Sunet Drive

An academic EFSS packaged for EOSC

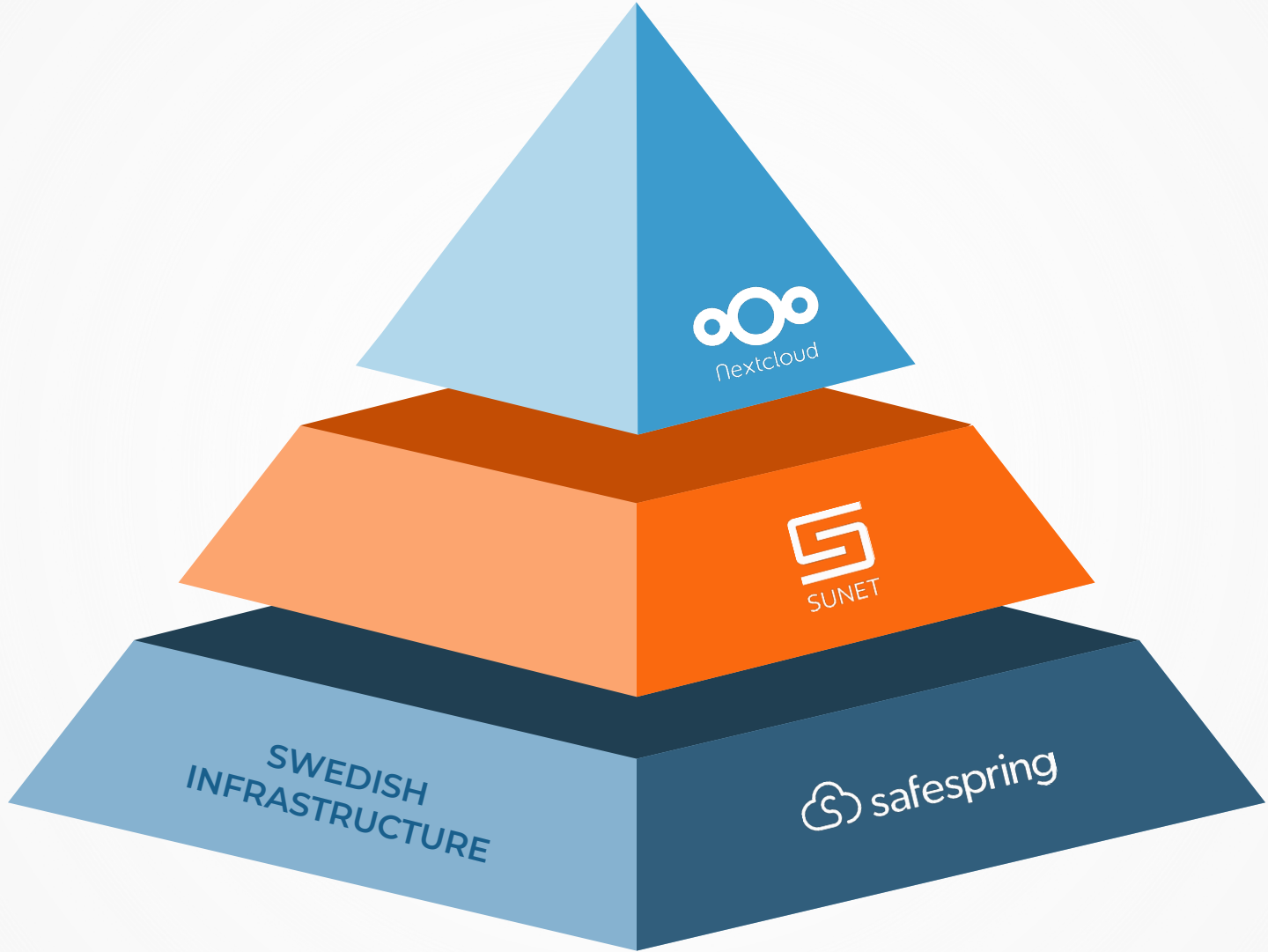**PRESENTORS**

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Open