It's all about the process: How Red Hat IT is using JBoss BPM Suite

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Who we are

- Mike Cirioli - IT Lead
- Lance Peterson - Developer
- John Bell - Developer
- Lauren Santiago - System Admin

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Mission

- To increase efficiency and cost savings at Red Hat by offering Business Process Management as an IT managed service
- Define best practices
- Improve JBoss BPM - customers win!

The IT BPM Team

● Explore Process Automation

Red Hat Product Stack (our own dogfood)

● JBoss BPM Suite 6.4.x
● JBoss EAP 6.4.x
● MariaDB
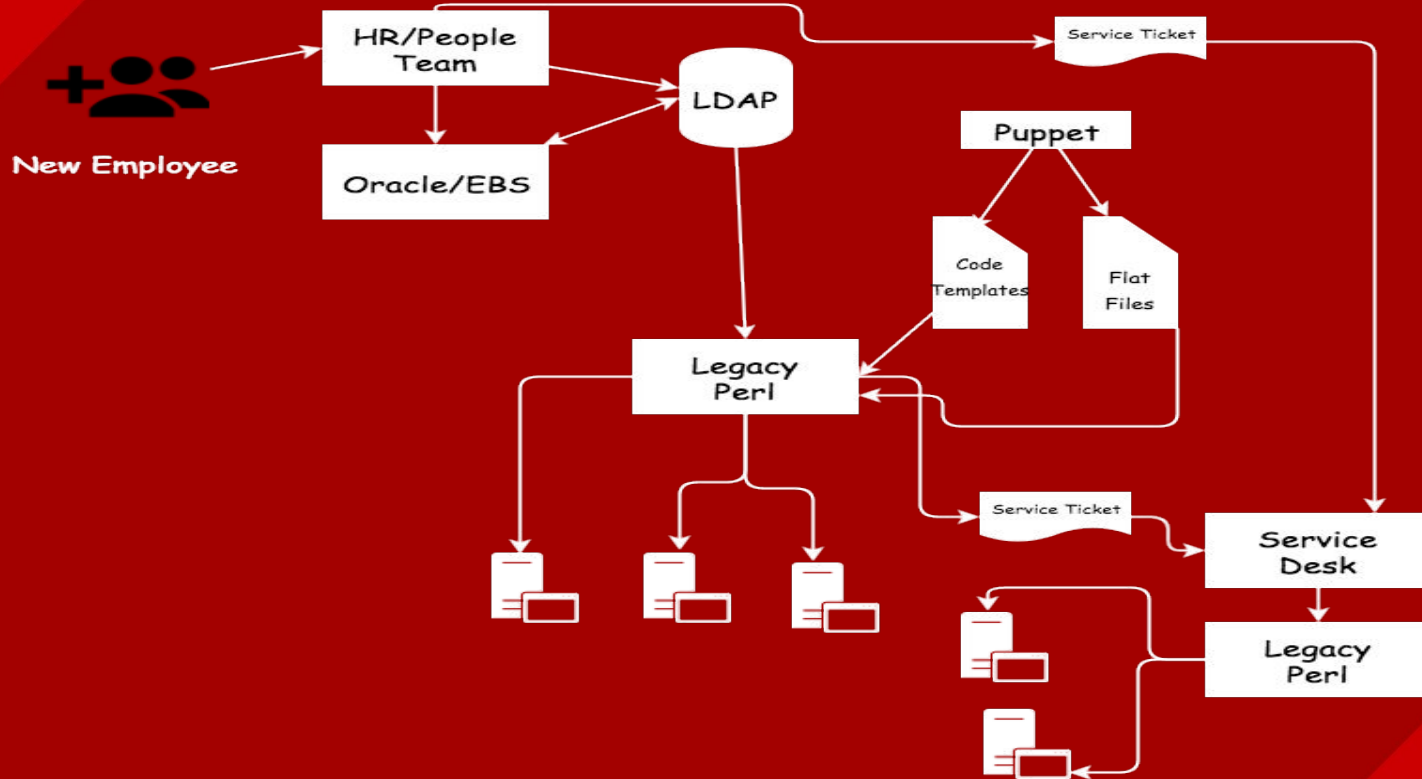
Case Study:
Account Management Lifecycle

You're Hired!

