

I'm not a robot





























Oracle Database is a relational database management system (RDBMS) developed by Oracle Corporation.

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IBM and Oracle have partnered for decades to help companies embrace cutting-edge technology and forge a path to success, even as the landscape changes rapidly before them. Together, we help clients navigate their cloud journeys and maximize business transformation in a complex hybrid cloud world. Case studies Aircraft silhouettes on background of sunset Transforming the Colleague Experience at Phoenix Group The largest savings and retirement business in the UK, Phoenix Group, and IBM embarked on project Thunderbird to enhance their employee experience through automation, self-service and process simplification. Learn more about their on-demand HR support and digital assistance Enhancing public services with Oracle Cloud Government of New Brunswick needed an experienced, specialized, and bilingual partner that would work together on a business-focused and change-intensive project. IBM defined a modernization roadmap for GNB and achieved key milestones despite COVID-19 constraints, providing ongoing support for Oracle Cloud adoption. Read their story Renovating one of the world’s most historic public buildings enabled by cloud By adopting industry-standard solutions for finance, procurement, HR and recruitment, this major public heritage project now has a single set of clear and well-documented business processes, which will help it stay smart, efficient and scalable as it grows. Find out how they did it The IBM Consulting and Technology solutions include watsonx Orchestrate Agents on Oracle Cloud Infrastructure built for Oracle Fusion enterprise apps, IBM Granite models in OCI Data Science, and new IBM Consulting offerings to accelerate business transformation for our clients through hybrid cloud and AI technologies. IBM agents in watsonx orchestrates for Oracle Fusion HCM/IBM Consulting AI Offering/watsonx platform available on OCIVMware Migration path. Actualizado: 5 de junio de 2024 Colaboradores: Molly Hayes, Amanda Downie Oracle es una compañía de tecnología de la información con sede en Estados Unidos que ofrece una amplia gama de productos y servicios orientados a los negocios que incluyen Oracle Database, un sistema de gestión de bases de datos relacionales (RDBMS). La compañía fue fundada en 1977 en California y se encuentra entre las compañías de software y hardware más grandes del mundo.1 Desde su creación hace casi cincuenta años, Oracle desarrolló un gran número de soluciones de tecnología de la información (TI) y adquirió una amplia cartera de empresas. Es particularmente conocida por sus ofertas de planeación de recursos empresariales (ERP) basadas en la nube en inteligencia empresarial y servicios financieros, así como por sistemas como Solaris, Java y Oracle Linux. Oracle también fabrica y vende servidores y soluciones de red especialmente diseñados para ejecutar sus plataformas y bases de datos. Su Oracle Database fue el primer sistema de gestión de bases de datos relacionales (RDBMS) basado en SQL lanzado comercialmente en los Estados Unidos.2 La compañía invierte mucho en tecnologías de código abierto, prestando recursos para el desarrollo y las pruebas de productos de código abierto y destacando con frecuencia que las plataformas clave, como Oracle Cloud Infrastructure (OCI), son “abiertas por diseño”.3 Los productos y servicios de Oracle se emplean en todo el mundo en servicios gubernamentales, compañías de telecomunicaciones y en entornos de atención médica donde la seguridad de los datos, la redundancia y la gestión compleja de cargas de trabajo son críticas. Oracle Corporation fue fundada en California por Larry Ellison, Bob Miner y Ed Oats con el nombre de Software Development Laboratories en 1977. Inspirados en un artículo de investigación británico que describe un modelo de base de datos relacional, los fundadores creían que había potencial en el sistema. Dos años más tarde, la compañía lanzó Oracle, la primera base de datos relacional comercial en emplear lenguaje de consulta estructurado (SQL).4 La compañía cambió de nombre a Oracle en 1982 y salió a bolsa en 1986, cuando en la Bolsa de Valores de Nueva York (NYSE) como Oracle Corp (ORCL). En los años transcurridos desde su fundación, Oracle adquirió una gran cantidad de empresas para ampliar sus ofertas y servicios. Los ejemplos de alto perfil incluyen PeopleSoft, Siebel, BEA, Sun Microsystems, Netsuite y Cerner. En 2010, la compañía adquirió Sun Microsystems, una compañía de desarrollo de software que desarrolló el lenguaje de programación