Invention Title:	Offloading logins
Invention Summary:	Currently, protocols exist for a Service Provider to offload authentication to an Identity Provider. That is, for one web site to let another web site authenticate the user on their behalf. No such protocols exist on the client side. That is, letting one client login on behalf of another client!
Invention Description:	An idea is described in detail whereby logins to services/web sites can be offloaded to another person using another device, or a standalone service that has the requisite credentials. This invention allows for another entity to provide the credentails required for a login, without actually revealing them. Examples include a parent letting a child login using their credentials, and offloading authentication to a hardware box (like STB), so that the user does not have to have credentials to login. Such a scheme can also be used for login by 'applications' which are not trustable with the user credentials.
Invention Commercial Value/Customers:	Such a scheme will be very valuable in terms of WOW factor, privacy and security. As mentioned above, one example application is when the users do not have to enter their credentials into a software or mobile application that they do not trust. This is a problem right now.
Invention Differences:	There is no mechanism for one client to offload authentication to another client. Related protocols exist on the server side though - so in a way, this disclosure is kind of like mirroring what is done on the server side for letting one server authenticate the user on behalf of another server.

Login offload

Letting others / other services login for you

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Seetharama Durbha

Overview

- Currently, protocols exist for a Service Provider to offload authentication to an Identity Provider
  - That is, for one web site to let another web site authenticate the user on their behalf
- No such protocols exist on the client side
  - That is, letting one client login on behalf of another client!

Use Cases

- One user can log another user in, while using a different device
  - No need to enter credentials on the same device
- A user can be logged in based on credentials stored at a distinct (client co-located) service
  - Common credentials across employees, for example
  - Distinct credential service with configurable access controls

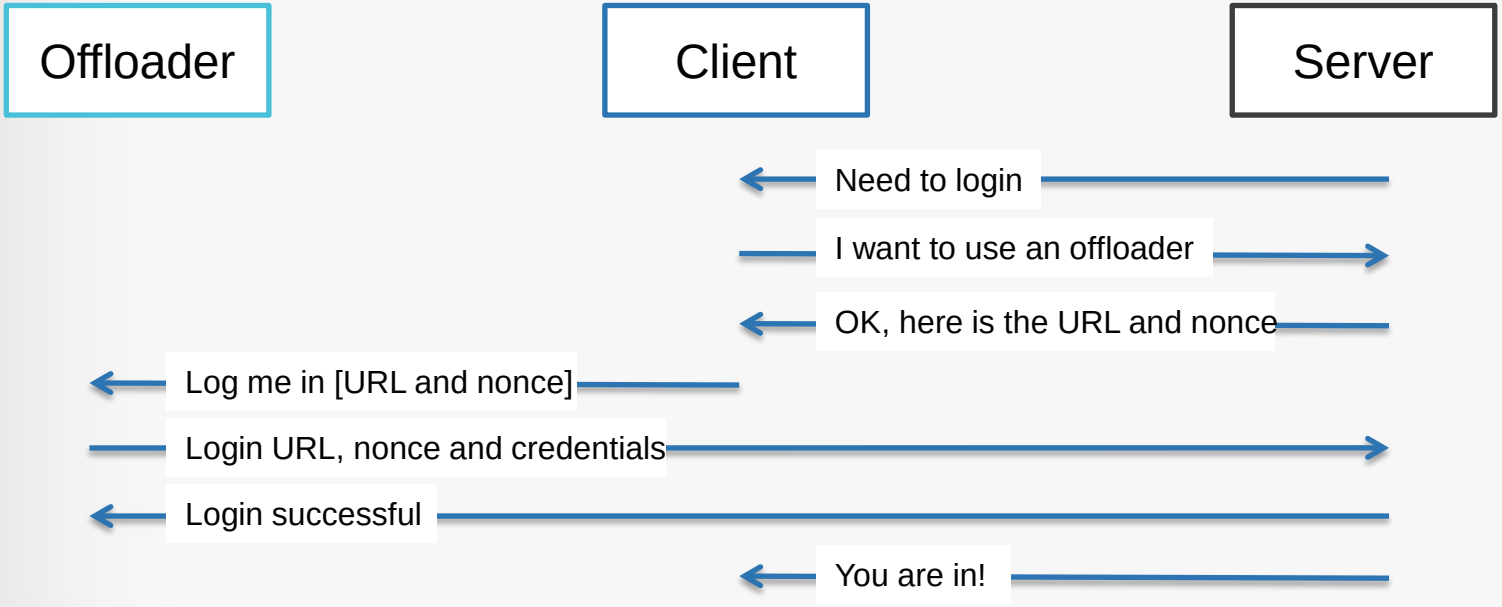
2 Methods

2 ways are presented

- Method 1: Using a service to perform login
- Method 2: Using another human to perform login

