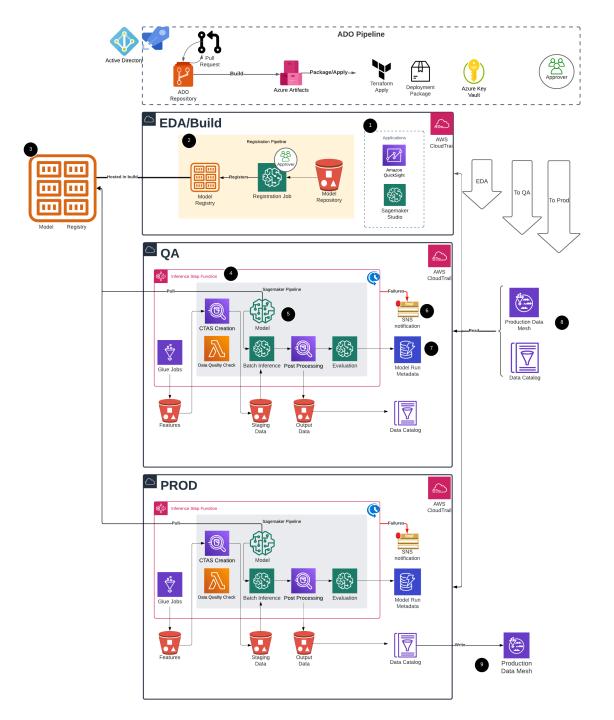
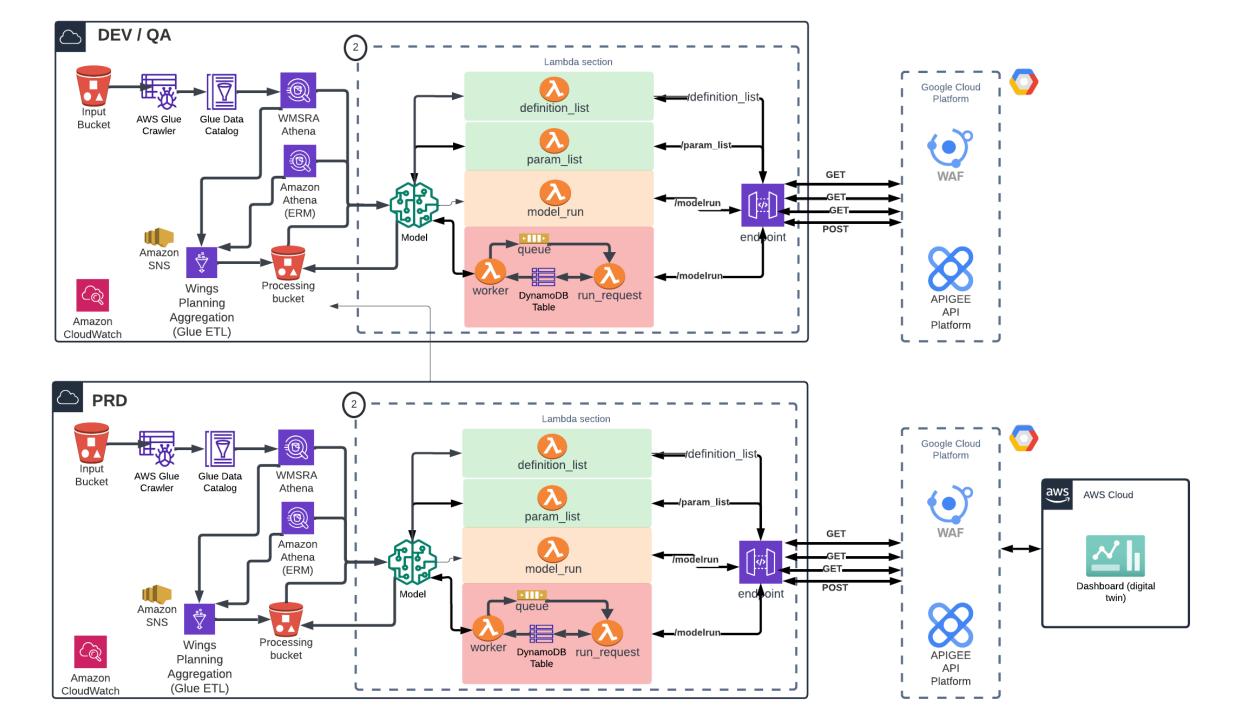


## **WiNGS**

May 2025

- 1 Quicksight and Sagemaker studio are leveraged by developers to monitor results and conduct development activities. Data from quicksight is consumed from our production datamesh source
- •2 Simplified model registration pipelines are leveraged to migrate pickle files built by the ERM to a sagemaker model format. Model is placed into cross-account model registry to be consumed by other account
- •3 Model Registry is hosted in build and given access by QA/Prod accounts to consume underlying model package groups
- 4 Main wingsops pipeline orchestrates data quality checks, feature pipelines, SageMaker batch inference processes, and post-processing steps
- •5 Model is pulled from build environment to be consomed by batch inference processes. Model version is consistent between higher level ennvironments
- •6 Failure notifications are trigged though SNS to alert issues to development team for resolution
- •7 Model run metadata is tracked for logging and futher analysis in dynamodh
- •8 All data is sourced through production pipelines outside of dependent ETL pipelines
- •9 Production data is served through the data mesh via terraformed glue table definitions for broader consumption





## **WiNGS Ops and Planning**

Raw Datasets/ Extracts

WiNGS stands for Wildfire Next Generation System and is comprised of two separate tools: WiNGS Ops and WiNGS Planning. WiNGS Ops supports real-time operational decision-making during emergency operations center (EOC) activations by aggregating risk, weather, customer, and asset insights. WiNGS Planning proposes mitigation efforts over time within the High Fire Threat Districts (HFTD) by using risk spend efficiency (RSE) methodology.

