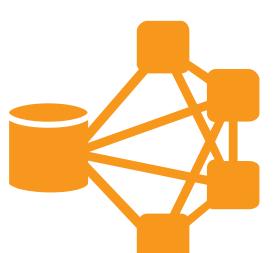


# **GENI Collection Framework**

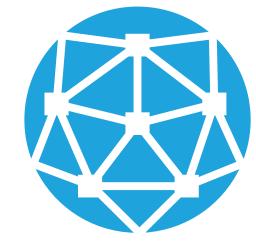
Cody Bumgardner (Chief Technology Architect) Ray Hyatt (Research Operations)

- Caylin Hickey (Data Scientist, Senior)
  - Kathryn Wong (Project Manager)



#### i. Collection

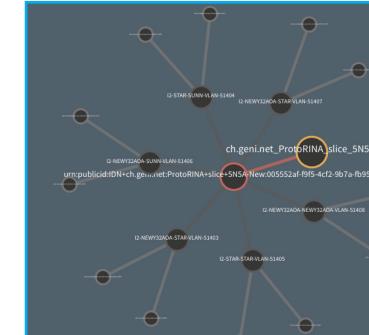
Retrieving metrics from resources across the GENI network.



## ii. Mapping

Constructing the GENI topology.

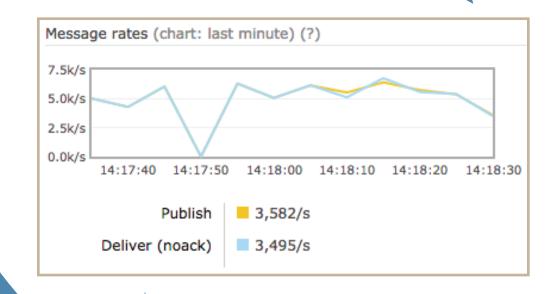
Providing and end-to-end view of resource utilization.





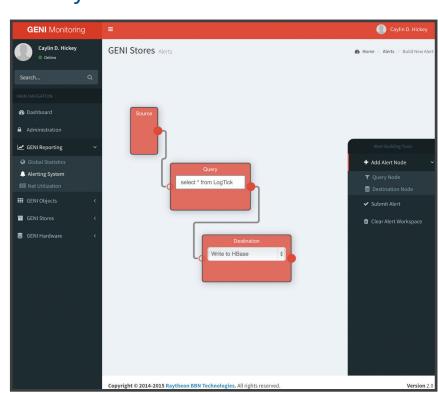
# iii. Aggregation

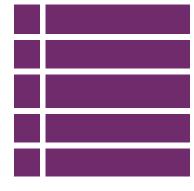
Turning collector information into a data stream.



## iv. Real Time Query System

Dynamic alerting and reporting from data stream.





# v. Time Series Repositories

Collection of all observed data events across the GENI network. Providing historic data for offline complex event modeling.

urn+ts	metric _0	metric_N	•••	external event
urn:publicid:IDN1426841116	12.2	34.1	•••	None
	•••	•••	•••	•••
urn:publicid:IDN1426848316	45.1	68.2	•••	Reported Warning
urn:publicid:IDN1426848616	46.0	92.1	•••	Reported Outage
urn:publicid:IDN1426848916	92.5	95.5	•••	Reported Outage
	•••	•••	•••	•••
urn:publicid:IDN1426856116	9.2	14.1	•••	None