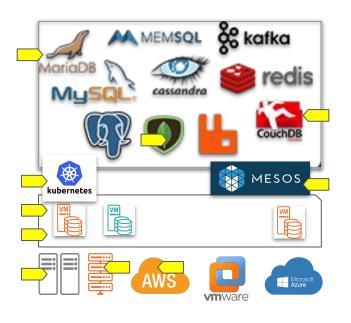


LIBRI and FARRIER:

Intuitive, Al-ready Framework for IT Stack Management and Assurance

Stack Management Today: Different formats, Many UI, Many Metrics



IT Ops get metrics, alerts, logs from various layers of the datacenter stack. Each layer has its own format.

- Infrastructure Server HW, network, storage
- Platforms Hypervisor, docker, SDN overlays
- Applications SW apps, SaaS

Our Al-assisted Framework

Simplifies operation, Saves \$ and Reduces Downtime

Machine Learning And AI Can Revolutionize IT Operations

- The entire stack from Infrastructure to Apps is evolving rapidly
- Service creation, operations and reliability assurance is getting complex
- Recent advancements in Artificial Intelligence and Machine Learning can
 - ✓ Cut upfront IT OPEX cost by 50% by unifying management for infrastructure, service and apps
 - ✓ Eliminate 90% of IT outages by learning and predicting issues beforehand
 - ✓ Save 90% of service platform expenses by leveraging modern serverless and visualization tools

Introducing Libri: ServiceBook Optimized for Data Browsing

- Simplified version of the notion for <u>Jupyter notebooks</u>
- Uses a Google sheet as interface for basic user interchange for SaaS
- Each Libri Notebook has following structure

Manage Service: Google sheets file with named sheets like

→ Service: IT infrastructure service request

→ Status: Service fulfilment status

→ Keys: Security and API keys. Including location for Explorer notebooks (see next page)

Manage Status: Google sheets with following named sheets like

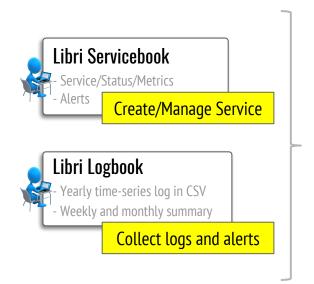
→ Metrics: SaaS specific metrics. Current values

→ Alerts: Info/Warning/Alert

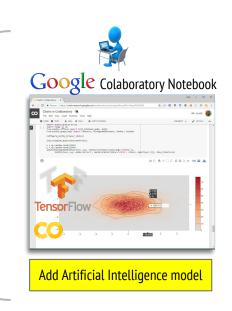
→ Logs: Log management configuration

The ServiceBook support backend runs on Google serverless cloud

Libri Books: Spreadsheets with Bot-service. Powerful. Intuitive.

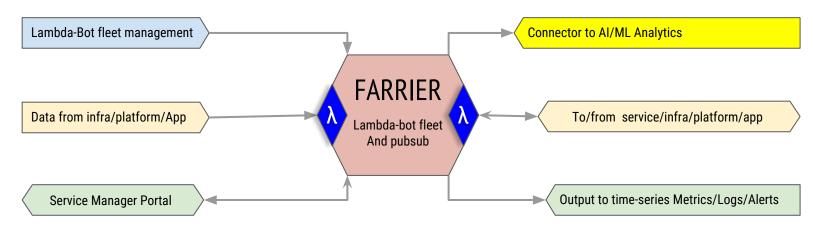






Integrated with Google mail, drive, sheets, cloud-functions, pubsub, Colab AI and Data Studio from Day #1

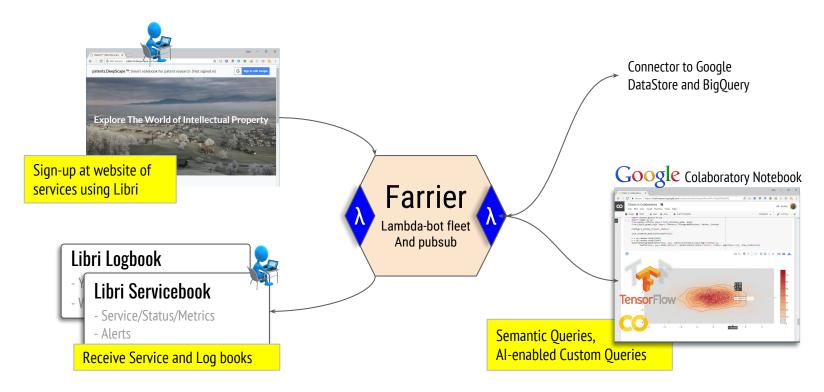
FARRIER: Extract/Transform/Load (ETL) Service with Bots



FARRIER is a an ETL service implemented with serverless lambda+pubsub framework for

High scalability, Low cost and pipes to latest AI/ML Framework

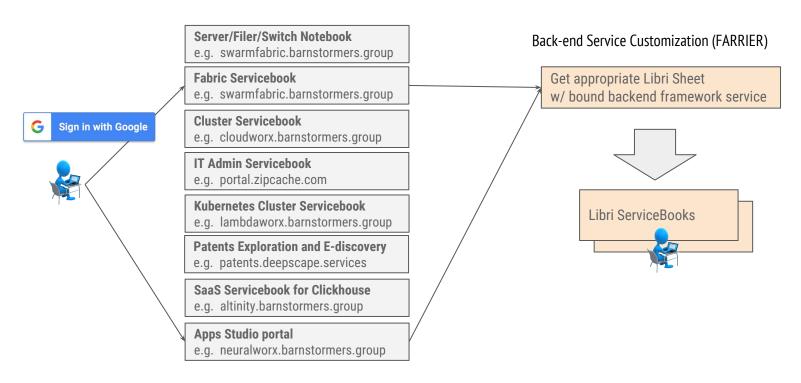
Example: 'DeepScape' - Patent Research and E-discovery Service



DeepScape.Patents: Al-enabled, G-suite Integrated E-discovery

- DeepScape.Patents Is a SaaS service from BarnStormers launching in December, 2018
- Libri and Farrier technology is integrated with templates for lambd-bot programs
- Google-Cloud-integrated service provides breakthrough capabilities for e-discovery
 - Deep insight: Integrated with Google Colab AI frameworks (Tensorflow/Keras/Pytorch)
 - Cost-efficient: Latest serverless cloud. DeepScape is 1/10th \$ of other e-discovery SW. And faster.
 - Great visualization: WIth Google Data Studio. Free.
 - Seamless integration: With G-suite and documentation tools

Farrier Provides Backend Service and Feature Extension with Bots



Status 9.9.2018 and Rollout Schedule (all dates are mid-month)

	Sept	Oct	Nov	Dec	Jan	Feb	March
Libri demo site	Х						
Libri for SwarmFabric		Х					
patents.DeepScape	Х						
Libri for Servers (Syslog)		Х					
Libri for ZipCache		Х					
Libri for ClickHouse			TBD				
Libri for NeuralWorx			Х				