



What the shift?

Von 9.4 zu Viya in unter einem Jahr

30.10.2025 Nico Schmiederer





Was euch erwartet

1. Wer ist Printus?
2. Unser Setting und Projekt

3. Unsere Learnings

4. Fragen



Nico Schmiederer

- Bachelor of Science Wirtschaftsinformatik
- 33 Jahre, Ortenberg
- Hobbies: Joggen, Tech-News
- Seit 2012 bei Printus
- Data Analyst
- SAS Admin





Zahlen und Fakten zur Unternehmensgruppe Schmid



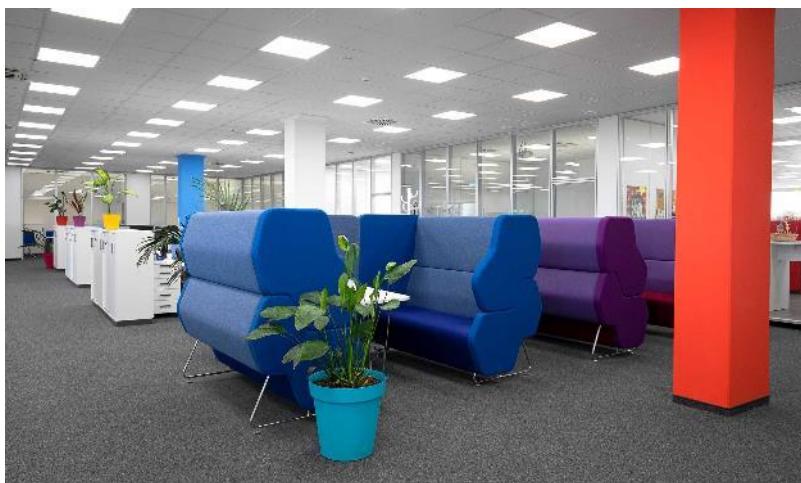
Inhaber: Hans R. Schmid



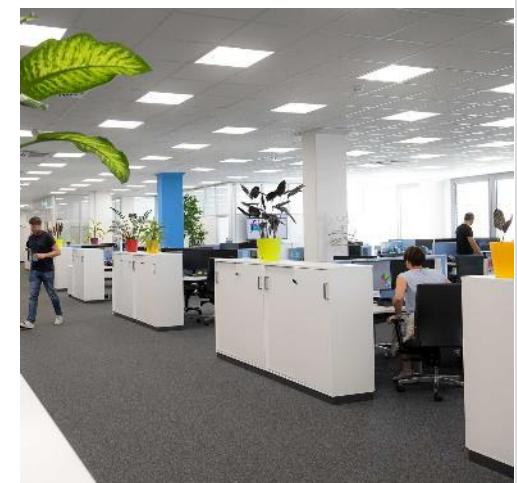
Über 1.800 Mitarbeiter



Vertreten in Deutschland, Österreich und Belgien



Über 1 Milliarde Euro Umsatz





Über uns: Vertriebskanäle

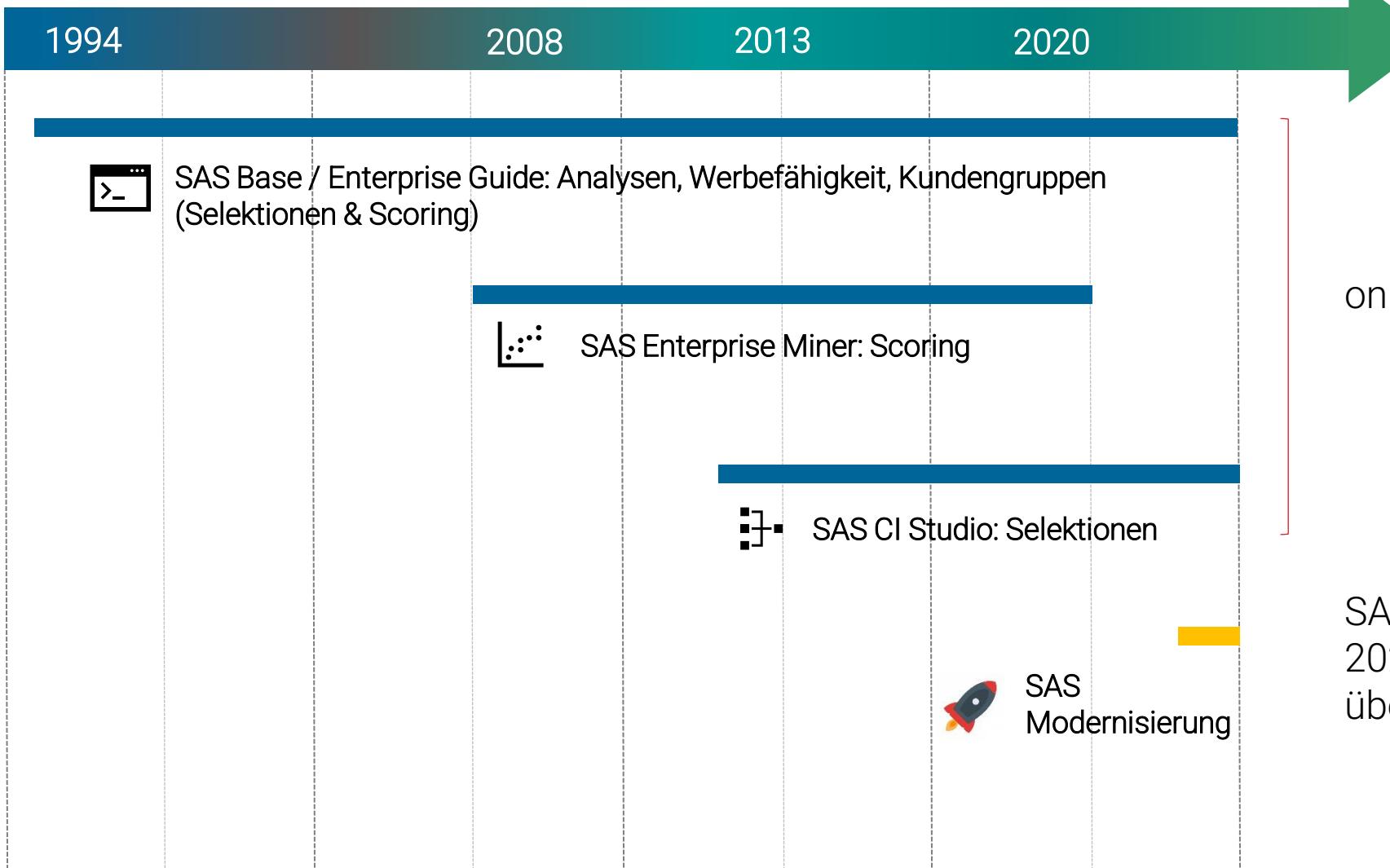
Wachstum seit über 40 Jahren

**Kontinuierliche Erweiterung unserer Fachbereiche
zu einem der größten Online- und Versandhändler Deutschlands**



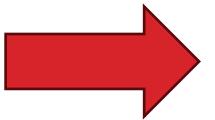


SAS und Printus im Zeitverlauf





Unser Setting



Viya 4 Sizing

- SAS Base 9.4 M7
- SAS Marketing Automation (CI-Studio)
- SAS Visual Analytics

- 2 Umgebungen (Test/Prod)
- 70GB RAM
- 8 Cores
- 9 Anwender (davon 3 Admin)

- 180 Autojobs
- 15 Dashboards
- 30 Schnittstellen

- Stable
- SAS Visual Statistics
- SAS Studio Analyst

- 2 Umgebungen (Test/Prod)

CAS: 1 x 8 vCPU cores with 96GB RAM
Compute: 1 x 8 vCPU cores with 64GB RAM
Stateful: 1 x 8 vCPU cores with 64GB RAM
Stateless: 1 x 16 vCPU cores with 128GB RAM

External PostgreSQL: 1 x 4 vCPU cores with 16GB RAM





Zusätzliche Anforderungen

- UTF8 (x3 zu x2)
- Crontab zu Automic
- MobaXterm zu VS Code
- Active Directory
- Monitoring Grafana
- Eigenständige Updates (fast) je

