Status update

ISO/IEC 24727: Identification Cards – Integrated Circuit Cards – Programming Interface

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U.S. Dept of Commerce
ISO/IEC 24727 multi-part standard

ISO/IEC 24727 – Identification Cards - Integrated circuit cards programming interfaces

✓ Builds upon ISO/IEC 7816

✓ **Focuses on services, interfaces**

✓ Card type neutral

✓ Contact and contactless agnostic

✓ **Identification, authentication, and signature services**

✓ **Discovery of capabilities**

✓ **Improve quality of life for the application developer**

✓✓✓ **Goal: Independent implementations that are interchangeable**
ISO/IEC JTC 1 SC 17/WG 4/TF 9

- ISO/IEC 24727 work assigned to Task Force in SC 17 Workgroup 4/Task Force 9
- Chaired by US (NIST)
- ANSI secretary
- TF9 scope
  - Standardization of a set of structured programming interfaces for interactions between integrated circuit cards and external applications to include generic services for multi-sector use
- [http://www.sc17.com/](http://www.sc17.com/)
The five parts of ISO/IEC 24727

• ISO/IEC 24727 Part 1: Architecture
  – Common terminology
  – Represents logical architecture for framework
  – Current status:
    • Final committee draft stage
    • Draft international standard anticipated Q3 2006

• ISO/IEC 24727 Part 2: Generic Card Interface
  – Common card interface
  – Discovery: Card capability description (CCD) and Card application capability description (ACD)
  – Current Status
    • Final committee draft stage
    • Draft international standard anticipated Q3 2006
The five parts of ISO/IEC 24727 (con’t.)

• ISO/IEC 24727 Part 3: Application Interface
  – New territory for ISO smart card standards
  – API, middleware, services
  – Current Status: Committee draft, second committee draft due June 2006, final committee draft anticipated Q4 2006

• ISO/IEC 24727 Part 4: API administration
  – Part 2, Part 3 interactions
  – Security architecture
  – Current status: working draft, committee draft anticipated Oct 2006

• ISO/IEC 24727 Part 5: Testing
  • Approach is to develop test requirements as part of the process of developing 24727 -- challenge
  – Current status: working draft, committee draft dependent on progress of other parts
Some considerations and challenges

• Part 3
  – Concepts present new thinking for technical work group; required to think out of the 7816 box
  – Ability to grow API without the ISO amendment process

• Part 4
  – Scope
  – Many of the ‘tough problems’ pushed from Part 2 and Part 3 to Part 4
    • Security model
    • Data models/data structure constructs
  – 7816-13

• Part 5
  – Observe that with 7816-4
    • There are tons of options
    • There is lack of APDU testing
  – 24727 testing approach needs to be succinct enough to achieve 24727 interoperability goals, otherwise why bother

• Regional implementations
  – Germany’s IAS
  – Japan concerns
  – Netherlands
  – US PIV
Summary

• Active participating national bodies: Australia, Finland, France, Germany, Japan, Netherlands, UK, US

• Europe has a very strong voice in this market

• US government is investing in ISO/IEC 24727 for several reasons, such as
  – Overcoming the ambiguities of the existing standards
  – Security and interoperable credentials
  – International reciprocity
Thank you.

Questions....

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