knowledge16

Experience the Service Revolution



Scripting Automation in Service Catalog Items and Workflows

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Agenda

Introduction

Define IT Automation and Orchestration

Orchestration - Where Used?

Orchestration Videos

- VM Ware
- Adding user to active directory

Benefits of Automation

University of Texas Rio Grande - Grows with ITSM Automation process

- IT Service Request, Access Request, Something Broken – Workflows, Forms, Scripts
- File Share Request Orchestration - Form, Workflow

Questions or Comments

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What is IT Automation and Orchestration?

- IT Automation is the ability to increase productivity, and/or quality beyond that possible with current human labor levels so as to realize economies of scale, and/or realize predictable quality levels.
- Orchestration is the ability to define, build, orchestrate, manage and report on workflows that support system and network operational processes. An orchestration process can cross all management disciplines and interact with all types of infrastructure elements, such as applications, databases and hardware.

What is the difference between ServiceNow Orchestration and ServiceNow Workflow?

- Orchestration uses workflow to automate processes to external systems.



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ServiceNow Orchestration? Where?

- Examples where orchestration can be used?
  - Password resets
  - Rebooting and restarting servers
  - Facilities request
  - Automated outage remediation
  - On-Call Scheduling
  - Event Management and Automated Remediation
  - Active Directory Management
  - Network Automation
  - Any Power Shell, SSH, Web process
  - VM Lifecycle Management
  - Software Distribution
  - Shared Services Request and many more to come….



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Orchestration Example Videos

https://youtu.be/1xAHh5W_YXg - How Orchestration works in VM Ware

https://youtu.be/LCWKLgGCHo0 - How to add user to Active Directory

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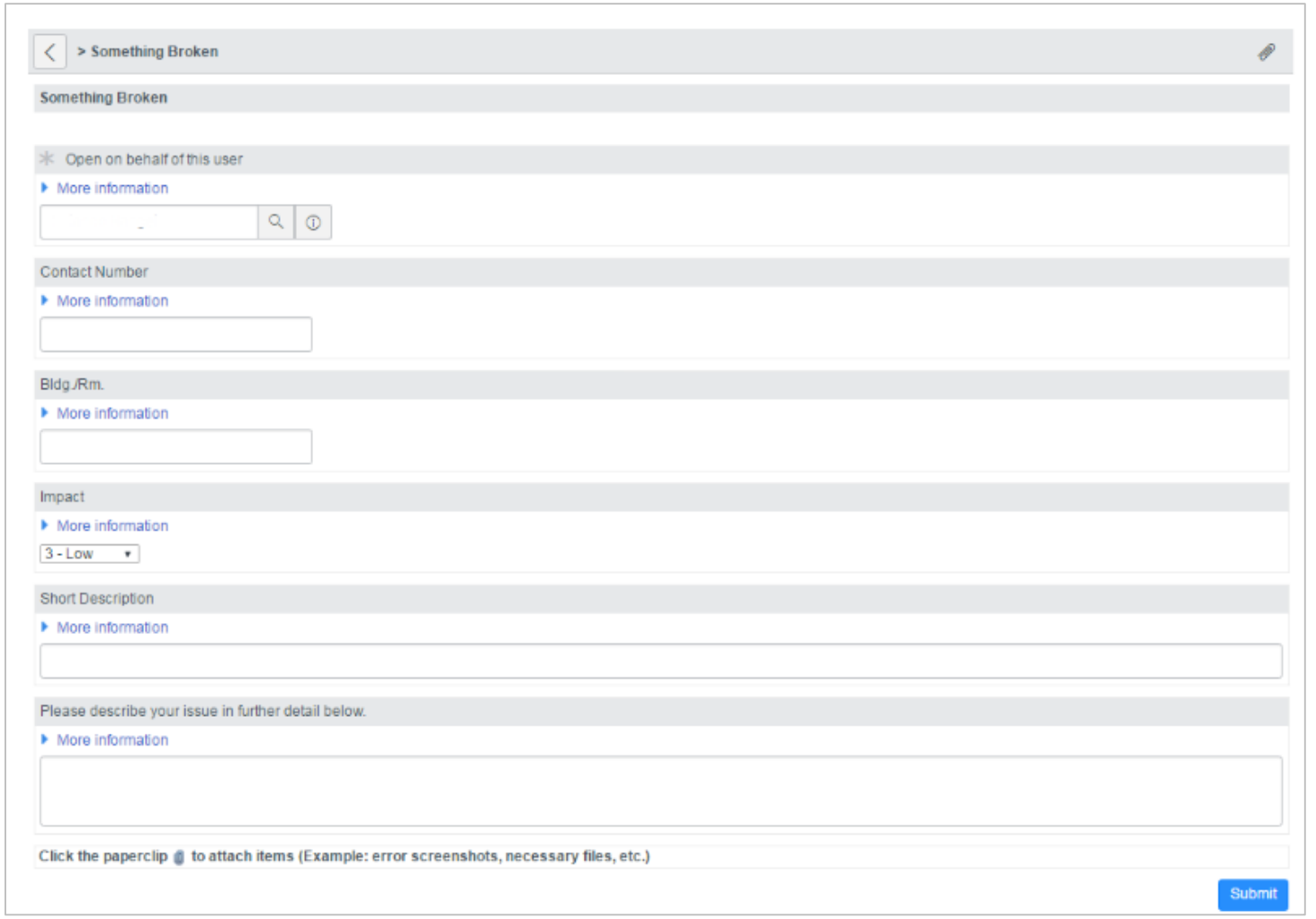
Why is Automation Important?

