



Hedera™ Hashgraph

Certificate of Blockchain Proof

Powered by **Proven**^{DB}

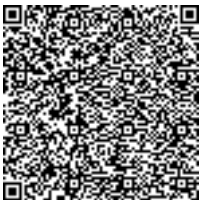
HH_Data-Privacy-Compliance-Paper_200613.pdf

Hedera Hashgraph (email user: contact@hedera.com)

This certificate constitutes proof that a document has been anchored to a Blockchain using the Hedera Hashgraph Protocol on [Mon, 21 Dec 2020 12:52:56 GMT](#) thereby proving that the document existed in its current form on the date at which the Blockchain entry was created.

You can use this proof to attest that:

- (a) the document has not been altered in any way.
- (b) the document existed in its current form on the specified date.



An online version of this proof can be found at:

<https://app.provencdb.com/app/document/share/25e20675e9987e85d16d6dbcc879b2a91ba42a1bb46af6d4b5e22c0e8279b1e843e28f9dd863fc5319f9b5a4751ac0c6516bc0e037a5cfb99901270b504b6c8364154cc6a864ee33b89fb72af020a02be9750cddf167c4a239086bc04049c727d930fbcca8804071a2d98d0f756165c2103de3ac30541b49065ab59bc2c9dc58506636a3ebfc435d1f690359f2118b/compliance>



Details of the document being proved

The document was uploaded by Hedera Hashgraph (email user: contact@hedera.com) at [Mon, 21 Dec 2020 12:52:53 GMT](#)

The document name when hashed was "HH_Data-Privacy-Compliance-Paper_200613.pdf"

You can view a copy of this document [here](#)
(permissions may be required to view the document)

The cryptographic hash of the document is:
`1d9e953d2da9fd6553f20c006a887f9ec946bde56652dd2787e8edd814067c12`

See [Schedule 1](#) for details of the hashing algorithm employed.

Blockchain proof details

The document hash was included within the [Hedera Hashgraph](#) proof at <https://explorer.kabuto.sh/mainnet/transaction/1e0b076a3f05a64f5591a7397a0563a2417aad93f701a28f9eec7c2ae3b3360441657542eeb36f40081fa0bf793513b9>

See [Schedule 2](#) for a detailed cryptographic proof.

The Hedera Hashgraph proof was anchored to the Blockchain in transaction [1e0b076a3f05a64f5591a7397a0563a2417aad93f701a28f9eec7c2ae3b3360441657542eeb36f40081fa0bf793513b9](#) at: [Mon, 21 Dec 2020 12:52:56 GMT](#)

Summary

The document *HH_Data-Privacy-Compliance-Paper_200613.pdf* with hash value `1d9e953d2da9fd6553f20c006a887f9ec946bde56652dd2787e8edd814067c12` was anchored to the Hedera Hashgraph Blockchain by Hedera Hashgraph (email user: contact@hedera.com) at: [Mon, 21 Dec 2020 12:52:56 GMT](#). Providing that the document continues to hash to that value, you can be certain that the document existed in its current form on or before that date.

Schedule 1: Document hashing

The document hash of `1d9e953d2da9fd6553f20c006a887f9ec946bde56652dd2787e8edd814067c12` was obtained by performing a [SHA-2 256 bit](#) hash on the document [here](#) (permission may be required to view this document).

The hash was calculated on the document and its metadata as stored in the ProvenDB system.

You can download a copy of the document and its metadata (permissions required) [here](#). You can independently validate the document proof by using the open source validation tool at <https://app.provencdb.com/homepage/downloads>.

