





**HIGH RISK**

**MEDIUM RISK**

**LOW RISK**



THREAT-ON-MER



**PUBLIC CLOUD**





**LAPTOP WITH  
BROWSER**

Exploit unlikely or  
running  
untrusted code already  
worst case

Exploit possible but  
needs another  
successful attack to run  
attackers code

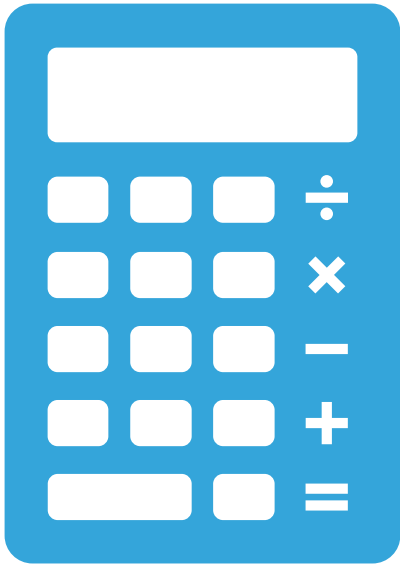
Exploit possible and  
runs untrusted code "by  
design"



**PRIVATE CLOUD**



**DATABASE  
SERVER**

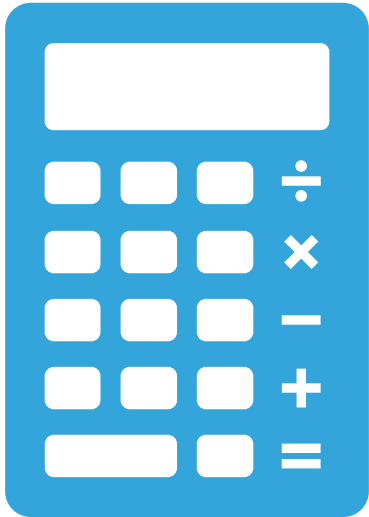


**MAILSERVER**

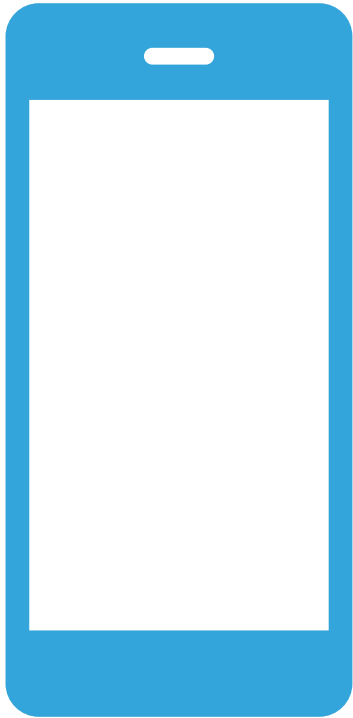


**FIREWALL**





**APPLICATION  
SERVER**



**MOBILE PHONE**

Public clouds run code of many untrusted parties which makes them very vulnerable.

Databases are often protected from the internet and are accessed only by application servers.

Running untrusted code on a database is often already the worst case scenario. Patching against Meltdown/Spectre would only marginally increase security.

Mailserver are exposed to the internet but have been proven to be very robust to "remote code execution" attacks.

Also a code execution is already the worst case.

Arguably mail servers can be placed in "medium" due to their exposure to the internet.

Laptops/desktop  
systems with browsers  
are very vulnerable  
because they execute  
untrusted code in the  
form of JavaScript from  
websites.

Threat-Order

Mobile phones run apps  
and websites (JavaScript).



Firewalls and switches (normally) do not expose an attackable surface to the external network.

This greatly reduces the likelihood of attacks.

A code execution is already the worst case.

VPN gateways expose a complex interface and are more likely to be attacked.

Application servers only  
run trusted code but  
attacks can lead to code  
execution.

Private clouds run many different workloads but they are all trusted.

An attacker only needs to hack one application running in the cloud to run a Spectre attack.

Given the patches are risky w. regards to performance and availability.

**What would be your patching strategy for each risk class?**



**PUBLIC CLOUD**



**DATABASE  
SERVER**



MAILSERVER



LAPTOP WITH  
BROWSER





MOBILE PHONE



**FIREWALL**



APPLICATION  
SERVER



**PRIVATE CLOUD**



ACCIDENT, MALICE,  
INCOMPETENCE?

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**WHY DID IT  
HAPPEN?**

## THREAT-0-METER

Given the patches are risky w. regards to performance and availability.

**What would be your patching strategy for each risk class?**



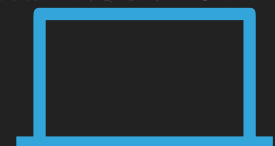
DATABASE  
SERVER



MAILSERVER



APPLICATION  
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LAPTOP WITH  
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### LOW RISK

Exploit unlikely or  
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### MEDIUM RISK

Exploit possible but  
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### HIGH RISK

Exploit possible and  
runs untrusted code "by  
design"