- Speed Delivery of Process
  - Usually processes takes weeks or even months, with orchestration its done in minutes. Creating/Requesting multiple request items in seconds get fulfilled automatically in couple of minutes.
- Security Risks
  - Standard credential access, access will be granted the same way every time. You can reduce the amount of privileged accounts in system servers.
- Documentation
  - When automating, a documentation process needs to be captured. Anyone should be able to execute, no need to wait for privileged account users.
- Money Saver
  - Allowing employees to focus on work that matters, and not focus on minimal tasks. (Password Resets)
  - Not getting rid of people, but shifting duties. :)

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Something Broken Incident

- Something Broken Form
  - Record Producer
- Incident Management



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IT Service Request

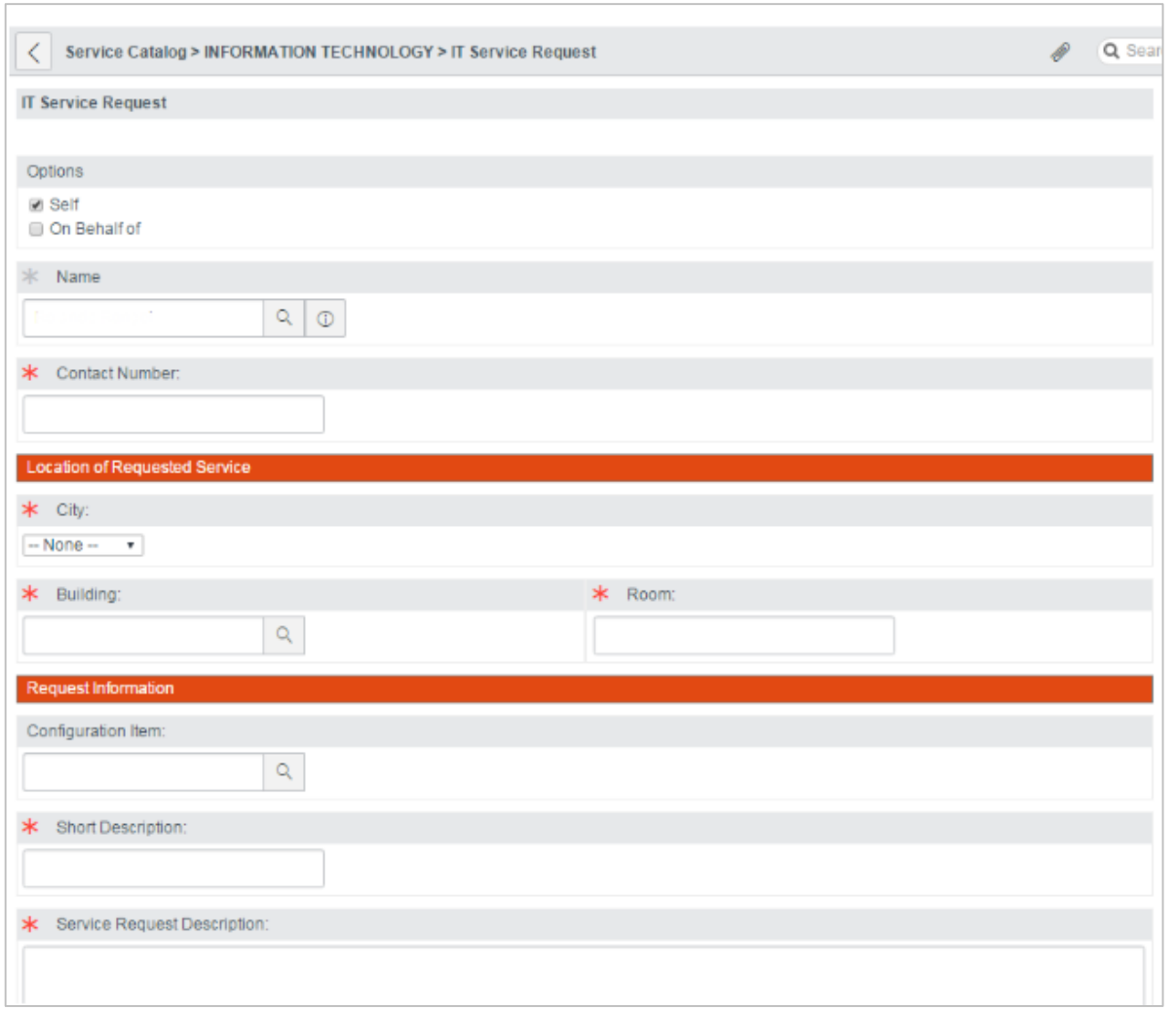
IT Service Request Variables/Form

Catalog Item - IT Service Request

Cat item = IT Service Request

Name	Type	Question
Request_Type	Select Box	Request Type:
Subject2	Single Line Text	Subject:
contact_number	Single Line Text	Contact Number:
request_location	Label	Location of Requested Service
campus	Select Box	City:
location_single_line	Container Start	
inner_container	Container Start	
building	Reference	Building:
formatter	Container End	
room	Single Line Text	Room:
formatter2	Container End	
desc_label	Label	Request Information
var_ci	Reference	Configuration Item:
Subject	Single Line Text	Short Description:
Description	Multi Line Text	Service Request Description:

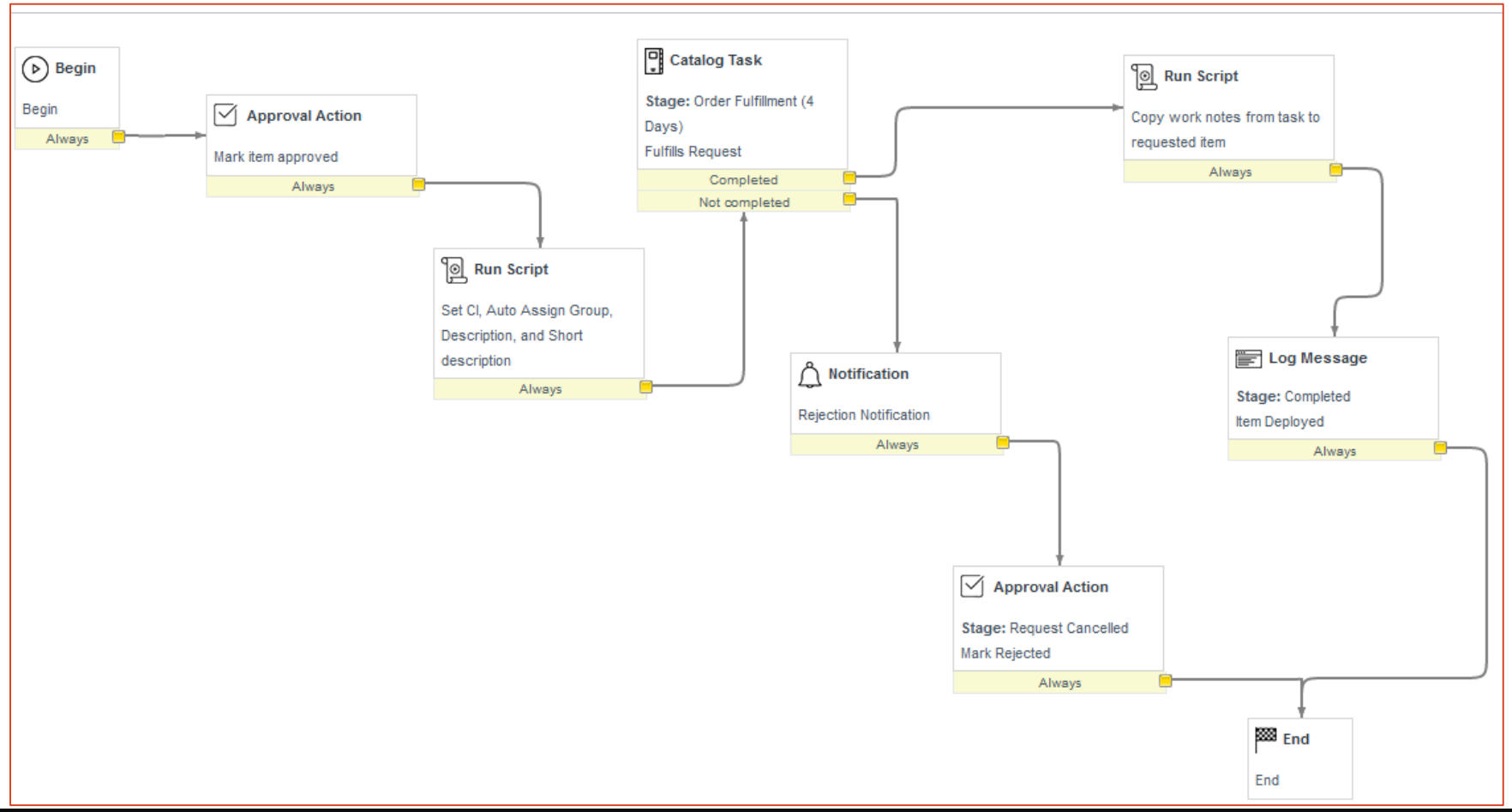
Actions on selected rows...