standards

Standardised API and functionality to simplify cloud service use.
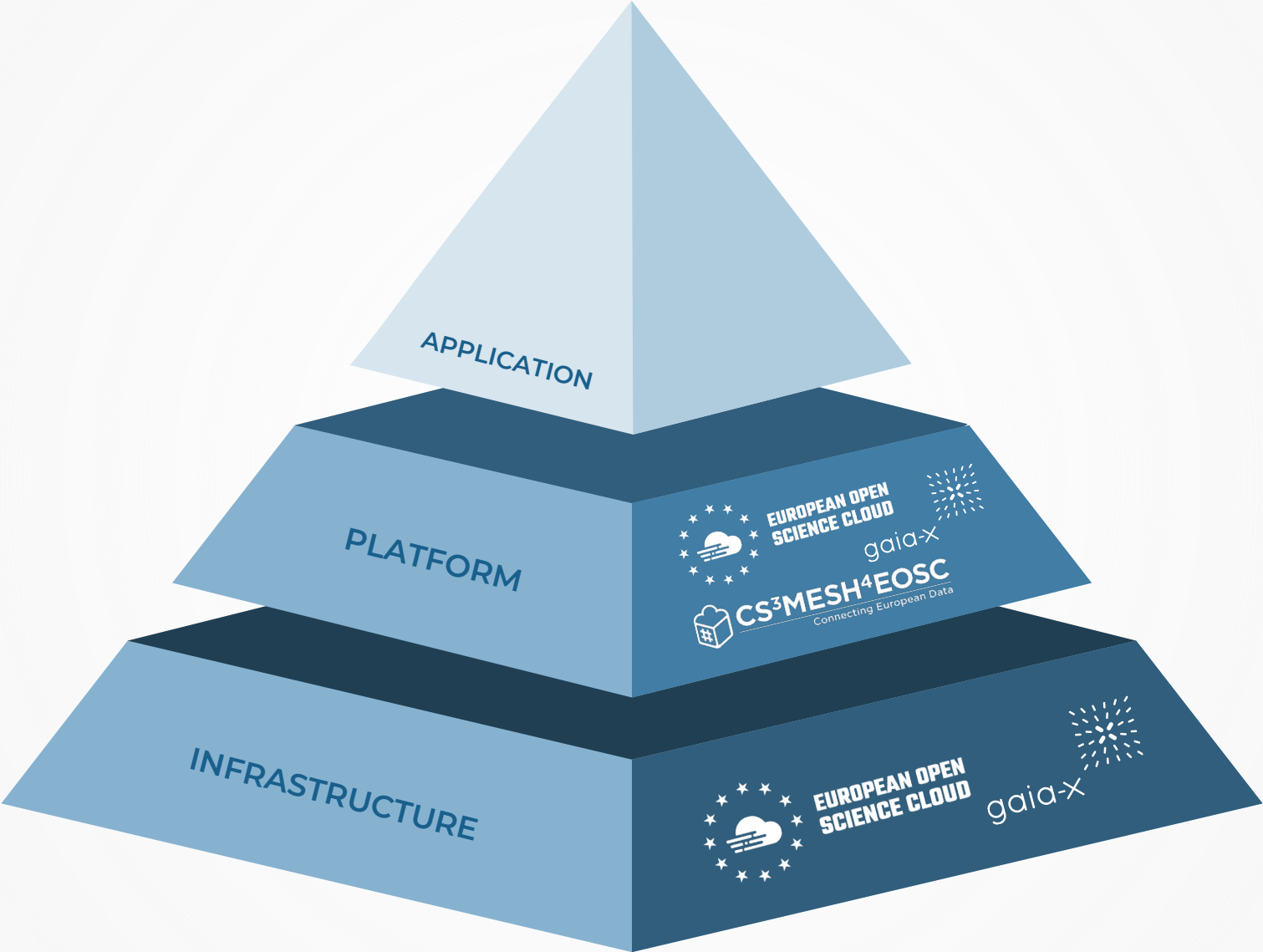
Compliance

