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Workflow 101

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About Us



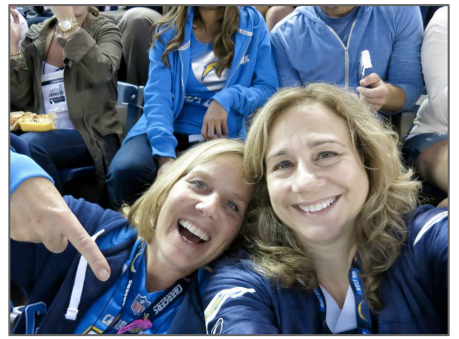
Frankie Thompson is the Lead Developer of ServiceNow Workflow

ServiceNow since 2010



Michelle Corona is the Course Owner of Advanced System Administration and Domain Separation, Kryterion Webassessor Site Administrator, Owner of Certified System Administrator exam

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Agenda



- Define ServiceNow Workflow and its Purpose
- Take a Tour of the Workflow Editor
- Make a Workflow! Complete Labs that Introduce you to the Workflow UI Features
- Learn the Difference Between a Workflow Version and Workflow Context

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What is ServiceNow Workflow?

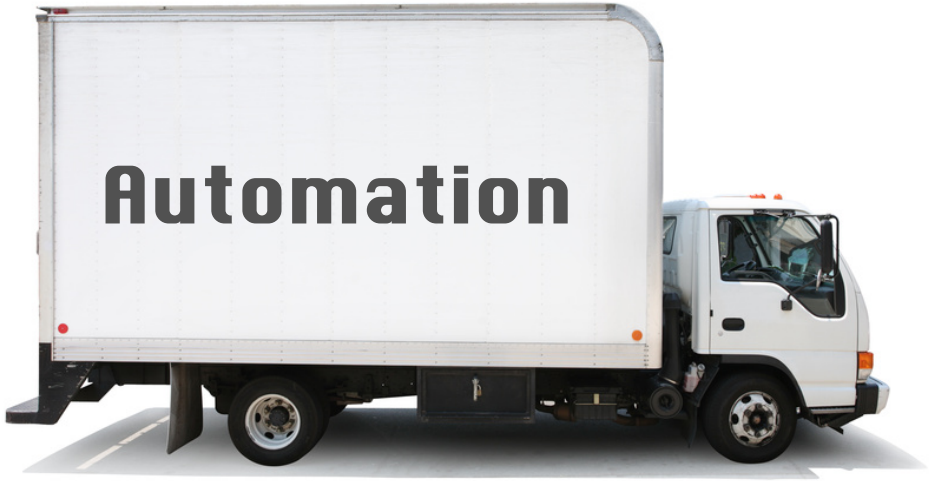
Part of the ServiceNow platform that automates multi-step processes

- A **Workflow** is defined as a series of Activities that follow execution paths
- An **Activity** is a set of instructions that carry out (automate) a specific piece of work
  - Work examples include executing a script, logging, approvals, record processing, and using timers
- A Workflow uses conditions and a table association to determine when to start, execute, continue, and end

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Benefits of Workflows

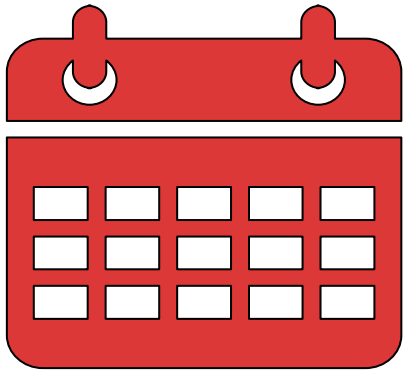
- Automation
  - Standardization of processes
  - Workflows modularize processes
  - Extensible
- Expansion of Self-Service Offerings
- Feedback to Stakeholders in a timely fashion (Stages, Notifications)



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Where are Workflows Used?

