



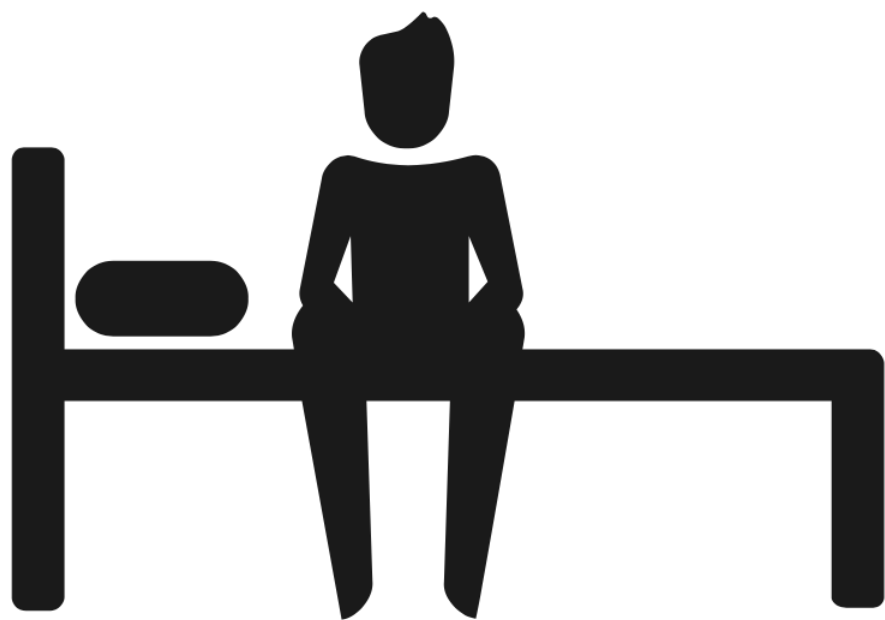
Mejorando tu confiabilidad a través de prácticas modernas de operaciones

Jesus Gil | Dr Rudo SQL

MVP Data Platform | Principal Data Architect | Autor

@jesus_gilv | @SQL_Rudo | YouTube SQLRudo

CONFIABILIDAD





Activities

Firefox Web Browser

Tue 21:54

TimePI Telemetry - Mozilla Firefox

FileEditViewHistoryBookmarksToolsHelp

192.168.0.99:1880/ui/#/4#%2F4

Search

Master Control

Status

8283???899192939499202

SHUT DOWN

REBOOT

BACKUP

UPdate/grade

Test 1

Test 2

Alarm Ack

Replies:

TELEPI S

BEEFPI S

TIMEPI S

NASTN S

MUSICPI

BEDPI

PIFACE

EYESPYPI

CAMERAPI

PORTAPI

TELEPI

BEEFPI

TIMEPI

NASTN

MUSICPI B

BEDPI B

PIFACE B

EYESPYPI B

CAMERAPI B

PORTAPI B

TELEPI B

BEEFPI B

TIMEPI B

NASTN B

UD

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MUSICPI T1

BEDPI T1

PIFACE T1

EYESPYPI T1

CAMERAPI T1

PORTAPI T1

TELEPI T1

BEEFPI T1

TIMEPI T1

NASTN T1

MUSICPI T2

BEDPI T2

PIFACE T2

EYESPYPI T2

CAMERAPI T2

PORTAPI T2

TELEPI T2

BEEFPI T2

TIMEPI T2

NASTN T2

MUSICPI AK

BEDPI AK

PIFACE AK

EYESPYPI AK

CAMERAPI AK

PORTAPI AK

TELEPI AK

BEEFPI AK

TIMEPI AK

NASTN AK

Load

MusicPi

BedPi

PiFace

EyeSpyPi

CameaPi

PortaPi

TelePi

BeefPi

TimePi

MAIN MENU

TELEMETRY

WEATHER

C & D

ALARMS

RLY CTL

DOOR CTL



Mark Kofman @markkofman · Feb 20
 @groovehq we can't access our helpdesk. whats up? our customers are waiting for us to respond.



Vero @veroapp · Feb 20
 @GrooveHQ getting a 500 error when trying to login. any problems at the moment?



Lesley Yarbrough @sprouticus · Feb 20
 @GrooveHQ hey guys, are you having some issues tonight? Getting a 500 error when trying to get to our help desk. pic.twitter.com/ncYNzyPZDH



Tract @tractcom · Feb 21
 @GrooveHQ what is going on with our support system?? pic.twitter.com/jrSGMqjiT



Brandon Griggs @bigboxofbrandon · Feb 21
 @groovehq everything has been down for hours with no updates. What's the story here?



Aron Rotteveel @ArondeParon · Feb 21
 Seems like @GrooveHQ could use an international helpdesk. All systems down, including it's own helpdesk :(



Nick Chapman @nchapman · Feb 21
 @GrooveHQ I'm getting lots of 500 errors. Is something wrong?



javierios: @mringlein mediatemple is down for me, wtf!
 about 13 hours ago · [Reply](#) · [View Tweet](#)



MattBowen: @mringlein our mediatemple sites are down.
 about 13 hours ago · [Reply](#) · [View Tweet](#)



razorfrog: Watch Twitter curse @mediatemple endlessly. Lots of fun. Unless you happen to have ALL of your websites there. <http://tr.im/ghz1>
 about 13 hours ago · [Reply](#) · [View Tweet](#)



mringlein: MediaTemple, come back please, come back now please
 about 13 hours ago · [Reply](#) · [View Tweet](#)



Fitzillo: Gah! #MediaTemple (mt) seem like they go down way more often than any other host... why are they so beloved?
 about 13 hours ago · [Reply](#) · [View Tweet](#)



lamallama: Mediatemple just went down
 about 13 hours ago · [Reply](#) · [View Tweet](#)

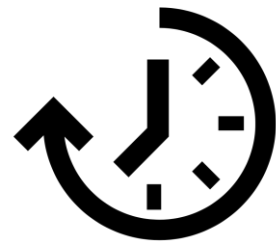


schofeld: Something majorly screwy with <http://mediatemple.net/> right now.
 about 13 hours ago · [Reply](#) · [View Tweet](#)

Puedes perder...



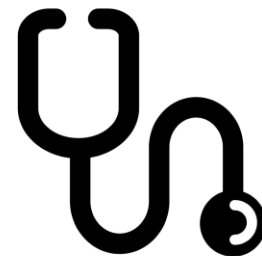
dinero



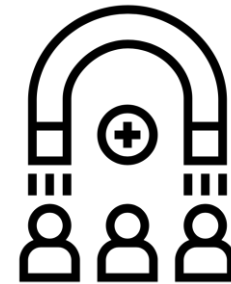
tiempo



reputación



salud



contratación

Puedes perder...



dinero



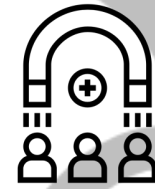
tiempo



reputación

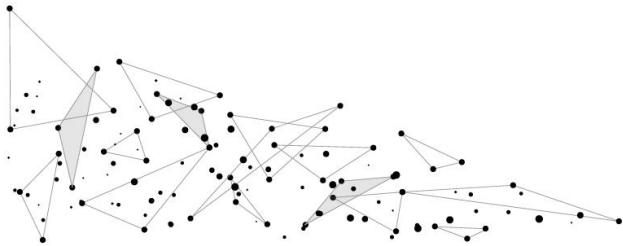


salud



contratación

**Operaciones modernas
pueden ayudar**



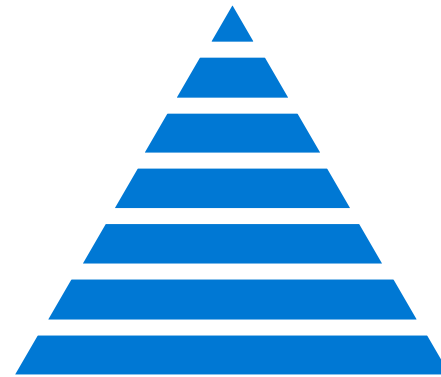
Mejorando tu confiabilidad a través de prácticas modernas de operaciones

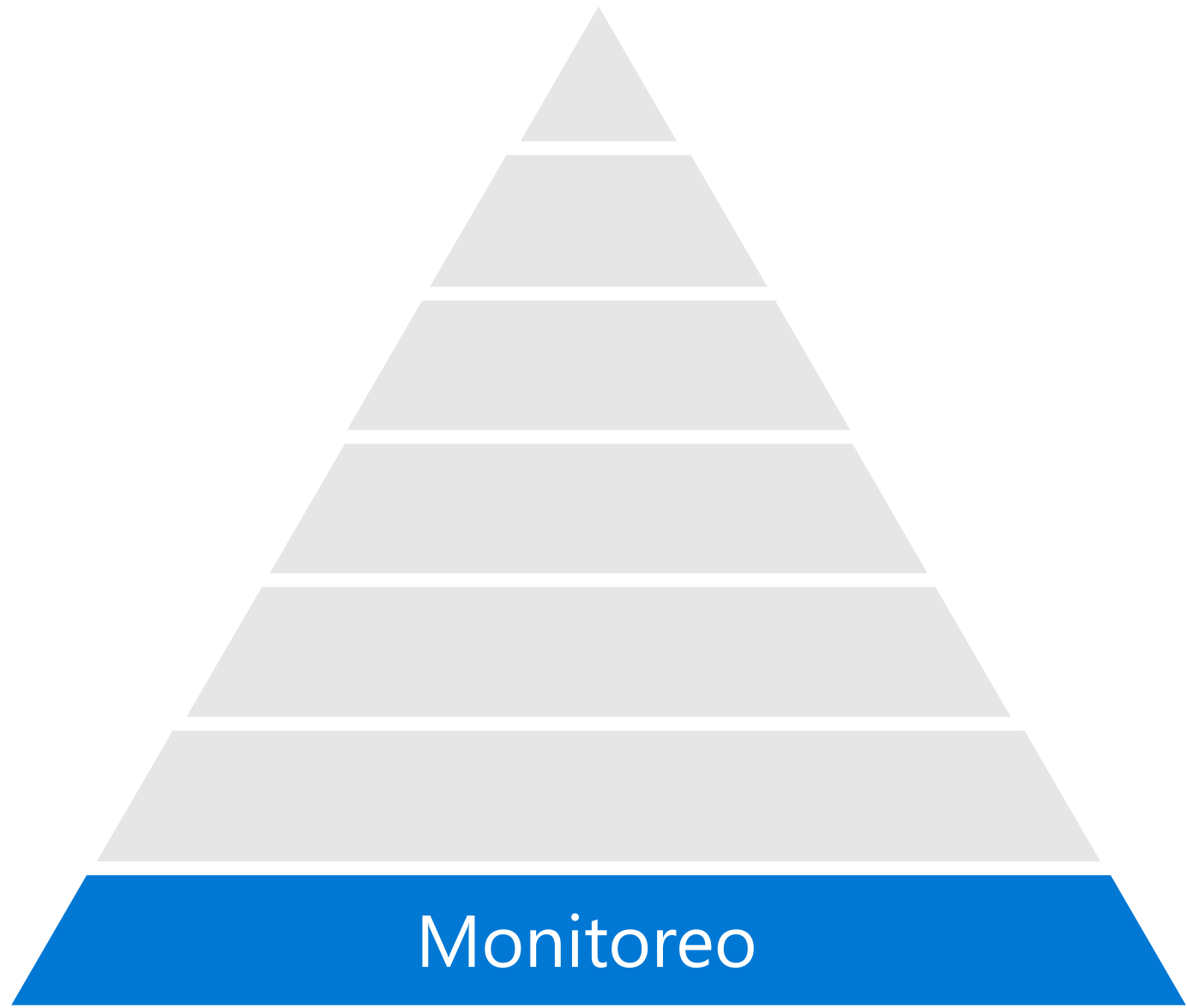
Mejora de la confiabilidad en tu empresa

