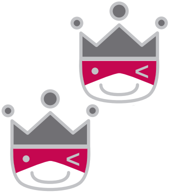
2

Spoofing

An attacker could take over the port or socket that the server normally uses.



2

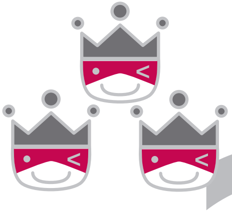
Microsoft

elevation of privilege

3

Spoofing

An attacker could try one credential after another and there's nothing to slow them down (online or offline)



3

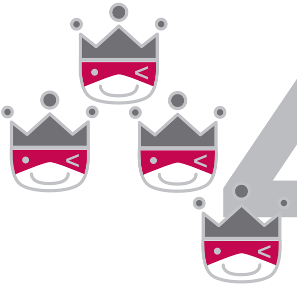
Microsoft®

elevation of privilege

4

Spoofing

An attacker can anonymously connect, because we expect authentication to be done at a higher level



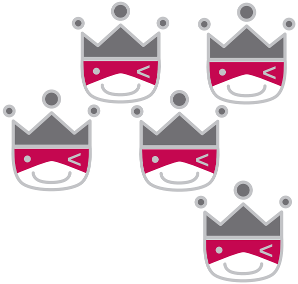
Microsoft®

elevation of privilege

5

Spoofing

An attacker can confuse a client because there are too many ways to identify a server

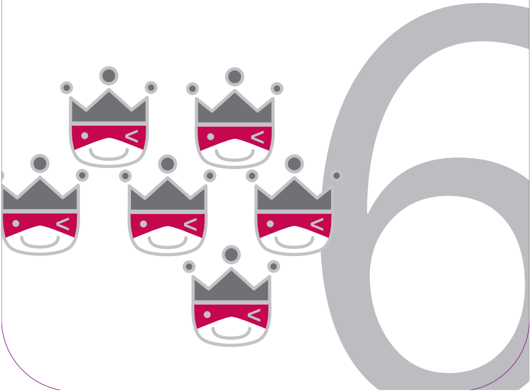


Microsoft®

elevation of privilege

6 Spoofing

An attacker can spoof a server because identifiers aren't stored on the client and checked for consistency on re-connection (that is, there's no key persistence)



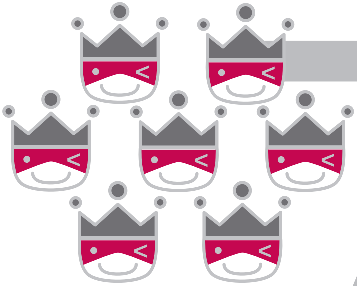
Microsoft®

elevation of privilege

7

Spoofing

An attacker can connect to a server or peer over a link that isn't authenticated (and encrypted)



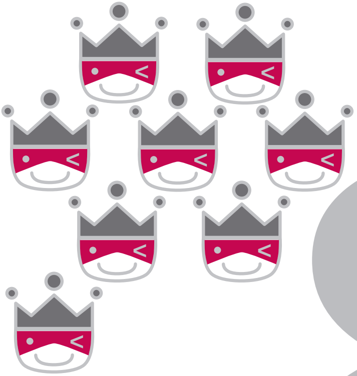
Microsoft

elevation of privilege

8

Spoofing

An attacker could steal credentials stored on the server and reuse them (for example, a key is stored in a world readable file)



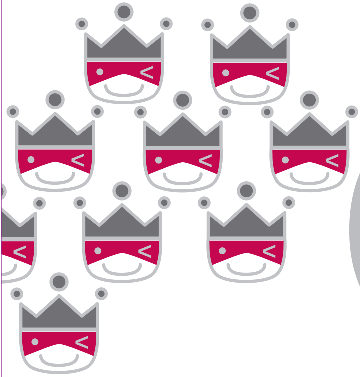
Microsoft®

elevation of privilege

9

Spoofing

An attacker who gets a password can reuse it (Use stronger authenticators)