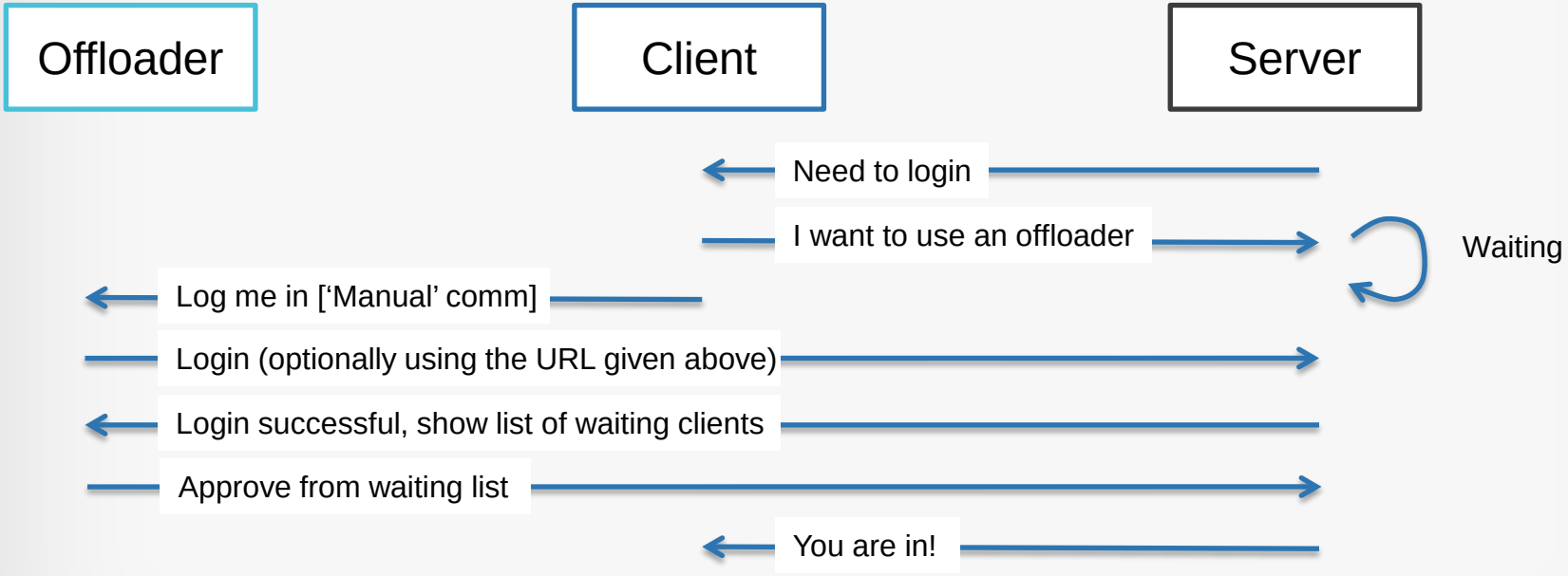
Method 1

High-level



Method 2

High-level



Differences

Method 1

- Works for ‘native’ clients
- Needs a socket listening service

Method 2

- Works for ‘human’ clients
- NO Need for a socket listening service

Implementation

Target platforms for each method

