



ORACLE®

BLOCKCHAIN
CLOUD SERVICE

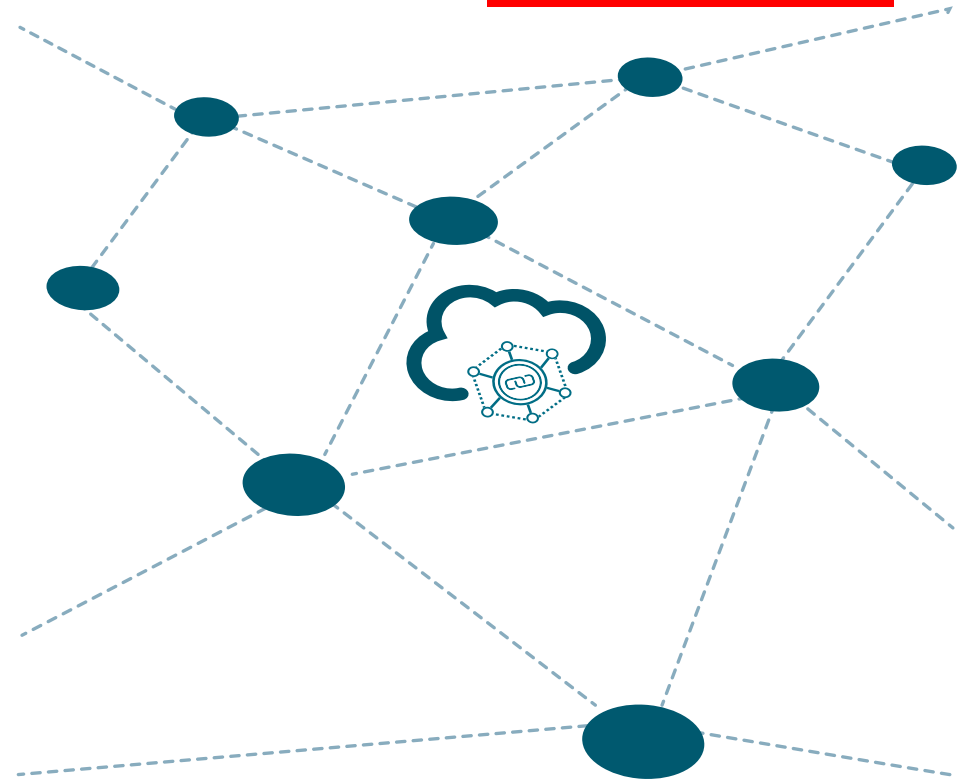
Integrate Your Business Network with the Blockchain Platform

ORACLE®

Why Blockchain?

Enable real-time transactions and securely share tamper-proof data across a trusted business network.

Oracle Blockchain Cloud Service gives you a pre-assembled platform for building and running smart contracts and maintaining a tamper-proof distributed ledger.



Increase business velocity

Create a trusted network for B2B transactions and extend and automate your operations beyond the enterprise. Optimize business decisions with real-time information visibility across your company's ecosystem.