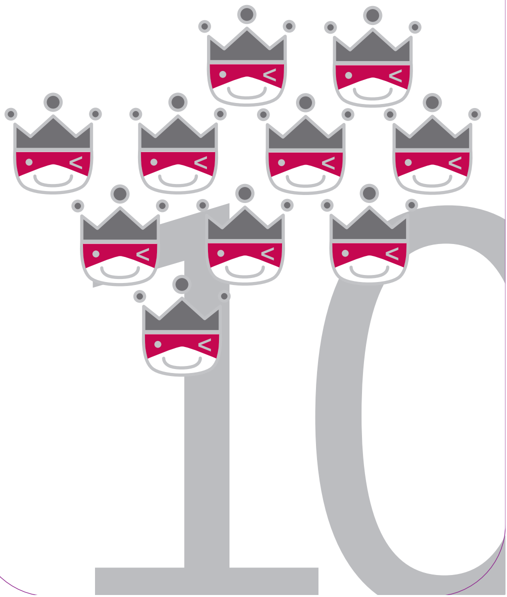


Microsoft®

elevation of privilege

10 Spoofing

An attacker can choose to use weaker or no authentication



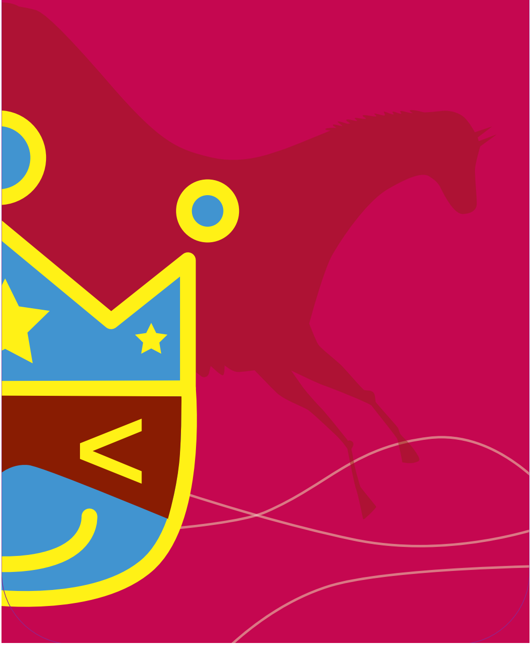
Microsoft®

elevation of privilege

J

Spoofing

An attacker could steal credentials stored on the client and reuse them



Microsoft®

elevation of privilege

Q

Spoofing

An attacker could go after the way credentials are updated or recovered (account recovery doesn't require disclosing the old password)

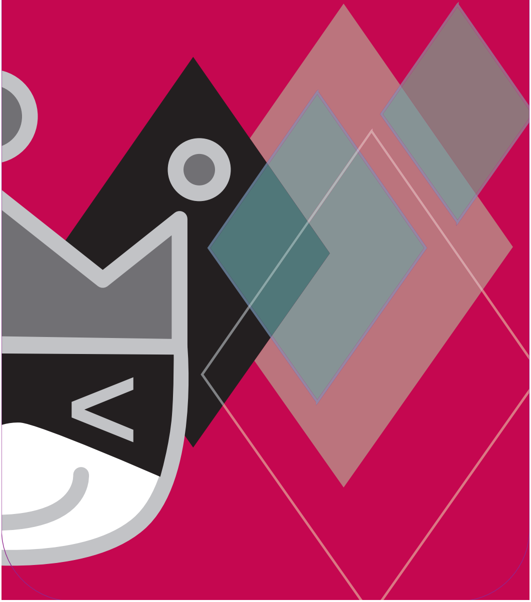
Microsoft®

elevation of privilege

K

Spoofing

Your system ships with a default admin password, and doesn't force a change



Microsoft®

elevation of privilege

A

Spoofing

You've invented a new Spoofing attack

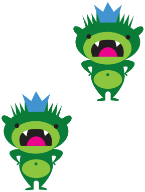
Microsoft®

elevation of privilege

2

Tampering

An attacker can take advantage of your custom key exchange or integrity control which you built instead of using standard crypto



2

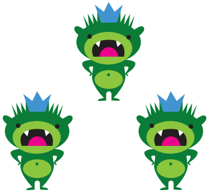
Microsoft®

elevation of privilege

3

Tampering

An attacker can modify your build system and produce signed builds of your software



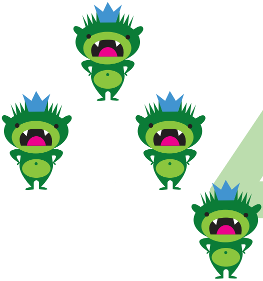
3

Microsoft®

elevation of privilege

4 Tampering

Your code makes access control decisions all over the place, rather than with a security kernel