Java, integrándolo aún más en el mundo de los sistemas informáticos y el software. La compra también llevó a la compañía a un vasto negocio de hardware (el enlace se encuentra fuera de ibm.com), poniendo el sistema operativo Solaris y Java bajo el ámbito de la compañía.5 También adquirió la popular base de datos de código abierto MySQL. En 2020, Oracle trasladó su antigua sede central de Redwood Shores, California, a Austin, Texas. En 2021, adquirió Cerner, una compañía de historiales médicos, en su mayor adquisición hasta la fecha.6 A partir de 2023, la compañía tuvo unos ingresos trimestrales totales de más de 200 millones de dólares y siguió creciendo considerablemente, según Forbes.7 En el otoño de 2023, la compañía anunció que invertiría mucho en casos de uso de IA generativa en todos sus servicios Fusion Cloud.8 Oracle Database es el producto estrella de Oracle. Es un popular sistema de gestión y almacenamiento de bases de datos empleado por organizaciones de todo el mundo para gestionar y almacenar sus datos. Emplea SQL para la manipulación y las consultas, y fue la primera base de datos de este tipo que se ofrece para su lanzamiento comercial. Oracle Database se puede ejecutar en Linux o Microsoft Windows. Las características de Oracle Database: Análisis avanzado: Oracle Database admite big data y analytics avanzados. Los sistemas pueden leer y procesar datos y ejecutar análisis predictivos o sistemas automatizados rápidamente. Alta disponibilidad de datos: Oracle Database está diseñado para un alto nivel de rendimiento operativo con características como la data replication, copia de seguridad y agrupación de servidores. Escalabilidad: Oracle Database es capaz de ejecutarse en un único servidor o en una base de datos distribuida masiva. Seguridad: Oracle Database tiene una variedad de características para proteger la privacidad y la integridad con cifrado y monitoreo de riesgos de seguridad. Oracle Database se ofrece actualmente9 en cuatro ediciones diferentes, cada una de las cuales ofrece varios niveles de funcionalidad. Edición Enterprise: Diseñado para grandes organizaciones, Oracle Database Enterprise Edition soporta procesamiento de transacciones en línea (OLTP) de alto volumen, así como almacenamiento de datos intensivo en consultas. Se puede mejorar con una amplia variedad de opciones de paquetes10 de Oracle para analytics avanzado, seguridad o funcionalidad. Edición Express: Oracle Database Express es la edición básica gratis de Oracle Database. Es fácil de instalar, fácil de gestionar y se puede usar en cualquier computadora. La edición está diseñada para admitir fácilmente actualizaciones a productos Oracle Database más avanzados. Edición personal: esta edición de Oracle Database incluye casi todos los componentes de la edición Enterprise de la base de datos, pero admite entornos de desarrollo de un solo uso. Esta edición es una forma rentable para que un desarrollador de software aproveche la funcionalidad completa de Oracle Database. Edición estándar: Oracle Database Standard Edition proporciona la funcionalidad básica de Oracle y es adecuada para aplicaciones web a nivel de departamento o de grupo de trabajo. Productos y servicios clave de Oracle Aplicaciones en la nube Oracle Fusion Cloud Application Suite11 es una familia de aplicaciones de software como servicio (SaaS) para casos de uso de empresas específicas. Incluye la suite Oracle Fusion Enterprise Resource Planning (ERP) para finanzas, gestión de proyectos y cumplimiento. La suite también ofrece plataformas específicas para cadena de suministro y fabricación (SCM), gestión de capital humano (HCM) y ventas. El ERP en la nube también ofrece complementos específicos de la industria para sectores como la educación superior o la experiencia del cliente para bienes de consumo. Con Oracle E-Business Suite, las organizaciones pueden simplificar la entrada y la gestión de datos con plantillas prediseñadas. Infraestructura en la nube Oracle Cloud Infrastructure (OCI) es una plataforma en la nube que admite aplicaciones comerciales tradicionales, así como tecnologías de vanguardia como inteligencia artificial (IA) y aprendizaje automático. La plataforma de nube distribuida incluye aplicaciones personalizadas y aplicaciones de proveedores de software independientes (ISV) para automatización, análisis, redes y almacenamiento. Hardware Oracle ofrece una amplia gama de sistemas de ingeniería creados con base en la escala. Estos incluyen servidores basados en x86 y SPARC, sistemas de ingeniería para ejecutar aplicaciones Java y soluciones de almacenamiento y redes. La plataforma Oracle Exadata12, un sistema de ingeniería desarrollado específicamente para