SRCNet Infrastructure updates for CHSRC September 2nd, 2024

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Agenda

- Current progress
 - Establishing CHSRC deployment methods
 - Deployment of first SRCNet Services
 - Forming the SRCNet Operations Group (SOG)
 - Centralized monitoring efforts
- Towards SRCNet v.0.1
 - Key milestones

Our focus is on SRCNet v0.1

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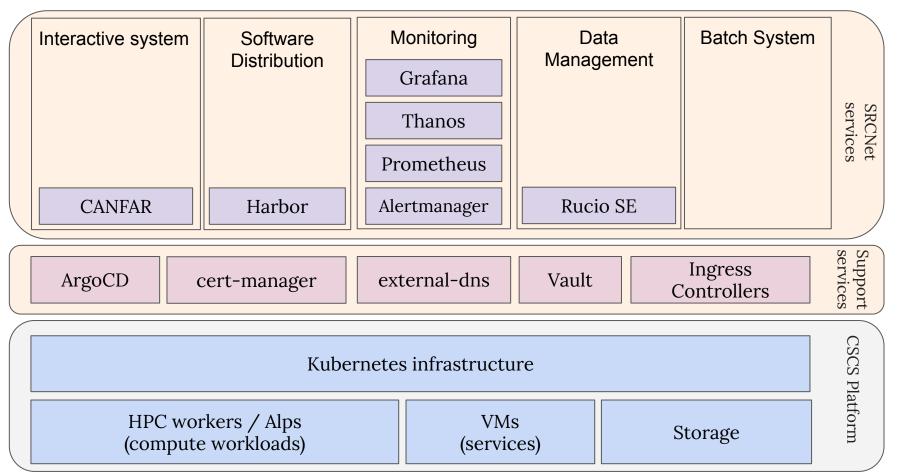
Participating SRCs and resources

	SP SRC	NL SRC	SW SRC			CN SRC		JP SRC		KR SRC	Total
Storage (PB)	0.500	0.100	0.300	4.000	0.400	1.000	1.200	0.651	0.300	0.270	8.711
Compute (PFLOPS)	0.010	0.010	0.011	0.175	0.014	0.175	0.040	0.022	0.100	0.010	0.567
Percentage Storage (%)	5.740	1.148	3.329	45.919	4.592	11.480	13.776	7.473	3.444	3.100	
Percentage Compute (%)	1.765	1.765	1.853	30.891	2.471	30.891	7.061	3.883	17.652	1.765	
Harmonisation Rate *	0.020	0.100	0.036	0.044	0.035	0.175	0.033	0.034	0.333	0.037	

Timeline and Key Milestones



CHSRC Setup / Architecture

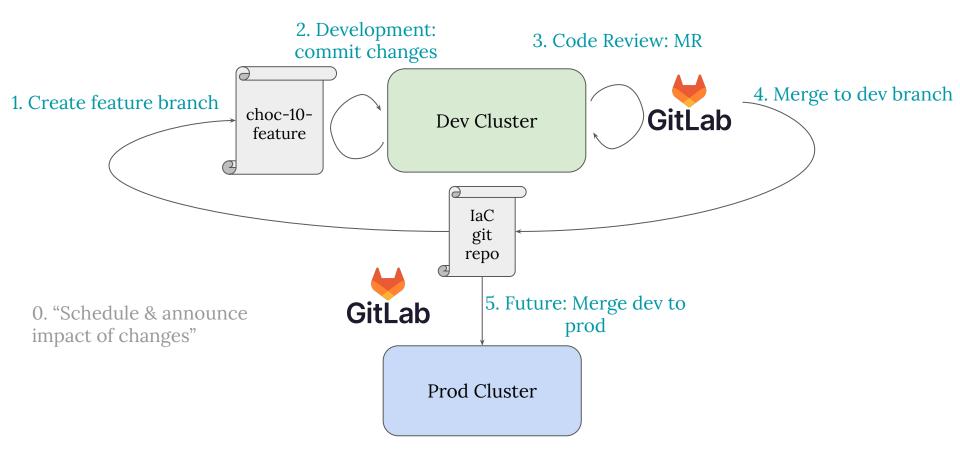


Establishing SRCNet service deployment methods

- Improving service deployments through increased automation and reusability efforts
- Using GitOps
 - Store service configuration in git
 - Share deployment and config recipes across teams globally
 - Collaborate and test new service deployments
- <u>Documentation efforts</u> across SRCNet teams for software stack
- CHSRC GitOps: <u>https://gitlab.com/ska-telescope/src/ska-chsrc-gitops</u>

