



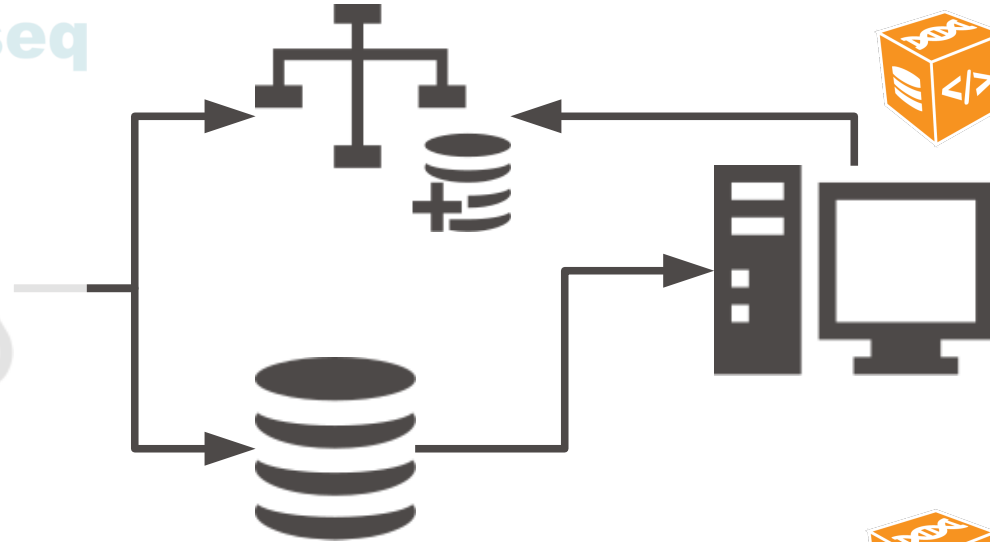
Data Storage Platforms



Korbinian Bösl
Data manager ELIXIR Norway
21 February 2020

NeLS

Norwegian e-Infrastructure for Life Sciences



sensitive
data



National HPC infrastructure

UNINETT

sigma2



Advanced Storage Needs

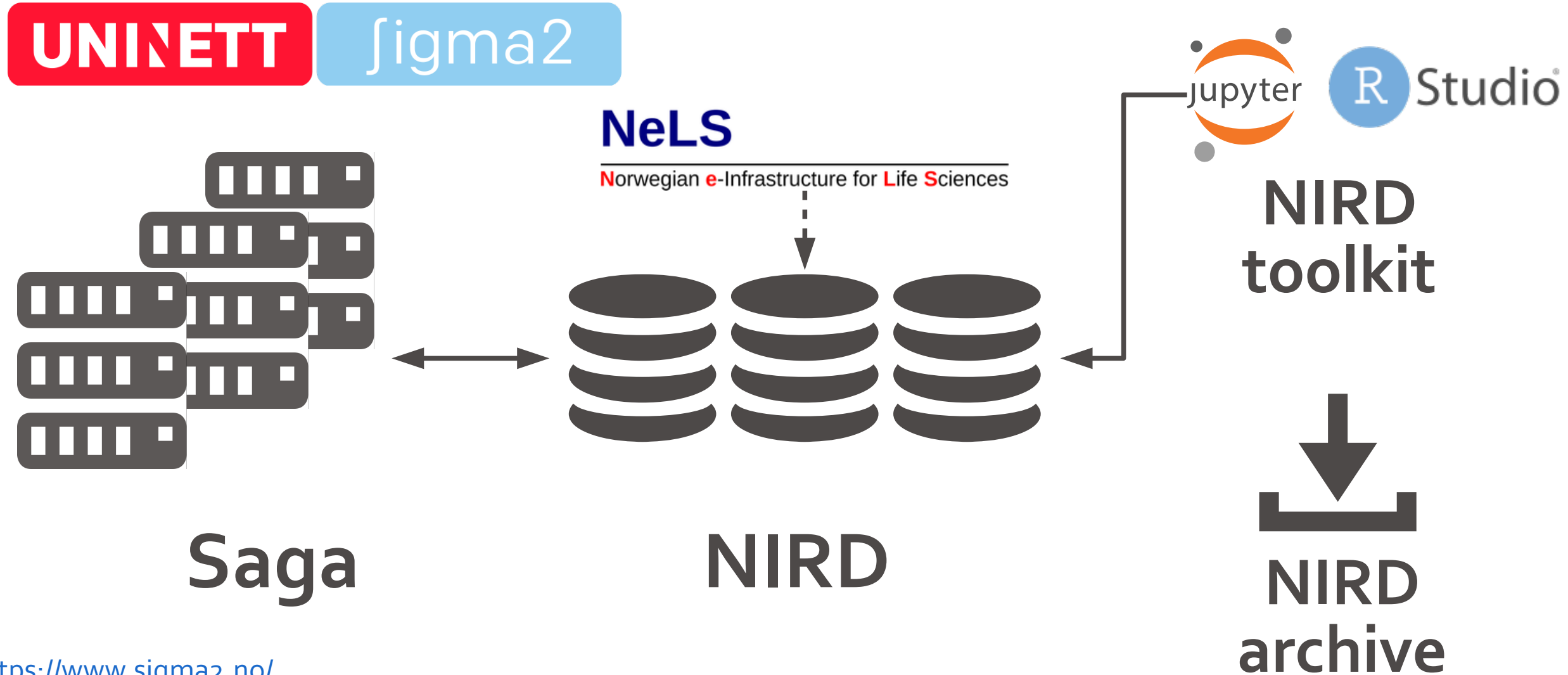


Advanced Computing Resources



Free Analysis Toolkit (Rstudio, Jupyternotebook)

National HPC infrastructure



