SaTC: CORE: Small: Secure Cloud Storage Verification Methods

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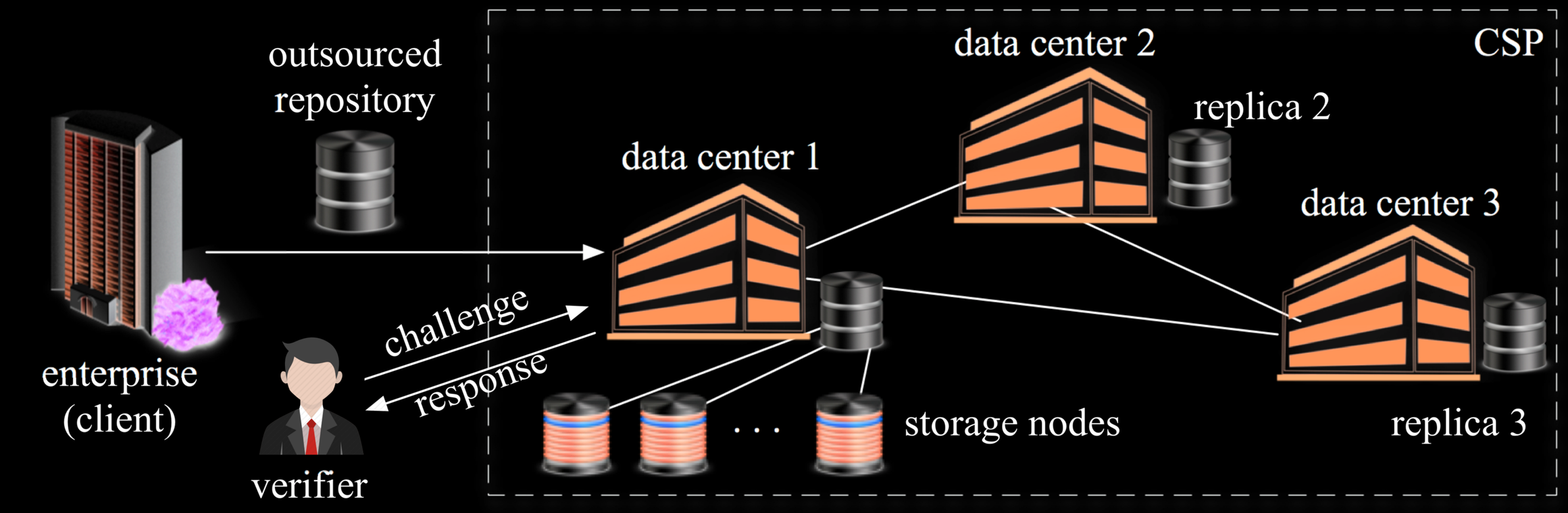
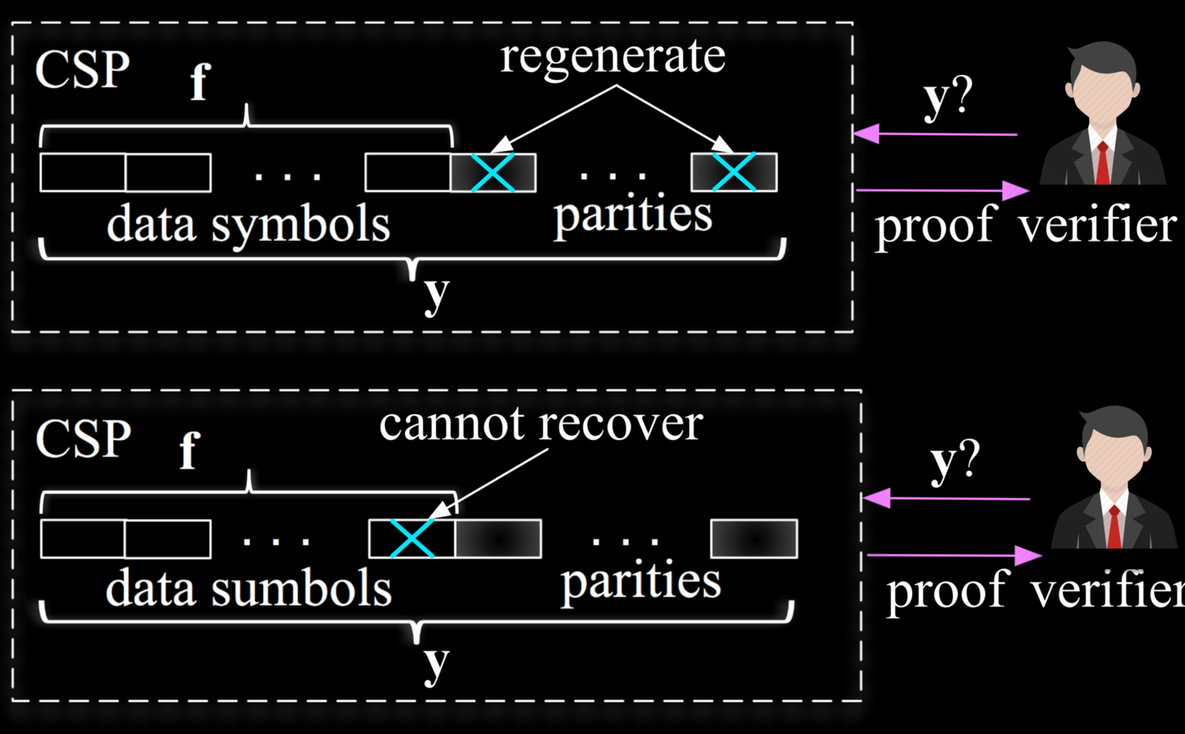
Project Goal: Verify the integrity and reliability of cloud storage in a resource-efficient manner