Service Catalog Item Request



Routine Change

Comprehensive Change

Emergency Change

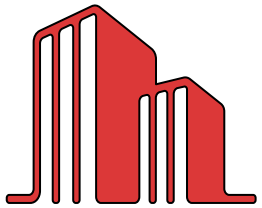


Contract Approval



SLAs

Procurement Processes





Grant Role to User

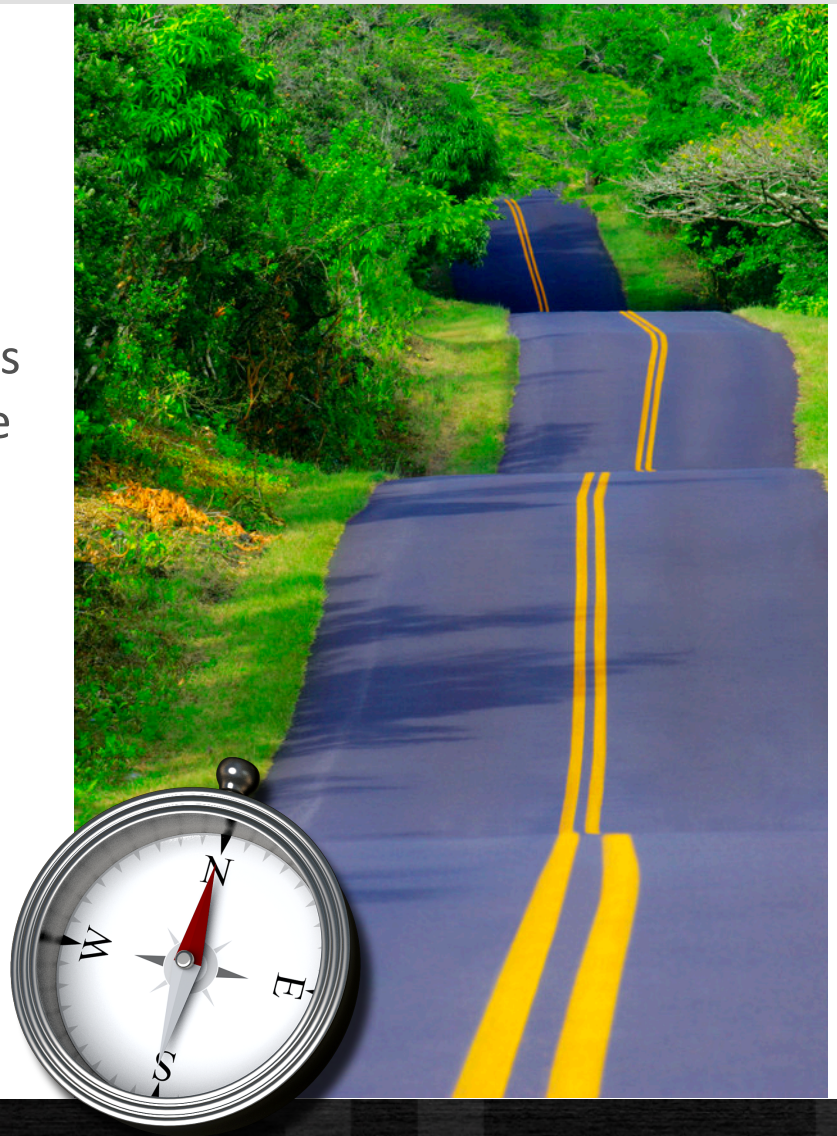
Delegate Roles to Group Members

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Workflow?

Use a Workflow

- Automate a repeatable process
- When a standard response is needed for every table Glide Record transaction insert, update, delete, and create



Do Not Use a Workflow

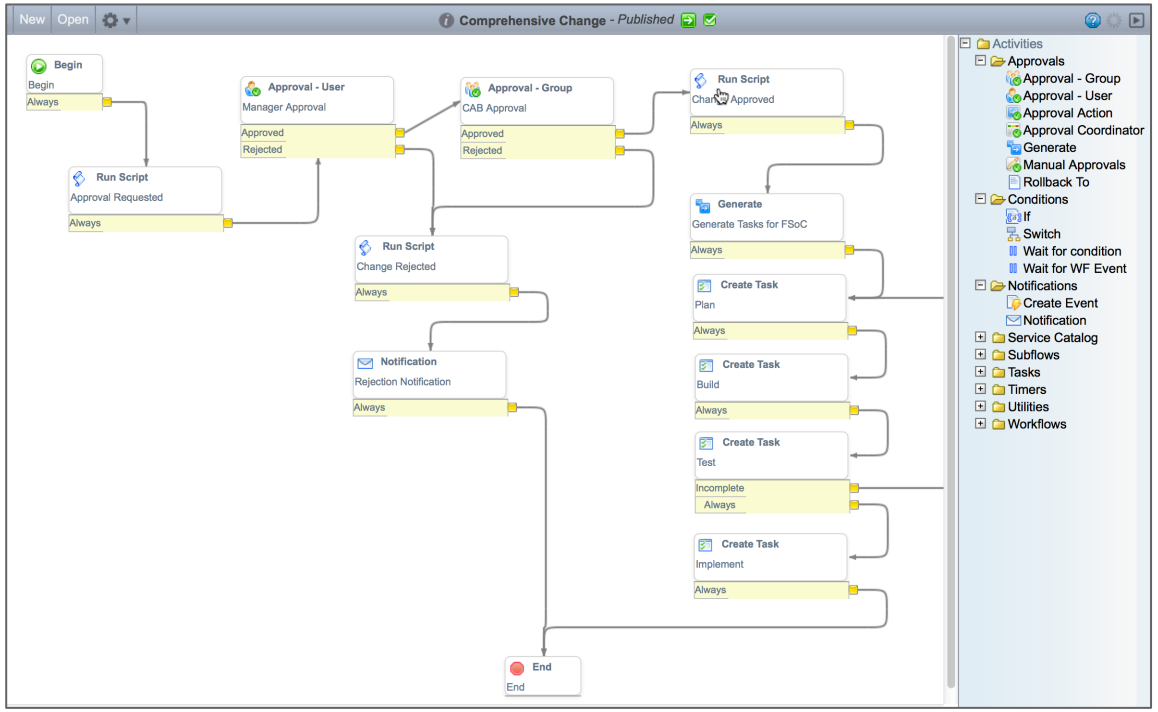
- When doing a simple discrete record change
- If the process being defined does not have a standardized responses

  Examples
  - New processes that are being refined
  - Automate getting a document through a review process but not automate the document editing and review (too much variation)

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Workflow Components

The **Workflow Editor** is the part of the ServiceNow UI that process owners and designers use to design workflows that automate business processes



The **Workflow Engine** is part of the Glide Script Engine and is invoked with the insert, update, delete or cancel of a Glide record

