WHEP 'Reconnect event' Proposal

https://github.com/wish-wg/webrtc-http-egress-protocol/pull/16

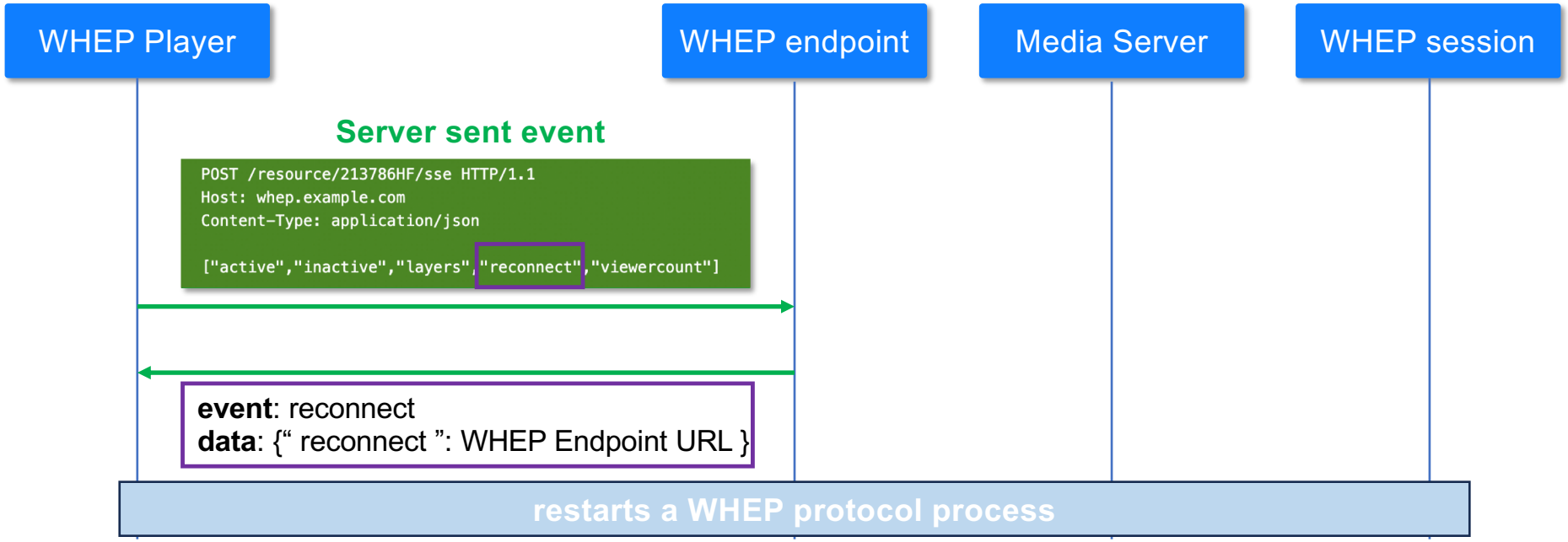
Use Case: WHEP *'Reconnect event'*

- Propose to add a "Reconnect event" in section 4.6.1 "Server-Sent Events extension".
- The reconnect event is sent by the WHEP Resource when the following situation occurs:

1. The quality of service of the WHEP Resource declines which affects the quality of experience for end users.

2. The connection between WHEP player and WHEP Resource is degraded which affects the quality of experience for end users.

Upon the receipt of the reconnect event, the WHEP player restarts a WHEP protocol process by sending the HTTP POST request to the WHEP endpoint URL.



Reconnect event extension

```
POST /resource/213786HF/sse HTTP/1.1
Host: whep.example.com
Content-Type: application/json

["active","inactive","layers","reconnect","viewercount"]

HTTP/1.1 201 Created
Location: https://whep.example.org/resource/213786HF/sse/event-stream
```

Upon the receipt of the reconnect event, the WHEP player restart a WHEP protocol process by sending the HTTP POST request to the WHEP endpoint URL.

* event name: "reconnect"
* event data: JSON object containing the WHEP Endpoint URL used for the WHEP player to restart the WHEP protocol process.

Discussion:

"use the original url" vs "WHEP Endpoint url"

Options	Advantage	Disadvantage
Original URL	Simple for implementation	No flexibility
Configurable URL	More flexible	Implementation cost

Thanks!