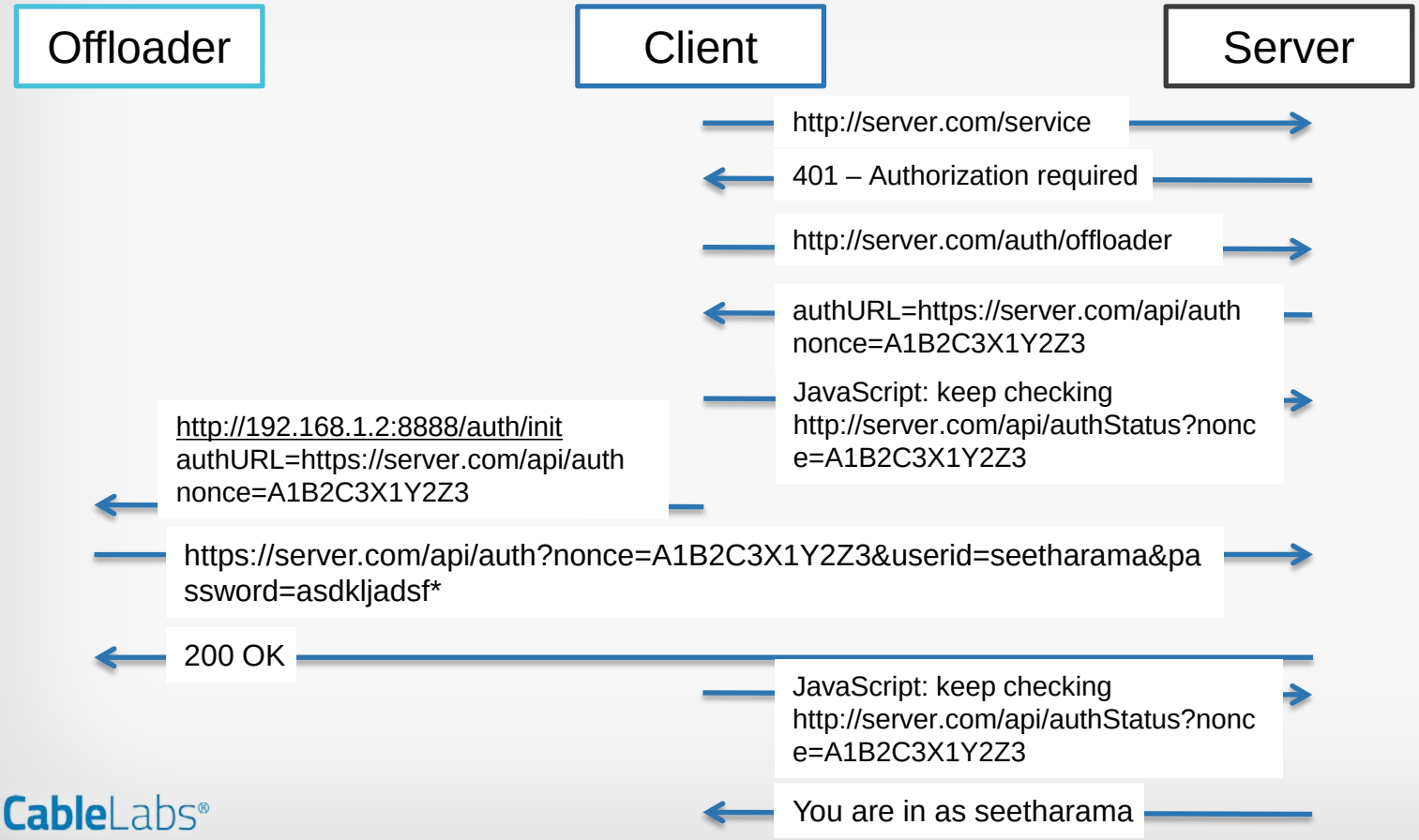
Method 1

A. Native client and native authentication service
B. Browser client and native authentication service

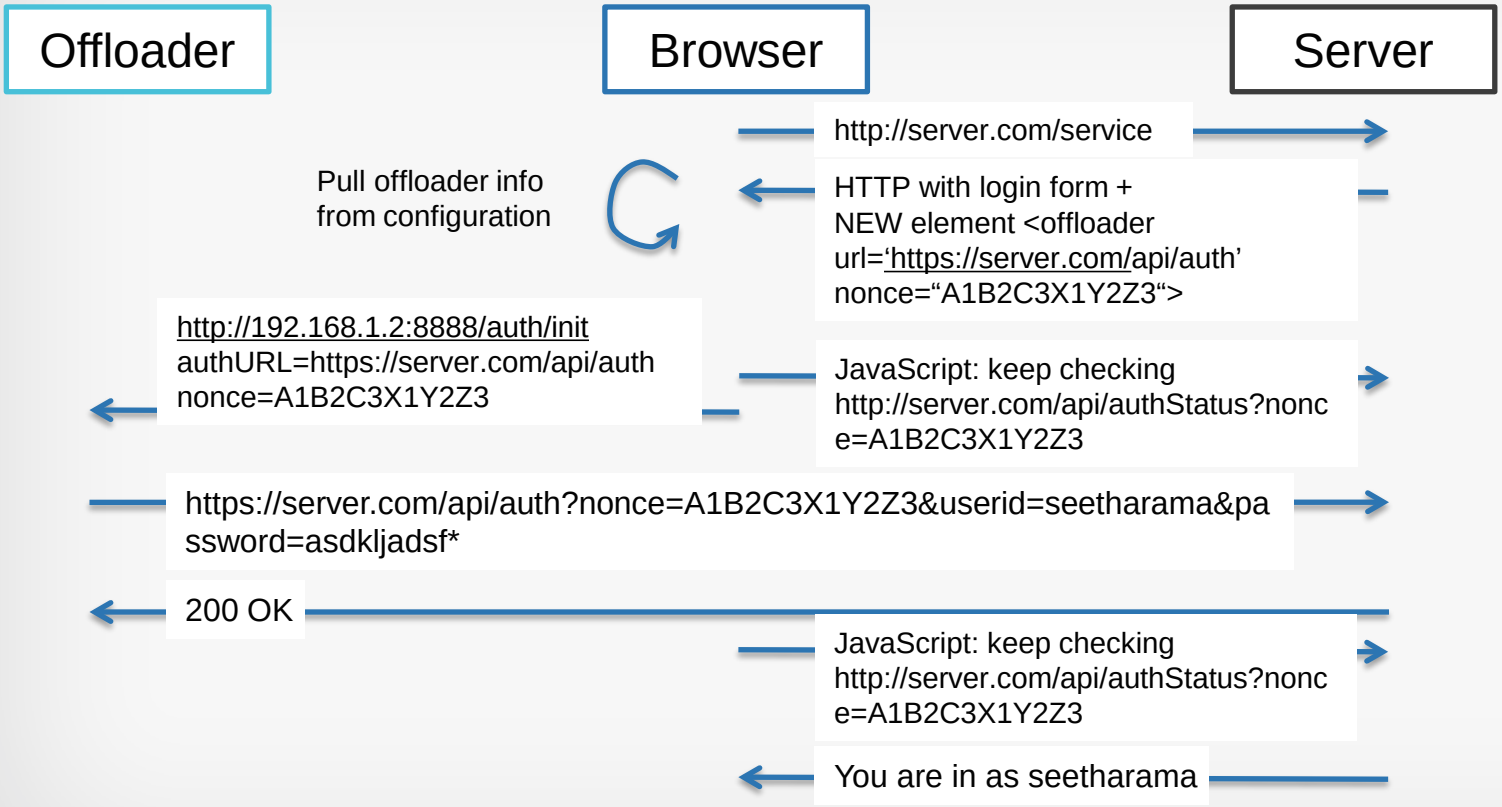
Method 2

A. ‘Verbal’ Communication – please log me into Amazon, for ex.
B. Communication using BT/NFC/Other

