29. February 2020

Cloud Architecture Report

Summary

Provider: Windows Azure

Primary location: EU-Frankfurt

Primary usage time:

# of Instances: 0

Requests: 0

Storage Capacity in TB: 0

Services

- Remote Crawler 1 - Azure Container Instances
- Remote Crawler 2 - Azure Container Instances
- Remote Crawler 3 - Azure Container Instances
- Crawler Manager - Azure App Service
- Datenstream - Azure Stream Analytics
- Speicher - Azure Blob Storage
- Logging - Azure Monitor
- Filter 1 - Azure Container Instances
- Filter 2 - Azure Container Instances
- Processing - Azure Functions
- mails - Azure Functions
- Suchindex - Azure Cognitive Search
- products - Azure Container Instances
- users - Azure Container Instances
- Frontend - Azure App Service
- Load Balancer - Azure Load Balancer
- Caching - Azure CDN

Remote Crawler 1

Properties

Name:	Remote Crawler 1
Category:	Compute
Service:	Azure Container Instances
Type:	Container (Standard)
Container type:	Standard
CPU:	1
RAM in GB:	1
Tasks:	1
Duration in seconds:	300
Transferred data in GB:	1

Usage

Location:	EU-Frankfurt
Usage type:	-
Usage period:	-
Usage prepay:	None
Operating mode:	-

Remote Crawler 2

Properties

Name:	Remote Crawler 2
Category:	Compute
Service:	Azure Container Instances
Type:	Container (Standard)
Container type:	Standard
CPU:	1
RAM in GB:	1
Tasks:	1
Duration in seconds:	300
Transferred data in GB:	1

Usage

Location:	EU-Frankfurt
Usage type:	-

Usage period:	-
Usage prepay:	None
Operating mode:	-

Remote Crawler 3

Properties

Name:	Remote Crawler 3
Category:	Compute
Service:	Azure Container Instances
Type:	Container (Standard)
Container type:	Standard
CPU:	1
RAM in GB:	1
Tasks:	1
Duration in seconds:	300
Transferred data in GB:	1

Usage

Location:	EU-Frankfurt
Usage type:	-
Usage period:	-
Usage prepay:	None
Operating mode:	-

Crawler Manager

Properties

Name:	Crawler Manager
Category:	Compute
Service:	Azure App Service
Type:	App
Operating system:	Linux
CPU:	2
RAM in GB:	4
Storage in GB:	50
Compute instance reference:	

Storage instance reference:	

Location:	EU-Frankfurt
Usage type:	-
Usage period:	-
Usage prepay:	None
Operating mode:	-

Datenstream

Properties

Name:	Datenstream
Category:	Analytic
Service:	Azure Stream Analytics
Type:	Data Stream
Datasets:	100
Dataset size in KB:	35

Usage

Location:	EU-Frankfurt
Usage type:	-
Usage period:	-
Usage prepay:	None
Operating mode:	-

Speicher

Properties

Name:	Speicher
Category:	Storage
Service:	Azure Blob Storage
Type:	Object-Storage (Standard)
Storage in GB:	1000
Read requests:	20000
Write requests:	10000
Transferred data in GB:	100

Usage

Location:	EU-Frankfurt
Usage type:	-
Usage period:	-
Usage prepay:	None
Operating mode:	-

Logging

Properties

Name:	Logging
Category:	Administration
Service:	Azure Monitor
Type:	Monitoring (System)
Metrics:	500
Requests:	10000
Data to collect in GB:	1
Data to save in GB:	1
Events in Mio.:	10
Logging:	false

Usage

Location:	EU-Frankfurt
Usage type:	-
Usage period:	-
Usage prepay:	None
Operating mode:	-

Filter 1

Properties

Name:	Filter 1
Category:	Compute
Service:	Azure Container Instances
Type:	Container (Standard)
Container type:	Standard
CPU:	1
RAM in GB:	1
Tasks:	1

Duration in seconds:	300
Transferred data in GB:	1

Usage

Location:	EU-Frankfurt
Usage type:	-
Usage period:	-
Usage prepay:	None
Operating mode:	-

Filter 2

Properties

Name:	Filter 2
Category:	Compute
Service:	Azure Container Instances
Type:	Container (Standard)
Container type:	Standard
CPU:	1
RAM in GB:	1
Tasks:	1
Duration in seconds:	300
Transferred data in GB:	1

Usage

Location:	EU-Frankfurt
Usage type:	-
Usage period:	-
Usage prepay:	None
Operating mode:	-

Processing

Properties

Name:	Processing
Category:	Compute
Service:	Azure Functions
Type:	Code
Invocations in Mio.:	3

