

S.S.R.F.

BY UNCLE RAT



Agenda

- ▶ What is it and how we abuse it?
- ▶ Attack strategy
 - ▶ Basic SSRF strategy
 - ▶ SSRF against a server itself
 - ▶ SSRF against other backends
 - ▶ Blind SSRF



What is it and how
we abuse it?

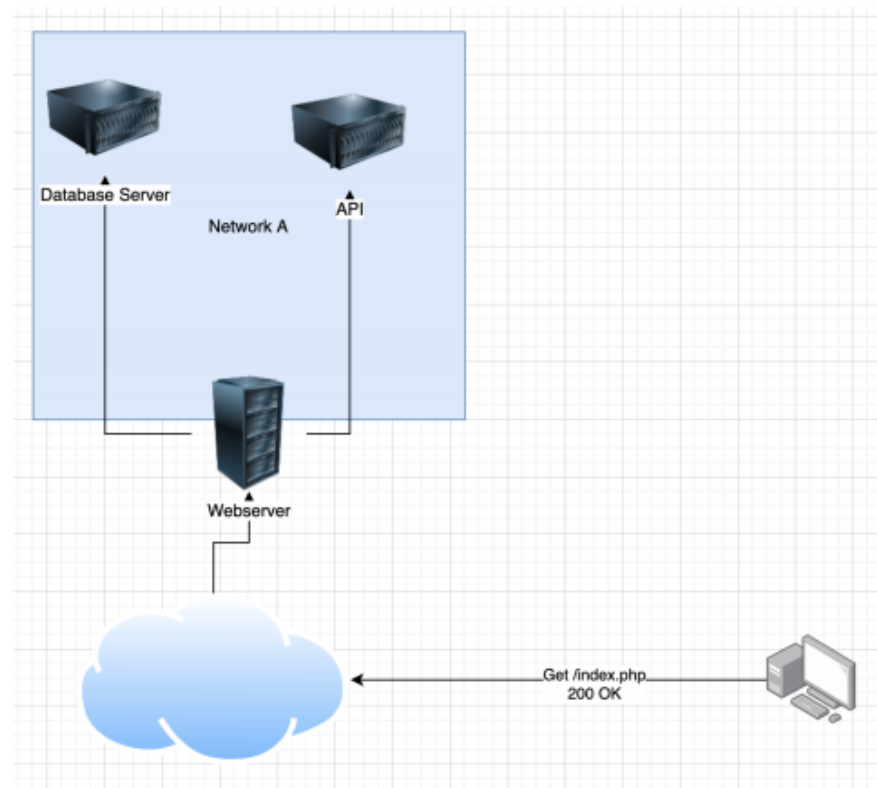


What is it and how we abuse it?

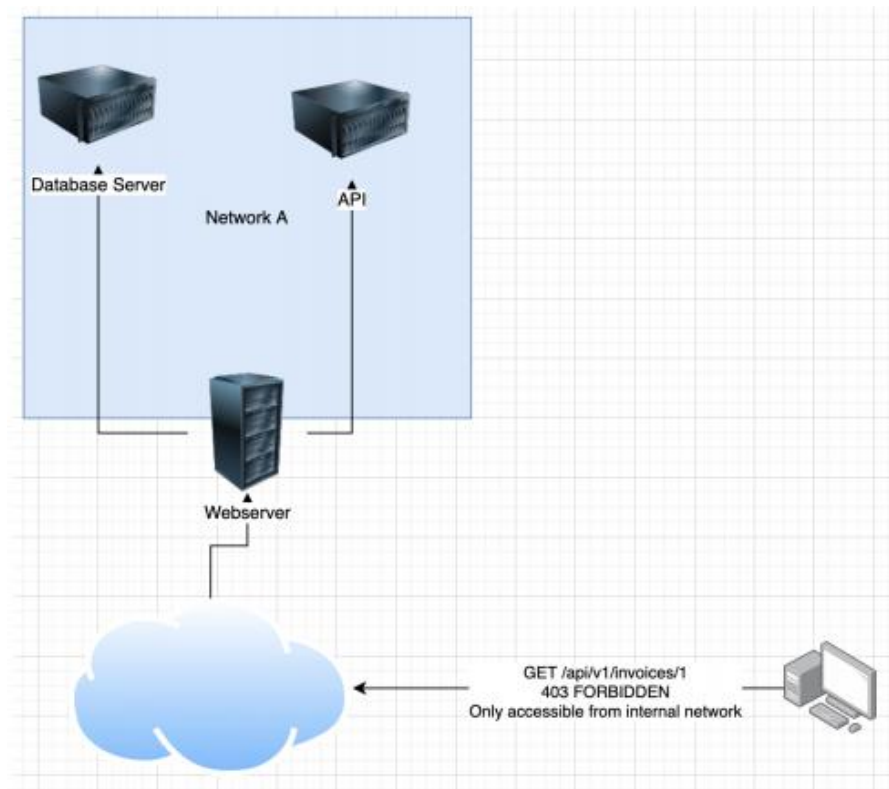
- ▶ SSRF - Server Side Request Forgery
 - ▶ Server Side Request Forgery can occur in different forms
 - ▶ How we normally abuse it?
 - ▶ Other ways to abuse it
 - ▶ Practical examples



