Scalability

Level Definitions

- **Level 0**: no ability to scale
- **Level 1**: supports single site horizontal scale out and scale in, independent of other components
- **Level 2**: supports geographic scaling, independent of other components
- **Level 3**: support scaling (interoperability) across multiple ONAP instances

Minimum Levels

- Runtime Projects: Level 1
  - NOTE: For Dublin, the building blocks will be put in place for Level 2 geographic scaling, and a few projects will pilot it
- All other Projects: Level 0

Guidance for Implementation

- Level 1 scaling within a single site can be easily implemented by project teams using OOM, Kubernetes clusters, replica sets, etc.
- CNI - OOM is introducing CNI which will allow for multi-site Kubernetes clusters (VxLAN or BGP). One can deploy pods and label them by geo location, which will be scheduled to corresponding labeled nodes. Labels would need to be defined in the Helm charts. See OOM-1506
- MUSIC - MUSIC supports geo-scaling, particularly for stateful components where traditional clustering techniques are insufficient (not performant, for example). Pilot projects: Portal, OOF, and SDC.
- Integration testing details TBD.

Contacts

OOM, MUSIC, and Integration teams.