

Oracle WebLogic Server Management Pack Enterprise Edition



KEY BENEFITS

- Improve performance and availability of Java EE applications and web services
- Improve quality of service by avoiding down time and improving end-to-end response time
- Reduce cost by automating manual, error-prone lifecycle management operations

KEY FEATURES

- Manage multiple domains centrally
- Gain in-depth JVM diagnostics
- Follow request instances from HTML to the database
- Perform key administration and configuration operations
- Detect configuration changes in real time and track historically
- Ensure compliance to industry standards and best practices
- Provision, clone, or scale up/down domains
- Apply patches to domains
- Perform disaster recovery operations

Oracle Enterprise Manager Cloud Control – Oracle’s on-premises management platform – and the Oracle WebLogic Server Management Pack Enterprise Edition provide a single pane of glass for managing all of a customer’s WebLogic deployments, whether in their data centers or in the Oracle Cloud. By leveraging Cloud Control and the pack, customers can reduce IT costs, improve business results and eliminate risk.

Performance Management

The Oracle WebLogic Server Management Pack Enterprise Edition greatly improves server as well as application performance by providing unique functionality to automatically detect performance bottlenecks; quickly diagnose these performance problems, and identify their root cause. Key performance management features of the pack include the following:

- Manage multiple WebLogic Domains, GlassFish Domains, and Oracle Coherence (*assuming Coherence is running on WebLogic; otherwise licensed separately*) centrally
- Monitor middleware availability and performance out-of-box; track such data historically, correlate messages across log files, and receive notifications of potential problems
- Monitor applications from a business perspective and from a single pane of glass via Business Application Management which integrates real end user experience KPIs with Service Level Agreements and supporting infrastructure
- Identify potential impact of availability and performance problems across tiers via a routing topology viewer
- Obtain real-time and historical in-depth JVM diagnostics including garbage collection, thread, and heap analysis without instrumentation overhead
- Trace request instances across containers to the database and vice versa
- Reduce problem resolution time through middleware diagnostics advisor which provides “root cause” findings in context of the most relevant configuration parameters and offers suggestions for each finding

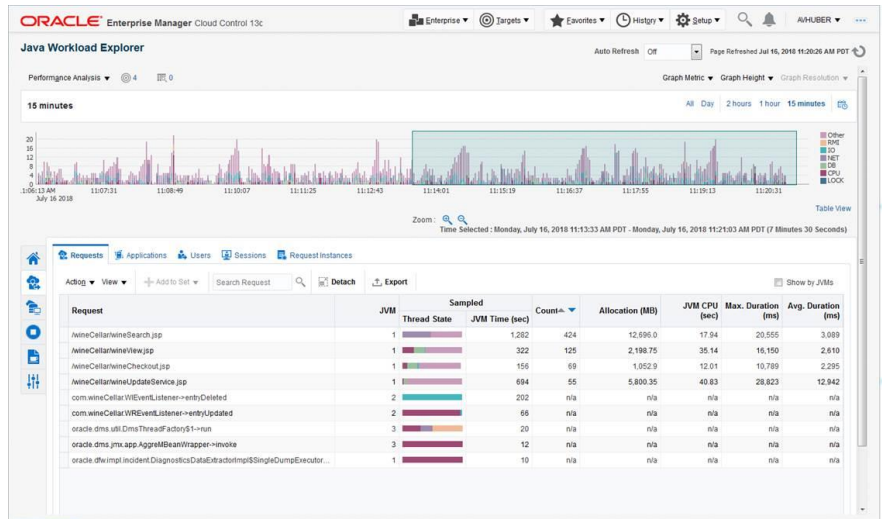


Figure 1. Java Workload Explorer enables you to compare JVM activity between two sets of requests or two periods of time – including actual versus sampled data

Service Level Management

The Oracle WebLogic Server Management Pack Enterprise Edition helps IT organizations to achieve high availability, performance, and optimized service levels for their business services. Key service level management features of the pack include the following:

- Monitor services from the end users' perspective using service tests or synthetic transactions executed from remote user locations
- Assess the business impact of any service problem or failure and understand whether service level goals have been satisfied

Administration

The Oracle WebLogic Server Management Pack Enterprise Edition provides common administration operations - traditionally available from the Oracle Enterprise Manager Fusion Middleware Control console or the WebLogic Server Administration Console – directly from the Cloud Control console. Consequently, a single console can be used to centrally administer multiple domains, and administrators can specify domain credentials once, store them as preferred credentials and never be prompted for domain credentials again. Key administration related features of the pack include the following:

