Oracle Java Management Service (JMS)

Cut costs, boost security, simplify maintenance

Oracle Java Management Service (JMS) is an Oracle Cloud Infrastructure (OCI) service that discovers, manages, and helps secure enterprise Java estates across on-premises (endpoints and servers), OCI, and multicloud. It delivers unified visibility, automated patching and inventory, vulnerability insights, and agentless application analysis for migration and performance—reducing risk and operational overhead while improving efficiency and compliance at scale.

Operational Resilience, Efficiency, and Optimization of your Java Environment

- ✓ **Reduce cost and risk with centralized control, version lifecycle insight, and optimization**
- ✓ **Improve security/compliance via vulnerability scanning and crypto event analysis**
- ✓ **Simplify operations at scale with automation and a single dashboard**
- ✓ **Accelerate modernization with Java migration and performance analysis**
- ✓ **Enable AI readiness with stable, optimized Java foundations**

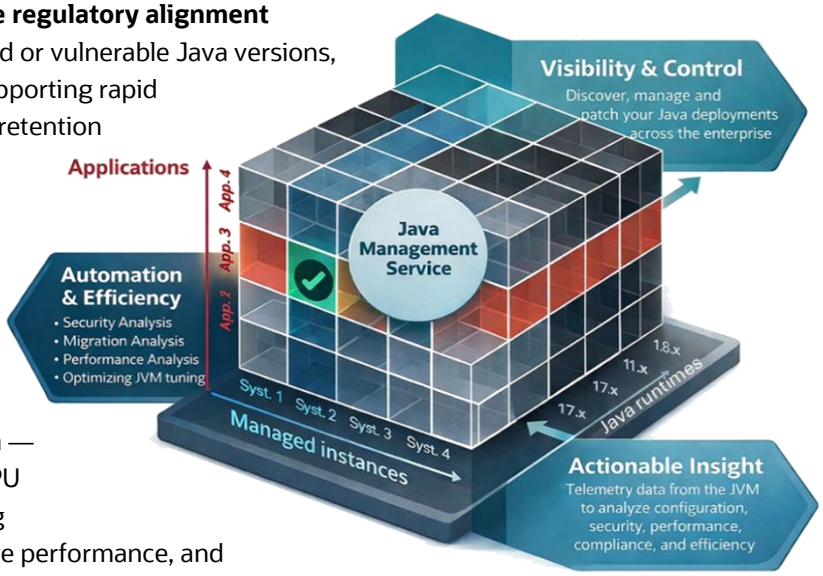
Key features

JMS provides a single pane of glass to discover and manage your Java deployments across the enterprise. **Java Download** simplifies and helps automate Java updates with easy access to latest Oracle JDK releases and updates across all versions. **Analyze Applications** empowers developers and administrators to gain instant, actionable insights into Java applications. **JMS Fleets** provides visibility and control of your Java usage and inventory across your entire Java ecosystem.

- Fleet-wide inventory and usage tracking, extended data retention, and task scheduling.
- Vulnerability scanning of third-party libraries with confidence-level filtering.
- Crypto event analysis to enforce modern policies.
- Java Download for latest Oracle JDK releases (LTS/non-LTS).
- Analyze Applications: agentless migration and performance analysis with OCI Object Storage integration and unified dashboard, and downloadable analysis reports.
- Centralized diagnostics for Java apps on servers and in Kubernetes/Oracle Kubernetes Engine (OKE) so teams can start and collect Java Flight Recorder (JFR) traces from one console to quickly pinpoint issues, improve performance, and speed incident resolution without logging into each host
- Automation at scale: automate Oracle Java installs/updates, schedule inventory, patching, and vulnerability scans, and generate audit-ready reports from a single console

Security and compliance — reduce risk and ensure regulatory alignment

JMS provides centralized visibility to identify outdated or vulnerable Java versions, risky configurations, and third-party library CVEs, supporting rapid remediation and audit readiness with extended data retention and exportable reports. Crypto event analysis flags legacy or unsafe algorithms to enforce policy and protect data exchanged with services—including AI workloads—helping maintain- compliance across hybrid estates.



