Use of CxTP for PANA
draft-bournelle-pana-ctp-02.txt

Julien Bournelle

Maryline Laurent-Maknavicius

Hannes Tschofenig

Yacine El-Mghazli

Gerardo Giaretta

Yoshihiro Ohba
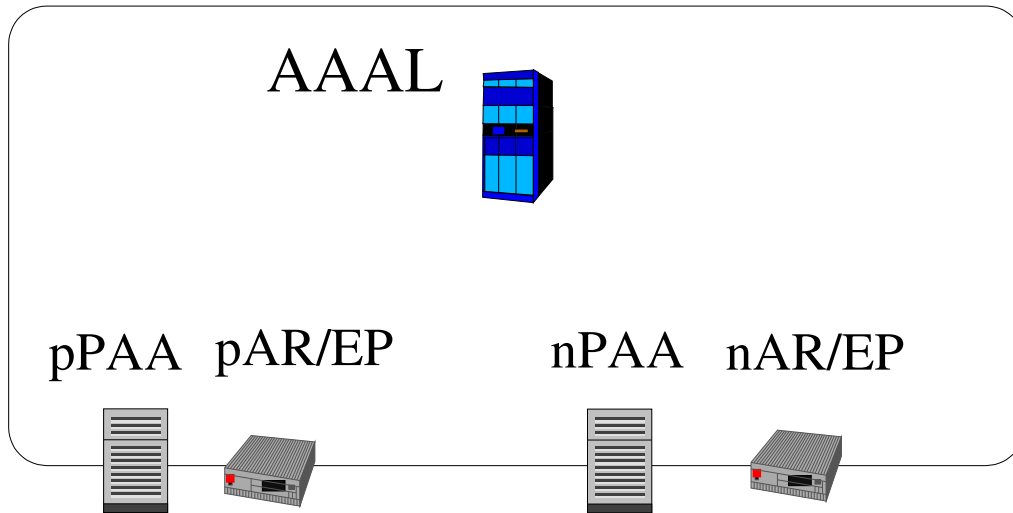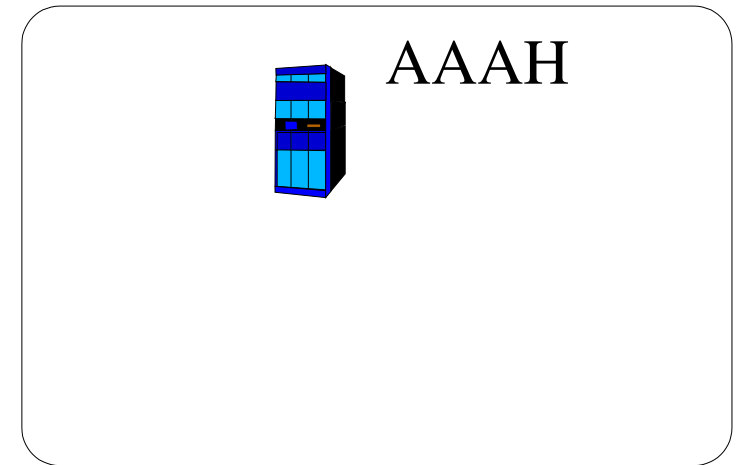
Rafa Marin Lopez

Outline

- Problem

- 2 approaches:

  - CxTP between PAAs

  - CxTP between ARs

- AAA interactions

- PANA context

- Next steps

Problem

AAAL

AAAH

pPAA   pAR/EP   nPAA   nAR/EP

PANA client

nPAA will authenticate PaC whereas it has already
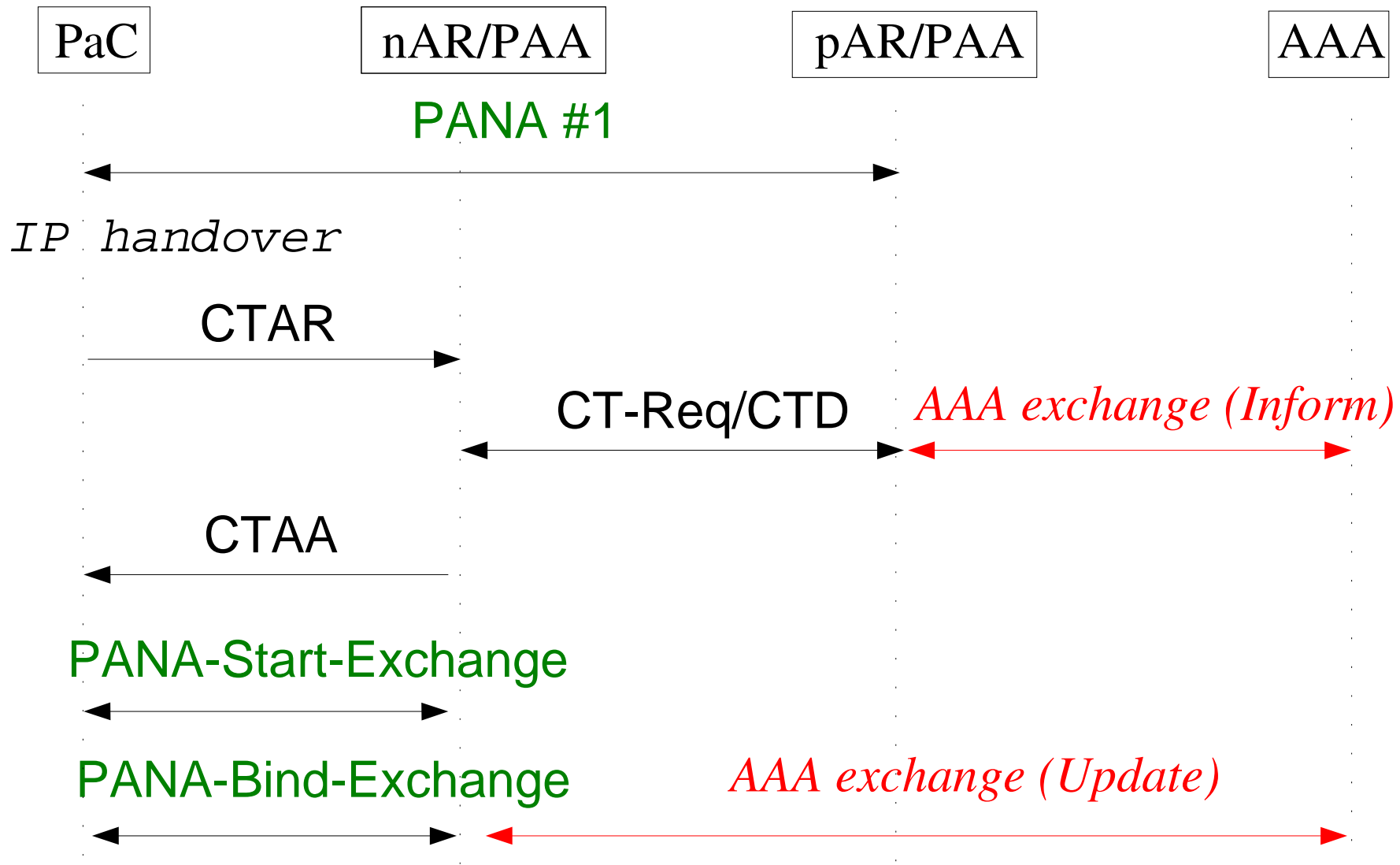been authenticated by pPAA

3

Contents of the I-D #2

- We describe 2 approaches using CxTP
  - CxTP between PAAs
    - PANA friendly (cf. `draft-ietf-pana-mobopts-00`)
    - CxTP more friendly (use of CTAR message)
    - Optimized CTP (CTAR embeds in PSA)
  - CxTP between ARs