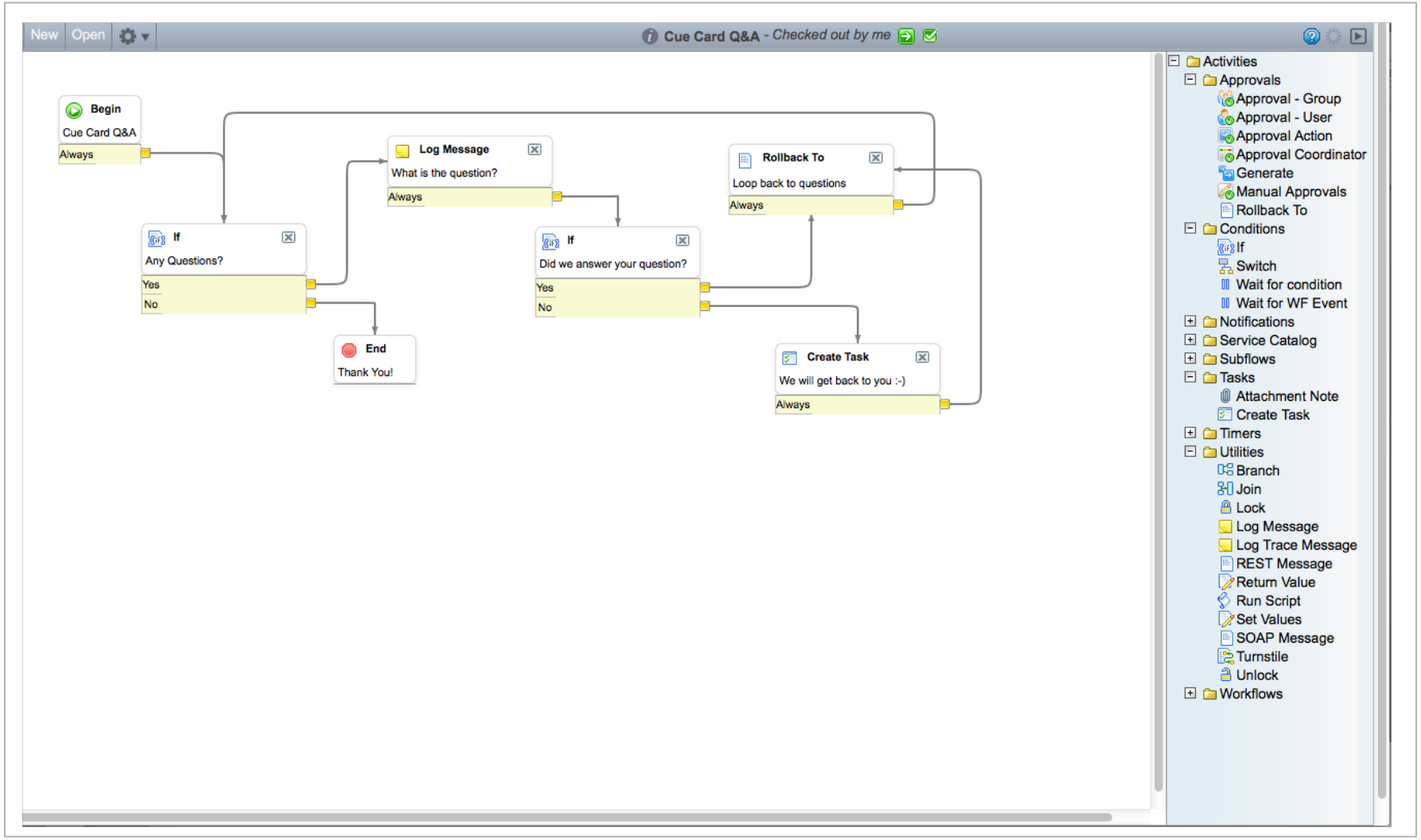
It runs in a predefined order relative to Business Rules and database operations

Each workflow can be designed to run based on conditions

- Similar to how Business Rules determine whether to run

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Demo Tour



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Lab 1

- Lab 1 Workflow Overview
  - Find Help on the Workflow Canvas
  - Reveal/Hide the Workflow Activity Tree
  - Learn about Activities, Connections, Transitions, and Lines
  - Create your first Workflow
  - Learn how Workflows associate with tables
  - Common QUESTIONS

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Questions?

Raise your hand to get Guru help



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Lab 1 Review Common QUESTIONS

Do you know how to….

Connect Activities? page 14

Redraw lines?

Gear > Expand Activities

Delete an Activity? 

Copy an Activity?

Right-click > Copy Activity

Make a custom Activity? page 15

Delete a transition? page 15

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Lab 2

- Lab 2 Workflow Versioning
  - Workflow Version Defined
  - Create an Update Set
  - Publish a Workflow

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Lab Time

Questions?

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Lab 2 States of a Workflow

- **Published**

  The Workflow is available to all users and Glide Records that meet the conditions of the workflow

