

SCAYLE: Evolución, servicios y Ciberseguridad

Grupo de Trabajo Regional en Ciberseguridad

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11 de Noviembre de 2020

Caléndula

2020

Technological renewal

+38 servers
+1380 processing units (cores)
+7 GPU cards

397 TFlop/s
Rpeak

Total storage
2419 TB

Object Storage
+1 PB

2018

Technological renewal

+169 servers
+2724 processing units (cores)
+8 GPU cards

226 TFlop/s
Rpeak

Total storage
1395 TB

Virtualization
+400 TB

2016

Technological renewal

+114 servers
+1824 processing units (cores)

137 TFlop/s
Rpeak

Total storage
995 TB

Lustre File System
+650 TB
Virtualization
+60 TB

2013

Technological renewal

+6 servers
+120 processing units (cores)
+30 Xeon Phi cards

67 TFlop/s
Rpeak

Total storage
285 TB

Virtualization
+185 TB

2009

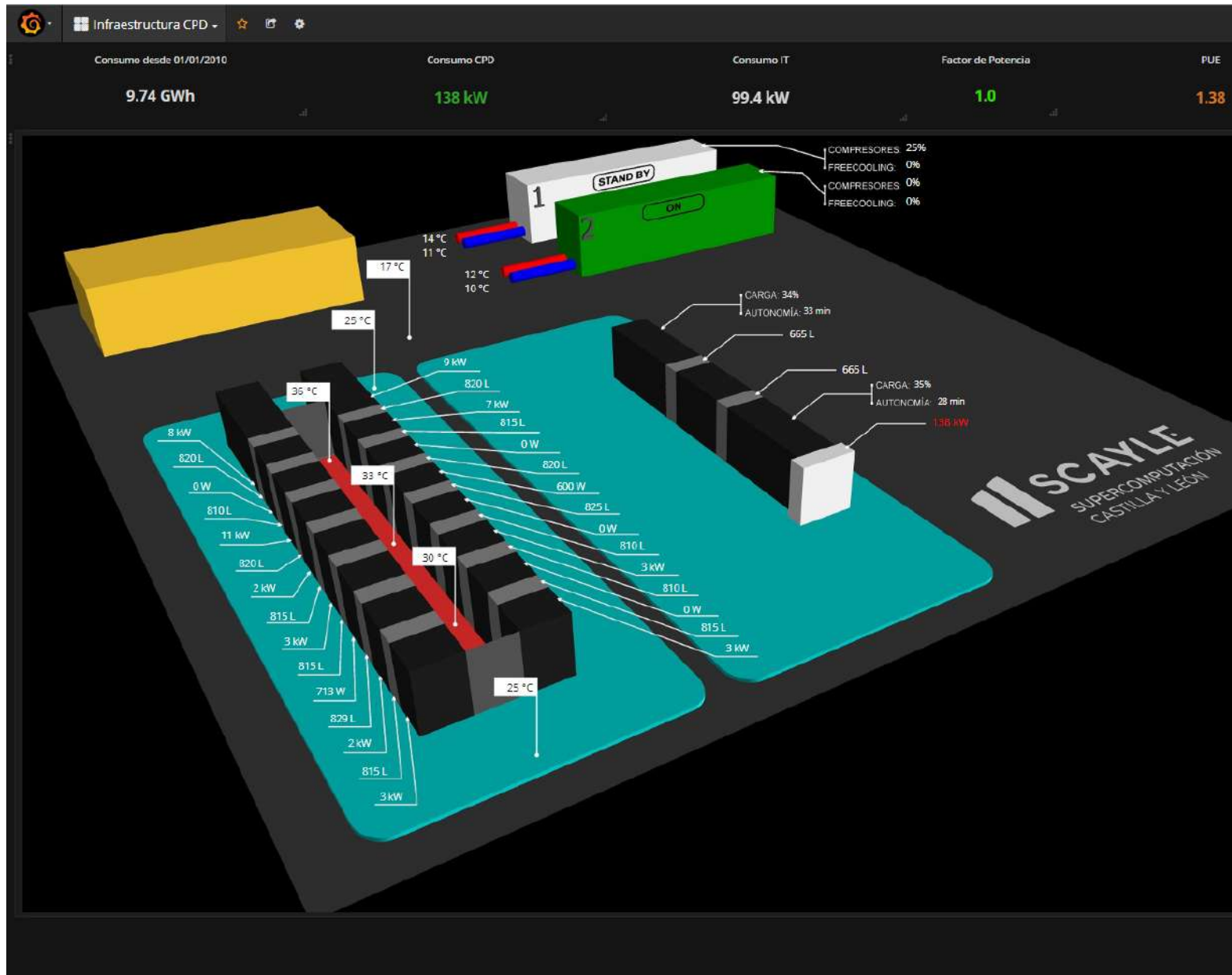
Initial installation

304 servers
2342 processing units (cores)

