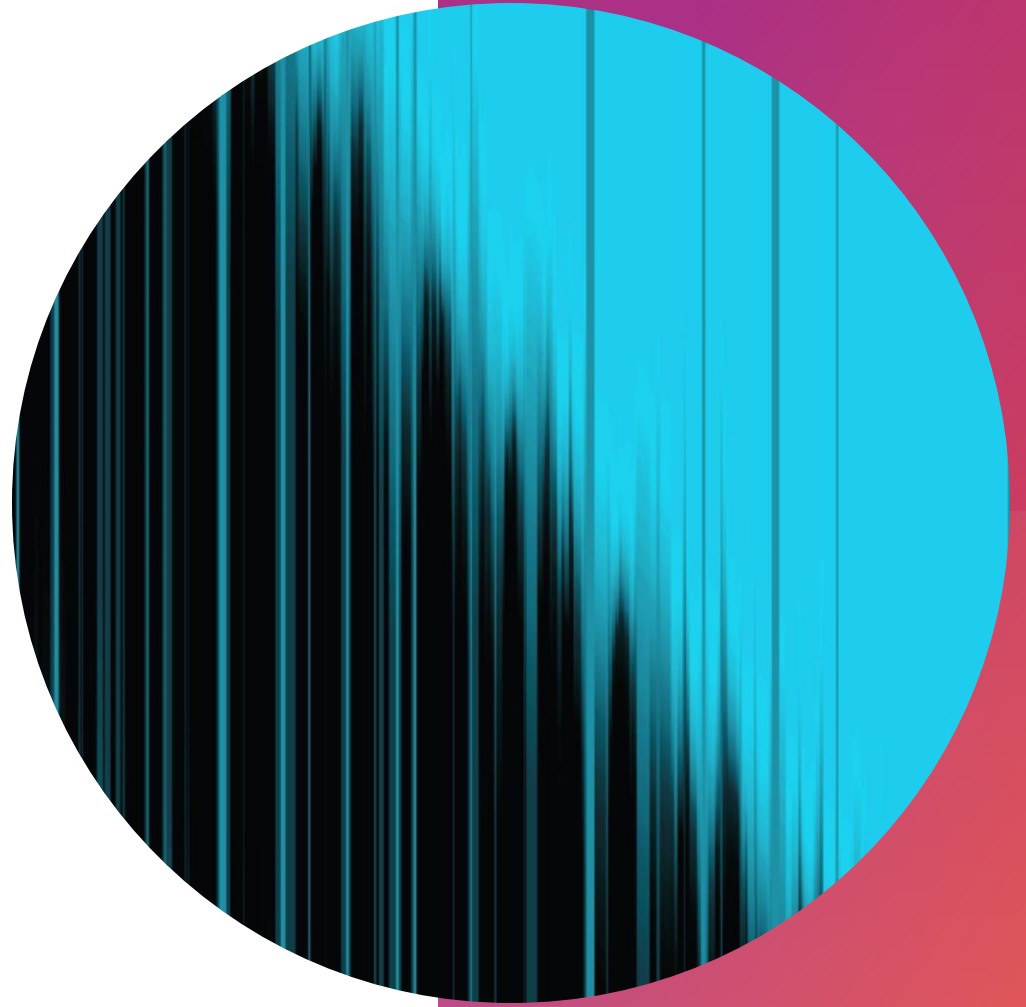


HTTP Daemon

ONEM2M TINY IOT PROJECT

엄경호

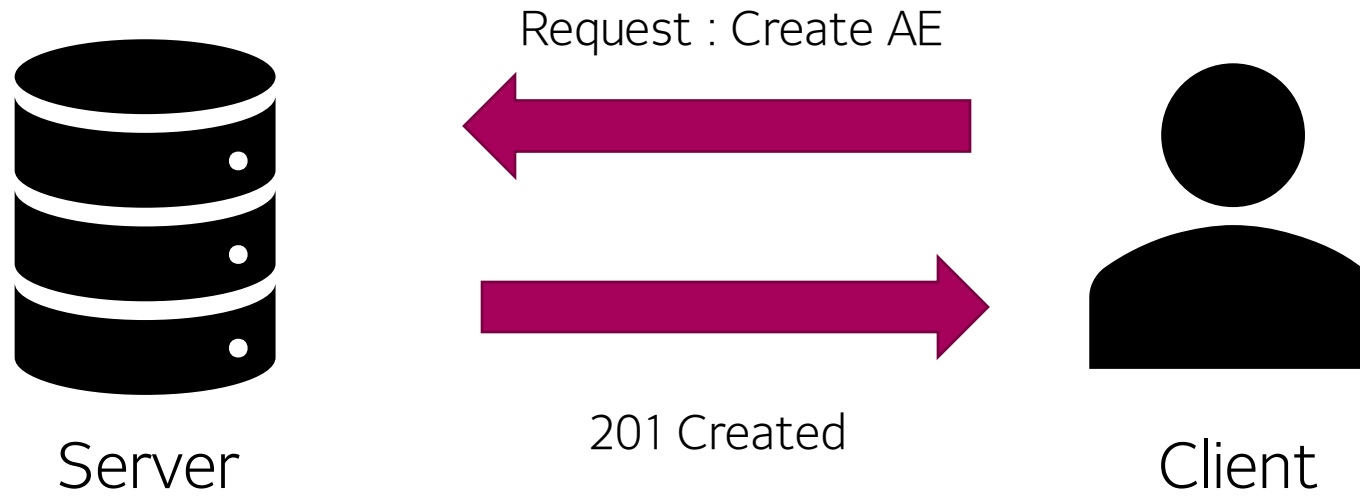


HTTP Daemon ?

HTTPd is a software program that usually runs in the background, as a process, and plays the role of a server in a client-server model using the HTTP and/or HTTPS network protocol(s).

출처 - WIKIPEDIA

HTTP Daemon ?



지난 주 진행 상황

```
{
  "to": "Mobius",
  "fr": "TAE",
  "op": 1,
  "rqi": "1234",
  "pc": {
    "m2m:ae": {
      "rn": "tiny_ae_test",
      "api": "tinyProject",
      "rr": true
    }
  }
}
```

