

## OPE-001 - Define, monitor and analyze customer workload health KPIs

Solution components are monitored via CloudWatch dashboards so they can centralize health status information.

This section presents how to monitor and check the health of resources configured in the customer's AWS portal. It shows the collection of information and logs used to perform load and metric analysis, indicating the use of tools such as CloudWatch and the process of capturing logs of operational events for later analysis. This allows for the generation of alerts based on specific metrics that can inform us of the status of resources at a given time and that could lead to actions to resolve the situation.

### CloudWatch images for RDS performance:

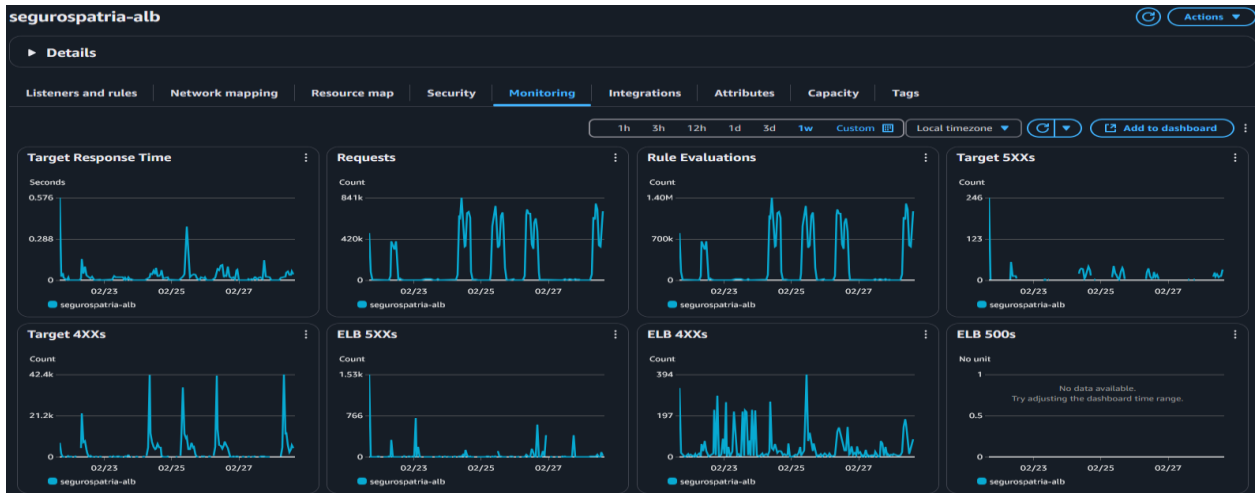
#### Charts or DB metrics

As part of our monitoring practice, we always make sure to monitor important metrics such as CPU, RAM, and disk. In addition, we've configured advanced metrics and event viewer log forwarding to Cloudwatch through the CloudWatch agent.

#### RDS Metrics



## ALB Metrics



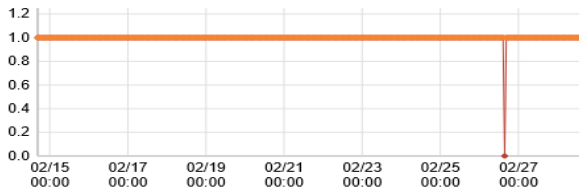
## Metrics Route 53 Health Checks

Health checks SISAPI SISWEB

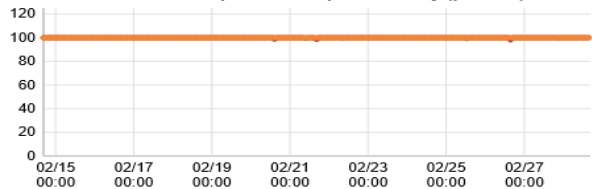
Time range Last 2 weeks

Refresh

Health check status



Health checkers that report the endpoint healthy (percent)

Click on a graph to see an expanded view. [View metrics in CloudWatch](#)