Performance and scale — improve efficiency and lower costs

Java Flight Recorder's actionable JVM telemetry data — including Garbage Collection, memory usage, and CPU utilization events— combined with automated tuning recommendations, helps resolve bottlenecks, improve performance, and reduce cloud costs for Java workloads on OCI and other environments. For legacy Java 8 estates, Oracle Java SE Enterprise Performance Pack (EPP) delivers additional performance gains, and JMS provides first-class operational support by identifying, reporting, and managing EPP instances across fleets—with EPP releases integrated into the JMS Java Download console for secure, scriptable, license-compliant distribution.

Fleet automation and lifecycle management — simplify maintenance and boost team efficiency

JMS automates Oracle Java installation and updates across managed instances, and uses task scheduling to standardize inventory, patching, and scanning at scale. Extended data retention with filterable, customized exports streamlines audits and stakeholder reporting, freeing teams to focus on higher value work.

Visibility and inventory governance — strengthen control and audit readiness

A unified dashboard presents fleetwide inventory, including third-party and embedded Java, along with a vulnerable library breakdown using CVSS to prioritize remediation. Detailed server usage tracking and automatic capture of IP addresses and hostnames enhance governance, license oversight, and security audits across cloud and on premises environments.

How it works

- JMS Fleet management uses plug-ins to discover and monitor Java instances. Advanced analytics provide telemetry-driven insights.
- Analyze Applications is agentless: upload JAR/WAR or JFR flight recordings directly or reference OCI Object Storage. Reports highlight migration effort, required code changes (down to lines), and performance bottlenecks.
- Unified dashboard for analyses, Java version control across fleets, vulnerability/CVSS insights, and automated patching and scans

Entitlements, prerequisites, and OCI usage

Advanced JMS features are available when desktops, laptops, servers, or cloud deployments are covered by an Oracle Java SE Universal Subscription (or legacy Java SE Subscription/Desktop Subscription) or when running on Oracle Cloud Infrastructure (OCI). Basic discovery features are broadly available to all Java users.

JMS requires an Oracle Cloud account and can be used via the OCI Free Tier. While certain capabilities for OCI-hosted Java workloads are included at no additional license cost, OCI resources used by JMS—such as Object Storage for reports and logs, as well as Monitoring and Logging—incur standard OCI charges, with storage billed separately at OCI rates. JMS integrates natively with OCI Monitoring, Logging, and Object Storage for enhanced functionality. For details or to subscribe, contact Sales or explore OCI.

Primary use cases

- Security hardening and compliance reporting across large estates.
- Application modernization: assess and plan migrations with automated code-level guidance.
- Performance tuning and cost optimization, including for AI workloads.
- Fleet lifecycle automation: inventory, patching, scanning, and reporting.

Customer outcomes

- Financial services: 40% estimated risk reduction; 60% improvement in technology traceability; 80% alignment to new regulations; 100% action plan to migrate to a secure, managed environment with Oracle support.
- Large deployments: OCI engineering used JMS Migration Analysis to plan service wide JDK upgrades with detailed, automated assessments and roadmaps.

Getting started

Onboard JMS fleets, enable Java Download, and use Analyze Applications for agentless migration and performance assessments. Contact us to schedule a demo, and review OCI JMS documentation and reference architecture.

Oracle Java Management Service

Whether your priority is security, modernization, or operational efficiency, JMS unifies visibility, automation, and actionable insights to cut costs, reduce risk, and accelerate confident adoption of new capabilities—including AI—across your Java estate.