Protocol Binding



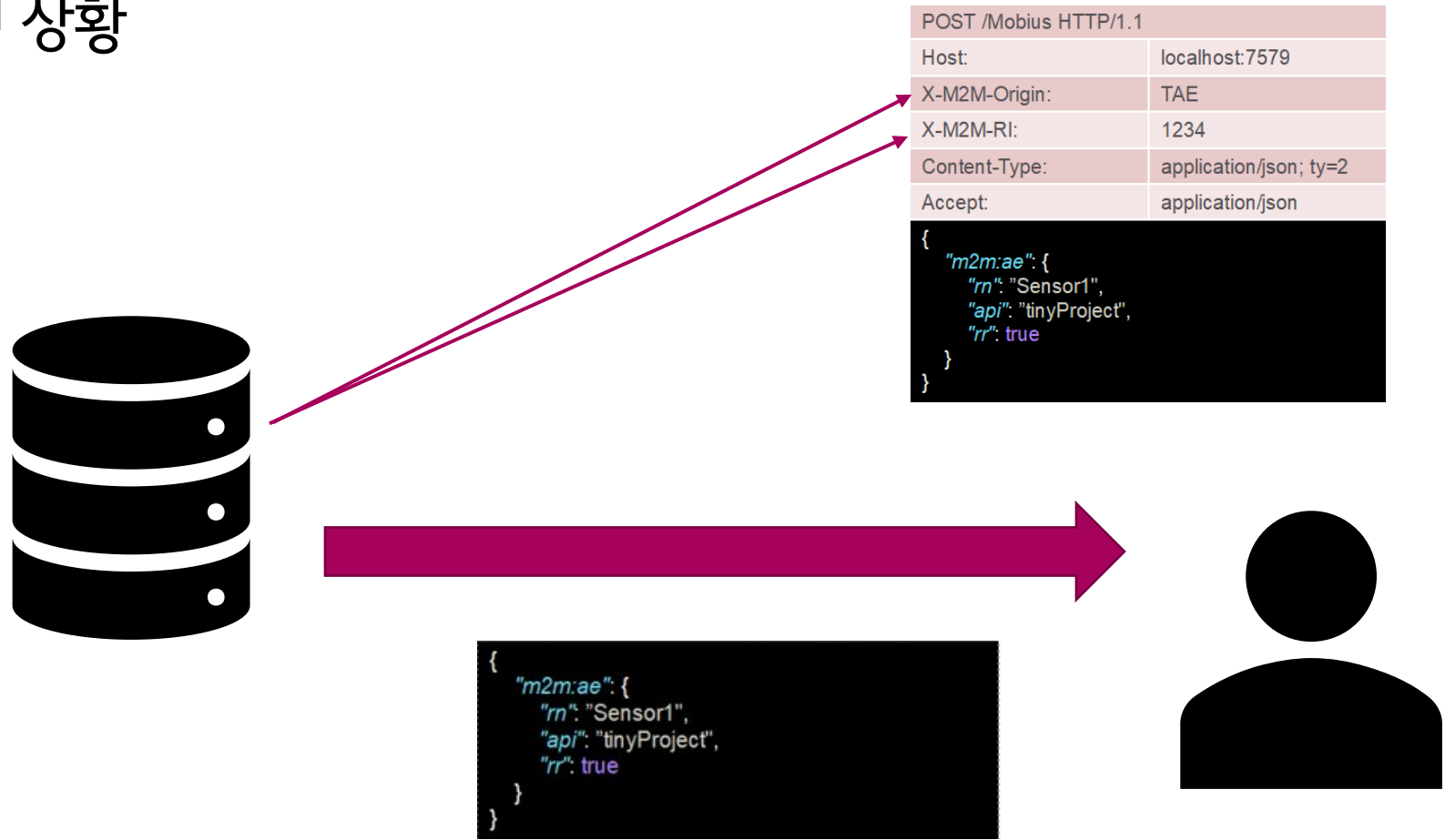
POST /Mobius HTTP/1.1

Host:	localhost:7579
X-M2M-Origin:	TAE
X-M2M-RI:	1234
Content-Type:	application/json; ty=2
Accept:	application/json

```
{
  "m2m:ae": {
    "rn": "Sensor1",
    "api": "tinyProject",
    "rr": true
  }
}
```

