Reminder on Restricted and Controlled Information Policy

Participants in this meeting are reminded that the Forum is an international organization, and they are prohibited from disclosing export restricted or controlled information during the course of this meeting.

In addition, participants are reminded that they are prohibited from making input contributions containing export restricted or controlled information to the Forum. Members wishing additional information on these prohibitions are referred to the Forum's Policy on Restricted and Controlled Information (SDRF Policy 009) available on the web.

Patent Call

This meeting is being held under the Intellectual Property Rights Policy adopted by the Forum. If you do not have a copy of this policy, please see me during the meeting or -view and download a copy of that policy (SDRF Policy 007) from the Policies and Procedures section of the Forum's website.

If you are personally aware of any claims under any patent applications or issued patents that are likely to be infringed by an implementation of a specification, software code or other work product which is the subject of this meeting, please inform me or an Officer of the Forum. You need not be the inventor of such patent or patent application in order to inform us of its existence, nor will you be held responsible for expressing a belief that turns out to be inaccurate.

The Importance of backward compatibility

– SCA Next –

Updated, Jan 2014

Agenda

- What does Backward Compatibility Mean?
- Is SCA Next Backward Compatible?
- How Important is Backward Compatibility for SCA Next?
- What are the Options for Moving Forward?
- Conclusion

What does Backward Compatibility Mean?

❖ Definition of Backward Compatibility

- **Wikipedia**:
  - "If products designed for the new standard can receive, read, view or play older standards or formats, then the product is said to be backward-compatible"
  - "In other contexts, a product or a technology is said to be backward compatible when it is able to fully take the place of an older product, by inter-operating with products that were designed for the older product"
  - "Backward compatibility is a relationship between two components, rather than being an attribute of just one of them. More generally, a new component is said to be backward compatible if it provides all of the functionality of the old component."

Is SCA Next Backward Compatible?

❖ Let's see what we can do….

Launch a SCAv2.2.2 application on a SCA Next Core Framework?	**No[1]**
Launch a SCAv2.2.2 node on a SCA Next Core Framework?	**No**
Reuse a SCAv2.2.2 Resource in a SCA Next Application?	**No[1]**
Reuse a SCAv2.2.2 Device in a SCA Next node?	**No[1]**
Get a SCAv2.2.2 DeviceManager to register with a SCA Next DomainManager?	**No[1]**
Use SCAv2.2.2 tools to install, instantiate, start, stop, connect, or disconnect SCA Next applications on an SCA Next Core Framework?	**No[1]**

❖ Therefore, how is SCA Next backward compatible?

- There is no interoperability possible between SCAv2.2.2 components and SCA Next components

[1] Even with full inheritance SCA Next IDL interfaces

How Important is Backward Compatibility for SCA Next?

- **How important is it for the SCARI customers to reuse the millions of lines of source code implemented over the last 7 years?**
  - The promise of the SCA is to maximize the reuse of software components
  - Savings mostly come at the second or third generation SCA Radio
- **How important is it for the US to be able to reuse DoD repository?**
- **How important is it for ESSOR players to be able to reuse their SCAv2.2.2 investment?**
- **How important is it for SVFuA players to be able to reuse their SCAv2.2.2 investment?**

What are the Options for Moving Forward?

- **[Option 1] Accept that SCA Next is not going to be backward compatible**
  - Must highlight clear advantages to justify SCA Next adoption
  - Must clearly state that porting will be necessary for any SCAv2.2.2 artefacts
- **[Option 2] Work on making SCA Next backward compatible**
  - Form a work group to investigate backward compatibility
- **[Option 3] Ignore SCA Next**

What are the Options for Moving Forward?

- **In December 2013, [option 2] was selected by WinnF. A new Task Group was formed and chartered to investigate backwards compatibility issues for SCAv4**
- **The SCA4.1 Backwards Compatibility Task Group**
  - Goal: Investigate how SCAv4 breaks backwards compatibility with SCA 2.2.2, define potential solutions to address specific issues, gather consensus and submit change proposals to the JTNC.
- **Schedule:**
  - [Milestone 1] – Jan 14 2014 – Prioritized list of issues, relative levels of disruptiveness, associated requirements
  - [Milestone 2] – Mar 14 2014 – List of potential solutions
  - [Milestone 3] – Apr 14 2014 – Final report containing selected solutions
  - Balloting dates: April group ballot, May committee ballot, June Plenary ballot

Conclusion

- **SCAv4 is not backward compatible at all**
- **We need to avoid [Option 3]**
  - Remember SCAv3.0?
  - It led us to SCAv2.2.2 and some extensions
- **[Option 2] is worth a try**
  - Join the Task Group!

– The End –

For more information: steve.bernier@nordiasoft.com