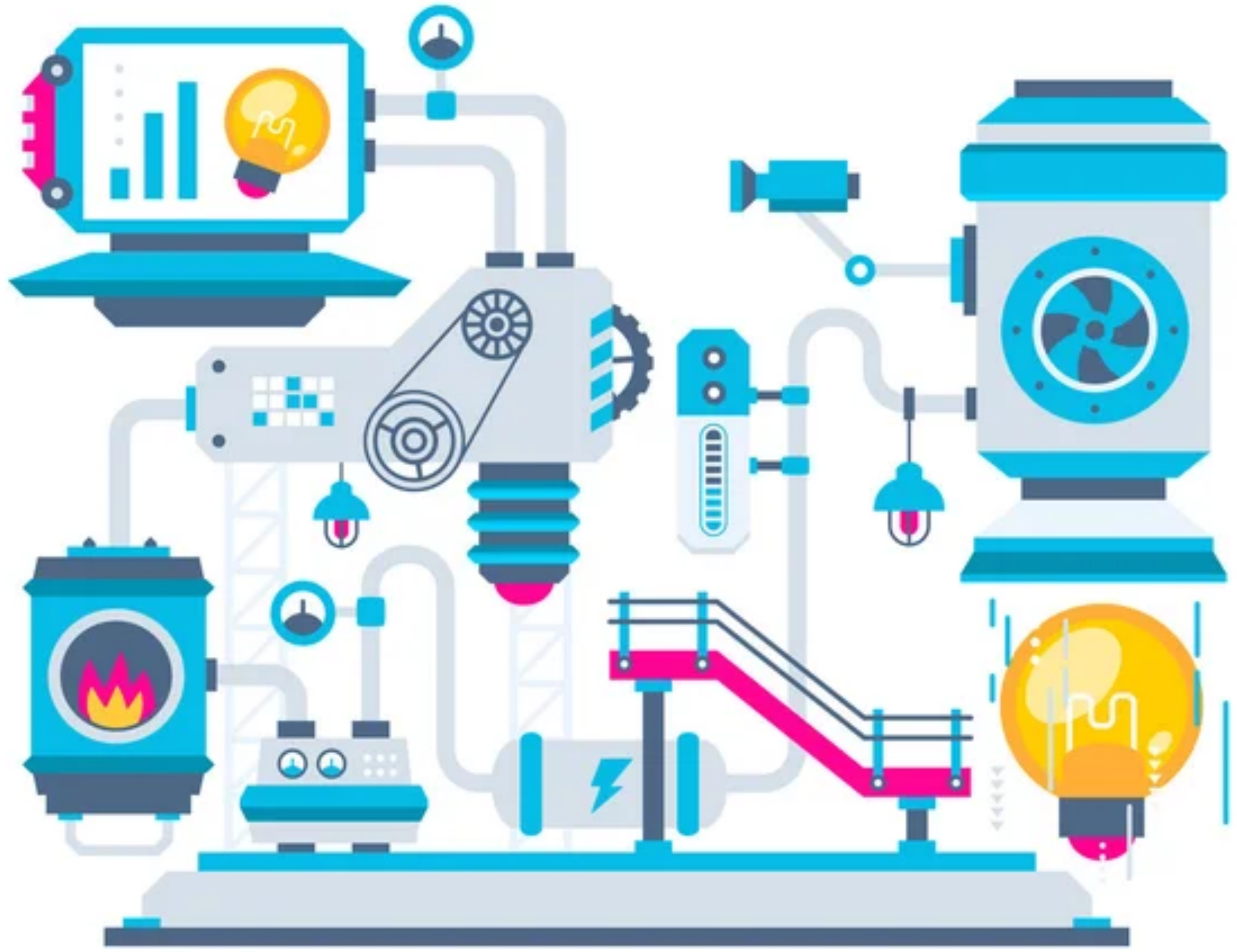
Followup on plans for IR1

Discussion items

S. Vallero - LVK satellite meeting on E2E Testing - March 14, 2026



Scenario-0

Only mandatory changes w.r.t. O4c

- CGMI information in Kafka alert (already in Circular)
- Understand with EM community if *GCN Classic over Kafka* can be dropped
- Take into account updated source classification from PE in alert updates
- Improve RRT support in GWCelery

TESTING REQUIREMENTS: standard LLPIC

Scenario-1

Consolidate LLAI with no (big) interface changes → Decision by May 1st

- Remove the list of active search pipelines from GWCelery code
- Fallback solution for GWCelery deployment outside CIT
- **Kubernetes deployment of GWCelery** in production:
  - need to quantify and identify computing resources
  - need a Secrets store → New service secrets.igwn.org
- **Event uploads**:
  - rationalise data model to be strictly defined
  - move to binary format

TESTING REQUIREMENTS: standard LLPIC + specific tests for new deployment mode to be defined

Scenario-2

Decrease latency by reducing the number of interactions with GraceDB (initial implementation) → Decision by May 1st

- **Search pipelines upload events via Kafka**
- Asynchronous service writes to GraceDB
- GWCelery keeps listening to igwn-alert (?)
- Possible issues:
  - Latency not necessarily reduced
  - Inconsistency in Superevent aggregator if not all pipelines migrate to the new version
- Possible solution: **move the Superevent aggregator in GraceDB**

TESTING REQUIREMENTS: standard LLPIC is enough but we need careful comparison of latency and aggregation results between 2 cycles → at least 2 LLPIC reference runs with all pipelines in

Scenario-3

Annotation pipeline developments for O5 → Decision by May 1st (?)

- 3 x Kafka-native alert manager prototypes (partial substitution of GWCelery)

- **The May 1st deadline will determine:**
  - **which prototype will be pushed forward for O5?**
  - **which prototype will be pushed forward for IR1?**

TESTING REQUIREMENTS: testing procedure will need to be defined from scratch