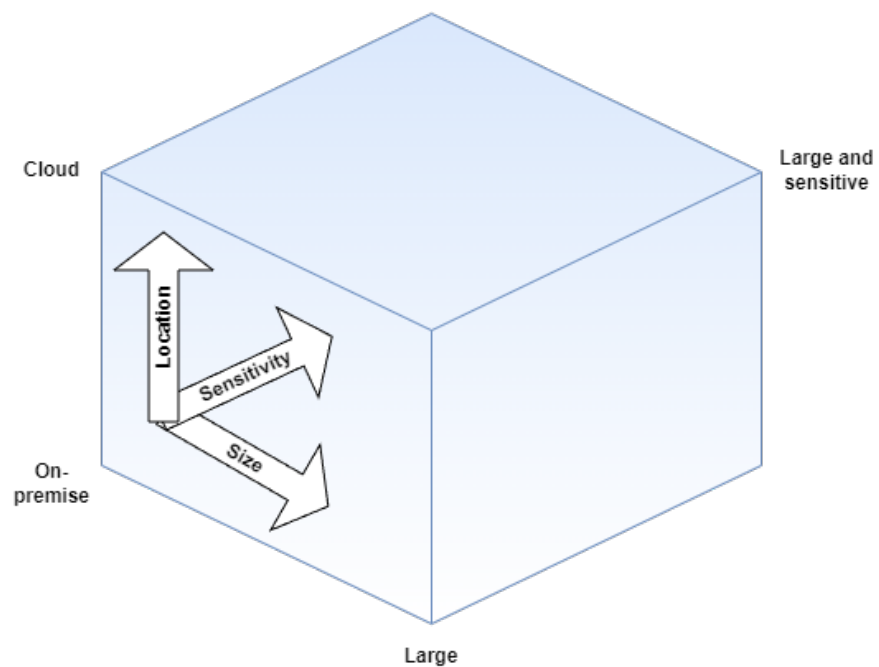Regulatory compliance for GDPR. No data transfer to 3:rd countries

Digital Sovereignty

Secure data centres with 100% renewable energy and focus on sustainability, no vendor lock-in.

Sunet is the Swedish University Computer Network

Data Classification

Cloud

Large and sensitive

Location

Sensitivity

Size

On-premise

Large

How do you access data?

Where is my data?

Lifecycle

Working Material

Data Retention Period

Archival

Partial disposal

Curated disposal

End of Project

Project lifetime

Access

"Classic" Files and Folders

"Modern" Apps

SUNET

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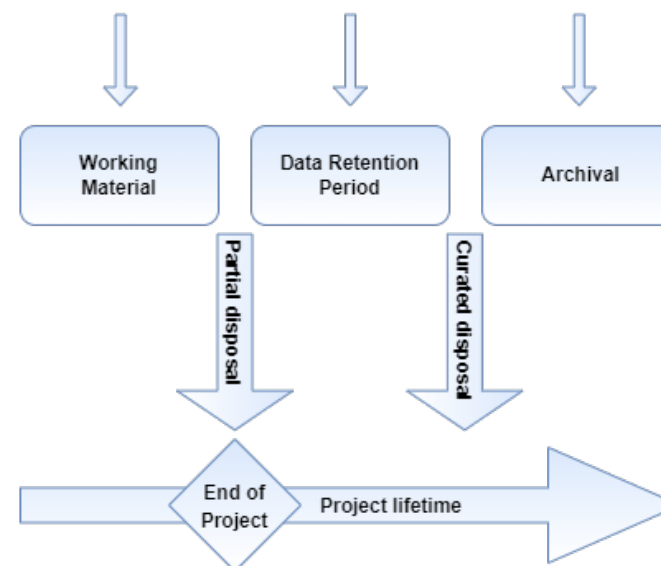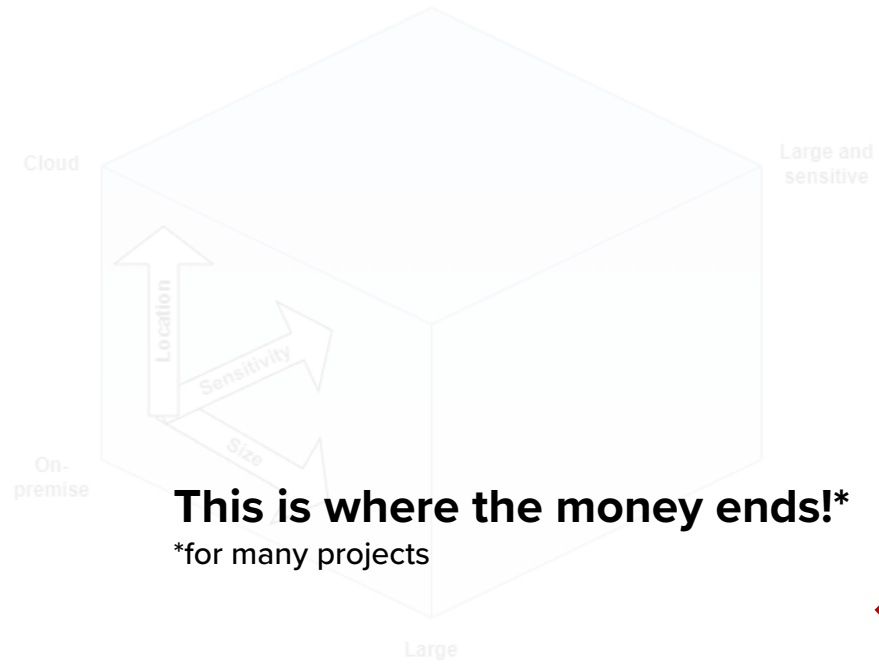
This is where the money ends!*
*for many projects

Access

"Classic" Files and Folders

"Modern" Apps

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Where is my data?