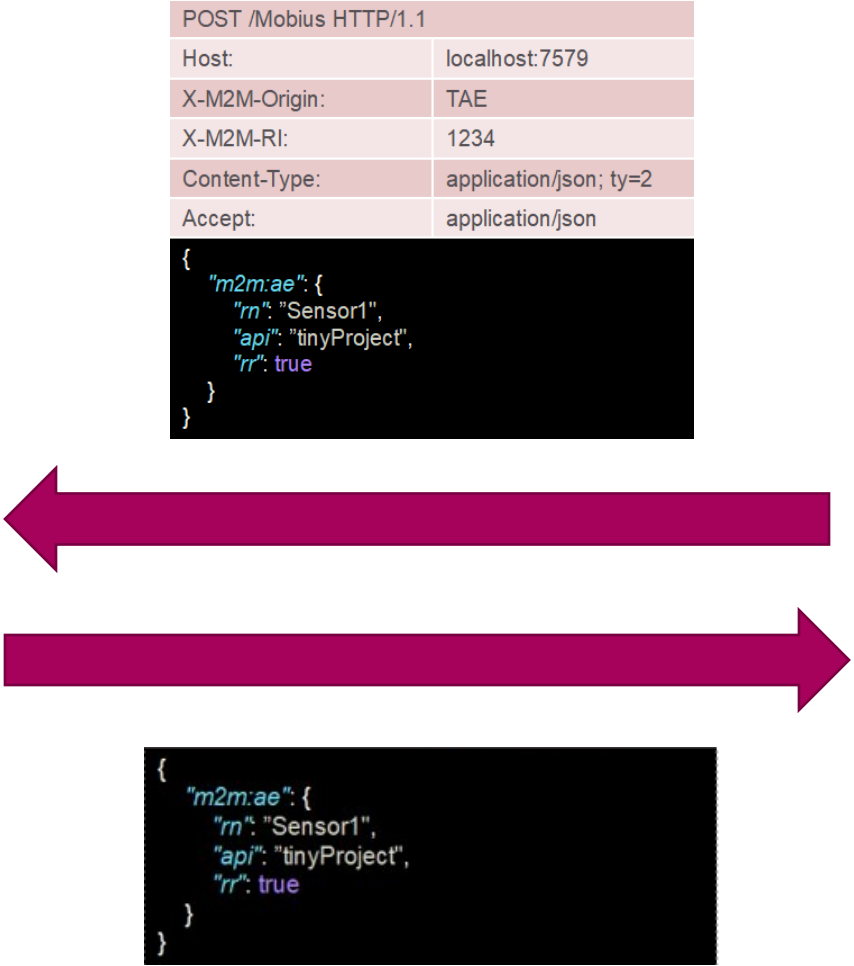
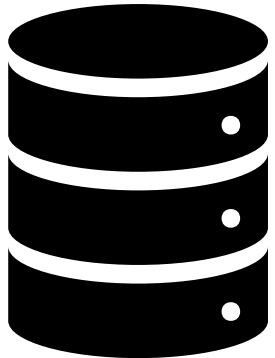
"op" : 1 -> Method, "fr" : "TAE" -> X-M2M-Origin, "rqi" : "1234" -> X-M2M-RI

지난 주 진행 상황



Response
Payload : char*

이번 주 진행 상황



이번 주 진행 상황

POST /Mobius HTTP/1.1	
Host:	localhost:7579
X-M2M-Origin:	TAE
X-M2M-RI:	1234
Content-Type:	application/json; ty=2
Accept:	application/json
<pre>{ "m2m:ae": { "rn": "Sensor1", "api": "tinyProject", "rr": true } }</pre>	



char* rn
char* api
bool rr

AE 구조체

NULL, 공백, 개행 제거 후 Parsing
By Json Parser

이번 주 진행 상황

```
// OneM2M Resource struct
typedef struct {
    char ct[16];
    char lt[16];
    char *rn;
    char *ri;
    char *pi;
    char *csi;
    int ty;
} CSE;

typedef struct {
    char et[16];
    char ct[16];
    char lt[16];
    char *rn;
    char *ri;
    char *pi;
    char *api;
    char *aei;
    int ty;
    bool rr;
} AE;

typedef struct {
    char et[16];
    char ct[16];
    char lt[16];
    char *rn;
    char *ri;
    char *pi;
    int ty;
    int st;
    int cni;
    int cbs;
} Container;

typedef struct {
    char et[16];
    char ct[16];
    char lt[16];
    char *rn;
    char *ri;
    char *pi;
    char *csi;
    char *con;
    int ty;
    int st;
} contentInstance;

// OneM2M Resource function
AE* Create_AE(char *parsed_json);
```



콜네임	숫네임	권장 자료형	입력 예시
resourceName	rn	문자열	"Mobius"
resourceID	ri	문자열	"TAE"
resourceType	ty	int	5
parentID	pi	문자열	"5-20191210093452845"
expirationTime	et	char[16]	"20240513T083900"
creationTime	ct	char[16]	"20191210T093452"
lastModifiedTime	lt	char[16]	"20191210T093452"
CSE-ID	csi	문자열	"/Mobius2"
App-ID	api	문자열	"tinyProject"
AE-ID	aei	문자열	"TAE"
requestReachability	rr	문자열	true
stateTag	st	int	0
currentNrOfInstances	cni	int	0
currentByteSize	cbs	int	0
contentSize	cs	int	0
content	con	문자열	"ON"

