

Consideration for TVR Requirements

draft-wang-tvr-requirements-consideration-00

J. Wang, China Mobile (Presenter)

P. Liu, China Mobile

Requirements (1/3)

- **Support Identification of Time-Variant Node and Non-Time-Variant Node**
 - Rationale: In the usecase of Time-Variant Routing , there may be two types of network composition. One is composed entirely of Time-Variant Nodes. For example, the location of network nodes in LEO will change from time. The other is composed of Time-Variant Nodes and Non-Time-Variant Nodes. For example, some network nodes have different power supplies. Some network nodes can be continuously powered, while others may change over time.
 - R1: MUST provide a discovery and resolving methodology for the identification of Time-Variant Node and Non-Time-Variant Node.

Requirements(2/3)

- **Support Different Advertisement Strategies for Time-Variant Node and Non-Time-Variant Node**
 - Rationale: There may be two types of nodes in the network, namely Time-Variant Node and Non-Time-Variant Node. In TVR, the information advertisement of nodes needs to be advertised in order to make routing decisions. Redundancy of information advertisement in the network is a typical problem. In the use case of Time-Variant Routing, the advertisement of Time-Variant Nodes will affect the routing decision. If Time-Variant Nodes and Non-Time-Variant Nodes adopt the same advertisement strategy, advertisement overhead may become larger.
 - R2: **MUST** support different advertisement strategies for Time-Variant Nodes and Non-Time-Variant Nodes.

Requirements(3/3)

- **Support classification of Time-Variant Nodes**

- Rationale: There are Time-Variant Nodes and Non-Time-Variant Nodes in the network. The information change of each Time-Variant Node may affect the routing decision. However, the influence of the information change of each Time-Variant Node on the routing decision is inconsistent. This is related to the change trend of Time-Variant Node information over time. It is helpful to set different advertisement strategies for different Time-Variant Nodes through the classification.
- R3: MUST provide a classification methodology for classification of Time-Variant Nodes.

Next Steps

- We hope our proposals can be of help to WG.
- Any discussions and comments are welcome.