Oh No! We Hired You!

- How do you manage it all and ensure your employees are productive on their first day?

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The Old Way To Do IT

New Employee → HR/People Team → Oracle/EBS → LDAP → Legacy Perl

Service Ticket

Puppet → Code Templates, Flat Files → Legacy Perl
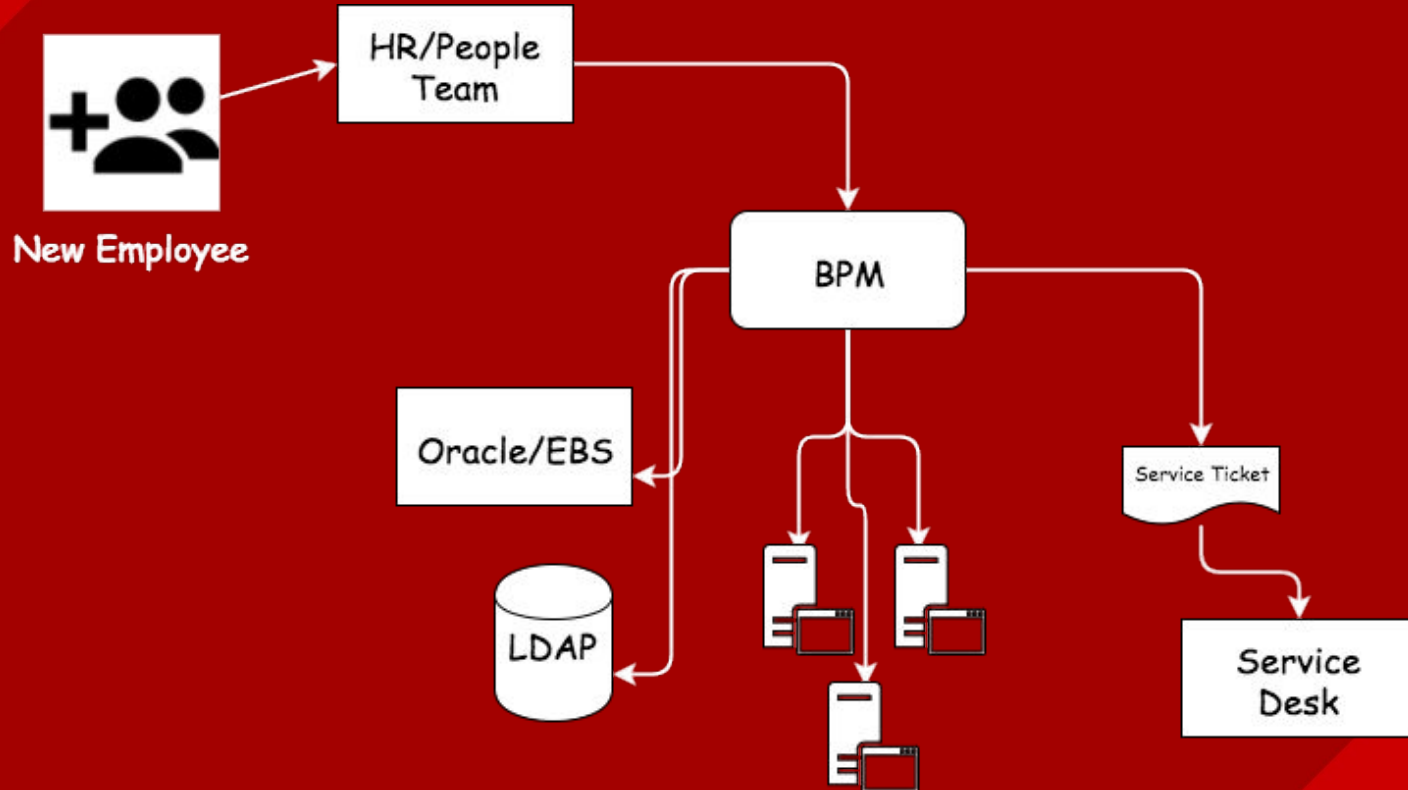
Service Ticket → Service Desk → Legacy Perl

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The Bad News

- Unmaintable
  - Scripts get orphaned when people leave

- Little coordination across teams
  - Equipment can't be prepped in advance
  - Multiple requests

- Not scaleable

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There's Got To Be A Better Way!