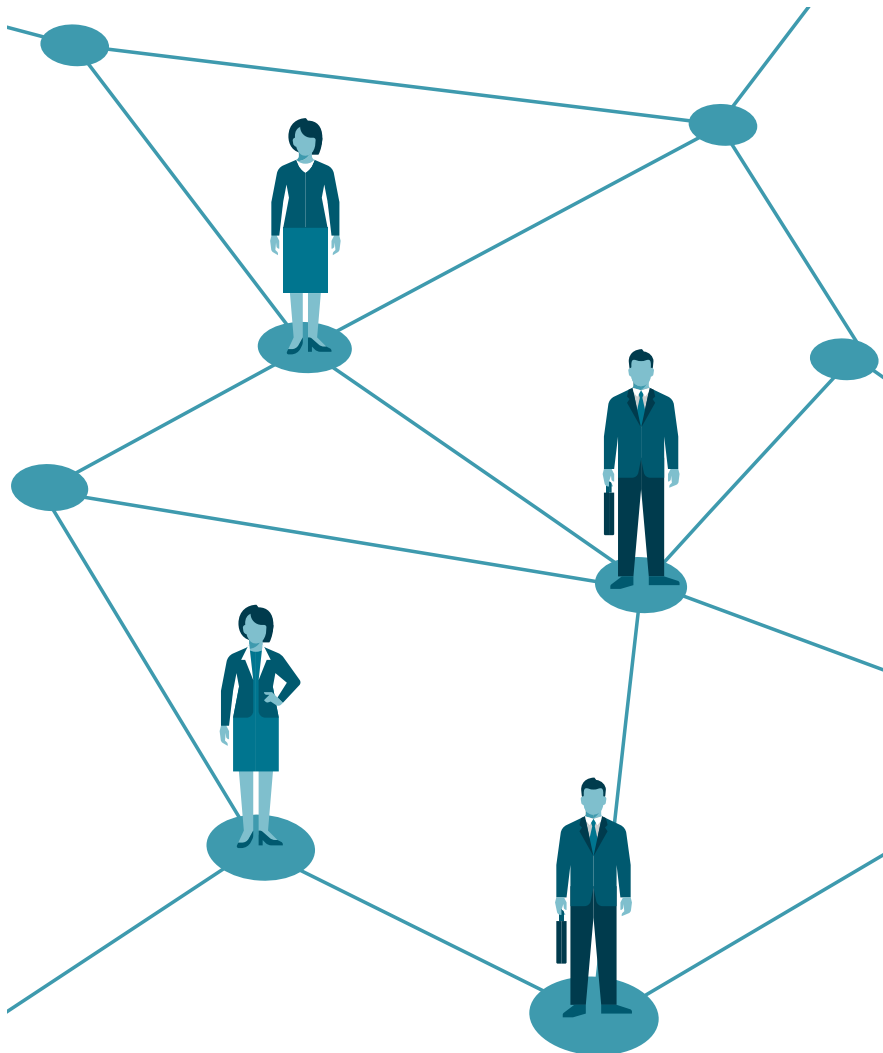
Reduce operations costs

Accelerate transactions and eliminate the cumbersome offline reconciliations by using a trusted shared fabric of common information. Eliminate intermediaries and related costs, possible single points of failure, and time delays by using a peer-to-peer business network.

Reduce the cost of fraud and regulatory compliance

Gain the security of knowing that business-critical records are tamper-proof via securely replicated, cryptographically linked blocks to protect against single points of failure and insider tampering.

What is It?



It's a trusted peer-to-peer network maintaining a distributed ledger.

Oracle Blockchain Cloud Service is a network consisting of validating nodes (peers) that update the ledger and respond to queries by executing smart contract code—the business logic that runs on the blockchain.

External applications invoke transactions or run queries through client SDKs or REST API calls, which prompts selected peers to run the smart contracts.

Multiple peers endorse (digitally sign) the results, which are then verified and sent to the ordering service. After consensus is reached on the transaction order, transaction results are grouped into cryptographically secured, tamper-proof data blocks and sent to peer nodes to be validated and appended to the ledger.

Service administrators can use the Oracle Blockchain Cloud Service web console to configure the blockchain and monitor its operation.

Recognize Yourself?

Can your enterprise answer yes to these questions?

- Do you have to deliver business results with a ready-to-go, enterprise-grade blockchain solution?
- Do you need to simplify your infrastructure and provide highly efficient blockchain operations to your application developers and lines of business?
- Are you being asked to deliver innovative capabilities faster and respond to the competition faster?
- Do you rely on SaaS applications or on-prem Oracle Fusion applications for enterprise processes that need to be extended beyond the enterprise boundaries?

