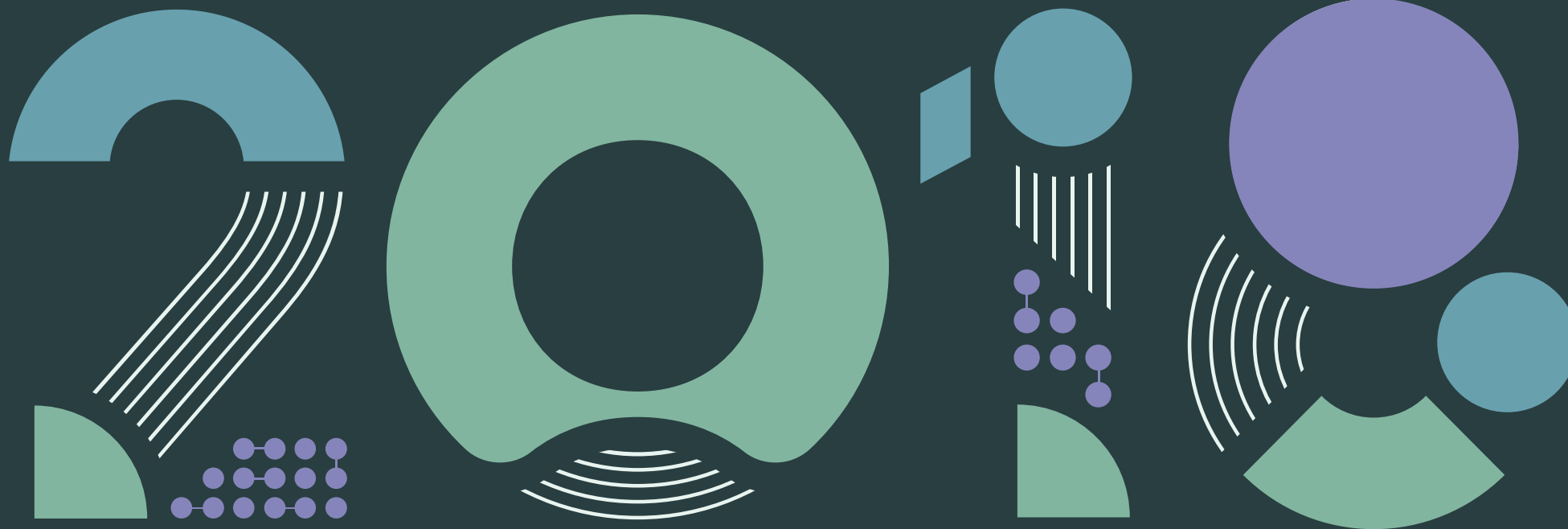


knowledge



May 7-10, 2018 Las Vegas

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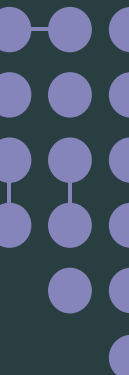


It's not you, it's me:

Implementing domain separation in an established ServiceNow® instance

Kourtney Brewster

ServiceNow® System Administrator
County of Monterey



Agenda

Selecting Domain Separation

Monterey County's unique challenges

Planning, organizing, and automating

Lessons learned

What's next?

Speaker introduction



Name: Kourtney Brewster

Title: Software Programmer Analyst

Function: ServiceNow® System Administrator

Company: County of Monterey



Experience/Expertise: Three years experience in ServiceNow®, Certified System Administrator and in-house trainer for ITIL users.

