



# Insecure Direct Object Reference IDOR (Broken Access Control)



**OWASP**

The Open Web Application Security Project

# IDOR (Broken Access Control)



**OWASP**

The Open Web Application Security Project

~# whoami

- **Eric Biako**

Bsc. IT, CEH v9

Information security officer @ E-connecta

Moderator @ <https://legalhackmen.com>

# IDOR (Broken Access Control)



**OWASP**

The Open Web Application Security Project

IDOR occurs when a user supplied input is unvalidated and direct access to the object requested is provided.

# IDOR (Broken Access Control)



**OWASP**

The Open Web Application Security Project



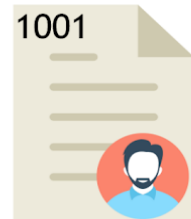
Get my document which number is "1000" please!

Of course!



Get the document which number is "1002" please!

Hey! Don't mention it!



# IDOR (Broken Access Control)



**OWASP**

The Open Web Application Security Project

This dwells on session management where the user has to be authenticated and/or authorized.



# IDOR (Broken Access Control)



**OWASP**

The Open Web Application Security Project

`http://mybank.com/balance?Id=7809`

`http://mybank.com/balance?Id=7811`

`http://mybank.com/balance?Id=7812`

`http://mybank.com/balance?Id=7813`

*Untrusted data*



# OWASP

The Open Web Application Security Project

## *impact.....*

- unauthorized information disclosure
- modification or destruction of data.
- performing a function outside of the limits of the user.

# IDOR (Broken Access Control)



**OWASP**

The Open Web Application Security Project

*Prevent it.....*

Enforce access control policies such that users cannot act outside of their intended permissions



# IDOR (Broken Access Control)



**OWASP**

The Open Web Application Security Project

***Prevent it.....***

Use ***hash function*** and use ***hashed values*** instead of normal numbers or strings.

# IDOR (Broken Access Control)



**OWASP**

The Open Web Application Security Project

*Prevent it.....*

[www.example.com/user.php?id=12](http://www.example.com/user.php?id=12)

[www.example.com/user.php?id=ea3eda3d3w2293](http://www.example.com/user.php?id=ea3eda3d3w2293)

# IDOR (Broken Access Control)



**OWASP**

The Open Web Application Security Project

## DEMO

BWAPP([www.itsecgames.com](http://www.itsecgames.com) )

<https://sourceforge.net/projects/bwapp/files/bWAPP/>

OWASP WEBGOAT :

<https://github.com/WebGoat/WebGoat>

# IDOR (Broken Access Control)



**OWASP**

The Open Web Application Security Project

- <https://www.bugcrowd.com/how-to-find-idor-insecure-direct-object-reference-vulnerabilities-for-large-bounty-rewards/>
- <https://www.gracefulsecurity.com/idor-insecure-direct-object-reference/>
- <https://codeburst.io/hunting-insecure-direct-object-reference-vulnerabilities-for-fun-and-profit-part-1-f338c6a52782>
- [https://medium.com/@woj\\_ciech/explaining-idor-in-almost-real-life-scenario-in-bug-bounty-program-c214008f8378](https://medium.com/@woj_ciech/explaining-idor-in-almost-real-life-scenario-in-bug-bounty-program-c214008f8378)
- <https://blog.detectify.com/2016/05/25/owasp-top-10-insecure-direct-object-reference-4/>