Review - DisplayAsAService GE OpenSpecification

Deliverable: WP13 Open Specification (D.13.1.2) M30

Document: DisplayAsAService GE Open specification (& Architecture)

Reviewer: Jarkko Vatjus-Anttila (Cyberlightning)

Please fix typos and grammatical errors directly in the document.

Structure

Check that the top level document structure is the same as in the template.

Yes

Relevance

Does the content belong to this GE/Document? Is it relevant?

Yes

Accuracy

Ist the content correct? Errors? Possible misconceptions?

The content at this point is brief and a lot of more information would be needed. Conceptually the text is already in place, and the reader gets the idea of what DaaS aims to be. However, being brief the text raises more questions as it actually answers. The detailed findings are listed below.

Completeness

Are the required topics/component covered? What is missing?

The following topics need attention in the document. It might be so that not every and single one of them can be described in detail, but by minimum each of the topics require a sentence which states is the feature part of DaaS or not. Detailed topics which need clarification are listed below:

- There is no mention about security in the document. It should be described how malevolent pixel sources can be controlled in the network.
- Architecture should specify, whether this service can work only in a single subnet, or can DaaS operate over Internet
- It should be defined how DaaS manage NAT and whether there are any requirements outside DaaS that should be noted from the practical installation perspective.
- What mechanisms the Controller uses for service discovery when it figures out what services are there.
- There is no mention about the protocols and/or mechanisms how the clients connect to a DaaS session.
- The software components required to build a DaaS setup is required. Are there open source components, if yes which ones. If not, then how are people getting access to the software.
- Architectural picture is really needed to understand the anticipated concept. The introduction describes two use cases, and the upcoming architectural picture should support both of the cases. i.e. describing the interfaces, who-implement-what scenario and how network components are described.
- The document does not say how VFB and/or VD capabilities are queried and how the streams are managed. I.e. can the client send whatever pixel stream, for example, encoded

- h.264. I'm sure this cannot be done, if the Controller does not happen to support hardware accelerated h.264 decoding. So, how are the capabilities queries managed.
- If the capabilities are fixed as requirements (for example it is mandatory that the controller manages h.264) then those need to be stated in this document.
- Can the transport be encrypted? if yes, what mechanisms for the key management and/or encryption algorithms are there.
- Are there bandwidth requirements for DaaS? How about latency requirements?
- Is there a need for QoS definition. For example, is there a prioritization schemes for the incoming streams. The document should specify either way.
- Can DaaS manage user-input? i.e. send events back from the physical display to the source in form of touch events, for example. Either way, it should be stated in the document.
- Can the controller manage geometry correction, for example bezel correction or non-planar dome correction for non-planar/projective screen surfaces.
- Display synchronization is mentioned to be done with software, but it is not described how. I.e. if the physical displays happen to be different the synchronization may be difficult. If synchronization requires similar physical displays, it should be stated in the text.
- Any other constraints that the system might have, for example related to different physical display resolutions, should be stated here.
- A typical use case (for example the display wall with multiple pixel sources) should be
 described as a reference together with devices required to set it up. The text says DaaS is
 implemented only in SW, but clearly the display walls and their controlling entities are not
 only SW. So, a generic description of such a case would enlighten the document greatly.
- -The terms and definition section has wrong topics. should be fixed with right glossary.

Comprehensibility

Can a normal user understand the content and follow the instructions?

The text as such is understandable, only the details above are missing.

Neutrality

Is the OpenSpecification neutral? Is it describing a technology and not a specific product? Open Specification generic / independent of a specific implementation.

Yes, it is generic enough.

Other comments

Any other suggestions to improve the document?

Only the changes above. Once those are corrected and a re-review is done, the document should contain all the needed info for the first public appearance.