# Heroku Integrations for Salesforce



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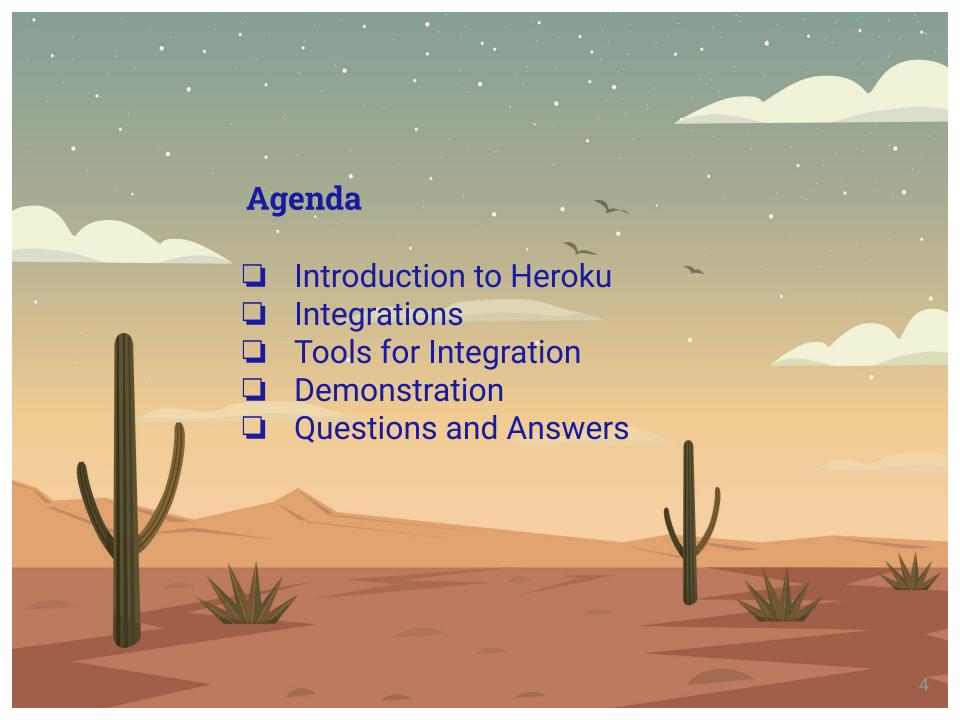
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## I am Michael Norton I am Michael Norton pelloi

I am here because I love to give presentations.