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IT Service Request Workflow

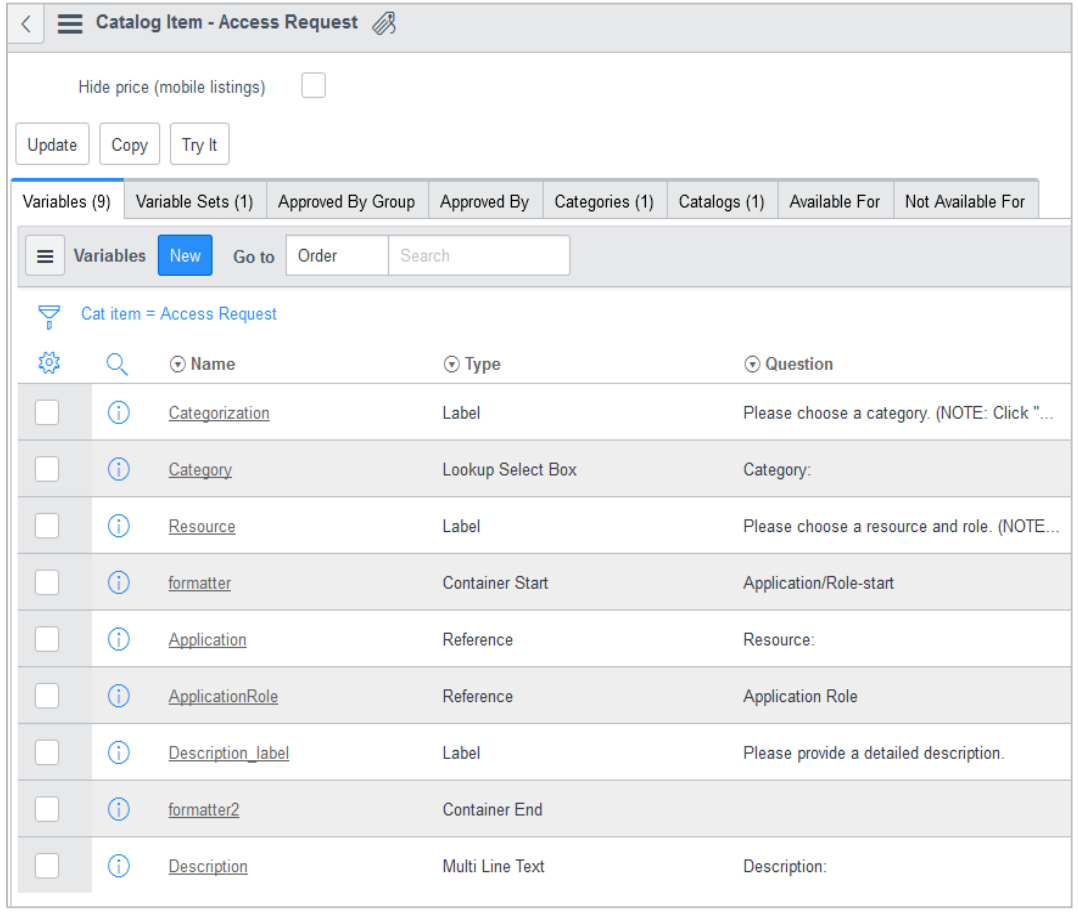
Automation IT Service Request

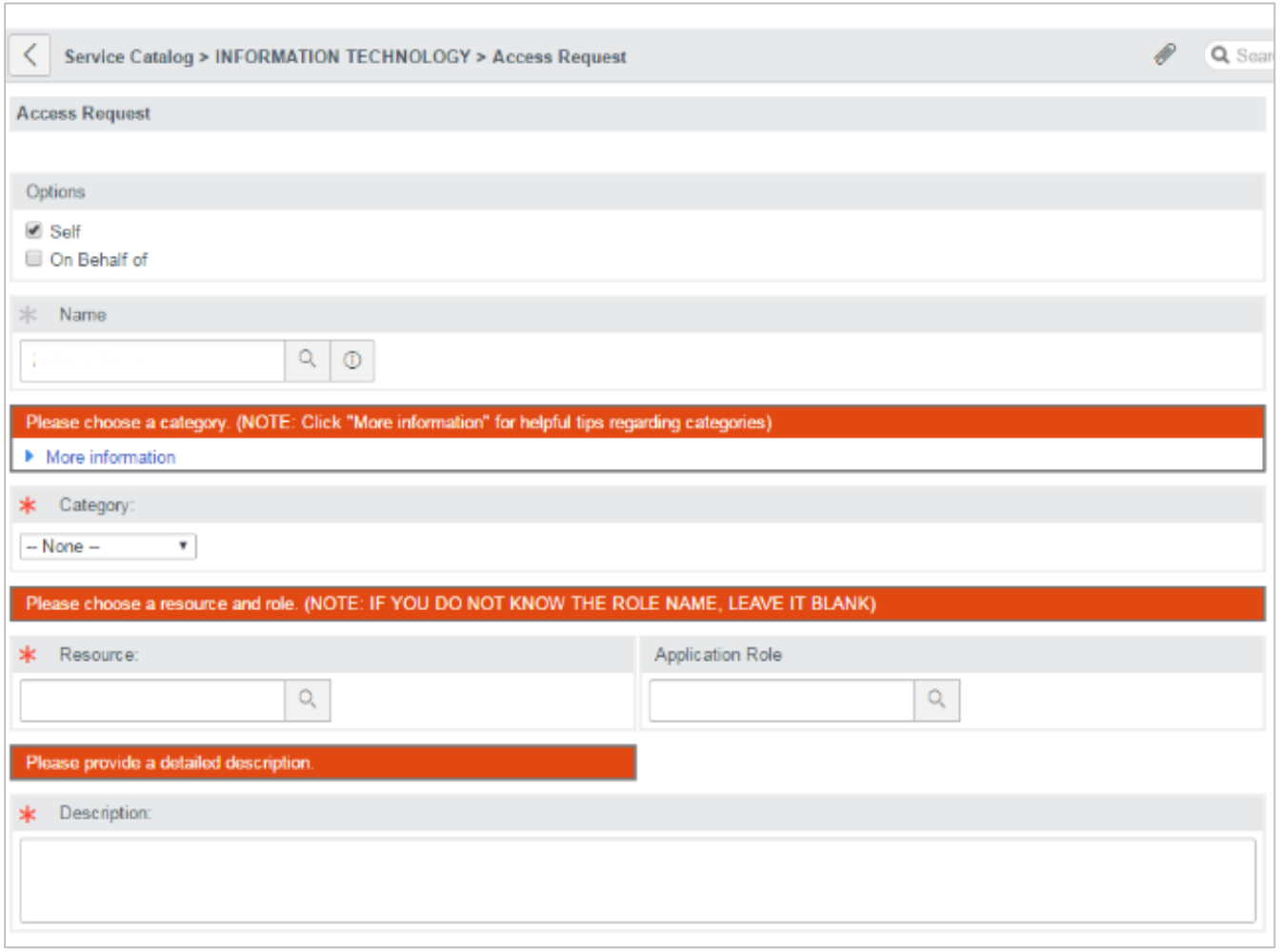


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Access Request

Access Request Variables/Form

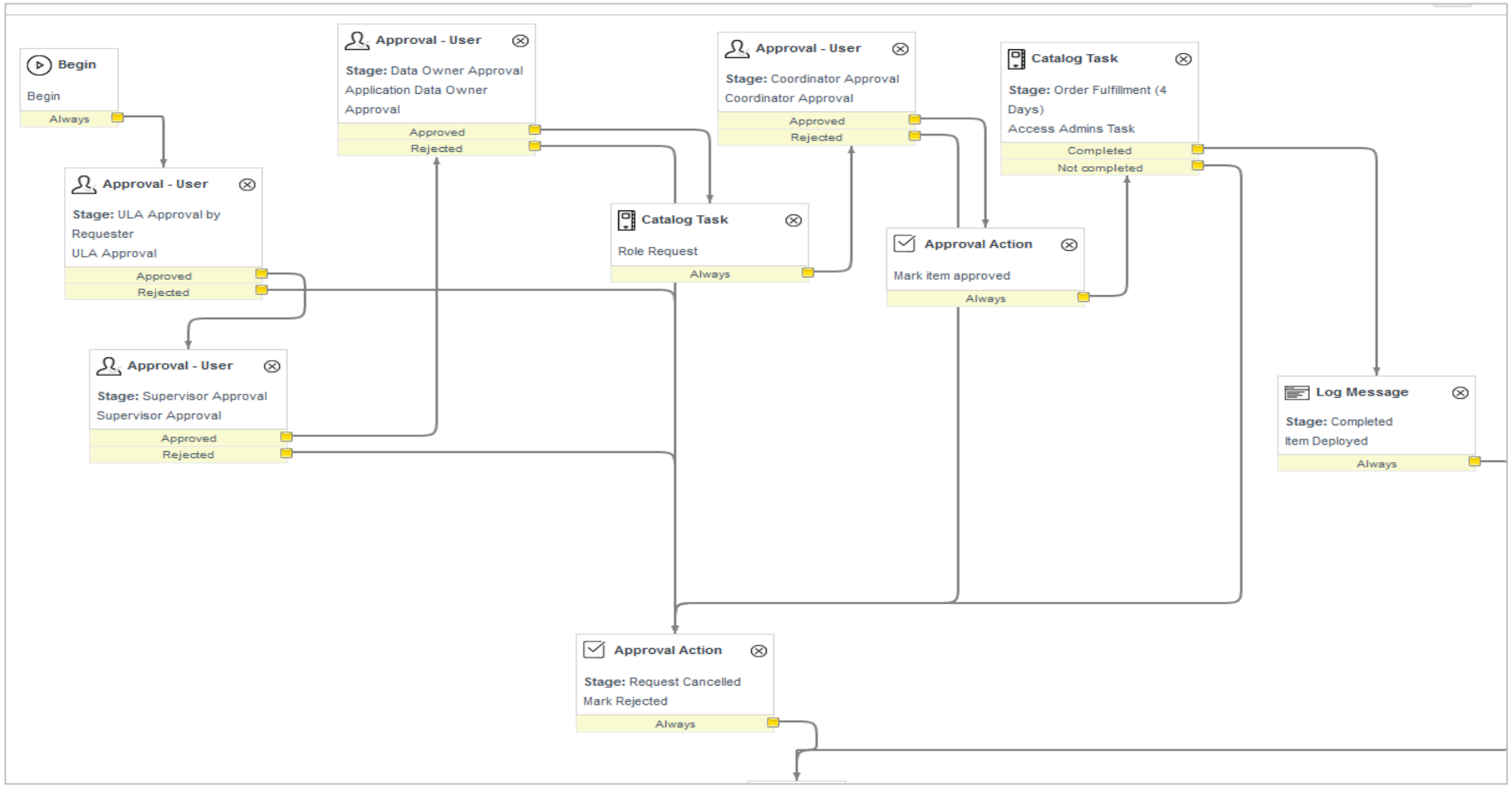




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Access Request Workflow

Automation Access Request



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Access Request Scripts

- Access Request Data Owner Approval - Left Side
- Access Request Coordinator - Right Side
  - Several owners for one resource application and need one approval from one owner
