

# **New WLCG probes for job submission: status, results and plan**

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# Outline

- Context
- Status of new probes
- New metrics configuration
- Migration strategy and schedule

# About job submission probes

- Used to check job submission capability
- AND to send WN checks as job payload
- Currently relying on WMS. To handle WMS decommission:
  - new direct CREAM probe with payload support (ALICE and LHCb)
  - new direct Condor-G probe (ATLAS and CMS)

- **Status of the new probes**

# 1) New direct CREAM probe

- New CREAM probe is ready for pre-production
  - support payload submission
  - support wn payload configuration
  - support timeout options
- Integration and validation done on real SAM box (*sam-lhcb-dev*)
  - test done con CERN CREAM CEs able to submit the job, get output files, send wn results

## 2) Condor-G probe

- prototype of the Condor-G probe ready
  - derived from WMS and new CREAM probes
  - compliant to Condor-G job “*status logic*”
  - support wn payload configuration
  - manually able to submit job with real payload (wn checks archive) and retrieve results
- to be done: testing & SAM integration
  - machine identified: *sam-atlas-dev* (needs Condor-G)
  - to be discussed: timeouts, error code

# On the “where to get the queue name” issue

- Queue name is needed for direct CREAM and Condor-G submission
- New probes are able to receive the queue name as config argument
- Currently, NCG does not support it
  - extension not doable in short term
- Initially, both probes get queue name from BDII
  - as the current CREAM probe is doing

