

QUIZ

True or False: Integrity Failures DO NOT pose a risk of arbitrary code execution.

True: Integrity Failures do NOT pose a risk of arbitrary code execution.

False: Integrity Failures DO pose a risk of arbitrary code execution.



Good job! Integrity Failures can lead to lots of things, including arbitrary code execution.

Which of the following situations is LEAST likely to have an Integrity Failure occur?

When an application is deserializing saved data.

During the build process for an application.

During offline use of an application.



Good job!

When an application is downloading and applying an update.

A popular motherboard brand has a feature to download and install firmware updates automatically. However, it does not properly verify that these updates are from an official source. Is this likely to result in an Integrity Failure?

No, this is NOT likely to result in an Integrity Failure.

Yes, this is likely to result in an Integrity Failure.



Good job!

A popular brand of router automatically downloads and installs firmware updates. It uses cryptographic signatures to verify the authenticity and origin of the updates it downloads, before applying them. Is this likely to result in an Integrity Failure?

No, this is NOT likely to result in an Integrity Failure.



Good job! As long as everything is implemented correctly, it's probably fine.

Yes, this is likely to result in an Integrity Failure.

True or False: A nation-state actor CAN use an Integrity Failure to distribute malware to thousands of organizations.

False: A nation-state actor CANNOT use an Integrity Failure to distribute malware to thousands of organizations.

True: A nation-state actor CAN use an Integrity Failure to distribute malware to thousands of organizations.



Good job! A nation-state actor can use an Integrity Failure to distribute malware to thousands of organizations. For example, the 2020 SolarWinds breach was due to an Integrity Failure.

Which aspect of the CIA Triad are Software and Data Integrity Failures most closely associated with?

Data Authenticity.

Availability.

Integrity.



Good job!

Confidentiality.

True or False: Software and Data Integrity Failures involve cases where insufficient measures are taken to ensure data integrity.

False, Software and Data Integrity Failures DO NOT involve cases where insufficient measures are taken to ensure data integrity.

True, Software and Data Integrity Failures involve cases where insufficient measures are taken to ensure data integrity.



Good job!

Complete this sentence: "Software and Data Integrity Failures usually happen..."

when data is used as behavior.



Good job!

when data is read without checking its integrity.

when data is downloaded before checking its integrity.