DB에서 제공 받은 자료

이번 주 진행 상황

char* rn
char* api
bool rr

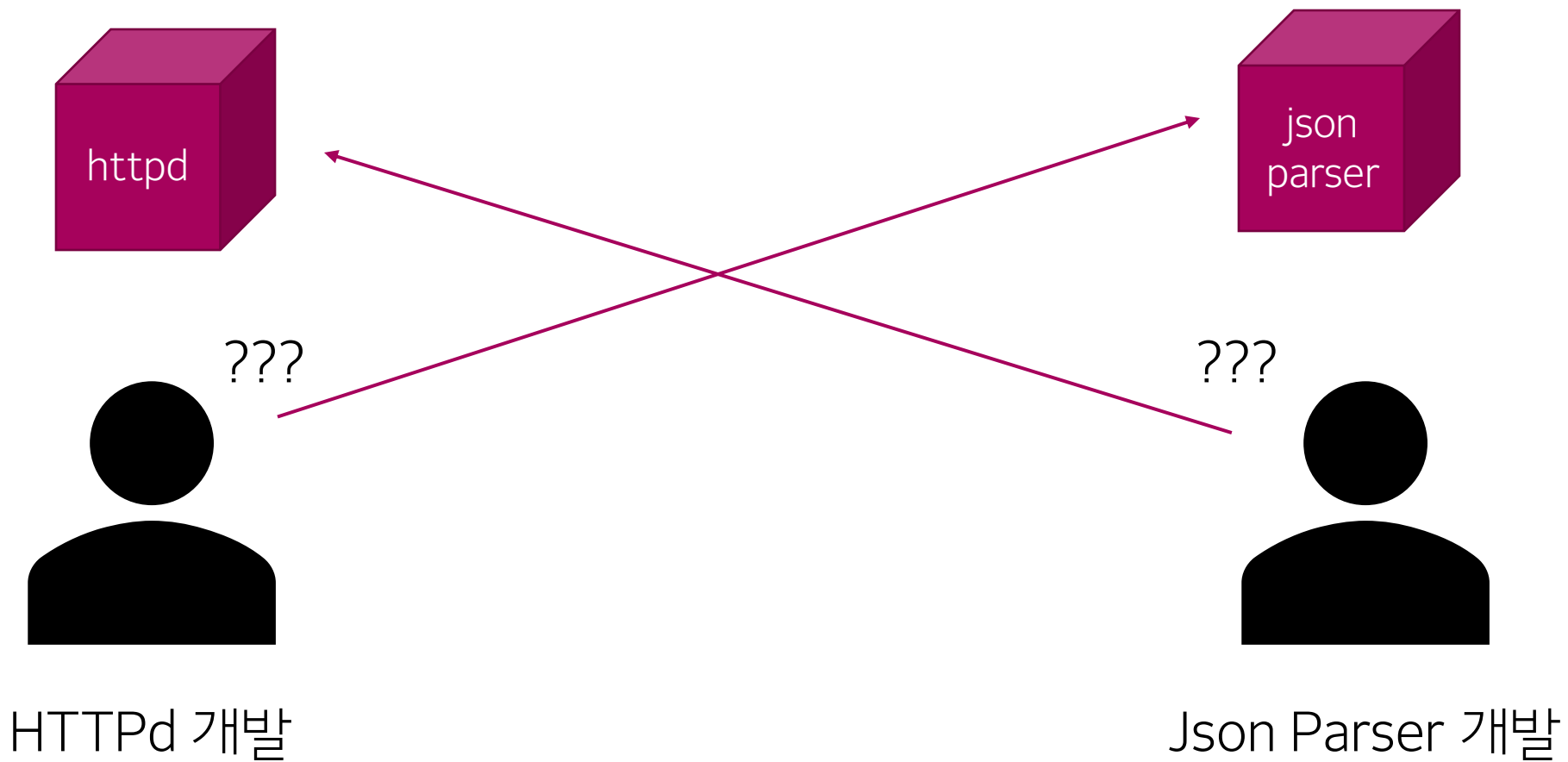


```
{  
  "m2m:ae": {  
    "rn": "Sensor1",  
    "api": "tinyProject",  
    "rr": true  
  }  
}
```

