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3GPP - IETF Report

Numerous discussions were promulgated in the last two months, with the ultimate goal to utilize the Internet functionality, when possible, in the third generation wireless network. This document highlights the main areas of collaboration, the results of the last two months and also some recommendations derived from this experience.

Charging /SA5

A liaison was established with the IETF AAA with the objective of influencing the accounting protocol, being developed by AAA, so that it satisfies the SA5 Charging rapporteur group requirements.

A presentation was prepared for and made at the IETF December meeting, that identified fourteen salient differences between the Charging rapporteur group protocol requirements and the main IETF AAA protocol requirements document <draft-ietf-aaa-na-reqts-07.txt>. All fourteen suggestions were regarded as being important by the AAA and addressed in the responses, suggesting intended compliance. Several responses solicited additional information. The responses were reported to the Charging rapporteur group and to SA5 (Tdoc S5-010023). The release 4 AAA requirements were summarized into a liaison statement which was approved by the SA5 at the February meeting (TdocS5-010127) and will be presented at the March 2001 AAA meeting.

The SA5 Charging rapporteur group "Building Block 2" work item (S5-000027) is the plan to establish the initial charging technical specifications for All IP charging. An important aspect of Building Block 2 is to coordinate with the IETF AAA in their development of a wireless protocol that can be adopted by the All IP charging functional entities. Liaison statements are intended to achieve this coordination. Hence, a liaison is needed who will participate in both SA5 and AAA. Considering the current stage of development, and with efficient coordination, it appears possible to have the first AAA charging protocol version completed within the Release 5 timeframe.

Robust Header Compression

Major progress has been made in the IETF ROHC WG on the Robust Header Compression protocol. The IESG (Internet Engineering Steering Group) has now approved ROHC as proposed standard track, with the following RFC numbers:

- RFC 3095: (ROCH): Framework and four profiles: RTP, UDP, ESP, and uncompressed.
- RFC 3096: Requirements for robust IP/UDP/RTP header compression.

The work on the ROHC component of the WI was completed and the results and recommendations are included in the TR-25.844, Radio Access Support Enhancements (Release 4).

SIP

The problem with SIP adoption seems to be its slow standardization by IETF and therefore there is a great need for IETF to expedite finalization of SIP.

The RFC 2543 is the only work on SIP that is currently referenceable. However, this main SIP document is currently being updated by a new id draft-ietf-sip-rfc2543bis-01.txt, which expires in April 2001.

This revised version of the main SIP document defines the fundamental methods and headers. There is discussion of splitting the document into two; into framework and methods drafts, possibly to help with the IMPP implementations that may not need all of the SIP methods. No timescales are currently set for this document to go to last call.

A summary of technical changes from the original RFC has been compiled in the list below.

1. Reliability of provisional responses in SIP (draft-ietf-sip-100re-02.txt) This document which defines a new PRACK method (i.e. new headers fields) was submitted to the IESG on July 2000.
2. Integration of resource management and SIP. This document (draft-sip-manyfolks-resource-00.txt) discusses how QoS and security establishment can be made a precondition to sessions initiated by the SIP. It proposes an extension to SIP to add a new COMET method. This document was accepted as a SIP WG item in December, but it depends on 2543 bis draft as uses 183 responses.
3. SIP extensions for caller identity and privacy (draft-ietf-sip-privacy-00.txt). This document defines new Anonymity and Remote-Party-Id headers and the extensions that allow the parties to be identified either by name or by type, the latter of which can be used to identify some group of callers and callees. This document was accepted as a SIP WG item in December, but it depends on the 2543bis draft as well on the "manyfolks" draft.
4. SIP extensions for media authorization (draft-ietf-sip-call-auth-00.txt). This document defines a new Media-Authorization header. It was accepted as a SIP WG item in December and it depends on 2543bis draft as uses 183 responses.

It is important to notice that all of the above Internet-drafts are important for the 3GPP standardization.

Smart Cards

Two documents relating to the smart cards were listed in January:

1. The "draft-guthery-tcp7816-01.txt" draft describes the transport of TCP and UDP packets over the IP layer of ISO 7816 integrated circuit ("smart") cards with particular attention to header compression. It expires in July and there is no working item defined in Release 5.
2. The "draft-guthery-ip7816-01.txt" draft describes the transport of IP datagrams and ARP messages over the ISO 7816 link layer of integrated circuit ("smart") cards. It expires in July and there is no working item related with this item in Release 5.

Ipv6

Stephen Hayes' report underlines that not all ramifications of using Ipv6 may have been worked out. The IETF, according to private individuals, would welcome the opportunity to review the 3GPP architectural plans for use of IPv6 to ensure that there are no unforeseen problems (e.g., Ipv6 DNS operational needs, IPv6 SMTP operational requirements, DHCP, short term NAT requirements for Ipv6 transition, .. ETC).

Recommendations:

1. It is recommended that the 3GPP actively solicit help from IETF to accelerate the standardization process in the areas where inefficiencies exist (i.e. transport - SIP)
2. Proactively, I will engage in dialogue with ADs and build the awareness of the areas of importance for Release 4/5 fulfillment (e.g. SIP, QoS, Ipv6).
3. 3GPP individual members are encouraged to be active within the IETF via mailing lists and participate in the various studies and answering the various questions posed by the IETF ADs.
4. Understand the scope of some BOFs (see the list) and their relation with relevant areas to 3GPP (e.g. user registration, presence services and SIP, Ipv6, local area)
 - Basic User Registration Protocol - the BOF aims to determine if a registration protocol, i.e. a simple or basic user registration, decoupled from the lower layers is needed.
 - Presence and Instant Messaging Protocol (prim) the BOF aims to define a protocol compliant with CPIM (Common Profile for Instant Messaging)
 - SIP for Instant Messaging and Presence Leveraging Extensions (SIMPLE) the BOF aims to investigate ongoing work towards the standardization of SIP for presence as a transfer protocol supported within the CPIM framework
 - Site Multihoming in Ipv6 - the BOF aims to discuss the multihoming approaches and to define the type of requirements needed to be defined
 - Internet Personal Appliances Control - the BOF aims to reach a consensus on what part of the problem space would be most appropriate for study in the IETF. The IPA devices are considered to be simple, with limited configurations (e.g. washing machines, lamps, TVs)