HPC infrastructure

UNINETT

sigma2

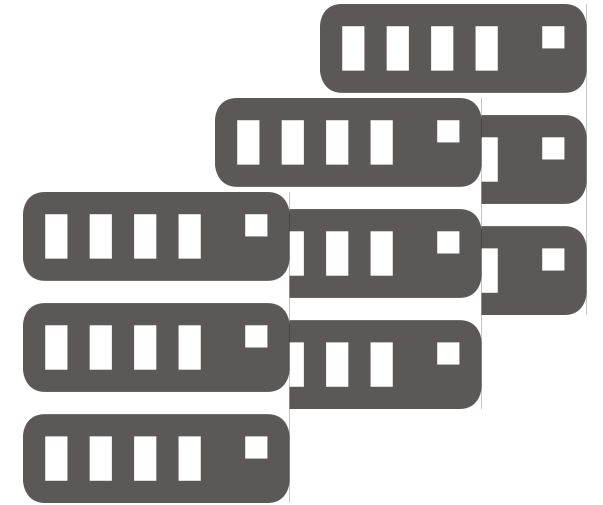
Saga

244 nodes – 9824 cores – 32 GPUs

Total 75TB RAM – 186-3066GB/node

89TB + 60TB NVMe+SSD

1PB file system



Storage infrastructure - NIRD

UNINETT

sigma2

Geo replicated

Nightly snapshots

12 PB (→ 36 PB next 4 yrs)



Sigma2 - Getting Access



Bi-annual calls (January & July) – Reapplication (!)

User contribution model (projects > 15 mill. NOK)