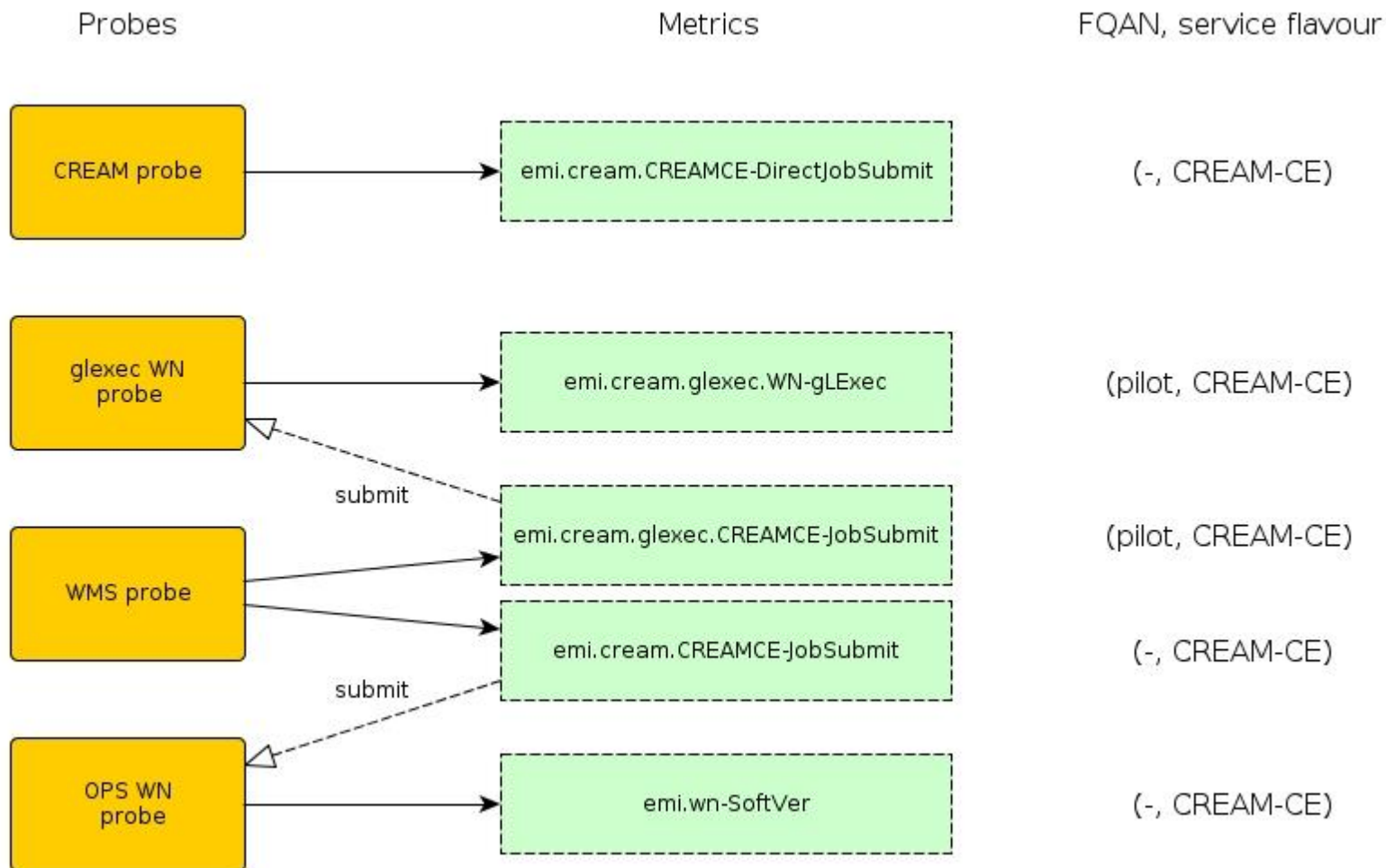
- **New metrics configuration**



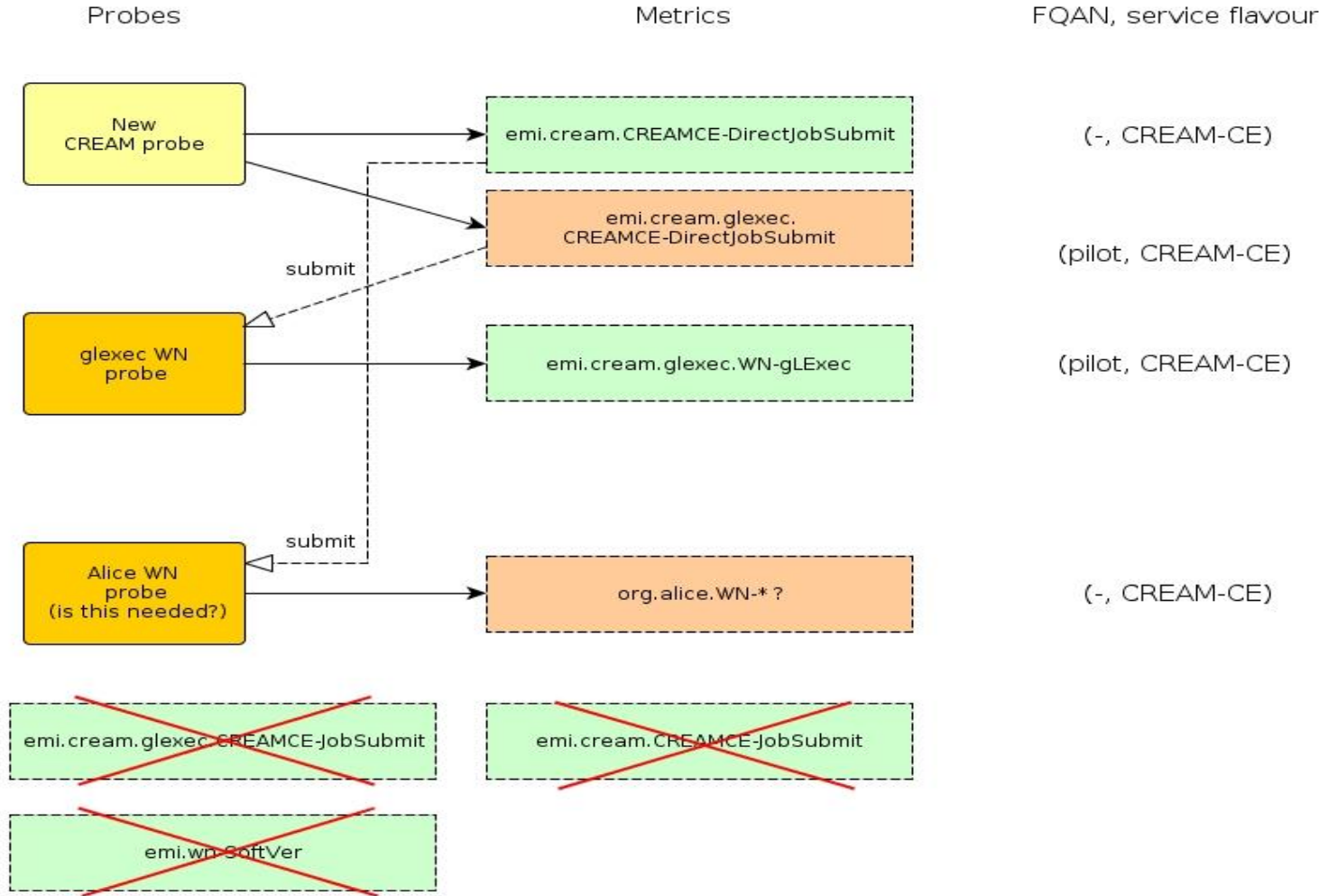
# Migration to new probes

- Not transparent, new metrics **have to** appear and old ones **have to** go
- Preserve existing metric names when possible
- Impact on profiles and validation
- First proposal document presented to experiment with positive feedback
  - next meeting in 3 weeks (~ 6th Feb)

