ACODEMY.IO

Module 2

Networking

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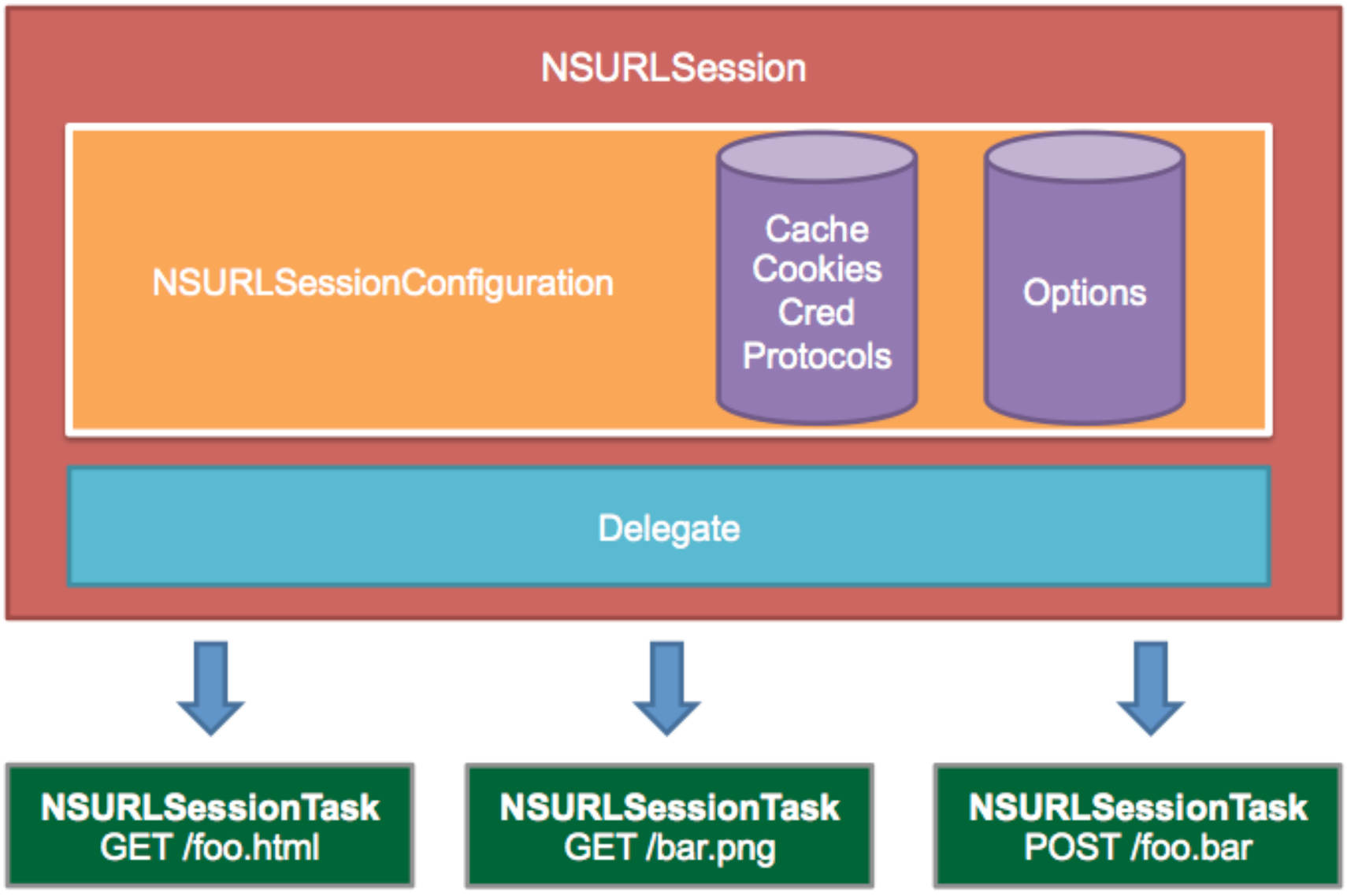
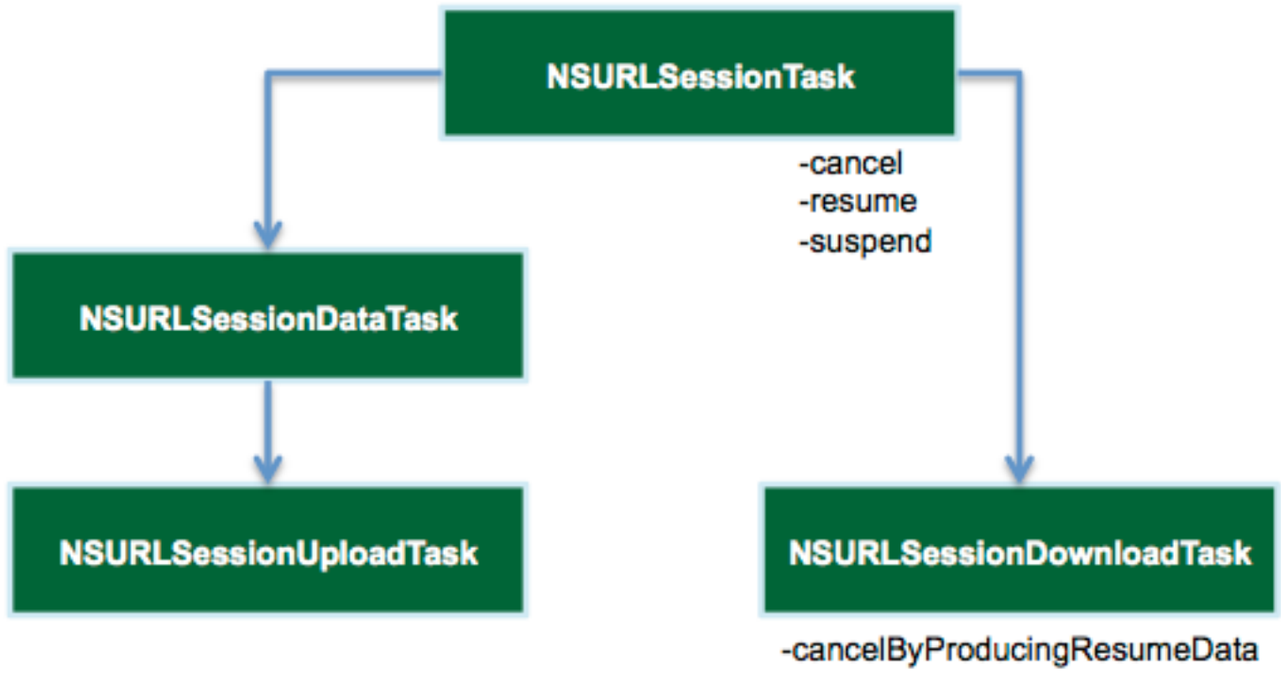

