

# Proven<sup>DB</sup>

# **Pricing**





# **ProvenDB Pricing**

#### **About this document**

This document provides indicative pricings for ProvenDB software. Pricing is subject to revision and change subject to the general conditions outlined in our EULA which can be found at <a href="https://provendb.com/homepage/licence/">https://provendb.com/homepage/licence/</a>. Unless otherwise indicated prices are in US Dollars (USD).

#### **About ProvenDB**

**ProvenDB** – is a blockchain-enabled database service that offers Blockchain enforced guaranteed proof of data integrity and provenance within a fully functional and broadly compatible database service<sup>1</sup>.

For more information about ProvenDB see <a href="https://provendb.readme.io/docs/home">https://provendb.readme.io/docs/home</a>.

ProvenDB Compliance Vault is a turn-key application built on ProvenDB that provides a tamper-resistant digital store for critical compliance information. The ownership and creation date of information stored in ProvenDB Compliance Vault can be definitively proven by stringent industry-standard cryptography. With ProvenDB Compliance Vault, you can be certain that your compliance data will satisfy the most rigorous compliance audit.

For more information about ProvenDB Compliance vault see <a href="https://rebrand.ly/8ibu4cd">https://rebrand.ly/8ibu4cd</a>.

# Deployment

You can use ProvenDB on-premise or as a cloud service. Additionally, the service may be embedded within an independently installable application.

#### **ProvenDB Cloud Service**

The ProvenDB Cloud Service is the easiest and, operationally, the cheapest deployment option. Data resides in a fully managed cloud database that supports industry-standard encryption and security measures.

The Cloud service is a fully managed service accessible through monthly subscription pricing. The ultimate storage of documents occurs in a MongoDB Atlas database which provides high-availability, backup and data encryption. Blockchain proofs are written to the public Bitcoin or Ethereum Blockchains. The ProvenDB management infrastructure runs on Microsoft Azure.

<sup>&</sup>lt;sup>1</sup> ProvenDB is fully compatible with MongoDB: the world's most popular non-relational Database Server



#### **ProvenDB On-Premise**

An on-premise deployment supports organizations whose security procedures prohibit the storage of sensitive information in the cloud. In this scenario, all elements of the ProvenDB database and/or the Compliance Vault are installed within the customer's data centre. The aggregated digital signatures are the only transactions that leave the customer's data centre, since these signatures must be anchored on a public Blockchain. However, these signatures are 256-bit numbers which cannot be converted to any meaningful data and which contain no identifiable information (not even the source of the transaction can be deduced from the signature).

ProvenDB is available as a downloadable package that can be run within a Docker or Kubernetes environment. The Docker package is suitable for evaluation and development purposes, while the Kubernetes environment provides fault-tolerance and load balancing and is recommended for production deployments.

ProvenDB Compliance Vault can also be run outside of the Docker or Kubernetes containerized environments, though professional services will be required to assist with configuration and installation.

#### **Embedded Deployments**

ProvenDB may be embedded within a custom application or commercial software offering. In this mode, ProvenDB provides a MongoDB-compatible interface that can be used with most popular application development frameworks such as React, Angular, Spring, .Net, etc.

This mode is suitable for ISPs who wish to develop applications that leverage ProvenDB's data integrity features but who do not wish to develop their own sophisticated Blockchain database.

#### **Blockchain options**

ProvenDB Compliance Vault uses *Merkle Trees* and *Trie Prefix Trees* to anchor critical information to a Blockchain. The cryptographic techniques are beyond the scope of this discussion; however, the advantages are easy to articulate:

- Very large numbers of documents or data elements thousands or millions can be proved on a Blockchain with a single transaction, providing a cost-effective way of leveraging otherwise expensive public Blockchains.
- Only a 256-bit hash value need be written to the Blockchain. This value cannot be decompiled into any meaningful data value, so although the proof of data integrity is stored on a public and highly secure Blockchain, actual data is safely stored off-chain.

By default, ProvenDB writes blockchain proofs to Bitcoin or Ethereum public Blockchains. However, ProvenDB can support any Ethereum compatible Blockchain, including Enterprise Ethereum private chains, the JP Morgan Quorum chain and many more. Integrations with other private Blockchains (for instance, Hyperledger) could be provided given sufficient lead time.