  - Several Coordinators for one resource application and need one approval from one coordinator

Access Request Data owner approval

```
// Set the variable 'answer' to a comma-separated list of user ids ar
approvers.
//
// For example:
//       answer = [];
//       answer.push('id1');
//       answer.push('id2');

/*
   var opt_list = new GlideRecord('sc_item_option_mtom');
   opt_list.addQuery('request_item', current.sys_id);
   opt_list.addQuery('sc_item_option.order','7');
   opt_list.query();
   opt_list.next();

   var app1 = opt_list.sc_item_option.value;
 */

   var app1 = current.variables.Application;

   var app_group_members = new GlideRecord('u_application_categories'
   app_group_members.addQuery('u_application_name', app1);
   app_group_members.query();
   app_group_members.next();

   var owner1 = app_group_members.u_owner_1;
   var owner2 = app_group_members.u_owner_2;
   var owner3 = app_group_members.u_owner_3;
   var owner4 = app_group_members.u_owner_4;
   var owner5 = app_group_members.u_owner_5;
   var owner6 = app_group_members.u_owner_6;


   var answer1 = [];
   answer1.push(owner1);
   answer1.push(owner2);
   answer1.push(owner3);
   answer1.push(owner4);
   answer1.push(owner5);
   answer1.push(owner6);


   var arrayUtil = new ArrayUtil();
   var answer = [];
   answer = arrayUtil.unique(answer1);
```