NSURLSession
NSURLSessionConfiguration
Cache
Cookies
Cred
Protocols
Options
Delegate
NSURLSessionTask
GET /foo.html
NSURLSessionTask
GET /bar.png
NSURLSessionTask
POST /foo.bar

NSURLSession

```
let session = NSURLSession(configuration:
NSURLSessionConfiguration.defaultSessionConfiguration())
```

- defaultSessionConfiguration:
  - global cache
  - cookie storage objects
- ephemeralSessionConfiguration:
  - similar to the default configuration
  - session-related data stored in memory
- backgroundSessionConfiguration:
  - upload or download tasks in the background

NSURLSessionTask



```
let baseURL = NSURL(string: "https://api.spotify.com/v1/")!
let request = NSURLRequest(URL: NSURL(string: "tracks/
0eGsygTp906u18L0Oimnem", relativeToURL: baseURL)!)

var session = NSURLSession.sharedSession()

var task = session.dataTaskWithRequest(request) {
    (data, response, error) -> Void in
    if let error = error {
        callback("", error.localizedDescription)
    } else {
        var result = NSString(data: data, encoding:
            NSASCIIStringEncoding)!
        callback(result, nil)
    }
}

task.resume()
```

NSURLComponents

- `scheme`
- `user`
- `password`
- `host`
- `port`
- `path`
- `query`
- `fragment`

