



SiGNET CA Report and Self-Assessment

Jan Jona Javoršek, Borut Paul Kerševan
jan.javorsek@ijs.si borut.kersevan@ijs.si

SiGNET CA
Jozef Stefan Institute
Slovenia

signet-ca@ijs.si

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Current Status



- 2004-2008, SiGNET CA is still a small CA
 - 1 RA (at the CA)
 - ~ 50 valid certificates
 - > 80 % host and service certificates
- But we seem to be getting bigger
 - new institutions requesting certificates
 - founding to the NGI
 - NGI will have a new RA

Operational setup



- Heavily patched OpenCA
 - based on 0.9.2
 - local quick set-up scripts
 - database export scripts
 - backup scripts
- An offline CA
- Only software tokens issued so far

Recent events



- Hot disaster recovery tests
 - survived a complete hw failure on online machine
 - quick install and db restore worked flawlessly
 - now keeping a failback in a VM
 - hard drive failure on offline machine
 - lost only logs from last successful login
 - rebuild a new set-up from backup
 - improved backup procedures

Other Operational Notes



- Still occasionally behind with CRL
 - (i.e. 5 days before end of life)
 - In spite of two Nagios checking services!
 - Solution: improved procedures for the present CA administrator
- IGTF Nagios monitoring service behind repository releases
 - developed automatic monitor update

Self-Assessment



- Self-Assessment based on Guidelines for Auditing CAs by Yoshio Tanaka and Mathew Viljoen
- Done in parallel with:
 - CP/CPS update
 - transfer of CP/CPS to RFC 3647 form
 - consideration of some technical difficulties
 - plans for the future

Problems Found



- Several updates to conform to IGTF-AP Classic Profile version 4.1:
 - CP/CPS was re-structured according to RFC 3647
 - Added missing provision for RA to respond in 3 working days
 - Added requirement for operational audits of personnel and maintenance of personnel lists
 - Added requirement for subscriber's key backups

Problems found



- ...
 - Added requirement for yearly self-assessment
 - Fixed missing subjectAlternativeName fields and Netscape Object signing extensions
 - both existed in practice [A!]
 - CRL version number changed to v2 in CP/CPS
 - matching practice [A!]

Improvements in CP/CPS



- Description of what constitutes certificate acceptance (after retrieval, subscriber has 5 working days to refuse the certificate)
- Clarification on what kind of changes to CP/CPS require OLD change
- A number of clarifications
- Nitpicks

New Provisions



- Allowance for FQDN in subjectAlternativeName
- Provisions for an OCSP service
- Dropped non-repudiation



Future plans



- Getting bigger
 - working with ARNES to set up a chain of NGI RAs for the CA
- A new set-up
 - with a HSM
- A MICS profile
 - for the institute or larger
- ... regular updates and self-assessments

Questions?



Draft version of SiGNET CA/CPS v1.1 for the impatient:
http://www-f9.ijs.si/~jona/cpcps/signet_ca-cps_v1.1.html