- **Unpublished**

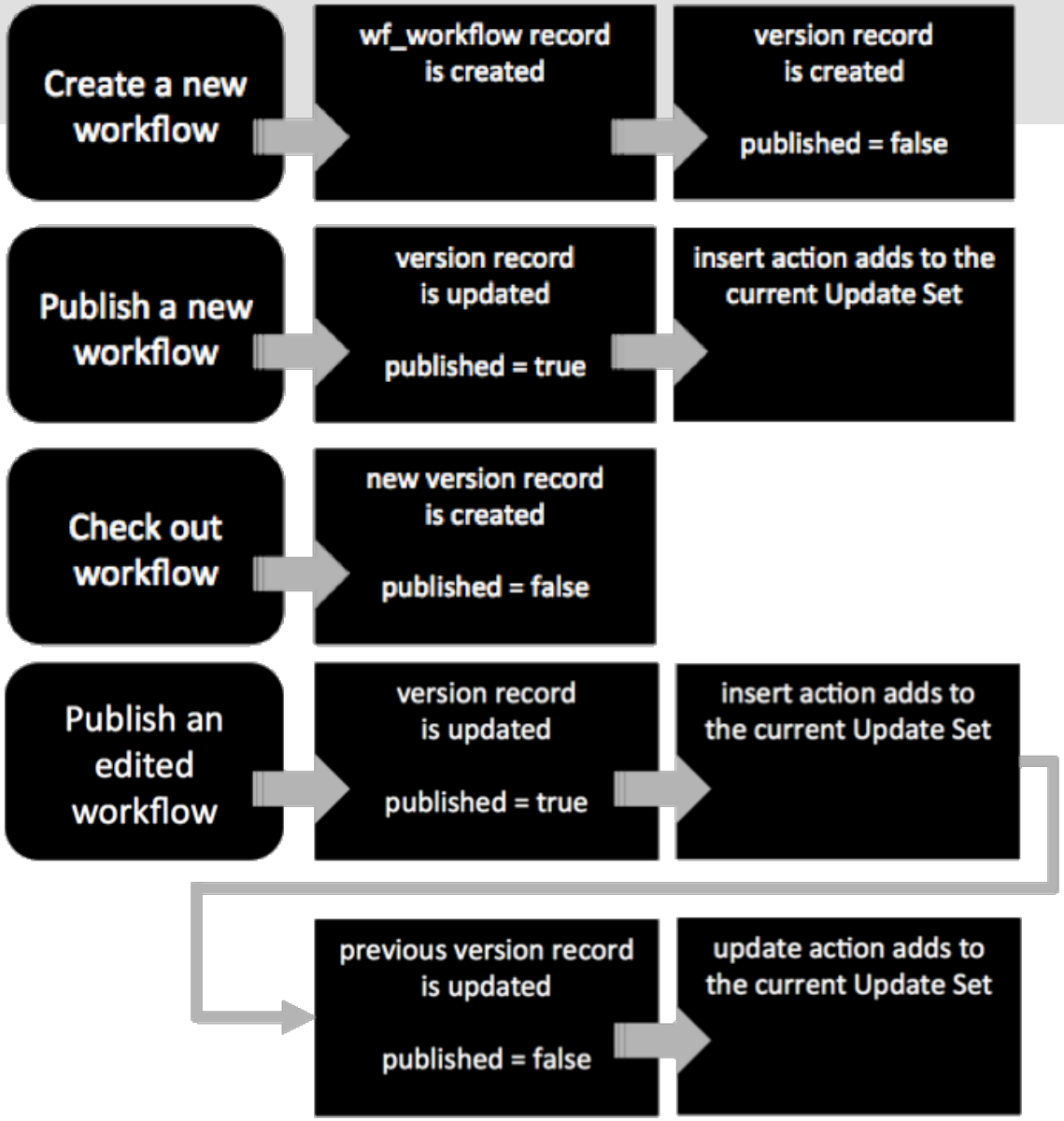
  The Workflow is no longer available for new Glide Records, but may be required for already running records

- **Checkout**

  The Workflow is available to run only for the user who has it checked out

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Workflow Version Life Cycle



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Lab Time

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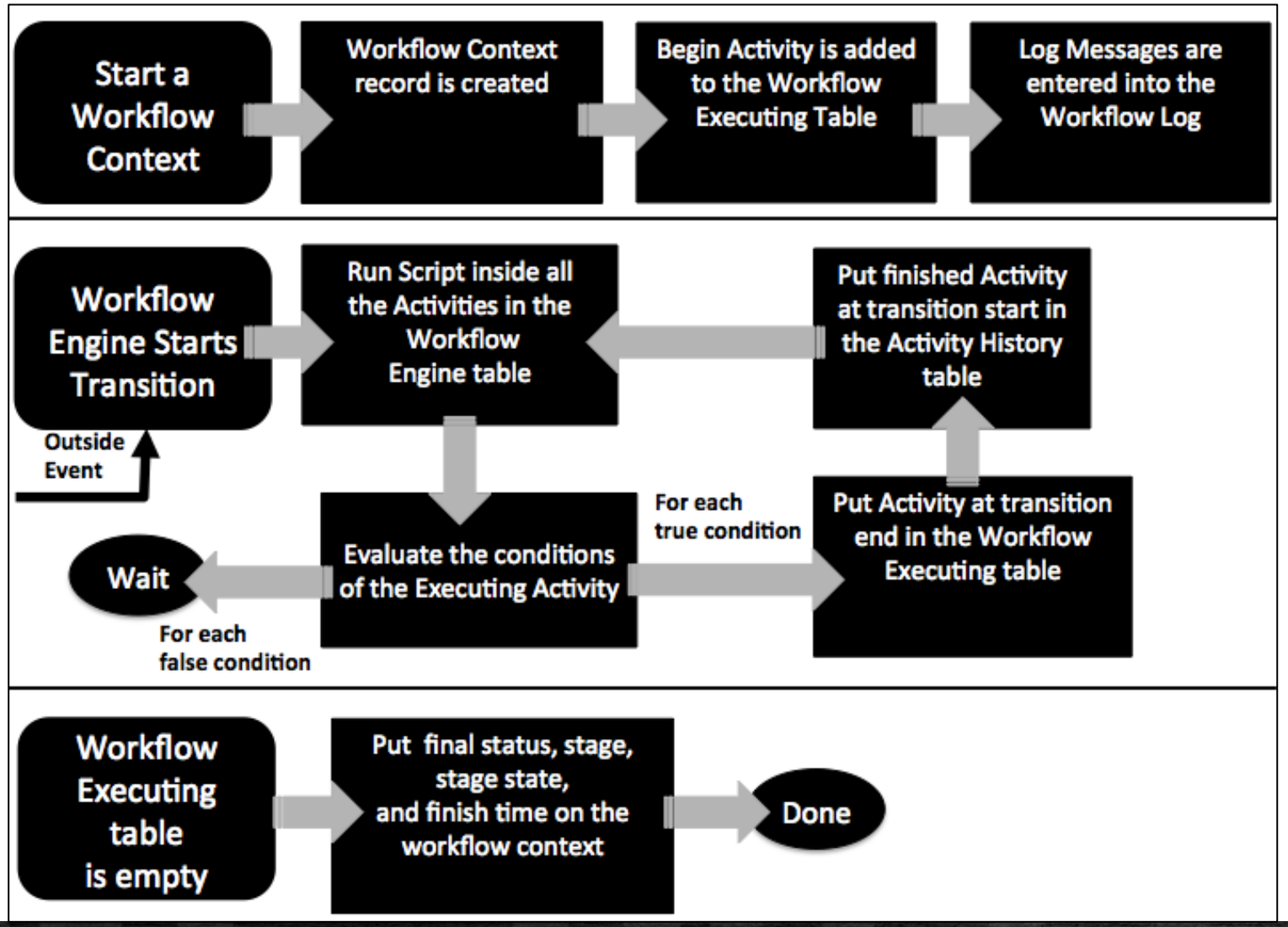
Lab 2 Review