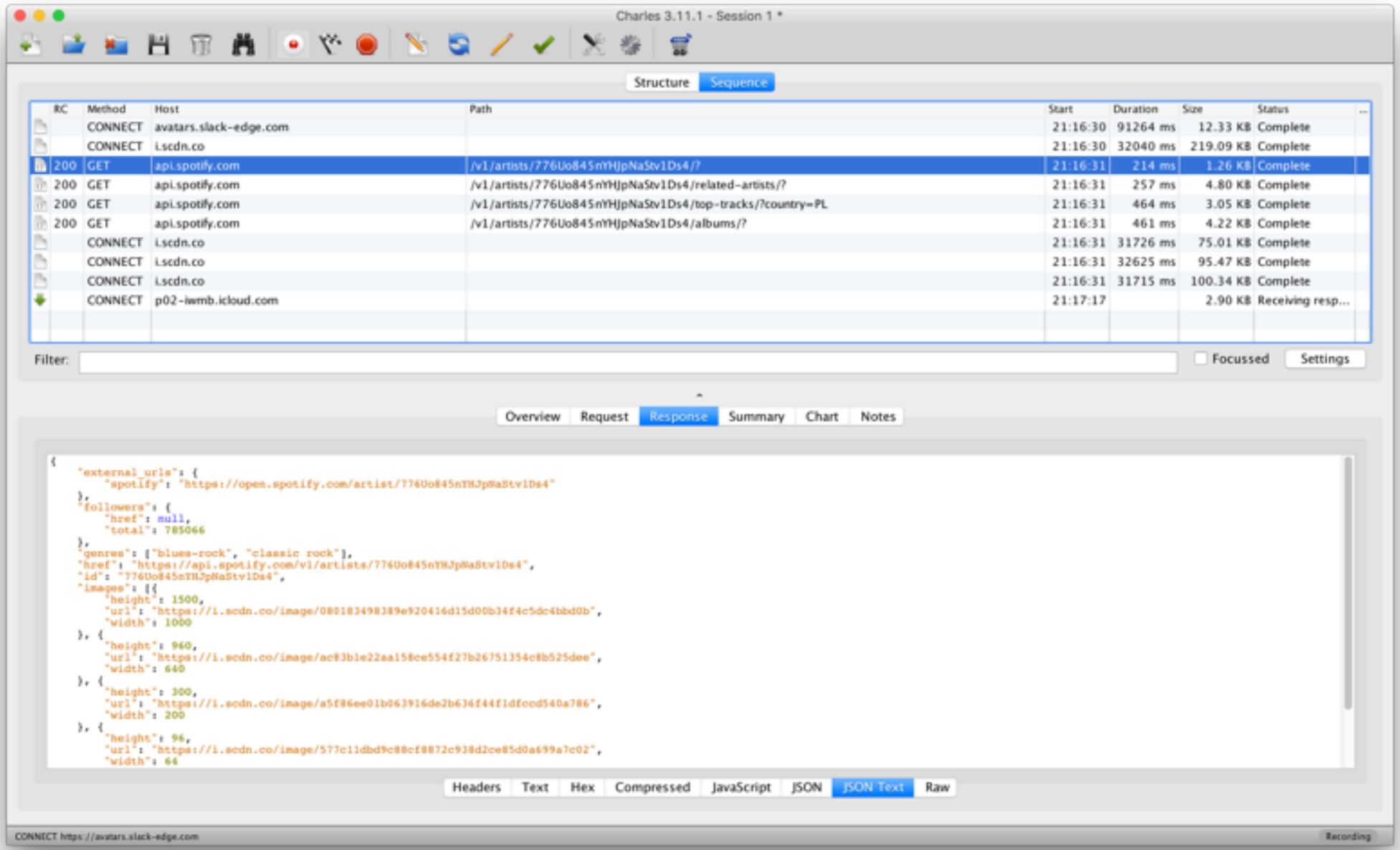
NSURLQueryItem

- `name`
- `value`

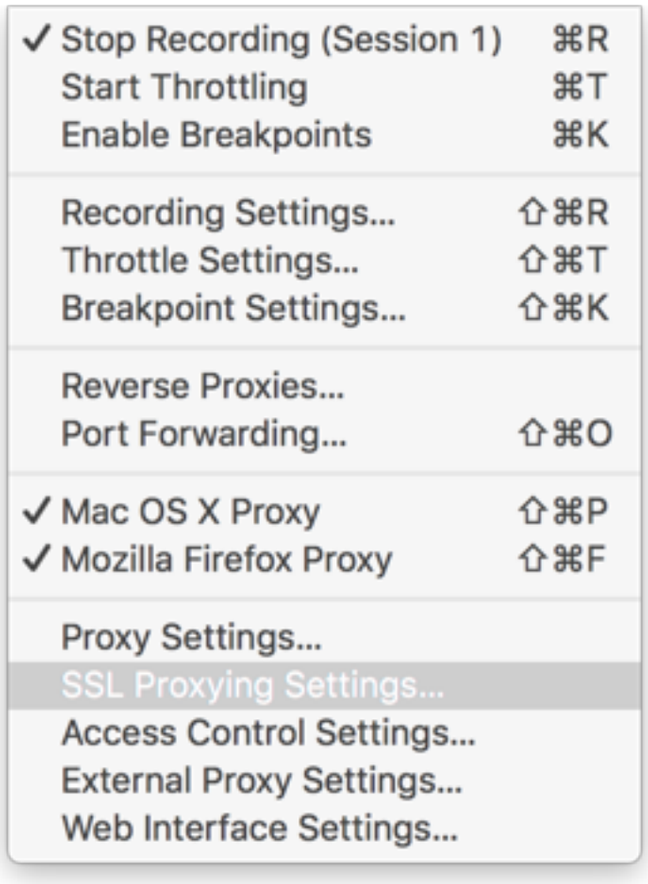
```
let trackIds = ["0eGsygTp906u18L0Oimnem"]

let urlComponents = NSURLComponents()
urlComponents.scheme = "https"
urlComponents.host = "api.spotify.com"
