1. HTTP Streaming

Data captured by MR recorder can be streamed live by means of TCP-IP connection. MR software setup can enable HTTP streaming and select the host port. If enabled, Once recorder activates the hardware, it creates an HTTP server responding with JSON-formatted payload to these HTTP GET requests:

GET /headers

Lists all channels available for streaming with their information.

```
{ "headers": [
{"name":"Pelvis","id":"human.pelvis","index":0,"type":"vector3.rot","device":"MyoMotion","units":"",
{"name":"Pelvis Position","id":"human.pelvis.pos","index":1,"type":"vector3.pos","device":"MyoMotion
{"name":"Pelvis Course","id":"human.pelvis.course","index":2,"type":"real.angle","device":"MyoMotion
]}
```

Here:

index

logical index of the channel which will be later used to identify which channel a data packet belongs to.

name

channel name

id

non-localized channel id

type

describes the nature of each data quantum, takes one of the following values:

real.angle

each sample is a floating-point angle value in deg

vector3.pos

each sample is a 3-component vector; components of all samples are returned as a single array containing 3*number_of_samples

vector3.rot

each sample is the vector part of the rotation quaternion; components of all samples are returned as a single array containing 3*number_of_samples

vector3.accel

samples with 3-component acceleration

units

measurement units if applicable

sample rate

floating-point number of samples per second for this channel

device

used to identify the device channels belong to

GET /samples

Returns array of newly-arrived data samples, channel-wise.

```
{ "channels": [
{"index":0,"sampleindex":1875, "samples":[0.001704,-0.003827,-0.0023543 ]},
{"index":1,"sampleindex":1875, "samples":[1.000000,-2.003827,7.7699854 ]}
]}
```

Here:

index
channel index for associating the header information

sampleindex
the number of indexes from the beginning of the acquisition and to this actual data block.

samples
array of values, multi-component channels return data in a single array.

GET /disable/n
excludes channel n from streaming. On success, returns an empty JSON structure { }, on error, returns { "error":"invalid channel index specified" }.

GET /disable/all
excludes all channels from streaming, returns emtpy JSON structure.

GET /enable/n
includes channel n into streaming. On success, returns an empty JSON structure { }, on error, returns { "error":"invalid channel index specified" }.

GET /enable/all
includes all channels into streaming, returns emtpy JSON structure. By default, all channels are enabled.