- Workflow Versions have 3 states: Published, Unpublished, and Checked out
- Update Sets move Published Workflows between instances
- **Workflow > Workflow Versions** list all active Workflows

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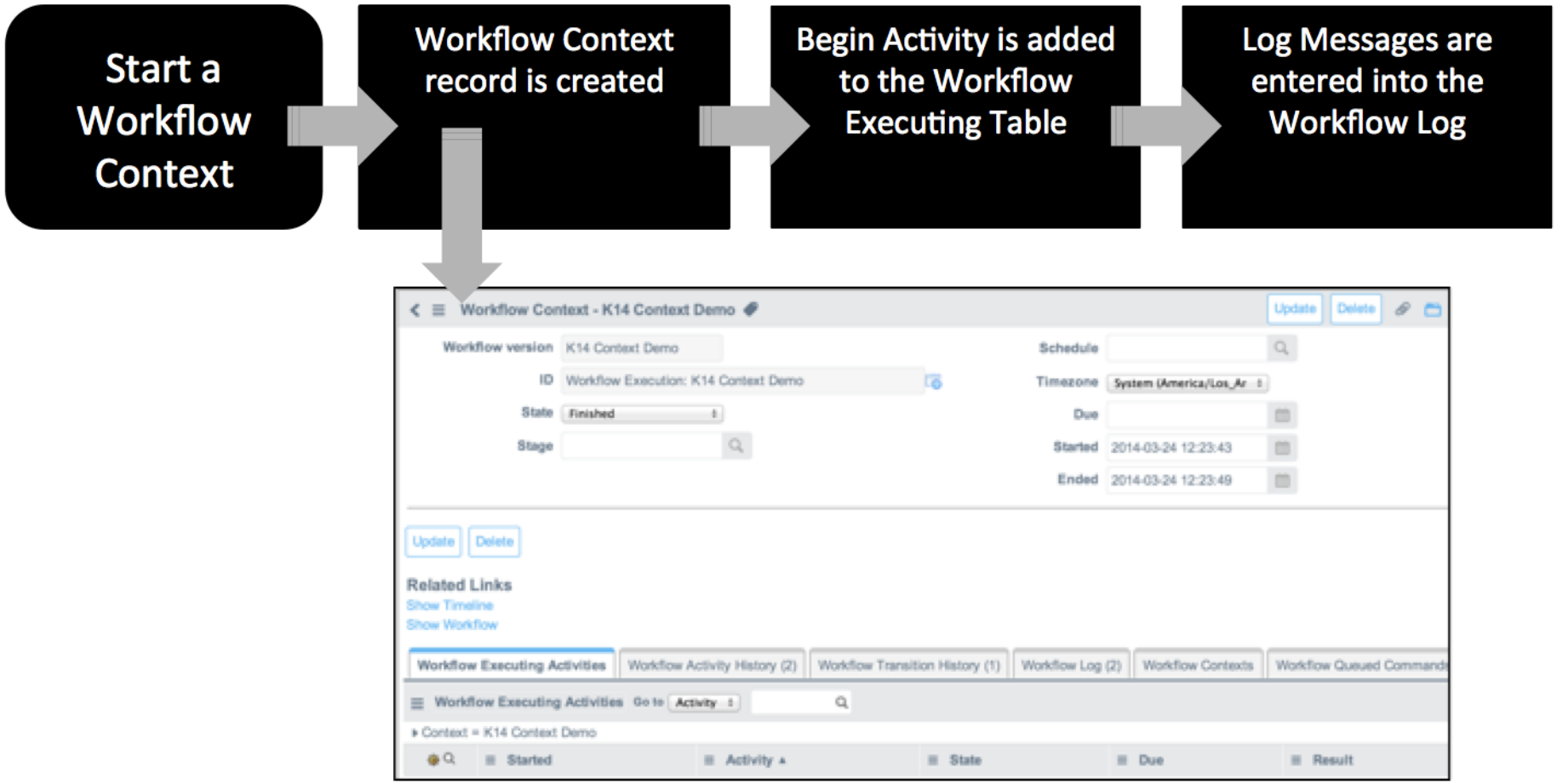
Lab 3 What does it Mean to Run a Workflow?