29 TFlop/s
Rpeak

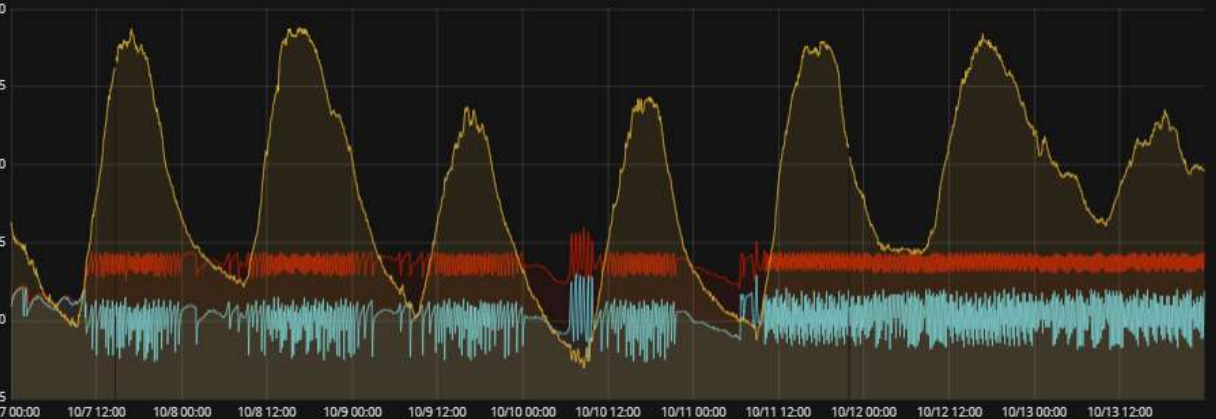
Total storage
100 TB

NetApp SAN/NAS
100 TB



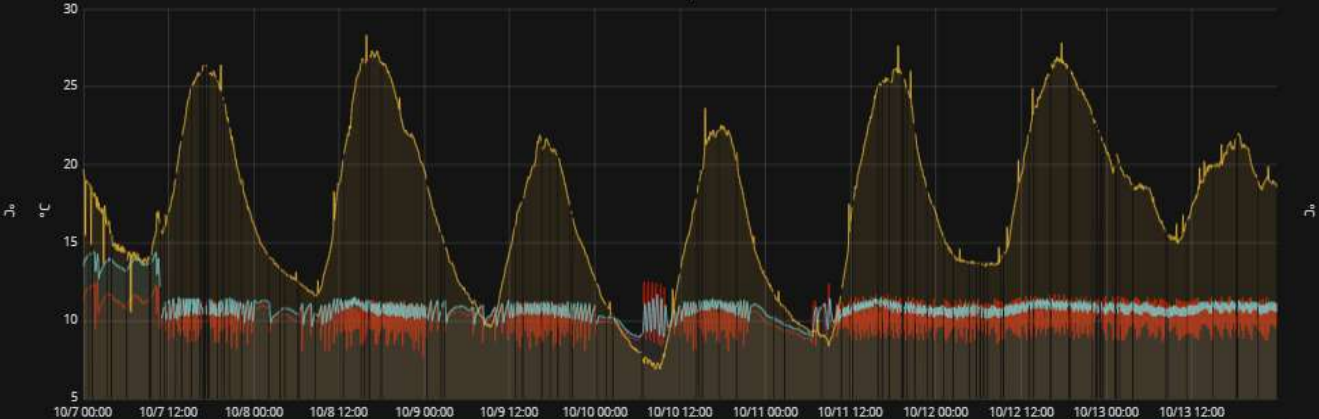
Caléndula

Chiller1 (Temperaturas)



	min	max	avg	current
Temperatura Retorno (°C)	11	16	14	14
Temperatura Impulsión (°C)	7	13	10	12
Temperatura Ambiental (°C)	7	29	18	20

Chiller2 (Temperaturas)



	min	max	avg	current
Temperatura Retorno (°C)	8	13	10	11
Temperatura Impulsión (°C)	9	14	11	11
Temperatura Ambiental (°C)	7	28	17	19

Chiller1 (Compresores/Free Cooling)



Free Cooling (%) Compressores (%)

Chiller2 (Compresores/Free Cooling)