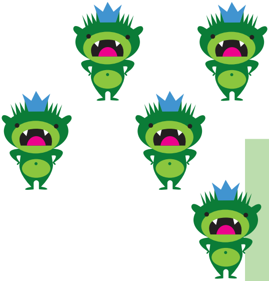


Microsoft®

elevation of privilege

5 Tampering

An attacker can replay data without detection because your code doesn't provide timestamps or sequence numbers



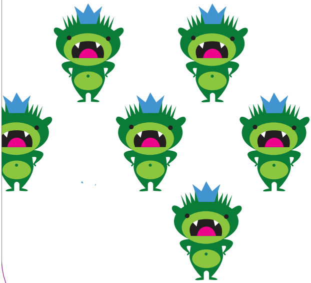
Microsoft®

elevation of privilege

6

Tampering

An attacker can write to a data store your code relies on



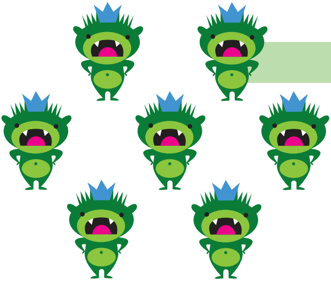
Microsoft®

elevation of privilege

7

Tampering

An attacker can bypass permissions because you don't make names canonical before checking access permissions



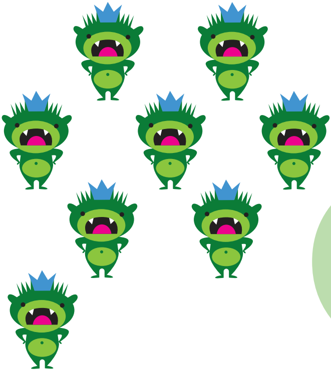
Microsoft®

elevation of privilege

8

Tampering

An attacker can manipulate data because there's no integrity protection for data on the network



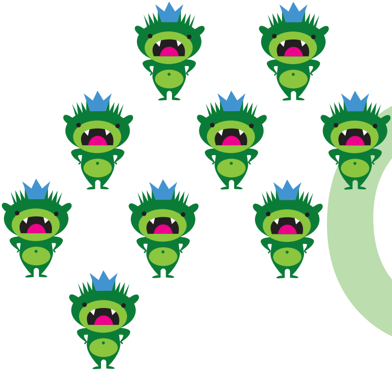
Microsoft®

elevation of privilege

9

Tampering

An attacker can provide or control state information



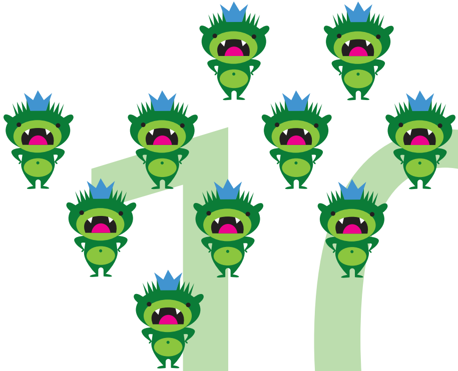
Microsoft®

elevation of privilege

10

Tampering

An attacker can alter information in a data store because it has weak/open permissions or includes a group which is equivalent to everyone ("anyone with a Facebook account")



Microsoft®

elevation of privilege

J

Tampering

An attacker can write to some resource because permissions are granted to the world or there are no ACLs

Microsoft®

elevation of privilege

Q

Tampering

An attacker can change parameters over a trust boundary and after validation (for example, important parameters in a hidden field in HTML, or passing a pointer to critical memory)

Microsoft®

elevation of privilege

K

Tampering

An attacker can load code inside your process via an extension point

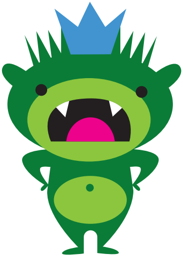
Microsoft®

elevation of privilege

A

Tampering

You've invented a new Tampering attack



Microsoft®

elevation of privilege

2

Repudiation

An attacker can pass data through the log to attack a log reader, and there's no documentation of what sorts of validation are done