**Aquí está
nuestro mapa**

**Aquí está
nuestro mapa**

Jerarquía de confiabilidad de Dickerson







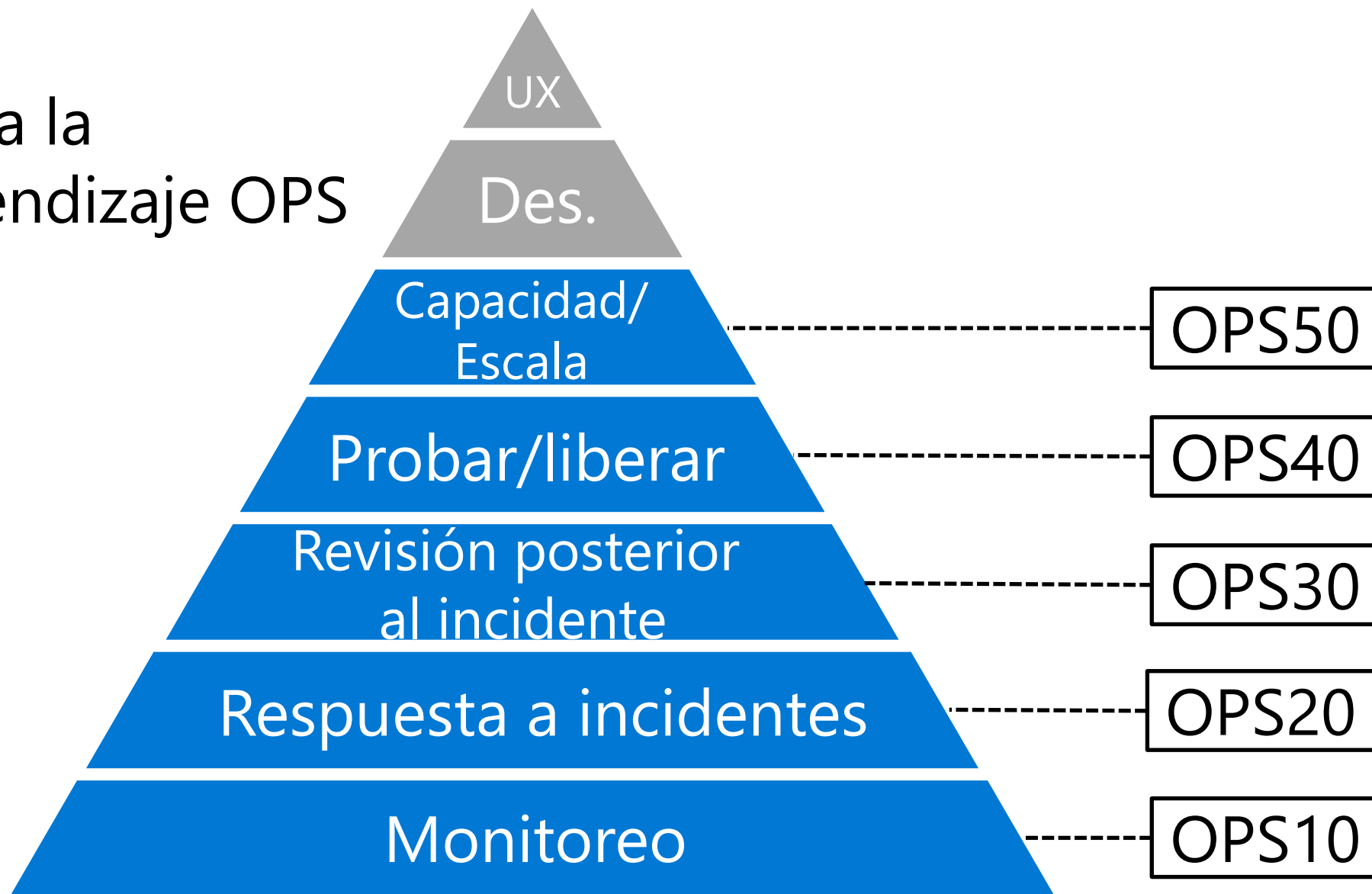




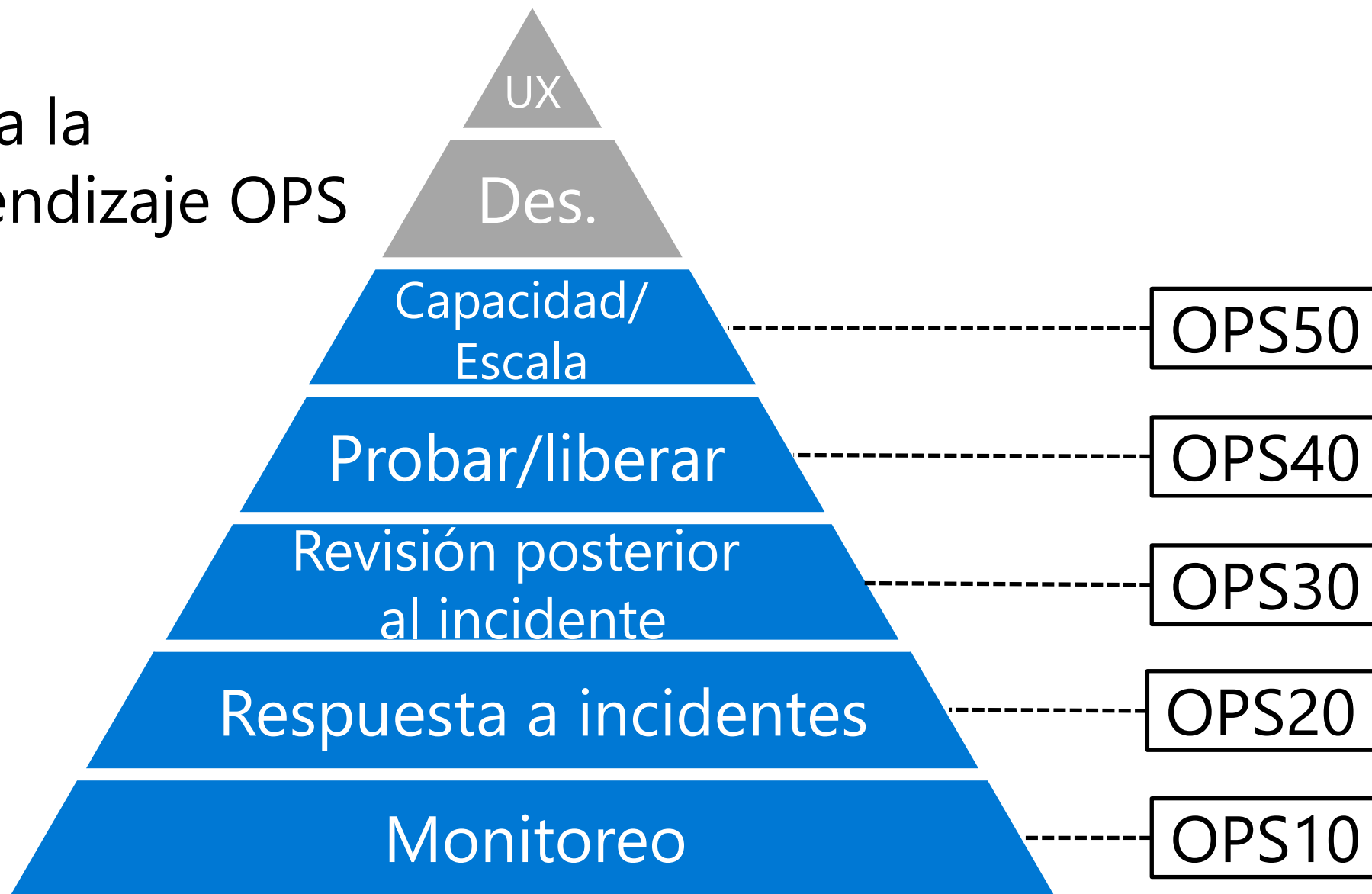




Bienvenido a la
ruta de aprendizaje OPS



Bienvenido a la
ruta de aprendizaje OPS



**Construyendo una base sólida para Operaciones
Modernas: Monitoreo**



**TAILWIND
TRADERS**



HOME APPLIANCES SINK HOME GARDENING DECOR KITCHEN ACCESSORIES DIY TOOLS

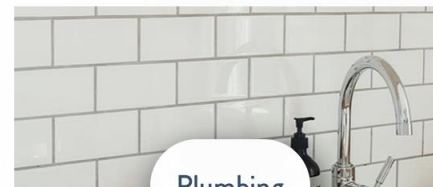