- Create a Context
- Run Transitions
- Complete and disposition the context



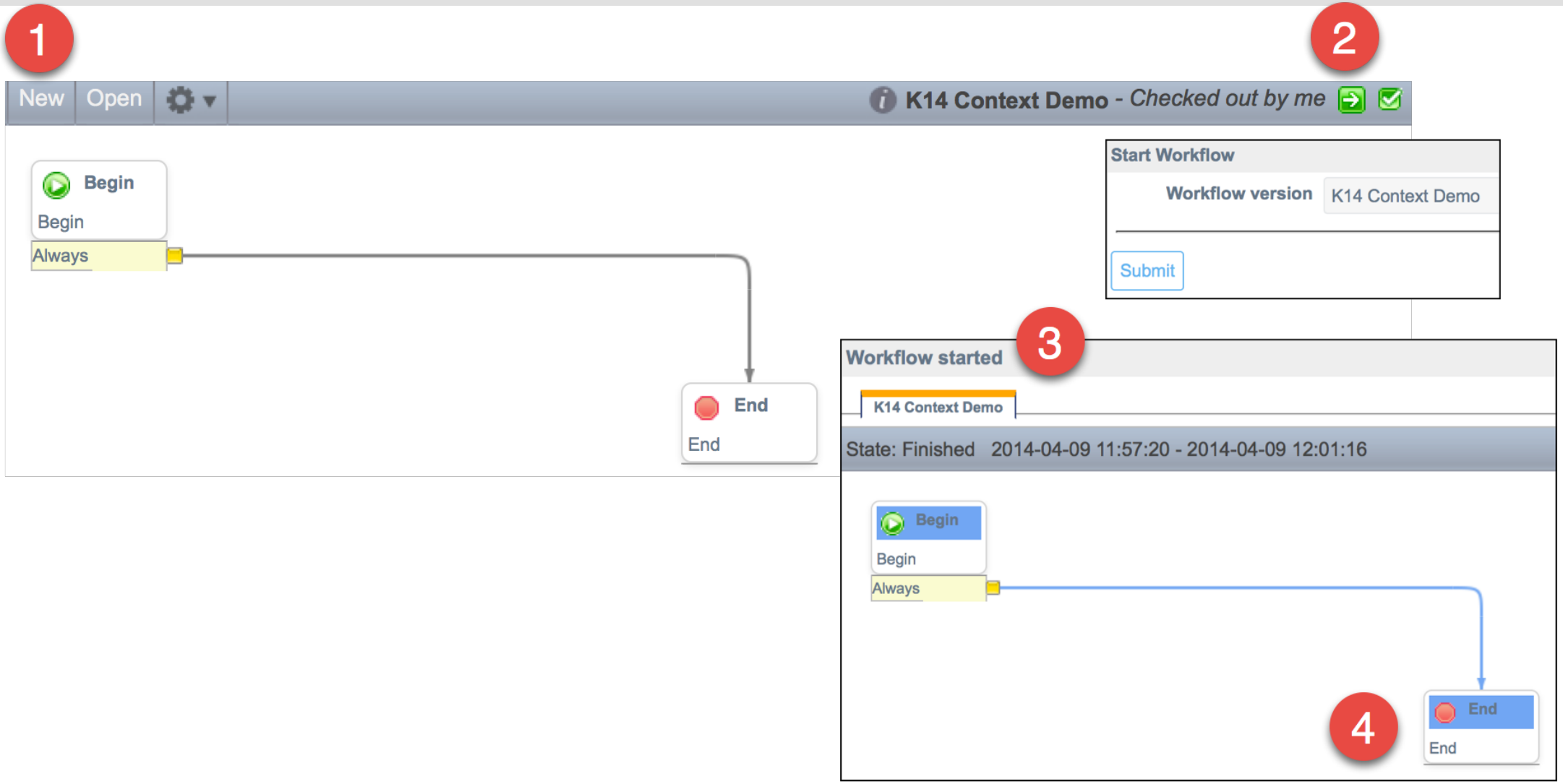
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The “Evidence” of a Workflow Running is the Workflow Context



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Demo Create a Workflow Context



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Lab Time

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Lab 3 Review

- A Workflow Context is a workflow that is executing in the Workflow Engine
- Each Context executes a Workflow Version
- When executing, the Workflow Engine checks the Activity's conditions:
  - When an Activity finishes, the Context follows transitions to the next Activity (for all true conditions)
  - When an Activity is not finished, the Workflow Engine waits for an Event (Approval, Task Complete)
- Context Activities are color-coded



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Lab 4

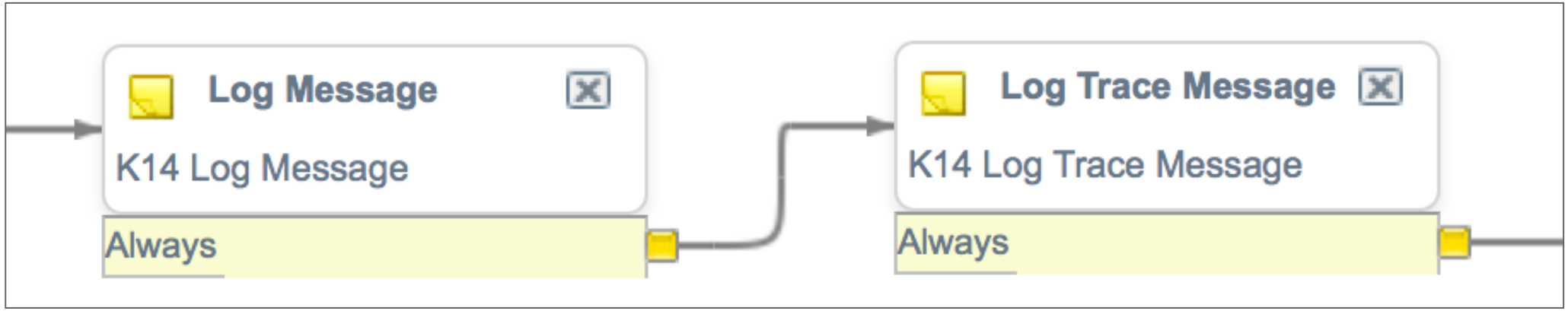
- Workflow Logging
  - Log Message Activity
  - Review Context
  - Review Logging Output
  - Examine Workflow Properties