ejecutar Oracle Database, combina servidores de bases de datos, almacenamiento y redes. Middleware Oracle ofrece una gama de productos y herramientas de middleware para ayudar a los desarrolladores a integrar y desplegar aplicaciones, como Oracle Application Express (APEX), un creador de aplicaciones web de código bajo. Oracle Fusion Middleware de la compañía, una familia de herramientas para aplicaciones empresariales, ofrece una suite de productos para la integración de datos, business intelligence y gestión de contenidos. Fusion Middleware puede proporcionar infraestructura para la funcionalidad de Internet of Things (IoT), integración de big data y gestión de contenido. Software Oracle produce y licencia una amplia gama de aplicaciones locales13 para compañías, incluido el software de back-office para ayudar a los empleados a gestionar sus funciones comerciales principales. Algunas ofertas notables incluyen: PeopleSoft, un ERP para recursos humanos, gestión financiera y soluciones de campus.La Oracle E-Business Suite, que cubre la gestión de pedidos, la logística y otras funciones empresariales.Oracle Business Intelligence (OBIEE) para informes y análisis.Oracle Enterprise Manager para operaciones avanzadas de datos de DevOps en organizaciones de gran escala. Casos de uso de Oracle Database Las organizaciones emplean Oracle Database en diferentes industrias y casos de uso, incluido el mantenimiento de data lakes confidenciales y el seguimiento de transacciones financieras masivas en tiempo real. Entre los casos de uso más populares para Oracle Database se encuentran: Gestión y almacenamiento de datos Las organizaciones emplean Oracle Database como repositorio central para almacenar y gestionar grandes cantidades de datos estructurados, o como almacén de datos para facilitar el análisis y la elaboración de informes. Plataformas de comercio electrónico Las organizaciones emplean las plataformas de comercio electrónico de Oracle que ofrecen soluciones de back-office para gestionar catálogos de productos, inventario y datos de transacciones. Servicios financieros y de seguros Las compañías financieras y los proveedores de seguros emplean la base de datos segura y cifrada de Oracle para gestionar los pagos, realizar un seguimiento de las transacciones y auditar los posibles riesgos. Gobierno y organizaciones sin fines de lucro Las agencias gubernamentales como el Departamento de Defensa14 y las empresas del sector público utilizan Oracle para administrar de manera segura los registros públicos y los datos, incluida la información clasificada. Servicios de atención médica En la industria de la atención médica, las organizaciones emplean la base de datos y las soluciones de Oracle para agilizar las operaciones, mantener la integridad de los datos y optimizar múltiples flujos de trabajo con insights predictivos. Procesamiento de transacciones en línea (OLTP) Las organizaciones, desde el comercio electrónico hasta los bancos en línea y las compañías de telecomunicaciones, emplean la capacidad de Oracle Database para ejecutar un gran número de transacciones de bases de datos por parte de un gran número de personas en tiempo real. Soluciones relacionadas Servicios de consultoría de Oracle Durante casi cuatro décadas, IBM® ha sido uno de los asociados más importantes de Oracle. IBM ofrece consultoría y servicios de Oracle a sus clientes que incluyen una hoja de ruta para cada etapa de su inversión en transformación de la nube, desde la consultoría estratégica hasta la implementación y la gestión de la nube. Explorar más Integración de Oracle Oracle proporciona una amplia gama de herramientas para administrar y optimizar el rendimiento. Al integrar la plataforma IBM Turbonomic® con Oracle, los clientes pueden automatizar acciones que administran y ajustan recursos como CPU, memoria y almacenamiento de información. Explorar más Cargas de trabajo de Oracle en IBM Power Durante más de 35 años, los clientes han confiado en IBM Power para implementar sus cargas de trabajo de aplicaciones y bases de datos Oracle. Las organizaciones grandes y pequeñas pueden aprovechar su confiabilidad, seguridad y capacidades de recuperación avanzadas. Explorar más Durante casi cuatro décadas, IBM fue uno de los asociados más importantes de Oracle. Contamos con más de 10 000 consultores dedicados a la nube de Oracle que han ayudado a los clientes a completar satisfactoriamente más de 6500 proyectos de Oracle. IBM ofrece a los clientes servicios y consultoría sobre Oracle que incluyen una hoja de ruta para cada etapa de su inversión en transformación a la nube, que abarcan desde la implementación hasta la gestión en la nube. Explorar los servicios