



Oracle Enterprise Manager

The Dashboard for the Modern Database Fleet

SOLUTION BRIEF / JANUARY 13, 2020

ORACLE®

MANAGE HYBRID DATABASE SYSTEMS AT SCALE WITH LESS EFFORT

According to a recent survey conducted by the International Oracle User Group, most DBAs spend too much time dealing with day-to-day maintenance and troubleshooting issues, and not enough time proactively planning ways to enhance the critical business systems under their purview. In response, the IT industry has begun a decisive shift towards cloud services to free up skilled technology resources for more productive pursuits. This transition creates a hybrid estate for most organizations, which requires new management tools and practices. Today's organizations need versatile tools that streamline the process of migrating resources to the cloud and simplify the management of hybrid environments.

A SINGLE MANAGEMENT SOLUTION FOR DATA CENTER AND CLOUD ASSETS

As Oracle's flagship management platform, Oracle Enterprise Manager provides a single solution to manage all of your Oracle deployments, both in your data center and in Oracle Cloud. Through deep integration with the Oracle product stack, it automates the management of Oracle Applications and Oracle Database instances, along with other hardware and software assets, including middleware and engineered systems. Customers depend on Oracle Enterprise Manager because it delivers:

- Increased visibility and intelligent analytics
- Comprehensive lifecycle automation and control
- An enterprise-grade management platform that is secure, accessible, and extensible

INCREASED VISIBILITY AND INTELLIGENT ANALYTICS

For the foreseeable future, the average IT environment will include a mix of on-premise and cloud-based systems. Oracle Enterprise Manager provides full visibility and intelligent analytics across the latest array of Oracle technologies, on-premise and in the cloud, with comprehensive visibility into the latest Oracle technologies:

Recently Added On-Premise Targets	Recently Added Cloud Targets
Oracle Database 19c and Oracle Database 20; Oracle Exadata 19.3, Exadata X8M, and Exadata XT storage; Oracle ZDLRA 19.3; Oracle WebLogic Server, Oracle SOA, Oracle Identity Management, and Oracle Business Intelligence EE 12.2.1.4	Oracle Autonomous Database – both dedicated and serverless (ATP-D, ATP-S) Oracle Autonomous Data Warehouse Oracle Exadata Cloud Service Oracle Exadata Cloud @ Customer

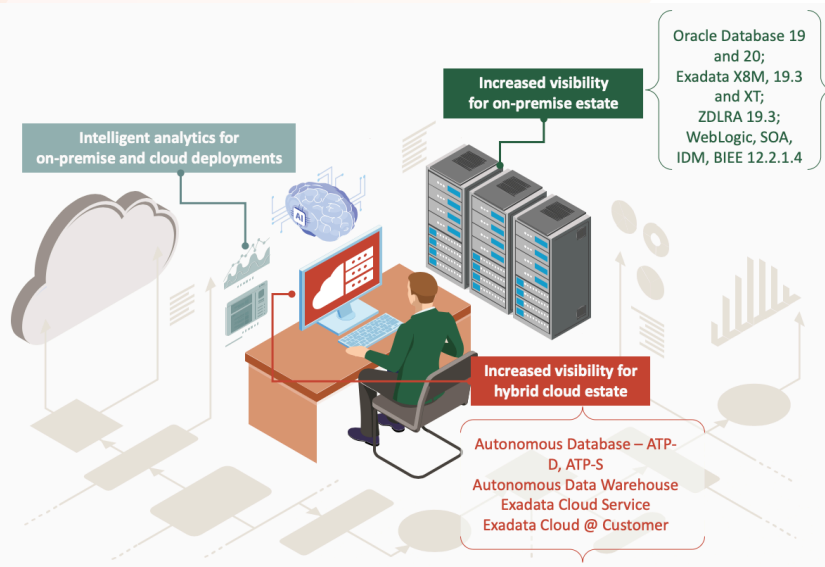
Why Use Enterprise Manager?

- Proactively manage performance and availability with rapid troubleshooting and analytics
- Roll out new application code faster by automating testing and provisioning
- Reduce cyber-threats through secure configuration enforcement, compliance monitoring, and automated patching
- Accelerate the adoption of public clouds with automated migration workflows

“We depend on Enterprise Manager to optimize our Oracle Database and Exadata fleet, which provides a mission-critical shared service for all of our most important business functions. The latest release of Enterprise Manager allows us to adopt the newest Exadata X-8 environments without delay, and to continue to use Enterprise Manager's comprehensive management automation capabilities across our entire hybrid database fleet.”

