Arrowhead Gateway Core Service 4.1.3 Release Notes

In Arrowhead version 4.1.3, the whole codebase of the Arrowhead framework has been rewritten using Spring Boot technology. We believe the new version is better both in code quality, performance and robustness. It is easier to use, maintain and improve.

However, this means that Arrowhead version 4.1.3 is NOT compatible with providers and consumers written for version 4.1.2 because the changes affect not just the backend but the public interface of the core services, too.

This document describes the new public API of the Arrowhead Gateway Core Service 4.1.3 and shows the key differences between the new interface and the old one.

Client Services

These services can be used by providers and consumers of the Arrowhead Cloud.

Uri: /gateway/echo
Type: GET

Returns a "Got it" message with the purpose of testing the core service availability.

4.1.2 version: GET /gateway
It returned with a different text.

Management Services

These services can only be used by the system operator of the local cloud. All date fields contain the text representation of a UTC timestamp.

Uri: /gateway/mgmt/sessions
Type: GET
Query params:
- *page* – zero-based page index (optional),
- *item_per_page* – maximum number of items returned (optional)

Returns a page of active gateway sessions. If page and item_per_page are not defined, returns all sessions.

Returned JSON structure:

```
{
  "count": 0,
  "data": [
    {
      "consumerCloud": {
        "operator": "string",
        "name": "string",
        "neighbor": true,
        "secure": true,
        "authenticationInfo": "string",
```

```json
      "gatekeeperRelayIds": [
        0
      ],
      "gatewayRelayIds": [
        0
      ]
    },
    "consumer": {
      "systemName": "string",
      "address": "string",
      "port": 0,
      "authenticationInfo": "string"
    },
    "consumerServerSocketPort": 0,
    "providerCloud": {
      "operator": "string",
      "name": "string",
      "authenticationInfo": "string",
      "neighbor": true,
      "secure": true,
      "gatekeeperRelayIds": [
        0
      ],
      "gatewayRelayIds": [
        0
      ]
    },
    "provider": {
      "systemName": "string",
      "address": "string",
      "port": 0,
      "authenticationInfo": "string"
    },
    "serviceDefinition": "string",
    "relay": {
      "address": "string",
      "port": 0,
      "type": "string",
      "exclusive": true,
      "secure": true
    },
    "peerName": "string",
    "queueId": "string",
    "requestQueue": "string",
    "requestControlQueue": "string",
    "responseQueue": "string",
    "responseControlQueue": "string",
    "sessionStartedAt": "string"
    }
  ]
}
```

If a provider and a consumer are in different clouds and there is no direct communication route, the gateway core service established a connection between them using a relay. An active connection object contains data about that connection: information about the consumer and the provider, the used service, the used relay and some relay-related technical information which can be used to close the connection from outside if needed.

4.1.2 version: GET /gateway/management
This version always returned all sessions in an array of JSON objects. The objects contained slightly different technical information.

Uri: /gateway/mgmt/sessions/close
Type: POST

Closes an active session.

Input JSON structure:

```
{
  "consumerCloud": {
    "operator": "string",
    "name": "string",
    "neighbor": true,
    "secure": true,
    "authenticationInfo": "string",
    "gatekeeperRelayIds": [
      0
    ],
    "gatewayRelayIds": [
      0
    ]
  },
  "consumer": {
    "systemName": "string",
    "address": "string",
    "port": 0,
    "authenticationInfo": "string"
  },
  "consumerServerSocketPort": 0,
  "providerCloud": {
    "operator": "string",
    "name": "string",
    "authenticationInfo": "string",
    "neighbor": true,
    "secure": true,
    "gatekeeperRelayIds": [
      0
    ],
    "gatewayRelayIds": [
      0
    ]
  },
  "provider": {
    "systemName": "string",
    "address": "string",
    "port": 0,
    "authenticationInfo": "string"
  },
  "serviceDefinition": "string",
  "relay": {
    "address": "string",
    "port": 0,
    "type": "string",
    "exclusive": true,
    "secure": true
  },
  "peerName": "string",
  "queueId": "string",
  "requestQueue": "string",
  "requestControlQueue": "string",
  "responseQueue": "string",
  "responseControlQueue": "string",
```

```
  "sessionStartedAt": "string"
}
```

4.1.2 version: Not existed.

Private Services

These services can only be used by other core services, therefore they are not part of the public API.