



D4Science  
1<sup>st</sup> User Communities  
Meeting

# Setting Up VREs

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- Cube is a framework to host, define and manage dynamic **Virtual Research Environments (VREs)** to satisfy the collaboration needs of distributed **VOs**
- From the **infrastructure** perspective a number of operations are required to make available a VRE:
  - installation of the gCube software
  - configuration of the gCube software

● These operations are organised in 3 different steps:  
**Infrastructure set-up, VO set-up, and VRE set-up**

## DILIGENT Infrastructure

### ImpECt VO



VO  
Admin



Resource  
Owner

### Vegetation VRE



VRE  
Admin



VRE  
Designer



Infrastructure  
Admin

### ARTE VO



VO  
Admin



Resource  
Owner

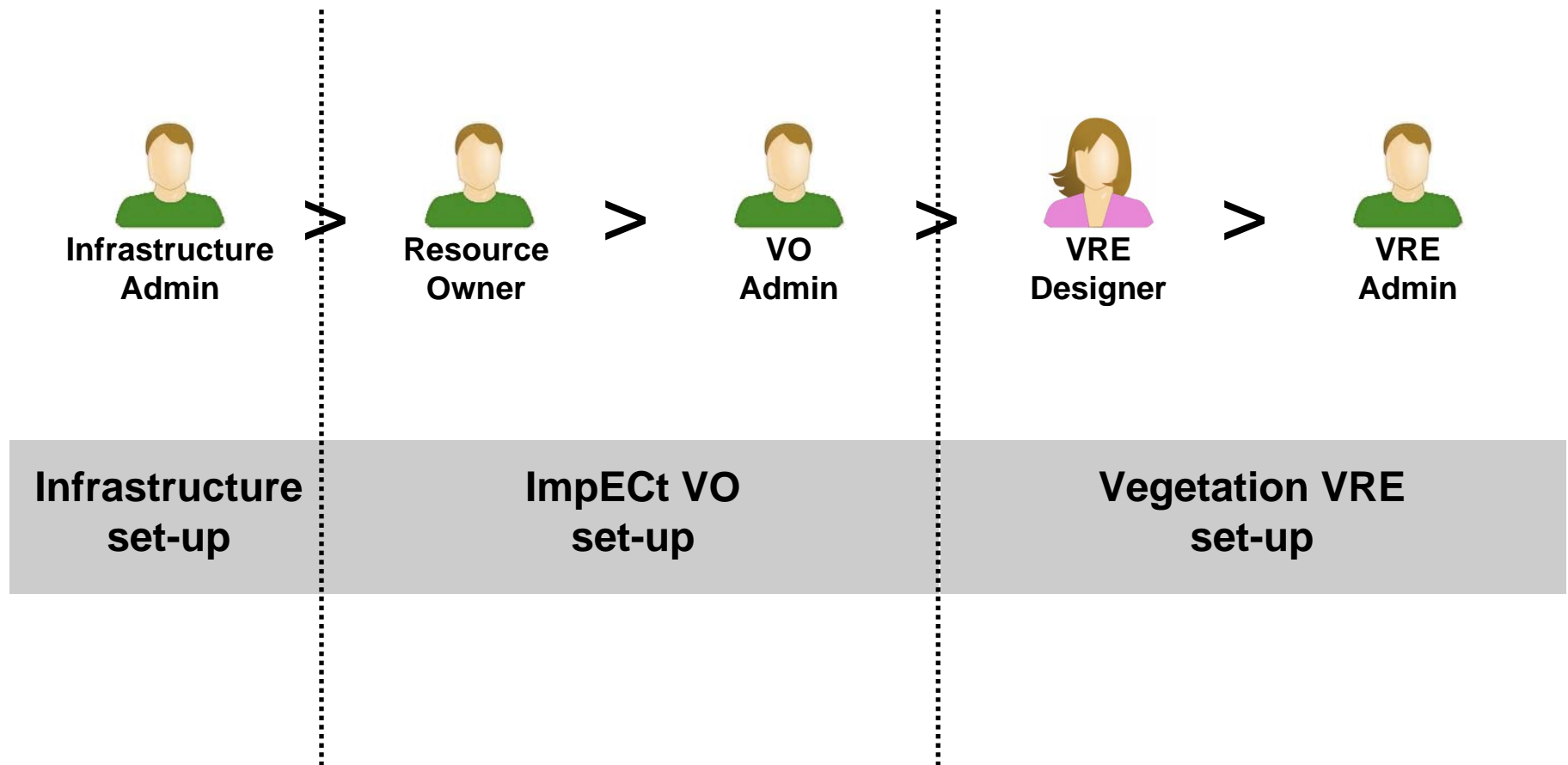
### Emblems VRE



VRE  
Admin