Login

 Free Shipping • For \$100 or more orders



start smart shopping
By uploading a photo

RECOMMENDED



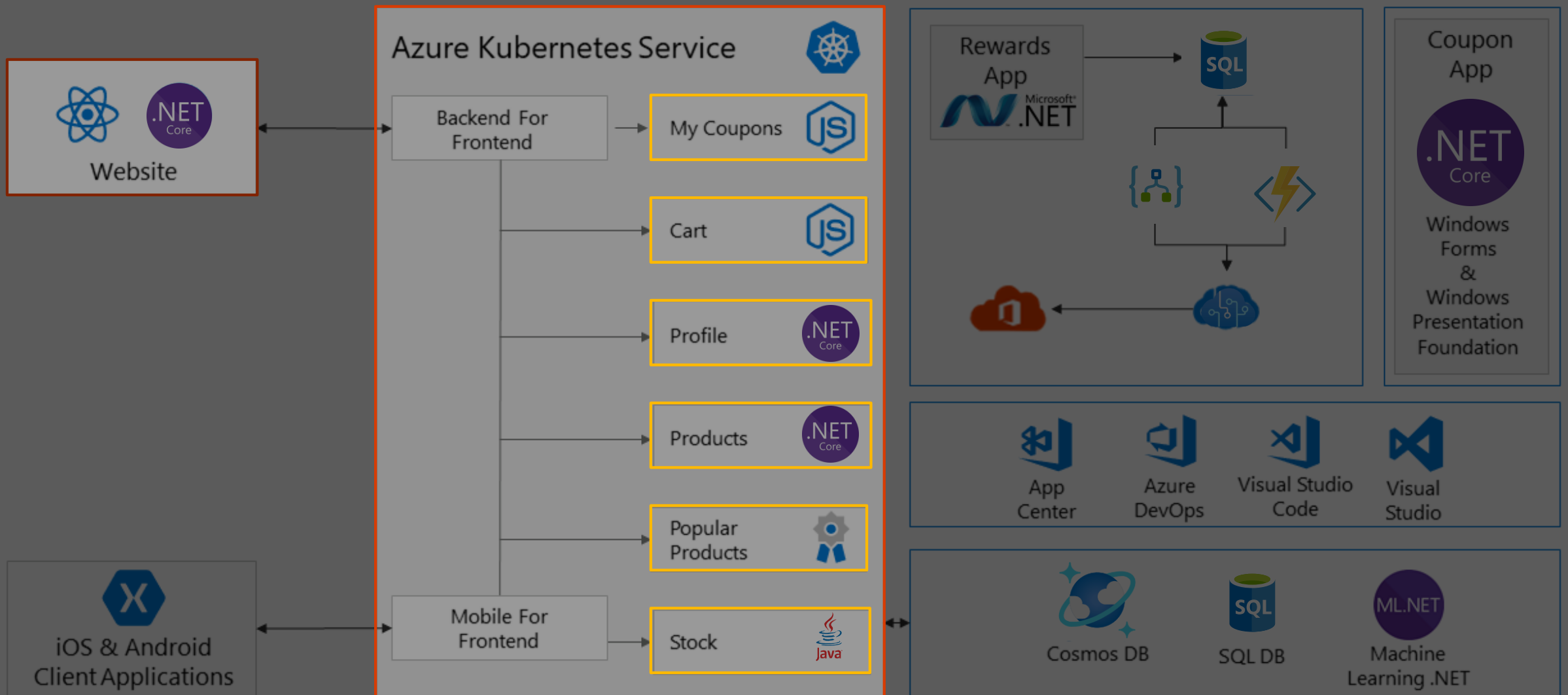
Plumbing

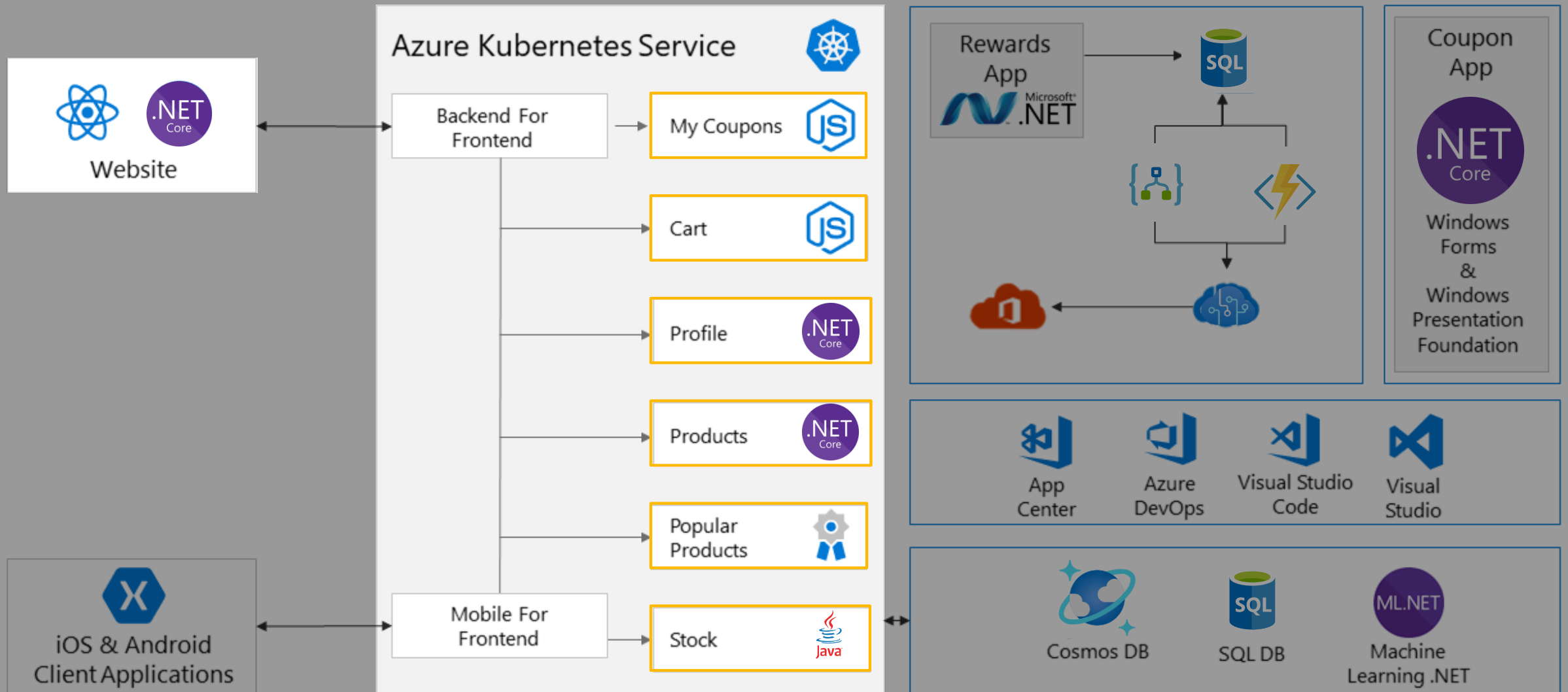


Electrical

aka.ms/OPS10

#MSIgniteTheTour









Azure Monitor

Aplicación

Sistema Operativo

Recursos de Azure

Suscripción de Azure

Inquilino de Azure

Recursos Personalizados



Azure Monitor

Aplicación

Sistema Operativo

Recursos de Azure

Suscripción de Azure

Inquilino de Azure

