

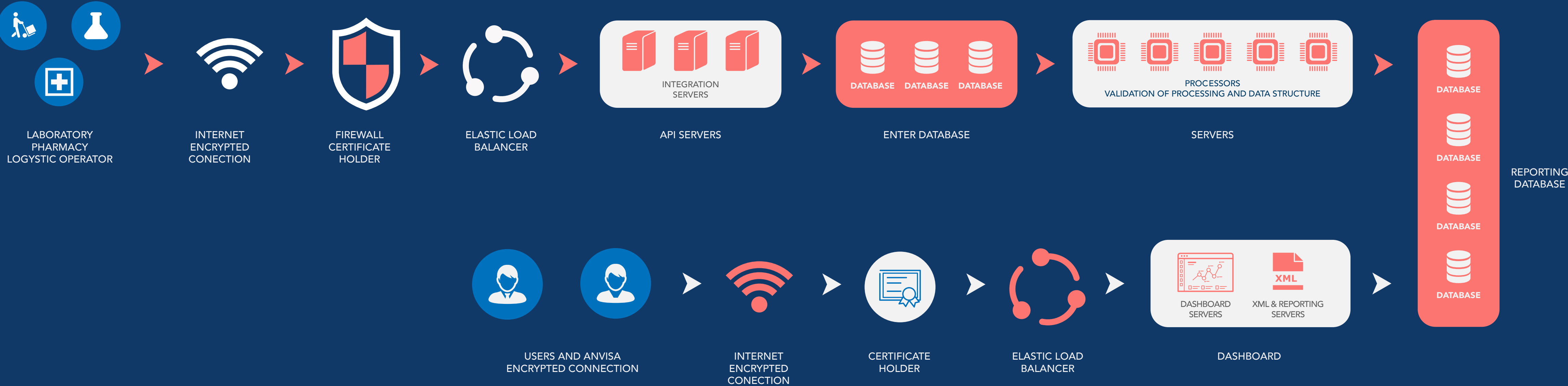
**CERTIFICATIONS / DATA FARM R&B**

**R&B**

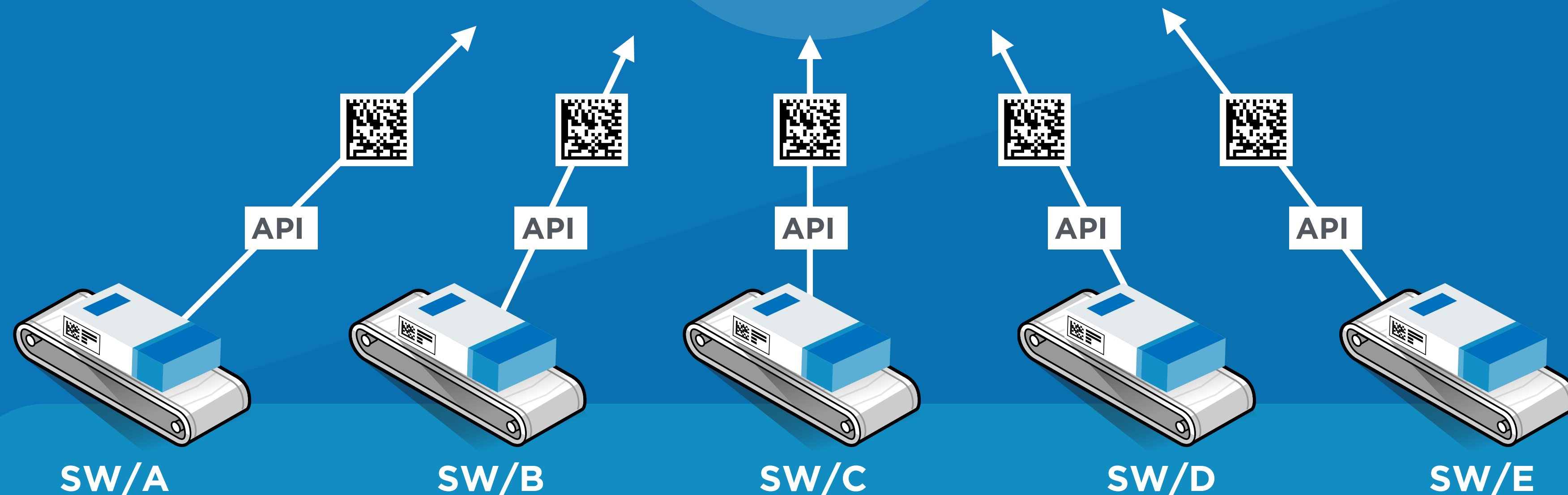
RASTREABILIDADE  
BRASIL



# INFRASTRUCTURE DATA FARM R&B



**DATAFARM&B**  
CAN BE PLUGGED  
TO ANY FACTORY  
LABORATORY  
SOFTWARE



**FACTORY**

# Reliability

## Multi Layer Datacenter



All registered events go through a two layer cluster, the first layer is a fast write assured layer where we guarantee to write all coming events in a full redundant fashion where events are always write in more then on server. The second layer works asynchronously to validate and process the raw events before sending them to the final storage cluster

**R&B** has chosen a datacenter that has ALL international certifications available for datacenter from security, vulnerability control to reliability.