urlComponents.path = "/v1/tracks/"
urlComponents.queryItems = [NSURLQueryItem(name: "ids",
    value: trackIds.encoded)]

debugPrint(urlComponents.URL)
```

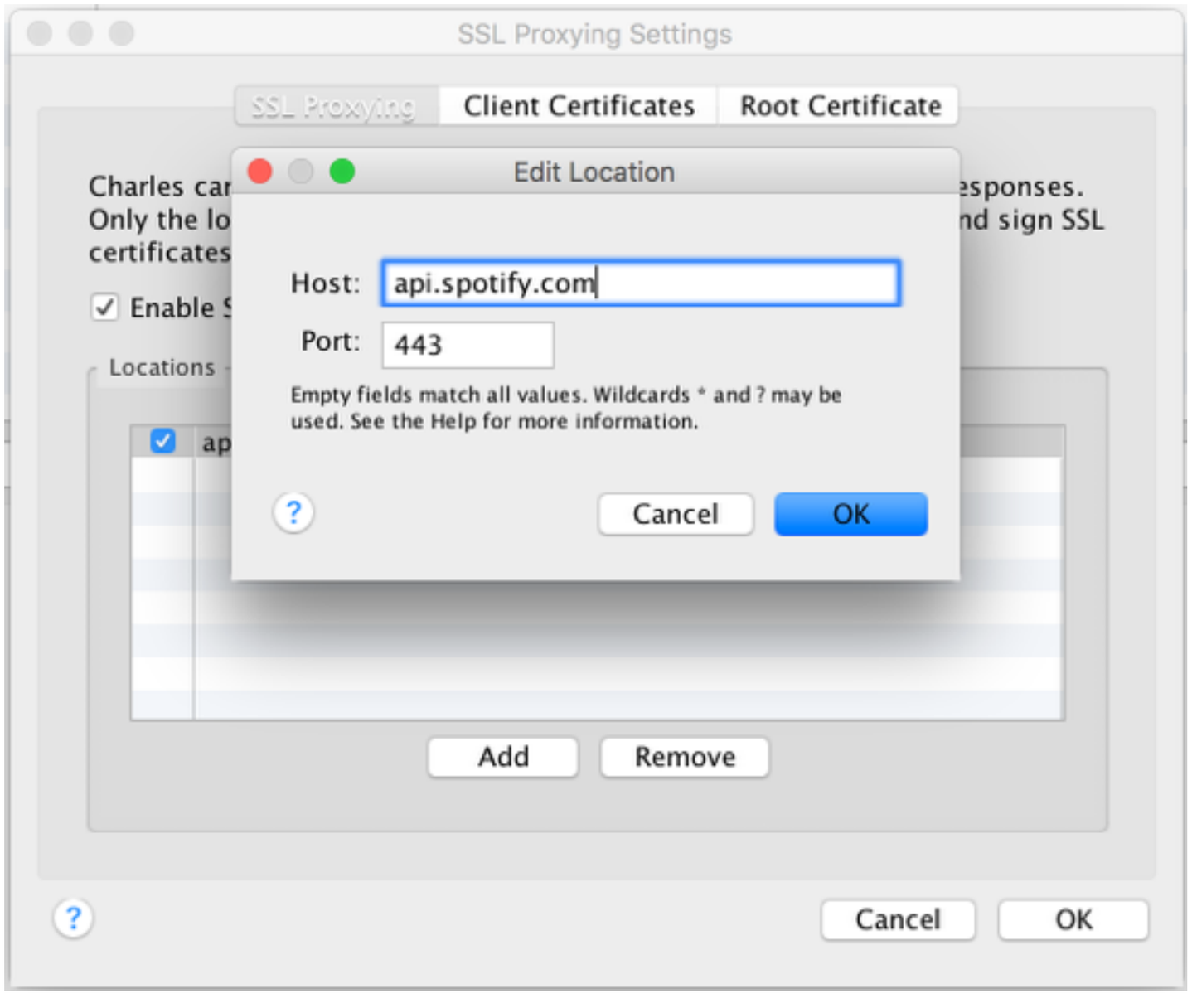
"https://api.spotify.com/v1/tracks/?ids=0eGsygTp906u18L0Oimnem"

