ACP update

draft-ietf-anima-autonomic-control-plane-30

Toerless Eckert tte+ietf@cs.fau.de (Futurewei USA)
Michael Behringer michael.h.behringer@gmail.com
Steinthor Bjarnason sbjarnason@arbor.net

v1.0

-29 – The final edit

- Converted to XMLv3 to get new XML tags to use for contributor
  - Moved Pascal (RPL), Michael (BRSKI, RPL), Brian (GRASP) from ack. to contributor
  - XMLv3'ification should also speed up RFC editor pass - RECOMMENDED (Brian also did this for GRASP to help RFC editor)
- Closed all remaining "DISCUSS" from IESG – Roman Danyliv, Ben Kaduk, Barry Leiba
  - Not sure if those qualified for DISCUSS, but would have been all good comments anyhow.
- Closed all COMMENTS from IESG
- Highlights
  - Ca. 2 additional pages node security considerations, including
    - IDevID/LDevID needs to be protected from private key extraction (TPM or the like), secure boot/software, etc..
    - EST / Registrar security considerations, constraining certs with id-kp-cmcRA to better protected devices (physical device security) to prohibit impairment of registrars == impairment of domain (aka: registrars are criticial infra)
    - Impaired non-registrar ACP node (man-in-middle) can not create new functional attacks other than filtering traffic (wrt. e.g.: GRASP discovery of EST server announcements)
  - Signaling of non-well-known-port number via DULL GRASP is another attack vector
    - Attacker on LAN can send e.g.: ACP over DTLS with 10,000 port numbers (DoS attack)
    - But "experts" not willing to agree that using well-known port numbers would be a good way to overcome issue. Toerless picked wrong experts to ask (mDNS: same problem, but their "services" very much depend on not having to assign well-known port numbers, whereas ACP-over-DTLS would be a very reasonable future ask (except that maybe now QUIC will superceed DTLS....)
  - Finally got the extension point syntax for AcpNodeName and GRASP right...
  - New separate section for "TLS security requirements" (6.1)
    - Merged from other places. Finally the short section other similar RFCs could steal (5 years ago GRASP ? ;-)
  - New A.10.9 for possible future ASA "discovery ACP secure channel downgrade attacks"
- Aka this all took time because there was a lot of fine-tuning of security text details involved
  - But security folks from IESG seem to like the result now

-30 The leftovers

- Final pass with Eric Vyncke (ACP responsible AD)
- Toerless' "denglish" vs. Microsoft spell checker: 0:100 , microsoft wins.
  - Really didn't make sense to attempt repeating this for every prior draft version because i did not find a way to avoid the 1000 non-issues raised (recurring wasted time)
- Four considerations where we could not get agreement and/or enough review, so can not be in RFC
  1. Making secure channel negotiation better / safe against downgrade attacks via an initial TLS/GRASP negotiation step

