

MONASTERY* coordination call

CT1 130e Conference call Gkatzikis Lazaros 12-05-2021

Agenda

- 1. Discussion of Plugtest Issues and way forward (UPV/EHU, Firstnet and Nokia)
- 2. CRs on Support of call to Functional Alias in (emergency) private calls (Nokia)
- 3. Discussion of call forwarding flows (Kontron)
- 4. CRs on addressing editor's note on FA resolution in First-to-Answer calls (Nokia)-Not addressed
- 5. MO and configuration corrections (only if time permits) -Not addressed
- 6. CRs on limiting of the number of simultaneous logins(Nokia) -Not addressed



Plugtest identified issues & suggested response

- 1. Affiliation and FA subscription procedures differ only in the accompanying filters (9.2.1.3 vs 9A.2.1.3)
 - Proposal: extend mcptt-info with indication that the request is FA related
- 2. SIP PUBLISH to refresh FA interest
 - No issue identified as long as implementations do not automatically reject messages with a body.
 - Proposal: Rel.17 clarifications as per one of the following alternative options:
 - 1) Add Note that refresh and remove may include body
 - 2) Add condition in steps 2 and 6 in both subclauses that this step does not apply to refresh
- 3. Unclear specs on whether "status" attribute is to be included from participating to FA controlling server in status change procedure (clause 9A.2.2.2.6)
 - Not FASMO: At the FA controlling server (see 9A.2.2.3.3) we do not have any related handling and even if status was included, it will be simply ignored
- 4. Missing procedure for forwarding the FA subscription from originating to terminating participating server
 - Rel-15 correction adding procedure "Forwarding subscription to functional alias status towards another MCPTT user procedure"

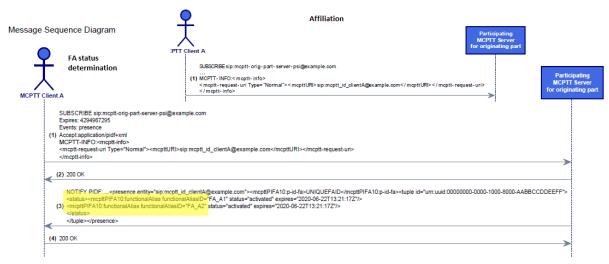


Problem 1: Affiliation and FA subscription

Problem statement:

- Initial subscription for affiliation and FA subscription procedures cannot be distinguished at the MCPTT server (see 9.2.1.3 vs 9A.2.1.3)
- Notify is ok since the accompanying filters clearly differ

Proposal: extend mcptt-info with optional indication that the request is FA related Since this is the only identified problematic procedure, an FA indication is sufficient



Problem 1 detailed analysis

- As per 24.379, the MCPTT server has no other means to identify that this is FA related (and not an affiliation subscription) but by the highlighted aspects of the filters.
- "4) contains a <ns-binding > child element according to IETF RFC 4661 [63], of the <ns-bindings > element where the <ns-binding > element:
- A) contains a "prefix" attribute according to IETF RFC 4661 [63], set to "mcpttPlFA10"; and
- B) contains an urn" attribute according to IETF RFC 4661 [63], set to the "urn:3gpp:ns:mcpttPresInfo A:1.0" value; "

"9.2.1.3 Affiliation status determination procedure

- 6) shall include an Accept header field containing the application/pidf+xml MIME type; and
- 7) if requesting MCPTT groups where the MCPTT user is affiliated to at the MCPTT client, shall include an application/simple-filter+xml MIME body indicating per-client restrictions of presence event package notification information according to subclause 9.3.2, indicating the MCPTT client ID of the MCPTT client."
- Including an application/simple-filter+xml MIME body, mandated for "requesting MCPTT groups where the MCPTT user is affiliated to at the MCPTT client" (see 9.2.1.3).
- Cases not covered
 - Discovering MCPTT groups which another MCPTT user is affiliated to
 - Functional alias procedures
- Therefore, either we need to impose to include the simple filter MIME in any case, or we provide a clear FA indication.



Problem 2: SIP PUBLISH to refresh FA interest

Problem statement

SIP PUBLISH requests for FA status change can be used

"to refresh indication of an MCPTT user interest in one or more functional aliases due to near expiration of the expiration time of a functional alias with the status set to the "activated" state received in a SIP NOTIFY request in subclause 9A.2.1.3; "

Analysis

- RFC 3903 main points
 - SIP-If-Match header field, is the unique identifier of the target "event state"
 - Supported publication operations as per table
- TS 24.379 states in subclause 9A.2.1.2

"In the SIP PUBLISH request, the MCPTT client:

| Operation | Body? | SIP-If-Match? | Expires Value |
|-----------|-------|---------------|---------------|
| Initial | yes | no | > 0 |
| Refresh | no | yes | > 0 |
| Modify | yes | yes | > 0 |
| Remove | no | yes | > 0 |

Table 1: Publication Operations

- 2) shall include an application/vnd.3gpp.mcptt-info+xml MIME body. In the application/vnd.3gpp.mcptt-info+xml MIME body, the MCPTT client shall include the <mcptt-request-uri> element set to the MCPTT ID of the MCPTT user;....
- 6) shall include an application/pidf+xml MIME body indicating per-user functional alias information according to subclause 9A.3.1. In the MIME body, the MCPTT client:

Proposal: Add Notes that RFC operations refresh and remove are not applied as is.