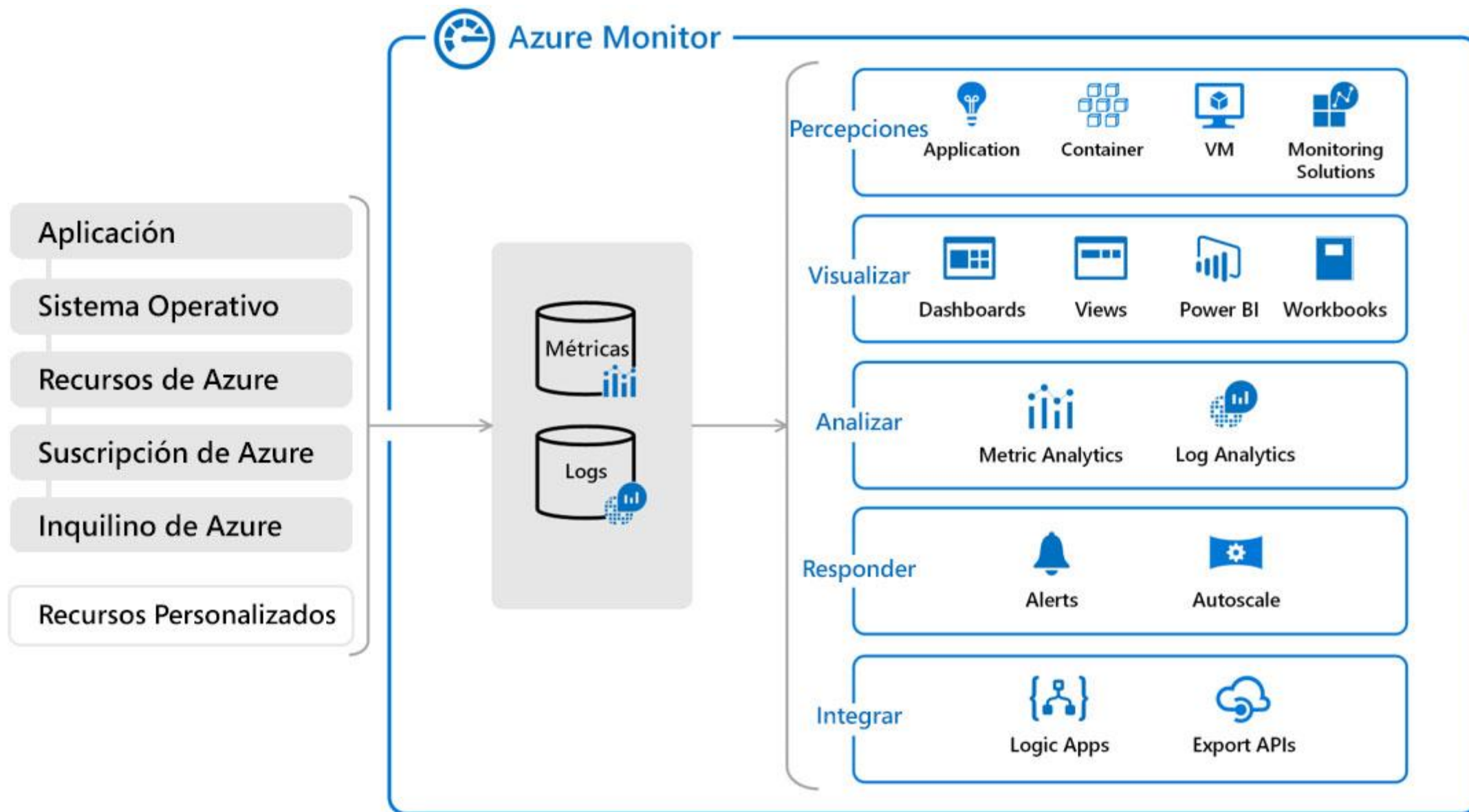
Recursos Personalizados

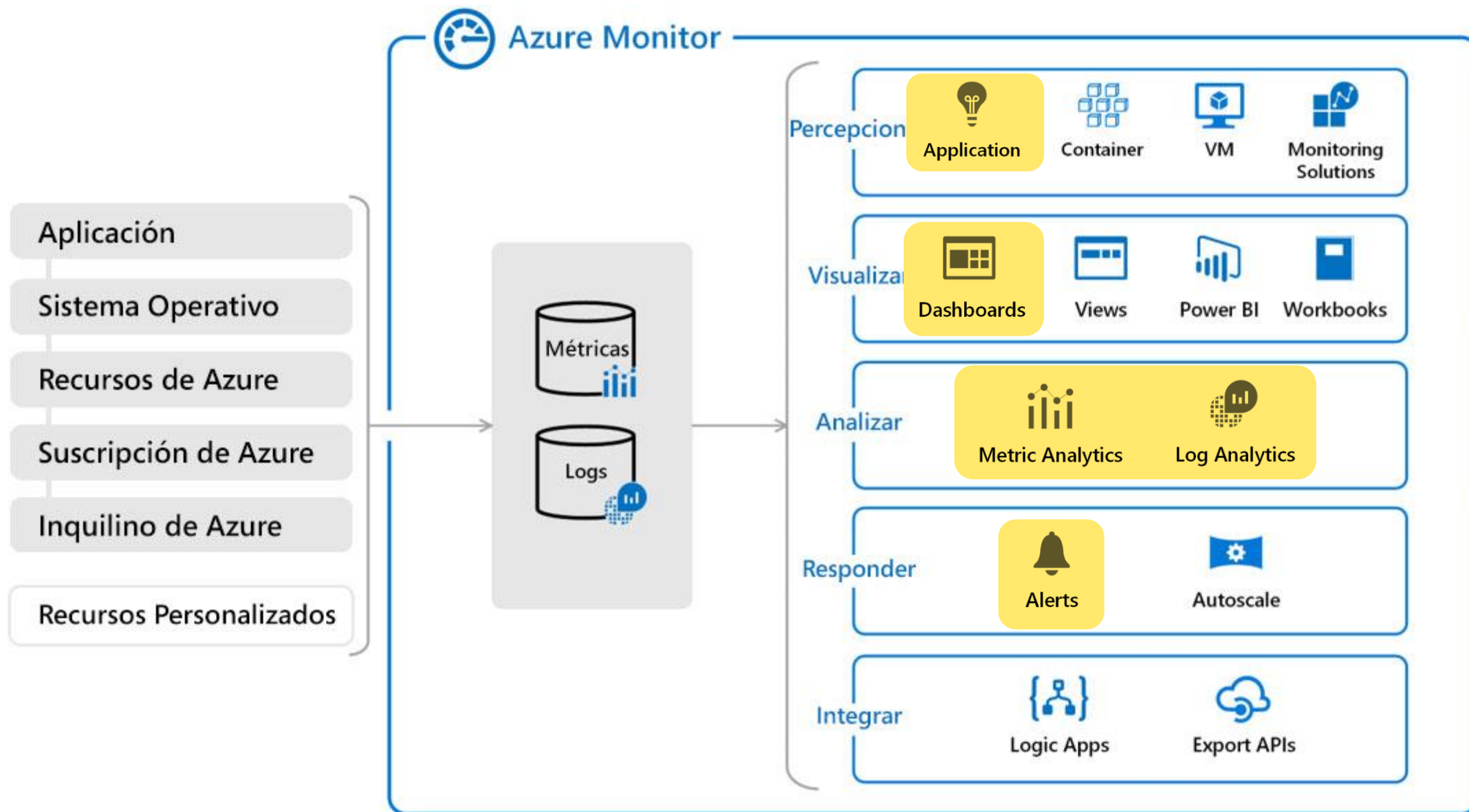


Métricas



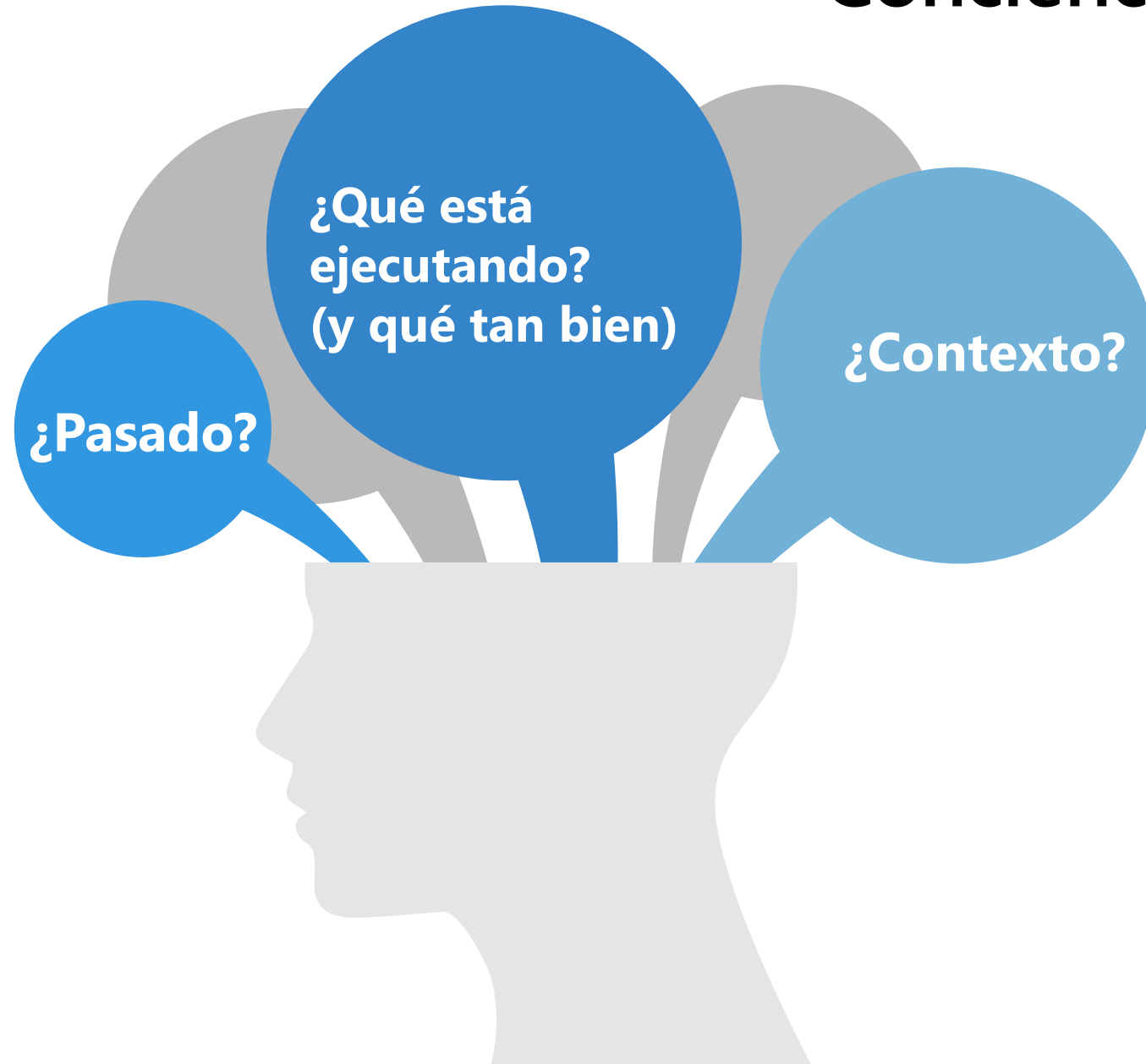
Logs





Preludio: Monitoreo de la Conciencia Operativa

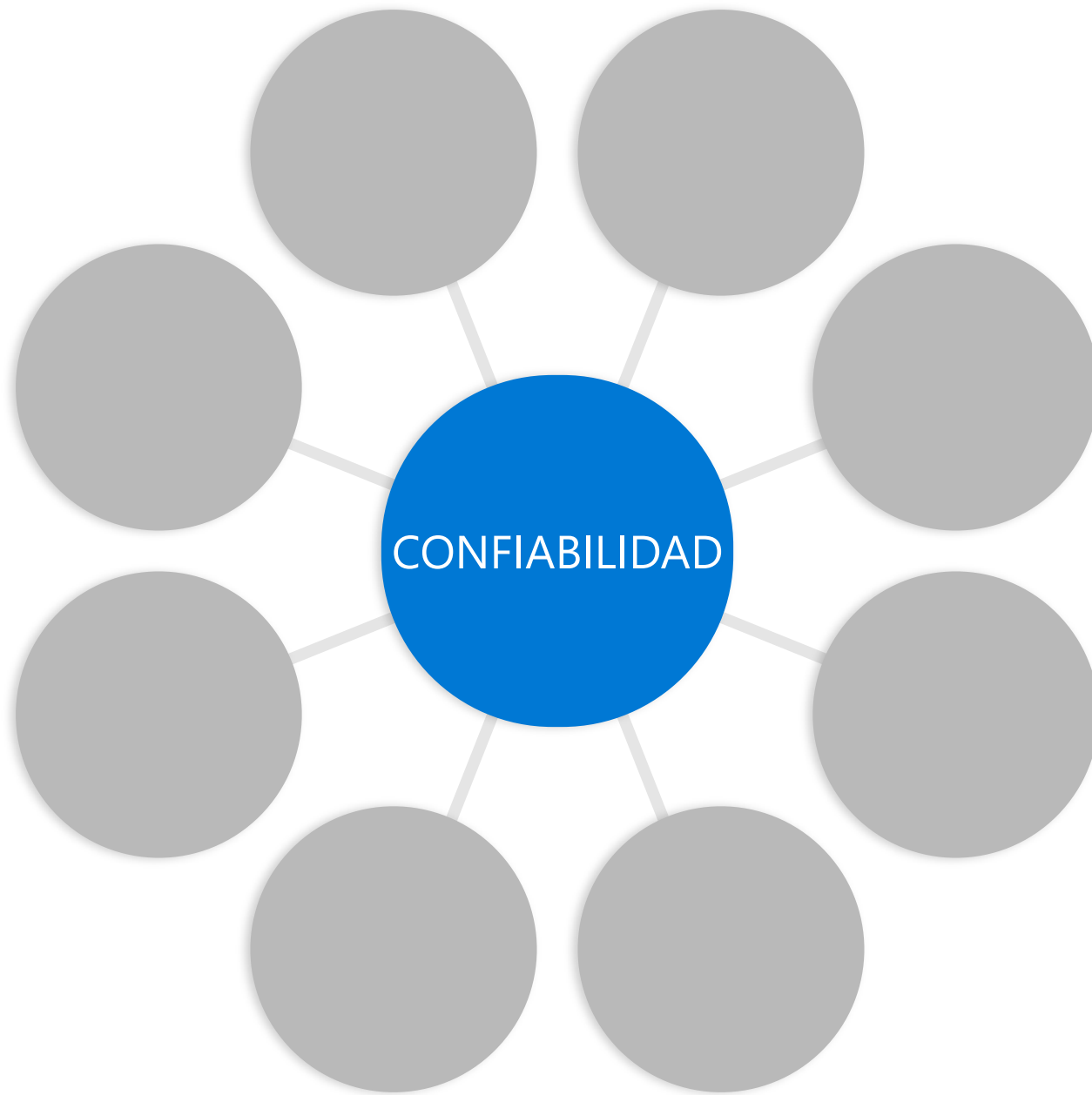
Conciencia operativa

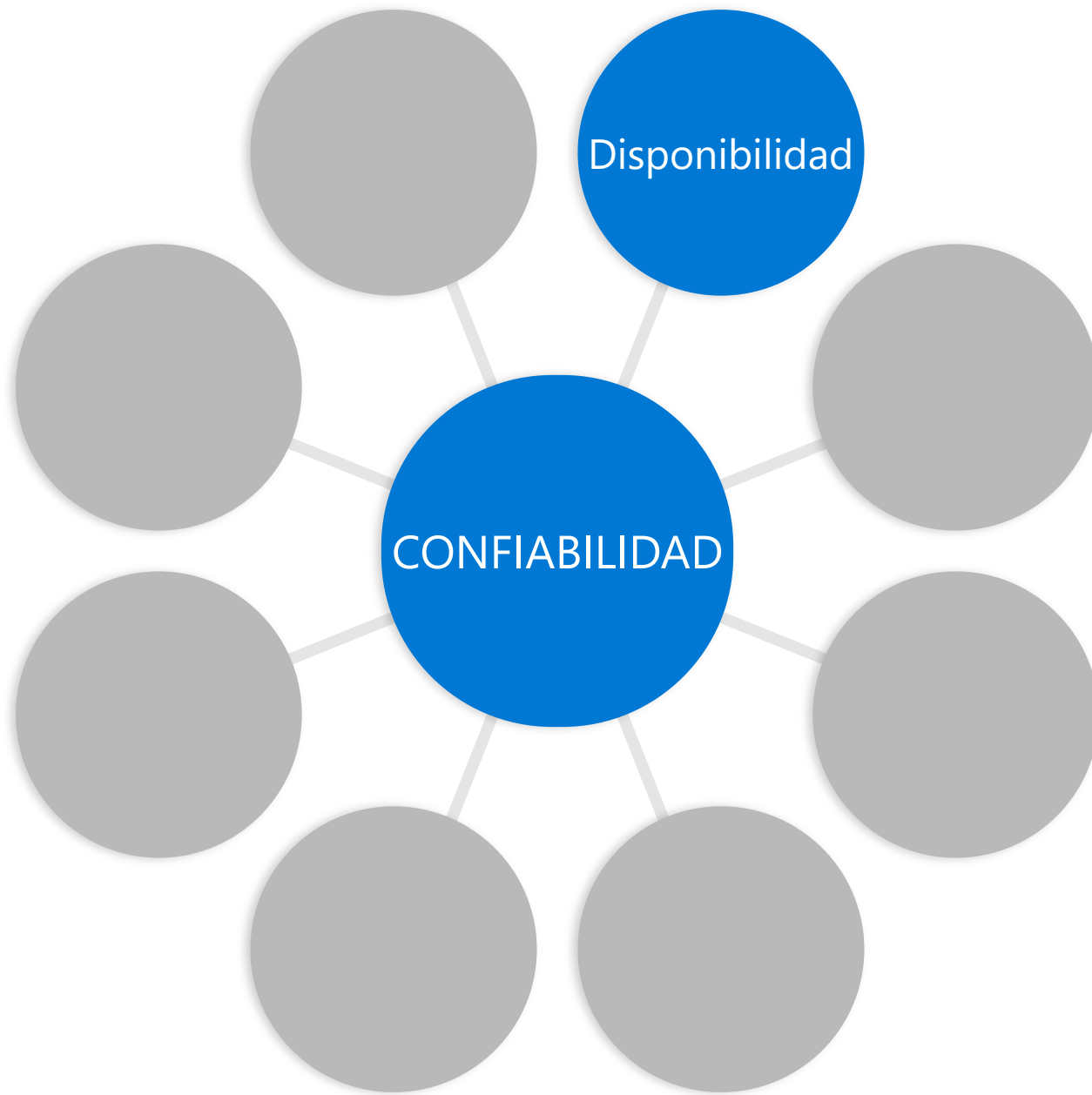


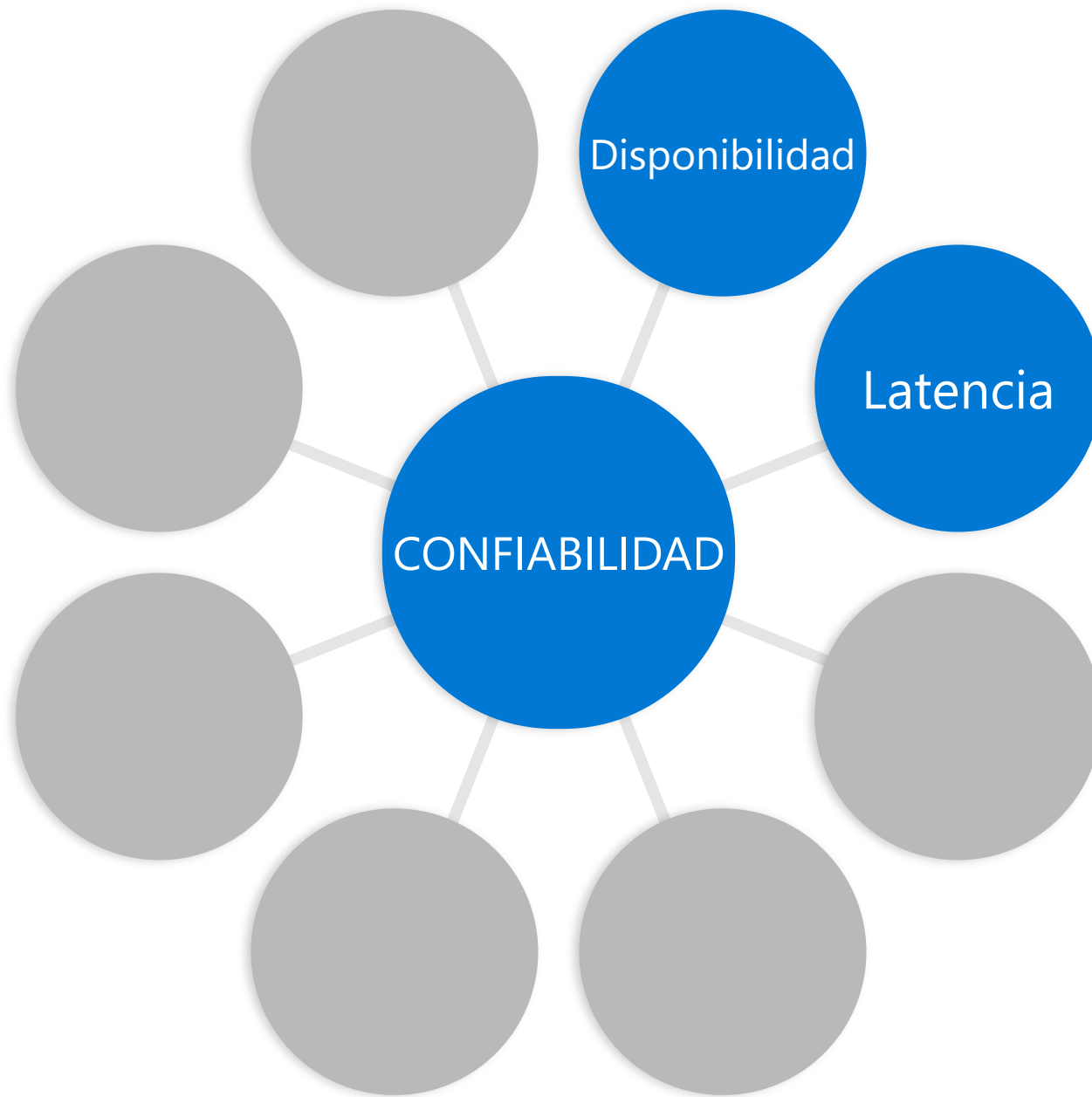
Demostración

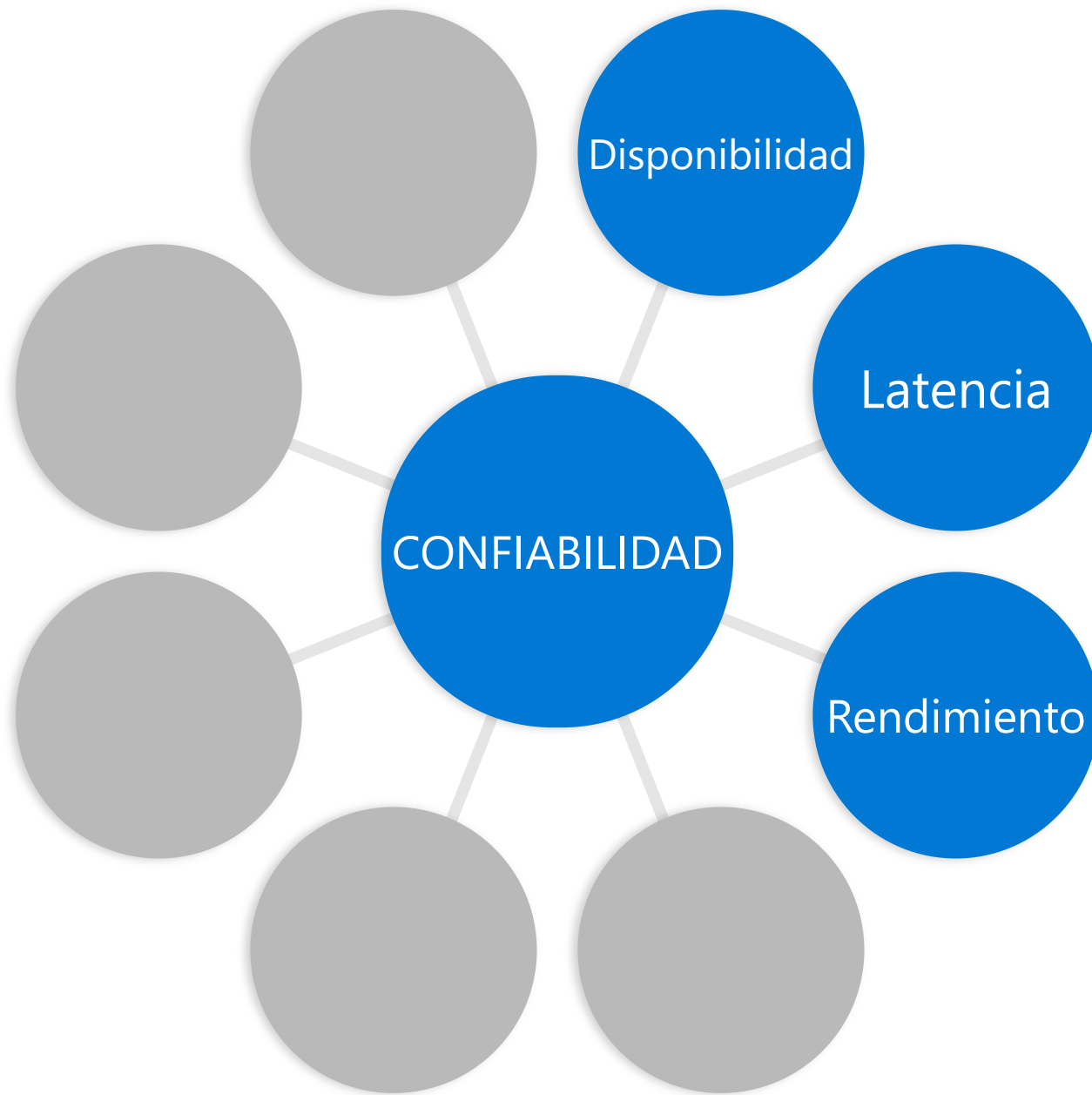
- **Información sobre aplicaciones y paneles de control**

