Oracle® Database

What's New for Oracle Blockchain Platform

Enterprise Edition

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What’s New for Oracle Blockchain Platform

Here’s an overview of the new features and enhancements that were recently added to Oracle Blockchain Platform Enterprise Edition. This document is organized by the date a specific feature or capability became available.

Topics

Release 24.1.3 - July 2024

Feature	Description
Hyperledger Fabric v2.5.7	New instances of Oracle Blockchain Platform Enterprise Edition are now based on Hyperledger Fabric v2.5.7.
Kubernetes infrastructure	Oracle Blockchain Platform now runs on Kubernetes clusters. As of this release, Kubernetes clusters are required and Docker Swarm is no longer supported. See Install Your Blockchain Platform Instance.
Chaincode as a service	You can run chaincode as a service that is managed externally instead of being built and launched on a peer node. See: Deploy Chaincode from an External Service

Feature	Description
Support for transferring NFTs from Oracle Blockchain Platform to Ethereum	The `atomicTransactions` REST API now supports transferring non-fungible tokens (NFTs) from Oracle Blockchain Platform Enterprise Edition to an Ethereum or Polygon network. See: Ethereum Interoperability and Atomic Transactions REST Endpoints
Ethereum support for atomic transactions (two-phase commit)	You can now run Ethereum transactions as part of an atomic transaction workflow by using the `atomicTransactions` REST API, where the combined transactions are either all committed or all rolled back. See: Make Atomic Updates Across Chaincodes and Channels, Ethereum Interoperability, and Atomic Transactions REST Endpoints
Rich queries in the console UI	You can run and analyze rich queries on the state database for a specified chaincode and channel in the console's **Channels** tab by using the **More Actions** menu. See: Rich Queries in the Console
Chaincode package deletion	To free up disk space, you can delete obsolete or unused chaincode packages by using the REST API or the console UI. See: Delete a Chaincode and Delete Installed Chaincode Package
OAuth 2.0 support for REST proxy event callbacks	In addition to mutual TLS, REST proxy event subscription callbacks now support invoking callback endpoints that are secured with OAuth 2.0 authorization. See: Subscribe to an Event
Atomic transactions (two-phase commit)	You can now use the REST API to combine a group of transactions across multiple channels into a single (atomic) transaction. Atomic transactions use the two-phase commit protocol, so that the combined transactions are either all committed or all rolled back. You can use this function to work around Hyperledger Fabric limitations related to atomic cross-channel updates. See: Use Atomic Transactions and Atomic Transactions REST Endpoints

Feature	Description
Oracle Blockchain Platform support for global distributed transactions	Oracle Blockchain Platform Enterprise Edition now supports the X/Open group XA (eXtended Architecture) standard, which specifies the interface between a global transaction manager and local transactional resource managers. The XA standard is based on a two-phase commit protocol. Oracle Blockchain Platform Enterprise Edition now provides a Java library that can be used as an XA resource manager, allowing global transaction managers to coordinate and sequence a series of atomic operations that can include Oracle Blockchain Platform Enterprise Edition blockchain transactions alongside databases, queueing systems, and other XA-capable resources. See: Use the XA Java Library
Reliable callbacks for event subscriptions	Oracle Blockchain Platform Enterprise Edition now supports more reliable delivery for subscribed events. If a callback fails, it is retried based on an exponential backoff policy. When you subscribe to chaincode events, you can specify the maximum number of times that a callback will be retried after a communication failure. See: Subscribe to an Event in the REST API documentation.
Private data collection enhancements	You can specify an endorsement policy to control access to a private data collection. You can also automatically prevent members of organizations that are not part of the collection from reading or writing private data. See: Add Private Data Collections
Updated Blockchain App Builder for Oracle Blockchain Platform	Oracle Blockchain Platform Enterprise Edition includes the latest version of Blockchain App Builder for Oracle Blockchain Platform to speed up development of custom blockchain applications. Blockchain App Builder includes extensive support for working with fungible and non-fungible tokens. Download it from Developer Tools tab in your blockchain instance. See: Blockchain App Builder.
REST API updates	There are a set of new REST APIs for Oracle Blockchain Platform Administrative and Application Operations. See: REST API for Oracle Blockchain Platform. For a list of new REST APIs and changed behavior, see New, Changed, and Deprecated REST APIs.

Release 21.1.2 - April 2021

Feature	Description
Supports Raft consensus	In previous releases Kafka was the only available consensus type of orderer. As of this release, Raft consensus is supported and Kafka is no longer supported. With this feature, orderers from multiple organizations can join a cluster, and channels can use different Raft orderer clusters to distribute load and provide better scalability. See What is the Ordering Service?
REST API updates	There are a set of new REST APIs for Oracle Blockchain Platform Administrative and Application Operations. See: REST API for Oracle Blockchain Platform. For a list of new REST APIs and changed behavior, see New, Changed, and Deprecated REST APIs.
Hardware security module (HSM) support	Oracle Blockchain Platform now supports using a SafeNet hardware security module (HSM) to store and manage keys. Specifically, the SafeNet Luna Network HSM device and SafeNet Luna HSM on Demand cloud service are supported. See Configure a Hardware Security Module Client.
Added support for backup OpenLDAP and Oracle Internet Directory authentication servers	You can now specify up to two backup servers to use if the primary OpenLDAP or Oracle Internet Directory server is unavailable. See Configure an External OpenLDAP, Oracle Unified Directory, or Oracle Internet Directory Server.
Blockchain App Builder for Oracle Blockchain Platform v1.4	A new component of Oracle Blockchain Platform to help speed up development of custom blockchain applications. It helps to expedite chaincode development, testing and deployment with a powerful CLI and Visual Studio Code extension. And it enables automated chaincode generation with a no-code/low-code approach for professionals looking to quickly model blockchain applications based on a declarative specification of the assets and their behaviors. Download it from Developer Tools tab in your blockchain instance. See: Blockchain App Builder.

Feature	Description
Rich history database supports blockchain tables	You can now store rich history data in blockchain tables. You can also configure rich history at the channel level as well as the instance level, get rich history replication status, and use channel policies to control access to rich history data. See Enable and Configure the Rich History Database.

Release 19.3.5 - December 2020

Feature	Description
Fine-grained access control sample	Oracle Blockchain Platform now provides a new version of the marbles sample on the Developer Tools tab of the console. This sample includes a library of functions that chaincode developers can use to create access control lists for chaincode functions. See Using the Fine-Grained Access Control Library.
Block validation utility	Block validation can be run from a REST API endpoint. It: • Parses local blockchain ledger files. • Verifies the integrity and data format. • Collects statistics such as block size, number of transactions, etc. See Block Validation REST API.

Release 19.3.4 - March 2020

Feature	Description
Added support for Microsoft Active Directory and Oracle Internet Directory as authentication servers	Previously user authentication was only supported via a built-in or external OpenLDAP server. Starting in this release, Microsoft Active Directory or Oracle Internet Directory can be used for authentication. See Configure an Authentication Server.

Release 19.3.3 - November 2019

Feature	Description
Improved and simplified logging	Access to log messages from all components in an Oracle Blockchain Platform instance are now available in real time. Additionally Blockchain Platform Manager access information is now available in logs. See Logging
Perform instance lifecycle tasks from Blockchain Platform Manager	All Blockchain instance lifecycle activities (such as starting or stopping the instance) are now available in Blockchain Platform Manager. See Manage Oracle Blockchain Platform

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