The screenshot shows a dark-themed interface of VS Code. On the left is the Explorer sidebar with a tree view of a Kubernetes namespace named 'SAS'. The 'cas-node-affinity.yaml' file is selected in the tree. The main area contains two tabs: a terminal window showing a list of pods and their status, and a code editor window displaying the content of 'cas-node-affinity.yaml'. The code defines a patch to add node affinity for the 'viya.sas.com' group.

```
apiVersion: builtin
kind: PatchTransformer
metadata:
  name: tolerations-affinity-patch
patch: |
  - op: add
    path: "/spec/controllerTemplate/spec/affinity/nodeAffinity/requiredDuringSchedulingIgnoredDuringExecution"
    value:
      nodeSelectorTerms:
        - matchExpressions:
            - key: workload.sas.com/class
            - operator: In
            - values:
              - cas
      target:
        group: viya.sas.com
        kind: CASDeployment
        name: .*
        version: v1alpha1
```

TERMINAL OUTPUT (partial):

```
sas-readiness-8d77fc954-ggbd9 0/1 Completed 0 5d23h
sas-redis-operator-767cd6c75-j6gft 0/1 Running 0 5d23h
sas-redis-server-0 0/1 Running 0 5d23h
sas-redis-server-1 0/1 Running 0 5d23h
sas-report-alerts-58679t58d-hm5d8 0/1 Running 0 5d23h
sas-report-distribution-64bf4867b4-psbqk 0/1 Running 0 5d23h
sas-report-execution-65f6d45bd-fxzcz8 0/1 Running 0 5d23h
sas-report-renderers-6d96797b56-1qgnq 0/1 Running 0 5d23h
sas-report-renderers-6d96797b56-rqnqn 0/1 Completed 0 5d23h
sas-report-services-group-dddd4d79-nfdwj 0/1 Running 0 5d23h
sas-scheduled-backup-incr-10-29131588-cz27x 0/2 CreateContainerConfigError 0 3d7h
sas-score-definition-4566ff4fd-mcstn 0/1 Running 0 5d23h
sas-score-execution-88edd9c9c-gr5sl 0/1 Running 0 5d23h
sas-search-7984bd26eb-kdnos 0/1 Running 0 5d23h
sas-studio-6bc689456-gck6 0/1 Running 0 5d23h
sas-studio-app-d878d49f5-mqj1 0/1 Running 0 5d23h
sas-studio-development-66779cbf9-c9zzn 0/1 Running 0 5d23h
sas-theme-designer-app-78c678cd7-hfqkc 0/1 Running 0 5d23h
sas-transformations-5f74cd4b79-4bn28 0/1 Running 0 5d23h
sas-visual-analytics-app-d8d054fb8-tlm6f 0/1 Running 0 5d23h
sas-visual-analytics-app-f45904dc-v95x2 0/2 Running 0 5d23h
sas-web-assets-68f4db9dc-pzb6 0/1 Completed 0 5d23h
sas-web-assets-68f4db9dc-pzb6 0/1 Running 0 2d21h
```