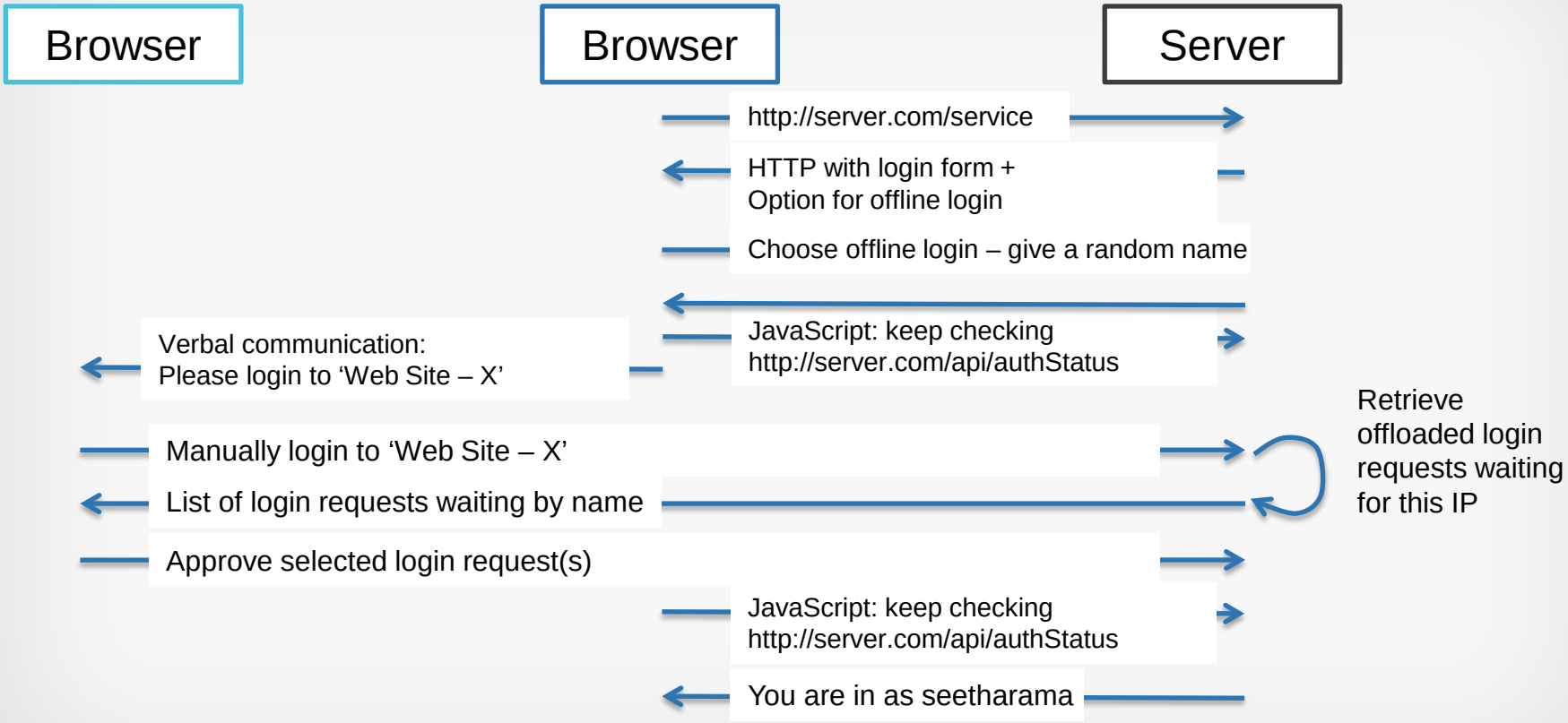
1 – A


Offloader
Client
Server
http://server.com/service
401 – Authorization required
http://server.com/auth/offloader
authURL=https://server.com/api/auth
nonce=A1B2C3X1Y2Z3
JavaScript: keep checking
http://server.com/api/authStatus?nonc
e=A1B2C3X1Y2Z3
http://192.168.1.2:8888/auth/init
authURL=https://server.com/api/auth
nonce=A1B2C3X1Y2Z3
https://server.com/api/auth?nonce=A1B2C3X1Y2Z3&userid=seetharama&pa
ssword=asdkljadsf*
200 OK
JavaScript: keep checking
http://server.com/api/authStatus?nonc
e=A1B2C3X1Y2Z3
You are in as seetharama