# **Pricing: Cloud Service**

	Developer	Business	Enterprise
Base Price (USD)	Free	\$150/month	Custom
Storage Limit	100MB	10GB	Custom
Additional 10GB		\$10/month	
Database Service	Shared	Shared (multi- tenant Atlas DB)	Dedicated database and infrastructure
Blockchains	Bitcoin via Chainpoint <sup>2</sup> Ethereum TestNet <sup>3</sup>	Bitcoin via Chainpoint Ethereum MainNet	Bitcoin via Chainpoint Bitcoin direct to MainNet Ethereum MainNet Private Blockchains
Blockchain Transaction Limits	Chainpoint Proofs on demand Ethereum TestNet Proofs on demand	Chainpoint Proofs on demand  Ethereum MainNet Proofs every 10 minutes  Additional Ethereum Proofs at USD 50 cents per proof <sup>4</sup> .	Custom

<sup>&</sup>lt;sup>2</sup> The Chainpoint network is an open network that provides free bitcoin proofs, but which has high latency: Proofs typically confirm 1-2 hours after submission. In comparison, Ethereum proofs usually confirm between 30-120 seconds after submission.

<sup>&</sup>lt;sup>3</sup> The Ethereum TestNet is used by Ethereum developers to develop and test applications. Proofs written to the

TestNet are of lower cryptographic strength than those written to the MainNet.

4 Note that an Ethereum proof can prove any number of documents in a single transaction. The ultimate price will depend on the number of additional proofs requested, not the number of documents proved.



# Pricing: On-Premise

	Standard	Enterprise	Custom
Price (USD)	\$5,000/year	\$10,000/year	Custom
<b>CPU limits</b>	4 cores <sup>5</sup>	>4 cores	
Storage Limit	500GB	>500GB	
White labelling	No	No	Yes
Document Services	Yes	Yes	Yes
Blockchain Support	Bitcoin Ethereum MainNet	Bitcoin Ethereum MainNet	Bitcoin Ethereum MainNet Private Blockchain
Blockchain Transaction Limits	Chainpoint Proofs on demand	Chainpoint Proofs on demand	Custom
	ProvenDB managed Ethereum MainNet Proofs every 10 minutes <sup>6</sup> .	ProvenDB managed Ethereum MainNet Proofs every 10 minutes	
	Additional ProvenDB Ethereum Proofs at USD 50 cents per proof.	Additional ProvenDB Ethereum Proofs at USD 50 cents per proof.	
	User Supplied wallet proofs on demand <sup>7</sup> .	User Supplied wallet proofs on demand.	
MongoDB license	MongoDB Community Edition	MongoDB Community Edition	MongoDB Community Edition MongoDB Enterprise License <sup>8</sup>
Deployment Environment	Docker/ Kubernetes	Docker/ Kubernetes	Docker/ Kubernetes Dedicated server

<sup>&</sup>lt;sup>5</sup> If running in a containerized or virtualized environment, the number of cores is the number of cores made available across all containers

<sup>&</sup>lt;sup>6</sup> These proofs are written to the Ethereum MainNet by ProvenDB infrastructure running in the ProvenDB cloud <sup>7</sup> These proofs are written to directly to the Ethereum MainNet using credentials supplied by the user. ProvenDB

infrastructure is not involved.

8 May require a license from MongoDB corporation at additional expense. MongoDB Enterprise provides enhanced encryption, security and backup capabilities.



# **Pricing for Embedded deployment**

Pricing for an embedded deployment of ProvenDB is variable. Typically, a per-unit price will be dependent upon the following factors:

- Price of the deployed software product
- Blockchain model used. In particular, whether if ProvenDB cloud infrastructure is used to perform Blockchain transactions or whether these are performed using user-supplied credentials.
- Data storage volumes and typical transactional rates.

### Support

ProvenDB offers the following support and Professional Services:

- Training and installation services at a rate of \$USD200/hour
- 24/7 web-based support
- On-call support as negotiated