► Explore



Enterprise-Grade



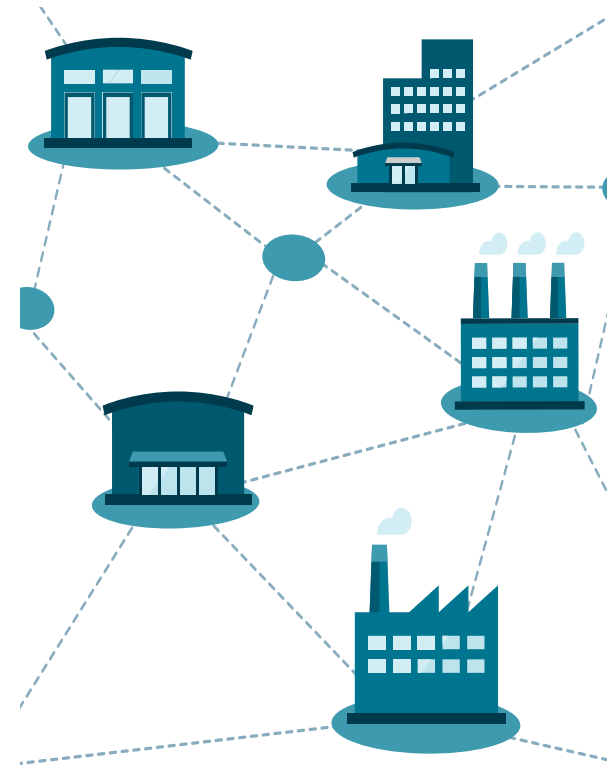
Managed PaaS



Speed to Market



Extend Enterprise Boundary



Enterprise-Grade Cloud Platform

- Scale the network participants and transaction volumes and ensure that your operations run continually with resilience, high availability, and automatic recoverability.
- Secure access in a permissioned blockchain protected by Oracle Identity Cloud Service with single sign-on and key management services.
- Set up confidentiality domains to conduct private transactions over secure channels.



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► Explore



Enterprise-Grade



Managed PaaS



Speed to Market



Extend Enterprise Boundary

Managed Blockchain PaaS

- Provision and configure blockchain resources rapidly and use built-in dashboards to detect bottlenecks in real time.
- Rapidly add partners to create a flexible blockchain network with dynamic configuration.
- Leave updates, backups, and other operational worries behind with Oracle managed services.



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► Explore



Enterprise-Grade



Managed PaaS



Speed to Market



Extend Enterprise Boundary

Speed to Market with Rich Integrations

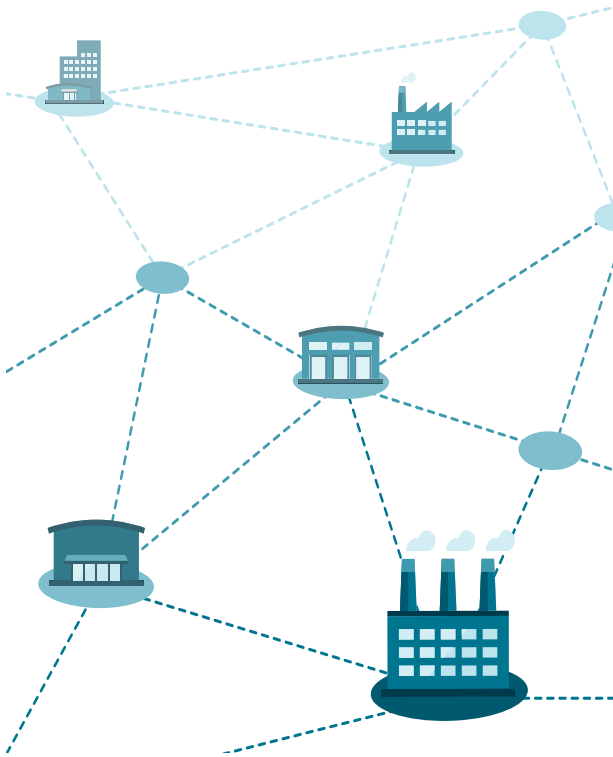
- Use REST APIs to simplify the integration for cloud-based or on-premises applications.
- Invoke blockchain operations from Java or JavaScript by using available SDKs and harness the Cloud Application Development Platform and ready-to-use DevOps capabilities.
- Use single sign-on to connect Oracle SaaS applications identity domains with Oracle Blockchain Cloud Service.