Microsoft®

elevation of privilege

3

Repudiation

A low privilege attacker can read interesting security information in the logs

Microsoft®

elevation of privilege

4

Repudiation

An attacker can alter digital signatures because the digital signature system you're implementing is weak, or uses MACs where it should use a signature

Microsoft

elevation of privilege

5

Repudiation

An attacker can alter log messages on a network because they lack strong integrity controls

Microsoft®

elevation of privilege

6

Repudiation

An attacker can create a log entry without a timestamp (or no log entry is timestamped)

Microsoft®

elevation of privilege

7

Repudiation

An attacker can make the logs wrap around and lose data

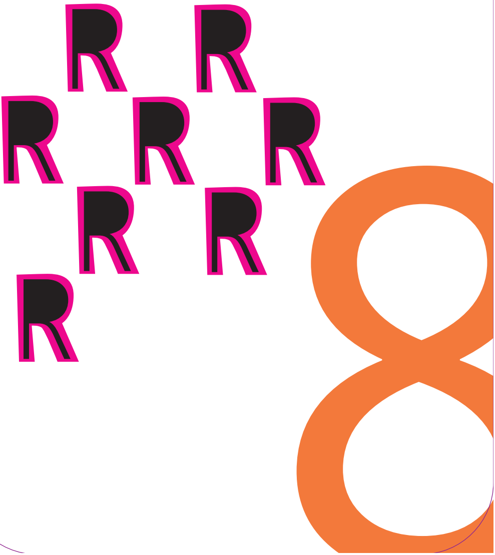
Microsoft®

elevation of privilege

8

Repudiation

An attacker can make a log lose or confuse security information



Microsoft®

elevation of privilege

9 Repudiation

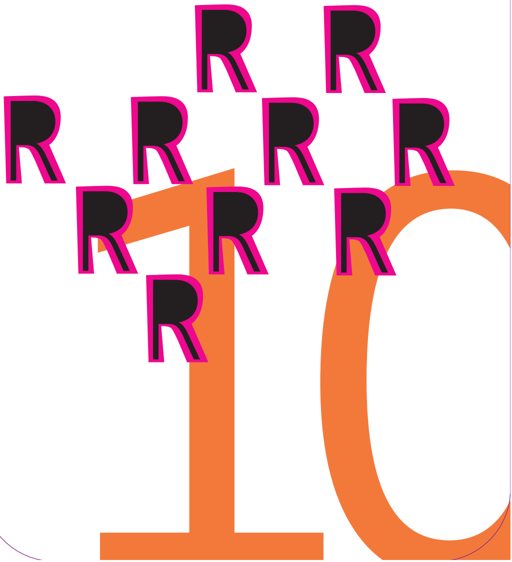
An attacker can use a shared key to authenticate as different principals, confusing the information in the logs

Microsoft®

elevation of privilege

10 Repudiation

An attacker can get arbitrary data into logs from unauthenticated (or weakly authenticated) outsiders without validation



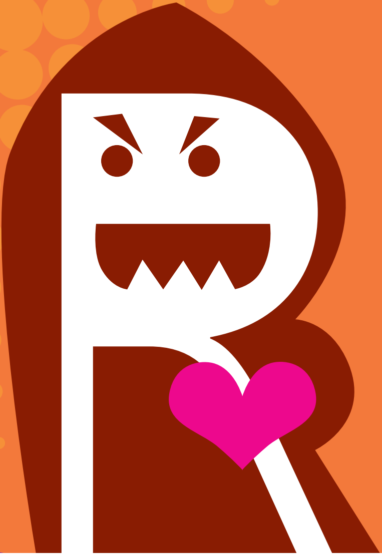
Microsoft®

elevation of privilege

J

Repudiation

An attacker can edit logs and there's no way to tell (perhaps because there's no heartbeat option for the logging system)



Microsoft®

elevation of privilege

Q

Repudiation

An attacker can say "I didn't do that," and you'd have no way to prove them wrong

Microsoft®

elevation of privilege

K

Repudiation

The system has no logs

logs = 0

Microsoft

elevation of privilege

A

Repudiation

You've invented a new Repudiation attack

Microsoft®

elevation of privilege

2

Information Disclosure

An attacker can brute-force file encryption because there's no defense in place (example defense, password stretching)

