

TC: Large: Collaborative Research: Privacy-Enhanced Secure Data Provenance

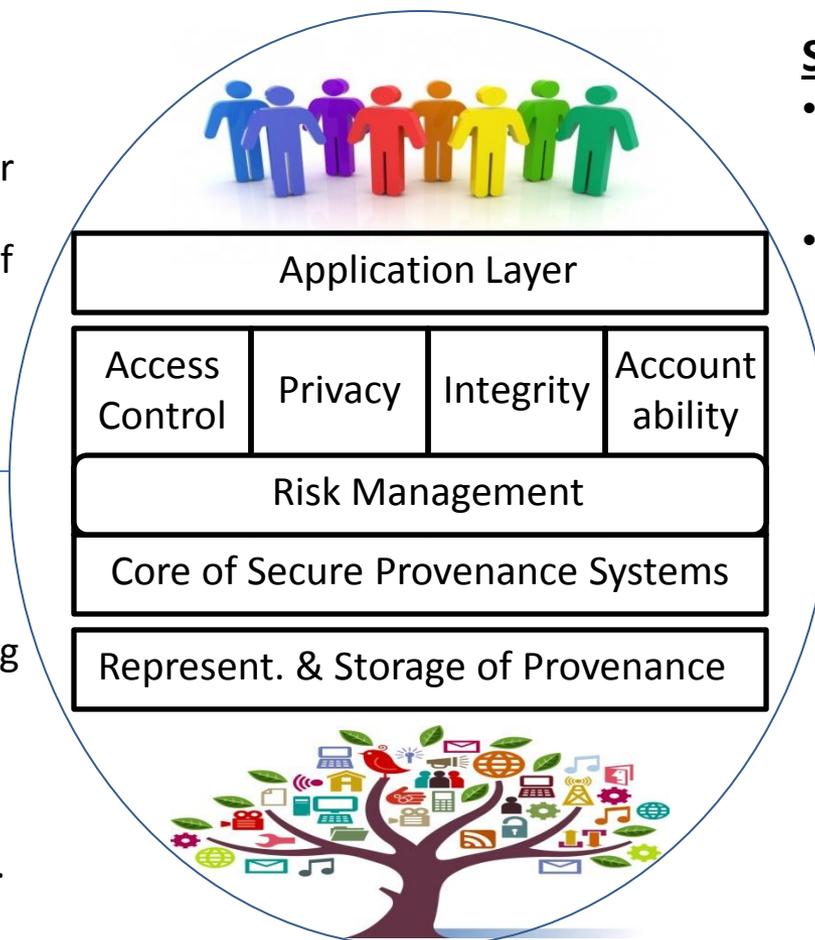
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Challenge:

- What foundational framework is adequate for systematically protecting the privacy and security of provenance information through the entire lifecycle?

Solution:

- New models, languages, architectures, and mechanisms for protecting provenance information.
- New security metrics and quantitative cyber risk analysis methodologies (Cybersecurity Dynamics).



Solution framework

Scientific Impact:

- Deeper understanding on the privacy and security of provenance information.
- New solution concepts for achieving Tailored Trustworthy Spaces (including security and trustworthiness metrics).

Broader Impact:

- Provenance-enhanced trustworthy information benefits every information consumer.
- Supported 13 PhD students (including 8 graduated, 2 minority students, and 2 female students).
- Two patent-pending technologies.

Award #: 1111925;

Project website: <http://provsec.org/>