



Nyheder fra Technology

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SAS[®] Technology

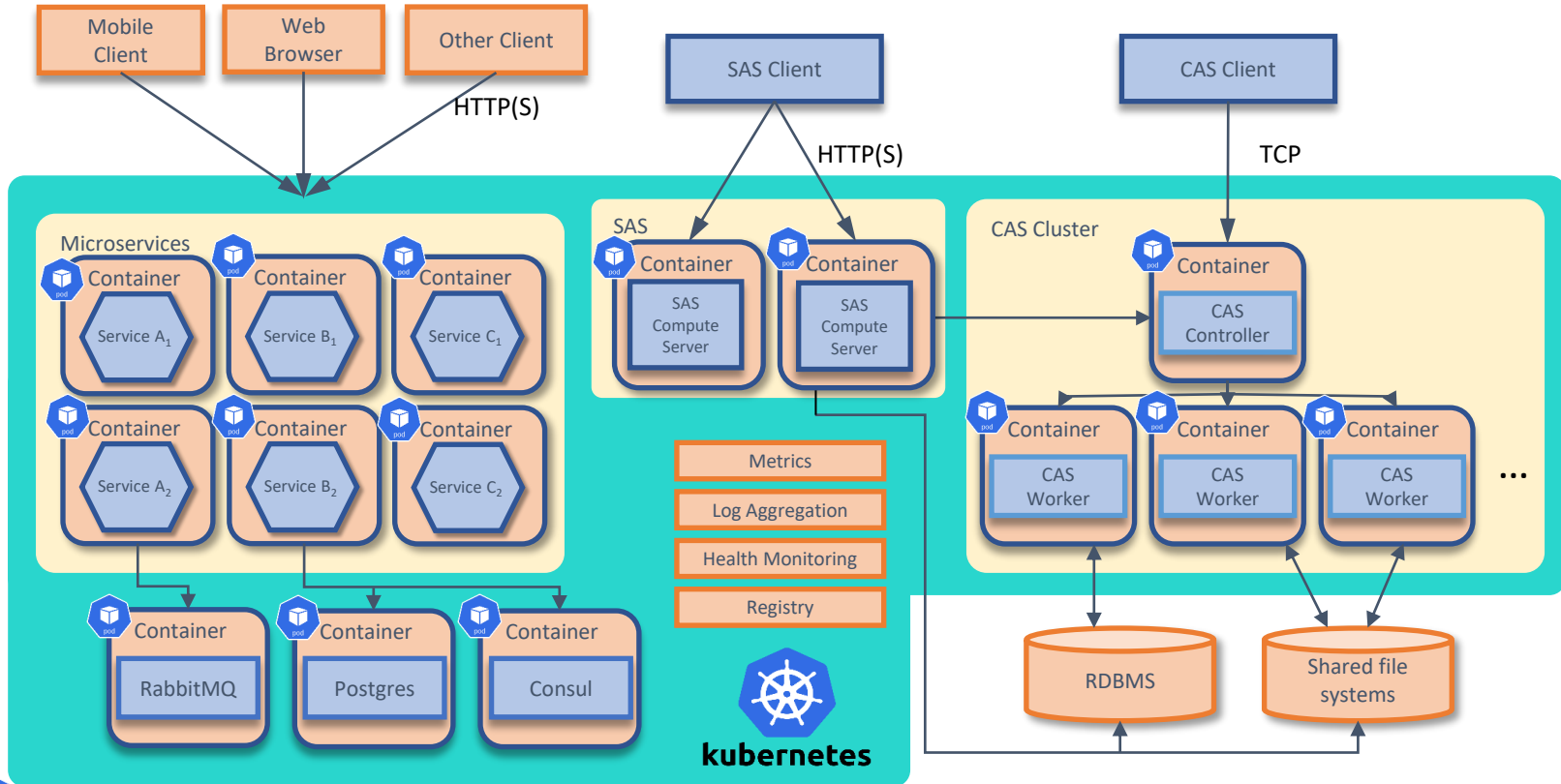


Nyhedstemaer

- Viya 4 on-premises
- Bedre datalagring i Viya 4 CAS
- R&D Roadmaps
- Kritiske sikkerhedsmeldinger

Viya 4 on-premises

SAS® Viya 4 in Kubernetes



The containers run within a Kubernetes Pod

Viya 4 on-premises

Upstream Open Source Kubernetes

- Kun officiel open source Kubernetes
<https://github.com/kubernetes/kubernetes>
- Bare metal og virtuelle maskiner samt cloud
- Kræver NGINX, Calico, kube-vip or MetalLB (i bestemte versioner)
- SAS Infrastructure as Code (vSphere og bare metal)

Viya 4 on premises

OpenShift on VMware

- Versionless – dvs. følger nu SAS K8s versionen (1.21 – 1.23)
- OpenShift driftsstøtte kan bl.a. købes hos
 - Accenture via SAS
 - Flere andre i markedet

Datalagring i Viya 4 CAS

Data Value Reduction som standard

- Sættes på CAS service.
- Fx i Environment Manager

The screenshot shows the SAS Environment Manager interface. On the left, a navigation pane lists various services, with 'cas-shared-default' highlighted. The main area displays the configuration for the 'cas-shared-default' service. A red box highlights the configuration instance 'sas.cas.instance.config: config'. A red arrow points to the 'Edit' button. Below, the 'contents' section shows configuration options, with a red box highlighting 'env.CAS_DEFAULT_MEMORY_FORMAT=DVR' and a red arrow pointing to it with the text 'Add text'.