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Lab 4 Workflow Logging



- Log Message Activity

Writes a message to the Workflow Log

"This is a message in the Log Message Activity"

Message must be a string

- Log Trace Activity

Writes a message to the Workflow Log that includes the Activity name, event that invoked the workflow, and the table of the Current Record

Message can be a string or a JavaScript expressions that evaluates to a string

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Lab 4 Review

- Log Message and Log Trace Message Activities write to the Workflow Log
- Level of verbosity in the Workflow Log is configurable by properties

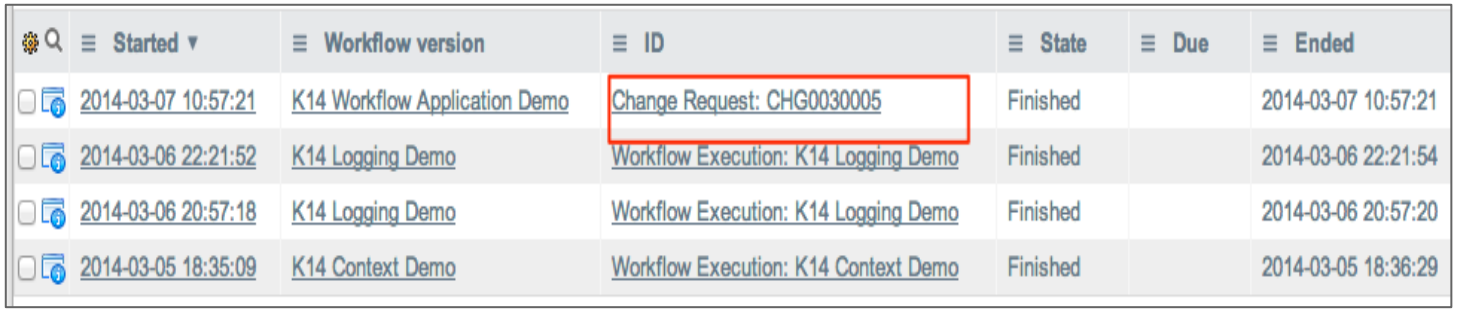
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Lab 5 Workflows in Applications

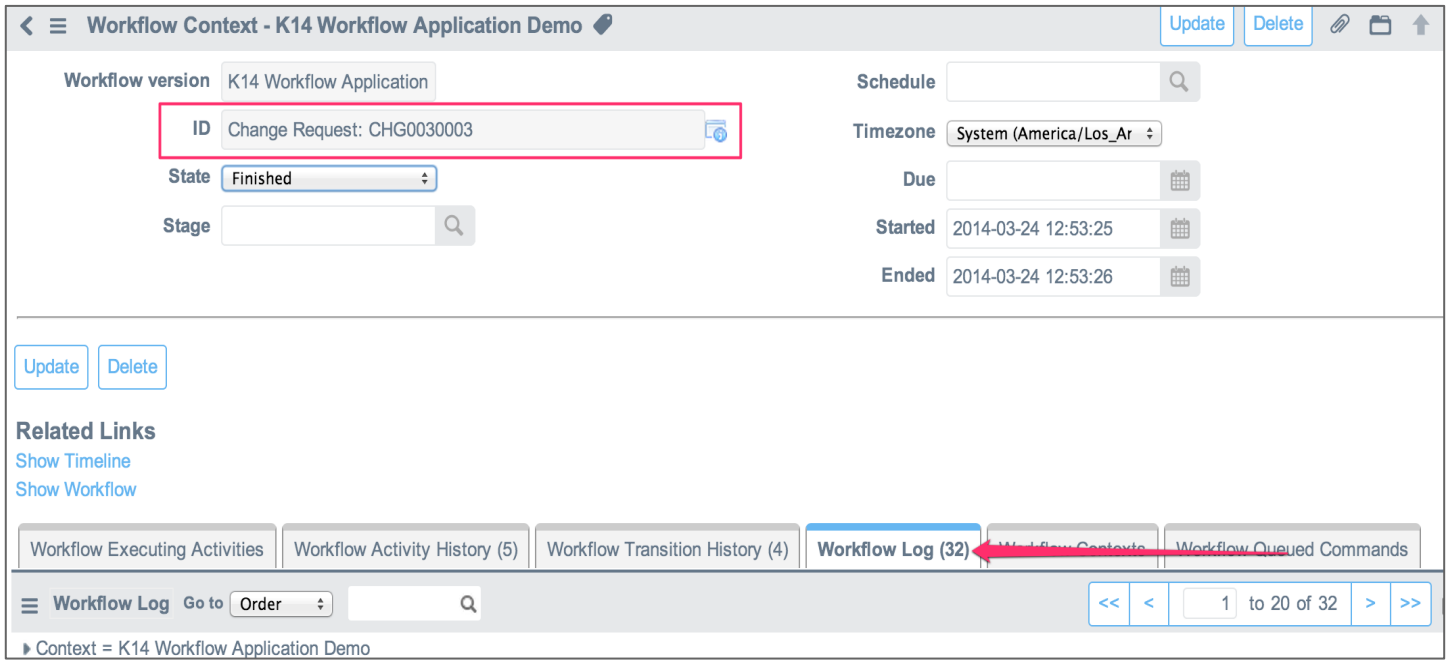
- In Automation, the Workflow needs to start independently
- Glide Engine knows 4 Events: CRUD
  - Workflows “run to rest” until conditions are met or an Outside Event
  - Outside Event is typically the insert of a GlideRecord, but can also be clicking the Play button, a State change, user assignment

