

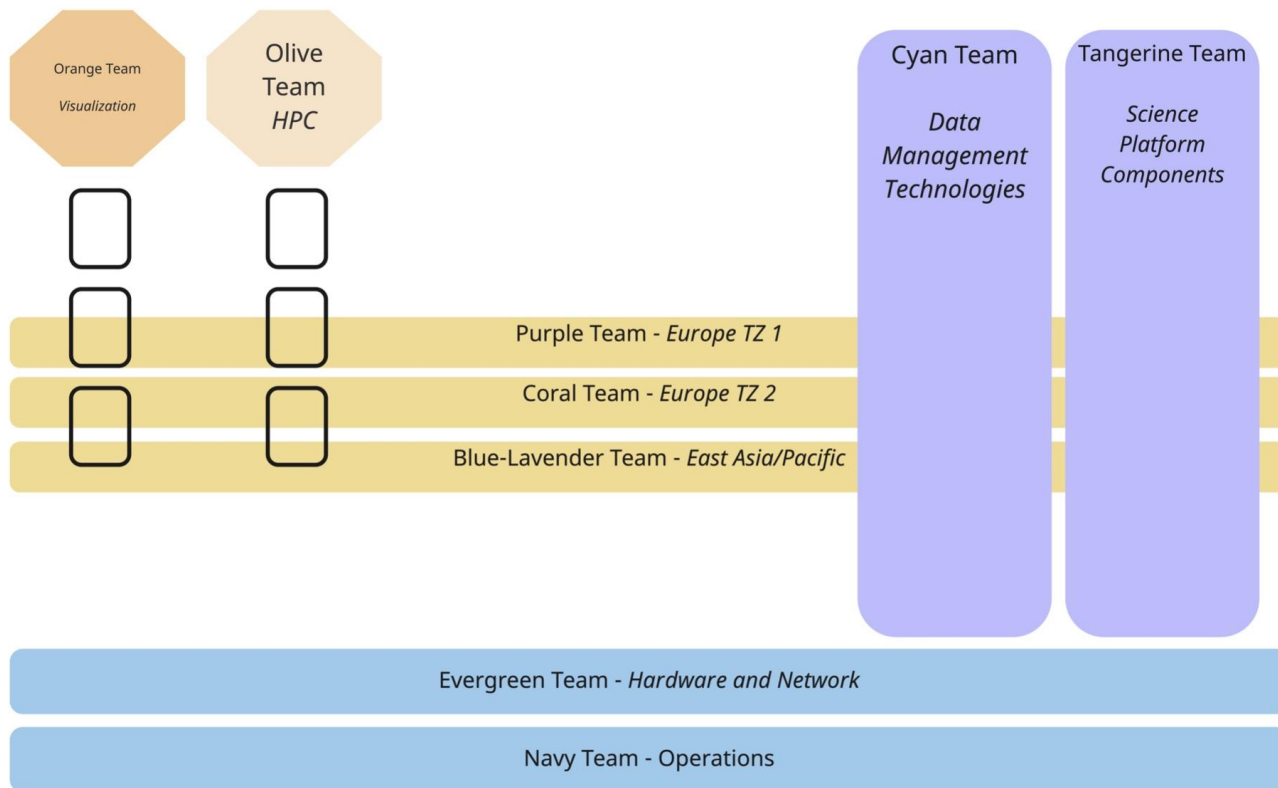
# Overview of Swiss SRCNet prototyping activities in the context of the Coral Team

*Pablo Llopis - Coral Team Member*  
EPFL

Swiss SKA Days  
04/10/2022



# Coral Team





# Coral Team - Institutions



Only active collaborators shown. More institutions as observers and expected to join in the near future

# Coral Team - Purpose and Goals

 **Identifying** computing **architectures** and **resources** available in SRC sites

 **Prototyping**

- **Data** management testbed
- **Authentication** and Authorisation Infrastructure
- **Science Platform**
- Assessing **performance** in different SRC sites and architectures

 **Impact:** gather and share **knowledge**

 Provide **early feedback** on the adoption of proposed solutions

# “Computing Inventory”

 **Identifying** computing **architectures** and **resources** available in SRC sites

Creation of an inventory of architectures (network, computing devices, storage..) for SRC sites.

Study solutions and identify advantages of each SRC site for different SRC use cases

# Data Management

Efforts to create a **Data Lake** prototype

Distribution of data between SRC sites to support scientific work

Collaboration between UK, Spain, and Switzerland

Collaboration between SKA and WLCG/CERN

# Federated Auth Solution

Ongoing work on integrating a **federated AAI** solution into prototype services

Based on modern industry standard technologies such as OpenID Connect (OIDC), IAM solutions (e.g. Keycloak, Indigo IAM)

Efforts to test this solution on an early Data Lake prototype



# Use case identification and profiling

## Identify **representative SRC use cases**

- Collect use cases as **reproducible workloads** in a well-structured [repository](#)
- **Profiling** of use cases in order to learn about their **scalability** and **performance characteristics**
- Keep workload inputs and analysis as **shareable knowledge** with the community
- Workload/algorithm **classification** - support producing an SRC-representative **performance score**

# Thanks to the Team

Tangerine Team  
Science Platform



The University of Manchester

Olive Team  
Benchmarking,  
Computing



Cyan Team  
Data Management



Purple Team  
AAI



**ETH** zürich

Blue Lavender  
Stream Aligned

It's a highly international and distributed **team effort!**

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