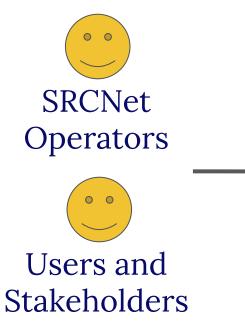


Workflow: Making CHSRC infrastructure changes

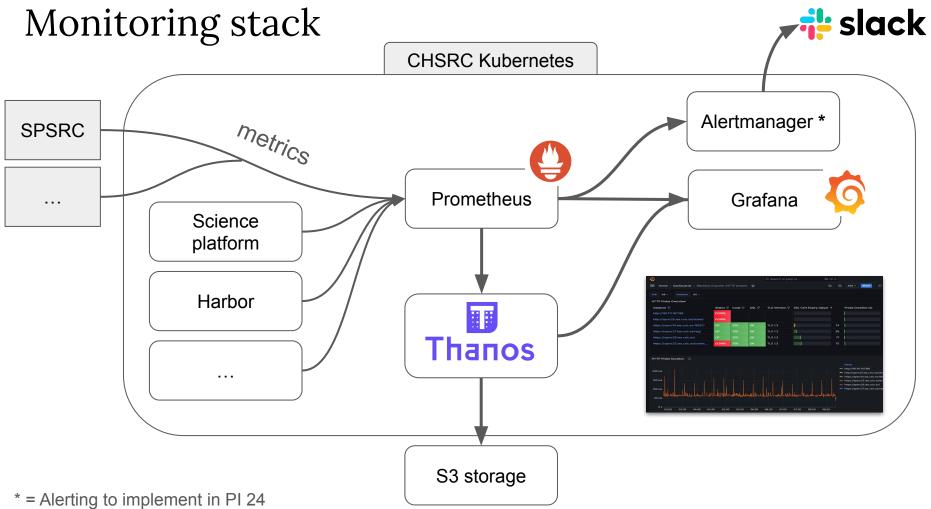


Centralized SRCNet Service monitoring

- Created a centralized monitoring service
- Showing an overview of services running at each SRCNet site



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SRC Operations Group (SOG)

SRC Operations Group (**SOG**) brings together the **operators** providing engineering **SRCNet Service Operations**.

Goal: Enable SRCNet v0.1 operations

Initial Scope and Purpose:



- Deploying, maintaining SRCNet Services.
- Establishing methods for managing daily operations of the SRCNet v0.1.
- Identifying dependencies and interfaces between SRCNet services.
- Coordination of maintenance ops across SRCNet sites.
- Sharing knowledge and deployment experience, feedback to dev teams.

https://confluence.skatelescope.org/display/SRCSC/SRC+Operations+Group

Beyond v0.1: Improved Monitoring and Alerting

Service Metrics

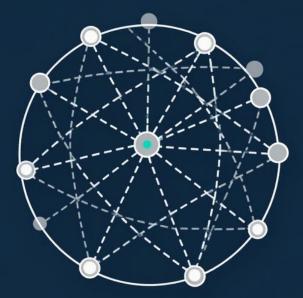
Beyond v0.1: Improved Monitoring and Alerting

Service Health

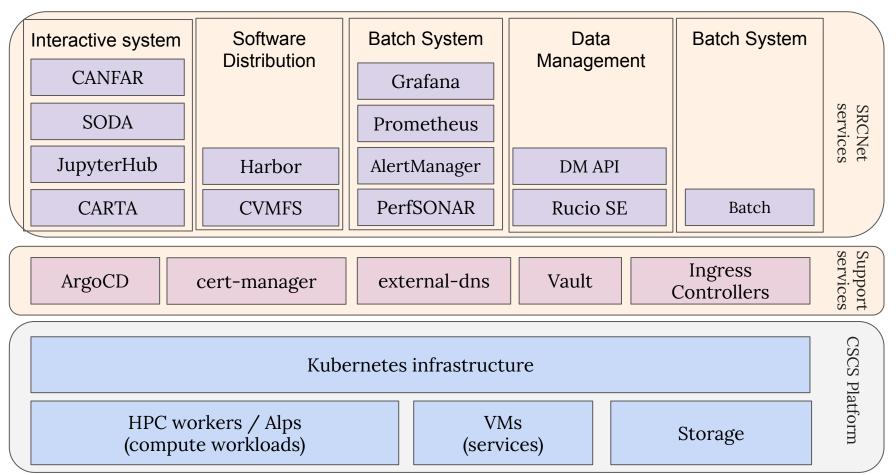


Beyond v0.1: Improved Monitoring and Alerting

Metrics and Alerting across SRCNet through a common interface.



SRCNet v0.1 Target Architecture



Thanks & Questions?