You can find me at: @NortonMD



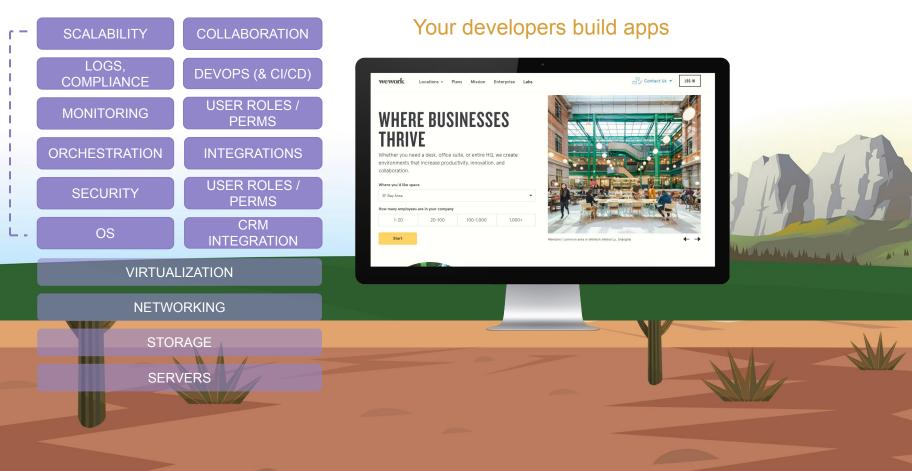
# Introduction to Heroku



#### Heroku is a PaaS built on top of Amazon Web Services

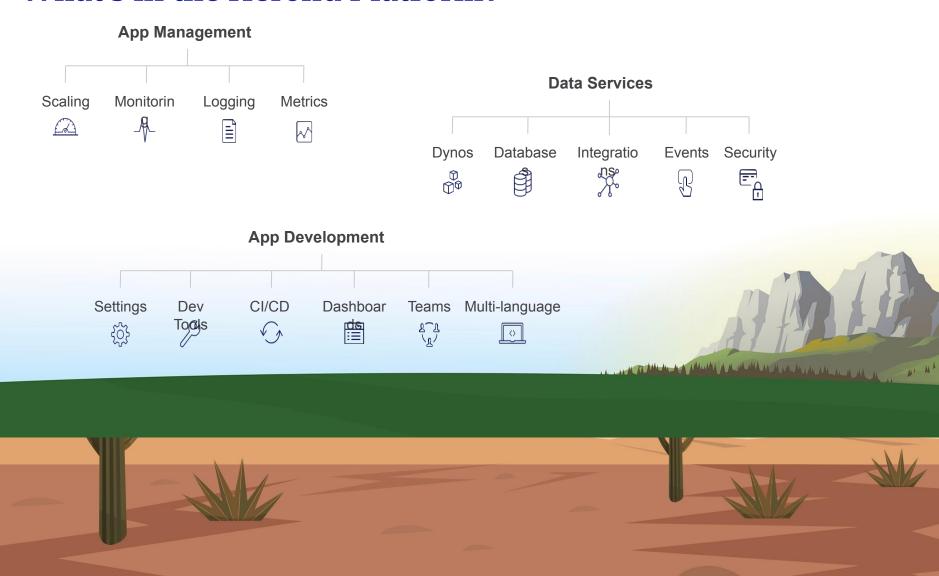
Developers focus on building amazing apps, Heroku does the rest

#### Heroku manages everything





#### What's in the Heroku Platform?



#### Languages with first-class support



#### Node

Our Node support is all about flexibility. Choose your own version of Node, choose any framework from Express and Hapi to Sails.js and Koa, and choose from any of our integrated add-on services such as Mongo, New Relic, Librato and more.

Learn more →



#### Java

Build microservices with Groovy and Ratpack, web apps with minimal fuss using Spark, and high performance web apps with Spring Boot/Spring Cloud, using a range of JDKs.

Learn more →



#### Python

Whether you prefer frameworks like Django or Flask, or getting your hands dirty with Twisted or raw sockets, Heroku stays out of the way, letting you easily deploy everything from bespoke microservices to complex, database-backed web applications.

Learn more →



#### Scala

Take your Scala solutions, whether microservices built with Finagle, or full-stack solutions built with Play, and combine them deploy it to the cloud, adding to them any of our integrated add-on services such as Treasure Data, Neo4j or Cassandra.

Learn more →



#### Ruby

Whether you prefer frameworks like Sinatra or Rails, or getting your hands dirty with Unicorn or WebSocket, or using the MRI or JRuby, Heroku's rock-solid Ruby support delivers.

Learn more →



#### PHP

An elegant platform for modern PHP apps - Heroku's PHP support including a modern stack with your choice of web server (Apache or Nginx) and runtime — PHP 5.5 and higher, including PHP 7 or HHVM — together with Composer for dependency management.

Learn more →



#### Go

Whether you prefer Go's stdlib, or frameworks like Negroni and Gin, Heroku gets out of the way, letting you build and deploy network services, microservices and high-traffic API endpoints, easily, and scalably.

Learn more →

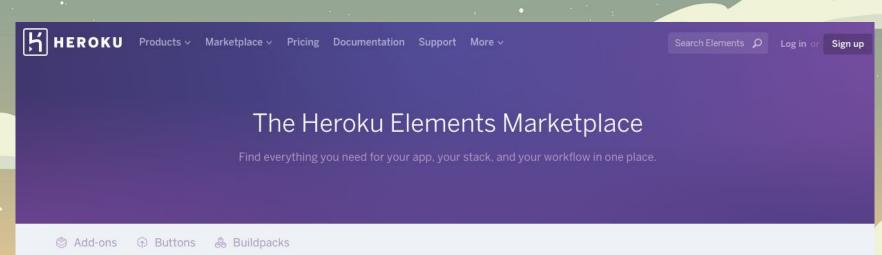


#### Clojure

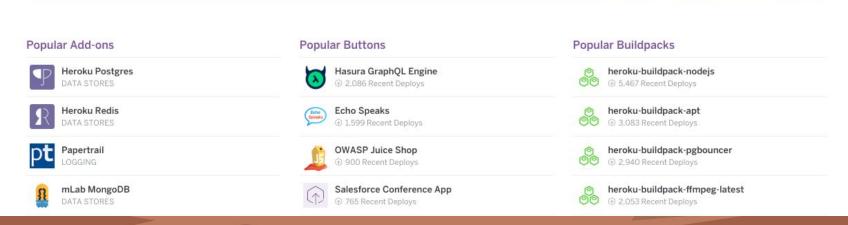
Build and deploy Leiningen-based applications with ease, whether they're micro-services built on libraries like Ring and Compojure, more complete solutions based on Luminus and Pedestal, or front-end apps using ClojureScript and Om.