de consultoría de Oracle You are in: Java SDK > Support > IBM FAQ to Oracle’s Java Products Commercial Licensing Last updated: 13th February 2025 As an IBM customer, you should be aware of Oracle's pricing for Oracle's Java™ products for commercial use and understand how this may impact you. This FAQ answers many of questions you may have and recommendations for alternative solutions. If you are a current IBM customer using an IBM product that includes an Oracle JDK, IBM's Java Software Developer Kit (SDK) and/or IBM's or Oracle's JRE under the Licensed IBM Product, then you are using the JDK/SDK and JRE under the IBM product license and not under Oracle's license. In this scenario the Oracle commercial pricing will not be applicable to the IBM product. However, if your organization is using Oracle's Java commercially under the Oracle license, then your organization could incur additional fees from Oracle. January 2019: Oracle implemented new pricing for Oracle's Java™ products for commercial use. Their commercial Java products includes the Oracle Java™ Developer Kit (DK), Java™ Runtime Environment (JRE) and related commercial features. September 2021: Oracle announced availability of Oracle JDK 17 and that this and their future releases will be provided under a free-to-use license. LTS (Long Term Support) releases, such as JDK 17, will be available under this license for one year after the release of the next LTS. However, if you are using a Oracle JDK/JRE prior to Version 17 in a commercial environment, then you may still incur license costs from Oracle. October 2024: Oracle have changed the licensing for Java 17 and it will no longer be provided under a free-to-use license. If you are using Version 17 of the Oracle JDK/JRE in a commercial environment, then you may incur license costs from Oracle. We recommend you read this FAQ for more information and if you have more questions, contact your IBM account representative. Oracle's announcement to charge for Oracle's JDKs/JREs No, the IBM SDK for Java and IBM Semeru Runtimes download pages host free, unsupported Java SDKs /JREs. Oracle's stated date was January 2019. Here is a summary of how this stands after Oracle's announcement in September 2021: Java binary Vendor Free for personal use Free commercial use Free security updates Community delivered security updates IBM Support contract option IBM Semeru Runtimes IBM Yes Yes Yes As part of an IBM product M&S contract. Through the IBM Runtimes for Business offering. IBM SDK for Java IBM Yes Yes No As part of an IBM product M&S contract. Eclipse Temurin™ Adoption™ Yes Yes Yes Through the IBM Runtimes for Business offering. Oracle Java SE v8 and v11 Oracle Yes No No Oracle Java SE v17 onwards Oracle Yes Yes! No Notes: 1. Oracle's proprietary No Fee license applies until one year after the subsequent LTS release. After the free use license period expires, subsequent updates will revert to the license model in use for Oracle Java 8 and 11. In essence this means there are no longer any free security updates provided by Oracle to Java Version 8 and Java Version 11. Furthermore, if you are using Oracle Java in a commercial environment then you may incur a license cost. I'm an IBM customer using the JDK, SDK and/or JRE. What if I'm approached by Oracle? No, IBM customers have a continued right to use these Java technology components at no additional cost under the terms of the IBM product license. 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This includes Java SDKs/JREs shipped for IBM operating systems, e.g. AIX, z/OS, IBM i (OS/400), or IBM products, e.g. WAS, MQ, IIB, DB2, etc. No. SDKs/JREs for IBM Systems are provided with IBM Products and from IBM on IBM Support. In addition, OpenJDK with OpenJ9 builds for these platforms are available at the IBM Semeru Runtimes download page. Oracle's policy change has no impact on any of the above. What if I'm using the JDKs/JREs directly from Oracle? Yes, if you downloaded your Java SE binary from Oracle.com and are using it in any of your products, devices, or platforms for commercial purposes, or within your business then you are affected by this announcement. IBM recommends you choose an equivalent IBM JRE, or a Java build of an open-source JRE (based on OpenJDK) such as OpenJDK with Eclipse OpenJ9 (see the IBM Semeru Runtimes), which will remain free-to-use for commercial purposes. If you want support, IBM can provide a cost-effective option through our IBM Runtimes for Business offering, which includes Java product monitoring and management. Java Support: Yes. Customers that want 24x7 support for Java can purchase the IBM Runtimes for Business offering. This provides