Securing Research and Education

A Security Incident Response Procedure for Identity Interfederation

The research leading to these results has received funding from the European Community’s Horizon 2020 Programme under Grant Agreement No. 653965, AARC (Authentication and Authorisation for Research and Collaboration). Credit is due to members of the REFEDS Sirtfi Working Group in addition to the AARC NA3.2 task contributors.

**Trusted Communication**
- [IR1] Provide security incident response contact information
- [IR5] Respect user privacy
- [IR6] Use the Traffic Light Protocol information disclosure policy

**Guaranteed Collaboration**
- [IR2] Respond to requests for assistance in a timely manner
- [IR3] Be able and willing to collaborate in the management of a security incident

**Operational Security**
- [OS1] Apply security patches
- [OS2] Manage software vulnerabilities
- [OS4] Be able to suspend access rights

Sirtfi, the Security Incident Response Trust Framework for Federated Identity, lists 16 statements that must be asserted by an entity to become Sirtfi-Compliant. Sirtfi enables trusted communication between security-conscious federation participants.

Compliance is expressed in federation metadata. In February 2017, 12 national identity federations are publishing Sirtfi-compliant entities.

Recent work by AARC proposes security incident response procedures for identity federations and interfederation. They are based upon the Sirtfi framework, the research and education federations’ response to the need for coordinated security incident response. The procedures recognise the necessity of establishing a central unit to provide security incident support at the interfederation level, and leveraging existing intrafederation relationships to address security incidents local to a single federation.

During an interfederation security incident, it is expected that communication will include federation and interfederation operators. This preserves the trust fabric of identity federations and leverages the existing relationships within their constituencies.

**Report**
- Report the incident to the federation security contact
- Ensure affected participants receive a heads-up

**Resolve**
- Appoint Incident Response Coordinators
- Retain evidence
- Share information as often as necessary
- Investigate and resolve

**Reflect**
- Share incident reports with all Sirtfi Compliant participants
- Update procedures and policy

Authors: H. Short (CERN), R. Wartel (CERN), T. Bärecke (SWITCH), T. Barton (U. Chicago), V. Brillioli (CERN), L. Franco (GEANT), O. Groys (FOM-NIKHEF), A. Harding (SWITCH), N. Harris (GEANT), I. Kakavas (GRNET), D. Kelsey (STFC), S. Lueders (CERN), I. Neilson (STFC), W. Pempe (DFN), W. Simpson (ORCID), H. Short (CERN), R. Smith (Inc.), P. Salaparva (SSG), L. Sinanovic (KIT), L. Valton (CERN), G. Verheijen (SIRTFI)

The research leading to these results has received funding from the European Community’s Horizon 2020 Programme under Grant Agreement No. 653965, AARC (Authentication and Authorisation for Research and Collaboration). Credit is due to members of the REFEDS Sirtfi Working Group in addition to the AARC NA3.2 task contributors.