Learn more →

#### Heroku Marketplace









- Overcome Limits
- Offload Heavy Computation
- Extend Storage
  - Data Synchronization
  - Data Virtualization
- Data Prep Inbound and Outhound
- User Interface Integration

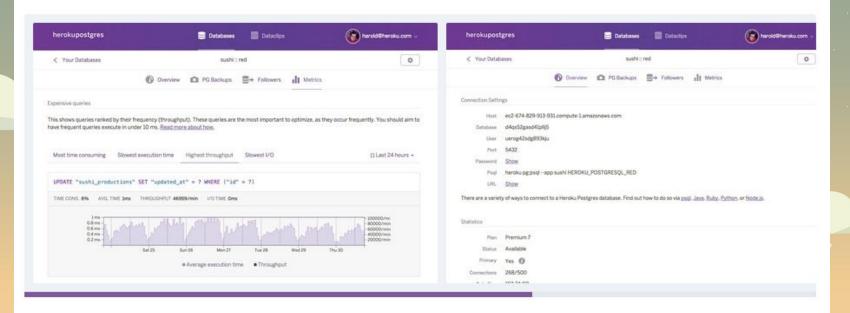
- Identity
- Data
- Process
- User Interface

- Identity
  - > DATA
- Process
- User Interface



#### Heroku Postgres

Reliable and powerful database as a service based on PostgreSQL. Starting at \$0/mo.



#### Connect, Use, and Develop

Databases are multi-ingress: use them from any cloud, PaaS, or your local computer. It is easy to connect from common languages & frameworks including Rails, Django, PHP, and Java: configuration strings are generated for them automatically. The starter tier provides expected up time of 99.5% and is well suited for development and hobby applications, with the production tier offering an expected up time of 99.95% for serious production applications.

#### Scale and Grow

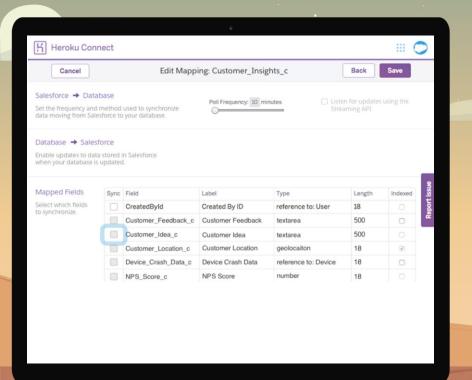
Scale vertically by choosing from a range of plans . Plans differ based on the size of their hot-data-set, the portion of data available and optimized on-the-fly in high speed RAM. When the time comes, scale horizontally by adding read-only followers that stay up-to-date with the master database.



#### Heroku Connect

Bi-directional data integration between Salesforce and Heroku

Postgres



salesforce

Build apps that span Salesforce and Heroku

Extend your CRM data to the world's leading dev platform

Easily consolidate Salesforce org data in minutes

Simply point & click to move data from many Salesforce orgs

Expose Heroku tables as External Objects

Use Salesforce Connect to virtually access Heroku data





- Identity
  - > DATA
    - More Tools!
- Process
- User Interface



#### The Salesforce User Interface



#### **Replicate & Preserve**

- Back Up & Archive Salesforce Data
- View, Retrieve & Restore in SF
- Control Salesforce Storage
- · Bulk Restore with Attachments
- · Create Historical Data Sets



#### **Time Machine**

- Unlimited Field Audit Trail
- · Solve for Complex Compliance
- · Record Every Version of Every Record
- · Side by Side Time Comparison
- View, Retrieve & Restore Data



#### **Migrate**

- · Salesforce Org Data Transfer
- Sandbox Seeding
- Einstein Analytics
- Marketing Cloud Connect



#### **Data Hub**

- · Multi-Org View, Analyze & Action
- Third Party Data Integration
- Business Unit Collaboration
- · Aggregate Company Wide Data