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Demo of Change Request



Started	Workflow version	ID	State	Due	Ended
2014-03-07 10:57:21	K14 Workflow Application Demo	Change Request: CHG0030005	Finished		2014-03-07 10:57:21
2014-03-06 22:21:52	K14 Logging Demo	Workflow Execution: K14 Logging Demo	Finished		2014-03-06 22:21:54
2014-03-06 20:57:18	K14 Logging Demo	Workflow Execution: K14 Logging Demo	Finished		2014-03-06 20:57:20
2014-03-05 18:35:09	K14 Context Demo	Workflow Execution: K14 Context Demo	Finished		2014-03-05 18:36:29



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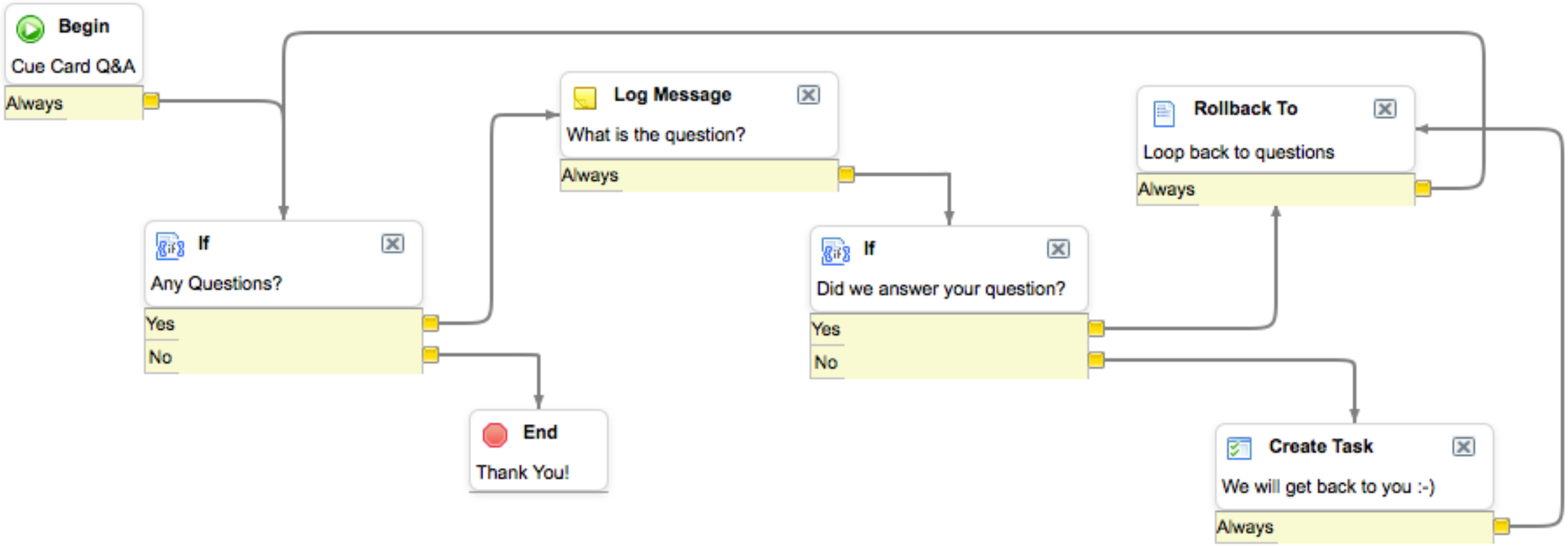
Lab 5 Review



- When there is a GlideRecord associated with a Workflow Context, the ID of the record is visible in the Workflow Context
- Included in Workflow Log Messages

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Cue Card Q&A



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Top Takeaways

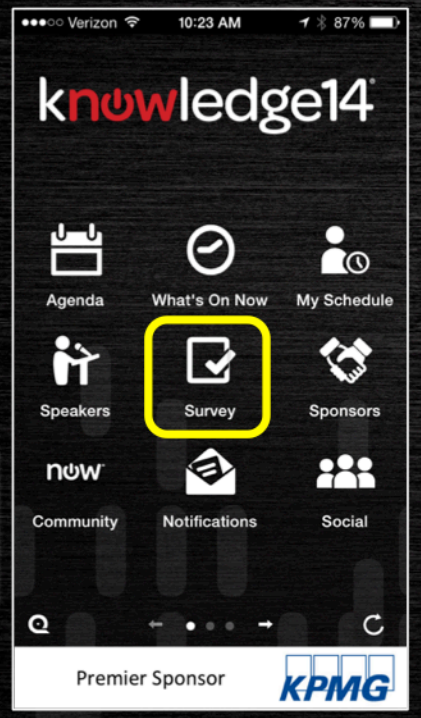
1. Workflow Editor and the Workflow Editor comprise ServiceNow Workflow

2. Workflow Editor facilitates the creation, checkout, editing, and publishing of workflows

3. A Published Workflow Version spawns many Contexts, each with its own logging, GlideRecord association if any, and its Execution History

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