

A05-2021 Security Misconfiguration

They are errors or inappropriate configurations in the environment, application, or services used, which expose the system to unnecessary risks. This flaw can include:

- Insecure default configurations.
- Unnecessary exposure of information.
- Excessive permissions on files or services.

Example: Cloud storage with public permissions, or database instances exposed to the internet.

Severity

- **Impacts multiple levels:** From the application to the underlying infrastructure.
- **Ease of exploitation:** Often, attackers only need to explore public configurations or take advantage of default settings.
- **Scope of impact:** It can facilitate other attacks such as privilege escalation, code injection, or unauthorized access.

Mitigation

- **Server hardening:** Apply recommended security configurations for the operating system, web server, and database.
- **Cloud security:** Review and harden the security configurations of the cloud services used.
- **Secrets management:** Store credentials and other secrets securely, avoiding including them in the source code.
- **Configuration security analysis:** Use tools to scan and detect insecure configurations.
- **Information security policy:** It is important that companies have information security policies that help employees correctly configure systems.