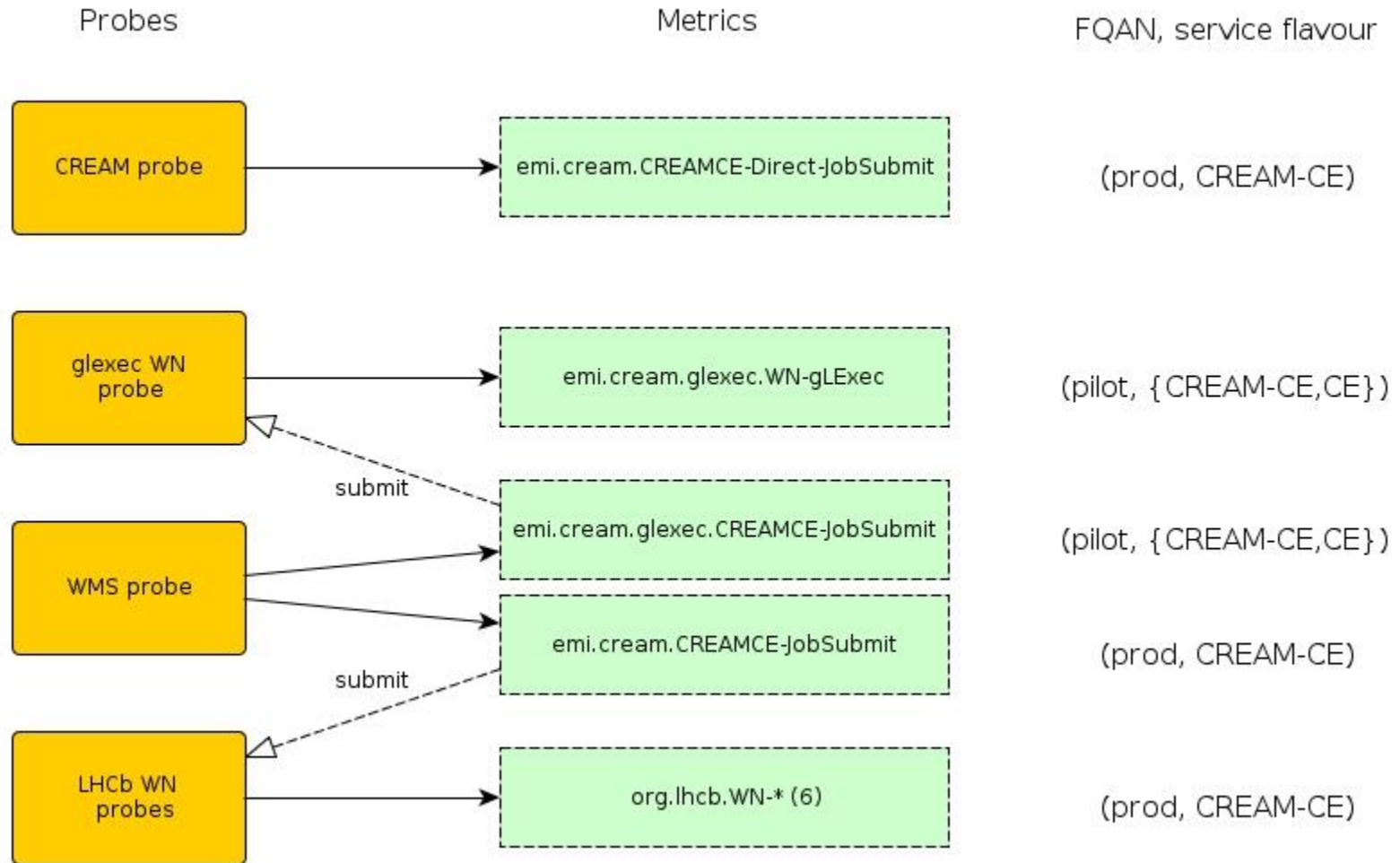
# Alice today



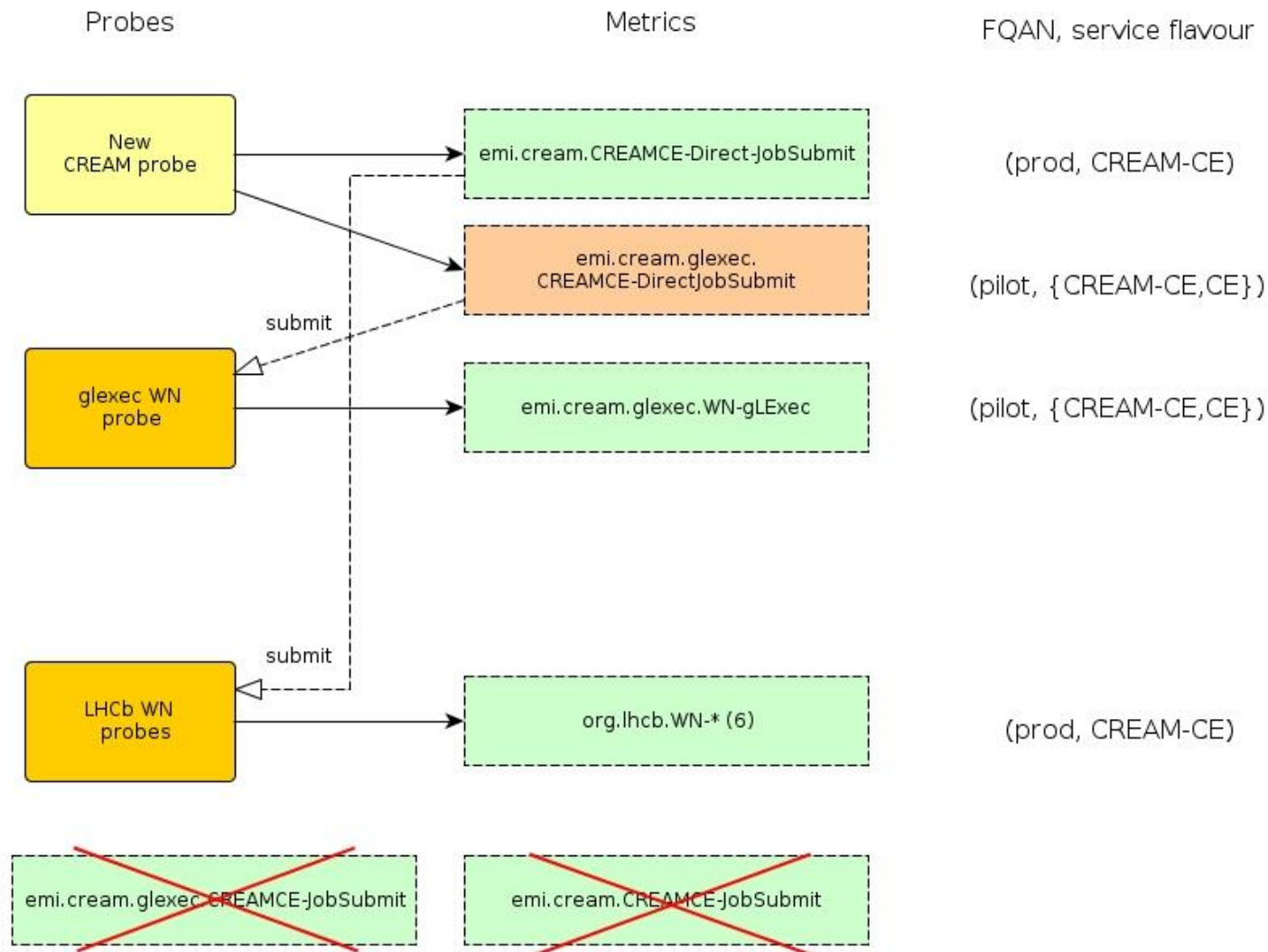
# Alice with the new CREAM probe



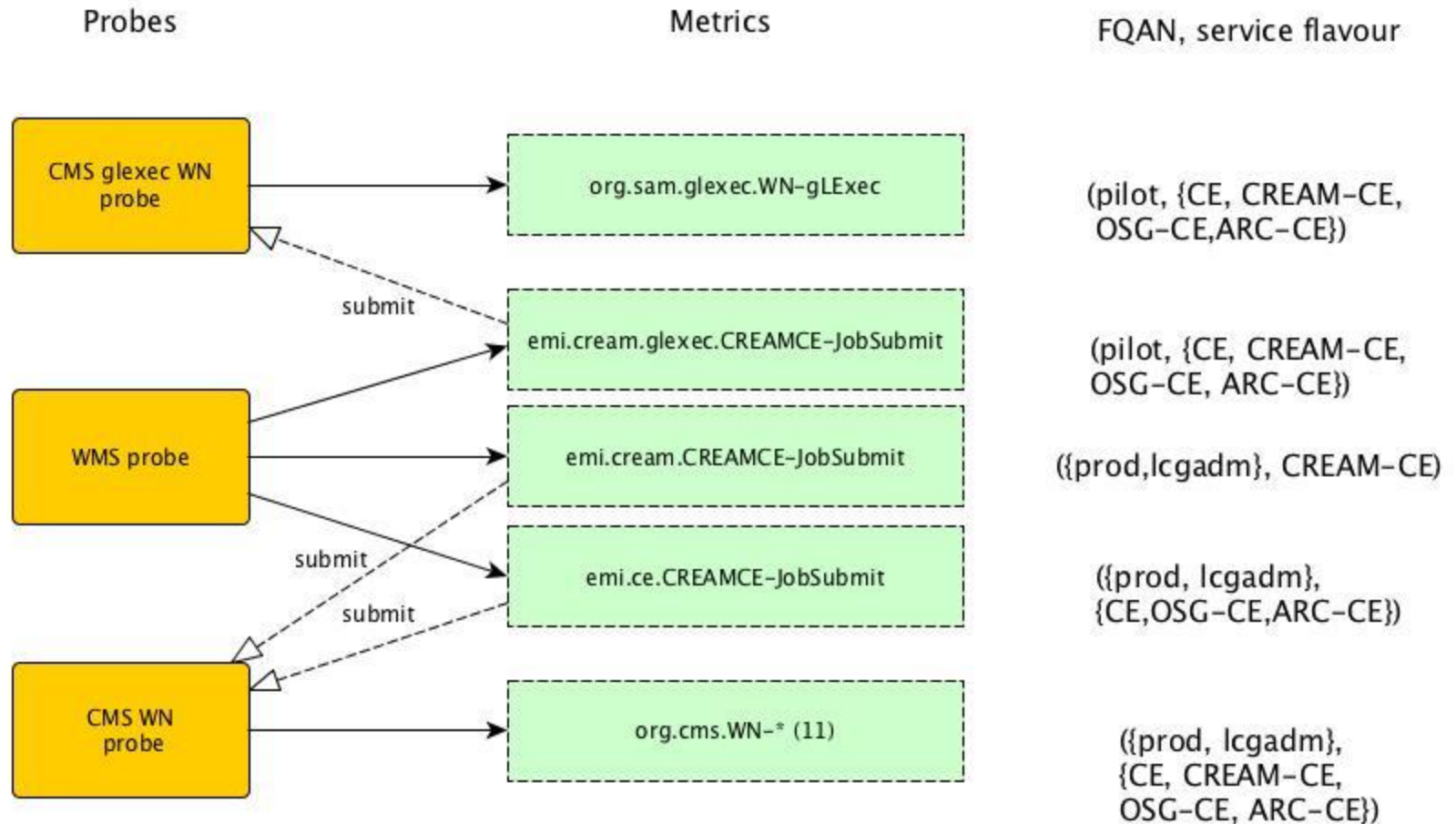
# LHCb today



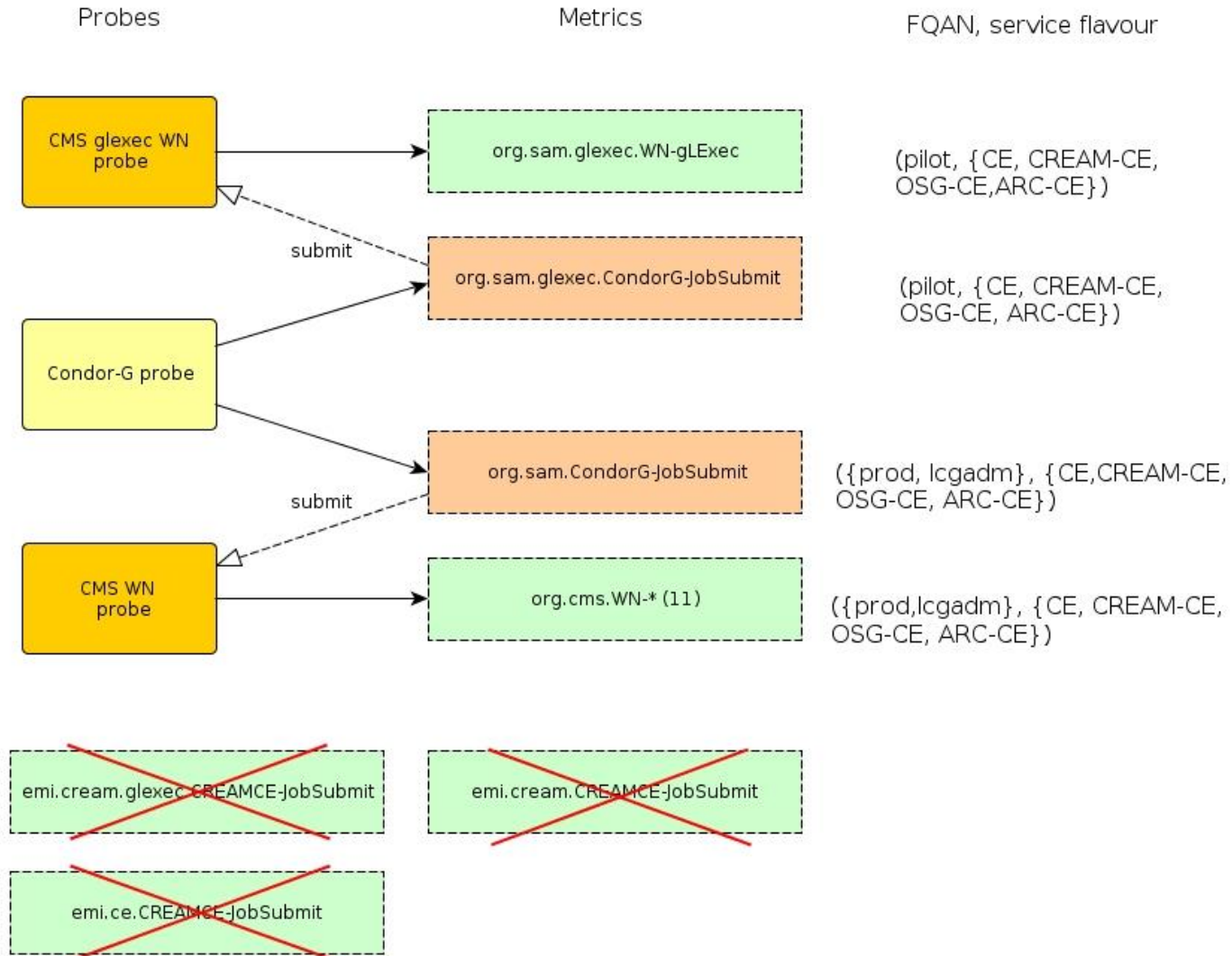
# LHCb with the new CREAM probe



# CMS today

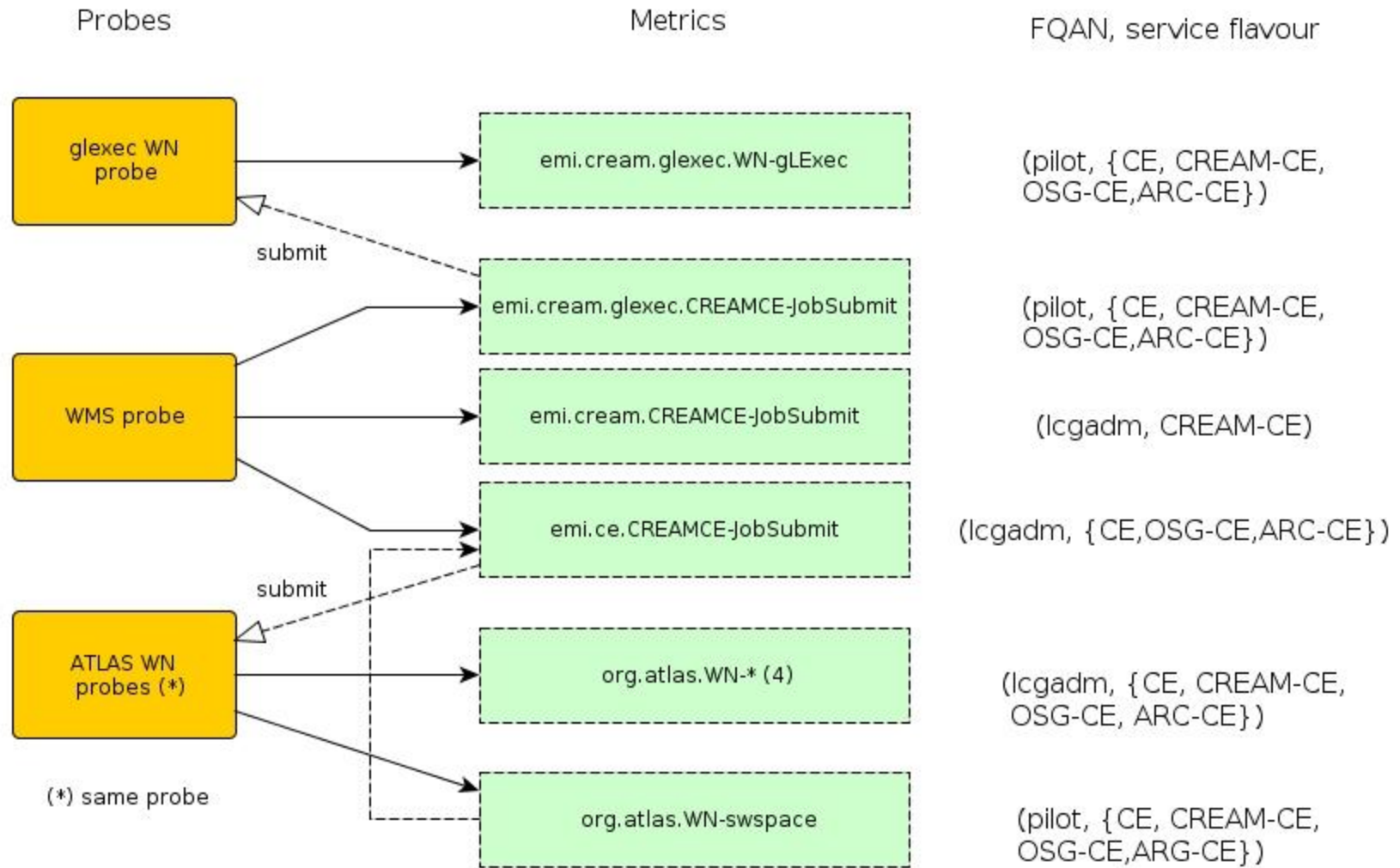


# CMS with new Condor-G probe



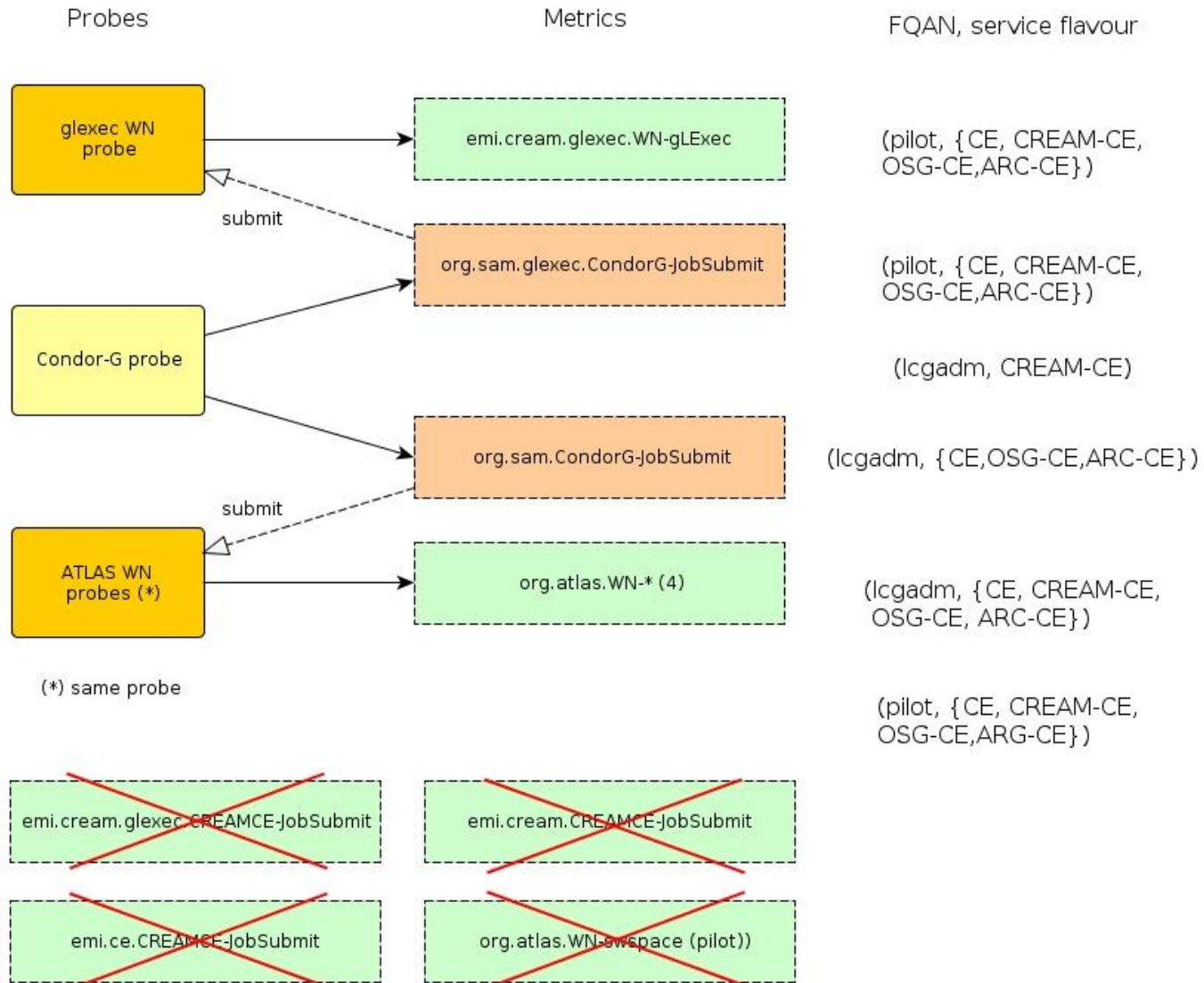