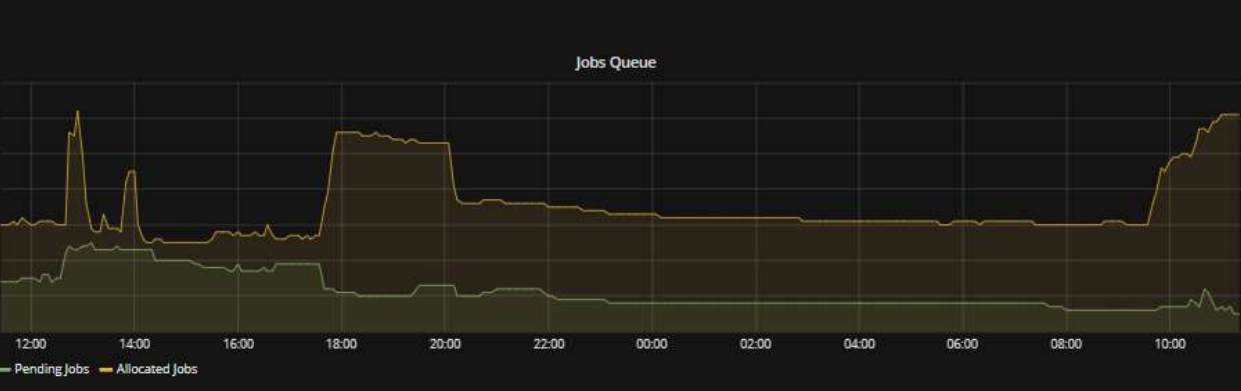
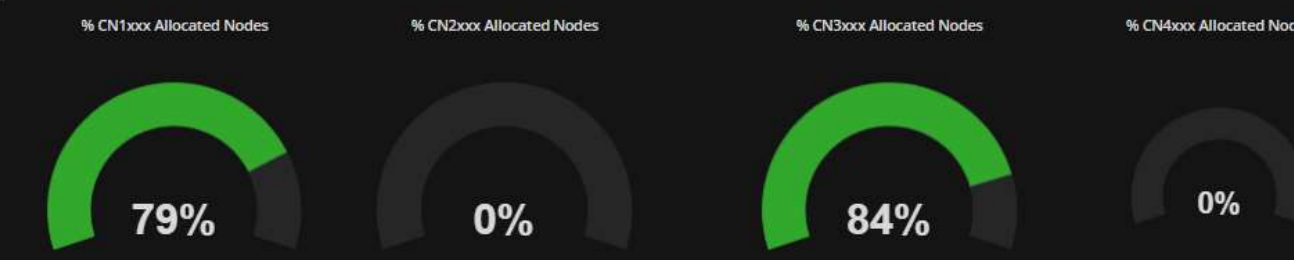
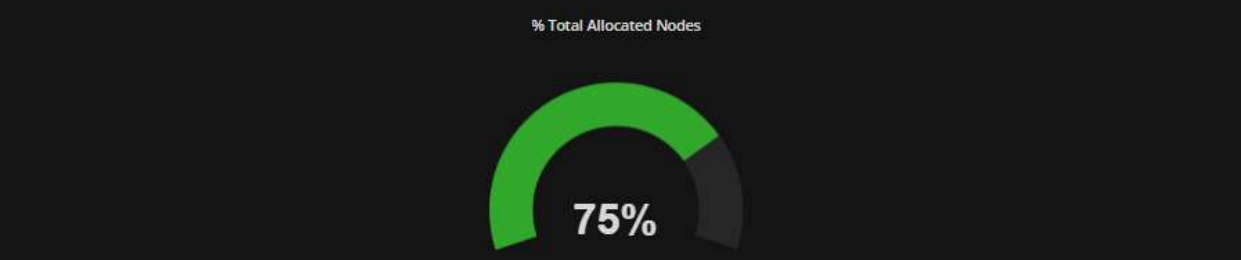
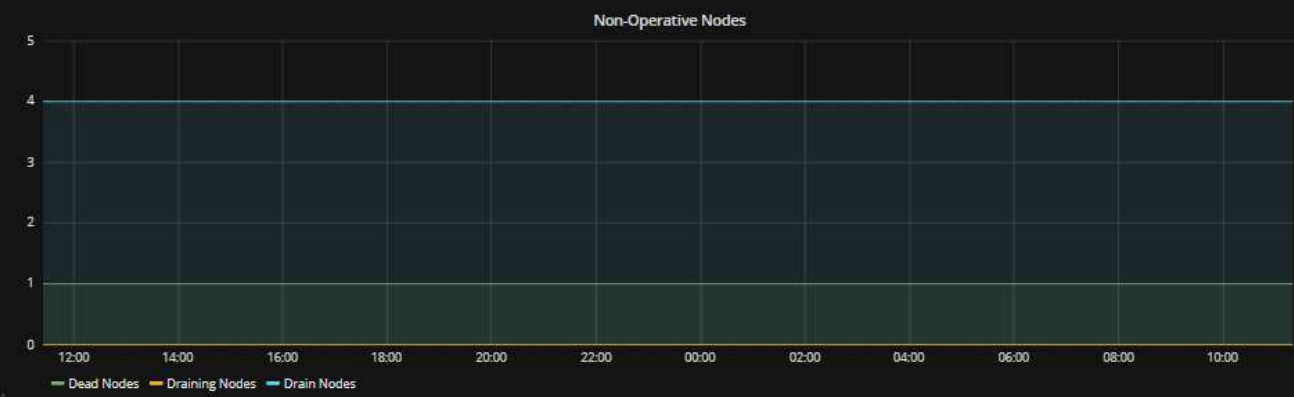
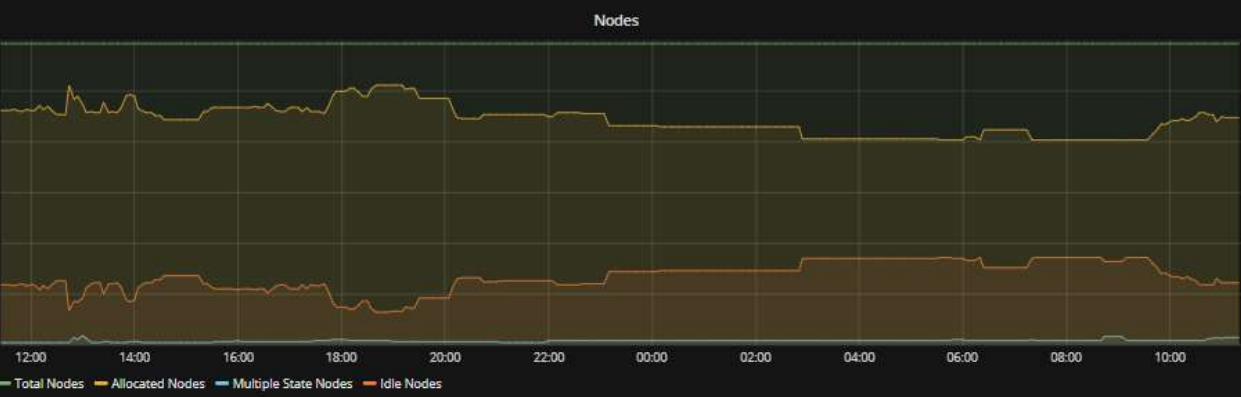
Free Cooling (%) Compressores (%)