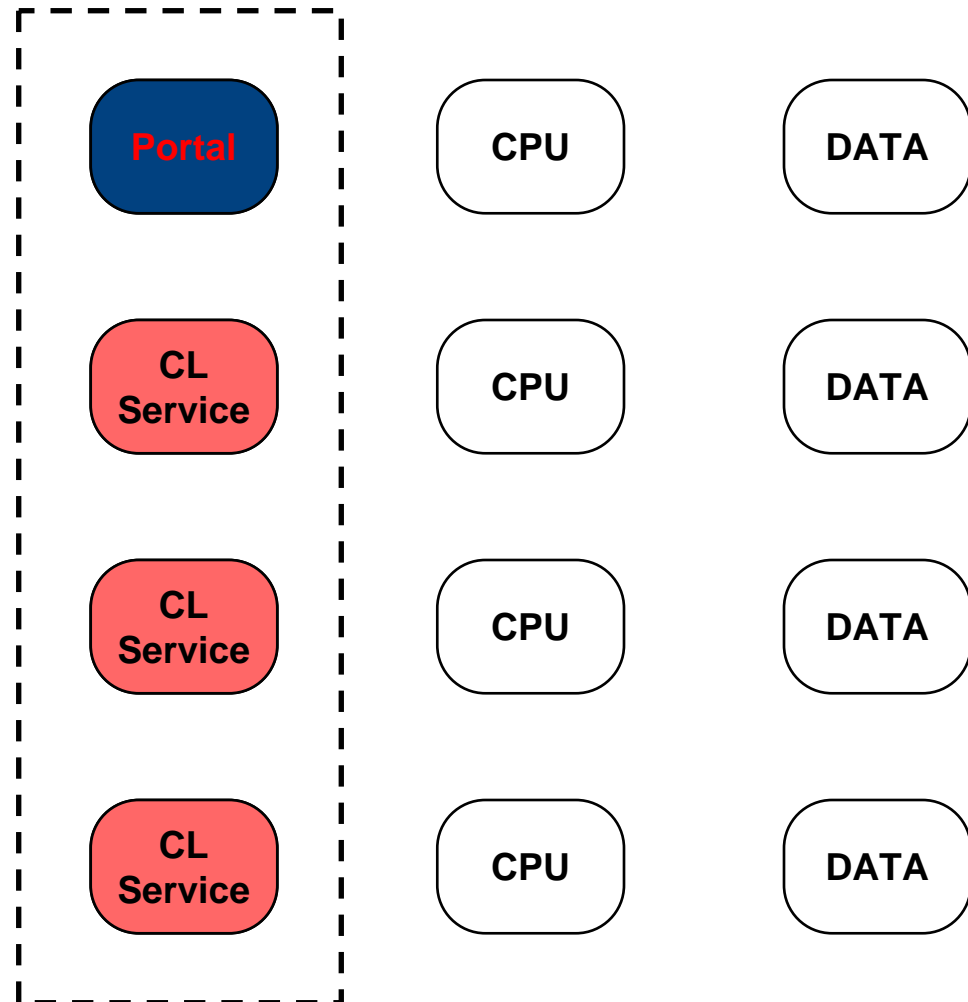
VRE  
Designer





## Infrastructure Admin

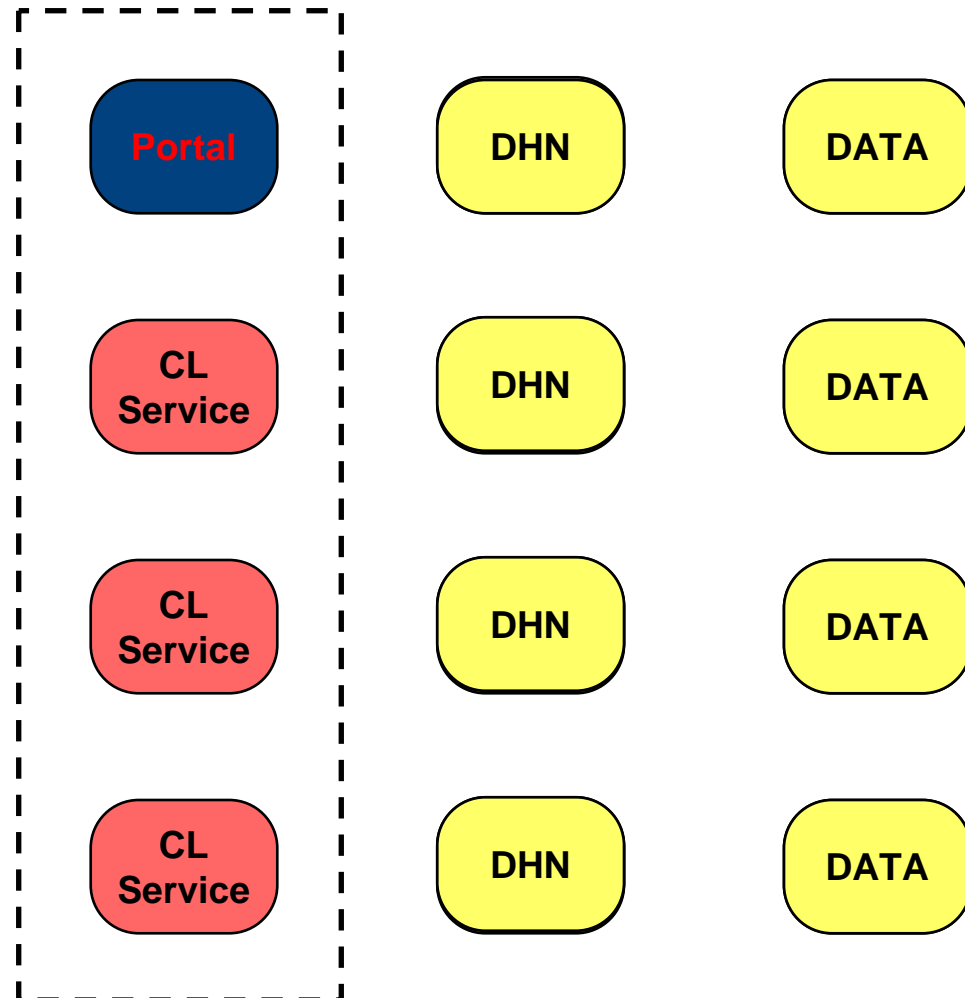
- deploys gCube collective layer services and gCube portal (gCube Admin Guide)
- prepares new VOs (gCube Portal)





## ImpECt Resource Owner

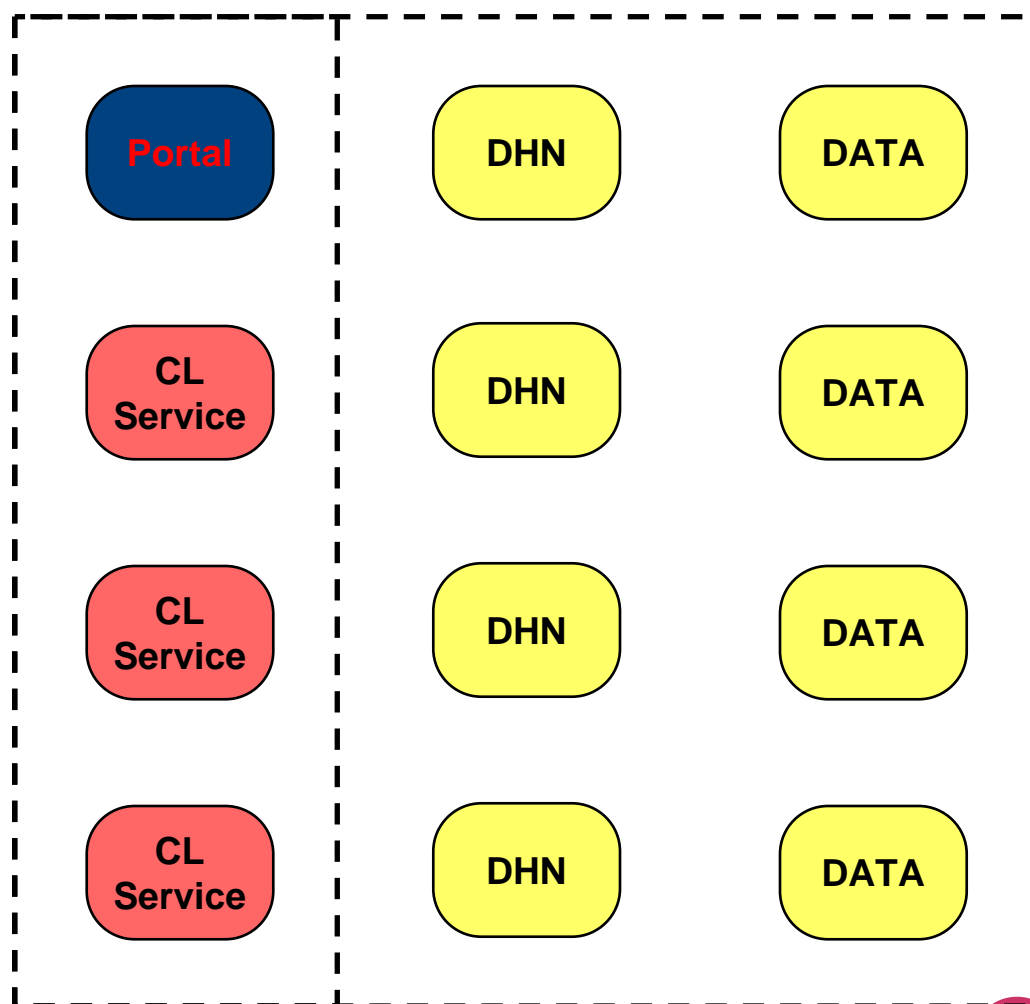
- employs the DILIGENT Hosting Node (gCube Admin Guide)
- registers different types of resources (gCube Portal)





