

Thank you all for an interesting discussion. While reading all your comments, (in particular end point protection) I began to wonder how secure an API (Application Programming Interface) would be and if the same comments made in your posts would be applicable.

An API is basically two applications or external systems communicating, one requesting information and the other passing the information from the backend (usually some kind of Database). The most common, are web-based API like REST and HTTP, which use OAuth (Open Authorization) an open standard access delegation. This grants access to web resources without having to share passwords.

Depending on how important the data is that is being transferred, an insecure API could be subject to the same attacks that a network could encounter. Examples of this could be Man-in-the-middle attack, Denial of service or injection leaving the data compromised. RedHat have provided best practices, which include:

Use of Tokens ensuring the system accessing the API is allowed and permissioned.

Use of encryption and signatures, such as TLS (Transport Layer Security) which is a standard that keeps an internet connection private and checks that the data sent between two systems is encrypted and unmodified.

Identify vulnerabilities and ensure they are patched.

Use Quotas and throttling to track who and how often the API is being called. [RedHat, 2019]

In conclusion, an API that is transferring information from one device to another holds equal importance to any network or application and protecting this information should be taken seriously. A recent article highlights API attacks including an attack on LinkedIn, where over 700 Million users had their personal information (such as name and address) sold due to a technical API flaw. [Mahony, R 2021]

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