Bowler RPC

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1 Discovery

1.1 Packet Format

1.1.1 General Discovery Packet Format

Figure 1 shows what the PC sends the device to initiate a discovery operation. Any additional operation-specific data is sent in the Payload section. The entire packet is 64 bytes.

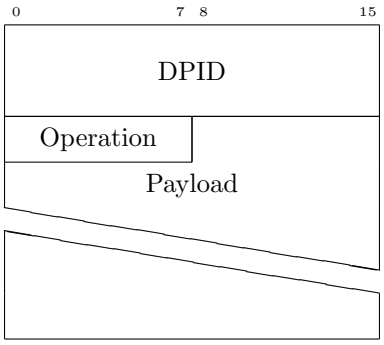

Figure 1: Discovery-time send packet format.

- DPID (Discovery Packet ID): 4 bytes
  - The DPID field is typically filled by SimplePacketComs and contains the ID for the packet it is contained in.
- Operation: 1 byte
  - The Operation field states the operation the packet performs.

Figure 2 shows what the device sends the PC to complete a discovery operation. Any additional operation-specific data is sent in the Payload section. The entire packet is 64 bytes.

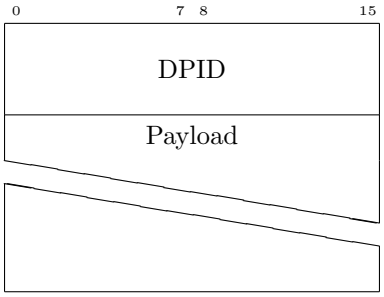

Figure 2: Discovery-time receive packet format.

- DPID (Discovery Packet ID): 4 bytes
  - The DPID field is typically filled by SimplePacketComs and contains the ID for the packet it is contained in.

1.1.2 Discovery Packet

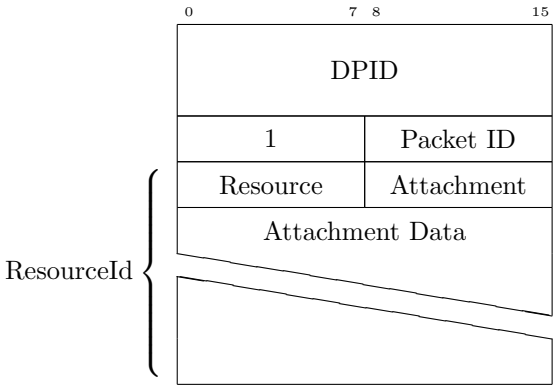

Figure 3: Discovery send packet.

- DPID (Discovery Packet ID): 4 bytes
  - The DPID field is typically filled by SimplePacketComs and contains the ID for the packet it is contained in.
- Packet ID: 1 byte
  - The Packet ID is a new ID for the Packet being discovered.
- Resource: 1 byte
  - The Resource encodes the type of the resource. It is the `ResourceId.resourceType.type`.

- Attachment: 1 byte
  - The Attachment encodes the type of the attachment point. It is the `ResourceId.attachmentPoint.type`.
- Attachment Data: 1+ bytes
  - The Attachment Data is any data needed to fully describe the Attachment. It is the `ResourceId.attachmentPoint.data`.

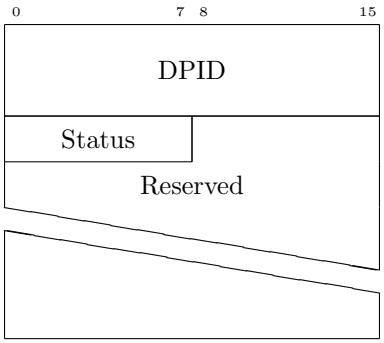

Figure 4: Discovery receive packet.

- DPID (Discovery Packet ID): 4 bytes
  - The DPID field is typically filled by SimplePacketComs and contains the ID for the packet it is contained in.
- Status: 1 byte
  - The Status field encodes the status of the discovery operation. 1 = Accepted, 2 = Rejected.