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Multimedia services

Requirements of distributed ledger systems for secure human factor services

Recommendation ITU-T F.747.10

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Recommendation ITU-T F.747.10

Requirements of distributed ledger systems for secure human factor services

Summary

Recommendation ITU-T F.747.10 provides general requirements and functional capabilities for distributed ledger systems (DLS) for secure human factor services.

This Recommendation describes the requirements for the secure human factor distributed ledger service model, which can solve conflicting goals of privacy protection and big personal human factor data utilization. This Recommendation also includes the functional capabilities for human factor distributed ledger shared nodes to perform machine learning without decryption on encrypted human factor data. However, the computational burden of machine learning for encrypted data may be excessive. To solve this problem, this human factor distributed ledger service model provides procedures for allowing the use of two or more encryption key pairs and notifying the key type. In addition, this Recommendation involves the integrity maintaining requirements for secure human factor services to maintain a safe distributed ledger and, checked from the beginning, to distribute personal human factor information. Therefore, the application of distributed ledger system in the distribution of personal secure human factor information can ensure transparent tracking from the distribution process to the final use path.

History

Edition	Recommendation	Approval	Study Group	Unique ID*
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Distributed ledger service model, privacy protection expansion, secure human factor, transparency tracking.

* To access the Recommendation, type the URL <http://handle.itu.int/> in the address field of your web browser, followed by the Recommendation's unique ID. For example, <http://handle.itu.int/11.1002/1000/11830-en>.

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