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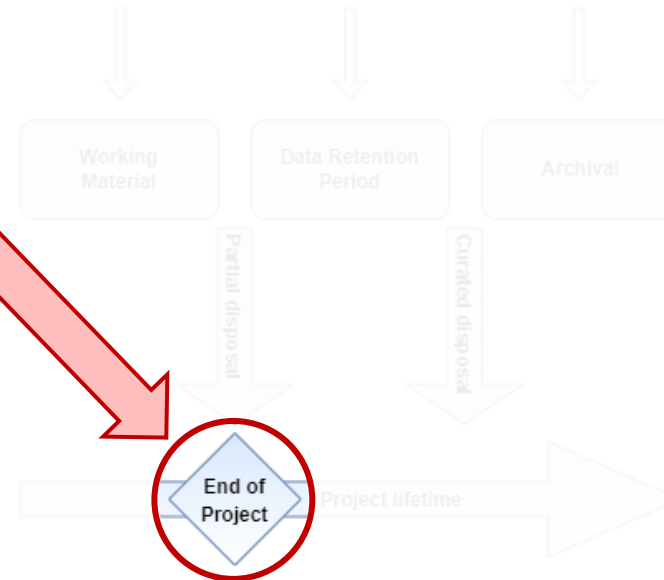
Primary data sources

Access

UV-Vis

IVIUM

...

Storage (S3)