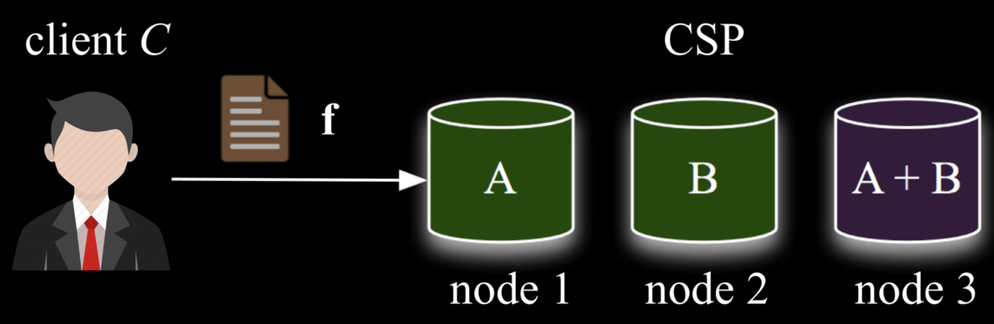


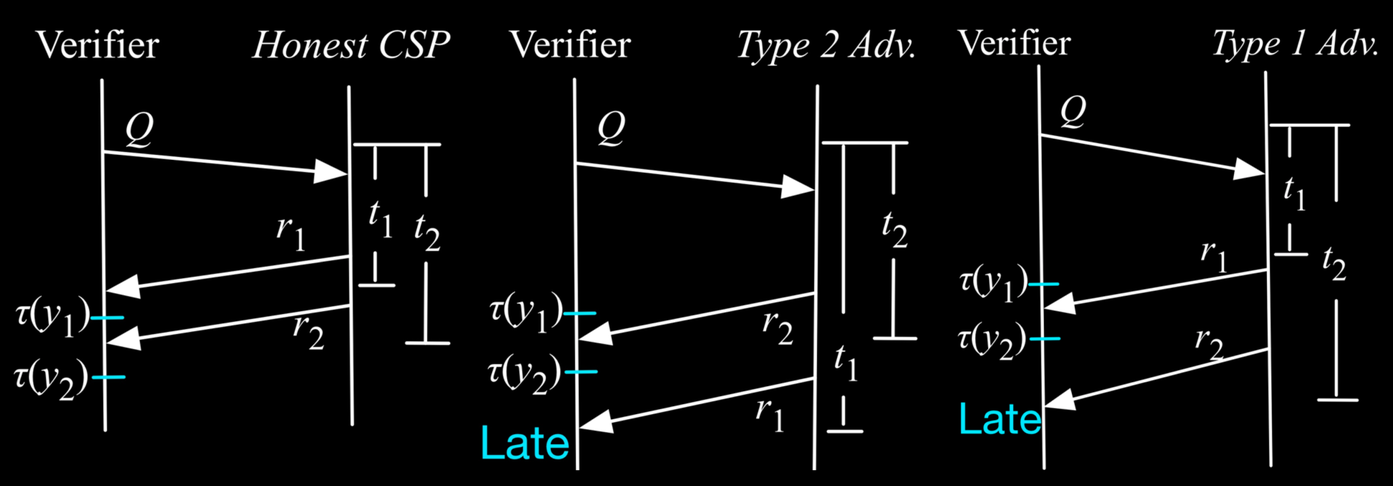
Storage Reliability at the logical level: Ensure data is stored reliably and enable data recovery