2

Microsoft®

elevation of privilege

3

Information Disclosure

An attacker can see error messages with security sensitive content

Microsoft®

elevation of privilege

4

Information Disclosure

An attacker can read content because messages (say, an email or HTTP cookie) aren't encrypted even if the channel is encrypted

Microsoft®

elevation of privilege

5

Information Disclosure

An attacker may be able to read a document or data because it's encrypted with a non-standard algorithm

Microsoft®

elevation of privilege

6

Information Disclosure

An attacker can read data because it's hidden or occluded (for undo or change tracking) and the user might forget that it's there

Microsoft®

elevation of privilege

7

Information Disclosure

An attacker can act as a 'man in the middle' because you don't authenticate endpoints of a network connection

Microsoft

elevation of privilege

8

Information Disclosure

An attacker can access information through a search indexer, logger, or other such mechanism

Microsoft®

elevation of privilege

9

Information Disclosure

An attacker can read sensitive information in a file with permissive permissions

Microsoft

elevation of privilege

10

Information Disclosure

An attacker can read information in files or databases with no access controls

Microsoft®

elevation of privilege

J

Information Disclosure

An attacker can discover the fixed key being used to encrypt

Microsoft®

elevation of privilege

Q

Information Disclosure

An attacker can read the entire channel because the channel (say, HTTP or SMTP) isn't encrypted

Microsoft®

elevation of privilege

K

Information Disclosure

An attacker can read network information because there's no cryptography used

Microsoft®

elevation of privilege

A

Information Disclosure

You've invented a new Information Disclosure attack

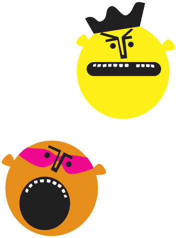
Microsoft®

elevation of privilege

2

Denial of Service

An attacker can make your authentication system unusable or unavailable



2

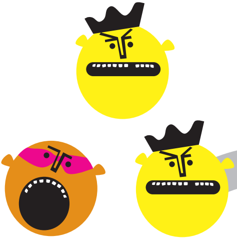
Microsoft®

elevation of privilege

3

Denial of Service

An attacker can drain our easily replacable battery ***(battery, temporary)***



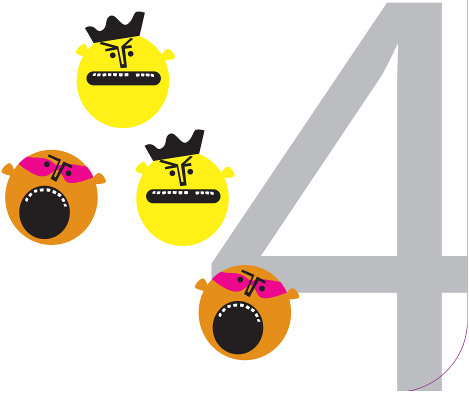
Microsoft

elevation of privilege

4

Denial of Service

An attacker can drain a battery that's hard to replace **(sealed in a phone, an implanted medical device, or in a hard to reach location)** *(battery, persist)*



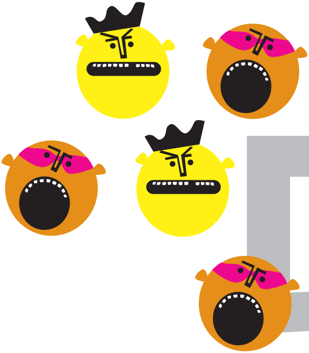
Microsoft®

elevation of privilege

5

Denial of Service

An attacker can spend our cloud budget ***(budget, persist)***



Microsoft®

elevation of privilege

6

Denial of Service

An attacker can make a server unavailable or unusable without ever authenticating but the problem goes away when the attacker stops ***(server, anonymous, temporary)***

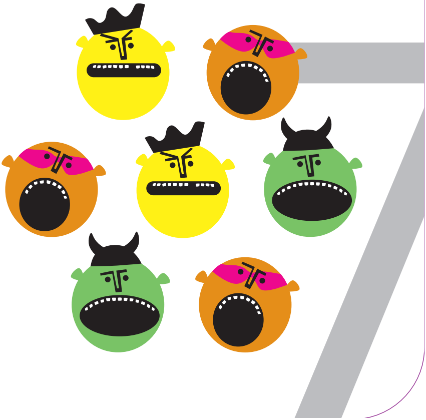
Microsoft®

elevation of privilege

7

Denial of Service

An attacker can make a client unavailable or unusable and the problem persists after the attacker goes away ***(client, auth, persist)***



