

# **Injecti0ns**

PHP Object Injection

# PHP Object Injection

- PHP Object Injection attack generally allows an attacker to perform various other different attacks such as Application Denial of Service, SQL Injection, Code Injection.
- This vulnerability usually occurs when the user input is not sanitized properly before passing it to the unserialize()PHP function.
- PHP contains the object serialization feature that could be exploited by attackers to pass serialized strings to a vulnerable unserialize() call.
- Hence, resulting in an arbitrary PHP object injection.

# Attack

This attack is only successful if the following conditions are met:

- The web application must have a class which implements a PHP magic method such as `__construct` and `__destruct`, which could be used for attacking.
- Classes which are used during the attack should be declared while calling the `unserialize()` function, if this condition is not met then the object autoloading must be supported for those classes.

# Consequences

- The attacker could deface the website.
- The attacker could send spam mails using the vulnerable website.
- The attacker could obtain the database credentials.
- The attacker could gain access to the confidential information.

# Mitigations

- Usage of JSON functions instead of the `unserialize()` function is an important mitigation step to be followed.
- Input Validation must be implemented.
- Source Code Analysis must be performed at the Implementation phase of the Secure SDLC.