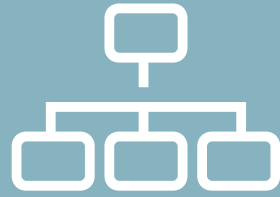
Achievements: Spearheaded PPM implementation, and key member of the team which successfully executed Domain Separation

Current Projects: Additional domain development, CMDB implementation, Kingston upgrade and CMS to Service Portal conversion

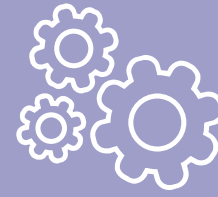
What you will learn



Planning



Organizing

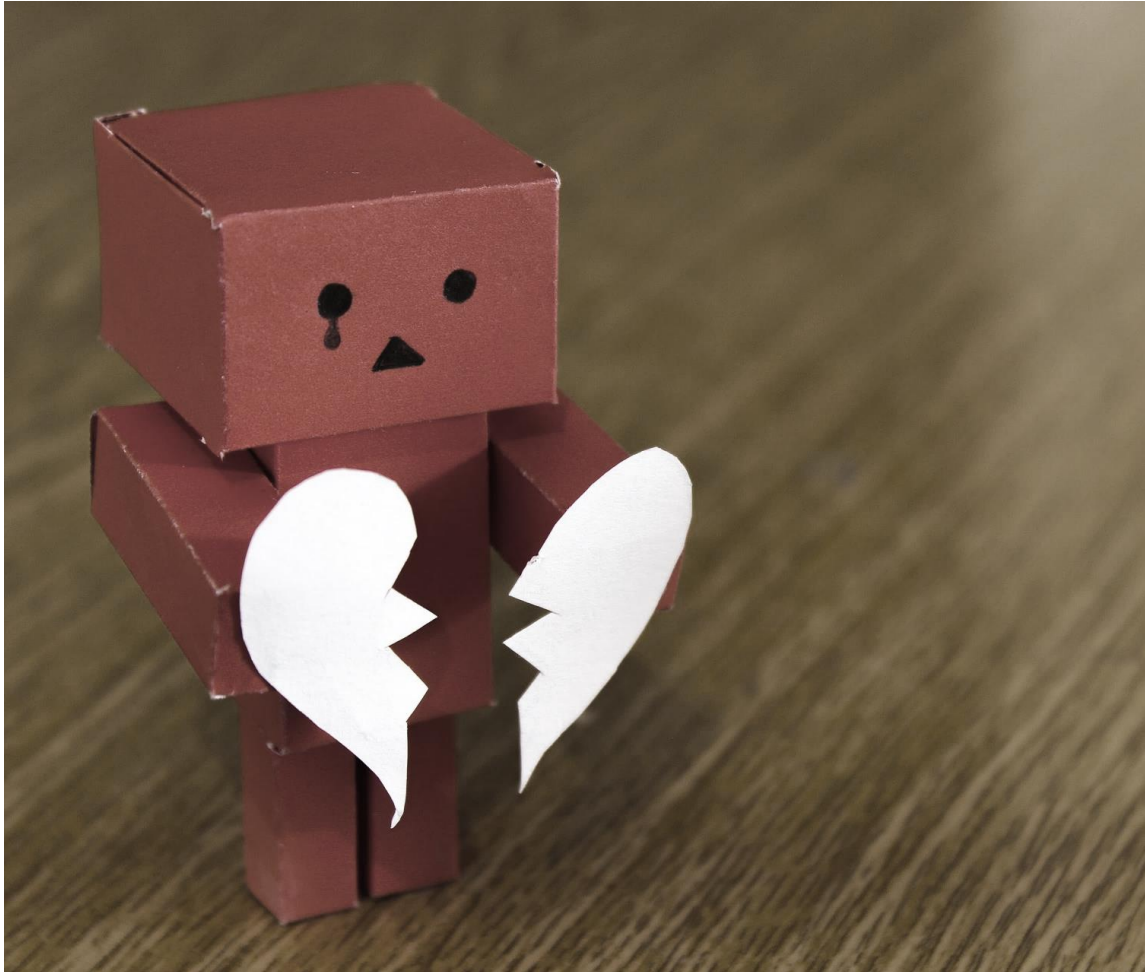


Automating



Succeeding

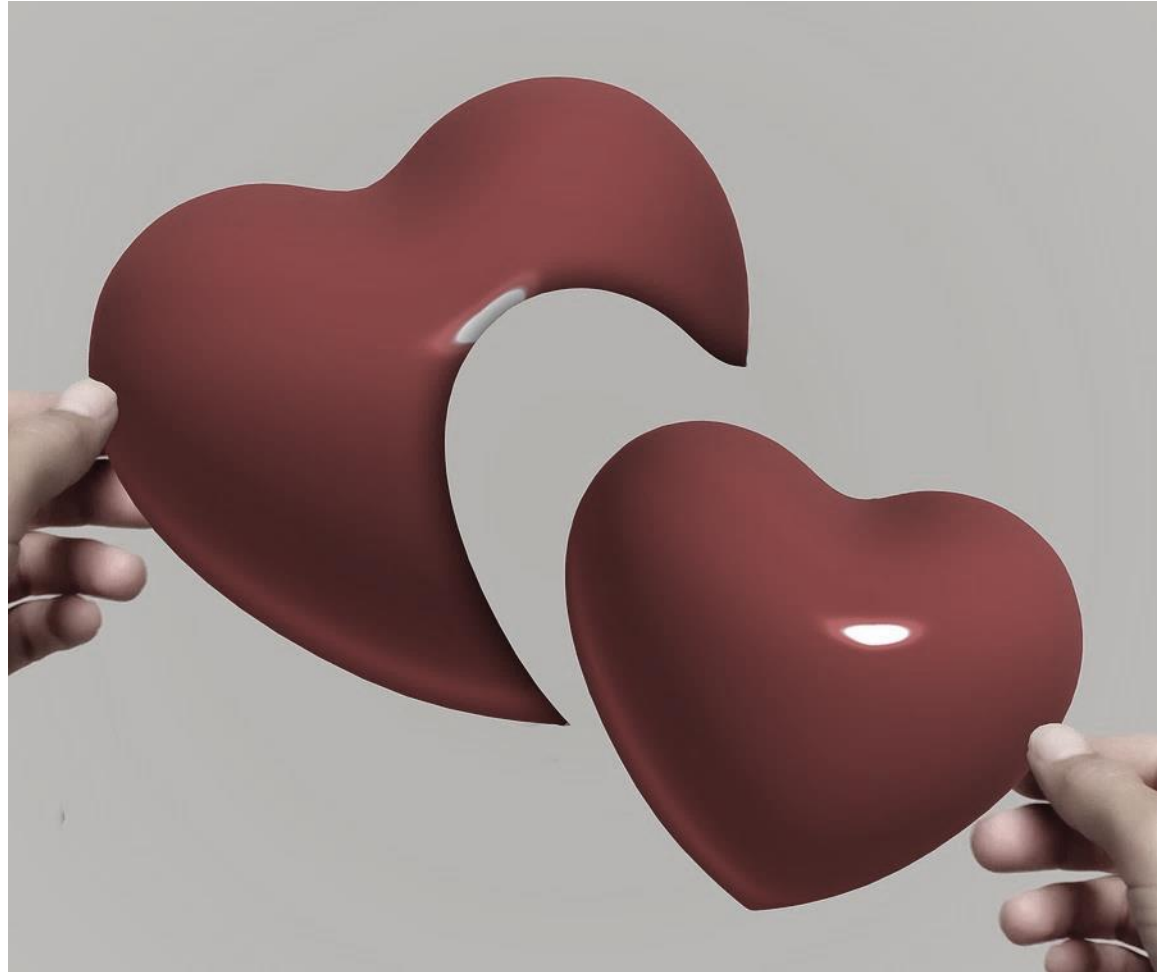
“It’s not you, it’s me”



- Monterey County has a unique environment
 - Centralized IT department (ITD)
 - Multiple departmental level IT teams
- ServiceNow® acquired and configured for ITD use only
- Initiative to have ServiceNow® be an enterprise ITSM solution

“I need some space”