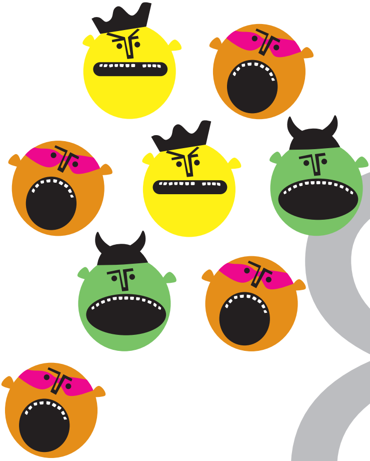
Microsoft®

elevation of privilege

8

Denial of Service

An attacker can make a server unavailable or unusable and the problem persists after the attacker goes away **(server, auth, persist)** ***(client, auth, persist)***



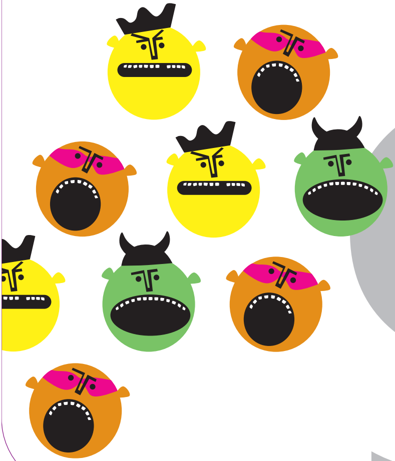
Microsoft®

elevation of privilege

9

Denial of Service

An attacker can make a client unavailable or unusable without ever authenticating and the problem persists after the attacker goes away ***(client, anon, persist)***

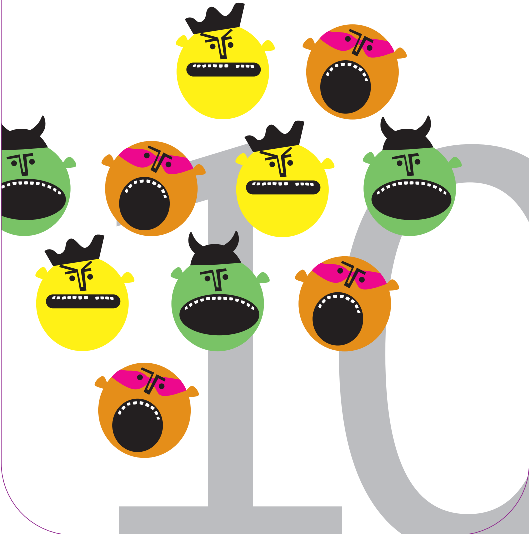


elevation of privilege

10

Denial of Service

An attacker can make a server unavailable or unusable without ever authenticating and the problem persists after the attacker goes away ***(server, anonymous, persistent).***



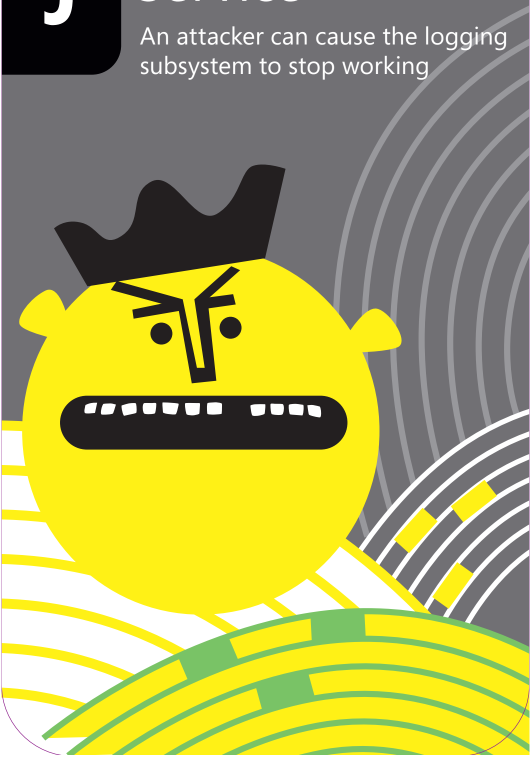
Microsoft®

elevation of privilege

J

Denial of Service

An attacker can cause the logging subsystem to stop working



Microsoft®

elevation of privilege

Q

Denial of Service

An attacker can amplify a Denial of Service attack through this component with amplification on the order of 10 to 1

