

MCP Session ID Header Guide

The **Mcp-Session-Id** header is part of the Model Context Protocol (MCP) specification. It provides a consistent identifier for session-based communication between clients and servers. This guide explains its purpose, lifecycle, and implementation examples.

1. Purpose of Mcp-Session-Id

The header allows the MCP client and server to associate multiple HTTP requests with a single logical session. This is essential for maintaining conversation context and managing resources efficiently on the server.

2. Header Lifecycle

Step	Description
1. Initialization	Client sends initial request (without Mcp-Session-Id). Server responds with Mcp-Session-Id header.
2. Subsequent Requests	Client includes Mcp-Session-Id in every follow-up request.
3. Missing Header	If required but missing, the server returns HTTP 400 Bad Request.
4. Expired Session	If session is invalid, server returns HTTP 404 Not Found.
5. Termination	Client can send DELETE with Mcp-Session-Id to end the session.

3. Example HTTP Exchange

Initialization Request:
POST /mcp/init HTTP/1.1 Host: api.example.com Content-Type: application/json
Response:
HTTP/1.1 200 OK Mcp-Session-Id: 7f83b52a-09a7-4a9e-9ac3-c92d8d3a9c42 Content-Type: application/json
Subsequent Request:
POST /mcp/event HTTP/1.1 Host: api.example.com Mcp-Session-Id: 7f83b52a-09a7-4a9e-9ac3-c92d8d3a9c42 Content-Type: application/json

4. Example Node.js Implementation

```
```js
import fetch from "node-fetch";
async function initSession() {
 const initRes = await fetch("https://api.example.com/mcp/init", {
 method: "POST",
 });
 const sessionId = initRes.headers.get("Mcp-Session-Id");
 console.log("Session ID:", sessionId);
 return sessionId;
}
async function sendEvent(sessionId) {
 await fetch("https://api.example.com/mcp/event", {
 method: "POST",
 headers: {
 "Mcp-Session-Id": sessionId,
 "Content-Type": "application/json",
 },
 body: JSON.stringify({ type: "event", payload: { message: "Hello" } }),
 });
}
(async () => {
 const sessionId = await initSession();
 await sendEvent(sessionId);
})();
```
```

5. References

- Model Context Protocol Specification: <https://modelcontextprotocol.io/specification/latest> - MCP
Transports Overview: <https://modelcontextprotocol.io/docs/concepts/transports>