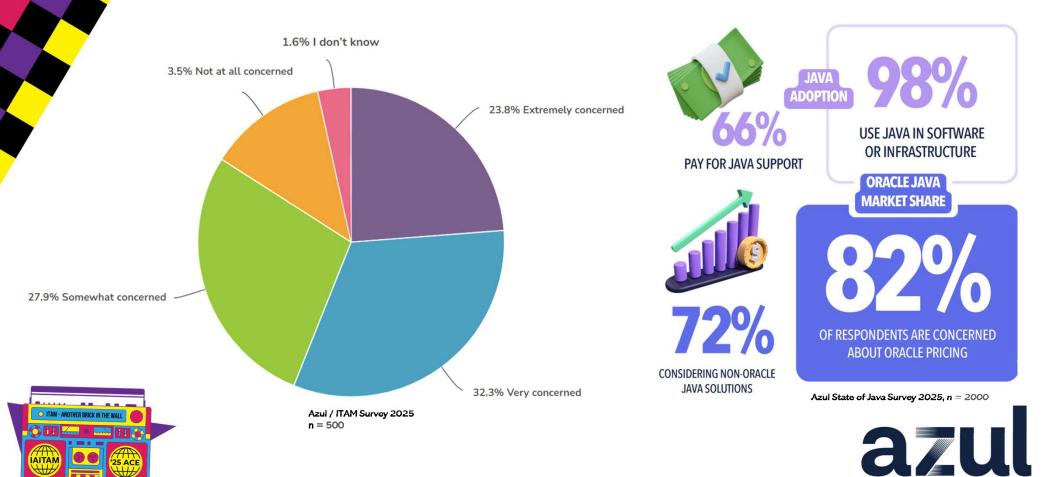








Oracle Java SE - How Concern Are People?





Face the Facts...

Switching & Saving

- Alternative Open JDK solutions to Oracle Java SE come in many flavors however the most common are free open-source community solutions and then alternative paid support solutions.
- Selecting the right Open JDK is based on the level of support needed for critical Java applications, the versions of Java in use, the type the type of industry legislation an organization needs to comply with in terms of support, and the security management needed for the Java estate.
- Savings vs. Oracle typically range from 65-85%.
- Switching to an alternate JDK is much easier than Oracle threaten, and most organizations can switch JDK solutions within weeks

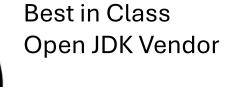






When You Need Help

The Power of 3



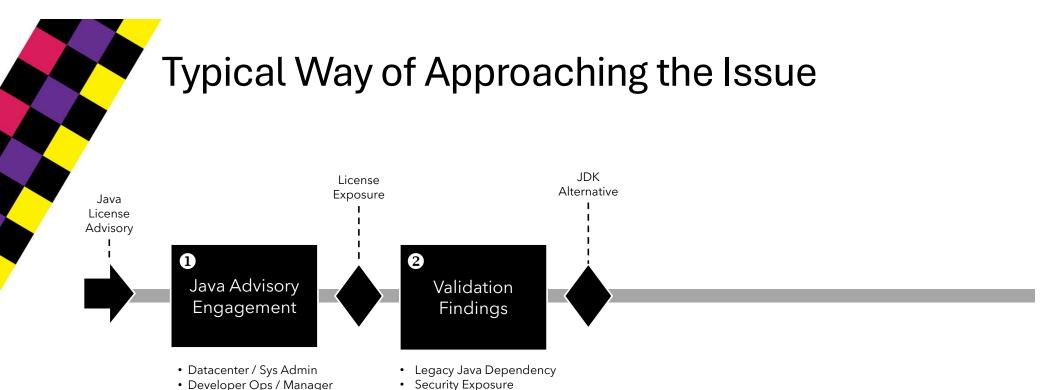
Specialist ITAM/SAM/Finops Advisor



Migration Service Partner









• License Manager

License Audit

• Java Usage / Strategy

Typical Partner Service Cycle

• Desktop / Server Use

• Prioritized Java Apps

• Industry Risk Knowledge



Getting Deeper Into What Counts

Simple Discovery

- o Computer / Server Name
- o Processor Environment
- o # Cores
- o JDK Version
- o JDK Windows Version
- o JDK Distribution
- o JDK Oracle vs. Non-Oracle
- o Oracle JDK Type
- o JDK Azul vs. Non-Azul, Azul build
- o Licensed vs. Unlicensed