## ImpECT VO Admin

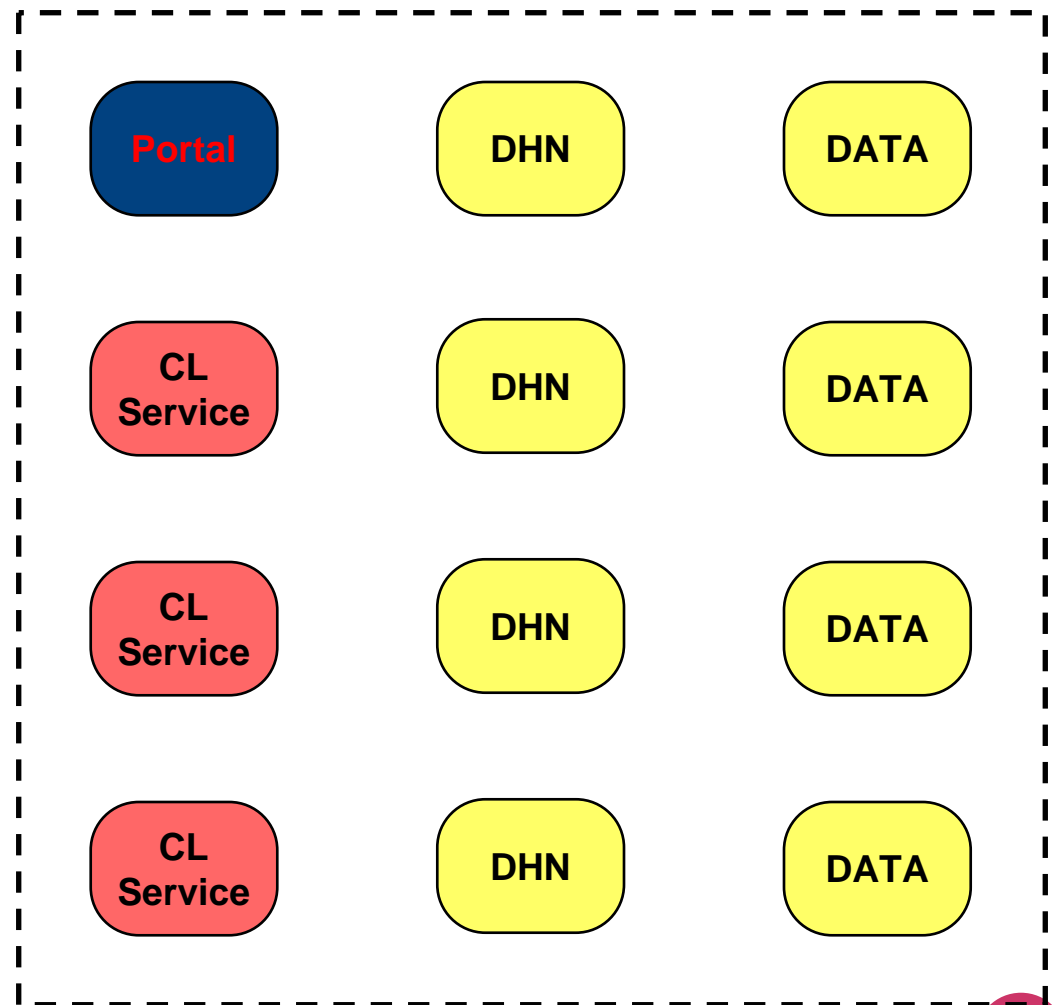
- approves the resources registered by the Resource Owner (gCube Portal)
- prepares new VREs (gCube Portal)
- manages users (gCube Portal)