Microsoft®

elevation of privilege

K

Denial of Service

An attacker can amplify a Denial of Service attack through this component with amplification on the order of 100 to 1

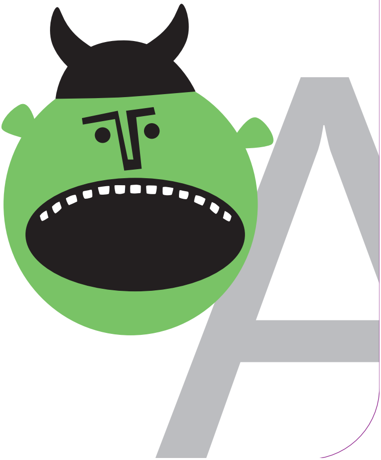
Microsoft®

elevation of privilege

A

Denial of Service

You've invented a new Denial of Service attack



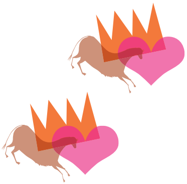
Microsoft

elevation of privilege

2

Elevation of Privilege

An attacker has compromised a key technology supplier



2

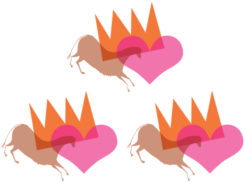
Microsoft®

elevation of privilege

3

Elevation of Privilege

An attacker can access the cloud service which manages your devices



3

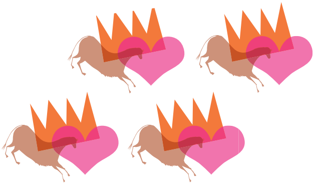
Microsoft

elevation of privilege

4

Elevation of Privilege

An attacker can escape from a container or other sandbox



4

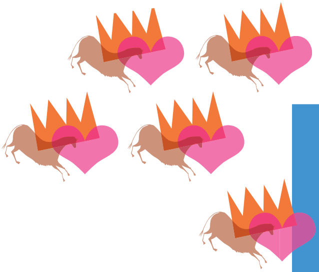
Microsoft

elevation of privilege

5

Elevation of Privilege

An attacker can force data through different validation paths which give different results



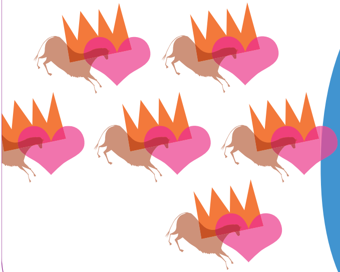
Microsoft®

elevation of privilege

6

Elevation of Privilege

An attacker could take advantage of permissions you set, but don't use



6

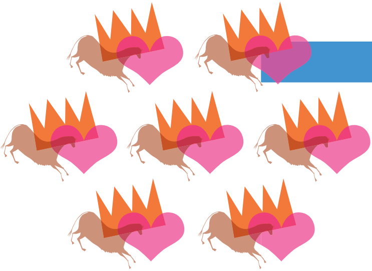
Microsoft

elevation of privilege

7

Elevation of Privilege

An attacker can provide a pointer across a trust boundary, rather than data which can be validated



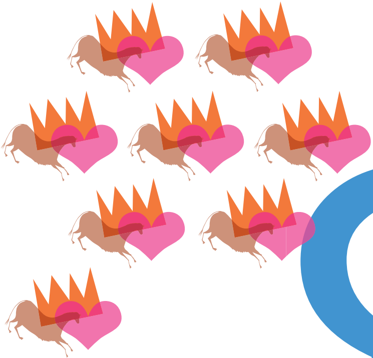
Microsoft®

elevation of privilege

8

Elevation of Privilege

An attacker can enter data that is checked while still under their control and used later on the other side of a trust boundary