support for OpenJDK binaries (OpenJ9 or HotSpot VM), which are available from the IBM Semeru Runtimes (OpenJ9 VM) and Eclipse Adoption™ community (HotSpot VM). The OpenJ9 VM is IBM's open source version of the JVM used in the IBM SDK for Java and which is integral to many IBM products that customers deploy to run their enterprise workloads today. Yes. Support for the SDKs/JREs is included as part of the installation of an IBM Product is included in the support entitlement for the IBM operating system or other IBM product that includes it. If support for SDKs/JREs under these use cases is needed, IBM sells the IBM Runtimes for Business offering, which provides support for the IBM Semeru Runtimes or Eclipse Temurin™ binaries from the Eclipse Adoption™ community. For more information, see the Marketplace page. IBM provides a very cost effective support contract, please see the Marketplace page or speak to your IBM Account Representative. IBM has a long-standing commitment to Java technology and the Java community. You can read about our latest commitment in this blog post which introduces in 2021 the no-cost IBM Semeru Runtimes. Please contact jimmail@uk.ibm.com or your account representatives/advocates for inquiries concerning any additional details not included in the above. 操作とセキュリティにSQLを使用するもので、商用リリースとして提供されている最初のデータベースでした。 Oracle Databaseは、LinuxまたはMicrosoft Windows上で作動します。 Oracle Databaseの特長は次のとおりです。 高度な分析 Oracle Databaseはビッグデータと高度な分析をサポートしています。システムはデータを読み取って処理し、分析行動や自動システムを迅速に実行できます。 高いデータ可用性 Oracle Databaseは、データ複製、バックアップ、サーバー・クラスタリングなどの機能を備え、高レベルの可用性(アウォンネスを実現するように設計されています。 拡張性 Oracle Databaseは単一のサーバー上でも、大規模な分散型データベース上でも稼働します。 セキュリティー Oracle Databaseは増強化セキュリティアーキテクスとの監視による、プライバシーと完全性を保護するためのさまざまな機能を備えています。 Oracle Databaseは現在、4つのエディションがあり、それぞれがさまざまなレベルの機能を提供しています。 Enterpriseエディション：大規模組織向けに設計されたOracle Database Enterprise Editionは、大規模のオンライン・トランザクション処理(OLTP)と高可用性データウェアハウジングをサポートしています。 高度な分析、セキュリティーまたは機能性のために、さまざまなOracleオプションとパック10で強化することができます。 エクスプレス、エディション Oracle Database Expressは、Oracle Databaseの無拘束のエンタープライズ・ソリューションです。インフラと管理が簡便で、どのコンピューターでも使用できます。 このエディションは、より高度なOracle Database製品へのアップグレードを容易に行えるよう設計されています。 個人エディション：Oracle Databaseのこのエディションには、データベースのEnterprise Editionのほぼすべてのコンポーネントが含まれていますが、単独使用の開発環境でのみ使用可能です。 このエディションは、ソフトウェア開発者がOracle Databaseの全機能を有効活用できる。 コスト効率の高い方法です。 Standardエディション Oracle Database Standard Editionは、基本的なOracle機能を提供しており、ワークグループ、部門レベル、またはWebアプリケーションに適しています。 Table Manager 1 (TM1) is a multidimensional, in-memory online analytical processing (OLAP) database with a cell-oriented structure—for example, spreadsheets that allow users to create sophisticated financial models and perform advanced calculations while benefiting from control and governance. TM1 was developed from the need to perform “spreadsheet” analysis to large volumes of multidimensional data. This is done by applying database security and governance to overcome the data volume and complexity limitations of the spreadsheet. In TM1, data is stored as multidimensional arrays or “cubes,” which can be easily manipulated and analyzed in real-time. Cell orientation is a key aspect of TM1. Data is stored and processed at the level of individual cells, rather than in predefined structures such as tables or columns. This allows for a high degree of flexibility in modeling and analyzing data, as cells can be easily manipulated and combined to create new views and analyses. Also, because cells can be easily linked to other cells or data sources, cell-oriented databases are highly dynamic and can be updated in real-time as new information becomes available. Manny Perez invented Table Manager 1 (TM1) in 1983 to solve complex, forward-looking business modeling problems associated with budgeting, forecasting and financial reporting. In 1996, Apollo purchased Singer Corporation, Company bought Apollo in 2007, which was soon after acquired by IBM®, branding it as IBM Cognos® TM1®. In 2016, IBM rebranded the product name to Planning Analytics, reflecting its expanded capabilities beyond traditional business planning and analytics into business intelligence by introducing the web interface, a highly visual, self-service data exploration and dashboarding tool. Currently, TM1 is still used to define IBM Planning Analytics core component, the TM1 Server. Discover expertly curated insights and news on AI, cloud and more in the weekly Think Newsletter. TM1 provides the flexibility, interactivity and modeling power of spreadsheets, but retains the control, security and scalability of a database. Find the most important concepts, functions and benefits below. Cubes, dimensions, hierarchies and rules are essential components of TM1. They provide a powerful framework