- How can we…..
  - Coordinate better
  - Integrate faster
  - Reduce manual steps

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There's Got To Be A Better Way!

Goals

- Avoid knowledge bottlenecks
- Separate the logic of the business process from the implementation details of the integrations
  - Allow the "team" to scale horizontally
  - Service owners "own" the last mile
- Support larger efforts at improving the onboarding experience at Red Hat

The Approach

- Standardize communication between the process and integrated systems
- Leverage industry standards and practices
  - JSON Data Format
  - REST
- Define data model
  - Process operates on the model
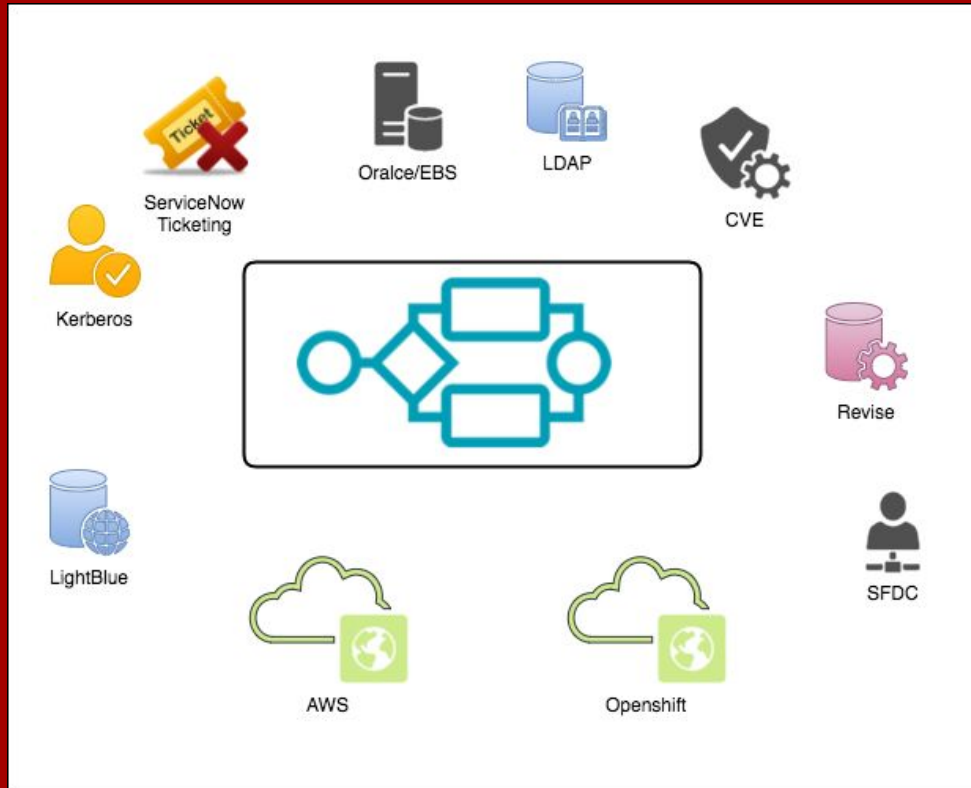 - Connectors consume and transforms this model

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Divide & Conquer

- Systems divided into tiers
  - Core (system of record)
  - Common (most used)
  - Outliers
- Integration with existing legacy "process"
  - "Big Bang" approach not feasible!