#### **Chain of Custody**









**VPC** 





Salesforce Shield

























Data Movement

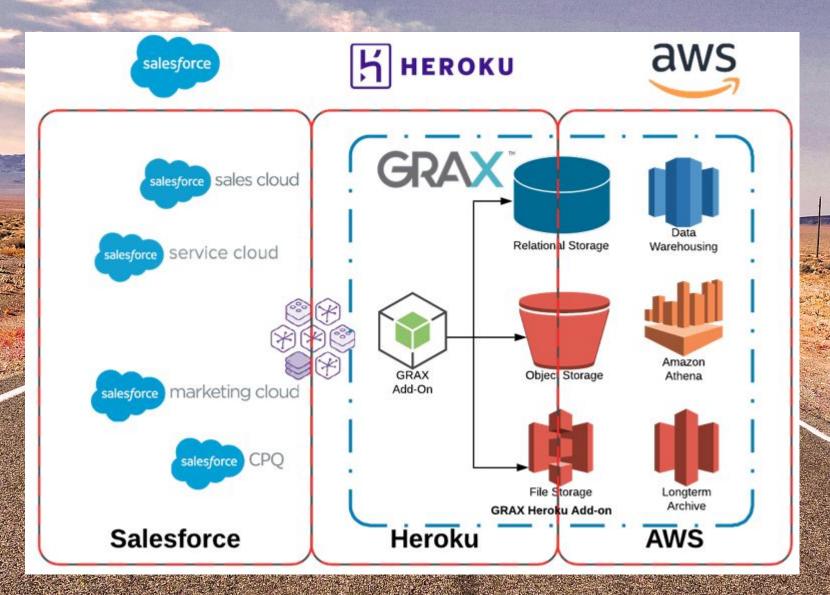
Movement

AWS / AZURE / GCP

**Heroku Private Space** 

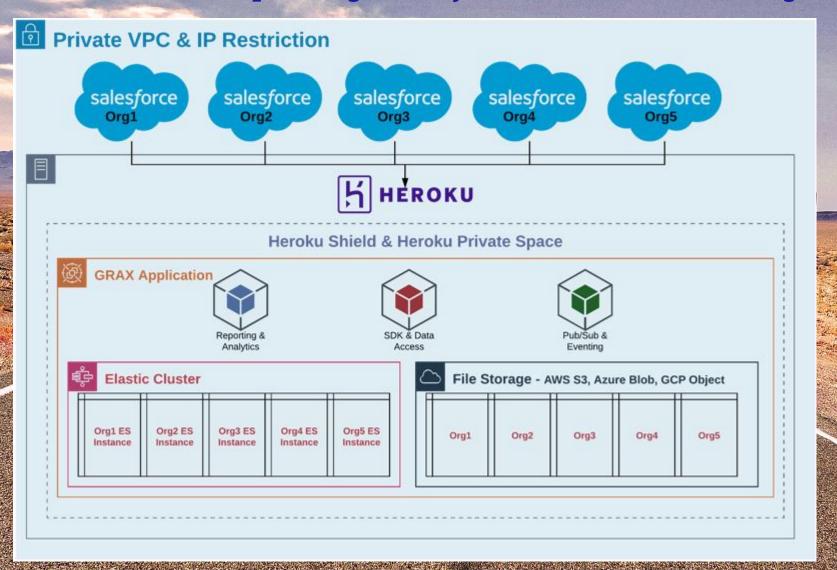
**Customer Data Chain of Custody** 

#### **Logical Architecture**



#### **GRAX Multi Org Architecture**

Boundless Reporting, Analytics, and Data Sharing

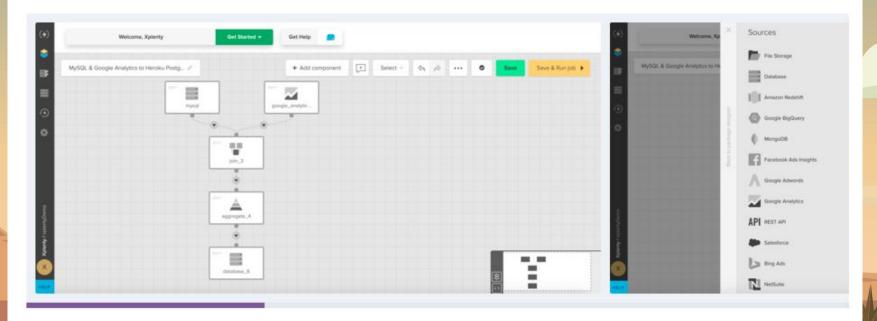


#### **Xplenty for System to System Integration**



#### **Xplenty**

Data Integration Service. ETL and ELT. Simplified. Starting at \$0/mo.