- Getting buy-in
- Three years of data and customizations
 - Customizations made with only ITD in mind
 - Thousands of records across multiple tables
 - Ongoing development in an incomplete state
- Hybrid environment of segregated and shared data
 - Old records remain visible
 - New records created in correct domain
 - Existing records passable between domains



Breaking up is hard to do



Get your act together

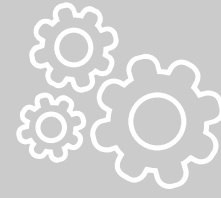


Planning

Test and validate
hierarchy and visibility
Prepare the environment



Organizing



Automating



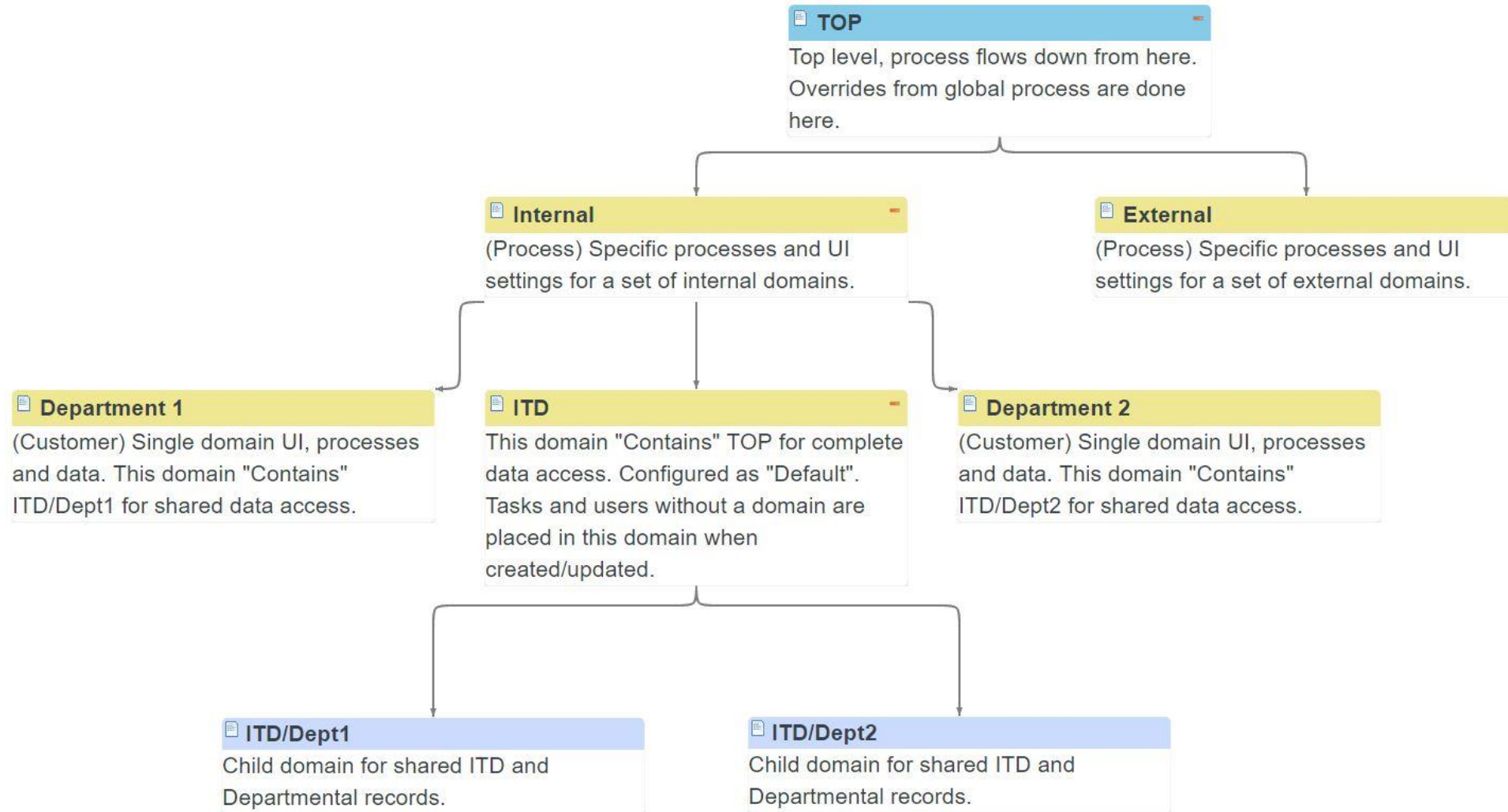
Succeeding

Time to move on



- Deciding to use Domain Separation