## ImpECT VRE Designer

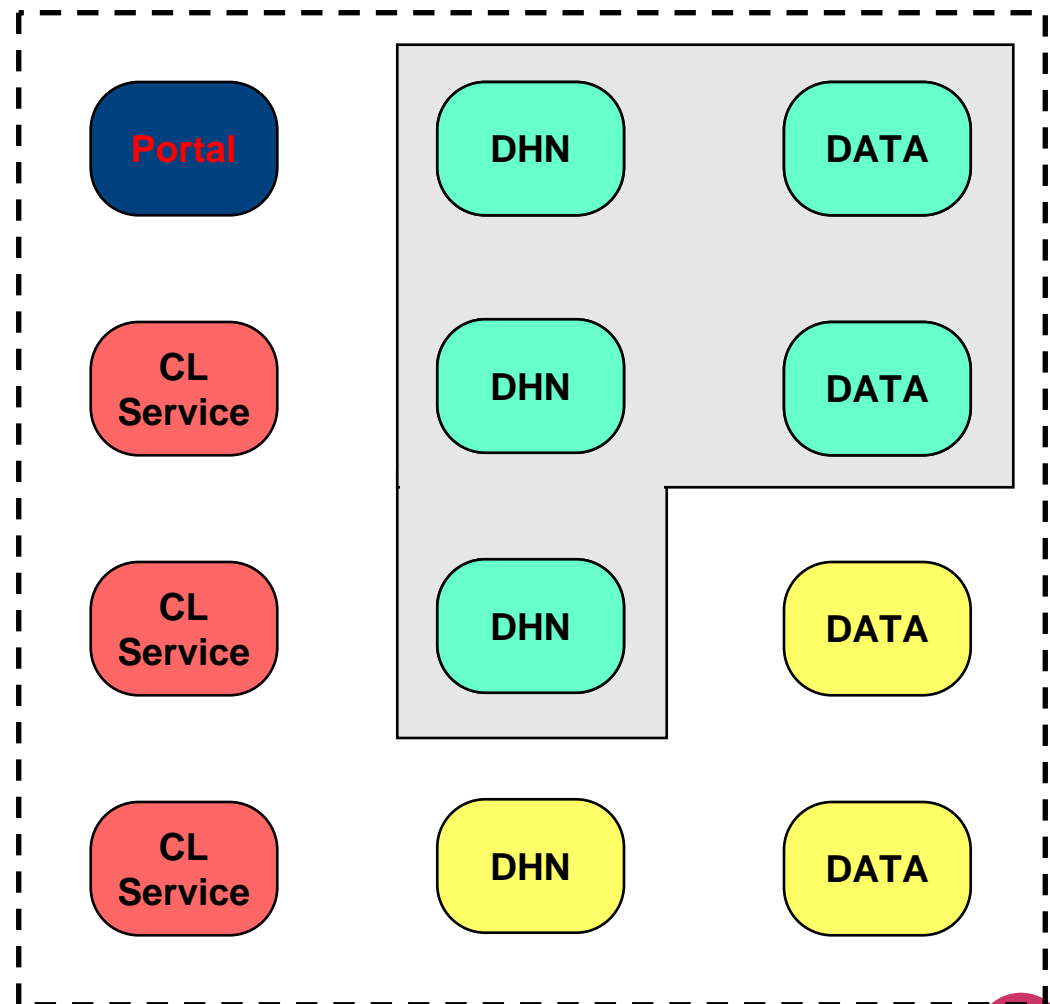
- defines a new VRE (gCube Portal)





## ImpECT VRE Admin

- approves and deploys the VRE defined by the VRE Designer (gCube Portal)
- applies modifications on existing VRE: new RI or new layouts (gCube Portal)



SCOPE	ACTION	TIME
Infrastructure	install collective layer	< 1 day
	install portal	< 1 day
VO	install 1 DHN	< 10 min
	register resources (DHN, data)	< 1 min
	approve resource (DHN, data)	< 1 min
	data import (metadata, indexes)	hours
	manage users	< 10 min
VRE	define VRE	< 10 min
	approve VRE	< 1 min
	deploy VRE	< 2 hour
	modify VRE	< 1 hour



### quick

- A new VO can join the infrastructure in less than 1 day
- A new VRE can be deployed in less than 2 hours



### easy

- Few manual deployment operations
  - well documented via the gCube Administrator Guide
- Many automatic deployment & configuration operations
  - carried out by gCube and managed using one single Portal



Thank You !