*Jones John, Database Services Manager, Technology and Innovation Division
Link Group*

Increased Visibility and Intelligent Analytics



Seamlessly Manage Oracle Autonomous Database

The prospect of a self-managing, autonomous database is compelling. Still, as with any big technology move, uncertainty creates risk. Oracle Enterprise Manager helps you confidently adopt Oracle Autonomous Database by leveraging new features such as cloud-aware target types for autonomous and cloud databases, including Oracle Exadata Cloud Service and Oracle Exadata Cloud at Customer.

Once you make the transition to Oracle Autonomous Database, your IT staff can continue using Oracle Enterprise Manager, but their focus will shift to higher value activities such as tuning applications and controlling usage. The Enterprise Manager Performance Hub includes industry-leading telemetry to simplify diagnostics. IT staff can seamlessly manage users, schema, roles, and storage space, freeing up time to diagnose and improve application-level SQL logic—all from the Enterprise Manager console. You can also use Enterprise Manager to orchestrate lifecycle operations via cloud-native APIs such as service instantiation, termination, and scaling.

“We rely on Oracle Enterprise Manager as part of our hosted database services. Enterprise Manager’s timely support for the latest versions of Oracle Autonomous Database and Exadata Cloud will allow us to bring the newest and most secure Oracle technology to our own customers, and the advances in automation and analytics will ensure that we can exceed our service-level goals with less effort.”

Andrey Tambovsky,
Technology Director
FORS

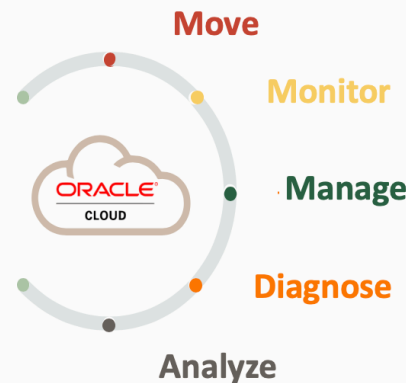
Seamless Management of Oracle Autonomous Database

Adopt the cloud with confidence

- **New cloud-aware target types** for autonomous and cloud databases including Exadata Cloud
- **Enterprise-wide fleet dashboard** for finding “hot spots”

Optimize customer-managed components

- **Monitor** with automatic anomaly detection
- **Manage** users, schema, roles, space, etc.
- **Diagnose and improve** application-level SQL logic
- **Automate lifecycle operations** such as service instantiation, termination, scaling, and orchestration via cloud-native APIs



Proactively Optimize Exadata Utilization

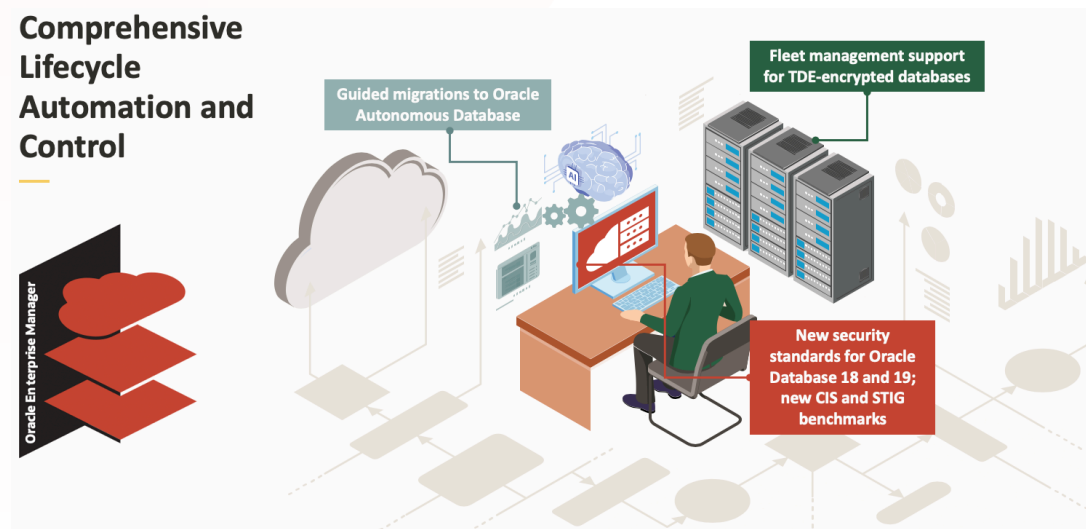
Customers that are consolidating database workloads onto Oracle Exadata Cloud Service, Oracle Exadata Cloud at Customer, and Oracle Autonomous Database can use Enterprise Manager's integrated capacity planning capabilities to plan for on-premise and cloud-based workload migrations.

