

# Sessions Object Requests Library

HTTP persistent connection, also called HTTP keep-alive, or HTTP connection reuse, is the idea of using a single TCP connection to send and receive multiple HTTP requests/responses, as opposed to opening a new connection for every single request/response.

The [Session object](#) allows you to persist certain parameters across requests. It also persists cookies across all requests made from the Session instance and will use urllib3's connection pooling. In the event you're making several requests to the same host, the underlying TCP connection will be reused, which can result in a significant performance increase.

## NOTE

### Keep-Alive

Thanks to urllib3, keep-alive is 100% automatic within a session! Any requests that you make within a session will automatically reuse the appropriate connection!

Note that connections are only released back to the pool for reuse once all body data has been read; be sure to either set stream to False or read the content property of the Response object.

## RECAP

### Request and Response Objects

Whenever a call is made to `requests.get()`, two major things occur. First, you are constructing a Request object which will be sent off to a server to request or query some resource. Second, a Response object is generated once Requests gets a response back from the server.

The Response object contains all the information returned by the server and also contains the Request object you created originally.

### Prepared Requests

Whenever you receive a Response object from an API call or a Session call, the request attribute is the prepared Request that was used. In some cases you may wish to do some extra work to the body or headers (or anything else really) before sending a request to achieve certain goal from the server.

## Reference

<https://requests.readthedocs.io/en/latest/user/advanced/#session-objects>