Deep Analysis

Oracle CVE's Identified	TOTAL INSTANCES	LOW	MEDIUM	HIGH	CRITICAL
Version 7	0	0	0	0	0
Version 8	155	227	405	15	311
Version 11	0	0	0	0	0
Version 17	0	0	0	0	0
Version 21	0	0	0	0	0

Oracle Instance Types Identified	t
ORACLE PRODUCT	258
BUNDLED INSTALLATIONS	258
SYSTEM-WIDE INSTALLATIONS	0
Oracle OpenJDK - not important	0
Oracle Java Found in TEMP/TMP	
Oracle Java Found In Recycle Bin	0
Oracle Java Found In Snapshots	0
Oracle Java Found In Backups	3

TOTAL NUMBER OF INSTANCES	2
TOTAL NUMER OF UNIQUE HOST NAMES	1

Oracle Java Versions Version 4	0
	100
Version 5	0
Version 6	14
Version 7	9
Version 8	211
Version 10	0
Version 11	0
Version 12	0
Version 14	0
Version 16	0
Version 17	6
Version 18	6
Version 19	12
Version 20	0
Version 21	0
Version 22	0
Version 23	0
#N/A	

GPL 2.0 W/ CPE	U
JVM Distributor	
AdoptOpenJDK	0
Amazon.com Inc.	0
Azul Systems, Inc.	0
Belden	0
BellSoft	0
Eclipse Adoptium	0
Eclipse Foundation	0
Eclipse OpenJ9	0
GraalVM Community	0
IBM Corporation	0
JetBrains s.r.o	0
Microsoft	0
N/A	0
#N/A	0

License Distribution

Oracle BCL





OpenLogic-OpenJDK

Oracle Corporation

Red Hat, Inc.

258



When Just Installed Data Isn't Enough

Static License Script Collection





Static

What is installed and where?
What versions are installed?
What times of Java?
Do I have enough detail?
Can I see security patches?



What is running and used?
What application is associated?
Where are my critical workloads?
Are there any performance issues?
Are there any zero day security issues?





How to Select the Right JDK...

High Risk, Low Skill

License Advisory Partner JDK Migration Partner

Low Risk, Low Skill

Try and Negotiate JDK Migration Partner High Risk, High Skill

Select Paid JDK Alternative Self Service JDK Migration

OpenJDK Alternative

Low Risk, High Skill

Try and Negotiate Self Service JDK Migration

Java Skills & Availability





License Risk



OpenJDK Alternative

Reasons Why You Need to Go with a Trusted Open JDK Vendor

 Ongoing Security Updates: PSU vs CPU



Critical 24/7
Response Times



 Licensing Defense Management



 Java-Specific Expertise



 Understanding Regulatory Compliance



 Security Incident Response Support







Regulatory Compliance & Security Mandates

	Healthcare	Utilities	Pharma/Life Science	Manu/ Transport	Retail	Gov't	Telco	Finance	Cross Industry
APAC	PDPC NPC	SOCI 2018 AESCSF CEA	IEC 81001-5-1* (*embedded devices)	SOCI 2018 AESCSF CEA	ASEAN Cybersecurity Cooperation Strategy	Australian CSS 2023- 2030 PSPF	DOT Cyber Rules 2024	PCI PGPA COBIT 2019	Essential8 D(A*)PA PDPO (*embedded systems)
EMEA	ENISA EHDS MDR* (*embedded systems)	EU Cyber Strategy 2020	EMA	EU Cyber Strategy 2020 ECRs (CRA) NASP	NIS 2	ENISA NIS 2 EU Cyber Regulations 2024	TSA 2021	FSA/FCA BASEL III	DORA CRA GDPR
Americas	HIPPA HITECH	SOX GLBA NERC FERC	HIPAA FDA 21 CFR Part 11 DSCSA	PCI DSS TSA FTCA	PCI DSS FTCA GLBA	FISMA NIST SP 800	TCA 996 FCC	PCI DSS BASEL III NYDFS SOX	CISA CCPA ISO 27001







Why Is Free Java Not Such A Good Idea?