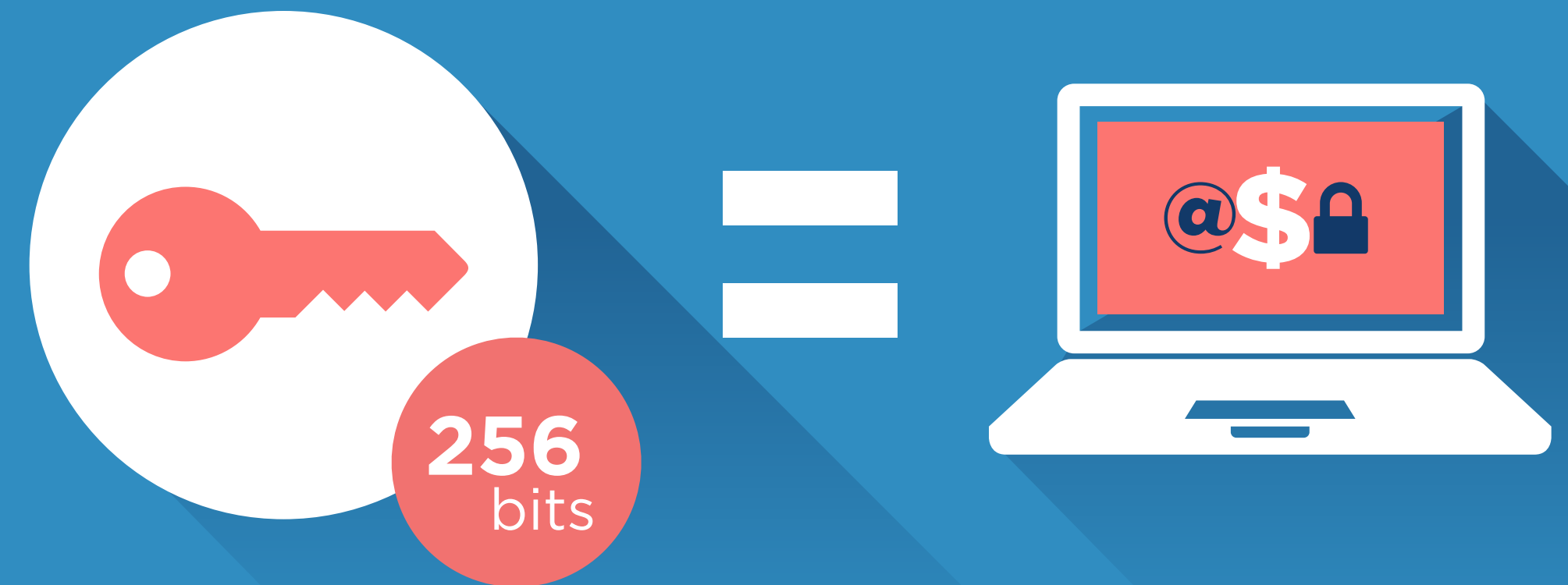
# Reliability

## Data communication

Certified data center, is crucial to ensure security and data integrity

### 1 Encrypted channel

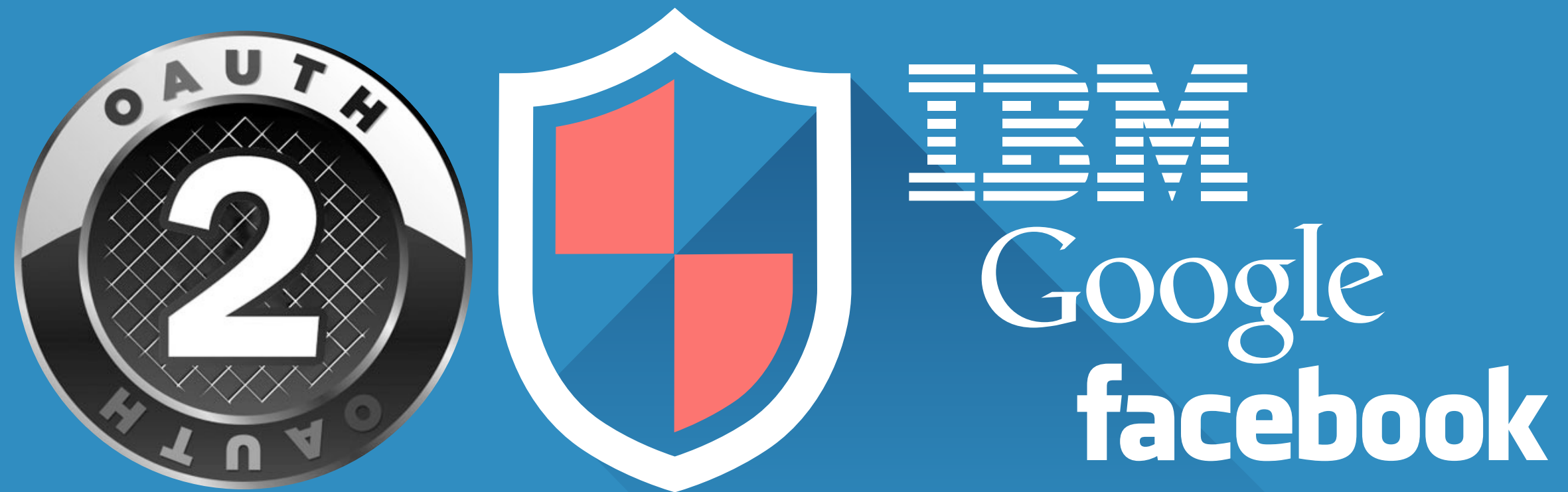
SSL - Secure Socket Layer. Strong 256 bits encryption. Same standard used by the financial market.



# Reliability

## Security

With a certified datacenter we need to make sure of the integrity and security of all incoming data:



## Authentication & Authorization

Authentication protocol **OAuth 2.0**  
(same used by IBM, Google e Facebook).

Standard security practices, fined grained permissions security and detailed level of access.