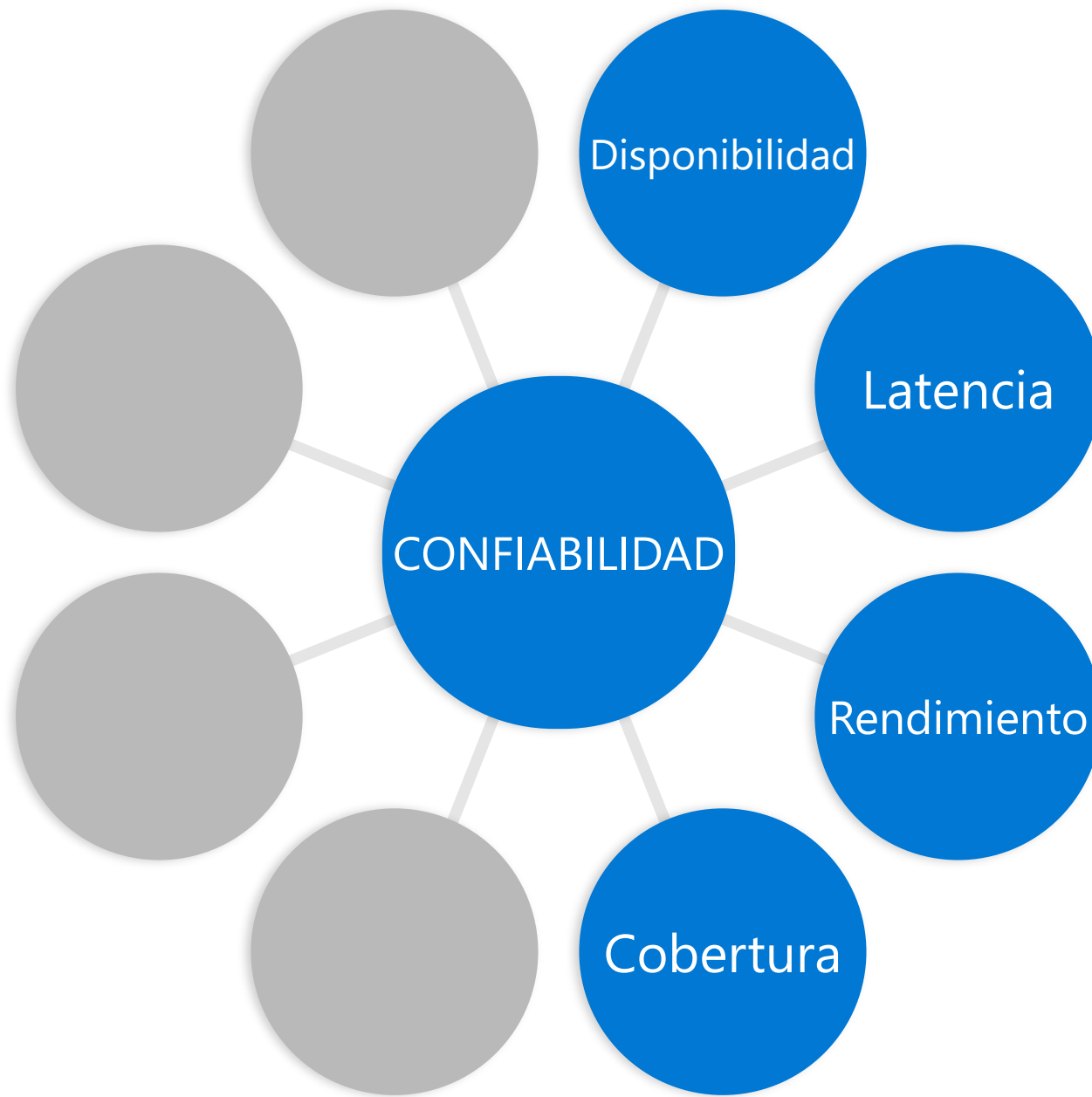
Monitoreo de la confiabilidad

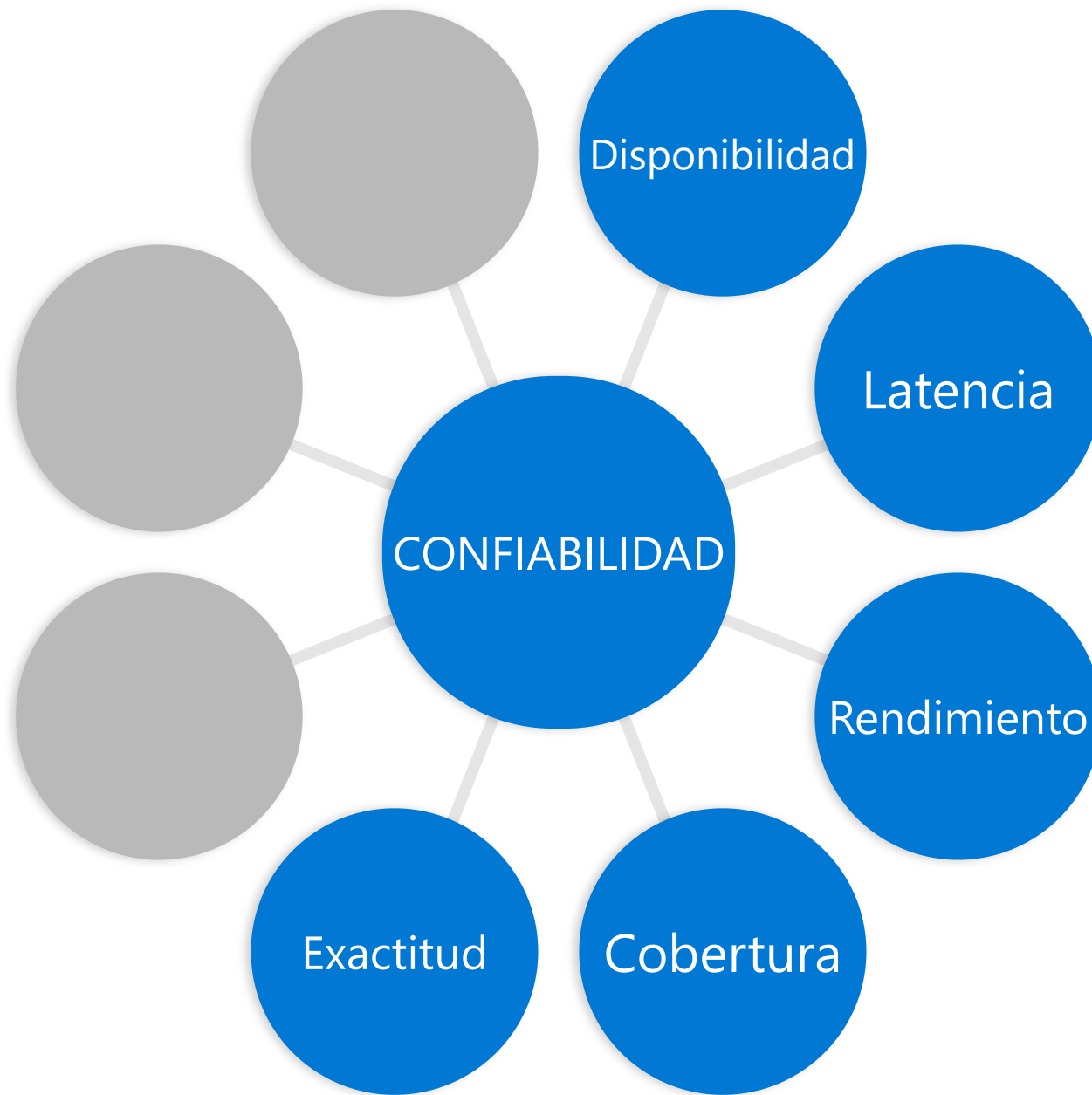


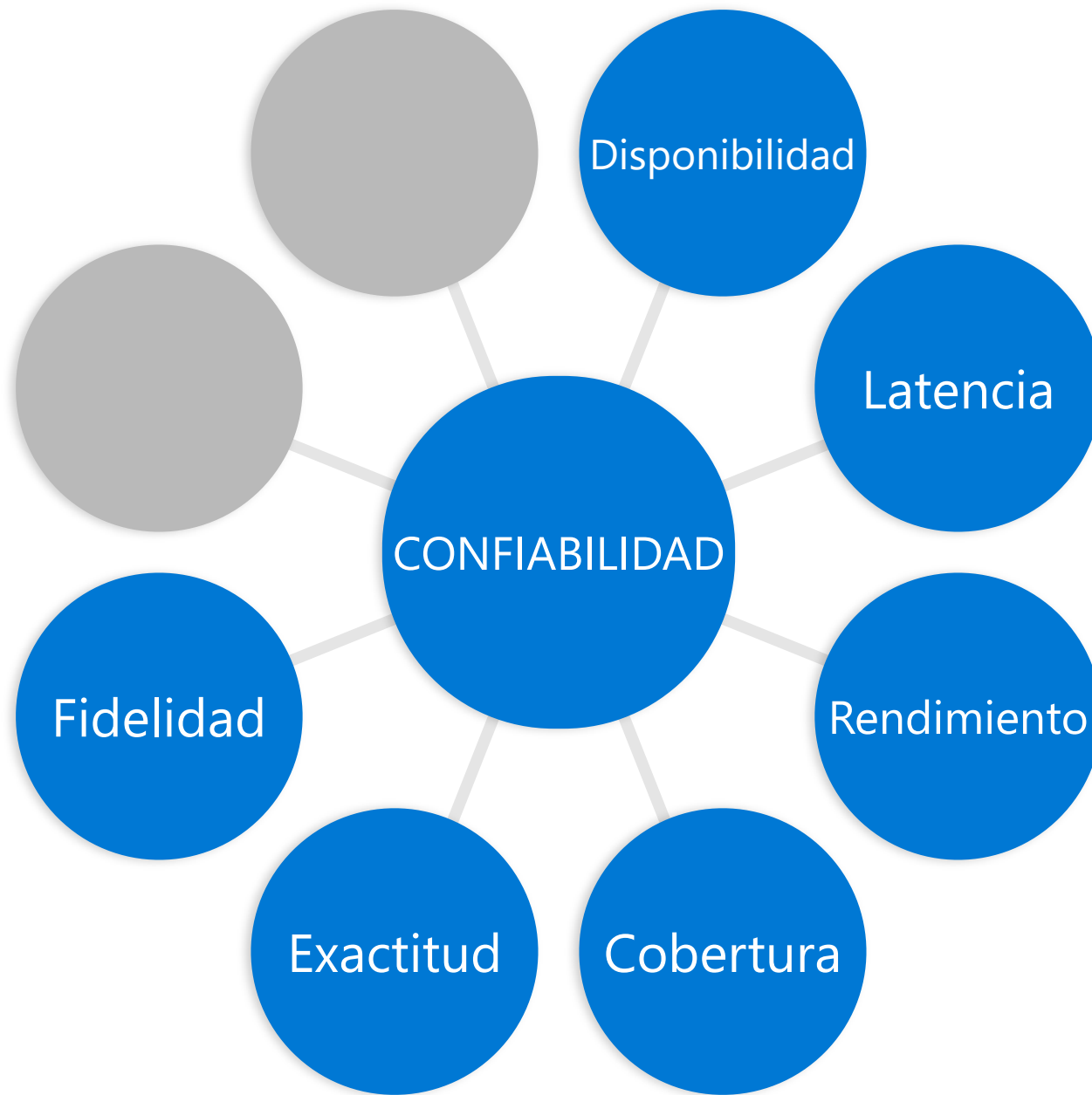








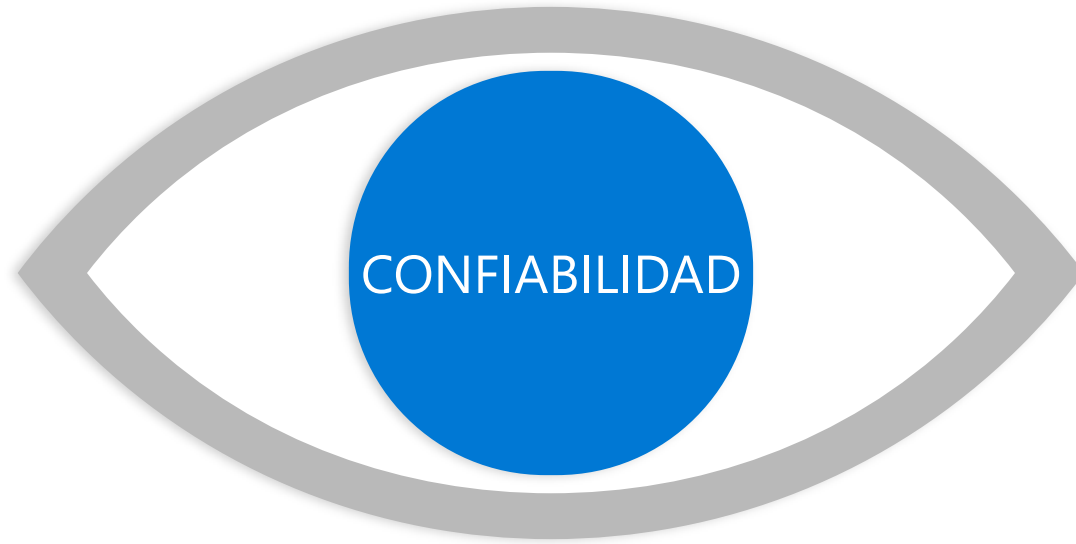


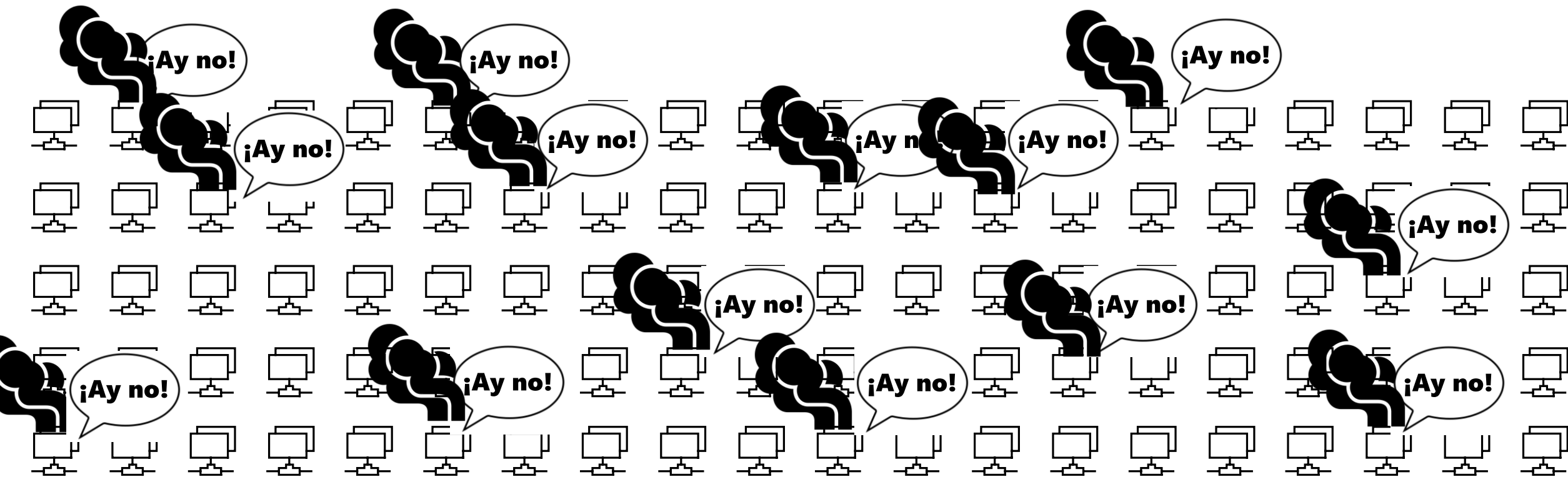


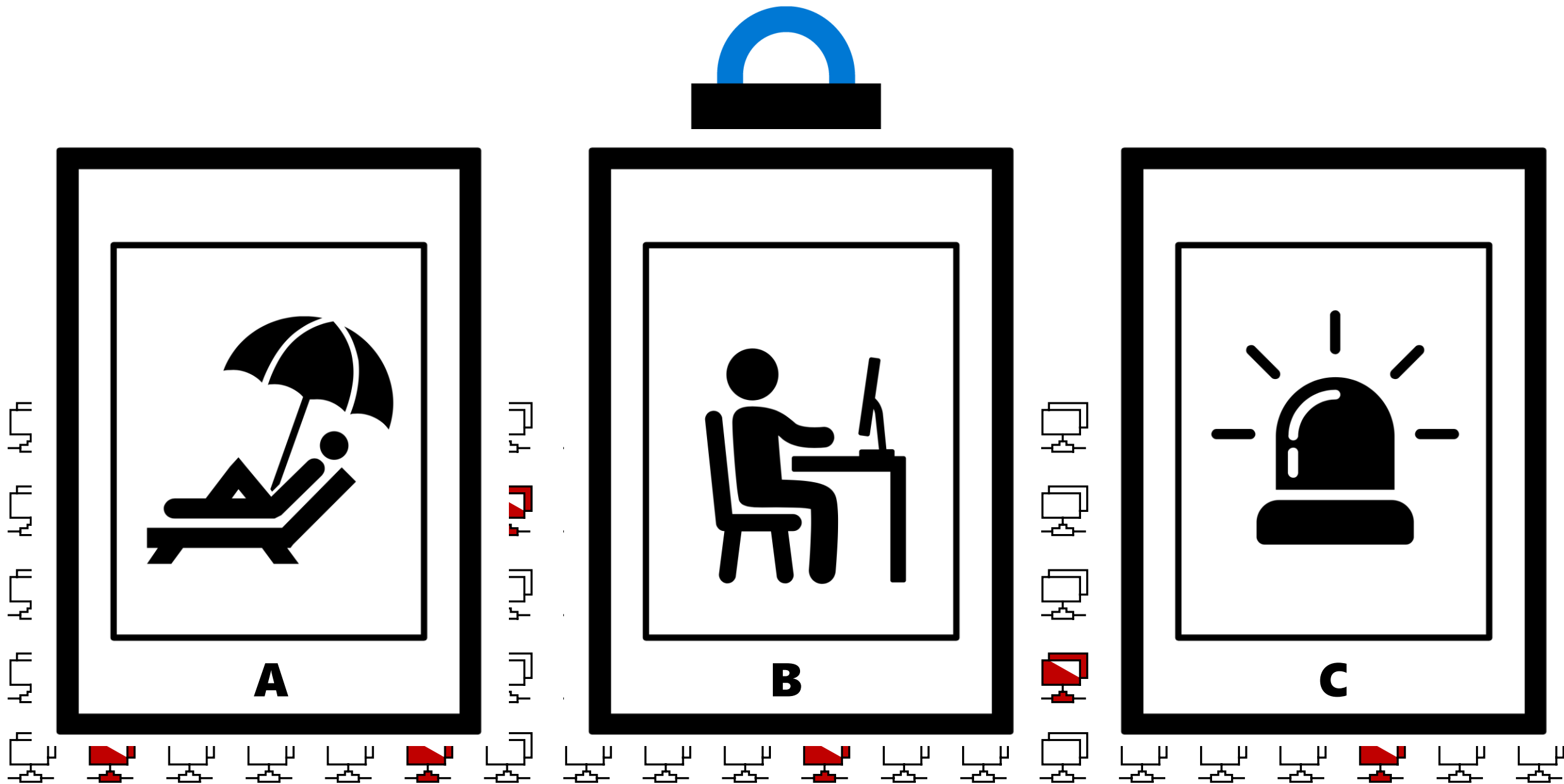




La confiabilidad se mide desde la perspectiva del cliente

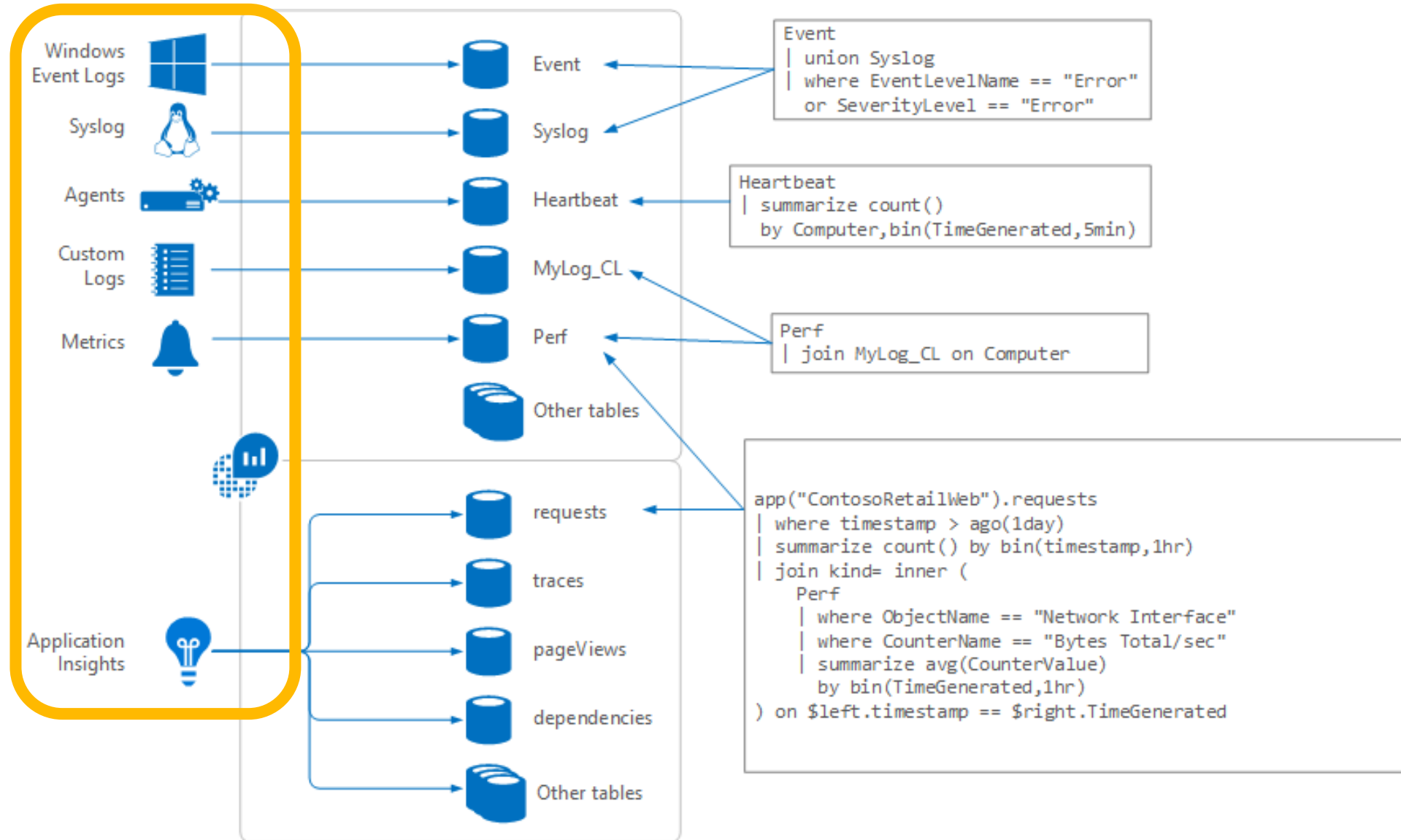




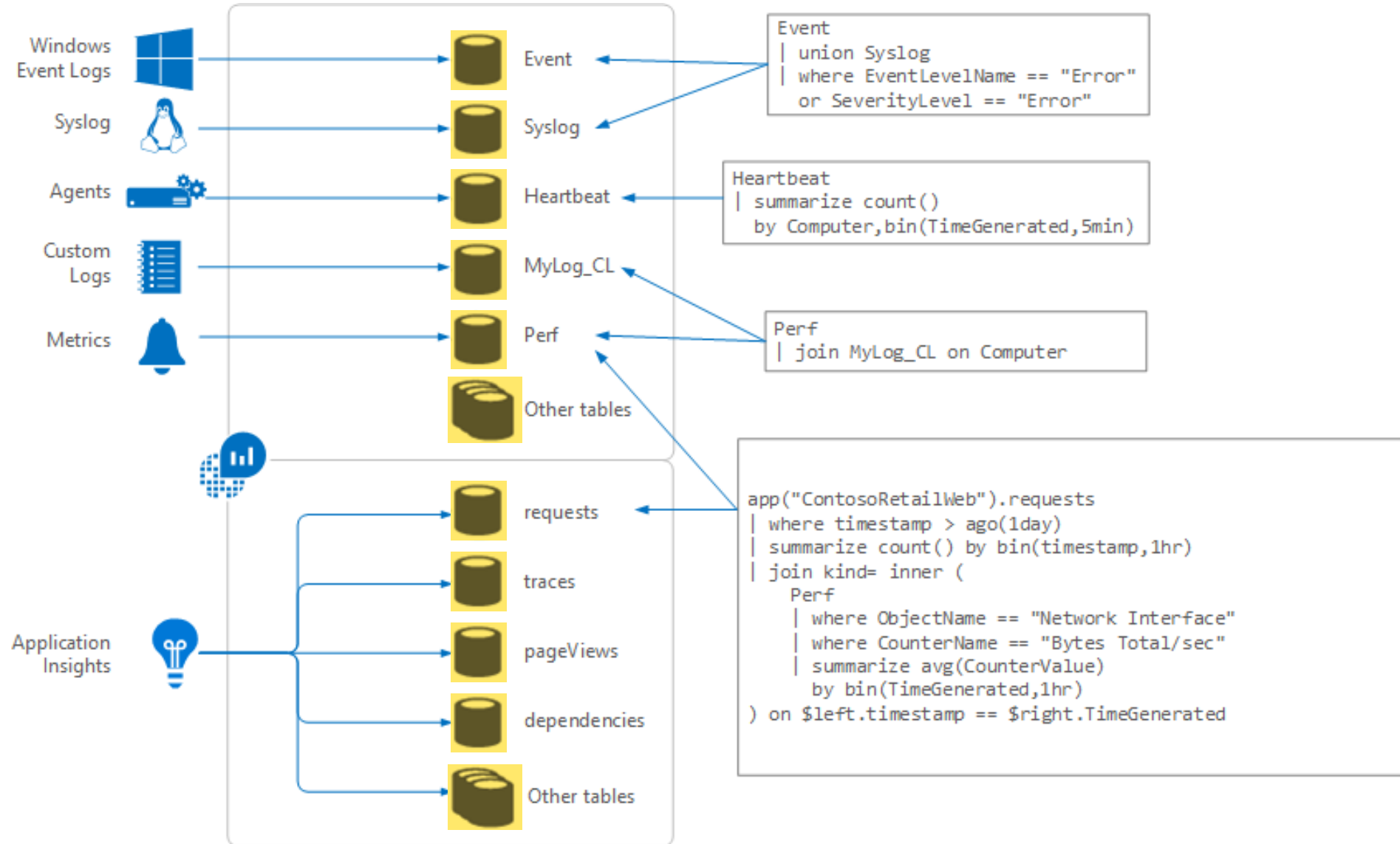


**Tiempo de la herramienta:
Azure Monitor Log Analytics**

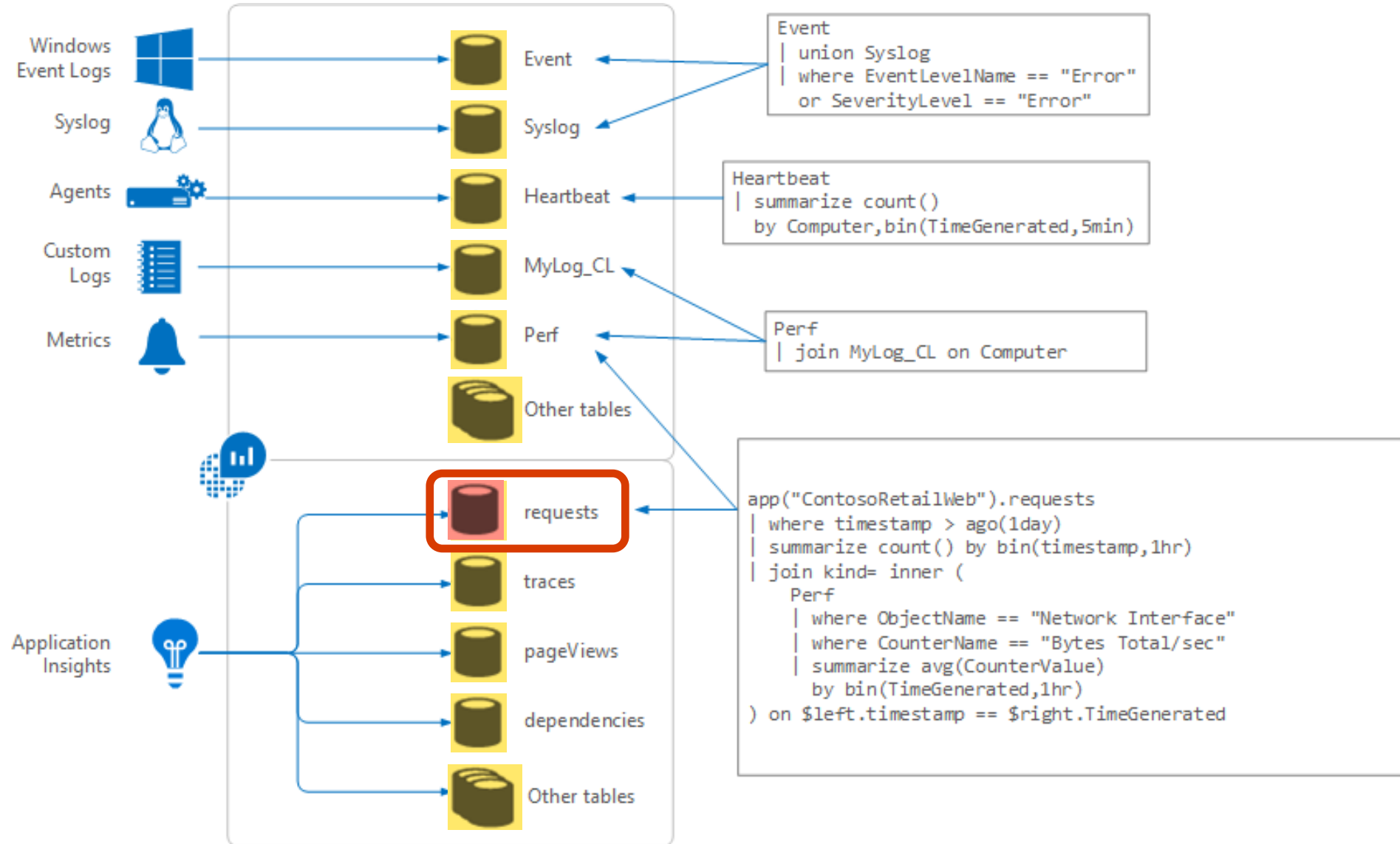
Azure Monitor Log Analytics



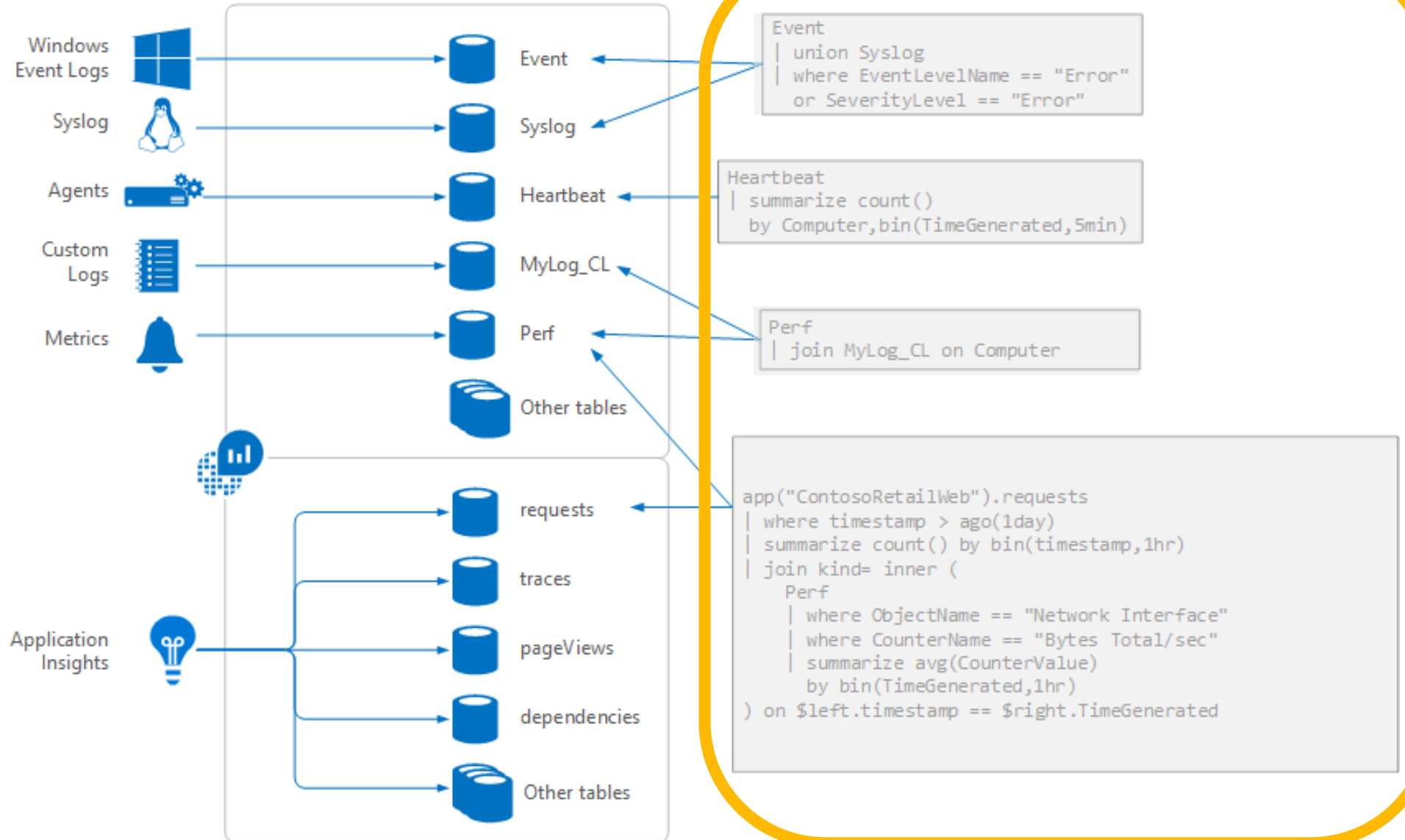
Azure Monitor Log Analytics





Azure Monitor Log Analytics



Azure Monitor Log Analytics








 Search (Cmd+/)




 New Query 1





 Help  Settings  Sample queries  Query explorer

-  Overview
-  Activity log
-  Access control (IAM)
-  Tags
-  Diagnose and solve problems

Investigate

-  Application map
-  Smart Detection
-  Live Metrics Stream

Search

-  Availability
-  Failures

Performance

Servers

Browser

Troubleshooting guides (previ...

Monitoring

Alerts

Metrics

Logs (Analytics)

Workbooks

Usage

-  Users
-  Sessions
-  Events

tt-app-insights



 Run

Time range : Last 24 hours

 Save

 Copy

 Export

 New alert rule

 Pin to dashboard

Schema

Filter

Explore









 Collapse all

Active

 tt-app-insights



APPLICATION INSIGHTS

-  traces
-  customEvents
-  pageViews
-  requests
-  dependencies
-  exceptions
-  availabilityResults
-  customMetrics
-  performanceCounters
-  browserTimings

 Functions

Favorite applications

Type your query here or click one of the example queries to start

Get started with sample queries

History

Requests' performance

Browsing data

Reports failures

 Clear history

requests | where timestamp > ago(30d) | summarize succeed = count (success == true), failed = count (success == false), total = count() by bin(timestamp, 1h) | extend SLI = succeed * 100.00 / total | extend...