PIA

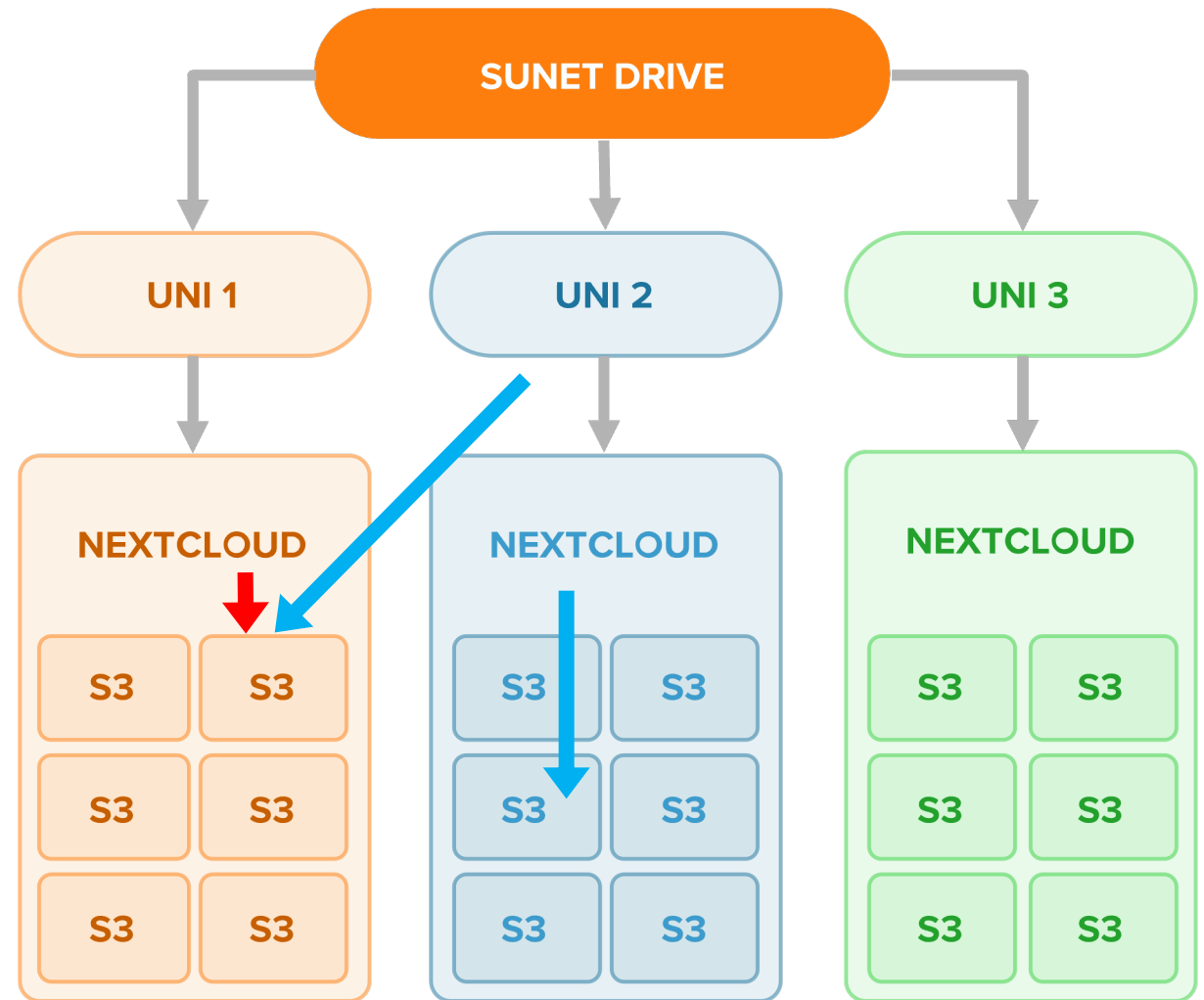| IPCE |
|---|

Co-management of nodes

- S3-bucket storage
- Share data between nodes
- Access ownership separation
- Lifecycle managed buckets

SUNET DRIVE

UNI 1   UNI 2   UNI 3

NEXTCLOUD   NEXTCLOUD   NEXTCLOUD

S3 S3 S3 S3 S3 S3
S3 S3 S3 S3 S3 S3
S3 S3 S3 S3 S3 S3
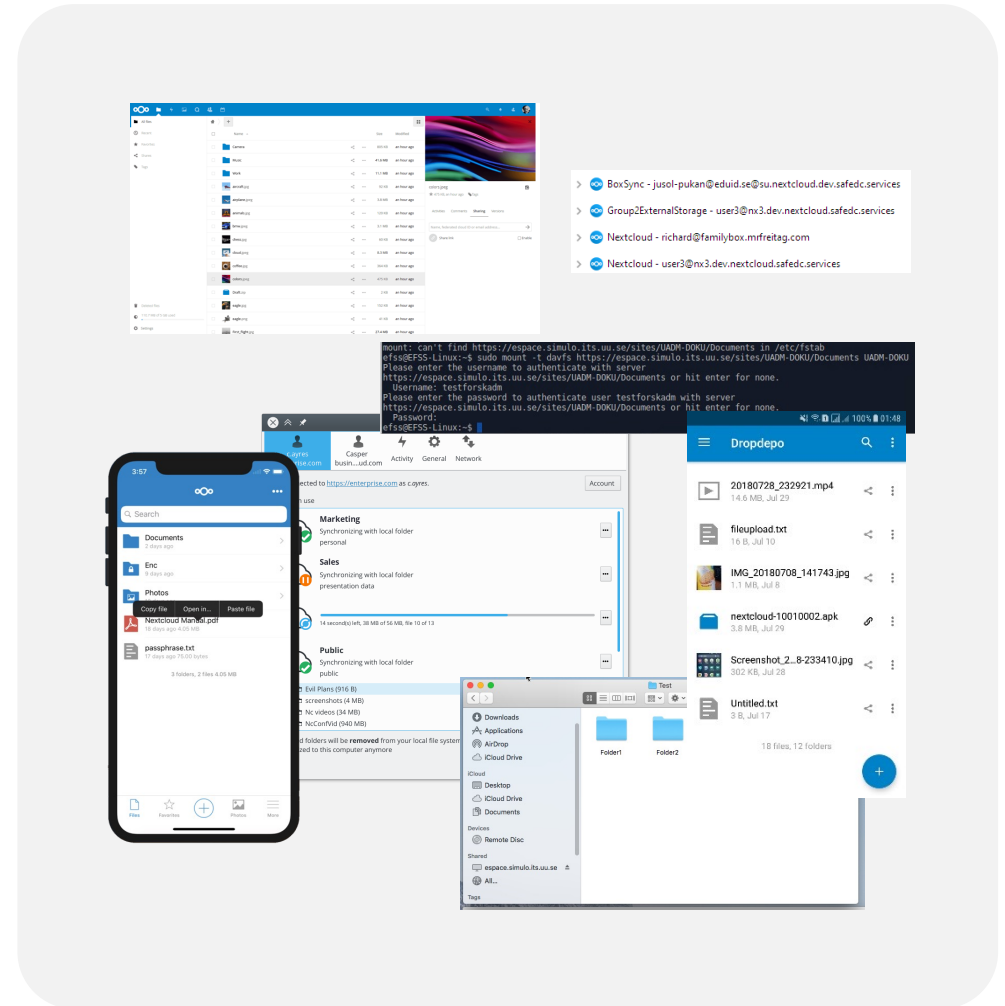
Sunet Drive