8

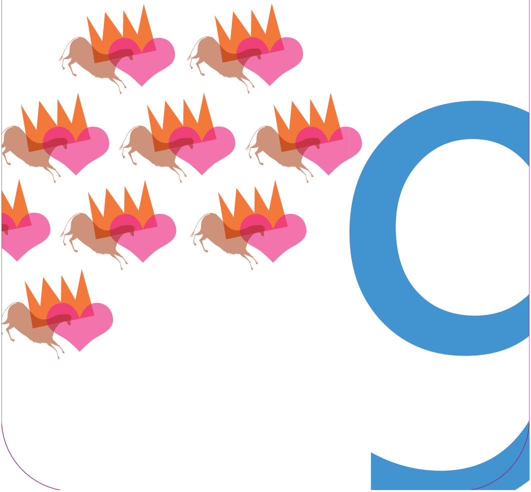
Microsoft®

elevation of privilege

9

Elevation of Privilege

There's no reasonable way for a caller to figure out what validation of tainted data you perform before passing it to them



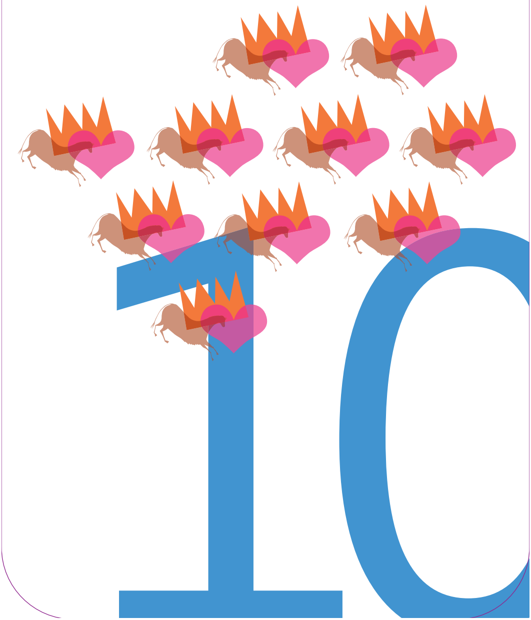
Microsoft®

elevation of privilege

10

Elevation of Privilege

There's no reasonable way for a caller to figure out what security assumptions you make



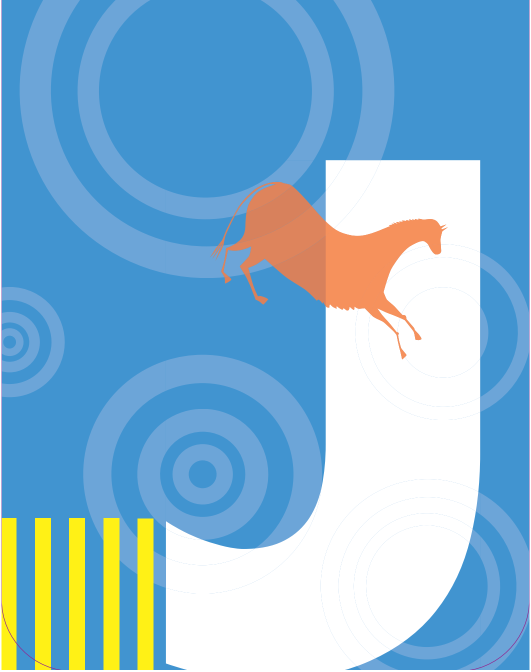
Microsoft

elevation of privilege

J

Elevation of Privilege

An attacker can reflect input back to a user, like cross site scripting



Microsoft®

elevation of privilege

Q

Elevation of Privilege

You include user-generated content within your page, possibly including the content of random URLs

Microsoft®

elevation of privilege

K

Elevation of Privilege

An attacker can inject a command that the system will run at a higher privilege level

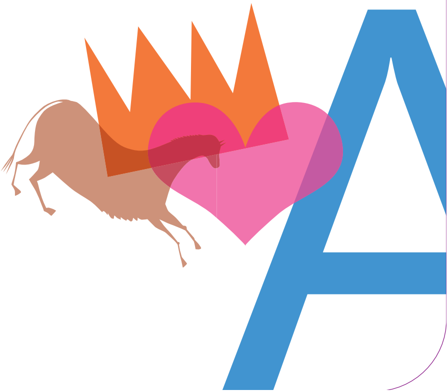
Microsoft®

elevation of privilege

A

Elevation of Privilege

You've invented a new Elevation of Privilege attack



Microsoft®

elevation of privilege