Configuration

View: All services

cas

CAS Access Management service
CAS Formats service
CAS Management service
CAS Proxy service
CAS Row Sets service
cas-shared-default
cas-shared-default-http
Forecasting Comparison service
Forecasting Events service
Forecasting Exploration service
Forecasting Filters service
Forecasting Gateway service
Forecasting Models service
Forecasting Overrides service
Forecasting Pipelines service
forecastingDataDefinition

The following configuration instances are used to configure the service "cas-shared-default":

Filter

> sas.cache.config.pool

▼ sas.cas.instance.config: config

GUID: de37fb0a-979f-4f4a-aa4-2b7b45405fd9
The globally unique identifier for the configuration instance.

Services: cas-shared-default
Service to which this configuration instance applies.

contents:

- CAS configuration script extensions
- Lua-formatted script that adds environment variables and/or configuration options to the CAS Server and Sessions.
- env.EXAMPLE_VARIABLE='value' -- Add an environment variable
- cas.example_setting='value' -- Add a configuration option

env.CAS_DEFAULT_MEMORY_FORMAT=DVR

Edit

Add text

Configuration

View: All services ▾

cas

CAS Access Management service

CAS Formats service

CAS Management service

CAS Proxy service

CAS Row Sets service

cas-shared-default

cas-shared-default-http

Forecasting Comparison service

Forecasting Events service

Forecasting Exploration service

Forecasting Filters service

Forecasting Gateway service

Forecasting Models service

Forecasting Overrides service

Forecasting Pipelines service

forecastingDataDefinition

New Configuration

The following configuration instances are used to configure the service "cas-shared-default":

Filter

> sas.cache.config.pool

▼ sas.cas.instance.config: config

GUID:

de37fb0a-979f-4f4a-aaf4-2b7b45405fd9

The globally unique identifier for the configuration instance.

Services:

cas-shared-default

Service to which this configuration instance applies.

contents:

-- CAS configuration script extensions

--

-- Lua-formatted script that adds environment variables and/or configuration options to the CAS Server and Sessions.

-- env.EXAMPLE_VARIABLE='value' -- Add an environment variable

-- cas.example_setting='value' -- Add a configuration option

env.CAS_DEFAULT_MEMORY_FORMAT='DVR'

Edit

Add text

Datalagring i Viya 4 CAS

DVR pladsbesparelser

Table Name	Table Makeup	CAS Size (DVR)	SAS7BDAT	Compressed SAS7BDAT (CHAR)	Compressed SAS7BDAT (BINARY)
Orion Star Customer Dimension (250X)	Repeating categoricals	2.52GB	8.5GB	3.4GB	3GB
Orion Star Order Fact (250X)	Numbers and a few repeating foreign keys / codes	8GB	20GB	25GB	25GB
MegaCorp (46 column, 1.6M row version)	Fully Flattened Data Mart	168MB	596MB	460MB	472MB
Insight Toys (57 column, 1.5M row version)	Fully Flattened Data Mart	575MB	1017MB	666MB	660MB
Appalachian Chocolate Order Fact (24 column, 500K row version)	Numbers with a few repeating foreign keys / codes	47MB	219MB	93MB	96MB

Every table tested is smaller in CAS DVR format than SAS7BDAT format, standard or compressed. Additionally DVR never causes table size growth like SAS7BDAT compression can (see Orion Star Order Fact above).

Datalagring i Viya 4 CAS

SAS Viya with SingleStore

- Distribueret relationel SQL database
- Række- eller kolonnebaseret lagring
- CAS-beregning kan ofte flyttes til SingleStore (in-database)
- Data streames parallelt til CAS uden load til memory
- Åben for SQL-klienter

SAS® Viya® with SingleStore

Data Architecture



kubernetes

- RDBMS
- Cloud Repos
- Etc.

SAS Compute Services (SPRE)



COMPUTE NODE POOL

Data Fabric



SAS CAS - "SAS® Viya® with SingleStore"

SAS CAS Services

CAS Controller

CAS Worker

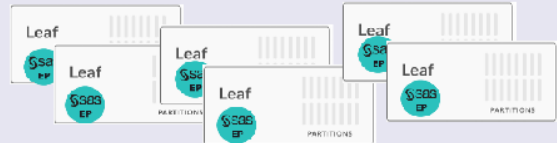
CAS Worker

CAS Worker

Aggregator

Aggregator

Aggregator



CAS NODE POOL INTEGRATED W/ SINGLESTORE



Roadmaps

<Fjernet fra præsentationen>

Kritiske sikkerhedsmeldinger

- 10-06-2022: SAS Security Update for SAS 9.4M7 (TS1M7)
- -> PostgreSQL opdateringer
- Følg med på
- <https://support.sas.com/en/security-bulletins.html>



Tak

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