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- Do you need to simplify your infrastructure and provide highly efficient blockchain operations to your application developers and lines of business?
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Extend Enterprise Boundaries

- Speed up business processes through blockchain integration accelerators, such as PaaS-for-SaaS and Oracle Integration Cloud Service, to easily leverage B2B transactions and partner data from enterprise applications.
- Enable new business models and revenue streams by reaching untapped markets leveraging blockchain-verified identity and offerings.

► Explore



Enterprise-Grade



Managed
PaaS



Speed to Market



Extend
Enterprise
Boundary



Create Trusted Networks

No Assembly Required.

Oracle Blockchain Cloud Service comes with a complete set of infrastructure services and embedded resources: compute, containers, storage, identity management, and event streaming to help you quickly set up and run a production-ready blockchain.

Easily create an instance of Oracle Blockchain Cloud Service. After you specify a few parameters, Oracle provisions the underlying infrastructure with the required Blockchain network components, REST proxy, and an administration console.

Need a partner to join your network? No problem. They can create a service instance just for that. Provision the service, and then simply log in to the Oracle Blockchain Cloud Service web console to complete the certificate exchange and join the existing blockchain network.



Why
Blockchain?

What is It?

Recognize
Yourself?

Create
Trusted
Networks

Automate
with Smart
Contracts

Develop or
Integrate
Applications

Conduct
Private
Transactions

Rapidly
Add New
Members

Simple
Console

Get
Started

Automate with Smart Contracts

Let business logic **automate transactions and query ledger data for you.**

Oracle understands the value of the trusted business network isn't only about sharing static information. It's also about conducting non-repudiable transactions and tamper-proof ledger updates. This is where your smart contracts come in because they can:

- Verify account balances before transferring funds.
- Check that a proposed sales order complies with certain standards.
- Transfer ownership of assets between parties after conditions are met.
- Match purchase and sales orders or reconcile invoices and trigger payments.
- Update a provenance record to ensure that the rights to a piece of art or a music composition are protected.

And much more.

Developers use Oracle Blockchain Cloud Service to quickly build smart contracts (chaincodes) to define the data schema in the ledger, initialize it, perform updates when triggered by applications, and respond to queries. Chaincodes can also post events that allow applications to be notified and perform downstream operations. For example, when certain purchase orders, invoices, and delivery records are matched by a smart contract, it can post an event so that subscribing applications can process related payments and update the internal Enterprise Resource Planning system.



Develop or Integrate Applications



Flexible options to create and extend applications.

Start developing blockchain applications within minutes with no need for complex setup. Leverage API-driven development for cloud or on-premises applications using REST API and API management service to invoke smart contract transactions or query ledger data.

Java and Node.js (JavaScript) SDKs give you another option for enabling applications to register and enroll users, creating channels and adding peers, querying ledger data, deploying and invoking new smart contracts, and subscribing to events.

Oracle enables enterprise IT developers to extend SaaS applications to use Oracle Blockchain Cloud Service through PaaS-for-SaaS using SDKs or Oracle Integration Cloud Service using REST APIs.

Enterprises and independent software vendors can build new applications in Oracle Java Cloud Service, polyglot Oracle Application Container Cloud Service, Oracle Mobile Cloud Service or Oracle Application Builder Cloud Service. You can also trigger blockchain transactions from your Integration, Service Oriented Architecture, or Oracle Process Cloud Service or, in a hybrid scenario, from outside the Oracle Cloud.

Conduct Private Transactions



If you want transaction privacy, **Oracle Blockchain Cloud Service** has the answer.

Not all business data exchanged between members is suitable for sharing with all participants. With Oracle Blockchain Cloud Service, controlling member access is easy: Define one or more channels to isolate peers into subnets and create private ledgers. Blockchain members have the power to conduct private and confidential transactions while coexisting with restricted members on the same blockchain network.

