Proposed Modifications to AS Macro and Community Attribute Syntax

Brian Renaud
renaud@merit.edu

Overview

- Current Syntax Can Produce Difficult Names
  - For long names
    - AS-ISPMAEEASTPEERS
  - For structured names
    - ISPGERMANROUTES

AS-Macro Syntax

- Syntax
  - Format
    - **AS-<*string*>**
  - Constraints on **<*string*>**
    - must be at least one character long
    - must contain only upper case letters, lower case letters, digits, underscores or dashes
    - must start with upper case or lower case letter

AS-Macro Syntax

- Case Insensitive
  - **AS-EBONE** same as **as-ebone**
- Examples
  - **as-ebone**
  - **AS-ISP-Some-Of-My-Favorite-Peers**

AS-Macro Syntax

- Discussion Points
  - Mandate <*string*> length > 1?
  - Mandate <*string*> end in letter or digit?
  - Allow case sensitive matches?

Community Syntax

- Syntax
  - Format
    - <*community*>
  - Constraints on <*community*>
    - must be at least on character long
    - must contain only upper case letters, lower case letters, digits, underscores or dashes
    - must start with upper case or lower case letter

Community Syntax

- Constraints on **<***community***>**
  - must not start with pattern "[Aa][Ss]"
  - must not be the same as any routing policy expression keywords
- Case Insensitive
  - **WCW** same as **wcw**

- Examples
  - **WCW**
  - **ISP-Transit-1**

Community Syntax

- Discussion Points
  - Mandate <*community*> length > 1?
  - Mandate <*community*> end in letter or digit?
  - Allow case sensitive matches?