You can use machine learning-based forecasting capabilities in the new Exadata Warehouse to identify resource issues based on fine-grained Exadata storage, cell, and host data, along with database performance data. You can retain these analytic results and import them into external business intelligence tools to further study resource issues.

COMPREHENSIVE LIFECYCLE AUTOMATION AND CONTROL

Experienced technology professionals turn to Oracle Enterprise Manager when their database estate expands. Oracle Enterprise Manager is not only a robust tool for diagnosing, tuning, and monitoring databases, it is also a complete lifecycle management solution. It works directly with Oracle Database to automate routine administrative tasks, such as applying security patches, rolling out version updates, consolidating and migrating databases, and automating database requests.

Comprehensive Lifecycle Automation and Control



Orchestrated Planning, Migration and Validation: Look Before You Leap

Having familiarity with cloud migration tools is an important step for today's database administrators. Yet even with increased automation, database experts want assurance that their mission-critical systems will work efficiently in the new cloud realm. Oracle boosts their confidence by combining cloud migration tools with front-end planning tools and back-end validation tools.

Oracle Enterprise Manager includes a Migration Workbench that accommodates the new APIs and management structures associated with cloud databases—including Oracle Autonomous Database. The Migration Workbench automates the planning cycle, helps DBAs determine which databases to move, selects the optimal migration tools to use for each move, and identifies existing dependencies within the database. For example, the Migration Workbench can help you decide which databases will work best with Oracle Autonomous Transaction Processing. It can also help you *plan* the migration process, *migrate* the data using the proper migration methodology, and *validate* the results by comparing before-and-after performance. Once you are satisfied with the migration, you can automate these management tasks going forward. Enterprise Manager launches the appropriate migration tools, moves the workloads, and validates that everything is working properly in the new cloud environment.

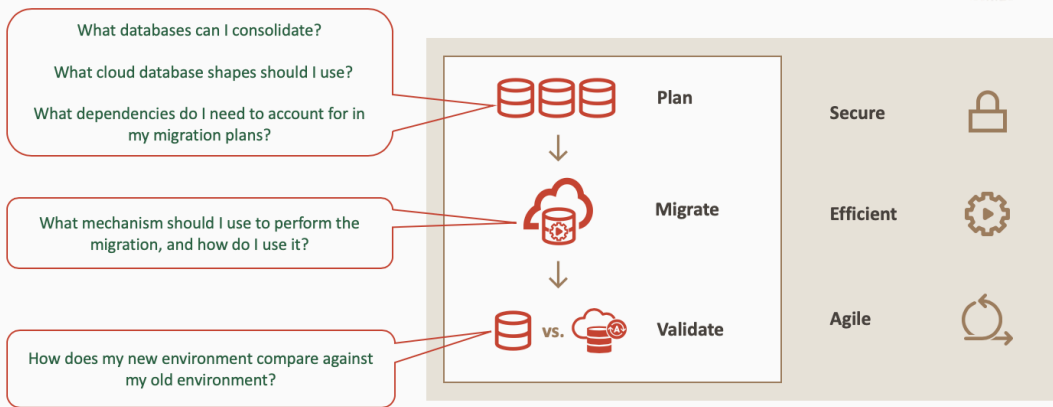
“Oracle Enterprise Manager has provided best-in-class manageability for Oracle Database for years. As more and more of our customers migrate their databases to the cloud, it’s natural that Enterprise Manager will serve as their migration solution to ensure they get there with minimal risk and effort.”

