SLIDES ONLY

NO SCRIPT PROVIDED

C5 Wire Test Data Ingestion and Power Bi Analysis

Joseph Ronca
Sr Database Admin | WSIRD Tech Lead
KIHOMAC INC.
Joseph.ronca@kihomac.com

C5 AWTS Data Ingestion & Analysis

- Introduction
  - 8 Years in USAF Data Analysis
    - AFLCMC/HB Cost Analysis
    - Reliability Data Analysis
      - C5
      - U2
      - A/H/M C130J
      - JSTARS
    - Data Engineering, Web Development, Network Engineering

KIHOMAC

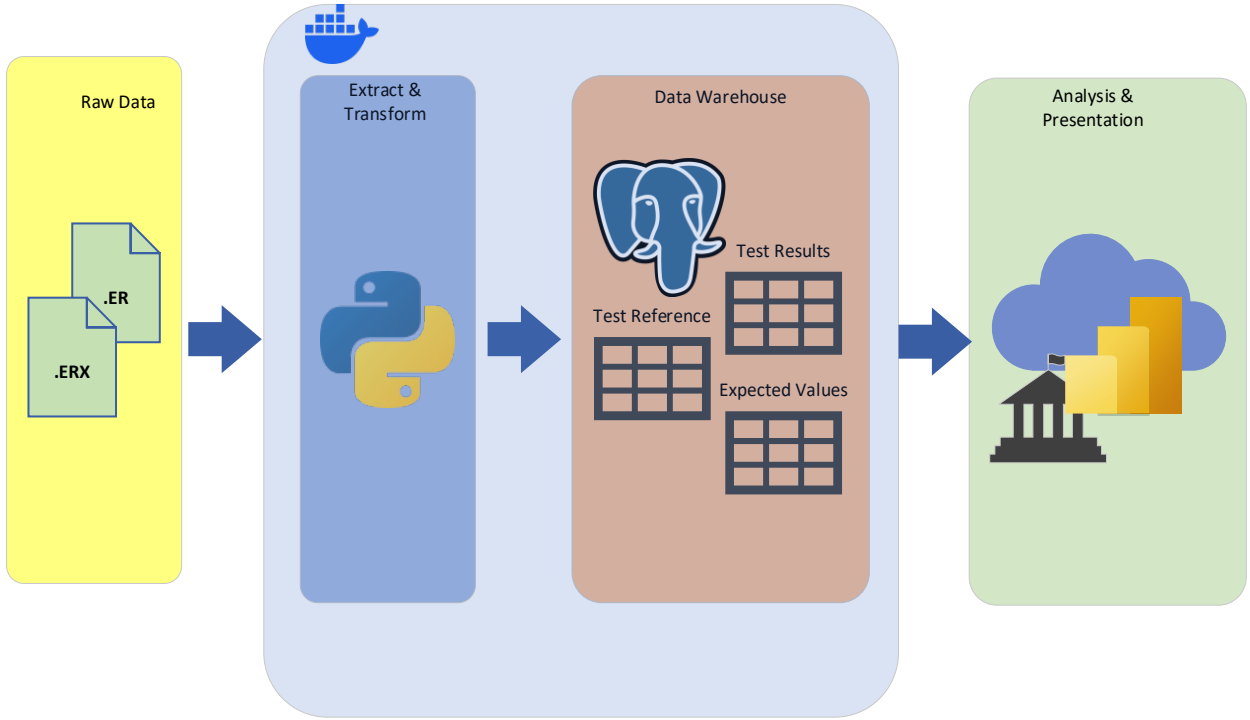
WSIRD
Weapon System Interactive Reporting Dashboard

C5 AWTS Data Analysis History

- Data being collected from AWTS testing is easily readable but not ready for analysis and reporting
- Engineers spend days extracting the relevant results from test results once [if] they are received
- This burden reduces our ability to understand fleet wide EWIS trends
- Results are not connected to maintenance actions, giving reliability engineers an incomplete picture

BLUF: AWTS data is often underutilized when making reliability assessments, data inaccessibility does not help

AWTS Data Ingest Architecture



- Two Python Applications: MAGNUS and EVE
- Results Published to DoD PowerBi, along side REMIS data

Current Reports

- Test Event Debrief Page
  - What was tested and what failed from previous test?
- Wire Path History
  - Are there any Wire sections that consistently fail?
- Test Event Comparison Tool
  - How have measured or expected values
- Fleet Failure Metrics
- Test Results Search

DISTRO A DEMO

Conclusion

- AWTS Test Data has been potentially underutilized within the C5 SPO
- Key enabler to using AWTS data is the intensive translation from ER/ERX format to a flat format
  - Automating translation turns hours of searching to minutes of query
- Once translated, AWTS data is useful for understanding and communicating wire health within fleet