Charles

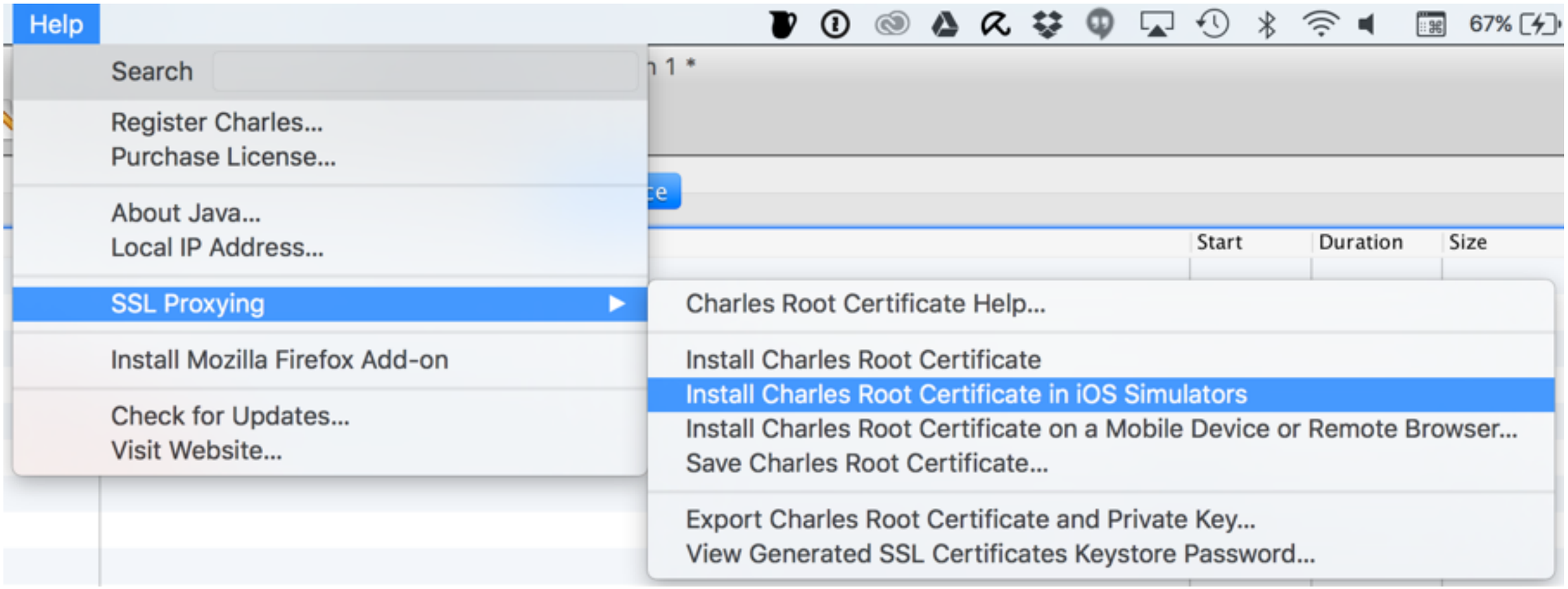

Charles 3.11.1 - Session 1 *
Structure
Sequence
RC Method Host Path Start Duration Size Status
CONNECT avatars.slack-edge.com 21:16:30 91264 ms 12.33 KB Complete
CONNECT i.scdn.co 21:16:30 32040 ms 219.09 KB Complete
200 GET api.spotify.com /v1/artists/776Uo845nYHJpNaStv1Ds4/? 21:16:31 214 ms 1.26 KB Complete
200 GET api.spotify.com /v1/artists/776Uo845nYHJpNaStv1Ds4/related-artists/? 21:16:31 257 ms 4.80 KB Complete
200 GET api.spotify.com /v1/artists/776Uo845nYHJpNaStv1Ds4/top-tracks/?country=PL 21:16:31 464 ms 3.05 KB Complete
200 GET api.spotify.com /v1/artists/776Uo845nYHJpNaStv1Ds4/albums/? 21:16:31 461 ms 4.22 KB Complete
CONNECT i.scdn.co 21:16:31 31726 ms 75.01 KB Complete
CONNECT i.scdn.co 21:16:31 32625 ms 95.47 KB Complete
CONNECT i.scdn.co 21:16:31 31715 ms 100.34 KB Complete
CONNECT p02-iwmb.icloud.com 21:17:17 2.90 KB Receiving resp...
Filter:
Focussed
Settings
Overview Request Response Summary Chart Notes
{
"external_urls": {
"spotify": "https://open.spotify.com/artist/776Uo845nYHJpNaStv1Ds4"
},
"followers": {
"href": null,
"total": 785066
},
"genres": ["blues-rock", "classic rock"],
"href": "https://api.spotify.com/v1/artists/776Uo845nYHJpNaStv1Ds4",
"id": "776Uo845nYHJpNaStv1Ds4",
"images": [{
"height": 1500,
"url": "https://i.scdn.co/image/080183498389e920416d15d00b34f4c5dc4bbd0b",
"width": 1000
}, {
"height": 960,
"url": "https://i.scdn.co/image/ac83b1e22aa158ee554f27b26751354c8b525dee",
"width": 640
}, {
"height": 300,
"url": "https://i.scdn.co/image/a5f86ee01b063916de2b636f44f1dfccd540a786",
