Discovery of Service consumption by STAs

Authors:

<table>
<thead>
<tr>
<th>Name</th>
<th>Affiliation</th>
<th>Address</th>
<th>Phone</th>
<th>email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antonio de la Oliva</td>
<td>InterDigital</td>
<td></td>
<td></td>
<td><a href="mailto:aoliva@it.uc3m.es">aoliva@it.uc3m.es</a></td>
</tr>
<tr>
<td>Robert Gazda</td>
<td>Interdigital</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Service discovery requirements

• Within the requirements document there is the explicit need for service discovery:
  • **R3.5.2:** 802.11bc amendment shall have a mechanism to facilitate the discovery of STAs consuming a particular broadcast service.
• This must be done for associated/un-associated STAs
• **Proposal is to use ANQP Request/Response originated from AP**
Operation

Replying STAs are the ones consuming the service

---

AP

Non-associated/associated STA consuming eBCS

Non-associated/associated STA not consuming eBCS

eBCS STA Consumed Service discovery Request (ANQP Query encapsulated in GAS)

eBCS STA Consumed Service discovery Response (ANQP Query encapsulated in GAS)
Considerations

- GAS in broadcast will require all STAs (associated/non-associated) to process the message.
  - Suggestion-> Reserve a groupcast address for STA service discovery
- Large number of STAs may be answering the request
  - Query must contain the service asked for (there should be no possibility to ask for all services)
  - This can also be mitigated by using GAS with a groupcast address (GAS implements mechanisms to reduce the signalling storms)
Straw Poll 1

• Do you agree to add to the TGbc SFD:
  • TGbc shall define a mechanism for APs to discover services consumed by STAs through an extension to ANQP.