International Multimedia Telecommunications Consortium

IMTC Approach to Interoperability Testing

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RADVISION & IMTC

About IMTC

- Founded in 1993 (CATS)
- Focus on standards-based interoperability
- T.120 -> H.320 -> H.323 -> SIP -> PSS -> 3G-324M -> SIP IMS ->…
- Who we are: market leaders in unified communication and multimedia content delivery fields working together to create interoperable, standard based products in a Non Profit Organization
- More info: www.imtc.org

IMTC IOT Expertise

- About 100 Face-to-face Interoperability Testing events to the date + virtual events
- SuperOp! flagship events – connecting different video-delivery technologies in one large network
- IMTC IOT plans and results recognized and requested by various SDOs – 3GPP, GCF, ITU and others
- IOT tools are used - IOTzilla

SIP Interoperability Issues

- Too many variations possible in SIP implementations – drives lots of IOT issues:
  - Message parsing issues (e.g., upper case versus lower case
  - Order in which certain fields are expected (e.g., number of m lines)
  - Expected value elements in the sip messages – e.g. DNS names instead of IP addresses
  - Unexpected sequence of messages (multiple 183/200)
  - Implementers choosing not to implements parts of specs

How To Improve Interoperability

- Identify a set of baseline features
- Define call flows for such baseline features and produce BCP/Implementer's guide
- Write down test cases around those features
- Setup and use IOT process/result management tools such as IOTZilla, and conduct testing
- Identify reference endpoints that have implemented the features correctly – have those reference endpoints available for virtual and F2F testing
- Have participants perform self test/certification before coming to IOT event.

About IOTZilla

- IOTZilla Suite covers the whole test life-cycle, from Planning through Test Execution and Results Analysis to proof-of-interoperability in a collaborative supporting platform. Major features include:
  - Planning, documenting and executing full conformance or Interoperability test specification and procedures – all in multi-vendor/multi-test environment
  - Tracking IOT process in highly secure web-based environment
  - Test Management, GroupWare, Scheduling and Infrastructure tools
- More info: www.ximpo.com

Conclusion

- Overall SIP Interoperability level should be improved based on systematic approach to the test plans and using IOT process management tools.
- IMTC has extensive body of IOT knowledge and expertise and would like to collaborate fully with IETF and SIP Forum to advance level of SIP IOT in the industry

Thank you!

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