Temperatura Exterior + % Compresores + Carga IT



Consumo IT (KW) Chiller1 Compresores (%) Chiller2 Compresores (%) Temperatura Exterior (C)

HPC (Calendula Status)

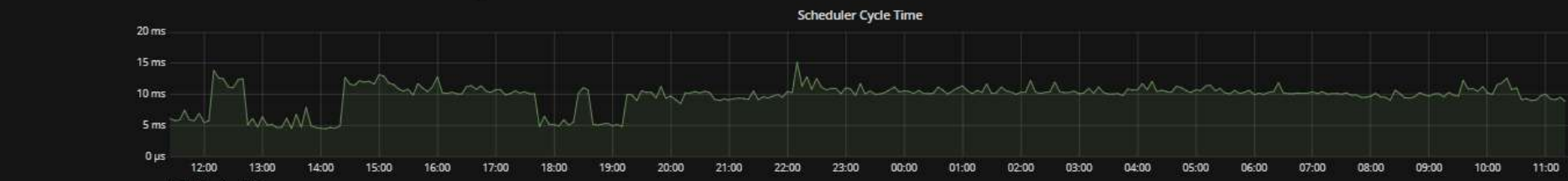


Slurm Scheduler Threads

3

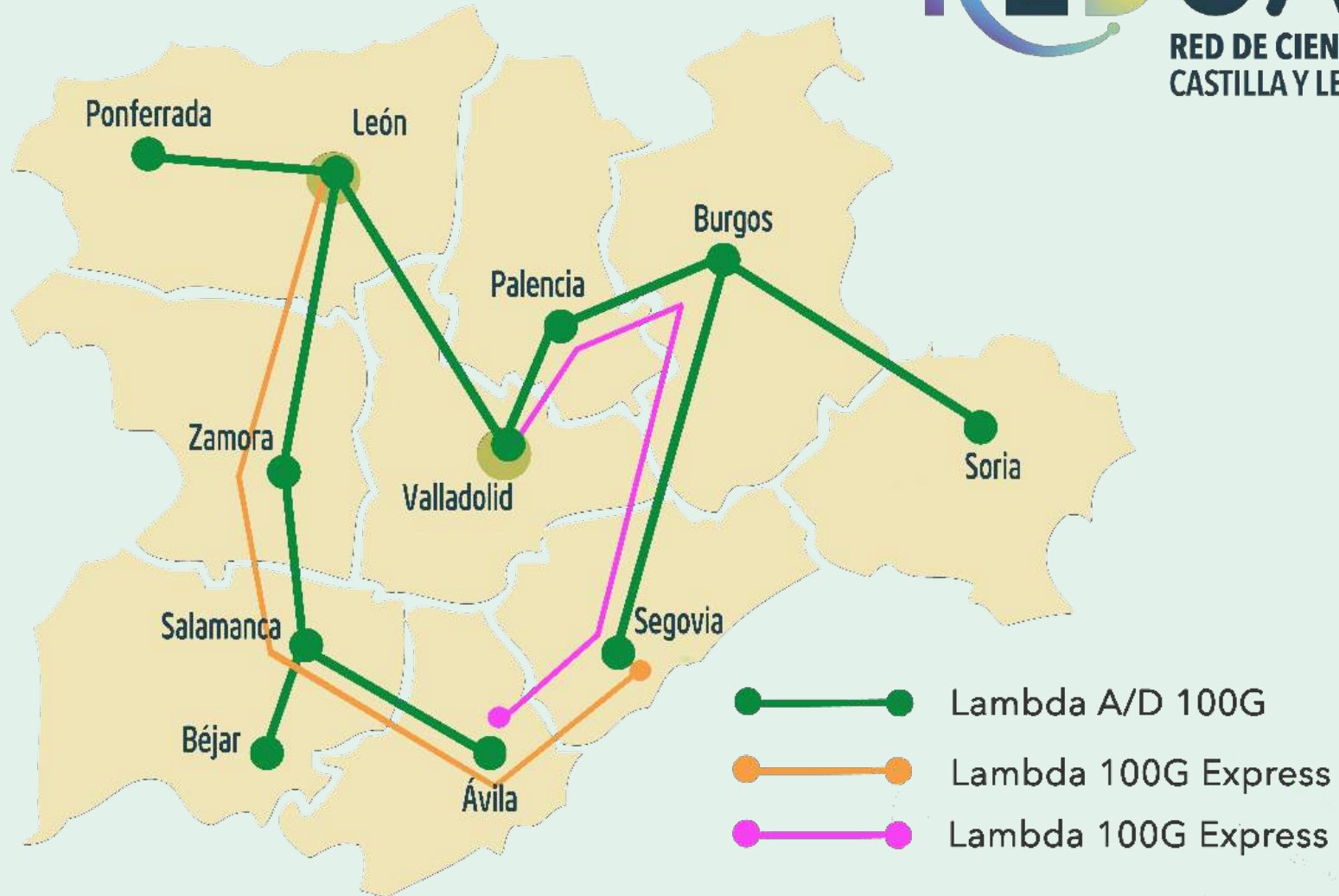
Agent Queue Size

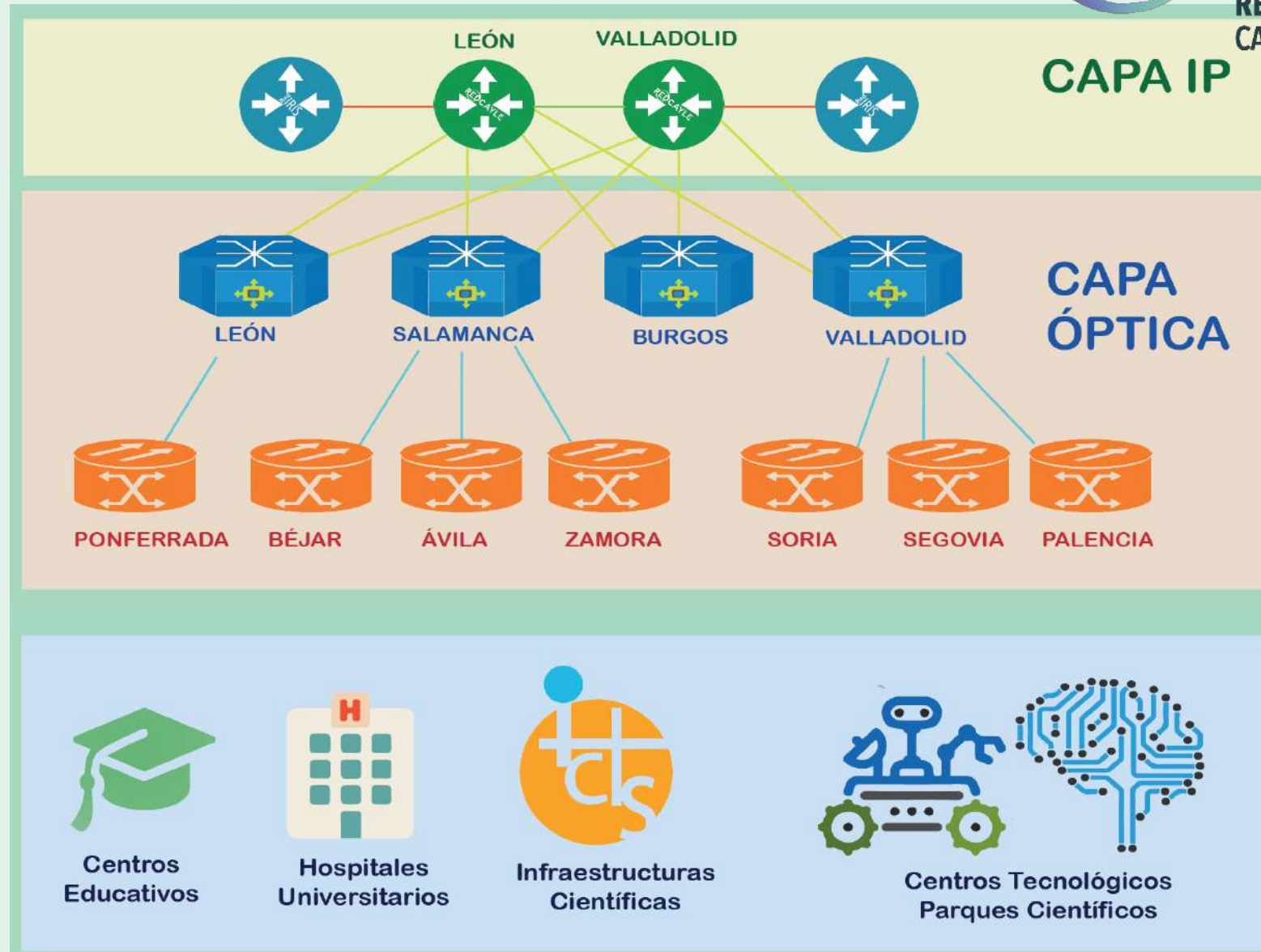
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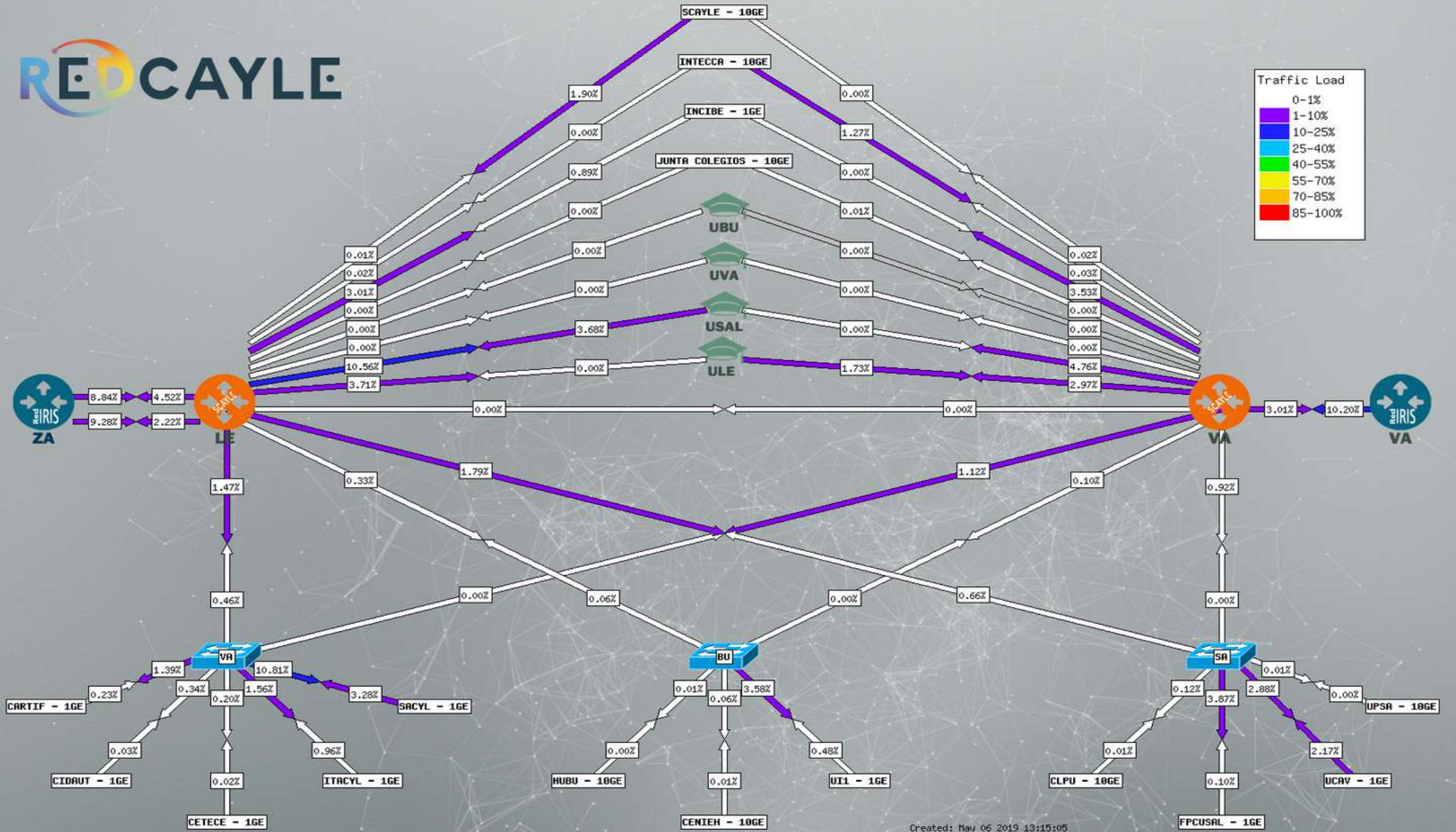




- **OpenCAYLE:**
 - Puesta en marcha en Mayo de 2020 (Beta)
 - Capacidad actual de 1 PetaByte
 - Ampliación en el primer semestre de 2021
 - Usuarios Piloto: Univ. Salamanca (2), Univ. De León (1) y UNED (1)
- Apoyo universidades (Covid19)
 - Proyecto Piloto **Laboratorios Virtuales** (USAL)
 - Campus virtual (UVA)
 - Centro contingencia (UBU)
- Estudio de **ampliación del CPD** (prevista primer trimestre 2021)







Participación Proyectos

Open IACS: Open LOD platform based on HPC capabilities for Integrated Administration and Control System of Common Agriculture Policy (Open IACS) [2019 – 2022]

Referencia: TENtec number 28073401

Convocatoria de Financiación: CEF TELECOM CALL FOR PROPOSALS 2018 CEF-TC-2018-5

Importe Total de la ayuda: 2.984.175,00 €.