Access Request Coordinator Approval

```
// Set the variable 'answer' to a comma-separated list of user ids and/or
user/group ids to add as approvers.
//
// For example:
//       answer = [];
//       answer.push('id1');
//       answer.push('id2');

/*

   var opt_list = new GlideRecord('sc_item_option_mtom');
   opt_list.addQuery('request_item', current.sys_id);
   opt_list.addQuery('sc_item_option.order','7');
   opt_list.query();
   opt_list.next();

   var app1 = opt_list.sc_item_option.value;
*/

   var app1 = current.variables.Application;

   var app_group_members = new GlideRecord('u_application_categories');
   app_group_members.addQuery('u_application_name', app1);
   app_group_members.query();
   app_group_members.next();


   var coord1 = app_group_members.u_coordinator_1;
   var coord2 = app_group_members.u_coordinator_2;

   var answer1 = [];

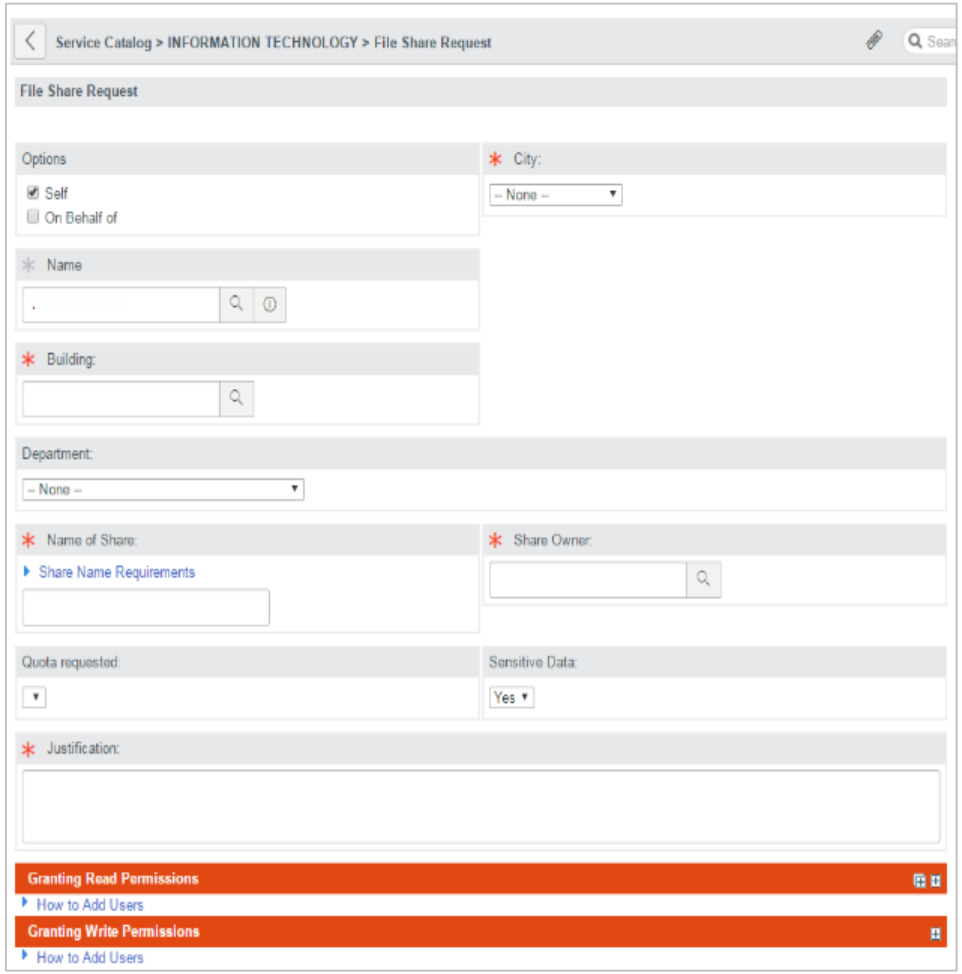
   answer1.push(coord1);
   answer1.push(coord2);

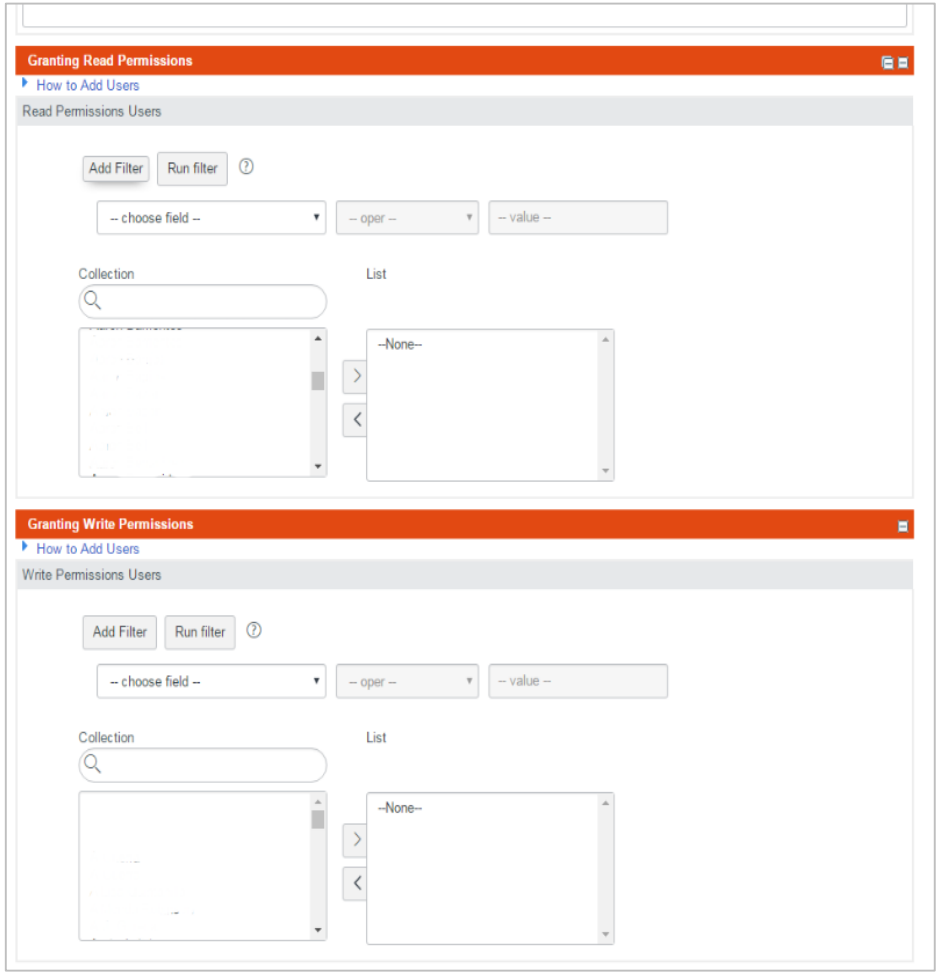
   var arrayUtil = new ArrayUtil();
   var answer = [];
   answer = arrayUtil.unique(answer1);
```