- Taking the ServiceNow® Domain Separation training
 - Learn best practices and things to avoid
- Prepare the environment
- Draw out multiple domain hierarchy options
- Trial and error in development
 - Clone and activate plugin
 - Try out different domain structures

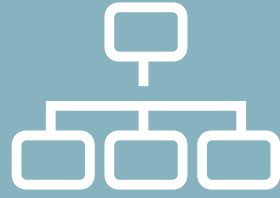
“I want to find myself”



Get your act together

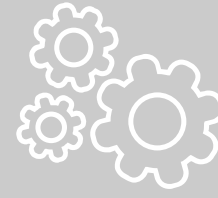


Planning



Organizing

Have a plan of action to ensure no customizations are missed



Automating



Succeeding

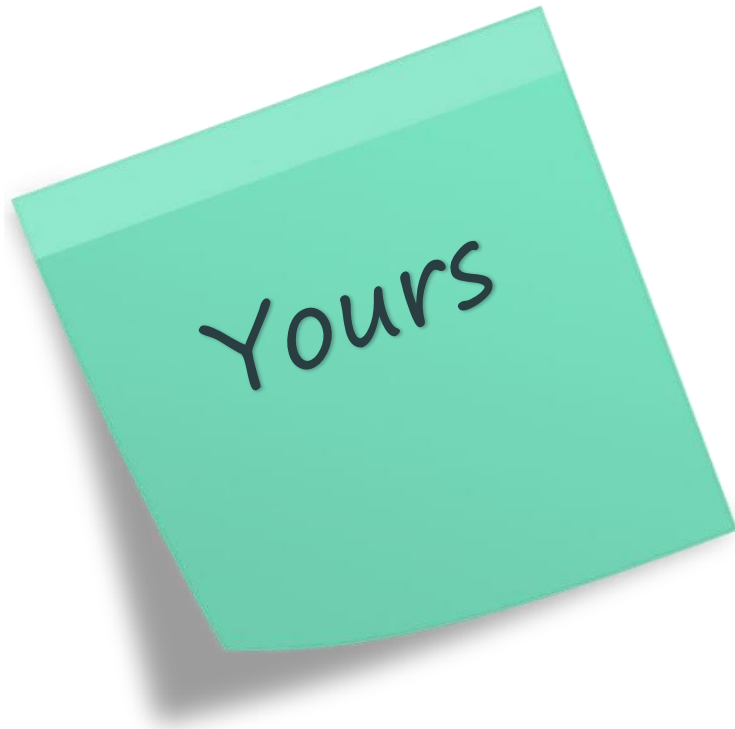
Dividing our belongings

- Use an organized approach for reviewing customizations
- One Excel file per table
 - One tab per type of customization

