ISP Networks

draft-lind-v6ops-isp-scenarios-01.txt
draft-ksinant-v6ops-isp-analysis-00.txt

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Status update since IETF 57

- Scenarios draft revised
  - draft-lind-v6ops-isp-scenarios-01.txt
- Analysis draft published
  - draft-ksinant-v6ops-isp-analysis-00.txt
- Some changes of members in the design team

Scenarios document layout

1. Brief description of a generic ISP network
   - Gives a generic view of an ISP
2. Transition Scenarios
   - Defines possible scenarios when transitioning between different stages
3. Future Stages
   - Possible future action not covered by the basic stages
4. Example networks

- One generic view and four concrete examples
- The examples is to be used to verify findings in the generic view

Scenarios updates

- A general bulk up of the document based on WG comments
- Still based on a generic ISP network view but with addition of examples
- Updates on the network description
- Stages and transition is now combined in the scenarios section
- Combination of different stages in different parts of network has been added

Scenarios direction

- Retained the generic approach with a basic network view
- Now Includes concrete network examples based on the basic network view
- The examples are to be used to illustrate the generic network view and verify in the analysis

Scenarios direction 2

- Does the scenarios need more detail?
- Should the examples be used as illustration and verification or should the analysis be based on the examples?
- Is a background to current v4 techniques useful or necessary? (like draft-mickles-v6ops-isp-cases-05.txt)
- Current document has a loose "core-access-exchange" separation. Should we try to improve this? Reasons:
  - Restricting
  - Not valid
  - Too vague
- If so, what could we do instead?
  - Only do a few examples
  - …

Analysis – Approach taken

- Overall analysis of the transition scenarios defined in the scenarios document
- Goes through generic issues i.e. routing and multicast
- Looks at ways of migrating core and access separately
- Points out possible solutions and steps needed to be taken
- Does not point out the “best” solution for a specific case
- Does not cover the examples defined in the scenarios, yet

- The goal is to evaluate the suitability of the already defined transition mechanisms in the ISP context

Analysis - Generic issues

- Core Transition actions
  - Steps in transitioning core networks
  - Configuration of core equipment
  - Routing
  - Multicast
- Access transition actions
  - Steps in transitioning access networks
  - Access control
  - Configuration of customer equipment
  - Traceability
  - Multi-homing
  - Filtering in the access network
- Exchange points actions
- Back-Office actions

Analysis - A few questions to the working group

- Is the current approach right?
- Should we go deeper into details:
  - In which proportion is back-office / network infrastructure in scope of this effort?
  - Is it useful to discuss each type of access technologies?
    - If it is, do we need separate documents or a single one?
- Are there other important issues to cover?
  - Should we deal with address allocation issues?
    - issues arising when applying for IPv6 addresses from RIR,
    - definition of addressing plans,
    - set up of support and technical processes,
    - address allocation mechanisms.

Analysis direction

- Continue on the current track:
  - Changes in the scenarios document to be processed
    - The examples will be added
  - Taking into account working group feed-back
  - Some sections still have to be completed

The future

- Continue working on the documents to reflect the WG consensus
- Adopt the drafts as WG items?
  - Subject to the changes discussed here

Team members

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