Updates: Information Distribution in Autonomous Networking

draft-liu-anima-grasp-distribution-11

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Recall: Draft Content and Scope

- GRASP Basic: Discovery/Negotiation/Sync
- GRASP Extention: Un-solicited Sync/Sub-Pub

**Specific ASAs**
(IGP-config/VPN-config/Slicing etc.)

**Infrastructure ASAs**
- ASA Lifecycle Management
- ASA Conflict

**Information Distribution**
- Selective Flooding
- Event Queue
- Data Storage

**GRASP Protocol Stack**

**GRASP APIs**

**Our draft**
Main changes of 11 version (since IETF’104)

- Added Section 5.2.3
  - Discussions about how information distribution can be composed by using existing GRASP APIs
  - Focused on asynchronous communication cases
## Storing and publishing information

<table>
<thead>
<tr>
<th>OPERATION</th>
<th>GRASP API</th>
<th>OPTION</th>
<th>RETURN VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>storeDataReq</td>
<td>discover()</td>
<td>objective=&quot;PUT_DATA&quot;</td>
<td>ASA_locator or error_code (e.g. “no_space”)</td>
</tr>
<tr>
<td>storeData</td>
<td>synchronize()</td>
<td>ASA_locator. Data Payload, ...</td>
<td>store_data_ack</td>
</tr>
<tr>
<td>pubInfo</td>
<td>flood()</td>
<td>objective=&quot;selective_flooding&quot;, topic=&quot;newData&quot;</td>
<td>N/A</td>
</tr>
</tbody>
</table>
## Subscribing and getting information

<table>
<thead>
<tr>
<th>OPERATION</th>
<th>GRASP API</th>
<th>OPTION</th>
<th>RETURN VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>subInfo</td>
<td>registerObjective()</td>
<td>objective=&quot;topicTitle&quot;</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>flood()</td>
<td>ASA_locator,</td>
<td>.store_data_ack</td>
</tr>
<tr>
<td></td>
<td></td>
<td>objective=&quot;topicTitle&quot;</td>
<td></td>
</tr>
<tr>
<td>notifyData</td>
<td>synchronize()</td>
<td>Objective=&quot;topicTitle&quot;,</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>payload=&quot;data&quot;</td>
<td></td>
</tr>
</tbody>
</table>
Future Work

- Complete procedures of information distribution
- Further map to GRASP APIs to support full information distribution
  - E.g. with prioritization
Thank You

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