for organizing and analyzing enterprise planning data and can help businesses gain valuable insights into their operations, performance and trends. Cubes are the central building blocks of TM1. They are multi-dimensional arrays of data that allow users to analyze and explore data from different perspectives. For example, a company might wish to summarize financial data by product, time-period and city to compare actual and budget expenses. Dimensions are the categories or attributes by which data is organized within a cube. Dimensions provide context and meaning to the data and allow users to slice and dice data along different axes. Typical dimensions a cube might contain are time, versions, regions, products, departments and metrics. Hierarchies are the logical organization of dimension members into a parent-child relationship. They provide a structure or organization to a dimension, allowing users to navigate and analyze KPIs at different levels of granularity or detail. For example, a time dimension hierarchy might include levels such as year, quarter, month and day. Rules are statements or instructions that govern the behavior of the database. Rules define how the database processes and calculates data and how it responds to user queries and requests. Rules can be used to calculate purchase costs, exchange rates, inventory levels, inventory depletion and final production costs. The storage of data is in computer memory instead of on disk or other external storage devices. This allows for faster access to the data, which is useful for processing large amounts of data quickly and enables real-time data analysis and reporting. By storing data in memory, TM1 can perform calculations and generate reports faster than traditional databases. Write-back capability, a feature of cell-oriented databases, enables users to update and save changes made directly to cells in the database, rather than exporting and importing data for editing. In a cell-oriented database, data is stored and processed at the level of individual cells, rather than in predefined structures such as tables or columns. TM1 optimizes calculations by performing them only on data that has actual values or changes, instead of recalculating everything in the cube. It saves time by reducing the amount of data processed during calculations and identifying only the cells that need to be recalculated based on updated or modified data. This software platform is designed to help businesses with decision-making based on real-time data, collaborating seamlessly with multiple stakeholders and forecasting future outcomes by using advanced statistical and predictive algorithms without the need for IT. Allows for a high degree of flexibility in data modeling and analysis, making it easier to accommodate changes in business requirements and adapt to evolving business needs. Can scale to handle large volumes of data, making it suitable for large enterprises and complex business environments. Designed for high-speed, real-time data analysis and modeling, making it ideal for large, complex data sets. The in-memory database architecture allows for rapid data retrieval and processing, enabling users to analyze data quickly and make informed decisions. Using Turbolntegrator, it can integrate data from a variety of data sources, including spreadsheets, leading ERP (such as Oracle, SAP), and other data management systems, making it easy to combine data from different sources for analysis and report authoring. Provides a platform for collaborative planning, budgeting and forecasting, enabling multiple stakeholders to contribute to the workflows and share insights and feedback in real-time. Provides granular security capabilities, allowing for data access to be restricted to specific end users or user groups, ensuring that sensitive data is only accessible by authorized users, leading to increased trust and confidence in the data. Can perform prospective analytics by using predictive modeling and forecasting techniques to analyze historical data, identify trends and patterns, perform what-if scenario analysis and make predictions about future outcomes. IBM Planning Analytics is an integrated business planning platform that unifies and synergizes organizational business data in a single platform that allows enterprise-wide collaboration and transparency. All users have access to real-time data to create more accurate, consistent and timely plans, budgets and forecasts without requiring a data scientist. Its intuitive front ends: the web interface, IBM Planning Analytics Workspace and native Microsoft Excel add-in make IBM Planning Analytics for Excel incredibly user-friendly, ensuring a seamless adoption process. Oracle is a U.S.