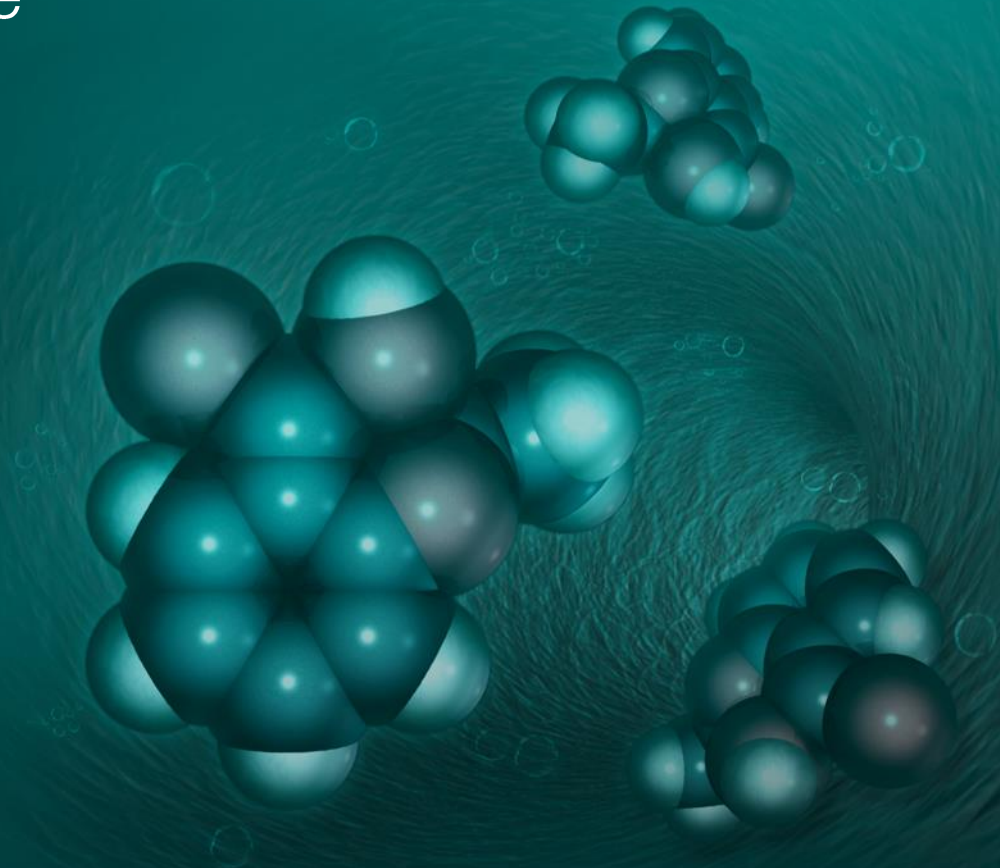


Embassy Cloud

‘Infrastructure as a Service’

Joanna Francis

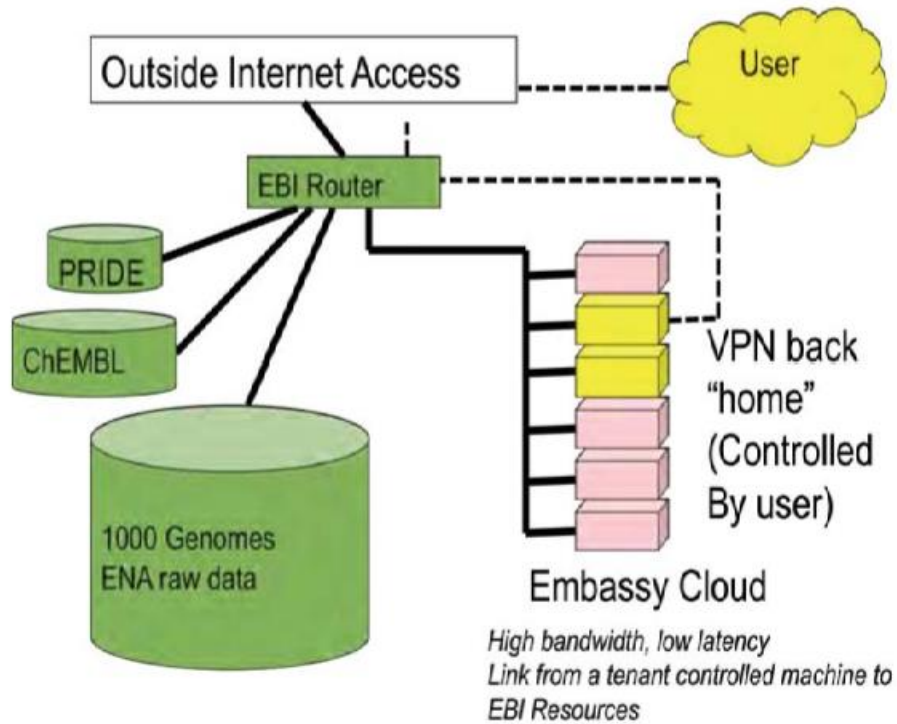
TSC Technical Writer



What is the Embassy Cloud?

- Embassy Cloud is an infrastructure owned & operated by EMBL-EBI
- It hosts collaborations between EMBL-EBI and partners
- It is co-located with the data resources & services of the EMBL-EBI in our datacentres
- Access to internal EMBL-EBI data resources can be provided
- Caches of datasets can be held locally to the cloud with an NFS presentation to multiple tenants
- Flexible resources & devolved administration

User Access to Embassy Cloud



What use cases does Embassy Cloud support?

- Collaborations where a flexible infrastructure is required that is:
 - close to EMBL-EBI data resources
 - scalable on demand
 - allows for delegated administration
- Collaborations that will generate datasets to share with other Embassy cloud users
- EMBL-EBI users who wish to develop & deploy workloads in a cloud environment

Use case examples

- BRAEMBL (EMBL Australia)
 - Use Embassy to stage submissions to the ENA (EBI dataset)
 - Data is cleaned & filtered in the Embassy before being submitted to ENA
 - Previously individual submitters experienced problems related to the geographic distance
- COMPARE (a collaboration of 29 organisations)
 - Accesses part of the ENA directly (so they do not have to duplicate the data)
 - Uses elastic resources to deal with their bursty workload



Cancer Research tenants

- EMBL PanCancer tenancy (an analysis tenancy)
 - Jan Korbel and Sergei Lakhnin
 - Completed Germline analysis in 2016
 - 1000 vCPU / 150VMs / 50TB storage
- OICR PanCancer tenancy (the data tenancy)
 - Hosts the European PCAWG data repository
 - 50 vCPU / 20 VMs / 1PB storage



Access to PanCancer data

- PanCancer data is hosted in Embassy by the OICR tenant
 - Primary purpose is to serve as the European PanCancer data repository service
- Embassy tenants can benefit from direct access via NFS
 - Saving time (downloading) & storage costs (access in situ)
 - To satisfy the security requirements of the data an enhanced security model is applied to the analysis tenancy
 - This is implemented by EBI and the analysis tenant together

