Lightweight sites in WLCG — introduction

Maarten Litmaath, CERN

HOW2019, JLab
The problem

- Many small sites currently need to invest efforts that are not commensurate with their size nor available funding

- **Multiple areas** are being investigated to allow small (and also bigger) sites to become more lightweight

- Sites are envisaged to be able to pick the best choice from a **matrix of solutions**
  - Depending on a site’s conditions
    - E.g. its infrastructure, project, supported VOs, …
Potential solutions

- This session presents a number of them
  - Vacuum models
    - DODAS: Dynamic On-Demand Analysis Service
    - Vac
    - Vcycle
  - SLATE: Service Layer At The Edge
  - PRP: Pacific Research Platform
  - SIMPLE: Solution for Installation, Management and Provisioning of Lightweight Elements

- There also are BOINC and possibly yet others

- We would like to learn which situations are matched by which solutions → input for defining the matrix layout
  - We rather may need multiple matrices

- Bonus: areas of collaboration