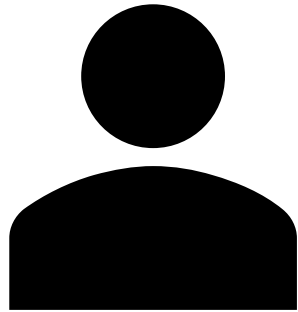
AE 구조체

구조체를 다시 Json 형태로 재조립
By Json Parser

Json Parser 포함시키는 중 생긴 이슈



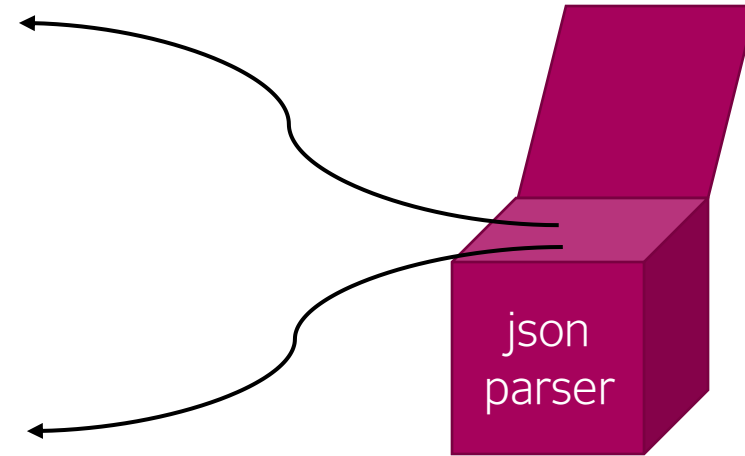
Json Parser 포함시키는 중 생긴 이슈



HTTPd 개발

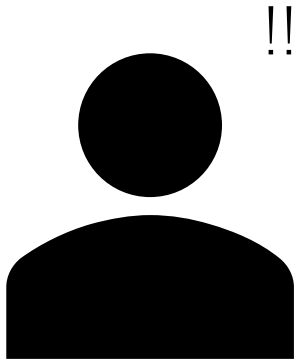
이 부분이 json 값을 저장하는
부분인가 보네

이 부분은 json을 재조립하는
부분인가 보네

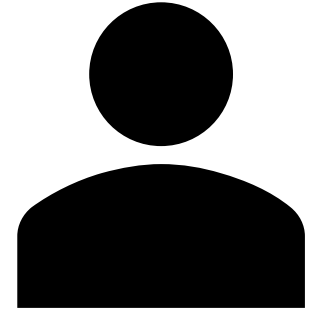
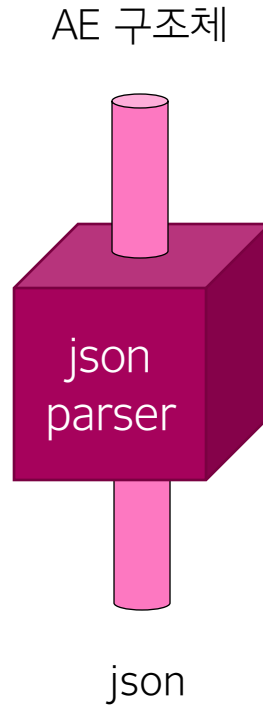


Json Parser 포함시키는 중 생긴 이슈

"Input 은 AE 구조체, return은 구조체 값을 포함한 json입니다."



HTTPd 개발



Json Parser 개발

Parameter 및 리턴 값 구조체로 통일하는 방향으로 협의