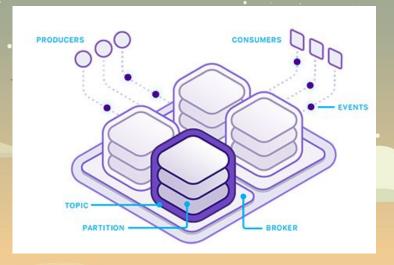
- Identity
- Data
  - > PROCESS
- User Interface



#### Apache Kafka on Heroku

Streaming data service optimized for developers

See how it works

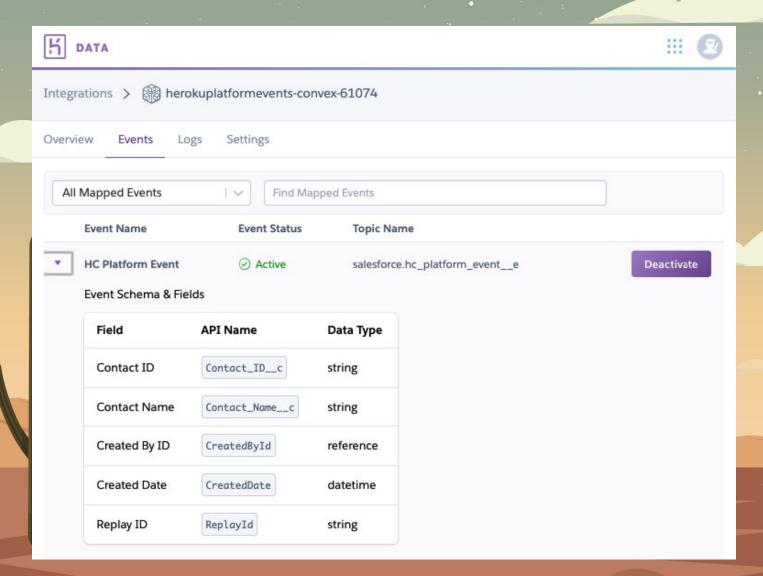


#### What is Kafka?

Apache Kafka is a distributed commit log for fast, fault-tolerant communication between producers and consumers using message based topics. Kafka provides the messaging backbone for building a new generation of distributed applications capable of handling billions of events and millions of transactions.



#### **Platform Events Pilot\***

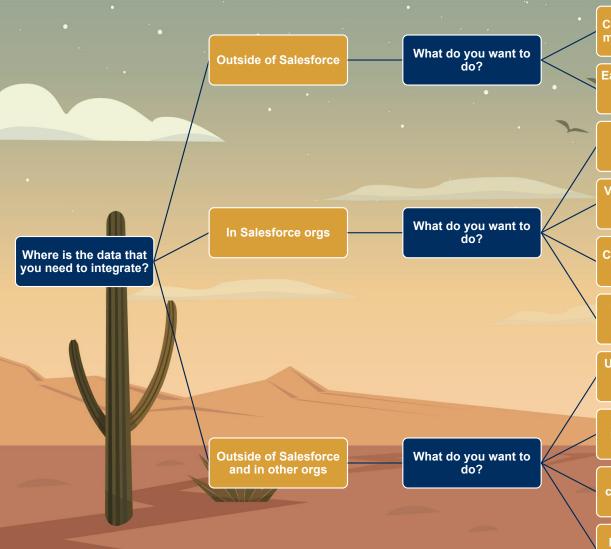




- Overcome Limits
- Offload Heavy Computation
- → Extend Storage
  - Data Synchronization
  - Data Virtualization
- Data Prep Inbound and Outhound
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## Data & Process Integration Decision Tree





Connect Salesforce to many systems via API

Easily access & act on data in a few key systems

Offload complex queries and transformations

Virtually access & act on data without importing it

Consolidate data from multiple orgs

Capture & replicate Salesforce data changes

Use Heroku as a Data Bridge to my key systems

Orchestrate data integrations across many systems

**W** III //

Build a common customer data model for B2C

Pub/Sub integration model across systems

**MuleSoft** 

Salesforce Connect

> Heroku Connect

Salesforce Connect

> Heroku Connect

Platform Events

Heroku Connect + MuleSoft

**MuleSoft** 

Customer 360 (pilot)

Platform Events

# Any questions? **Any duestions? Auh diestions?**thanksi

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#### **Salesforce Platform Integration Portfolio**

#### Salesforce **APIs**



#### Heroku Connect



#### Salesforce Connect



#### **Platform Events**



#### CDC



#### External **Services**



Access and manipulate Salesforce data and processes with code

Instant deployment of scalable database with point & click integration to Salesforce

Connect Salesforce to external systems & Salesforce orgs without data import

Salesforce-nativ e pub/sub for real-time integration & logic execution across internal & external systems

Tracking changes to objects in Salesforce and replicating those changes to any system instantly

Create end-to-end business processes in Salesforce using workflows in other systems

- Leverage declarative tools to connect to external APIs and bring the logic into **Salesforce**
- Use this external logic within Salesforce flows in real time

















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#### **Platform Events Pilot**