Co-management of nodes

The main storage unit is an S3-bucket

Sunet Drive is a cloud-based file storage and collaboration service that utilises the S3 (Simple Storage Service) infrastructure as its main storage unit. S3 is a highly scalable, reliable, and secure object storage service that can store and retrieve any amount of data from anywhere on the web.

Every university has its own Sunet Drive node

Sunet Drive is a service provided by the Swedish University Network (SUNET), which is a collaboration between Swedish universities and colleges. Each university has its own Sunet Drive node, which provides a secure and dedicated file storage environment for its faculty, staff, and students.

Data can be shared between nodes

One of the benefits of the Sunet Drive service is that data can be easily shared between nodes, enabling collaboration and knowledge-sharing between different universities and departments. This is achieved through the use of access control lists (ACLs), which allow node administrators to grant or revoke permissions to specific users or groups.
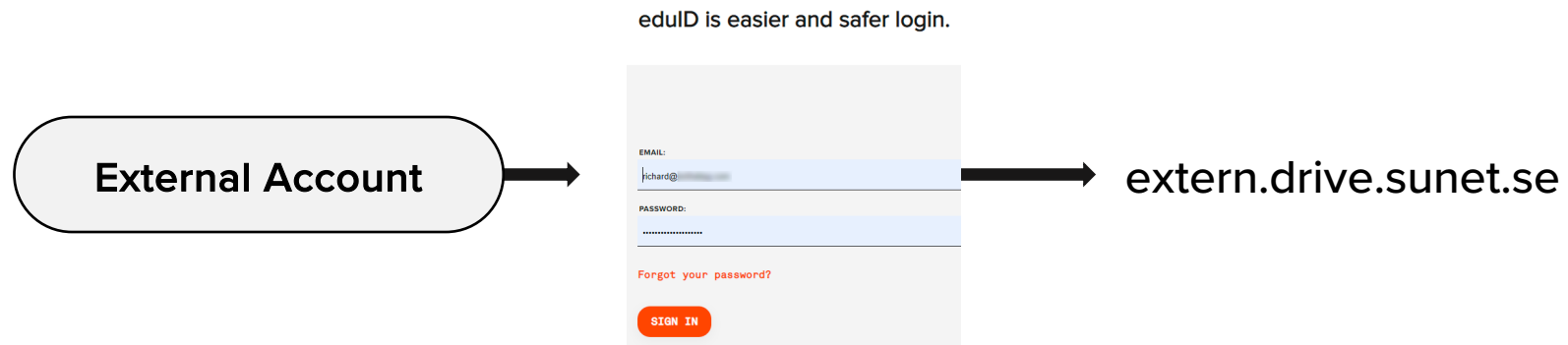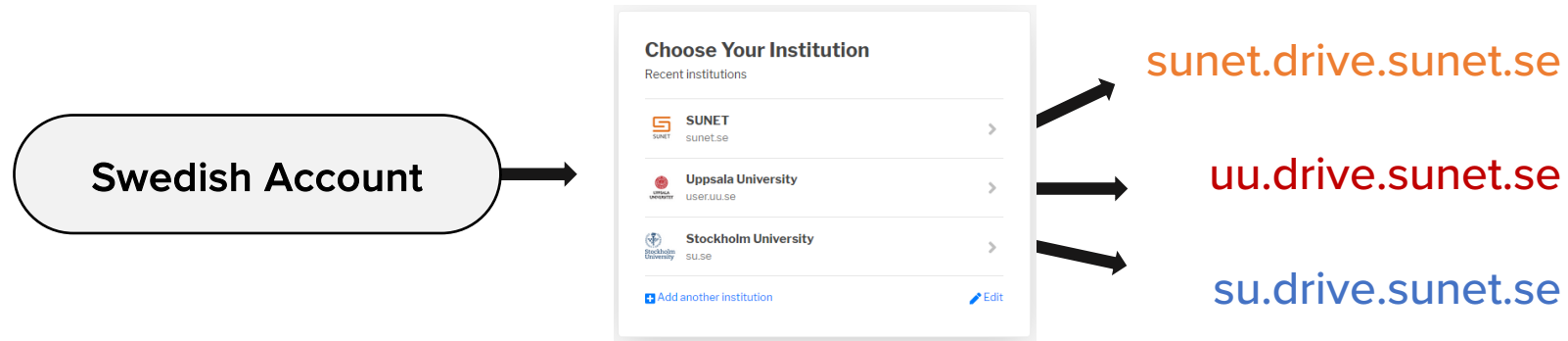
Separation of access and ownership