Zeitlicher Ablauf

Feb 2024

Entscheidung: Viya
Openshift

Hardware-
beschaffung

Okt 2024

Lizenzverhandlung/
Dienstleister

Projektplanung

Hardware-
vorbereitung

Feb 2025

Installationsbeginn

Stabilisierung

Migration

Aug 2025

Ablösung CI-Studio

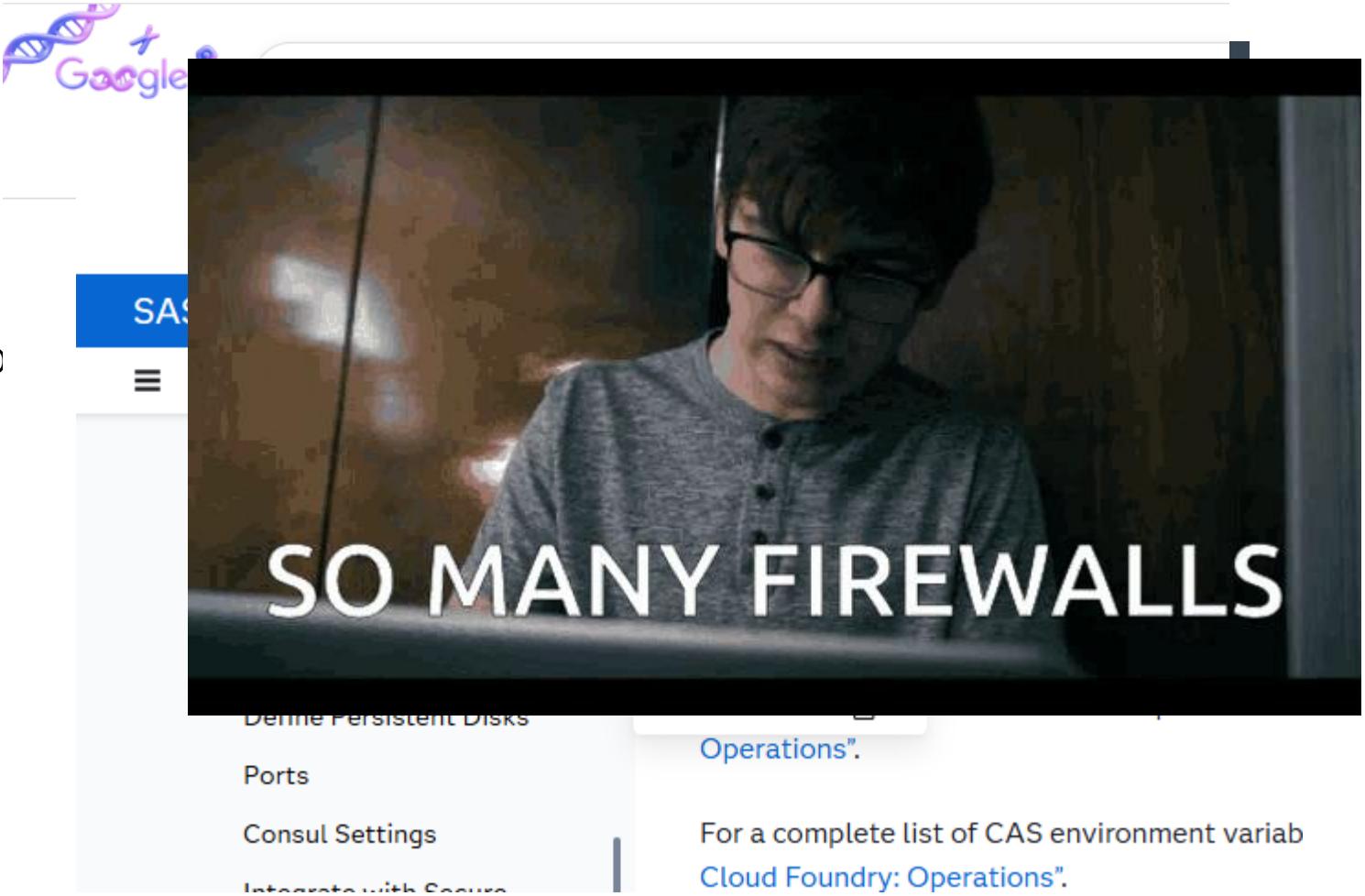
Okt 2025

Rückbau SAS 9.4



Herausforderungen

- „kurze Anpassungen“
- Alles selbst machen
- Doku führen gerne zu Viya 3.5
- Firewall (Mirror-Manager, Python)
- Viele Abhängigkeiten zu Abteilung
- Anpassungen vielfältig möglich
 - Deployment
 - Environment Manager
 - CLI
 - PYViyaTools





Probleme

- VI und yaml
- RAM unter 9.4 vs. RAM in Pods/CAS
- CAS wechselt Node
- Zu viele Pods parallel
- PVC-Speicher im Blick behalten
- Logging braucht mehr Ressourcen