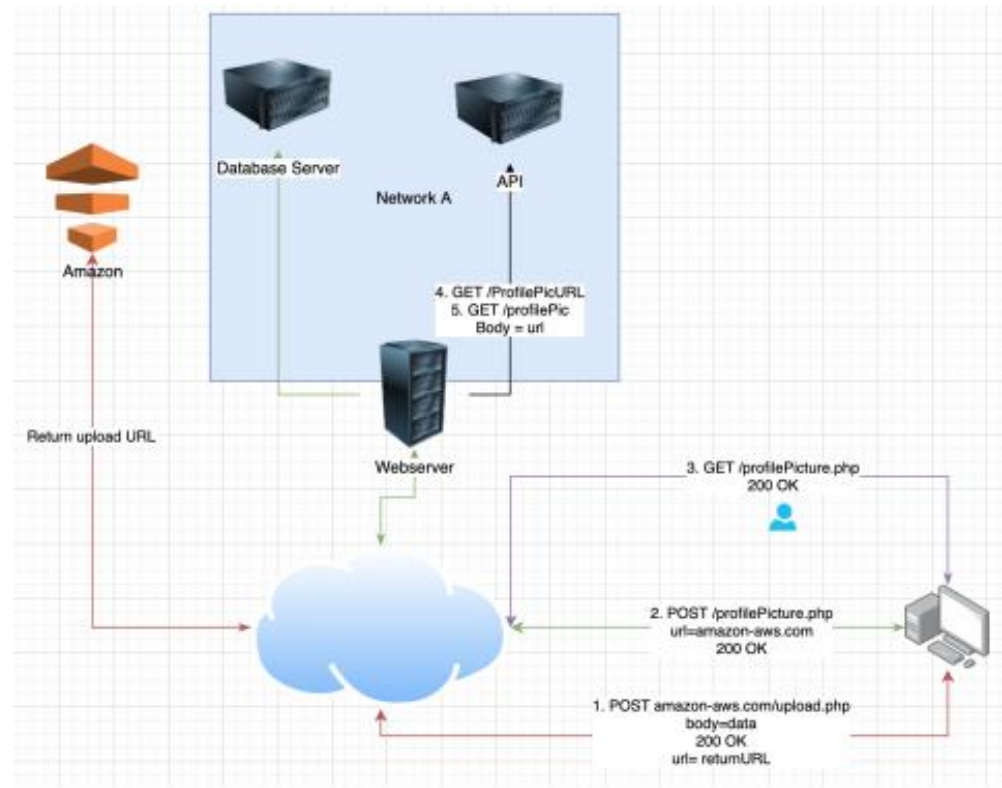
Case 1



Case 2



Case 3



Attack strategies



Basic SSRF strategy

- ▶ Basic types of SSRF attacks
 - ▶ SSRF against the server itself
 - ▶ SSRF against other backend systems
- ▶ If all else fails
 - ▶ Blind SSRF
- ▶ Where to also look
 - ▶ Partial URLs in the body instead of a full URL
 - ▶ URLs within data files such as XML files or CSV files (import functionality)
 - ▶ The referer header can sometimes contain SSRF defects



SSRF against the server itself

- ▶ Where to start
- ▶ Attack on loopback ip

Example:

```
POST /profilePicURL.php
url=127.0.0.1:81/getUsers.php
-----
GET /profilePic.php
200 OK
TestName1 TestName2 TestName1@test.test
TestName3 TestName4 TestName5@test.test
```



SSRF against other backend systems

- When can it occur?

Example:

```
POST /profilePicURL.php
url=192.168.32.123:3387/getUsers.php
-----
GET /profilePic.php
200 OK
TestName1 TestName2 TestName1@test.test
TestName3 TestName4 TestName5@test.test
```



Blind SSRF

- ▶ How it works?
- ▶ Burp collaborator
- ▶ RCE
- ▶ HTTP request