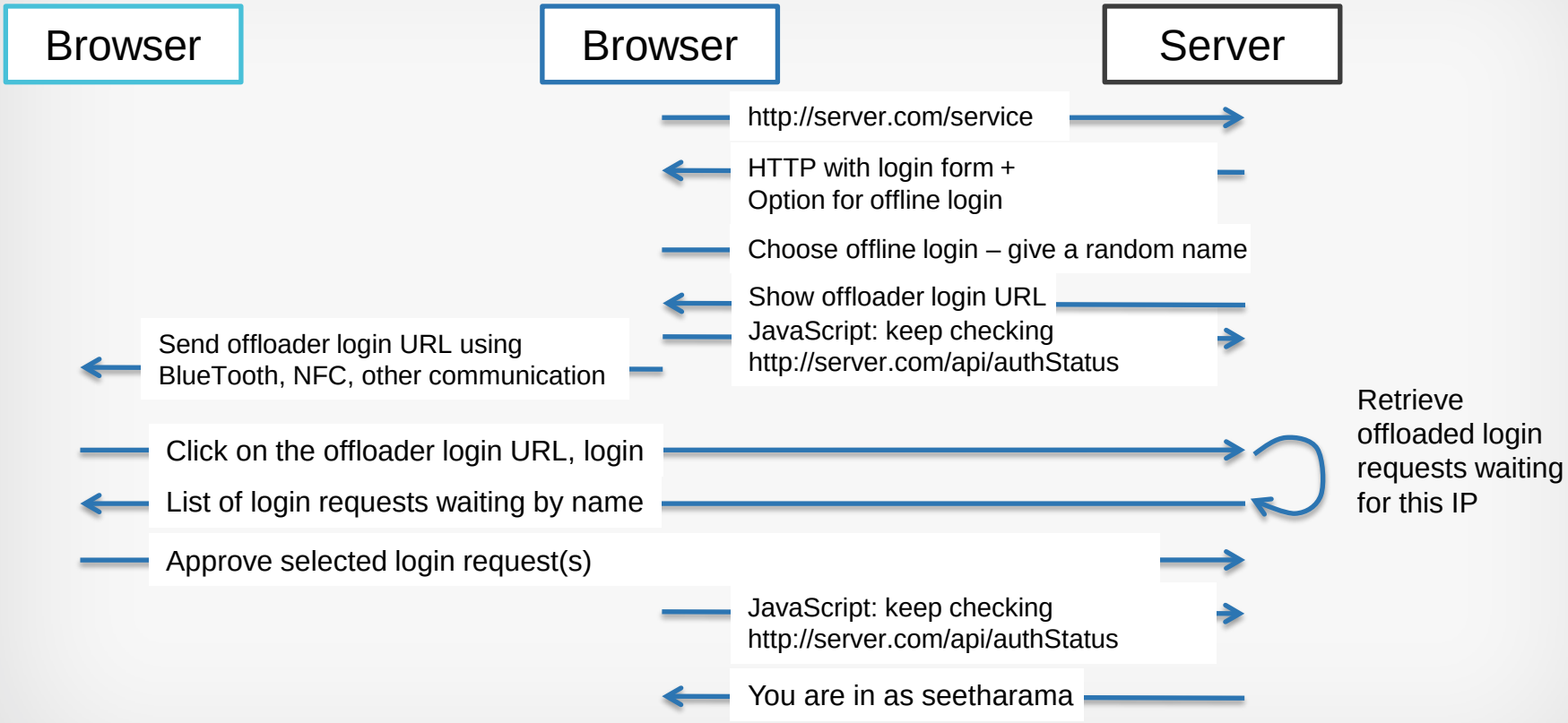
1 – B


Offloader
Browser
Server
http://server.com/service
Pull offloader info from configuration
HTTP with login form + NEW element <offloader url='https://server.com/api/auth' nonce="A1B2C3X1Y2Z3">
http://192.168.1.2:8888/auth/init authURL=https://server.com/api/auth nonce=A1B2C3X1Y2Z3
JavaScript: keep checking http://server.com/api/authStatus?nonce=A1B2C3X1Y2Z3
https://server.com/api/auth?nonce=A1B2C3X1Y2Z3&userid=seetharama&password=asdkljadsf*
200 OK
JavaScript: keep checking http://server.com/api/authStatus?nonce=A1B2C3X1Y2Z3
You are in as seetharama

2 – A


Browser
Browser
Server
http://server.com/service
HTTP with login form +
Option for offline login
Choose offline login – give a random name
JavaScript: keep checking
http://server.com/api/authStatus
Verbal communication:
Please login to ‘Web Site – X’
Retrieve
offloaded login
requests waiting
for this IP
Manually login to ‘Web Site – X’
List of login requests waiting by name
Approve selected login request(s)
JavaScript: keep checking
http://server.com/api/authStatus
You are in as seetharama

2 – B



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Invention summary

- A cool way to offload logins to either another human using another device or a service
- A way to associate offloaded login statii