Message String Extension

Venkatesh Sastry

Kent Leung

Alpesh Patel

Background

- Mobile users should be informed about status of Registration Request

- "Reply code" does not give enough details to generate a meaningful message

- Exact interpretation could depend on deployment

- For. e.g. message could be like, pre-paid quota is exhausted, international roaming is disabled, etc

Overview

- Defines a new skippable extension for use in Registration Reply (RRP)

- Both Home Agent and Foreign Agent can add the extension to RRP

- The extension carries a text string, which can be displayed on mobile node user interface

- The message carried is deployment specific

Format of the Extension

```
 0                   1                   2                   3
 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1
+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+
|  Type         |    Length     |    SubType    | Text . . .
+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+
```

Sub-Type:
- 1: if the extension is added by Home Agent
- 2: if the extension is added by Foreign Agent

Text: Implement dependent message to be displayed on the user interface

Home Agent consideration

- If added by HA, must appear before MHAE
- In case of authentication failure, text could be a failure reason message
- In case of successful authentication, text could be a welcome message

Foreign Agent consideration

- Foreign Agent can add Message String Extension to Registration Reply
- The extension can be added
  - to the registration reply sourced by Foreign Agent
  - to the registration reply relayed by Foreign Agent

Mobile Node consideration

- Interpretation is implementation specific
- Typical usage is to display the text field of Message String Extension on Mobile Node's user interface
- MN may throttle the messages displayed

Thank You