Annual Pentesting Engagement Automation:

People:
      Engagement Manager
      Application Owner
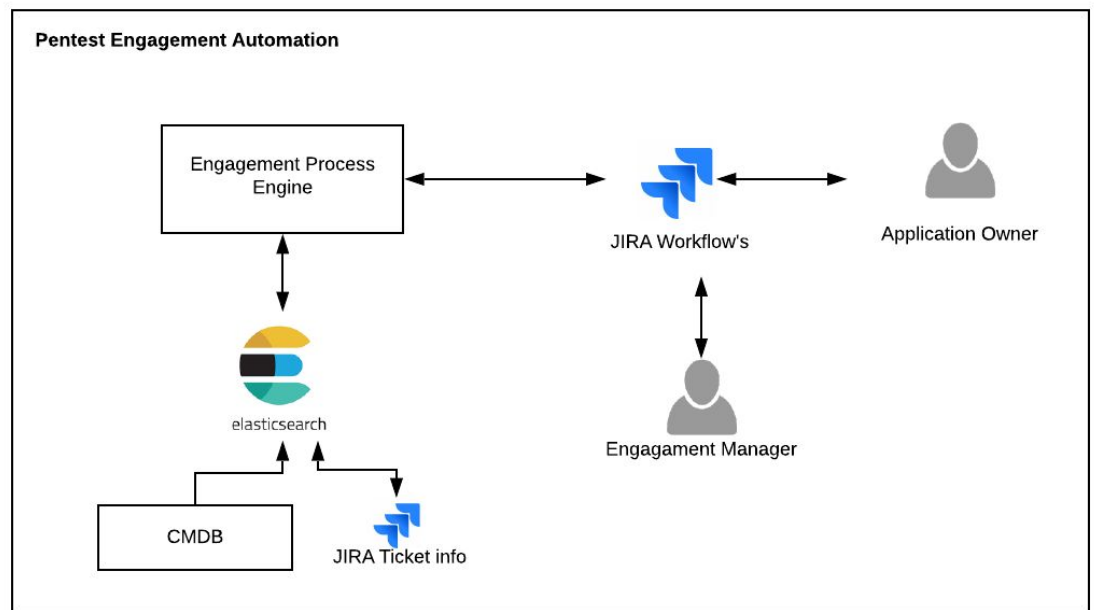   Application Security Leader
      Vendor (Future)

Flow :

1. Pull CMDB data on a daily basis to keep in sync with updates to CMDB
2. **Process engine** trigger's JIRA work-flow for any application ready for Annual Pentesting or any new application went to production.
   JIRA work-flow:
   - JIRA service ticket created with a Form asking Application owner to fill details of application to be pen tested. Some fields are auto populated from CMDB.
   - JIRA ticket moves back and forth from Application Owner to Engagement Manager if information is missing.
   - If Engagement Manager Satisfies with the information provided in JIRA ticker, Vendor pen testing process kicks-in (this is outside scope of this design).

Systems:

- **Process engine**

- **CMDB (a.k.a Asset Management System)**

- **ElasticSearch**
  - Used as a Datalake
  - Stores up-to-date information on applications or software assets synched daily with CMDB.
  - Data from JIRA (ticket information) is stored in Data Lake to run analysis and to show Dashboards. The following information is fetched.
    - JIRA ticket information
    - History of processed tickets.
  - Dashboards for Application Security Leader
    - Ad-hoc dashboards can be created by correlating data from JIRA and CMDB
      - Current engagements
      - Future engagements
      - Pending engagements
      - Completed Engagements

Pentest Engagement Automation

Engagement Process Engine

JIRA Workflow's

Application Owner

elasticsearch

Engagament Manager

CMDB

JIRA Ticket info

High level Design