

**XCON WG**  
**IETF-76 Meeting**  
**Hiroshima, Japan, Thursday November 12, 2009**

**Conference Control Manipulation Protocol**  
**(CCMP)**  
**draft-ietf-xcon-ccmp-04.txt**

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# Agenda

- ❑ **A bird's eye view on CCMP version -04**
  - Got invaluable input from a couple of thorough reviews!
  - Getting closer and closer to the final target..
- ❑ **Changes since -03 version**
- ❑ **Way Forward**
- ❑ **Comments/Questions**

# CCMP -03 reviews outcomes

- ❑ The protocol seems pretty well thought out 😊
- ❑ There's still a need for clarity 😞
- ❑ There are a couple of technical issues to be addressed 😞

# Need for clarity: issues solved

- ❑ **Most comments basically relate to document's structure and readability:**
  - e.g.: “Section 4/5. These two sections could probably stand to be merged. I think it would be helpful to have the content of Section 5 (especially Figure 1) before most of Section 4, except maybe the first paragraph”...
- ❑ **We restructured the overall document in a way that looked more logical (also to us ;-)**
  - We now have the following organization:
    - 4: XCON Conference Control System Architecture
      - 4.1. Conference Objects
      - 4.2. Conference Users
    - 5. Protocol Overview
      - 5.1. Protocol Operations
      - 5.2. Implementation Approach
    - 6. CCMP messages
      - 6.1. CCMP Request Message Type
      - 6.2. CCMP Response Message Type
      - 6.3. Detailed messages

# Need for clarity: issues (potentially\*) solved

- ❑ “Section 7.2.1, password I'm confused about how this parameter interacts with the <conference-password> element in the data model: In the data model, conference passwords are only scoped within a given <conf-uri>, whereas a password for a CCMP request would presumably need to be scoped at the level of the conference. Or is the CCMP password an independent value not reflected in the conference object?”
- ❑ We put the XCON-URI among the identifiers allowed in the Data Model (even though, strictly speaking, it is not a signaling URI). Hence, we also defined, for the XCON-URI, a password, like in the following sample excerpt:

```
<info:conf-uris>  
  <info:entry>  
    <info:uri>xcon:8977794@example.com</info:uri>  
    <info:display-text>Conference XCON-URI</info:display-text>  
    <xcon:conference-password>3456</xcon:conference-password>  
  </info:entry>  
</info:conf-uris>
```

**\* WG opinion required**

# Need for clarity: open issue

- ❑ **“It seems like this document and the data model should both use the same specification language, either XSD or RelaxNG, to facilitate parsing/validation”.**
  
- ❑ **Up to now, we have always sticked to the xsd approach**
  - If needed, we can provide a RelaxNG specification of the CCMP
  - Other options:
    - Provide “official” xsd also for the Data Model?
    - Provide both specifications (xsd and RelaxNG) for both documents?

# Technical issues: updates to confObjs

- ❑ **“There should be more discussion here about how the client constructs the right fragment to express his changes, and how the server interprets the fragment it gets”.**
- ❑ **In version -04 of the protocol we decided to adopt, for CCMP updates, a mechanism à la event package**
  - i.e. introduce versioning in CCMP messages

# Managing conference objects modifications (1/3)

- ❑ **Each conference object is now associated with a version number indicating the most up to date view of the conference at the server's side**
- ❑ **Such version number is reported to the clients when answering their requests**
  - 1. Client sends “update” request (with no version number)
  - 2a. If ALL modifications are applied
    - server answers with “success” message which also contains the current “version” of the modified object
  - 2.b. If modifications ARE NOT ALL applied
    - Server answers with “updateFailed” message
    - No change to the server-side object becomes effective

# Managing conference objects modifications (2/3)

## □ If client owns version “X” of an object and:

- gets back an answer carrying version “X+1”
  - can be sure that the version it was aware of was the most up to date
- gets back an answer carrying version  $\geq$  “X+2”
  - can detect that the object that has been modified at the server's side was more up to date than the one it was working upon
  - can send to the server a further "retrieve" request, for the sake of having available the latest version of the modified object

## □ In no case the server is obliged to send back a copy of the modified conference object as part of the update response message

- Such a copy can always be obtained through an ad-hoc "retrieve" message

# Managing conference objects modifications (3/3)

- ❑ All CCMP response messages (except those associated with the retrieval of either blueprints or conferences) will have to contain a mandatory "version" parameter
- ❑ This does not hold for request messages, for which the "version" parameter is not at all required
  - it represents useless information for the server:
    - as long as the required modifications can be applied to the target conference object with no conflicts, the server does not care whether or not the client had an up to date view of the information stored at its side
- ❑ **Note well: a client which has subscribed at the server, through the XCON event package, to notifications about conference object modifications, will always have the most up to date version of that object available at his side.**

# Main changes since -03 version

- ❑ **Re-organized the overall structure of the document (see slide #3)**
- ❑ **Section on updates completely re-thought**
  - Introduced versioning in CCMP responses
  - Removed “modified” error code:
    - Updates either succeed (“success”) or fail as a whole (“updateFailed”)
  - Added new error code associated with modification failures:
    - updateFailed
- ❑ **Added reason string to response messages (useful, e.g., to better clarify error situations)**
  - response-string
- ❑ **Identified and removed typos and inconsistencies**
- ❑ **Schema file updated (also in the appendix of the draft)**
- ❑ ...

# Open issue on request filtering (as per IETF-75)

## ❑ Should we consider adding “filters” to CCMP requests?

- E.g. something like:
  - blueprintsRequest(“give me just blueprints associated with no video content”)
  - confsRequest(“just active conferences”)
  - confsRequest(“just those in which I’m currently participating”)
- Aim:
  - Reduce traffic between client and server
  - Avoid overwhelming clients with bunches of un-needed information
    - Client-side filtering might be resource-consuming, especially in the case of mobile nodes
  - ...
- Note well:
  - Filters might take the form of xpath queries

## ❑ We think this might be useful

- Minor modification to the spec required

# Way Forward

## □ Draft is ready for WGLC

- Proposed timeline:
  - D1: IETF-76 + 3 weeks:
    - -05 version (based on feedback from the meeting) published
  - D2 = D1 + 4 weeks:
    - Feedback received from experts and Mailing List
  - D3 = IETF-77 – 3 weeks:
    - Final version of the document ready

**ANY COMMENTS/Questions?**