# ATLAS today





# ATLAS with new Condor-G probe



- **Migration strategy and plan**

# Strategy

- Get the probe ready
- Provide experiment recipes on how to use it
- Experiments provide new RPMs with new configuration
  - for each setup
- Install and validate new probe/metrics in pre-production and production with new profiles when needed

# Migration strategy

## new CREAM for ALICE, LHCb

- Validate new metrics in pre-prod
- When happy, deploy new setup in production
- Glxec submission metric changes name
  - but not glxec WN checks

# Schedule

## new CREAM for ALICE, LHCb

- Recipe for new config to be sent by SAM team (by 24th Jan)
- Packages for preprod for ALICE and LHCb (by 7th Feb)
- Deployment in pre-prod and validation (until end of Feb)
- Deployment in prod

# Migration strategy

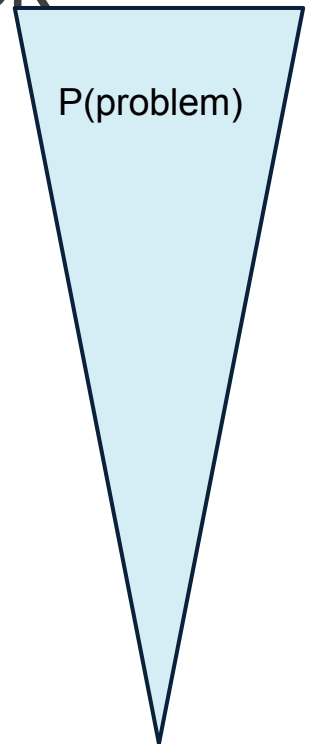
## Condor-G for ATLAS, CMS

- Run Condor-G and WMS probes in parallel
- **step 1:** pre-prod with Condor-G and mock WN test / WMS full WN tests
- **step 2:** pre-prod with Condor-G and full WN test / WMS no payload
- **step 3:** production with Condor-G full WN tests / WMS no payload
- **step 4:** removal of WMS probe

# Schedule

## Condor-G for ATLAS, CMS

- step 1: pre-prod Condor-G with mock WN test (beg. March)
- step 2: pre-prod Condor-G with WN payload (change profiles) (end of April)
- step 3-4: prod Condor-G with WN payload / WMS no payload ( end June)



# Conclusion

- We have a plan
- New direct CREAM probe ready
  - pre-prod validation in next weeks
  - everything done by end of Feb
- Condor-G probe is being finalized
  - pre-prod validation more challenging
    - get to know the new technology
  - validation with Condor-G and WMS probes running in parallel in production push WMS dependency a bit further in time