Importe de la ayuda para SCAYLE: 338.590,00 €

CROSS-FOREST. CROSS Harmonization & HPC modelization of FOREST [2018 – 2021]

Referencia: TENtec number 27750354

Convocatoria de Financiación: CEF TELECOM CALL FOR PROPOSALS 2017. CEF-TC-2017-3

Importe de la ayuda: 2.010.250,00 €

Importe de la ayuda para SCAYLE: 252.937,50 €

EUROCC - National Competence Centres in the framework of EuroHPC [2020 – 2022]

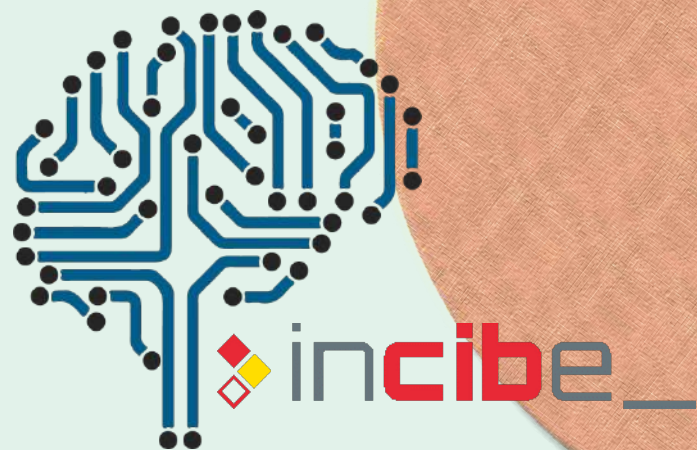
Convocatoria de Financiación: EuroHPC-04-2019: HPC Competence Centres

