



Detect Attacks	
Verify message integrity	use techniques such as checksums or hash values to verify the integrity of messages, resource files, deployment files, and configuration files.
Verify storage Integrity	Define measures to make sure that databases have not been modified.
Maintain audit trail	Keep record of systems and user actions and their effects to attempt to prosecute attackers or create better defenses in the future
Identify Intrusions	Compare network traffic and request to a set of signatures within a system or known patterns of malicious behavior in the database.

Mitigate Attacks	
Authenticate subject:	ensure that an actor/subject (user or a remote computer) is actually who or what it purports to be
Authorize Subjects:	ensuring that an authenticated actor/subject has the rights to access and modify either data or services.
Manage security data	management of keys for cryptography, the secure storage of authorization rules, and other ways to handle security information.
Filter data	Data should be data from abnormal input or untrusted sources.
Establish security channel	provide secure communications in a distributed system
Verify origin of message	Verify the authenticity of the origin of message (ex. With digital signature)
Establish security channel	Provide secure communications in a distributed system
Hide data	Confidentiality should be achieved by encryption or steganography.

React to Attacks	
Alert subjects:	notify operators, other personnel, or cooperating systems when an attack is suspected or detected.
Apply institutions policies	Apply institution policies to limit the exposure of the system when an attack has been identified.

Recover from attacks	
Audit actions	Keep a record of user and system actions and their effects, to help trace the actions of, and to identify, an attacker.
Apply institutions policies	Apply institution policies to restore the system to a fully operational state

