SSL Intro

Year2 plans

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SSL: Path to Production

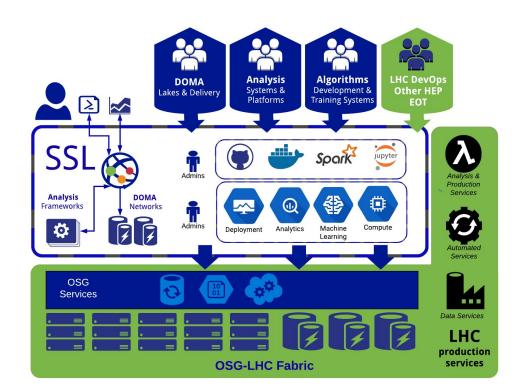


Provisioning of software **environments** and development tools.

Distributed platforms

materialized with tools like containerized edge services.

Integration point with the OSG and LHC experiment services (data, analysis).



SSL People



- Core group to support base environment
- CS research on accelerated services
- Leverages effort from R&D areas, external projects & research computing staff
- Organizes contributed resources for scalability testing





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WBS from the PEP

See Advisory Panel <u>talk</u> for full update on each WBS



- WBS6 (SSL): the Institute's Scalable Systems Laboratory
 - W6.1 Create and operate a scalable cyberinfrastructure platform for IRIS-HEP R&D.
 - W6.2 With IRIS-HEP R&D teams, create best-practice "DevOps" patterns for deployment and operation of DOMA services, analysis platforms, and execution environments for innovative algorithms.
 - W6.3 Assist IRIS-HEP R&D teams with functional and scalability testing of Institute developed components, within the broader services context of the LHC experiments and their dependencies.
 - **W6.4** Provide database services for metrics aggregation, visualization and analytics for IRIS-HEP testing campaigns on the SSL.
 - **W6.5** Provide the Institute with user-facing and back-end cyberinfrastructure components as needed for education, training and outreach events.

SSL Schedule from the PEP



3.2.6 Project Schedule: SSL

Type	Time	Description	WBS	Risks	Metrics
			task		
D	0-6	G6.1: Develop SSL web presence for communica-	6.1		
		tion/organization			
D	0-6	G6.2: Collect and align SSL requirements from	6.1	R6.1	
		reearch areas and LHC experiments			
D	0-6	G6.3: Identify leveraged resource contributions from	6.1	R6.1	M.6.1,
		institutions, labs and Ops program facilities (e.g.			M.6.4
		LHC Tier 1, Tier2 centers)			
D	6-12	G6.4: Provide SSC area with training cyberinfras-	6.5	R6.1	M.6.3
		tructure			
M	18-24	G6.5: With DOMA, scale test a data lake prototype	6.3	R6.2	M.6.1,
		across multiple sites. n.b. yesterday's DOMA session			M.6.2,
					M.6.4

SSL Metrics



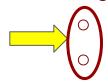
4.6 WBS6: SSL

- M.6.1: Number of deployed and operated platform services
- M.6.2: Number of SSL users (registered, active per quarter)
- M.6.3: Number of engaged Institute software areas per quarter
- M.6.4: Number of integrated SSL cluster resources orchestration

Analysis Systems & SSL Blueprint



- June 21-22, 2019 @ NYU
- Engagement with AS team, SSL team and representatives from NCSA, SDSC, NYU Research Computing, Google and RedHat (26 participants)
- Key outcomes:



Kubernetes as "common denominator" Federated "substrate" project identified

Industry partnerships explored



Goals today



- Review technical planning for SSL services and resources deployed so far (Lincoln's talk)
- Define the SSL k8s substrate deliverables and milestones
- Review requirements for DOMA demonstrators