Remark: The very same issue appears in affiliations i.e. subclause 9.2.1.2

"In the SIP PUBLISH request, the MCPTT client:...

2) shall include an application/vnd.3gpp.mcptt-info+xml MIME body. In the application/vnd.3gpp.mcptt-info+xml MIME body, the MCPTT client shall include the <mcptt-request-urr> element set to the MCPTT ID of the MCPTT user;....

6) shall include an application/pidf+xml MIME body indicating per-user affiliation information according to subclause 9.3.1. In the MIME body, the MCPTT client:"

Problem 3: Use of "status" attributes

d-fa>UNIQUEFAID
mcpttPIFA10:p-ld-fa>

Problem statement

Ambiguity on whether the "status" attribute should be included in the participating<=> FA controlling servers interface

Remark: "expires" is explicitly mentioned as removed.

Analysis

- Clause 9A.2.2.2.6 states the conditions and the actions
- "10) shall include an application/pidf+xml MIME body indicating per-functional alias status information constructed according to subclause 9A.3.1.2. The MCPTT server shall indicate all served MCPTT user IDs, such that:
- Specs do not state that status is to be included.
- What if the participating MCPTT server includes it?
 - ✓ the controlling would anyway ignore it,
 - ✓ the corresponding handling at the FA controlling server (see 9A.2.2.3.3) does not have any related handling and will simply ignore it

Proposal: Clarify that the <functionalAlias> element of the pidf+xml documents needs/does not need to include the "status" attribute.



Problem4: FA status determination of other user Already addressed in CT1#128e (C1-211482)

Problem statement:

- Missing procedure for forwarding the FA subscription from originating to terminating participating server
- FA status determination of user served by other MCPTT server is not supported

Solution: Rel-15 correction adding procedure "Forwarding subscription to functional alias status towards another MCPTT user procedure"



Add generic support to Calling an FA

Stage-2 reqs

- unclear on whether FAs need to reach destination
- No procedural text, but mentioned in table

Stage-3 agreements:

- the FA is carried up to the end
- new element <called-functional-alias-URI> in application/vnd.3gpp.mcptt-info+xml MIME bod

Information E

Functional alias

Functional alia

Use floor con

SDP offer
Implicit floor

MCPTT ID

Proposal:

- Resolved by reusing FA resolution mechanism, but initiated by the client.
- <called-functional-alias-URI> set by the Client at step 5

| 3. N | 1CPTT private call | request | | | | | |
|--|--------------------|---|--|--|--|--|--|
| | | 4. Authorize request | | | | | |
| 5a. MCPTT functional alias resolution response | | | | | | | |
| 5b. | MCPTT private cal | Il request | | | | | |
| € | MCPTT progress in | dication 7. MCPTT private call request | | | | | |
| | | 8. Notify call | | | | | |
| 10. MCPTT private call respo | | 9. MCPTT private call response | | | | | |
| 11. Media plane established | | | | | | | |
| n/vnd.3gpp.mcptt-info+xml MIME body | | | | | | | |
| W. T. T. S. P. P. P. | | | | | | | |
| Element | Status | Description | | | | | |
| | М | The MCPTT ID of the calling party | | | | | |
| S | 0 | The functional alias of the calling party | | | | | |
| | М | The MCPTT ID of the called party | | | | | |
| S | 0 | The functional alias of the called party | | | | | |
| trol indication | М | This element indicates whether floor control will be used for the private call. | | | | | |
| | М | Media parameters of MCPTT client. | | | | | |
| request | 0 | An indication that the user is also | | | | | |

Home MCPTT service provider

MCPTT server

1. MCPTT client 1 and MCPTT client 2 are registered for MCPTT service

MCPTT client

MCPTT client

2. initiate private call

Called FA added upon resolution (in first-to-answer call)

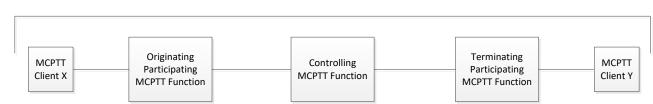
Editor's Note: [eMONASTERY2, CR 0691] How the controlling MCPTT server adds and populates <called-functional-alias-URI> element for a first-to-answer-call is FFS.

- No need to have the same e2e handling of FA resolution here
- The FA is added to <called-functional-alias-URI> by the controlling server at resolution phase

"b) upon receipt of a SIP NOTIFY request generated as specified in subclause 9A.2.2.3.8,

- i) shall set in the application/vnd.3gpp.mcptt-info+xml MIME body with the <mcpttinfo> element containing the <mcptt-Params> element the <called-functional-alias-URI> to the value of the called functional alias to be called.include an active functional alias SIP INVITE request, with the <functional-alias-URI> set to the URI of the used functional alias; and
- ii) shall invite the MCPTT user(s) listed in the application/pidf+xml MIME body of the SIP NOTIFY request as specified in subclause 11.1.1.4.1;"

Primary MCPTT system





NOKIA