IT-BPM Enhancements
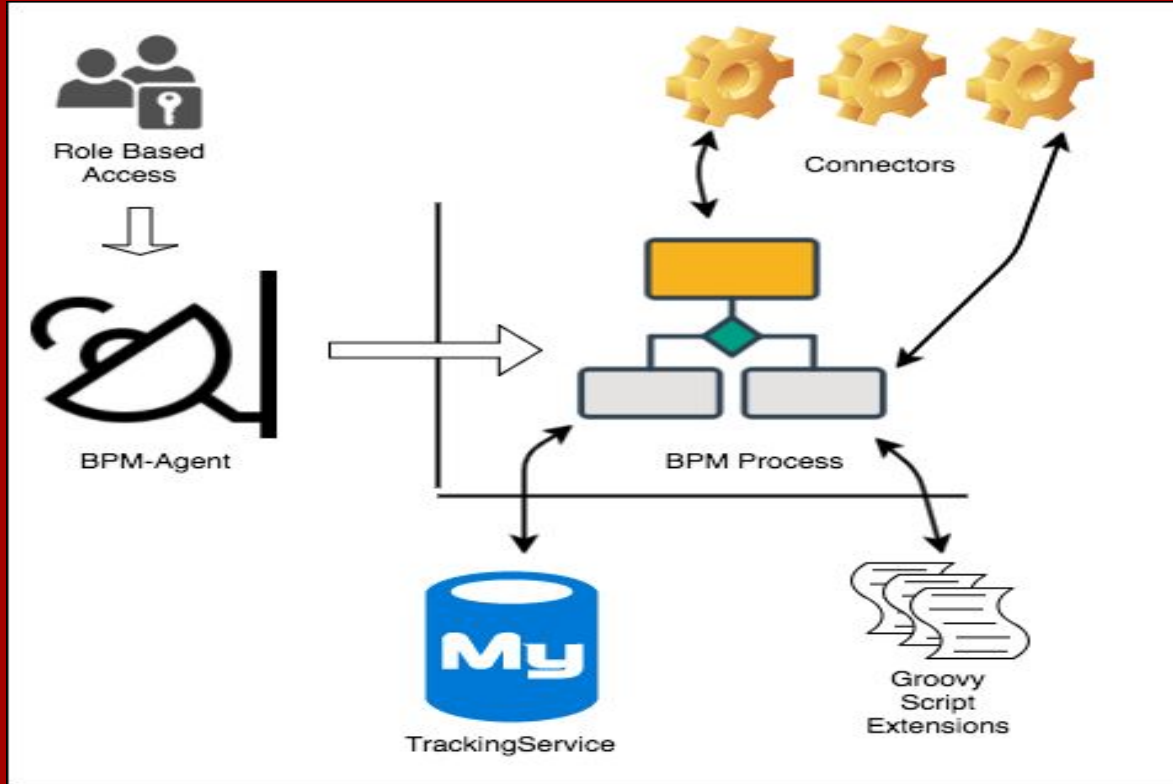
Connectors In Use Today

BPM-Agent

- Removes knowledge dependency from BPM consumers
- Fine-grained access control
- Multiple authn options
- Broker integrations with JBoss Fuse & Camel

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Process Tracking

- External tracking of process state
- Helps identify "lost" processes
- Ties into existing monitoring tools used by IT

Groovy WorkItem Handler

- Ability to run external groovy scripts
- Perform data transformation and "housekeeping" tasks
- Externally managed

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Initial Implementation

- IT BPM Team put theory into practice
  - Developed connector framework
  - "Cannonical" data model
  - Infrastructure

Results!

- Reduced show-stopping failures to almost zero!
- Manual steps no longer batched, reducing bottlenecks
- Completely automated first step of 2-part manual process
  - 30 minutes per new account time saving!
- Raised awareness around shortcomings in human process steps

Next Steps

- Integration of second-tier apps
  - 4 Teams now using the connector framework for their own integrations
- Tie in to existing human driven processes
  - Overhaul of entire onboarding experience
- BRMS
- Embedding BPM engine

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Lessons Learned (Pt. 1)

- Understand your process first!
- The concept is simple but there is a steep learning curve for implementation
- Keep the process focused on the business logic
  - Externalize integration points

Lessons Learned (Pt. 2)

- Start small
- Learn from others
- Participate in the BPMS community!

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Other Projects

- Red Hat Connect
  - Container Certification
- Rover Groups
  - Self-service group management
- Telephony/Call routing

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Resources

- https://developers.redhat.com/products/bpmsuite/community/

- http://mswiderski.blogspot.com/   (Excellent resource!!!)
- http://www.schabell.org/p/jboss-bpm-suite-starter-kit.html

- IRC - Freenode/#jbpm

Questions??