Duration in seconds:	1
Storage in MB:	512

Usage

Location:	EU-Frankfurt
Usage type:	-
Usage period:	-
Usage prepay:	None
Operating mode:	-

mails

Properties

Name:	mails
Category:	Compute
Service:	Azure Functions
Type:	Code
Invocations in Mio.:	3
Duration in seconds:	1
Storage in MB:	512

Usage

Location:	EU-Frankfurt
Usage type:	-
Usage period:	-
Usage prepay:	None
Operating mode:	-

Suchindex

Properties

Name:	Suchindex
Category:	Analytic
Service:	Azure Cognitive Search
Type:	Search Engine
Instance type:	General
CPU:	1
RAM in GB:	2
Hours:	730

Processed data in GB:	5
Transferred data in GB:	5

Usage

Location:	EU-Frankfurt
Usage type:	-
Usage period:	-
Usage prepay:	None
Operating mode:	-

products

Properties

Name:	products
Category:	Compute
Service:	Azure Container Instances
Type:	Container (Standard)
Container type:	Standard
CPU:	1
RAM in GB:	1
Tasks:	1
Duration in seconds:	300
Transferred data in GB:	1

Usage

Location:	EU-Frankfurt
Usage type:	-
Usage period:	-
Usage prepay:	None
Operating mode:	-

users

Properties

Name:	users
Category:	Compute
Service:	Azure Container Instances
Type:	Container (Standard)
Container type:	Standard

CPU:	1
RAM in GB:	1
Tasks:	1
Duration in seconds:	300
Transferred data in GB:	1

Usage

Location:	EU-Frankfurt
Usage type:	-
Usage period:	-
Usage prepay:	None
Operating mode:	-

Frontend

Properties

Name:	Frontend
Category:	Compute
Service:	Azure App Service
Type:	App
Operating system:	Linux
CPU:	2
RAM in GB:	4
Storage in GB:	50
Compute instance reference:	
Storage instance reference:	

Usage

Location:	EU-Frankfurt
Usage type:	-
Usage period:	-
Usage prepay:	None
Operating mode:	-

Load Balancer

Properties

Name:	Load Balancer
Category:	Compute
Service:	Azure Load Balancer
Type:	Load Balancer
Units:	1
Transferred data in GB:	10

Usage

Location:	EU-Frankfurt
Usage type:	-
Usage period:	-
Usage prepay:	None
Operating mode:	-

Caching

Properties

Name:	Caching
Category:	Network
Service:	Azure CDN
Type:	CDN
Transferred data in GB:	100
Transferred data in TB into internet:	2
Http-requests:	1000000

Usage

Location:	EU-Frankfurt
Usage type:	-
Usage period:	-
Usage prepay:	None
Operating mode:	-

Cost Calculation

Service costs

Remote Crawler 1	0.13 USD	300 * 0.0468 USD + 300 * 0.0054 USD + 1 * 0.0 USD
Remote Crawler 2	0.13 USD	300 * 0.0468 USD + 300 * 0.0054 USD + 1 * 0.0 USD
Remote Crawler 3	0.13 USD	300 * 0.0468 USD + 300 * 0.0054 USD + 1 * 0.0 USD
Crawler Manager	138.70 USD	0.19 USD * 730 hours
Datenstream	350.40 USD	4 * 730 hours * 0.12 USD
Speicher	31.60 USD	1000 * 0.0196 USD + 20.0 * 4.3E-4 USD + 10.0 * 0.0054 USD + 100 * 0.1 USD
Logging	328.60 USD	500 * 0.258 USD + 10000 * 0.01 USD + 10 * 0.6 USD + 1 * 30 * 2.99 USD + 1 * 30 * 0.13 USD
Filter 1	0.13 USD	300 * 0.0468 USD + 300 * 0.0054 USD + 1 * 0.0 USD
Filter 2	0.13 USD	300 * 0.0468 USD + 300 * 0.0054 USD + 1 * 0.0 USD
Processing	24.60 USD	3 * 0.2 USD + 1500000.0 * 1.6E-5 USD
mails	24.60 USD	3 * 0.2 USD + 1500000.0 * 1.6E-5 USD
Suchindex	245.28 USD	730 * 0.336 USD
products	0.13 USD	300 * 0.0468 USD + 300 * 0.0054 USD + 1 * 0.0 USD
users	0.13 USD	300 * 0.0468 USD + 300 * 0.0054 USD + 1 * 0.0 USD
Frontend	138.70 USD	0.19 USD * 730 hours
Load Balancer	7.35 USD	1 * 0.01 USD * 730 hours + 1 * 10 * 0.005 USD
Caching	162.00 USD	2 * 1000.0 * 0.081 USD

Total costs

Per Hour:	1.99 USD
Per Day:	48.42 USD

Per Month:	1452.74 USD

Cost Scaling

Cost Optimization

Cost Comparison