Lösungen

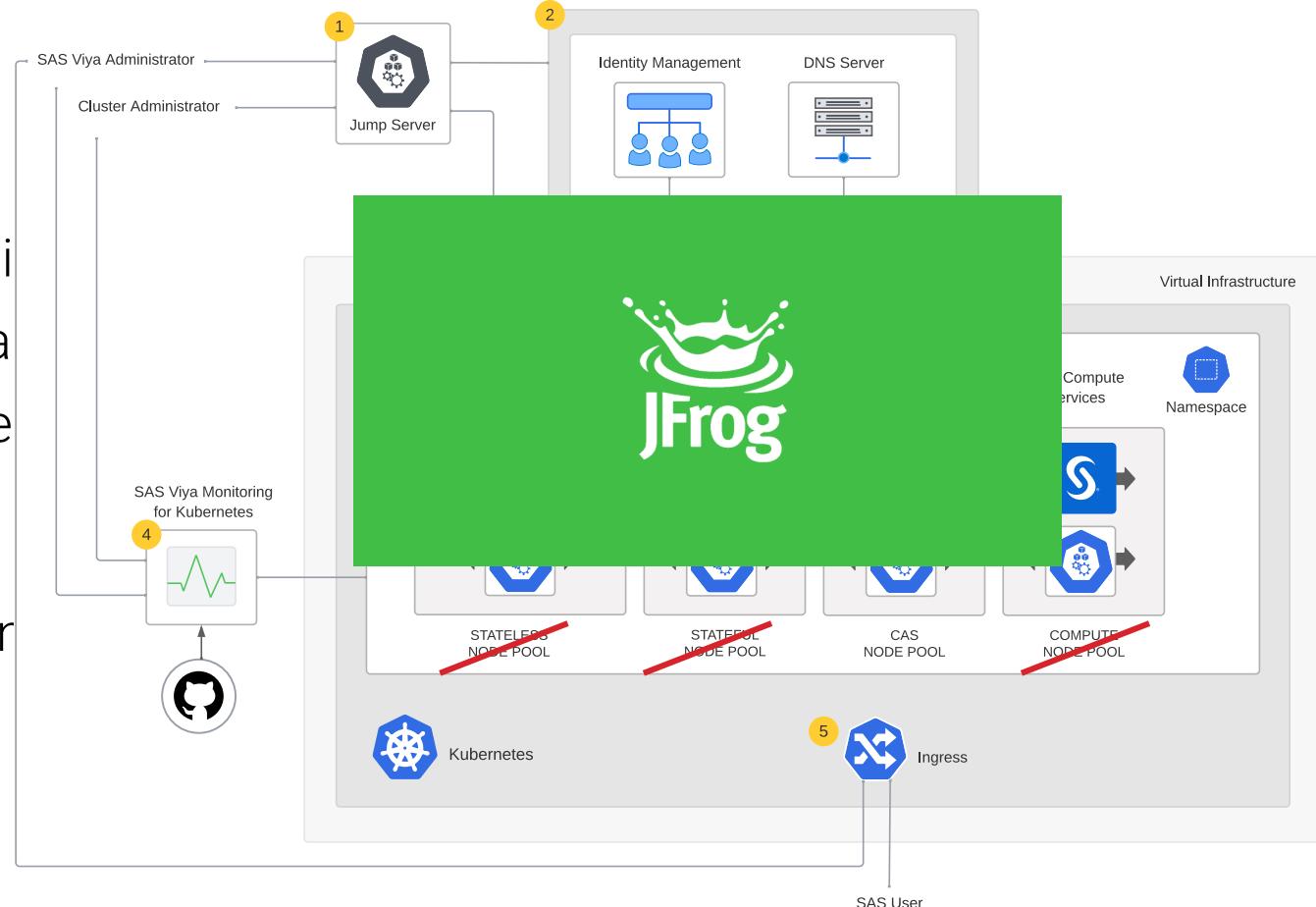
- VS Code
- Default RAM für Pods erhöht
- CAS auf Node1 limitieren
- Process-Limit erhöht
- Cleanup Pyconfig

A screenshot of the Visual Studio Code interface. The left sidebar shows a file tree with several SAS-related files and folders. The main editor area is currently empty. The bottom status bar indicates the connection is via SSH to 'lx0cpsastmgmt.ad.ugss.net'.



Finetuning

- CAS Autorestart
- Verteilung der Pods
- Mirror-Manager interne Arti
- Workload-Orchestrator dea
- Tägliches Backup verkleine
 - Keine Postgres
 - Nur 4 Tage
 - Keine .log; .tmp Dateier





Zeit für Fragen

?