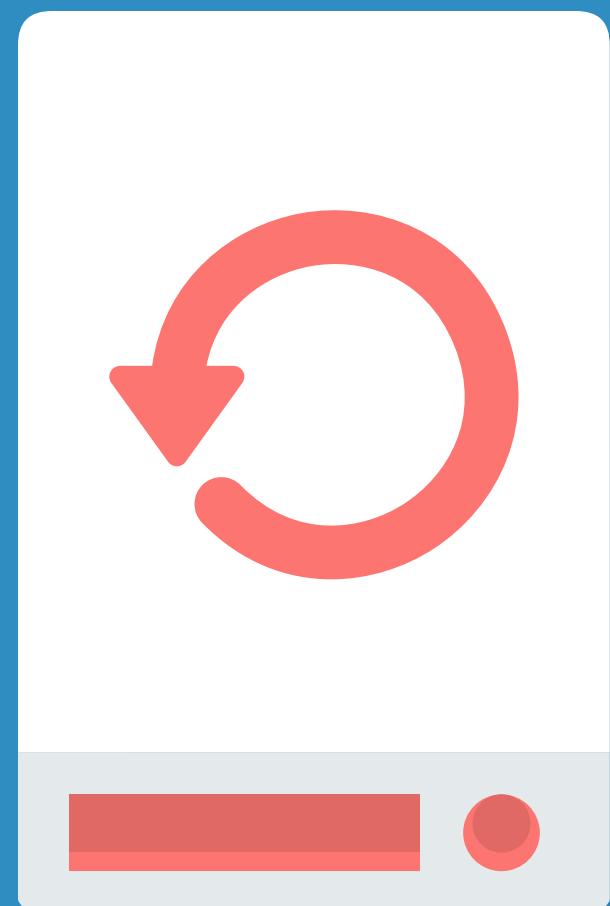
Fully audit able access control with logged security events.

Intrusion and anomaly detection processes in place.

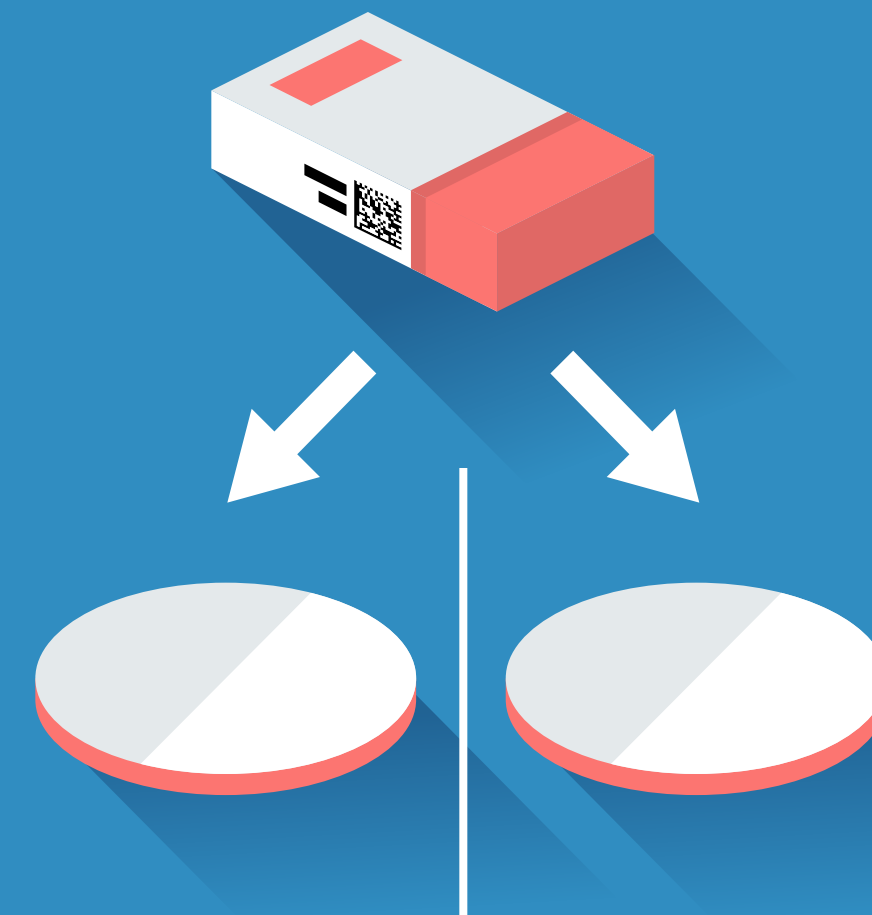
# Reliability

## Data reliability

It's paramount to guarantee data integrity and have the proper data protection measures in place