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File Share Request Orchestrated

- File Share Request Form
- Form – Left and Right Screenshots

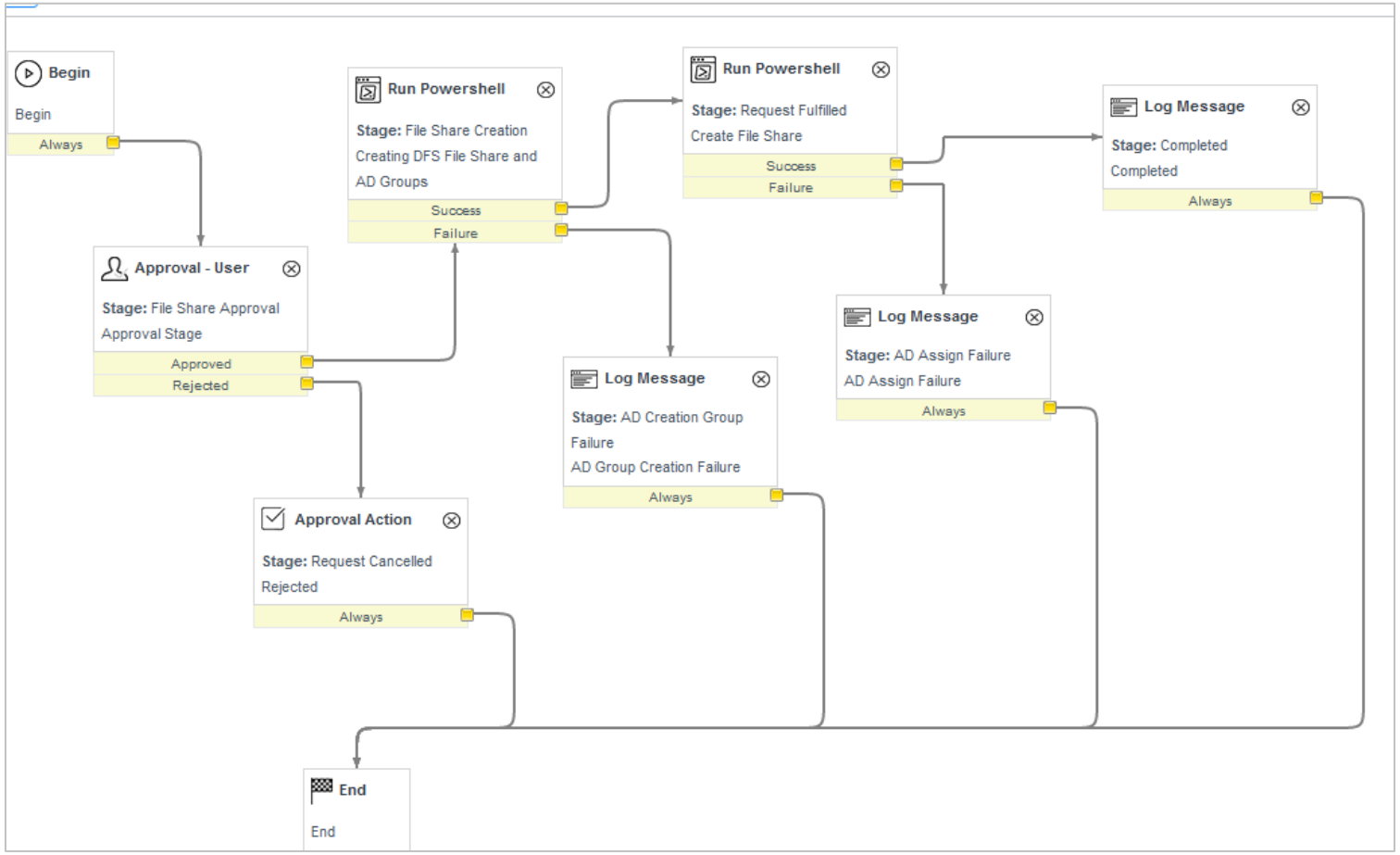




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File Share Request Workflow

Orchestration - File Share Request



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Quote – Key Point

"Inspire the world, or the world will inspire you"

– Andrew T. Herrera

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Top Takeaways

1. ServiceNow makes it easy to automate with its user friendly application

2. The difference between Orchestration and Automation is, Orchestration uses workflow to automate processes to external systems

3. ServiceNow benefits a company by saving money, speeding processes, diminishing security risks, and documentation organization

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