
Java Card Forum

2005

Working status & Deliverables



Objectives

- ◆ Develop & promote the Java Card language in association with the smart card market standards & bodies.
- ◆ Prepare technical documents (specifications, APIs, application notes and guidelines) in support of Java Card;
- ◆ Exchange technical information among members about Java Card and its implementation;
- ◆ Propose to SUN Microsystems any useful improvement to the Java Card API specification;
- ◆ Technical output is made available to all appropriate companies e.g. chip suppliers, tool and software developers and issuers.



Membership

- ◆ Membership in the Java Card Forum (JCF) can be achieved by any company that:
 - ◆ Is a licensee of Java Card from SUN Microsystems Inc.
 - ◆ Agrees to be bound by the by-laws of the JCF, including commitments to participate in/support the work of the JCF.
- ◆ Members :
 - ◆ Endorse Java Card,
 - ◆ Commit to providing Java Card in its products,
 - ◆ Commit to promoting Java Card as a favored solution for dynamic multiple application schemes,



Status

- ◆ Close to One Billion Cards issued from JCF members work
- ◆ Representation within the JCF from all major smart card vendors, most chip manufacturers, issuers and software vendors
- ◆ Java Card 2.2.1 is the current reference release.
- ◆ Deployment in major application sectors: mobile telecoms, banking, public sector and IT



Advancing JC technology

- ◆ The Java Card Forum and Sun Microsystems are working on advancing Java technology for smart cards. We are designing a new platform to allow integration into all general IT infrastructures rather than smart card specific infrastructures as at present. This will give the capability for many industry sectors not currently familiar with smart cards to benefit from their use e.g. Managing XML based content and information.
- ◆ The interfacing of smart card technology into IT infrastructures has often been compromised by the speed of communication and slow processing power. Java Card 3.0 will be designed to take advantage of industry changes to this area.
- ◆ Java Card 3.0 will maximise levels of on-board card security processing previously not possible off card. End to End wording?



Advancing JC technology

- ◆ The programming of Java Cards currently requires specialist development knowledge. Java Card 3.0 will allow leverage of full Java technology familiar with millions of developers
- ◆ Java Card 3.0 is opening up new security devices but is specifically targetting smart cards. The benefit is that this can extend the scope of usage beyond the boundaries of ISO7816
- ◆ In summary Java Card 3.0 not only continues the revolution of Java technology but more importantly opens new markets.....e.g Video Broadcast, 4G, DRM.....This aims to maintain the leading role of the JCF in enhancing Java Card in the smart card world and provide the improvement and longevity of Java Card technology for all customers.



Next

- ◆ Smart Cards are evolving toward being full-fledged computers, peers on the Internet
- ◆ The evolution of SC hardware frees applications from limitations of the past
- ◆ Easy integration of SC security in networks create new card services opportunities for issuers :
 - ◆ Example 1: End to end content protection
 - ◆ Example 2: Protected networked workflows
 - ◆ Example 3: Secure entry to web services
- ◆ JCF is preparing a major 2007 release to support this evolution
- ◆ The key access of development are a better alignment with Java & TCP/IP support
- ◆ The goal is seamless migration path from JC2.2
- ◆ Project name is Java Card 3



Thank You