Face the Facts...

What are Java Critical Patch Updates (CPUs) and why are they important in selecting the right Open JDK vendor

Date	Versions	Highest CVE	No of CVEs	Fix delay
Jul 2020	JDK 8	8.3	9	13 days
Oct 2020	JDK 8, 11, 13, 15	5.3	8	16 days
Jan 2022	JDK 11	5.3	15	36 days
Jul 2022	JDK 8	7.5	3	14 days
Jul 2022	JDK 11, 17, 18	7.5	3	25 days
Jul 2023	JDK 11, 17	5.9	8	38 days









What's Needed to Accelerate the Change Project **JDK** License Management Alternative Exposure Java License Advisory 2 3 4 Java Advisory Java Migration Validation JDK Migration Workshop Engagement **Findings** • Datacenter / Sys Admin • Legacy Java Dependency Migration Sizing Application Impact • Developer Ops / Manager Security Exposure Resourcing Effort Prioritization Desktop / Server Use Timelines & Durations • Project & Resource Plan • License Manager • Prioritized Java Apps • Customer Success • Java Usage / Strategy Migration Advisory License Audit • Industry Risk Knowledge

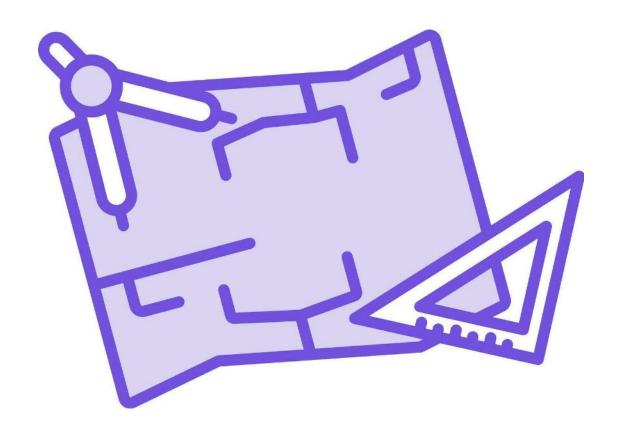


Typical Partner Service Cycle





How to Create a Blueprint for Success







The Java Licensing Playbook

Manage Responses

You don't have to consider responding to Oracle until you have

Java Licensing Inventory

Make sure you inventory Java in all applications, devices, and middleware across all deployment types.

Build Your ROI

Consider the pros and cons of staying with or migrating from Oracle Java

Understand your new Oracle licensing risk by looking at how your employee count relates to Oracle licensing

O ITAM - ANOTHER BRICK IN THE WALL

Identify the amount of Oracle Java in use within your software estate

Focus on the type and version of Java license e.g., server, desktop, cloud or virtual instance

Use an asset tool e.g., Flexera or bring in a partner specialist Determine if you are at risk from an Oracle Java audit

Evaluate your existing Oracle Java SE contract and its limitations

Identify exceptions e.g. Third-party ISV application support

Understand your critical applications and key Java dependencies

Determine the Java skills you have internally and your ability to move to alternatives

License Savings

Legacy Version Support

alternative vendor

Security Readiness

o Legislation Compliance

Choose the right OpenJDK

o Migration Assistance



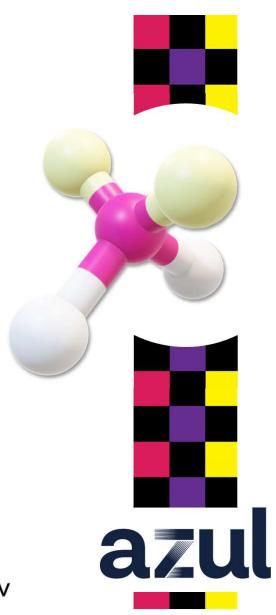


Face the Facts...