Application for small grants continually

TSD – National sensitive data service



Maximum classification



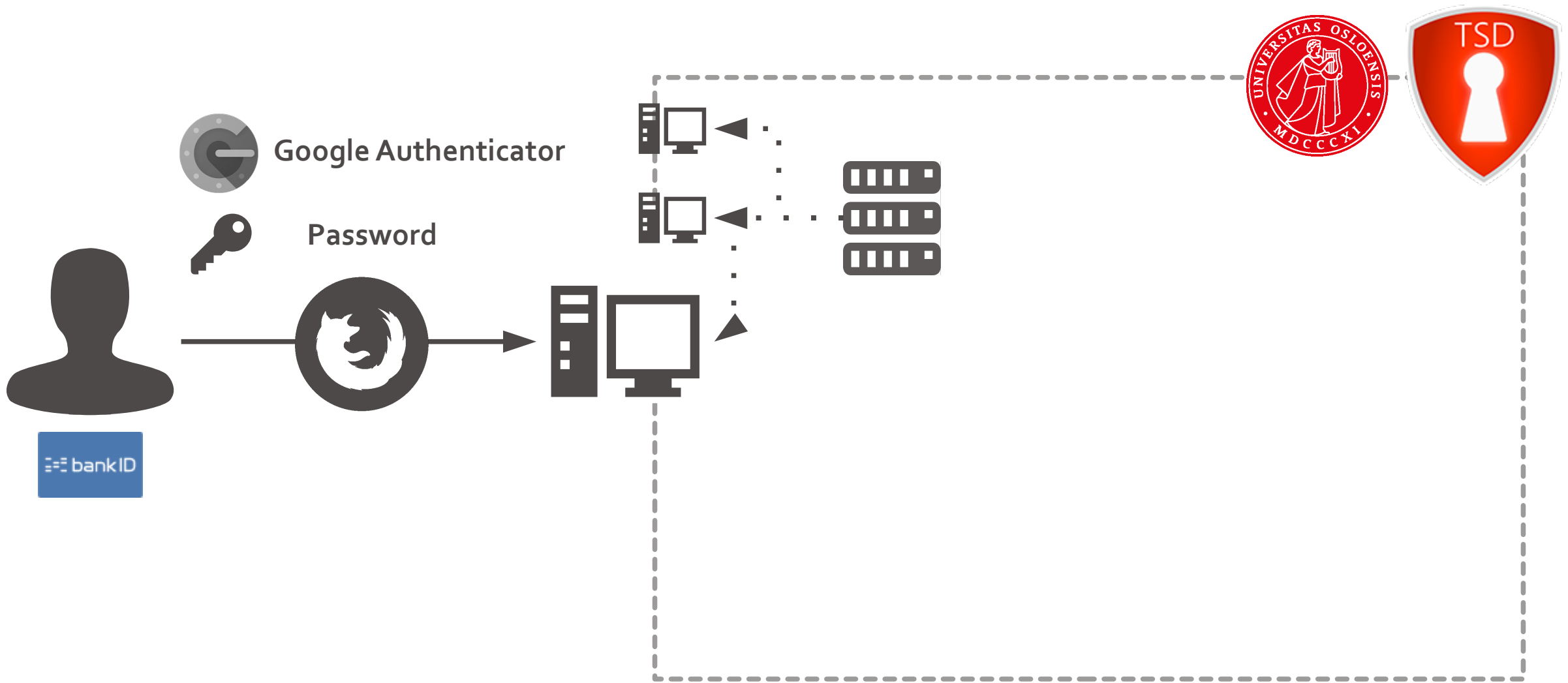
2-factor authentication

Attached HPC resources

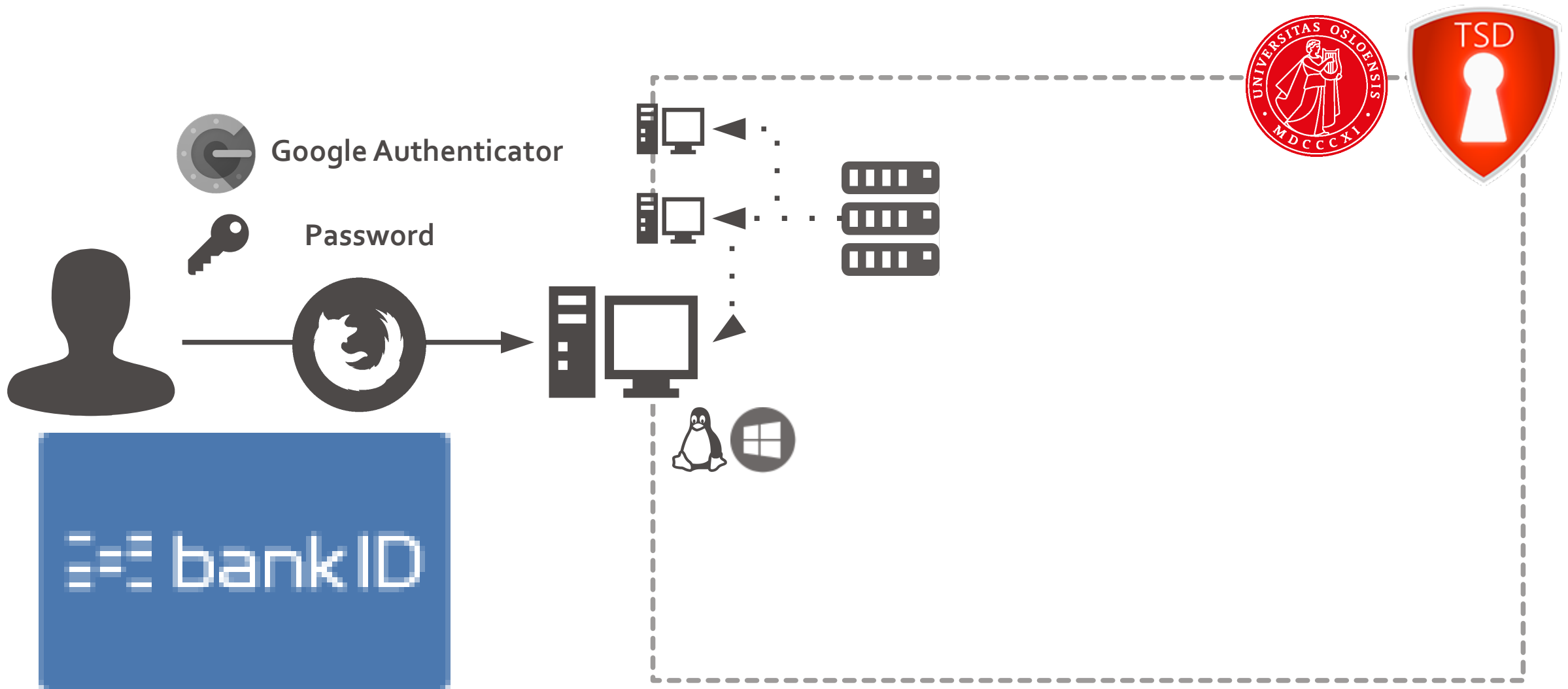
