CUSS 2 – Current Information

The CUSS standard has provided a framework and process for Self Service lasting nearly 20 years. The CUSS Technical Solutions Group (CUSS-TSG) has evaluated the current specification (including the technology it mandates) and decided it is time for a completely new architecture and implementation of CUSS.

Where are we?

The CUSS-TSG started discussing CUSS 2 in 2018 with the following key targets in mind …

- Use current and contemporary technologies.
- Remove CORBA and mandated tooling (plugins).
- Introduce and mandate safe communication protocols (Security by Design).
- Remove restrictions on browser technology avoiding browser and JAVA dependencies.
- Provide better support for PCI-DSS requirements.
- Support AIDM and OneID processes and practices.
- Provide a shorter release cycle and time to market.
- Provide for early adopters through Alpha/Beta releases.
- Keep proven methodologies and operational processes.
- Provide simplified specification and documentation.

… and meanwhile has managed to define and provide two ‘Early Developer Releases’ of CUSS 2 for gathering feedback from developers and to verify if the above targets were kept.

- Version 2.0.1 has been released in March 2021.
- Version 2.0.2 came out in December 2021 with the feedback included from version 2.0.1.

What can be expected from CUSS 2?

The important migration not only abandons old and no longer supported technologies, but also introduces a new approach for developing CUSS platforms and applications for Self Service Touchpoints. The new approach encourages the integration of smaller and mobile devices such as tablets and smartphones along with the traditional Kiosk and Bagdrop. The CUSS 2.0 Approach expands what can be considered a Kiosk and how the “Self Service Experience” can be delivered to the passenger.

The introduction of a Websocket API and contemporary WEB-Services technology allows airlines, airports, and 3rd parties an easier path to development of modern CUSS applications. Application vendors can now make use of existing developer resources already accustomed to proven API and Web development standards. The use of new technologies, secured communication protocols and practices, allowed the CUSS-TSG to align the CUSS Standard with the IATA Airline Industry Data Model (AIDM) standard, and makes it easier to comply with external standards and regional mandates (e.g. those defined by the card payment industry).
What should not be expected from CUSS 2

- Though Cloud based computing is a current topic in the industry and always part of the discussion in the CUSS-TSG, CUSS 2 does not define nor force operations in the cloud. The CUSS-TSG, with the specifications it defines, takes care that Cloud based operations are a valid option and will be facilitated.

- The CUSS 2 specification supports and facilitates aspects of PCI DSS certification but does not in itself provide end-to-end certification.

- The appearance of new screen formats and ratios and the necessity to support more diverse devices, CUSS 2 defines a more flexible way for applications to handle screen formats. However, application developers and suppliers cannot expect CUSS 2 devices that allow for resolution switching will ensure the applications are displayed correctly and conveniently on all supported screen formats. It is expected that application vendors shall provide responsive applications that handle a number of different screen resolution and format breakpoints, such as but not limited to horizontal, vertical, 4:3, 5:4 and 16:9 aspect ratios.

- As the traditional "installed on the kiosk and by operations teams" model will soon cease to exist in favor of a true distributed model: Applications can connect to CUSS anywhere. This requires a high level of control that is only possible through certification. Certification provides the mechanism for application first-contact secret information that separates genuine applications from denial-of-service attacks and man-in-the-middle attacks on the system. Accordingly, certification should be a requirement for all CUSS platforms, with the exact process and methodology yet to be determined and approved.