The English content of this news is below.

HUAWEI CLOUD HCIP certificate validity period_HUAWEI CLOUD Trusted Intelligent Computing Service (TICS) passed the first batch of endorsements by the Academy of Information and Communications Technology of China

2020-12-25

On December 18, the 2020 Data Asset Conference was held in Beijing. At the meeting, the China Academy of Information and Communications Technology issued certificates for products that passed the "data computing platform based on trusted execution environment". HUAWEI CLOUD Trusted Intelligent Computing Service TICS is based on Kunpeng TrustZone confidential computing, combined with hardware TEE and software SMPC algorithms, to achieve software and hardware computing acceleration, and supports cross-trust domain federated SQL analysis and federated learning capabilities.

After six years of vigorous development, big data product evaluation has become an important reference for government and enterprise customers in the process of purchasing and selecting, and is an important standard for the industry to measure the quality and ability of big data products. The big data product evaluation of the China Academy of Information and Communications Technology is an authoritative big data evaluation system in China, and the evaluation scope covers the basic capabilities and performance of big data products.

HUAWEI CLOUD Trusted Intelligent Computing Service TICS is aimed at the government and enterprise industries, breaking down cross-industry data silos and realizing multi-party data federated SQL analysis and federated learning capabilities under data privacy protection within and between industries.

In this evaluation test, HUAWEI CLOUD Trusted Intelligent Computing Service TICS passed 100% of the 21 mandatory use cases at one time, and also passed the four optional use cases at one time, including fault monitoring and recovery, data circulation audit, algorithm scalability, and side-channel security, handing over a perfect answer.

Throughout the R&D process, HUAWEI CLOUD's privacy computing R&D team has realized cross-trust domain federated SQL analysis and federated learning from the following six aspects, relying on strong R&D strength and rich exploration and

practical experience:

◆ Dynamic alliance management: Invite HUAWEI CLOUD tenants as data participants to dynamically build a trusted computing alliance to achieve strict and controllable data usage and supervision within the alliance.

◆ Multi-party data fusion analysis: Support docking with the mainstream data storage system of multiple data participants, realize SQL join and other fusion analysis of multi-party data for data consumers, and realize the security statistics of sensitive data of all parties in the aggregation computing node with TEE security support.

◆ Multi-party federated training: Horizontal and vertical federated training is realized by docking with mainstream deep learning frameworks, and supports multi-party sample alignment, federated feature selection, training model protection, federated prediction, etc. based on TEE and SMPC (such as inadvertent transmission, secret sharing, homomorphic encryption, etc.).

◆ Trusted intelligent agent: Data participants use the data source proxy module to achieve independent and controllable data source registration, privacy policy (desensitization, encryption, watermarking), metadata release, etc., and provide reliability monitoring, operation and maintenance management throughout the life cycle for data source agents.

◆ Visual data use supervision: Provide visual data usage flow charts for data participants, provide plug-in blockchain docking storage, and realize the multi-party consensus of data usage methods and execution algorithms that data providers can perceive before execution, and the auditability and traceability of data use processes.

◆ Containerized deployment of cloud and end: Deployment management of containerized multi-party data source proxies and aggregated computing nodes, supporting multiple deployment modes on the cloud, edge, and hybrid cloud.

HUAWEI CLOUD's trusted intelligent computing service TICS has been implemented in various scenarios such as government data circulation, government-enterprise data integration, inclusive finance, and data trading. In the future, the trusted intelligent computing service TICS will practice the "platform + ecology" strategy to achieve end-to-end security and auditability of data in the process of storage, circulation and computing, release the value of government and enterprise data, and make enterprises smarter.