Contact us to start maximizing the value of your Oracle Java investment

JMS Features summary table

JMS Feature	Description	Benefit
Java Download		
Simplified, script-friendly downloads	Token-based commands for any supported JDK; "latest" alias for auto-patching	Automates updates, reduces errors, keeps fleets current
Secure, centralized distribution	Centralized, policy-controlled distribution across desktops, servers, and cloud	Lowers operational risk; consistent, compliant deployments
Integrated EPP release delivery	EPP releases visible and retrievable via Java Download with license compliance	Boosts Java 8 performance without migration; compliant rollout
Comprehensive reporting	Central visibility of downloaded/installed runtime versions	Audit-ready insight and version governance
JMS Fleets — Security & Policy Compliance		
Vulnerable library scanning (CVSS)	Detects third-party libraries, identifies libraries loaded at runtime, and maps known CVEs with CVSS scoring; dashboard breakdown	Prioritizes remediation by focusing on vulnerable libraries that are actively used over those that are merely deployed; reduces exposure and audit risk
Crypto event analysis	Flags weak/deprecated algorithms and cert usage vs. Oracle crypto roadmap	Enforces crypto policy; protects sensitive/AI data flows; warns for upcoming deprecation
Outdated version detection and patching enablement	Identifies runtimes below the security baseline; warns of upcoming deprecation; facilitates download/install of latest Oracle Java	Faster patch cadence; improved compliance posture
JMS Fleets — Cost Reduction & Team/Resource Efficiency		
Automated Oracle Java install/updates	Orchestrated deployment/updates across managed instances	Cuts manual effort and variance; consistent baselines
Task scheduling	Automates inventory, scanning, and lifecycle tasks on recurring/one-time schedules	Improves operational consistency; frees team capacity
Extended retention and exportable data	Longer inventory/usage retention; filterable exports for BI/ITSM	Streamlines audits and reporting; simpler tool integration
Detailed server usage, IP/host capture	Tracks server usage patterns; auto-captures IPs/hostnames	Enhances license oversight, governance, and security ops
JMS Fleets — Improved Performance & De-risked Migrations		
Performance recommendations	Analyzes telemetry/JFR to recommend JVM tuning	Better app performance, lower cloud costs, fewer incidents
Centralized Java Flight Recorder (JFR)	Remote start/collect JFR across fleets (incl. Kubernetes/OKE)	Faster troubleshooting; consistent diagnostics at scale
Migration analysis (fleet advanced)	Assesses feasibility/effort to move to newer JDKs	Safer, faster upgrades with clear work plans
EPP estate support	Identify, report, and manage EPP instances across fleets	Unlocks Java 8 gains with governance and supportability
Analyze Applications		
Migration Analysis (agentless)	Upload JAR/WAR; multi-target JDK assessment with required code changes	De-risks upgrades; data-driven migration plans
Performance Analysis (agentless)	Upload JFR; get bottleneck insights and tuning guidance	Improves performance; simplify JMV tuning with detailed recommendations
Unified dashboard and reports with OCI Object Storage integration	Initiate/monitor analyses; store artifacts/reports securely; download findings	Rapid insights, compliant storage, easy collaboration
Risk mitigation without fleet setup	No agents or prod changes needed to get actionable insights	Accelerates issue discovery; reduces outage risk
Visibility & Inventory Governance		
Unified "single pane of glass"	Central view of all Java deployments (on-prem, OCI, other clouds)	Improves control and decision-making across estates
Third-party/embedded Java discovery	Inventory includes non-Oracle JDKs and embedded Java	Full landscape visibility; better license and risk management
Kubernetes/OKE observability	Containerized Java visibility and diagnostics	Extends governance and troubleshooting to cloud-native apps

Learn More

- Oracle Java Management Service
- Oracle Java SE Universal Subscription
- Oracle Cloud Infrastructure
- Monitor and manage your Java and Java application installations
- Configure Java Management Service Advanced Features for additional insights into Enterprise Java workloads
- Unlock Powerful Insights with Java Management Service: Introducing Analyze Applications and Major Management Enhancements
- Java Management Service – OCI Documentation

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