-based information technology company that offers a wide range of business-oriented products and services that include Oracle Database, a relational database management system (RDBMS). The company was founded in 1977 in California and is among the largest software and hardware companies in the world.1 Since its inception nearly fifty years ago, Oracle has developed a vast number of information technology (IT) solutions and acquired an extensive portfolio of companies. It is particularly renowned for its cloud-based enterprise resource planning (ERP) offerings in business intelligence and financial services, as well as for systems such as Solaris, Java and Oracle Linux.Oracle also manufactures and sells purpose-built servers and network solutions to run its platforms and databases.Its Oracle Database was the first SQL-based relational database management system (RDBMS) released commercially in the United States.2 The company invests heavily in open source technologies, lending resources to the development and testing of open source products and frequently highlighting that key platforms such as the Oracle Cloud Infrastructure (OCI) are “open by design.”3 Oracle products and services are used worldwide in government services, telecommunications companies and in healthcare setting where data security, redundancy and complex workload management are critical. Discover expertly curated insights and news on AI, cloud and more in the weekly Think Newsletter. The Oracle Corporation was founded in California by Larry Ellison, Bob Miner and Ed Oats under the name Software Development Laboratories in 1977. Inspired by a British research paper outlining a relational database model, the founders believed that there was potential in the system. Two years later, the company released Oracle, the first commercial relational database to use structured query language (SQL).4 The company was renamed after its first product in 1982 and went public in 1986, trading on the New York Stock Exchange (NYSE) as Oracle Corp (ORCL). In the 40 years since its founding, Oracle has acquired a vast number of companies to expand its offerings and services. High profile examples include PeopleSoft, Siebel, BEA, Sun Microsystems, Netsuite and Cerner. In 2010, the company acquired Sun Microsystems, a software development company that developed the Java programming language, further emeshing it in the world of computer systems and software. The purchase also brought the company into a vast hardware business, bringing the operating system Solaris and Java under the company's purview.5 It also acquired the popular open-source database MySQL. In 2020, Oracle moved its longtime headquarters from Redwood Shores, California to Austin, Texas. In 2021, it acquired Cerner, a healthcare records company, in its largest acquisition to date.6 As of 2023, the company had a total quarterly revenue of more than 200 million USD and continued to grow sharply, according to Forbes.7 In the fall of 2023, the company announced it would invest heavily in generative AI use cases across its Fusion Cloud services.8 The Oracle Database is Oracle's flagship product. It is a popular database management and warehousing system used by organizations across the globe to manage and store their data. It uses SQL for manipulation and querying and was the first database of its kind that is offered for commercial release. The Oracle Database can be run on Linux® or Microsoft Windows. The Oracle Database features: Advanced analytics: The Oracle Database supports big data and advanced analytics. Systems can read and process data and run predictive analytics or automated systems, quickly. High data availability: The Oracle Database is designed for a high level of operational performance with features like data replication, backup and server clustering. Scalability: The Oracle Database is capable of running on a single server or on a massive distributed database. Security: The Oracle Database has a range of features to protect privacy and integrity with encryption and security risk monitoring. The Oracle Database is currently offered9 in four editions, each offering various levels of functionality. Enterprise edition: Designed for large organizations, Oracle Database Enterprise Edition supports high-volume online transaction processing (OLTP) as well as query-intensive data warehousing. It can be enhanced with a wide variety of Oracle options and packs10 for advanced analytics, security or functionality. Express edition: Oracle Database Express is the free entry-level edition of the Oracle Database. It is simple to install, easy to manage and can be