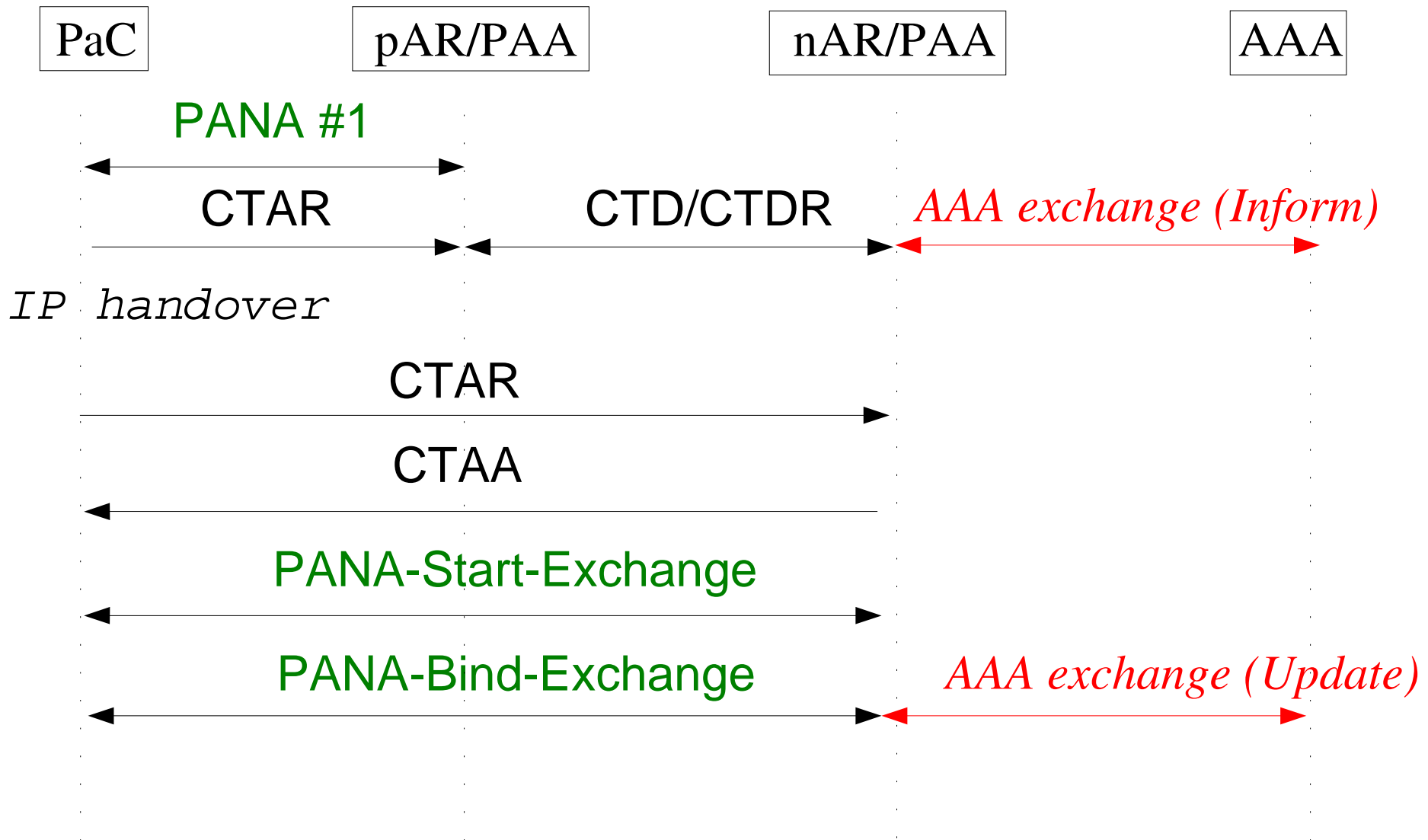- Interaction with AAA

- PANA context

CxTP between PAAs

- `draft-ietf-pana-mobopts-00`

  - Predictive mode not supported

  - PSA triggers the transfer

  - Use CT-Req/CTD without CTP auth. token

- CxTP "friendly" approach

  - use of CTAR message

  - Predictive mode supported

- Problem:

  - if CxTP already used between ARs: 2 exchanges

CxTP between ARs: Reactive mode

PaC   nAR/PAA   pAR/PAA   AAA

PANA #1

IP handover

CTAR

CT-Req/CTD   *AAA exchange (Inform)*

CTAA

PANA-Start-Exchange

PANA-Bind-Exchange   *AAA exchange (Update)*

6

CxTP between ARs: Predictive mode

PaC   pAR/PAA   nAR/PAA   AAA

PANA #1

CTAR   CTD/CTDR   *AAA exchange (Inform)*

IP handover

CTAR

CTAA

PANA-Start-Exchange

PANA-Bind-Exchange   *AAA exchange (Update)*

AAA interaction

- AAA server needs to know the PAA in charge of the PaC

  - Re-authentication

  - Abort/Terminate Session

- `pPAA–AAA session-id` sent to nPAA

- nPAA should inform the AAA (update)

- Handle in separate document (AAA messages)

  - `draft-liu-aaa-diameter-session-mobility-00.txt`

PANA context

- Session-lifetime elapsed
- AAA servers identity/pPAA-AAA session-id
- Keying material: AAA-Key-int
- Filtering rules to be applied to EP ?

Next steps

- Separate the 2 approaches ?

  - define a specific PANA CT (`pana-mobopts`) ?

  - define a more general solution

- AAA-Key-new: need security review

- AAA interaction impacts PANA context

- AR-PAA interface not handle here