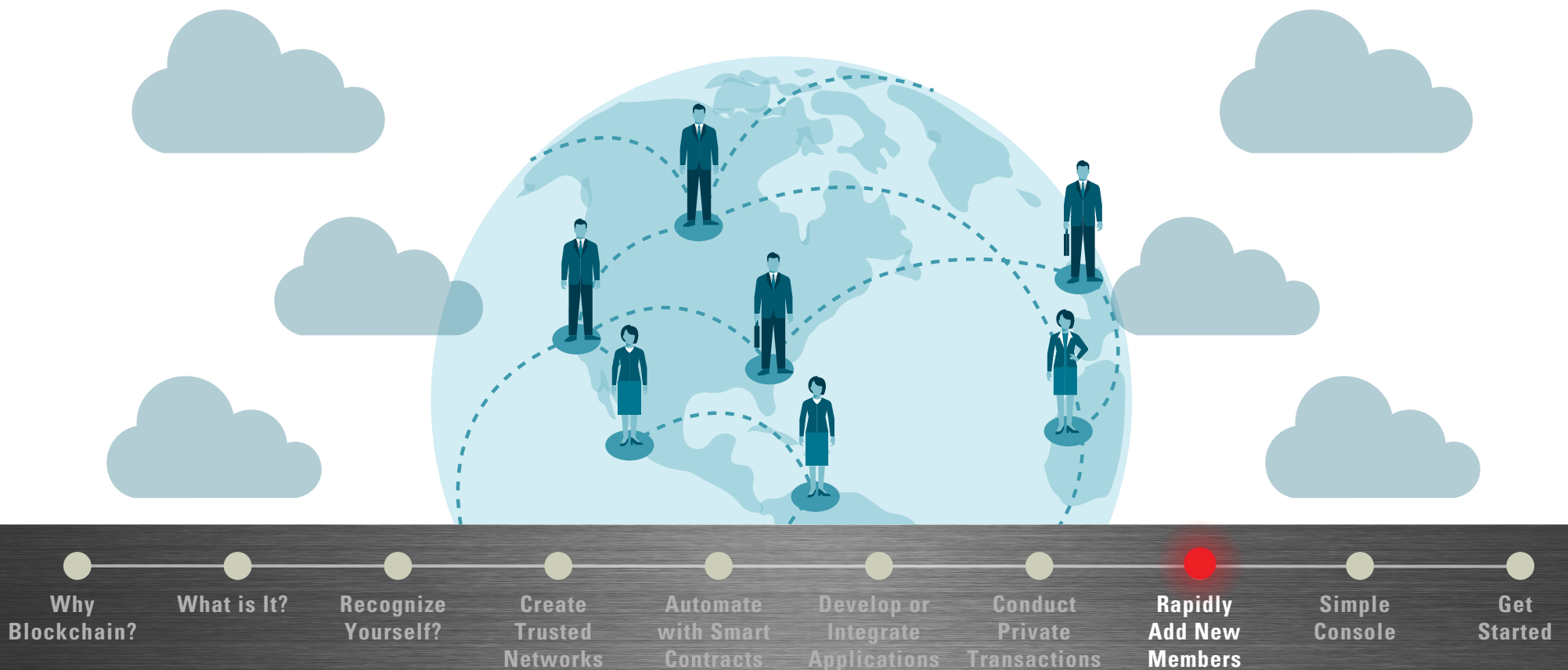
The power of channels for conducting confidential transactions is critical. For example, you can safeguard pricing information between buyer and seller by using a private channel, while registering the ownership transfer on a channel that's open to all members.

Peers can only join channels subject to approval by other organizations on that channel. And client requests are routed to the specified channel to run a smart contract that was deployed on that channel. Once endorsed and verified, the results are updated in that channel's ledger, which is only accessible to its member peer nodes.

Rapidly Add New Members

Extend the network across members and geographies.

With Oracle Blockchain Cloud Service, the network expands as you add new members next door or across the world. Your partners sign up for their own instance of Oracle Blockchain Cloud Service to join an existing blockchain network. After their instance is provisioned in any of the Oracle Public Cloud global data centers or at customer data center on Oracle Cloud Machine, you can invite them to join your blockchain network by exchanging the digital certificates. Then, their peers can join the network and any channels for which they are authorized to securely conduct transactions and share updates. A global enterprise can operate local peers in multiple regions and still be a part of the same blockchain network. What's more, organizations running compatible versions of Hyperledger Fabric outside of the Oracle Cloud can also be invited to join.