Schedule 2: Hedera Hashgraph proof

The Hedera Hashgraph proof uses a Trie structure for linking data to the public Blockchain. It aggregates multiple hash values into a single hash value which is then placed on the Blockchain. The following Hedera Hashgraph proof proves that the hash value of

`1d9e953d2da9fd6553f20c006a887f9ec946bde56652dd2787e8edd814067c12`

is associated with the root hash placed on the Hedera Hashgraph Blockchain in transaction

<https://explorer.kabuto.sh/mainnet/transaction/1e0b076a3f05a64f5591a7397a0563a2417aad93f701a28f9eec7c2ae3b3360441657542eeb36f40081fa0bf793513b9>

This proof can be downloaded (permissions required) [here](#)

Below is a binary representation of the Blockchain proof

```
eJy0k8GuG0QPhf+n+Ncs2KYZ22PPTFdX4hVYsQn22CaRbpMoSQtdFjZs2zeAFrUgxAqx5D0i8TAo95aKq4gNElvP
+Jvj8TnfvInrcX2+AR8xmBxdR7owU2KZpYj23nLEHFXMg0UY3bH1Fj3c09QibQL+fMGsNr7a7jzOH7sWpMlzMfvgBUChRLmAhU10G3OqL/
dtRyf2pPN6RT3nSs9/YoFywJwgfAp4GPGxyyffcDP3eFf4i+d/4R/ZwfdznUcX339w61a3P6yd1v5bq7uD17v9sc/vf/
F98dzjeiM2bPQkzVWndkaF0tgoLJXKmPSINSK3gZWFS9mlOXhBiN5ovvd/u3x7UukOU02MvwBKBmHVq3QT514vRZMqB6qdVtaA/
niE5ee48S1Yy8SWeSKyADdNbaiKZn1TGD3ZulRXldhUZ1IppsKi2tuDTuGDIFrluqPgTenm8QWVJGM9FkDkFHHzWquvc+JgExiww55MHaNWyOVCm
AHRVqXCIE6gU0Nb1x1WISCdpMjSSZG0Z2UcEoJa1XZMYqUp2cKDLAroC1gkLrPmCQWCZ37uilVRnVKrtmaABxgJEOnF5brwCeWUjC2xVQqPTLYjy
1JZk2KFYbpRbwi+M7D03lAc1hQCvOrQyhWdkYsVwDm4wXp2ElmjdcRXNU6S0NnJAGeom2CkF2To3KjiJEnGoZlfrkRWyVGHtxoBTtGsagY+K1Go
QtIsPjUYKokmHMmbUMqAxCUa73jJga8BmXXhW067Cilm9pfQ65hQZTsPFW0LrwKFSDaWnZAT7lcKCs6fJjMmsVRjajGgyvMLF10GgYoKZs3cOG
ORl6VmNurM/XMr7XJ4/ugRzHR4HXT3RzXYbp9UlobvD36L68sXb+9rx5TdvTs/38Xrq7Y/vr238/DIEsdJEKQur1GQeol1G08JCihWaqg/
KVkCx54iYbaIGGZFcoi3cuGLExBG1IA6pxbINyAbb54eNseX51fr02l/fLxc3j/9aH/Y7VLtNh5tdstncdjk8+XDWZb/
tbJ3N303PcVXp9//0vYlbfzR7vDFcq51s93vNtvT8hndfdtPn3wo/RkAAP//gWL5tQ==
```

Schedule 3: List of printable links in the document

Document being proven:

<https://app.provendb.com/app/document/share/0fde0c83bf650a722cce1e0aec1d81574e40c7ded249abf7b92eda640437a6caf9347591b991453f4fbf17c420c4e7ff3ab838b9d29a683ea88da6b158a2aea8358c4c2c02152dba3d151bc379e93e816dfb9b4f297223603f766e21d4f1c5e39aa5df19ec9055ebb97f66fd336da8d2d3d049badeb5a1153622f171add6e83bfe0437a88b53b8677ac9db0cf6c578/compliance>

Hedera Hashgraph

<https://www.hedera.com/>

Blockchain transaction:

[1e0b076a3f05a64f5591a7397a0563a2417aad93f701a28f9eec7c2ae3b3360441657542eeb36f40081fa0bf793513b9](https://app.provendb.com/app/document/share/1e0b076a3f05a64f5591a7397a0563a2417aad93f701a28f9eec7c2ae3b3360441657542eeb36f40081fa0bf793513b9)

Open source validation tool:

<https://app.provendb.com/homepage/downloads>