Another important feature of Sunet Drive is the separation of access and ownership. This means that while data can be shared between nodes, the ownership of the data remains with the original uploader. Additionally, access permissions can be finely-grained, allowing administrators to control who can view, edit, or delete files and folders on a per-user or per-group basis. This helps ensure the security and privacy of sensitive data.

Buckets can be lifecycle managed

In S3, buckets (a container for objects stored in S3) can be lifecycle-managed using rules to transition objects to different storage classes automatically, archive them to Glacier for long-term retention, or even delete them when they are no longer needed. Sunet Drive uses this feature to help manage data storage costs and optimise data retention policies.

SUNET

Identity management: SWAMID/eduGAIN

Swedish Account

Choose Your Institution
Recent institutions

SUNET	sunet.se	>
Uppsala University	user.uu.se	>
Stockholm University	su.se	>

+ Add another institution   ✏ Edit

sunet.drive.sunet.se

uu.drive.sunet.se

su.drive.sunet.se

External Account

eduID is easier and safer login.

EMAIL:
richard@

PASSWORD:

Forgot your password?

SIGN IN

extern.drive.sunet.se

Sunet Drive

SUNET

Identity management: SWAMID/eduGAIN

Over 6000 IdP worldwide

SWAMID/eduGAIN is a federated identity management system that connects over 6,000 Identity Providers (IdPs) worldwide, including universities, research institutions, and other organisations. This allows users to use their existing institution or organisation credentials to access various online services and resources.

External collaborators can use eduid.se

In addition to using SWAMID/eduGAIN, Sunet Drive allows external collaborators to use eduid.se to sign into the service. eduid.se is a Swedish national identity federation that provides secure authentication and authorisation services for external users who need access to resources and services provided by Swedish universities and research institutions.

Follow your data (as a researcher)

With SWAMID/eduGAIN, researchers can follow their data across different institutions and services while controlling who can access it. This makes it easier for researchers to collaborate with colleagues from different institutions and share data securely while ensuring they always know where their data is stored and who has access to it.

Own your data (as an institution)

Sunet Drive gives institutions control over their data, allowing them to set access permissions and manage user accounts. This means that institutions can ensure that their data is protected and only accessed by authorised users while still enabling collaboration and knowledge-sharing with other institutions and researchers. Additionally, Sunet Drive provides tools and features for managing data retention policies, ensuring that data is securely stored and deleted when it is no longer needed.

Single Sign-On using your organisation or institution account

Sunet Drive uses SWAMID/eduGAIN for identity management, meaning users can use their organisation or institution account to sign into the service. This enables Single Sign-On (SSO), which allows users to access multiple web applications and services without having to enter their login credentials repeatedly.