- Lock a domain configuration via Change Center prior to making changes
- View and edit settings for the domain, cluster, server, application deployments, multitenancy, server template and machine configurations
- Create, edit, delete and test JDBC data sources
- View, configure and use MBeans via the System MBean Browser
- Record configuration actions as series of WLST commands
- Configure log file settings (e.g. location, format, log level, rotation policy)
- Audit administration operations performed by Enterprise Manager administrators

Figure 2. WebLogic Domain operations performed from Oracle Enterprise Manager Cloud Control 13c are audited and searchable from the Audit Data page

Lifecycle Management

The Oracle WebLogic Server Management Pack Enterprise Edition provides comprehensive lifecycle management capabilities for middleware software and its underlying hardware that help customers to maximize value of their IT assets, increase the quality of IT services, reduce the cost of managing IT, and meet IT compliance requirements. Key configuration management related features of the pack include the following:

- Automate discovery of configuration items
- Detect configuration changes in real-time and track changes historically
- Compare configurations to reduce “configuration drift” and when undesired differences are detected, synchronize the configurations to make them the same again
- Correlate both real-time and historical configuration changes with performance metrics
- Ensure compliance with regulatory standards and unique business policies including standards such as the Security Technical Implementation Guide (STIG) , Sarbanes-Oxley (SOX) and Payment Card Industry (PCI)

Figure 3. Detected violation of WebLogic Server configuration when evaluated against

STIG compliance standard

The pack also automates common manual and error-prone operations allowing administrators to focus on more strategic initiatives. Key patching and provisioning related features of the pack include the following:

- Receive automatic WebLogic Server patch recommendations via integration with My Oracle Support
- Search for, download, and apply Patch Set Updates, Critical Patch Updates, and one-off patches to managed servers across one or more domains
- Provision a domain and/or Oracle Home from installation media stored in the software library
- Clone a domain and/or Oracle Home from a provisioning profile stored in the software library
- Scale up or out existing domains (e.g. expanding a two node WebLogic Cluster to four nodes) or scale down (e.g. reducing four node cluster to two)
- Export and import a WebLogic partition between domains
- Migrate an older versioned domain to a partition in version 12.2.1 domain
- Deploy, undeploy or redeploy Java EE applications to one or more domains
- Perform disaster recovery operations against systems supporting Java EE applications (e.g. failover to a standby site when the primary site goes down)

The screenshot shows the Oracle Middleware Provisioning software library interface. It is divided into two main sections: Profiles and Deployment Procedures. The Profiles section contains a table with columns for Name, Products, Source, Platform, Version, Owner, and Description. The Deployment Procedures section contains a table with columns for Name, Description, Version, Owner, Type, and Parent Procedure.

Name	Products	Source	Platform	Version	Owner	Description
AH 12.2.1 domain Profile	Oracle We...	WebLogic Domain	Linux x86-64	12.2.1.0.0	SYSMAN	no oracle home, one cluster one managed server
Restricted JRF Domain Config Profile - FMW infra 12.2.1.0	Oracle We...	WebLogic Domain	Linux x86-64	12.2.1.0.0	ORACLE	Contains 12.2.1.0 domain with one cluster containing one managed server with no custom apps deployed, restricted JRF, no binaries. Originally generated from software downloaded from OTN as fmw_12.2.1.0.0_infrastructure_Disk1_1of1.zip
No JRF Domain Config Profile - FMW infra 12.2.1.0	Oracle We...	WebLogic Domain	Linux x86-64	12.2.1.0.0	ORACLE	Contains 12.2.1.0 domain with one cluster containing one managed server with no custom apps deployed, no JRF, no binaries. Originally generated from software downloaded from OTN as fmw_12.2.1.0.0_infrastructure_Disk1_1of1.zip
Provision Fusion Middleware				4.0	ORACLE	Middleware Provisioning
Provision FMW infra 12.2.1.0 Oracle Home					ORACLE	Middleware Provisioning
Provision WebLogic Domain 12.2.1.0					ORACLE	Middleware Provisioning

Figure 4. Store fully tested gold images as profiles in software library and then use deployment procedures to clone the profiles for installation and configuration automation

CONTACT US

For more information about Oracle WebLogic Server Management Pack Enterprise Edition, visit oracle.com or call +1.800.ORACLE1 to speak to an Oracle representative.



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