8/30/2019, 11:00 AM | 28 results

Run

requests | where timestamp > ago(30d) | summarize succeed = count (success == true), failed = count (success == false), total = count() by bin(timestamp, 1h) | extend SLI = succeed * 100.00 / total | project...
8/30/2019, 10:53 AM | 28 results

Run

// Failed operations // Calculate how many times operations failed, and how many users were impacted
requests | where success == false | summarize failedCount=sum(itemCount)...
8/30/2019, 8:58 AM | 5 results

Run

requests | where timestamp > ago(30d) | summarize succeed = count (success == true), failed = count (success == false), total = count() by bin(timestamp, 1h) | extend SLI = succeed * 100.00 / total | extend...
8/30/2019, 8:54 AM | 26 results

Run

requests | where timestamp > ago(30d) | summarize succeed = count (success == true), failed = count (success == false), total = count() by bin(timestamp, 1h) | extend SLI = succeed * 100.00 / total | project...
8/30/2019, 8:53 AM | 26 results

Run

Learn more

-  Documentation
-  Online course
-  Query language
-  Community
-  What's new
-  Start tour

tt-app-insights



Run

Time range : Last 24 hours



Save



Copy



Export



Schema

Filter

Explore



Filter by name or type...



Collapse all

Active

tt-app-insights



APPLICATION INSIGHTS

- traces
- customEvents
- pageViews
- requests
- dependencies
- exceptions
- availabilityResults
- customMetrics
- performanceCounters
- browserTimings

Functions

Favorite applications

Type your query here or click one of the example queries to start

Get started with sample queries

History

Requests' performance

2 more

Clear history

requests | where timestamp > ago(30d) | summarize succeed = count
(success == true), failed = count (success == false), total = count() by...

Run

8/30/2019, 11:00 AM | 28 results

requests | where timestamp > ago(30d) | summarize succeed = count
(success == true), failed = count (success == false), total = count() by...