Simple Console

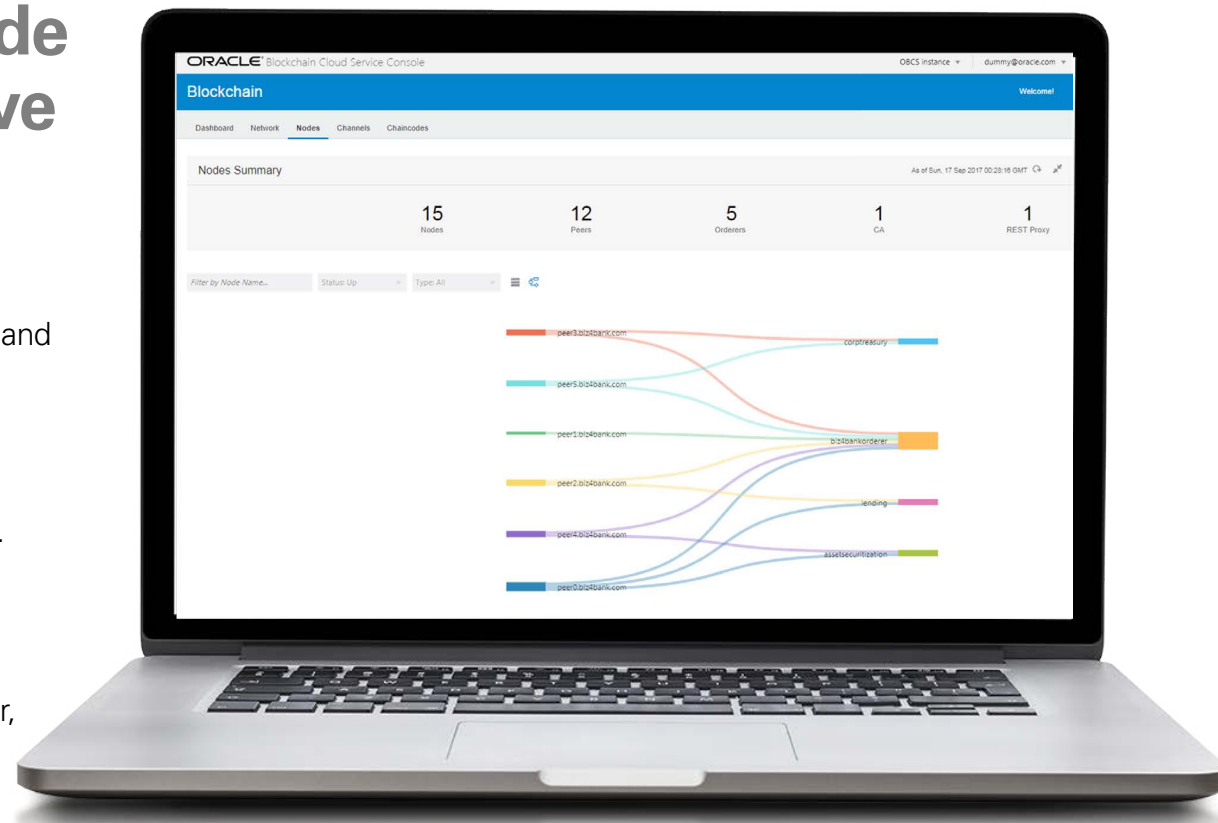
Administration, monitoring,
and troubleshooting **made
simple with the intuitive
UI console.**

Common administration tasks

- Bring up and take down the blockchain network and manage peers, orderers, and so on.
- Configure network channels and set policies.
- Deploy smart contracts.
- Add peers, orderers, and member organizations.

Easy monitoring and troubleshooting

- Monitor the network dashboard.
- View the network topology and monitor the peer, orderer, and network component status.
- Monitor channel and ledger metrics.
- Search and browse ledger blocks.
- View node logs to troubleshoot.



Get Started

Learn More

- View data sheets, FAQs, pricing, and additional resources on the [Oracle Blockchain Service](#) product page.
- Sign up for a free trial at [Oracle Cloud](#).
- Purchase a subscription and get started by visiting the [Oracle Help Center](#).

