Activiti is supporting real-world and important process needs everyday

A large ERP Vendor	Leverages Activiti for their cloud-based Workflow service.
A large Travel Service provider	Drives booking processes through Activiti
A large search provider	Leverages the pluggable persistence of Activiti 6 to achieve enhanced process throughput for process automation
1000's of others...	Are using Activiti everyday to bring process management to business, technical, and digital solutions in nearly every industry and geography in the world.

Activiti 6 continues a tradition of innovation

- Activiti v6 is an evolution of the core engine

- Leverages lessons learned

  - Lifecycle Control

  - Flexibility (such as pluggable persistence)

  - Enhancements (in-memory & data store mapping) to the process graph for emerging use cases
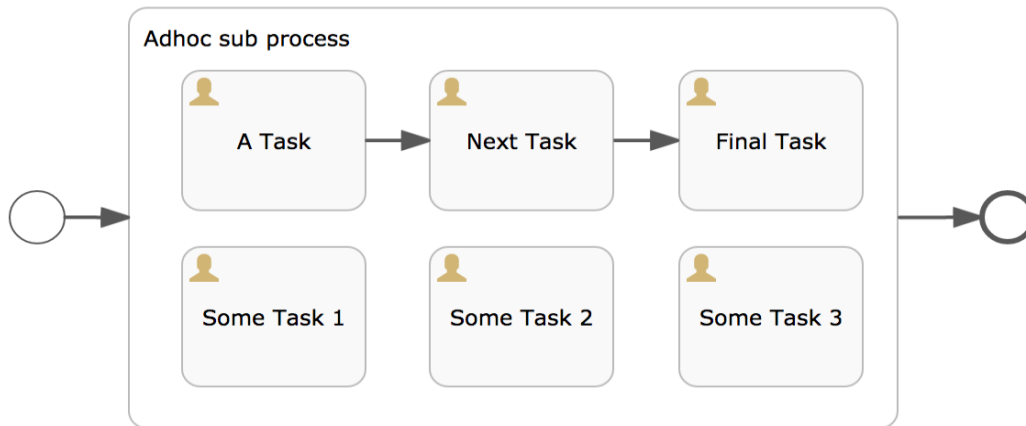
Activiti v6: Dynamic Process Support

Scenario	Capabilities, Description
Dynamically re-assign task priority	Dynamic BPMN Service, Adhoc Subprocess
Ad Hoc Case Management	
….	
Live Process Migration	

Demo

Dynamic BPMN Service API

Ad Hoc Sub-process Example


```
Execution execution = runtimeService.createExecutionQuery().activityId("adhocSubProcess").singleResult();
assertNotNull(execution);

List<FlowNode> enabledActivities = runtimeService.getEnabledActivitiesFromAdhocSubProcess(execution.getId());
assertEquals(4, enabledActivities.size());

runtimeService.executeActivityInAdhocSubProcess(execution.getId(), enabledActivities.get(0).getId());
```

Dynamic Process Support Wrap Up

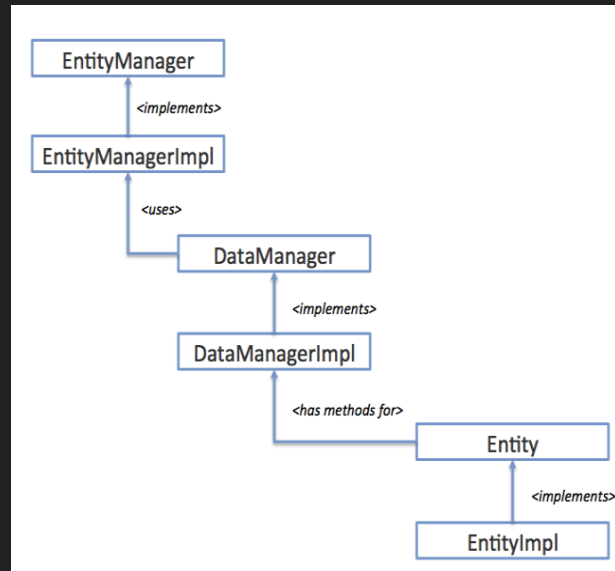These are new, convenient, and powerful features

Best Practices will emerge

Activiti v6: Pluggable Persistence

Scenario	Capabilities, Description
Cloud Resiliency & Performance	Pluggable Persistence

Pluggable Persistence Architecture Summary

- Goals
  - Data objects (the entity) should be pluggable
    - (eg jpa impl uses annotations, nosql could store data in different layout)
  - Data services (the entity managers) should be pluggable