Ernest Molinaro, CEO
Compasso

“We are using Oracle Enterprise Manager to help customers such as Unicoop Firenze migrate to and adopt Oracle Autonomous Database. The newest release of Oracle Enterprise Manager builds on Oracle’s best-in-class automation and analytics to ensure the performance and security of our customers’ most important asset—their data.”

Marco Bettini, CEO
Bridge Consulting, S.R.L.

Easily Move to Oracle Autonomous Database with the Migration Workbench



The Migration Workbench operates in conjunction with Oracle Autonomous Database to ensure complete and stable migrations. There are three basic steps to the process:

- **Plan:** First you have to figure out which databases to move or consolidate, and what types of cloud databases you should use. The Topology Viewer helps you identify the database dependencies within your applications, and the Consolidation Planner analyzes your historic capacity usage to estimate how much capacity you will need in the cloud, and then maps that usage to cloud resources.
- **Migrate:** The Migration Workbench identifies the best migration mechanism to use based on the source and destination configurations, and explains how to use that mechanism.
- **Validate:** Once the migration is complete, Enterprise Manager measures the success of the migration by validating that all the objects have been successfully migrated, and comparing the source and destination schema. This verifies that all the objects you had on-premise have been successfully migrated to the cloud. It also compares the before-and-after performance of each workload and makes tuning recommendations, if necessary.

Comprehensive Automation and Control to Maximize Your Security Posture

Oracle Enterprise Manager can automatically patch and update your database management systems, on-premise and in the cloud, to ensure they comply with industry and corporate requirements. Staying current with software patches is an essential aspect of security. Oracle observes and adheres to pertinent standards including Security Technical Information Guide (STIG) and Computer Information Security (CIS) Benchmark v2.1.0, Level 1-RDBMS, as well as Oracle-provided best-practices for Oracle Database 18c and 19c.

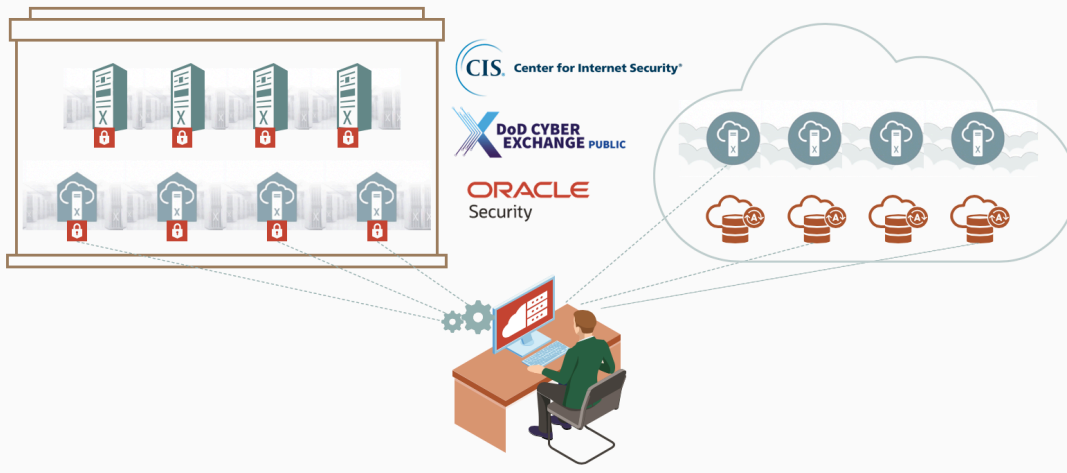
“Our customers are excited to move to Oracle Cloud, especially for the new autonomous offerings. We will use the new Oracle Enterprise Manager Migration Workbench to help them get there even faster, due to both the efficiency gains provided by the automation and the assurance of success provided by the built-in validations and best practices.”

*Brian Bream, CEO
Collier IT*

“Our key public sector and commercial customer—and our own experts—use Oracle Enterprise Manager every day to manage their Oracle Database and Exadata fleets. The new version of Enterprise Manager eases the migration to Autonomous Database and applies machine analytics to Enterprise Manager data. This is precisely what is needed to ensure our customers can continue to operate seamlessly across their entire database fleet.”

*Erik Benner, Vice President,
Transformation
Mythics*

Comprehensive Automation and Control to Maximize Your Security Posture



“Oracle Enterprise Manager provides key control features that ensure the security of enterprise data, on premise and in the cloud. Its new features will increase the usage of data encryption, and the new compliance standards from both Oracle and third-parties will help our customers maximize their security postures, whether their data resides in their data centers or on the public cloud.”

