Augmenting Provenance Records with Trust

Oshani Seneviratne and Ken Beckett, Oracle Corporation

-Use Cases:

- Compliance with laws such as US Sarbanes Oxley Act and Health Insurance Portability and Accountability Act.
- For data combined from different "flows", provide a guarantee that the data has not been tampered with.

-Our Proposal:

- Define the minimal set for a provenance description.
- Generate the SHA512 Hash for a provenance record described using that minimal set.
- Make these hashes available with the provenance records for verification, using an API, or published on a web page.
- Provide a mechanism for provenance proof chains for modifications to an existing provenance record.