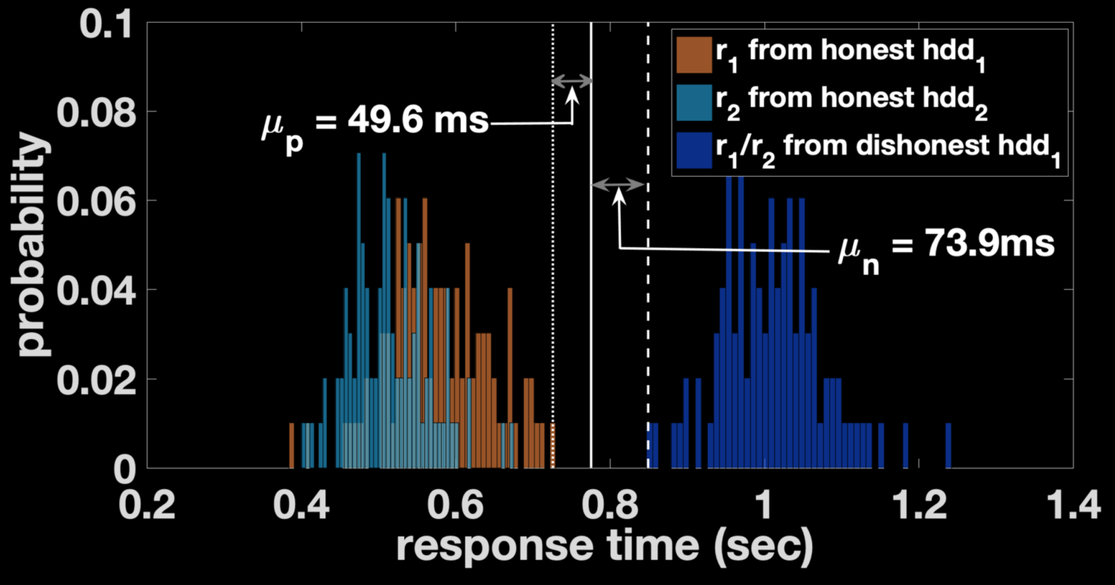


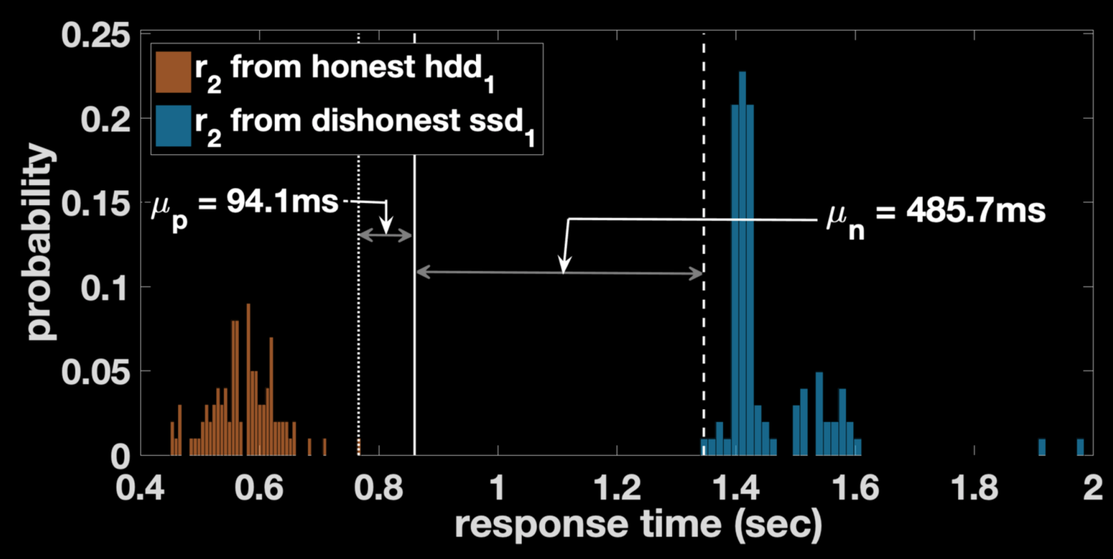
- Guarantees of storage reliability while enabling efficient data maintenance
- Characterization of tradeoffs between security and storage/communication overhead
- Use of public ECC that can be selected by the CSP
- Privacy-preserving auditing

Reliability at the physical level: Ensure data is distributed across storage nodes and data centers









Broader Impacts

- The project addresses dire need for accountability, privacy, security, and regulatory compliance for critical infrastructures such as storage
- Currently funds in part two female Ph.D. candidates

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