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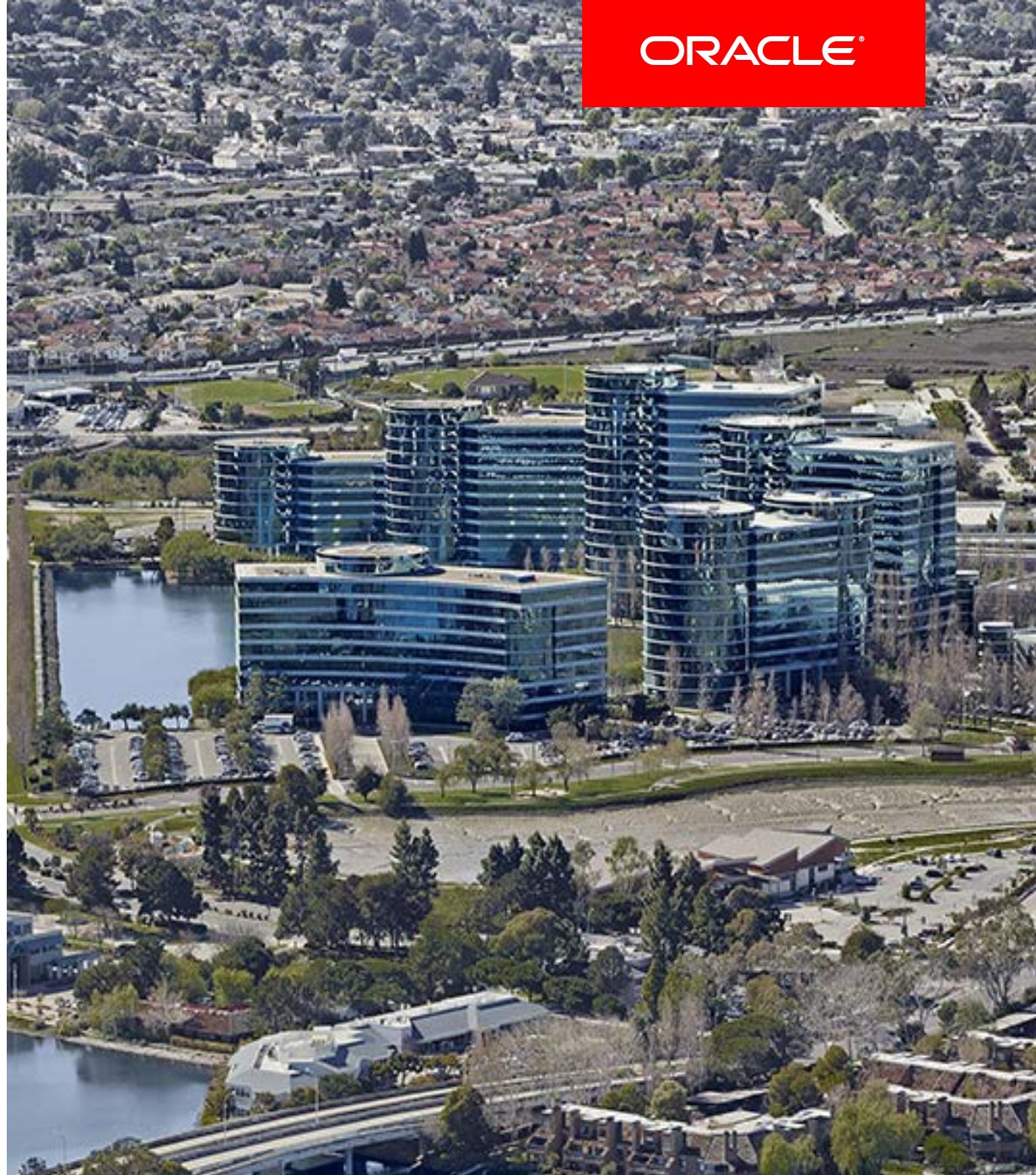
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Safe Harbor

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Integrated Cloud

Applications & Platform Services

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