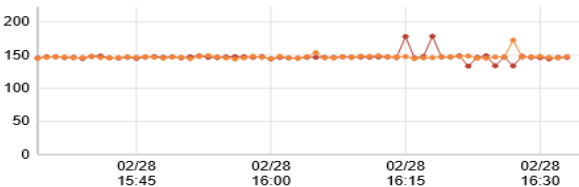
Latency health checks SISAPI SISWEB

Time range Last hour

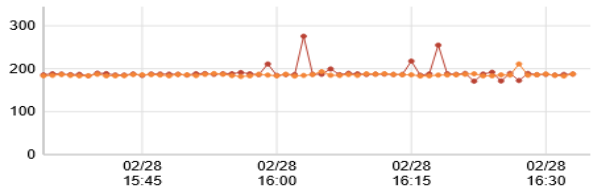
Region Global

Refresh

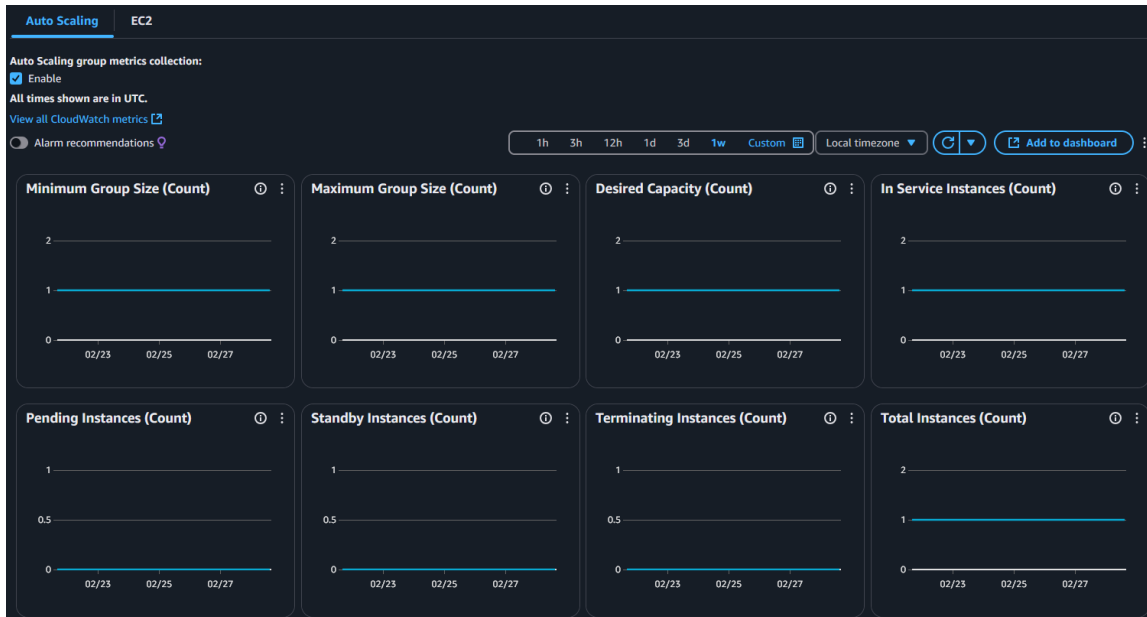
Time to complete SSL handshake (milliseconds)



Time to first byte (milliseconds)



## Auto Scaling Groups



Monitoring alarms are defined:

Configured alarms are triggered in certain scenarios depending on the observed metric, for example: if the CPU percentage exceeds 90%, it sends an alarm.

The main metrics monitored are CPU, RAM and disk.

The screenshot shows the AWS CloudWatch 'Alarms' console. At the top, there's a search bar and filters for 'Alarm state: Any', 'Alarm type: Any', and 'Actions status: Any'. A 'Create alarm' button is visible. Below the filters is a table listing 10 alarms. The table has columns for Name, State, Last state update (UTC), Conditions, and Actions. The alarms are categorized by their state: 'Insufficient data', 'In alarm', and 'OK'.