**Office  
backup  
policies and  
disaster  
recovery  
planning.**



**Full data  
redundancy**

All events are  
always in N+1  
different servers



# Data availability

There are no single points of failure:

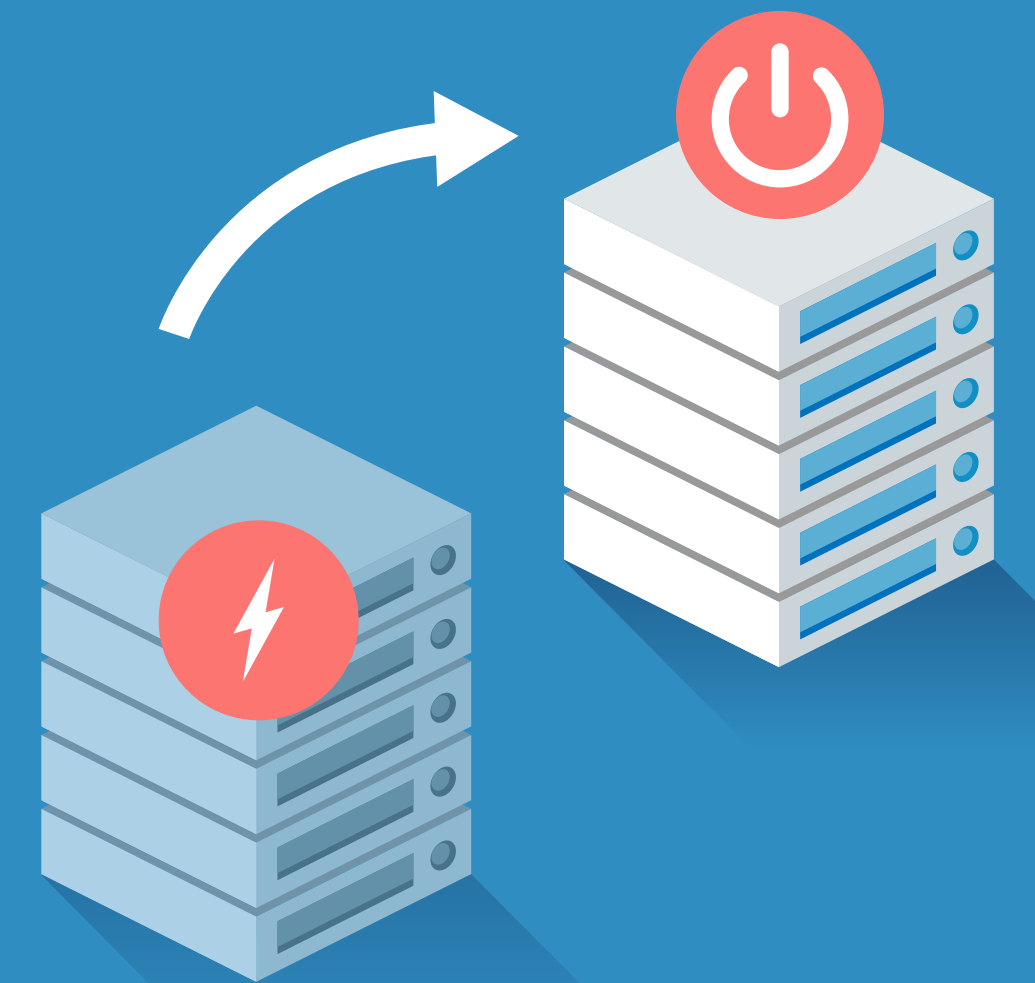
## N+1 Solutions

For each hardware, appliance or server we always an extra instance



## Automatic Fail Over

There is no manual interference needed when an equipment goes down, another instance automatically assumes the job