*Pravin Patil, CEO
Kapstone*

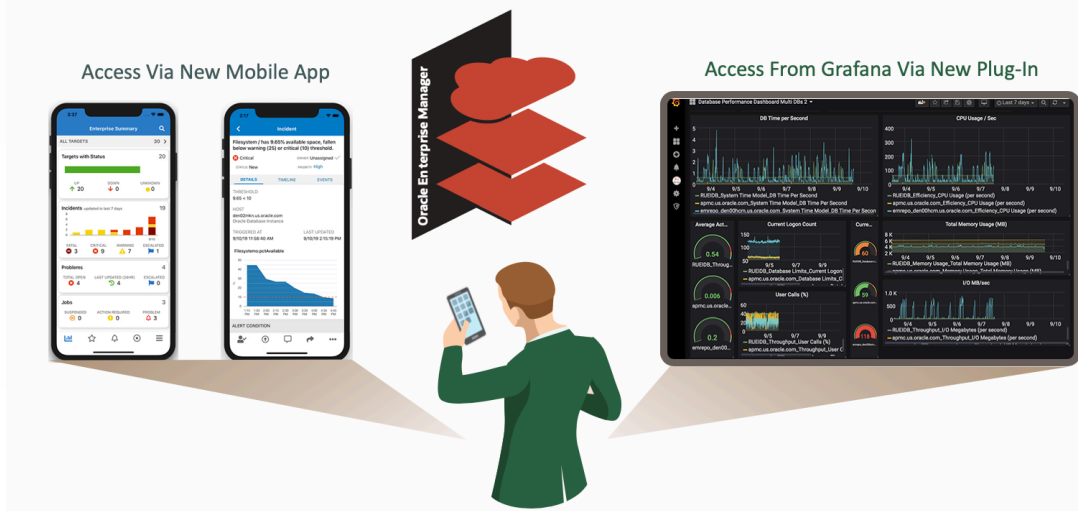
AN ENTERPRISE-GRADE MANAGEMENT FRAMEWORK, AVAILABLE IN THE CLOUD

Many DBAs turn to Oracle Enterprise Manager to more consistently automate routine tasks. Now, a new mobile interface makes it easy to stay apprised of and interact with incidents. Additionally, a new Grafana plug in lets administrators analyze and monitor time-series data through the popular Grafana utility, all via the Oracle Enterprise Manager Console. According to O AUG research, having a consistent management interface gives DBAs confidence in Oracle’s evolving IT roadmap, paving the way for the adoption of cloud-based databases, applications, and infrastructure. Management consistency ensures repeatable, high-performance results.

“Epsilon runs marketing and loyalty programs for many of the world’s most well-known companies, and we depend on Oracle Enterprise Manager to maintain tip-top performance. We are already heavy users of Enterprise Manager’s automation features and regularly perform sophisticated analysis on Enterprise Manager data, so we are excited to leverage the new migration workflows and to use the advanced Exadata analytics features, along with the new Grafana Plug-In.”

*Joe Kopilash, Senior Director,
Database
Epsilon*

Enterprise-Grade Framework: Secure, Accessible, and Extensible



Adopting Oracle’s flagship management solutions in a hybrid environment that includes cloud and on-premise systems is now easier than ever before. Oracle Enterprise Manager runs in the Oracle Cloud Infrastructure (OCI) Marketplace. This turnkey offering allows you to instantly deploy a high availability (HA) infrastructure via pre-defined Oracle Cloud Marketplace images. With a couple of clicks you can stand up an Enterprise Manager environment based on Oracle best practices. You can subscribe to this service in the OCI marketplace and have it up and running in minutes.

CONCLUSION: GAIN CONTROL OVER THE ENTIRE TECHNOLOGY STACK

Oracle Enterprise Manager has been designed to help organizations confront the reality of a hybrid database estate that includes a diverse array of hardware and software infrastructure. It helps you confidently adopt proven management practices, take advantage of the next generation of technology innovations, and efficiently support your business objectives.

To learn more about Oracle Enterprise Manager, visit <https://www.oracle.com/enterprise-manager/>.

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Integrated Cloud Applications & Platform Services

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