"width": 200
}, {
"height": 96,
"url": "https://i.scdn.co/image/577c11dbd9c88cf8872c938d2ce85d0a699a7c02",
"width": 64
Headers Text Hex Compressed JavaScript JSON JSON Text Raw
CONNECT https://avatars.slack-edge.com
Recording

Charles


✓ Stop Recording (Session 1) ⌘R
Start Throttling ⌘T
Enable Breakpoints ⌘K
Recording Settings... ⇧⌘R
Throttle Settings... ⇧⌘T
Breakpoint Settings... ⇧⌘K
Reverse Proxies...
Port Forwarding... ⇧⌘O
✓ Mac OS X Proxy ⇧⌘P
✓ Mozilla Firefox Proxy ⇧⌘F
Proxy Settings...
SSL Proxying Settings...
Access Control Settings...
External Proxy Settings...
Web Interface Settings...


SSL Proxying Settings
SSL Proxying
Client Certificates
Root Certificate
Edit Location
Host: api.spotify.com
Port: 443
Empty fields match all values. Wildcards * and ? may be used. See the Help for more information.
Cancel
OK
Locations
Add
Remove
Cancel
OK

Charles


Help
67%
Search
Register Charles...
Purchase License...
About Java...
Local IP Address...
SSL Proxying
Install Mozilla Firefox Add-on
Check for Updates...
Visit Website...
Charles Root Certificate Help...
Install Charles Root Certificate
Install Charles Root Certificate in iOS Simulators
Install Charles Root Certificate on a Mobile Device or Remote Browser...
Save Charles Root Certificate...
Export Charles Root Certificate and Private Key...
View Generated SSL Certificates Keystore Password...
Start
Duration
Size

Allow non-SSL (HTTP) requests

▼ App Transport Security Settings	▲▼	Dictionary	(1 item)
Allow Arbitrary Loads	▲▼	Boolean	YES