Name	State	Last state update (UTC)	Conditions	Actions
TargetTracking-SRVCOREIIS-ASG-AlarmLow-d8539376-09dd-41e7-bb02-81f01c1b77b9	Insufficient data	2024-07-29 19:54:18	CPUUtilization < 56 for 15 datapoints within 15 minutes	Actions enabled
TargetTracking-SRVCOREIIS-ASG-AlarmHigh-122d0bb6-d579-42ea-8e44-ce53e7be6702	Insufficient data	2024-07-29 19:42:45	CPUUtilization > 80 for 3 datapoints within 3 minutes	Actions enabled
TargetTracking-SRVHFAPP-ASG-AlarmLow-9570442e-cbd2-4ccb-8796-7afbb9516a45	In alarm	2024-04-17 16:03:26	CPUUtilization < 62.99999999999999 for 15 datapoints within 15 minutes	Actions enabled
TargetTracking-SRVHFAPP-ASG-AlarmHigh-1f9a9ad8-c24b-4002-ad9d-ce42b2db7f23	OK	2024-04-17 15:48:07	CPUUtilization > 90 for 3 datapoints within 3 minutes	Actions enabled
TargetTracking-SRVPRFIIS-ASG-AlarmLow-65e3c4c9-8060-4da9-a343-a0b2d3ca1d2	In alarm	2024-04-17 15:41:14	CPUUtilization < 56 for 15 datapoints within 15 minutes	Actions enabled
TargetTracking-SRVPRFIIS-ASG-AlarmHigh-098736fe-4c18-4a7d-87ea-3d15624efc96	OK	2024-04-17 15:26:03	CPUUtilization > 80 for 3 datapoints within 3 minutes	Actions enabled
Queda un 15% de espacio de almacenamiento en disco D	Insufficient data	2023-06-27 23:24:51	LogicalDisk % Free Space <= 15 for 1 datapoints within 5 minutes	Actions enabled
Queda un 15% de espacio de almacenamiento en disco E	Insufficient data	2023-06-27 23:24:19	LogicalDisk % Free Space <= 15 for 1 datapoints within 5 minutes	Actions enabled
El uso de memoria del servidor esta por encima de 90%	Insufficient data	2023-06-27 23:24:16	Memory % Committed Bytes In Use >= 90 for 1 datapoints within 5 minutes	Actions enabled
Queda un 15% de espacio de almacenamiento en disco C	Insufficient data	2023-06-27 23:24:07	LogicalDisk % Free Space <= 15 for 1 datapoints within 5 minutes	Actions enabled

## Logging by CloudWatch

We have a number of Log Groups in which we store logs of different types, from RDS error logs to logs forwarded from the servers via the Cloudwatch agent installed on the servers.

**Log groups (22)**

By default, we only load up to 10000 log groups.

☐ Exact match

<input type="checkbox"/>	Log group	Log class	Anomaly d...	Data pro
<input type="checkbox"/>	<a href="#">/aws/directoryservice/d-9a670bdb57-seguropatria.local</a>	Standard	<a href="#">Configure</a>	-
<input type="checkbox"/>	<a href="#">/aws/fsx/windows</a>	Standard	<a href="#">Configure</a>	-
<input type="checkbox"/>	<a href="#">/aws/rds/instance/sp-srvcoredb/error</a>	Standard	<a href="#">Configure</a>	-
<input type="checkbox"/>	<a href="#">/aws/rds/instance/srvcoredb-qa/agent</a>	Standard	<a href="#">Configure</a>	-
<input type="checkbox"/>	<a href="#">/aws/rds/instance/srvcoredb-qa/error</a>	Standard	<a href="#">Configure</a>	-
<input type="checkbox"/>	<a href="#">/aws/rds/instance/srvcoredb/agent</a>	Standard	<a href="#">Configure</a>	-
<input type="checkbox"/>	<a href="#">/aws/rds/instance/srvcoredb/error</a>	Standard	<a href="#">Configure</a>	-
<input type="checkbox"/>	<a href="#">/aws/rds/instance/srvcoredb/rds-events</a>	Standard	<a href="#">Configure</a>	-
<input type="checkbox"/>	<a href="#">/aws/storagegateway/sgw-0DDB1664</a>	Standard	<a href="#">Configure</a>	-
<input type="checkbox"/>	<a href="#">/aws/storagegateway/sgw-B99D51D0</a>	Standard	<a href="#">Configure</a>	-
<input type="checkbox"/>	<a href="#">/aws/storagegateway/sgw-BCA41ED5</a>	Standard	<a href="#">Configure</a>	-
<input type="checkbox"/>	<a href="#">/aws/storagegateway/share-20BF6250</a>	Standard	<a href="#">Configure</a>	-
<input type="checkbox"/>	<a href="#">/aws/storagegateway/share-8FF52AFE</a>	Standard	<a href="#">Configure</a>	-
<input type="checkbox"/>	<a href="#">/aws/vendedlogs/identity-sync/profile/ERROR_LOGS/Synchronizati...</a>	Standard	<a href="#">Configure</a>	-
<input type="checkbox"/>	<a href="#">RDSOSMetrics</a>	Standard	<a href="#">Configure</a>	-
<input type="checkbox"/>	<a href="#">aws-cloudtrail-logs-seguropatria</a>	Standard	<a href="#">Configure</a>	-
<input type="checkbox"/>	<a href="#">aws-waf-logs-seguropatria</a>	Standard	<a href="#">Configure</a>	-