Importe de la ayuda: 2.535.520,00 €

Importe de la ayuda para SCAYLE: 105.625,00 €

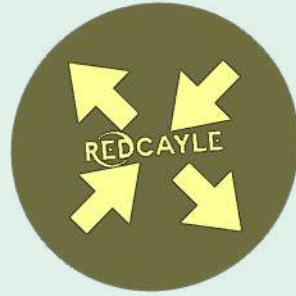
Ciberseguridad

RED CAYLE



universidad
de león

NetFlow

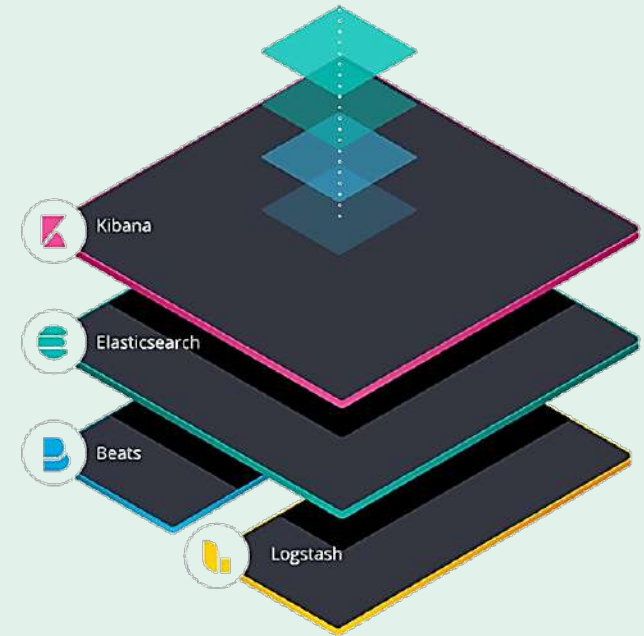


Data
Collection

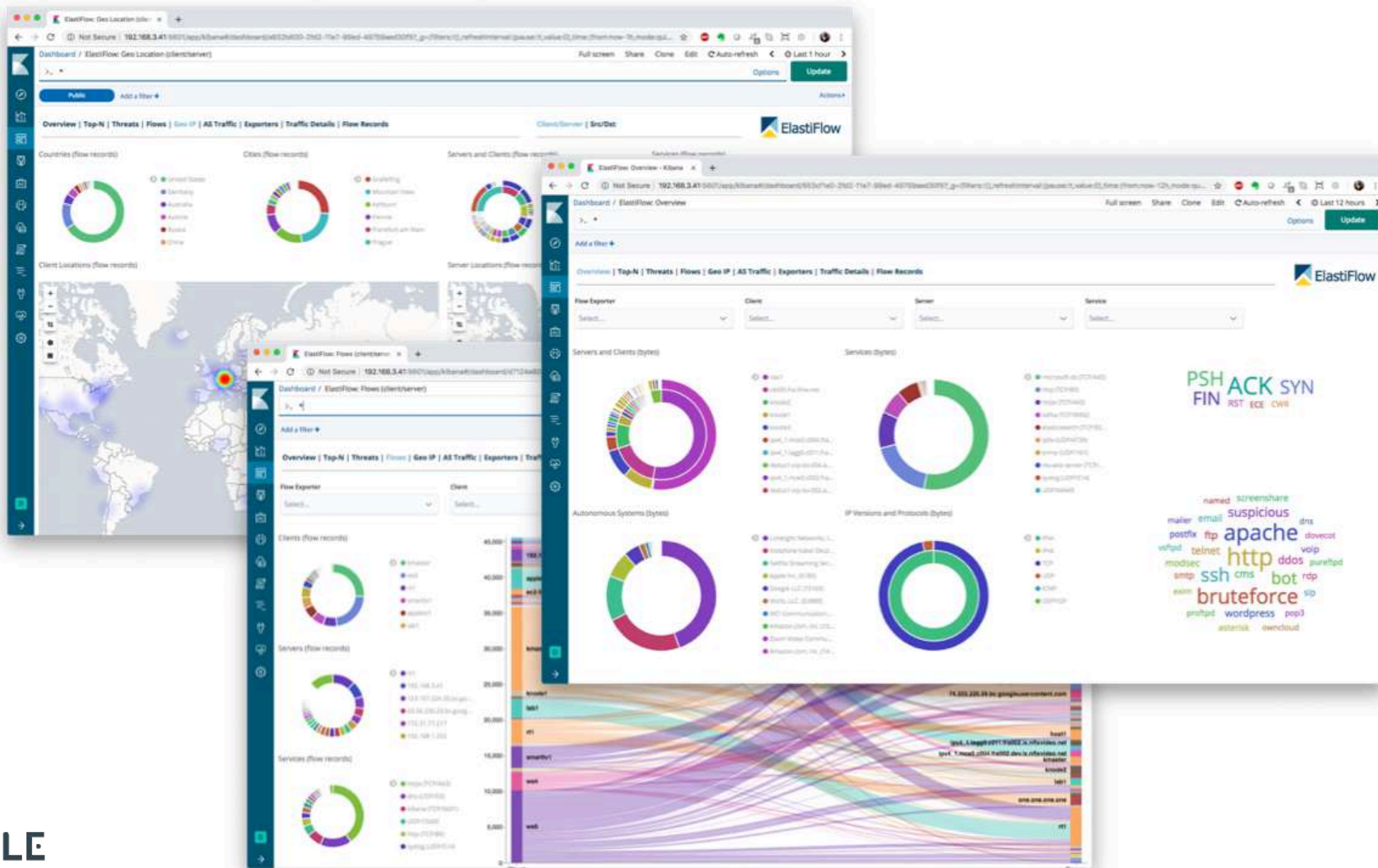
Data
Aggregation
& Processing

Indexing &
storage

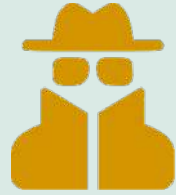
Analysis &
visualization



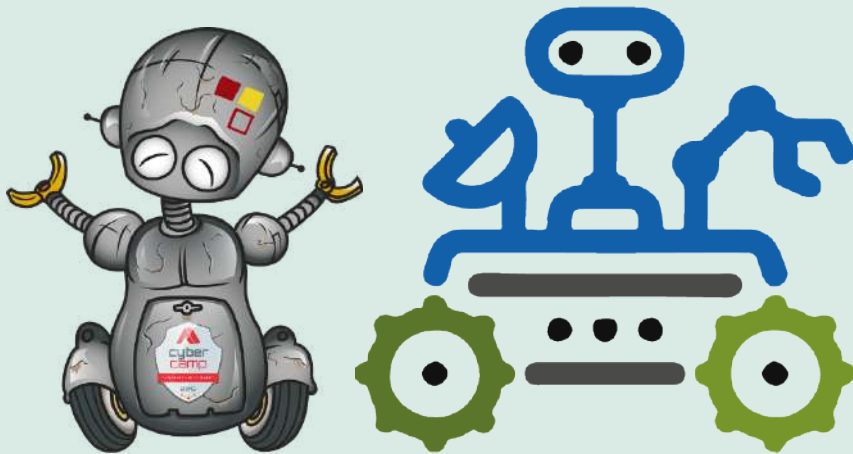
graylog



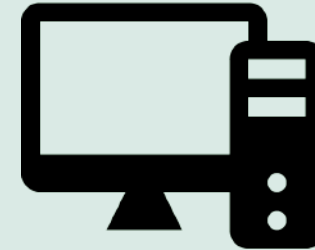
Honeypot Alta Interacción



ROS



Honeypot Media Interacción





Gracias !!

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