Run

8/30/2019, 10:53 AM | 28 results

 **Run**

Time range : **Last 24 hours**



Save



Copy



Export



New alert rule



Pin to dashboard

Type your query here or click one of the example queries to start



 **Run**

Time range : **Last 24 hours**



Save



Copy



Export



New alert rule



Pin to dashboard

requests

|



 **Run**

Time range : **Last 24 hours**

 Save  Copy

requests

 **Run**

Time range : **Last 24 hours**

 Save  Copy

requests

| top 10 |

 **Run**

Time range : **Set in query**



Save



Copy

requests

| **where** timestamp > ago(30m)

 **Run**

Time range : **Set in query**



Save



Copy

```
requests
```

```
|where timestamp > ago(30m)
```

```
|where toint(resultCode) == 404
```

 **Run**

Time range : **Last 24 hours**



Save



Copy

```
requests
```

```
| sort by timestamp desc
```

 **Run**

Time range : **Set in query**



Save



Copy

```
requests
```

```
|where timestamp > ago(30m)
```

```
|summarize count() by name, url
```

**Mejora de la confiabilidad
en tu empresa**

Los feedbacks adecuados mejoran la confiabilidad de tu empresa.

Los feedbacks adecuados mejoran la confiabilidad de tu empresa.

Permíteme presentarte uno de la ingeniería de confiabilidad de sitios...

La Ingeniería de confiabilidad de sitios es una disciplina de ingeniería dedicada a ayudar a una empresa a alcanzar de manera sostenible el nivel apropiado de confiabilidad en tus sistemas, servicios y productos.

La Ingeniería de confiabilidad del sitio es una disciplina de ingeniería dedicada a ayudar a una organización a alcanzar **sosteniblemente** el nivel apropiado de confiabilidad en sus sistemas, servicios y productos.

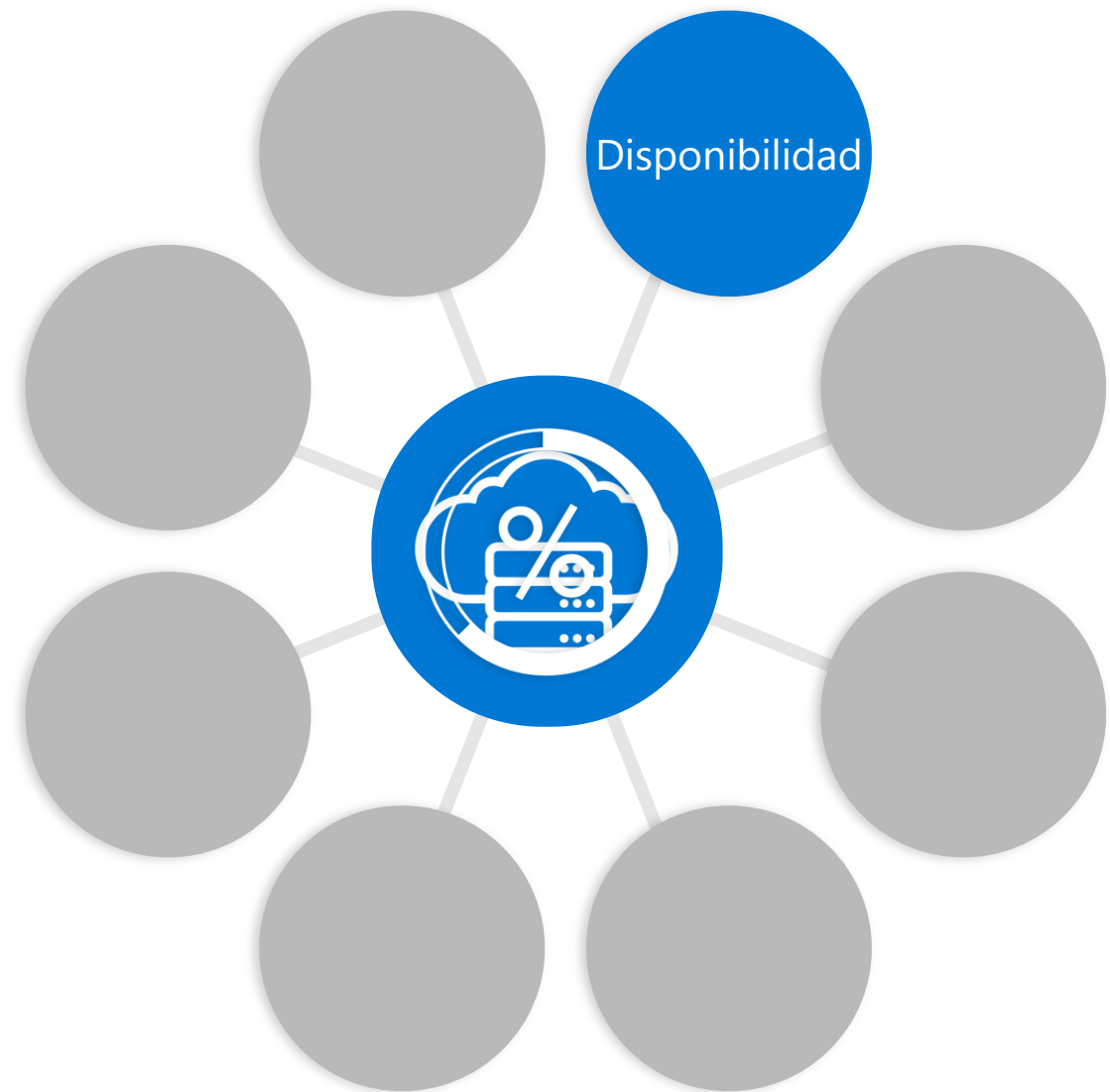
La Ingeniería de confiabilidad del sitio es una disciplina de ingeniería dedicada a ayudar a una organización a alcanzar sosteniblemente el nivel apropiado de confiabilidad en sus sistemas, servicios y productos.