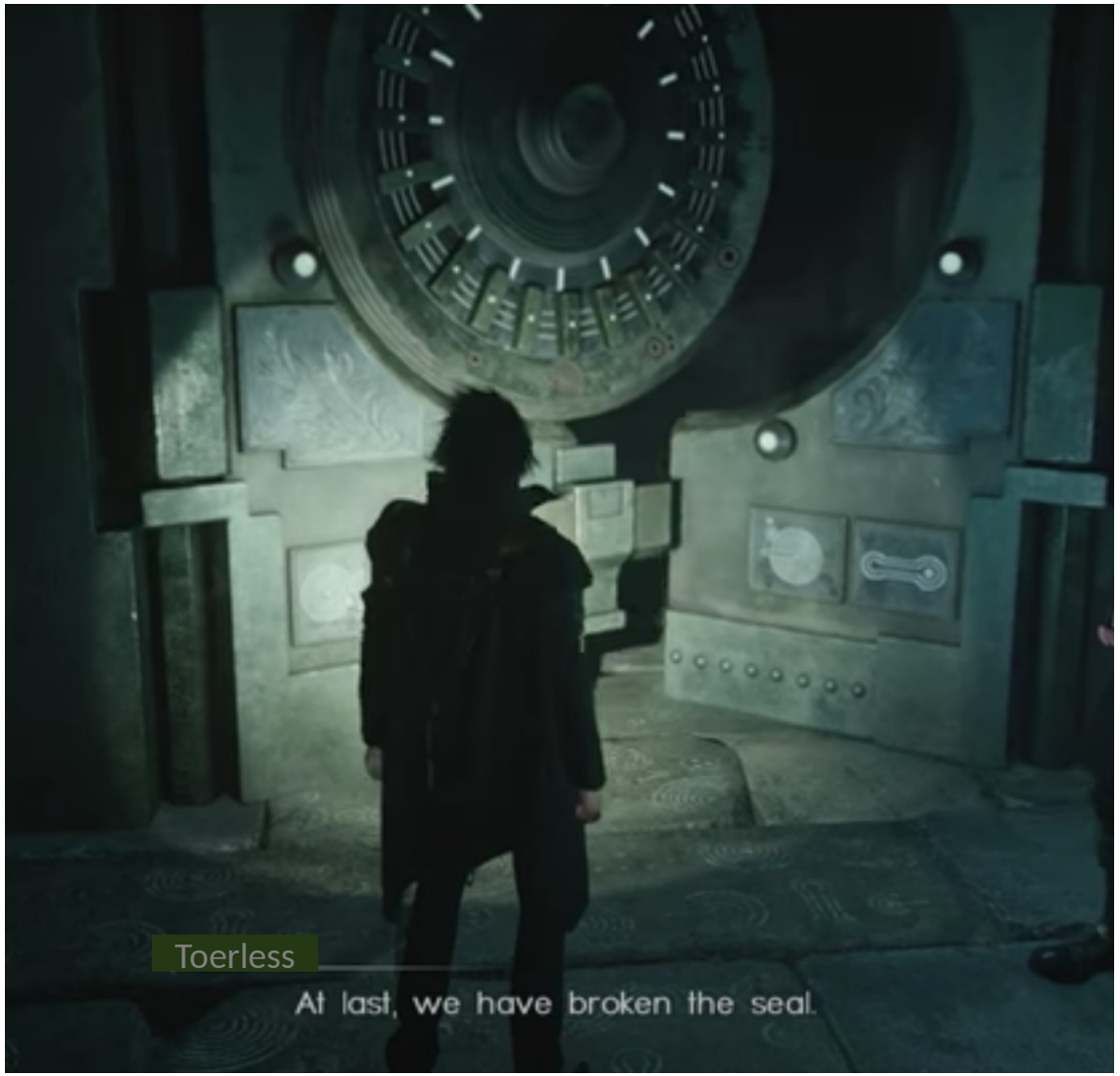
     Was marked for removal in RFC for years now already, as WG thought it was too complex. Ben Kaduk actually likes the idea and also contributed text, but of course, e-too-late now for RFC
  2. New: answer to Q: from BenK "should ACP address of peers certificate be verified at transport stack" – IMHO NO, does not make sense, but not enough time to discuss this
  3. Recent (since ca -25) How would ACP work with Public CA ? Some IMHO good and correct text, but Mcr started to also have interesting (counter?)arguments…

     Hint: if we had been able to keep rfc822Name, we could be using public CA NOW for ACP… *sigh*

     So… Having this argument/text in a future draft might be a lot better to continu this line of thought
  4. Hardening DULL GRASP (from -29)
- These four considerations now in new appendix B.
  - Marked for RFC editor removal
  - Toerless tried to innovate a new way to leave breadcrumps in the RFC to these leftovers –reference to [ACPdraft], but Eric couldn't bring himself to approve of this
  - Aka: "normal" IETF process "you need to know" – look into last draft to know what didn't make it into the RFC.

Cluster C325 unlocked

pending RFC-edit work (top of queue ?!)



Thank You!