used on any computer. The edition is designed to easily support upgrades to more advanced Oracle Database products. Personal edition: This edition of Oracle Database includes nearly all the components of the database's Enterprise Edition but supports single-use development environments. This edition is a cost-effective way for a software developer to take advantage of Oracle Database's full functionality. Standard edition: Oracle Database Standard Edition provides basic Oracle functionality and is well-suited to workgroup, department-level or web applications. Cloud applications The Oracle Fusion Cloud Application Suite11 is a family of software-as-a-service (SaaS) applications for specific business use cases. It includes the Oracle Fusion Enterprise Resource Planning (ERP) suite for financials, project management and compliance. The suite also offers specific platforms for supply chain and manufacturing (SCM), human capital management (HCM) and sales. The cloud ERP also offers industry-specific add-ons for sectors such as higher education or customer experience for consumer goods. Using the Oracle E-Business Suite, organizations can simplify data entry and data management with prebuilt templates. Cloud infrastructure Oracle Cloud Infrastructure (OCI) is a cloud platform that supports traditional business applications as well as leading-edge technologies like artificial intelligence (AI) and machine learning. The distributed cloud platform includes options for a multicloud solution, a public cloud option, a hybrid cloud or a dedicated cloud running entirely on an organization's data centers. OCI offers tools to run applications and analyze data as well as securely store information. The platform supports Oracle applications, custom applications and independent software vendor (ISV) applications for automation, analytics, networking and storage. Hardware Oracle offers a wide range of engineered systems that are built with scale in mind. These include i86- and SPARC-based servers, engineered systems for running Java applications and storage and networking solutions. The Oracle Exdata platform12, an engineered system developed specifically to run Oracle Database, combines database servers, storage and networking. Middleware Oracle provides a range of middleware products and tools to help developers integrate and deploy applications, such as Oracle Application Express (APEX), a low-code web app builder. The company's Oracle Fusion Middleware, a family of tools for enterprise applications, offers a suite of products for data integration, business intelligence and content management. Fusion Middleware can provide infrastructure for Internet of Things (IoT) functionality, big data integration and content management. Software Oracle produces and licenses a wide range of on-premises applications13 for businesses, including back-office software to help employees manage their core business functions. Some notable offerings include: PeopleSoft, an ERP for human resources, financial management and campus solutions. The Oracle E-Business Suite, which covers order management, logistics and other business functions.Oracle Business Intelligence (OBIEE) for reporting and analysis.Oracle Enterprise Manager for advanced DevOps data operations in large-scale organizations. Organizations use Oracle Database across different industries and use cases, including the maintenance of sensitive data lakes and the tracking of massive real-time financial transactions. Among the most popular use cases for Oracle Database are: Data management and data warehousing Organizations use Oracle Database as a central repository to store and manage vast troves of structured data, or as a data warehouse to facilitate analysis and reporting. E-commerce platforms Organizations use Oracle's e-commerce platforms that provide back-office solutions to manage product catalogs, inventory and transaction data. Financial and insurance services Oracle's secure and encrypted database to manage payments, track transactions and audit potential risk. Government and nonprofits Government agencies like the Department of Defense14 and public sector companies use Oracle's securely managed public records and data including classified information. Healthcare services In the healthcare industry, organizations use Oracle's database and solutions to streamline operations, maintain data integrity and optimize multiple workflows with predictive insights. Online transaction processing (OLTP) Organizations, from e-commerce to online banks and telecommunications firms, use Oracle Database's capacity to execute large numbers of database transactions by large numbers of people in real-time.