IHE Work Item Proposal (Short)

# Proposed Work Item: Content Creator/Content Consumer Harmonization

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Date: 10/20/2014

Version: .7

Domain: PCC, ITI

# The Problem

*<Summarize the integration problem. What doesn’t work, or what needs to work?>*

*<Describe the Value Statement: What is the underlying cost incurred by the problem and what is to be gained by solving it? If possible provide quantifiable costs, or data to demonstrate the scale of the problem.>*

As the ITI profile Document Digital Signature was being revised to include a reference to the PCC Content Consumer actor it was realized that certain requirements of consuming CDA would be included in that reference. Thus a discussion between ITI and PCC started around what could be revised in the PCC-TF to provide a more reusable Content Consumer for DSG.

The root of the problem is that PCC and ITI utilize Content Creator and Content Consumer actors in different ways. The general understanding of how these actors should be defined is that they are abstract in nature with generalized functionality. They are intended to be further defined when used in specific profiles. This in itself is ok, however due to the fact that various implementations of these actors across ITI and PCC have grown organically a few problems have resulted. These problems are defined as follows:

1. The PCC-TF does not reference the abstract definition of these actors which does exist as part of the [*Technical Frameworks General Introduction and Shared Appendices*](http://ihe.net/TF_Intro_Appendices.aspx)*.*
2. The options defined in PCC-TF-2:Section 3.1 on the Content Consumer actor are not applicable to all uses of this actor. There are four options in total, three of which require the content being consumed to be a CDA document. This is done so via the View Option (Section 3.1.1) and inheritance of this option’s constraints in the Document Import Option (Section 3.1.2) and the Section Import Option (Section 3.1.3). This renders these Content Consumer options unusuable with non-CDA type content.
3. The appropriate presentation of documents by the Content Consumer actor can sometimes be a challenge. To deal with these situations appropriately further guidance is needed. Following is a list of more details around these challenges:
   1. The View Option contains a requirement to be able to print to paper in PCC-TF-2:3.1.1, #4. This does not support the overall goal of what IHE is driving towards with the standardization and digitization of healthcare.
   2. The use of stylesheets needs to be dealt with somehow. This sentence in the Content Consumer View Option provides vague guidance at best:

“This includes at a minimum the ability to render the document with the stylesheet specifications provided by the document source, if the document source provides a stylesheet.”

This project is a harmonization and refactoring effort between PCC and ITI initially. These two actors have grown organically over the years, through new profile development as well as through vendor implementations. The value of fixing these issues is that a more clear, consistent and extensible model will be available. This issue will continue to proliferate if not addressed in the near future.

# Key Use Case

<Describe a short use case scenario from the user perspective. The use case should demonstrate the integration/workflow problem. Feel free to add a second use case scenario demonstrating how it “should” work. Try to indicate the people/systems, the tasks they are doing, the information they need, and where the information should come from.>

Following is a list of profiles/use cases (not exhaustive) that utilize the Content Creator and Content Consumer Actors.

1. Use cases as defined in ITI Document Digital Signature (DSG)
2. Use cases as defined in ITI Basic Patient Privacy Consent (BPPC)
3. Use cases as defined in all PCC content profiles

# Standards & Systems

<List existing systems that are/could be involved in the problem/solution.>

<If known, list specific components of standards which might be relevant to the solution.>

CDA, PDF, non-CDA, text, images

# Discussion

<If possible, indicate why IHE would be a good venue to solve the problem and what you think IHE should do to solve it.>

1. This is not a typical profile proposal. In fact this may be processed as a CP, however the resulting changes may very well have significant impact to many existing profiles and thus it should be considered as a work item in the PCC planning process.
2. What content types will Content Creator and Content Consumer need to support?
3. What is the overall impact to this change? i.e. how many profiles will be affected and are there any breaking changes?
4. Which options should be generic vs templated?
5. ***Possible soutions:***
   1. ***Rewrite the options to better represent less and more specific needs of what the options are intended to support. That is, add a “CDA View Option” that is focused on rendering only CDA content, and also add a “Content View Option” that is focused on rendering generic content such as a text document or image. Or perhaps even a “Text View Option” and “Image View Option” for those specific use cases.***
   2. ***Create new actors and group them with the existing actors. RAD Image Enabled Office Uses this approach.***
6. ***What is the level of responsibility of the content consumer to display/render the content in the way that the content creator intended for it to be displayed/rendered.***
7. This ties into the MCV/RECON profiles somehow
   1. Relates to proposed transaction renumbering?

Technical Framework References:

* BPPC - ITI-TF Volume 1 Section 19.3, 19.4