JDK Migration DNA

- The number of desktop & server JVM instances
- The number of different critical and non-critical applications
- The number of applications on different Java versions and instances
- Your own resources vs. external help to plan, manage and perform the migration





Get a T-Shirt ROI and JDK Migration Estimate

Sizing

Metric	Derivative	
Employees		5,000
1) // / / C	Desktop	1,740
JVMS	Servers	860
A	Critical Apps	3
Applications Severity	Non-Critical Apps	4
	JDK 8+ Apps	6
A	JDK 6/7 Apps	0
Application Characteristics	Applets / Webstart	2
Characteristics	Desktop Apps	4
	Server Apps	3
	Discovery Hours	153
Migration Effort	Execution Hours	143
	Validation Hours	45

License Cost Analysis	
Expected Oracle Costs	\$630,000
Typical Alternate Costs	\$130,000

ROI

Migration Effort	
Migration Hours	341
Migration Weeks	9.0
Migration Months	2.0

1 Year ACV Summary	Totals
ROI\$	\$450K+
ROI %	74%
3 Year TCV Summary	Totals
ROI \$	\$1.45M+
ROI %	77.00%
5 Year TCV Summary	Totals
ROI\$	\$2.4M+
ROI %	78%







Get a T-Shirt ROI and JDK Migration Estimate

Sizing

	Derivative	
Employees		15,000
IV AN ACC	Desktop	3,490
JVMS	Servers	710
۸ ا: با C ا	Critical Apps	10
Applications Severity	Non-Critical Apps	4
	JDK 8+ Apps	10
	JDK 6/7 Apps	4
Application	Applets / Webstart	5
Characteristics	Desktop Apps	12
	Server Apps	2
	Discovery Hours	508
Migration Effort	Execution Hours	310
	Validation Hours	117

License Cost Analysis	
Oracle Java SE Costs	\$1,485,000
Typical Alternate Costs	\$240,000

ROI

Migration Effort	
Migration Hours	935
Migration Weeks	24.0
Migration Months	6.0

1 Year ACV Summary	Totals
ROI\$	\$1.15M+
ROI %	78%
3 Year TCV Summary	Totals
ROI\$	\$3.6M+
ROI %	81%
5 Year TCV Summary	Totals
ROI\$	\$6.1M+
ROI %	82%







Get a T-Shirt ROI and JDK Migration Estimate

Sizing

Metric	Derivative	
Employees		100,000
JVMS	Desktop	24,670
J V IVI J	Servers	4175
A : + : C i +	Critical Apps	12
Applications Severity	Non-Critical Apps	16
	JDK 8+ Apps	21
A constitution of the cons	JDK 6/7 Apps	7
Application	Applets / Webstart	8
Characteristics	Desktop Apps	18
	Server Apps	10
	Discovery Hours	1164
Migration Effort	Execution Hours	718
	Validation Hours	195

License Cost Analysis	
Oracle Java SE Costs	\$6,300,000
Typical Alternate Costs	\$1,100,000

ROI

Migration Effort	
Migration Hours	2077
Migration Weeks	52.0
Migration Months	12.0

1 Year ACV Summary	Totals
ROI\$	\$5M+
ROI%	79%

3 Year TCV Summary	Totals
ROI\$	\$15.4M+
ROI %	82%

5 Year TCV Summary	Totals
ROI\$	\$25.8M+
ROI%	82%







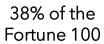
About Azul

azul

Builds of Open DK and Better Java Runtimes Low Cost, Better Support, More Performance



- o The Only Company 100% Focused on Java
- o The World's Top Businesses Run on Azul
- o Broadest Platform Support with 1,000+ Java updates / quarter since 2005 across all Java versions, operating systems & architectures.
- o Azul customers have been using our certified, Java SE-compliant, TCK-tested Java runtimes to power business critical environments since 2004.
- o Largest Java Engineering Team after Oracle



50% of Forbes Top 10 World's Most Valuable Brands 100% of the World's Top 10 Trading Companies

















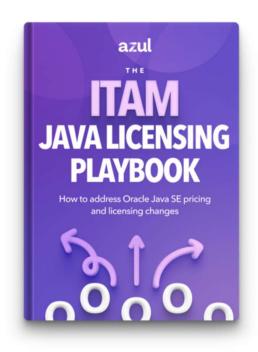




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