Sunet drive today

- 2x54 nodes on 300 servers in two data centres

- 100% powered by green energy

- 13 paying customers

- 120TB data stored with 0.5TB added daily

- Nearly 2,000 users

Total storage in GB
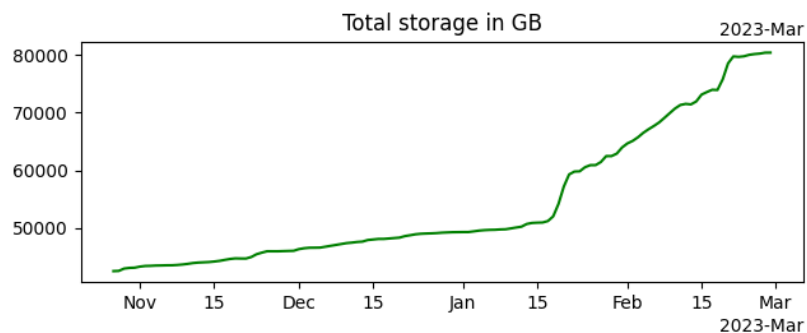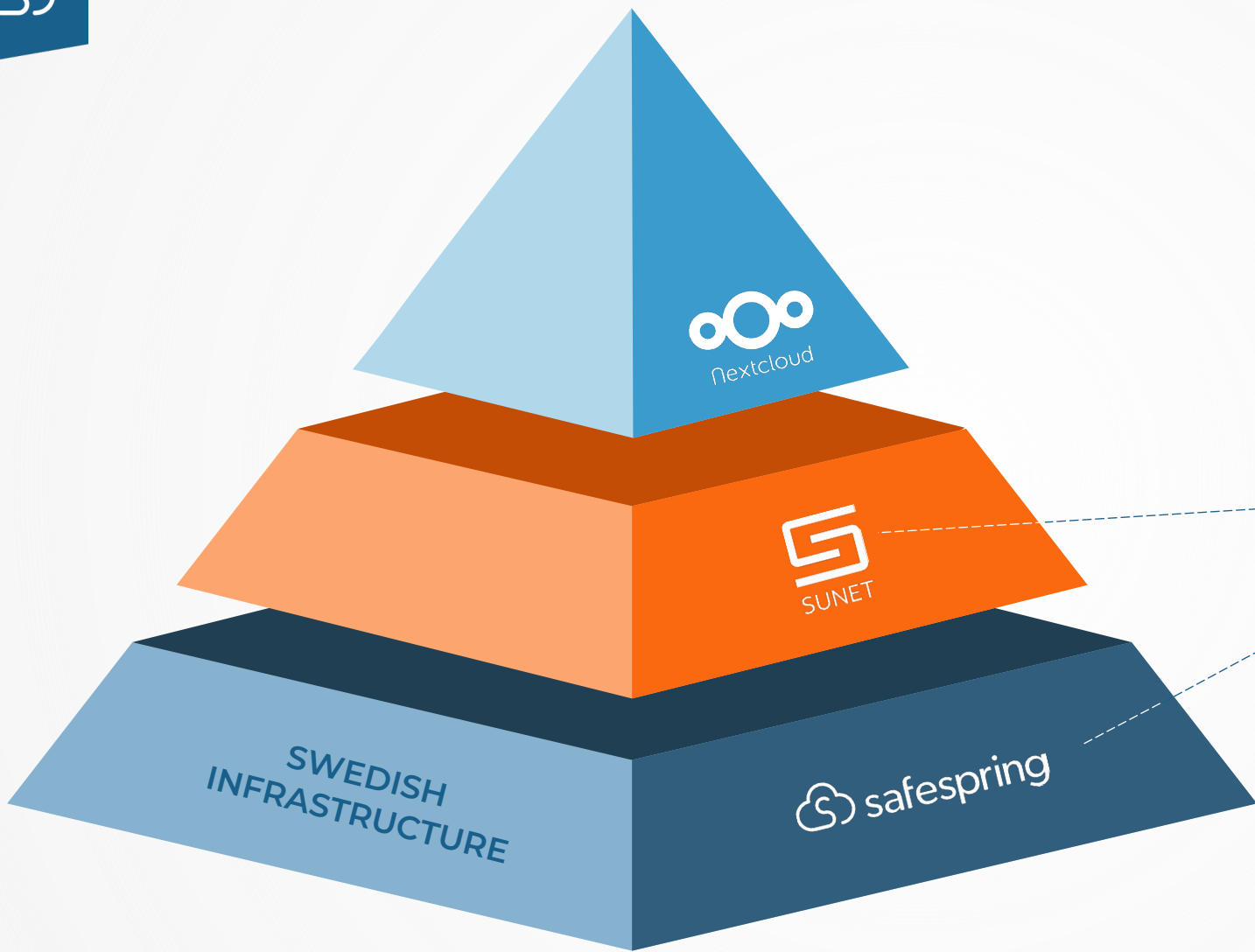
Sunet Drive in the future

- Full RDS-setup in production

- Secure Zones

- Data migration

- Third data centre (Kalix, Sweden)

- Kubernetes

FUTURE APPLICATION
Sciebo Research Data Service

FUTURE APPLICATION
ScienceMesh

SUNET

Thanks for listening
please contact us
if you have any
further questions!

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