# Capacity and Performance

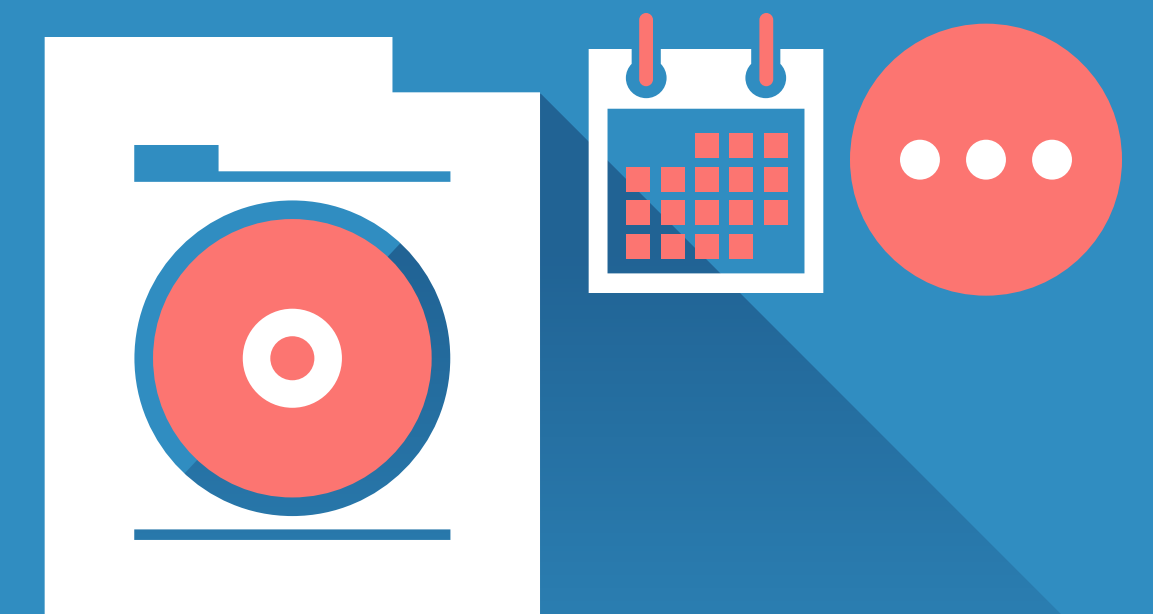
## Distributed & Parallel programming

By being on a cloud structure we can elastically adjust the processing capacity, we can optimize the server utilisation and we can grow our structure linearly according with the demand



## Endless storage capacity

R&B loves data and we created our business to hold data indefinitely, we are not deleting data not even when the law allow us to.



## Unlimited horizontal growth

Our processing power can be augmented by adding more servers with more efficient than growing by enhance hardware.





# ANVISA XML protocols among several other options

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XML  
**ANVISA**

**R&B** has a highly pluggable environment and with our integration layer we can support communication with all know protocols

More specifically **R&B developed the government (Anvisa) XML protocol** accordingly the published guidance.

During our pilot with a Laboratory in São Paulo we could test the ANVISA's XML as well as our proprietary protocols.

# CERTIFICATIONS DATAFARM&B



**U.S. Health Insurance  
Portability and  
Accountability Act  
(HIPAA)**



**Service Organization  
Controls 2 (SOC 2)  
Type II report.**



# CERTIFICATIONS DATA FARM & B



## Service Organization Controls 3 (SOC 3)

[https://cert.webtrust.org/pdfs/soc3\\_amazon\\_web\\_services.pdf](https://cert.webtrust.org/pdfs/soc3_amazon_web_services.pdf)



## PCI DSS Level 1

The most important security certification required for example to all institutions wanting to hold credit card data.

# CERTIFICATIONS DATA FARM & B



## ISO 27001

ISO/IEC 27001 is a standard for information security management.



## FEDRAMP





**R&B**

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