Indicadores de nivel de servicio (SLI)



SLI: ¿qué medir?





SLI: ¿qué medir?

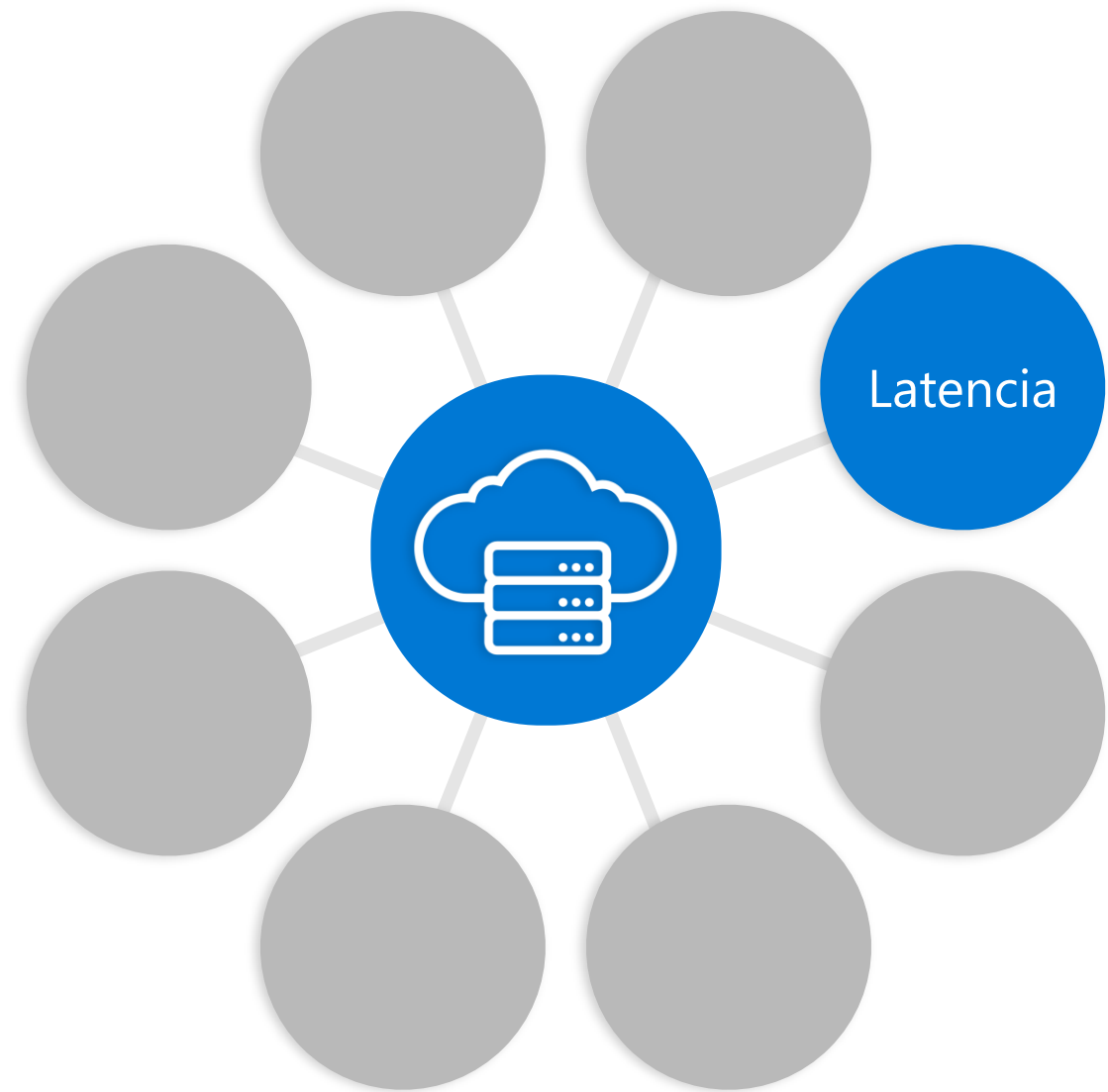
Nº de llamadas HTTP exitosas

Nº total de llamadas HTTP

=
P
r
o
p
o
r
c
i
o
n

→ Relación * 100 = % proporción

0,5 * 100 = 50% de disponibilidad



SLI: ¿qué medir?

Nº de operaciones realizadas en menos de 10ms

Número total de operaciones

$$0,8 * 100 = 80\% \text{ de éxito}$$



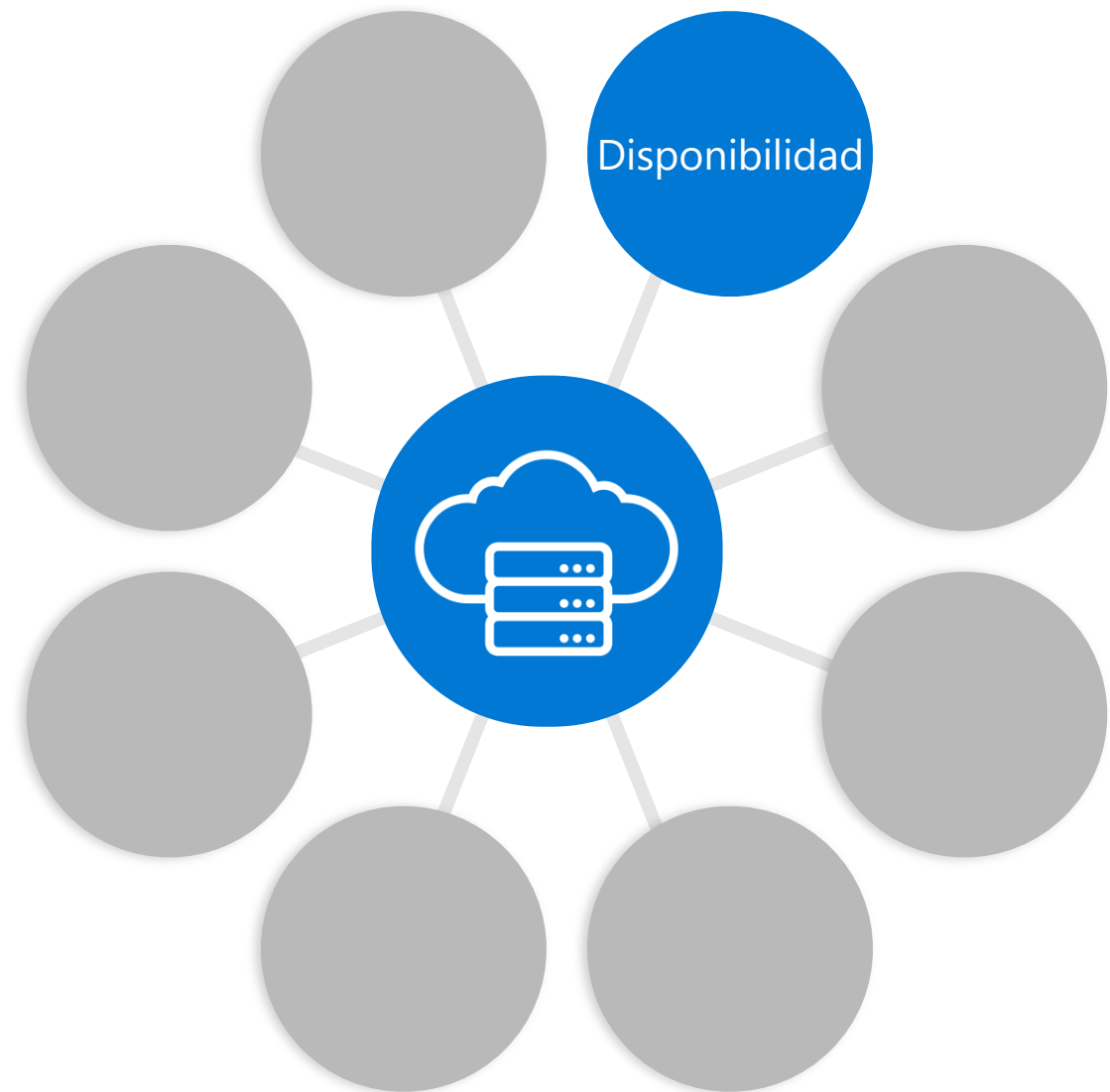






¿Dónde lo medimos?





SLI: ¿DÓNDE medir?

Nº de llamadas HTTP exitosas

Nº total de llamadas HTTP

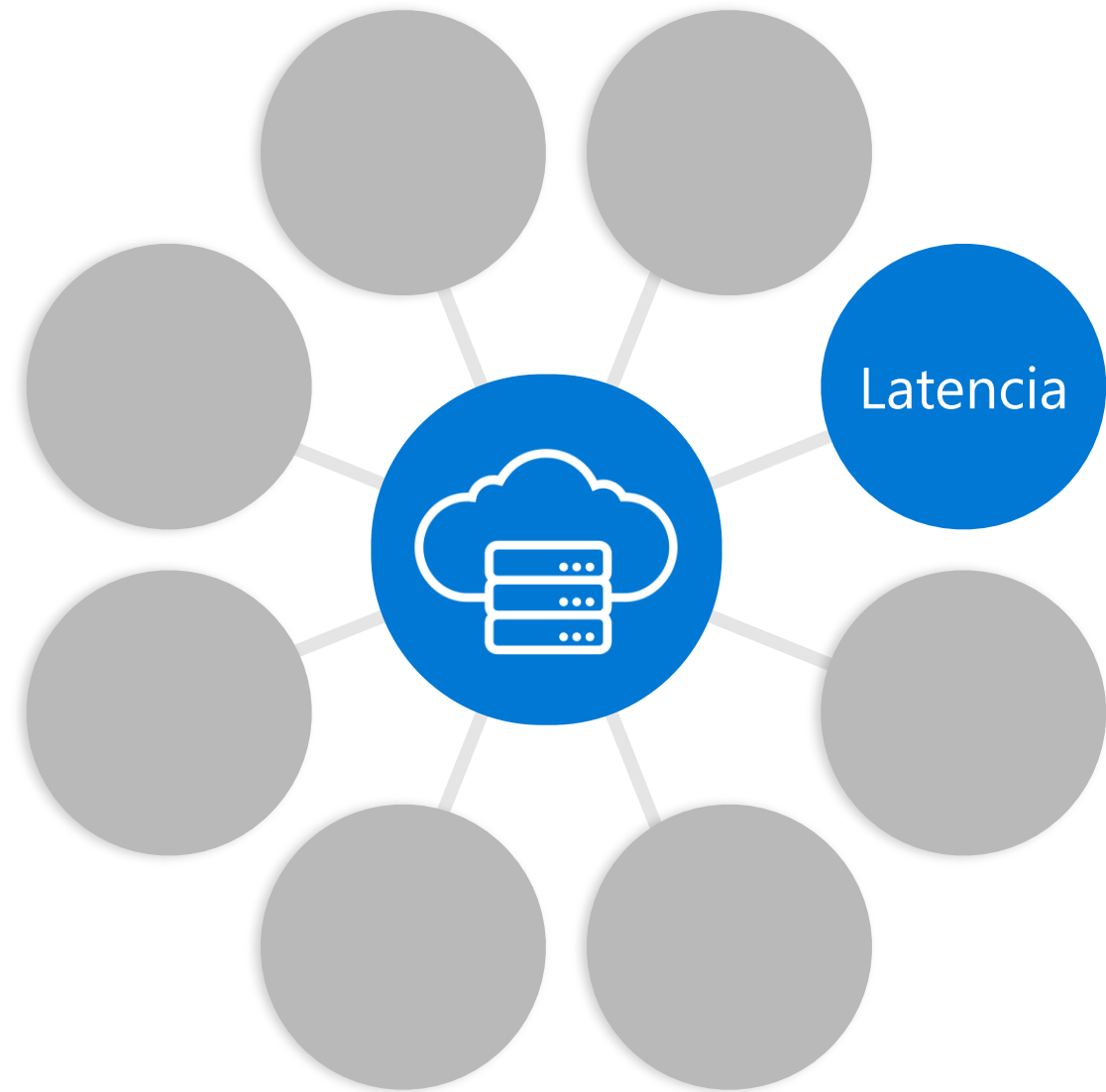
como se ha medido:
...en el balanceador de carga
... en el servidor

SLI: ¿DÓNDE medir?

Nº de operaciones realizadas en menos de 10ms

Número total de operaciones

...como se ha medido en el cliente





SLI: ¿dónde medir?





SLI: ¿dónde medir?



Conoce tus compensaciones

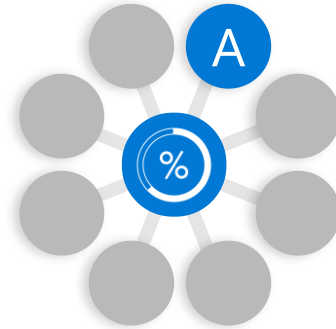
Objetivos de nivel de servicio (SLO)

Receta básica de SLO - Disponibilidad



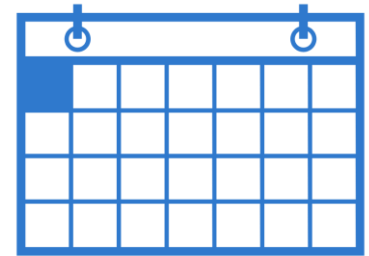
La cosa

- solicitudes HTTP
- controles de almacenamiento
- operaciones



La proporción deseada

- exitosa el 50% de las veces
- puede leer el 99,9% de las veces
- retorno en 10 ms el 90% de las veces



El tiempo

- en los últimos 10 minutos
- durante el último trimestre
- en los 30 días anteriores

El 90% de las solicitudes HTTP informadas por el balanceador de carga tuvo éxito en la ventana de los últimos 30 días.

Próxima parada...





Mejorando tu confiabilidad a través de prácticas modernas de operaciones

Jesus Gil | Dr Rudo SQL

MVP Data Platform | Principal Data Architect | Autor

@jesus_gilv | @SQL_Rudo | YouTube SQLRudo