See TaskEntityImpl

Demo

User Forms, Improved Lifecycle Management, and DMN

Getting from Activiti 5.x to 6.0

Backwards compatibility

- API

- DB Schema

- Process Definitions

- Java Delegates

- Integration with other frameworks (Spring, Camel, …)
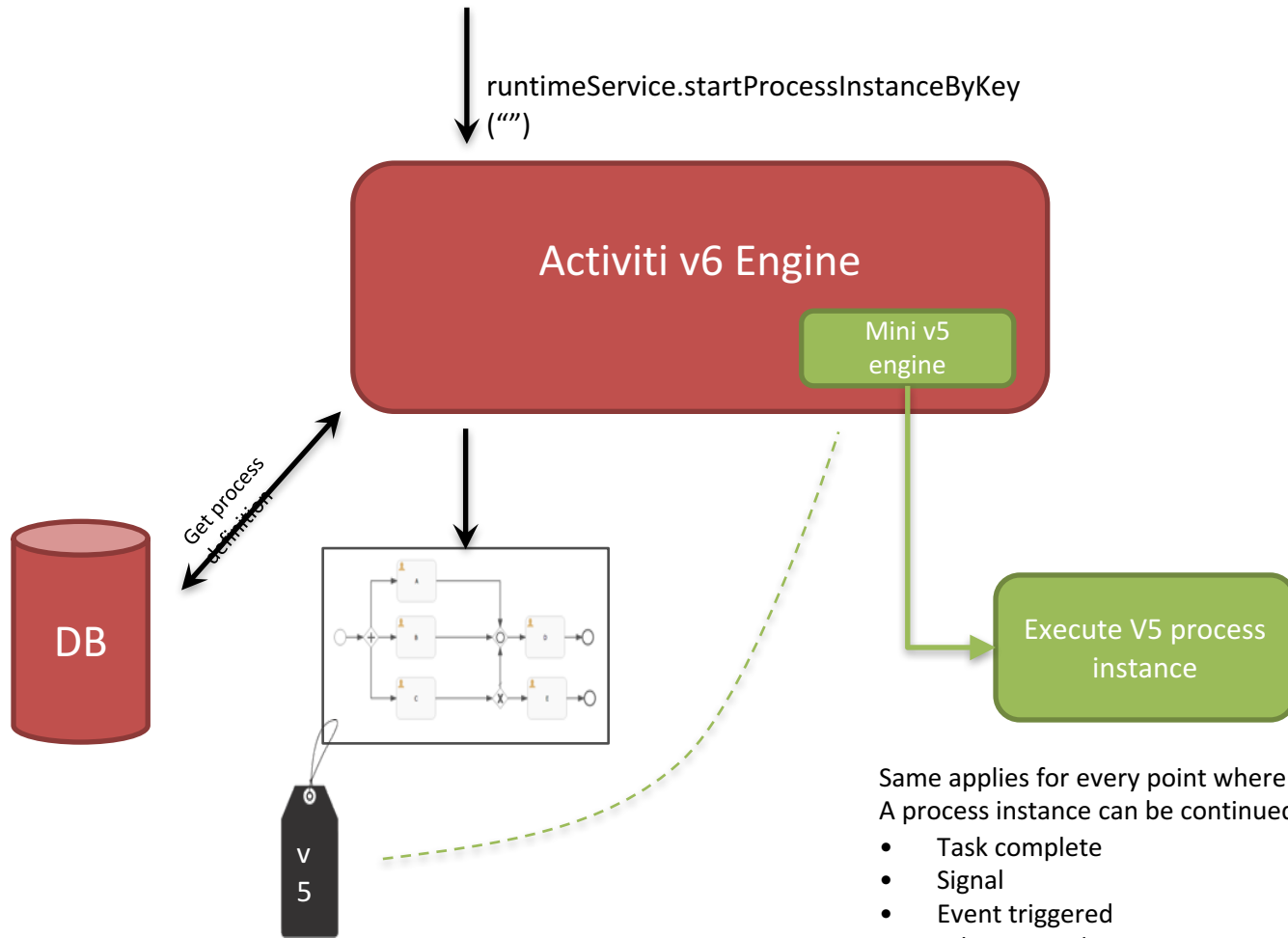
- Embeddability

- Concepts

Getting from Activiti 5.x to 6.0

Not backwards compatible

- Core changes are in org.activiti.impl

- Job Executor

- Minor stuff that is quickly migrated:

  - Method signature changed for JavaDelegate/ActivityBehaviour

    - 'throws Exception' is gone

  - signal() is now called trigger()

  - ActivityBehaviours that use PVM datastructures/methods

Getting from Activiti 5.x to 6.0

- The upgrade of 5.x.x → 6.0.0 is like any regular Activiti update

- Drop jar, auto upgrade db (or execute DDL changes)

- During that upgrade, existing deployments are tagged with 'V5'

runtimeService.startProcessInstanceByKey
("")

Activiti v6 Engine

Mini v5 engine

Get process definition

DB

V 5

Execute V5 process instance

Same applies for every point where
A process instance can be continued:

- Task complete
- Signal
- Event triggered
- Job executed
- …

Getting from Activiti 5.x to 6.0

Migration of the process definition to v6

- Backwards compatibility is enabled by having 'activiti5-compatibility' dependency on classpath

- Old process instances keep running against v5 'mini-engine'

  - Runtime execution is different from v6

- Running process definition in v6 is

  - Migrating your custom logic

  - Running your tests

  - Deploying a new version of the process definition

Activiti v6 Summary

Scenario	Capabilities, Description
Ad hoc and Dynamic Process Support	Dynamic Service, Adhoc Subprocess
Cloud Resiliency & Performance	Pluggable Persistence
Design End User Forms w/Process	User Forms
Standards-based Rule Modeling	DMN Modeling and Execution (new to v6)
Continuous Delivery	Model Key (Process, Forms, Decisions, Apps)

….and… it sports a new look and feel!

So when is Activiti v6 officially available?

Release Candidate: Fri Apr 28 2017

GA planned 1 week later

The Future

Activiti

- Improved Microservices

- Updated Decision Service

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Activiti powering Alfresco Content

- Move to Activiti 6

- Workflow as a Service

- Expanded possibilities: forms, etc.

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Activiti & Application Development Framework

- We're consolidating Activiti / APS APIs

- Activiti and ADF teams are collaborating

- This paves the way for ADF and Activiti

Get involved?

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