TSD – National sensitive data service



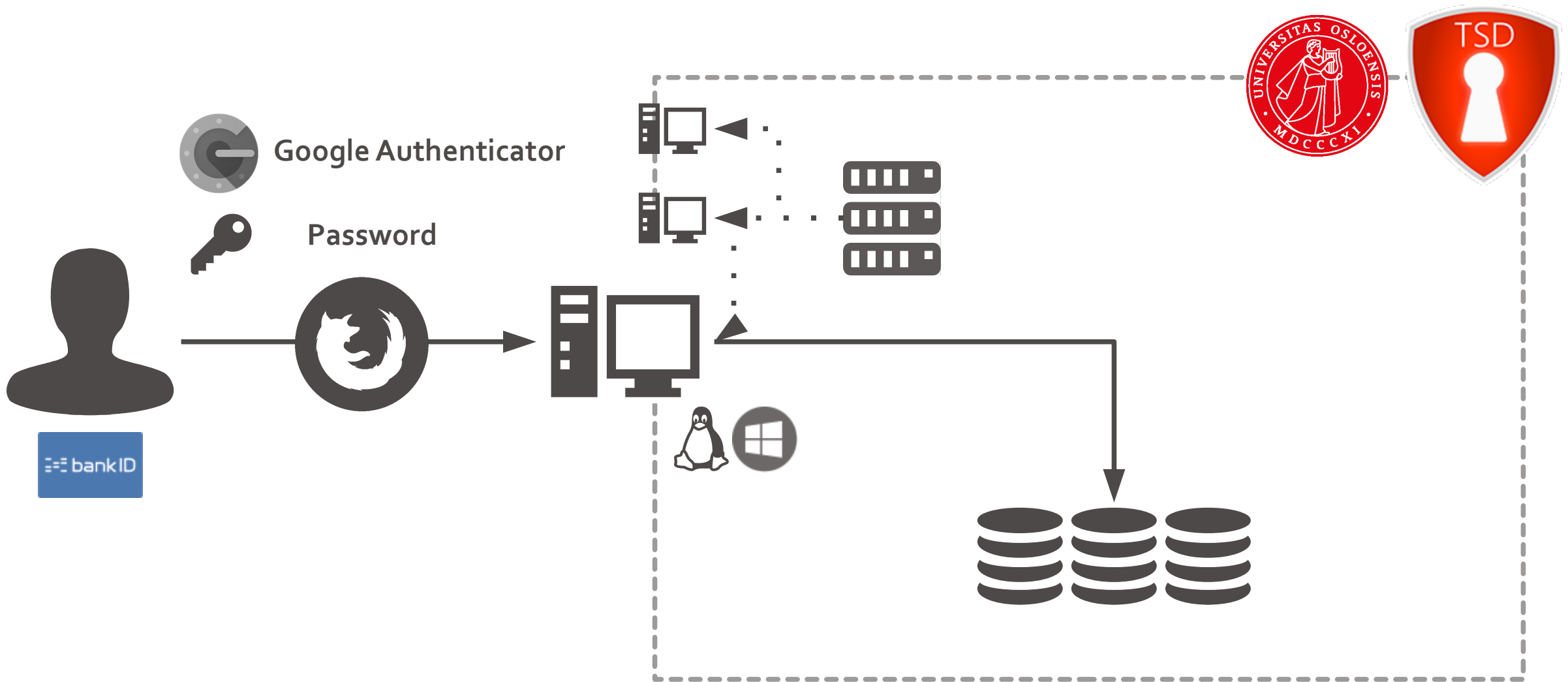
TSD – National sensitive data service



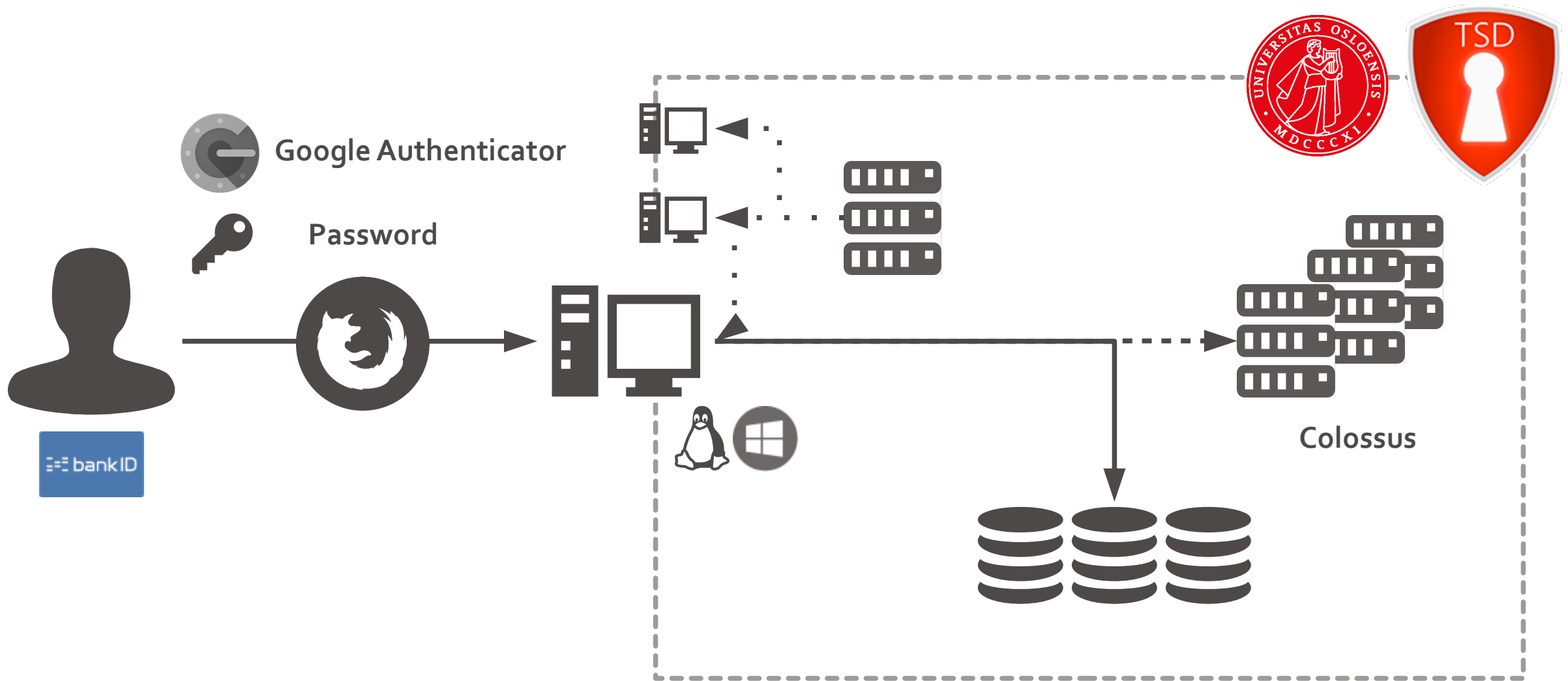
TSD – National sensitive data service



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TSD – National sensitive data service



TSD – Getting Access



Subsidized access through Sigma2 calls

User contribution model (non UiO: min 15kNOK/a)

Storage quotas through NeLS