	A	B	C	D	E	F	G	H	I
1	Name	Active	Table	Type	Created	Created by	Updated	Updated by	Notes
2	Calculate Duration From End Date	TRUE	pm_project	onChange	2013-05-20 15:41:53	admin	2015-03-30 11:30:58	admin	Leave Alone
3	Calculate End Date From Duration	TRUE	pm_project	onChange	2013-05-13 09:37:08	admin	2016-04-21 04:32:18	admin	Leave Alone
4	Check Valid Nested Project Start Date	TRUE	pm_project	onChange	2013-04-08 14:26:17	admin	2015-04-06 03:37:23	admin	Leave Alone
5	CoM Set Customer Dept	TRUE	pm_project	onChange	2015-10-13 13:55:42	Kourtney	2015-11-03 15:14:14	Kourtney	Move to ITD
6	CoM Set Customer Dept	TRUE	pm_project	onChange	2015-10-22 15:34:37	Kourtney	2015-10-22 15:35:09	Kourtney	Move to ITD
7	Disable Calculation Type	FALSE	pm_project	onLoad	2014-11-19 14:32:59	admin	2015-03-30 11:30:06	Kourtney	Clone to ITD, Revert
8									
9									
10									

Navigation tabs: ACLs | BR | **Client Scripts** | Notifications | UI Action | UI Policy | (+) | Search:

Dividing our belongings



Items that need
no action



Items that need
to be moved



Items that need
to be cloned and
reverted in global

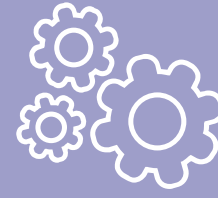
Get your act together



Planning



Organizing



Automating

Don't do manually what scripting can do for you



Succeeding

Dividing our belongings

UI action to clone and revert

< ☰ Clone Record (DS) ✎ ✓ ⋮ Update

Name	<input type="text" value="Clone Record (DS)"/>	Application	<input type="text" value="Global"/> ⓘ
Table	<input type="text" value="Global [global]"/> ▼	Form button	<input checked="" type="checkbox"/>
Order	<input type="text" value="1,000,000"/>	Form context menu	<input type="checkbox"/>
Action name	<input type="text"/>	Form link	<input type="checkbox"/>
Active	<input checked="" type="checkbox"/>	List banner button	<input type="checkbox"/>
Show insert	<input type="checkbox"/>	List bottom button	<input type="checkbox"/>
Show update	<input checked="" type="checkbox"/>	List context menu	<input type="checkbox"/>
Client	<input type="checkbox"/>	List choice	<input type="checkbox"/>
Overrides	<input type="text"/> 🔍	List link	<input type="checkbox"/>
Comments	<input type="text" value="Clone record and insert into ITD Domain"/>		
Condition	<input type="text" value="gs.hasRole('admin') && !gs.nil(current.sys_domain)"/>		

Dividing our belongings

Clone the record to the correct domain

```
var tblName = current.getTable_name();

var gr = new GlideRecord( tblName );
gr.initialize();
gr.get( current.sys_id );
gr.setDisplayValue( 'sys_domain', 'ITD' );
gr.autoSysFields( false ); // Do not update sys_updated_by, sys_updated_on,
sys_mod_count, sys_created_by, and sys_created_on
gr.insert();

gs.addInfoMessage( 'Record ' + current.sys_id + ' has been cloned to ' +
gr.sys_id + ' in table ' + tblName );
```

Dividing our belongings

Revert the existing record

```
revertToStock();
function revertToStock() {
  var grRevert = new GlideRecord( 'sys_upgrade_history_log' );
  grRevert.addQuery( 'file_name', 'CONTAINS', current.sys_id );
  grRevert.query();
  while ( grRevert.next() ) {
    var name = grRevert.file_name;
    var grHead = GlideappUpdateVersion.getHeadVersion( name );
    if ( grHead.isValidRecord() ) {
      grRevert.payload = grHead.payload;}
    var grBaselineHead = GlideappUpdateVersion.getVersion( name, grRevert.upgrade_history,
      'sys_upgrade_history', null );
    if ( grBaselineHead.isValidRecord() ) {
      var isSuccess = GlideappUpdateVersion().revert( grBaselineHead.sys_id );
      if (isSuccess) {
        grRevert.disposition = '5';
        grRevert.update();}}}}}
```

Dividing our belongings

Form button visible to revert any record once reviewed

The screenshot shows a configuration form for a Business Rule. The title is "Copy State to Incident State". On the right side, there are buttons for "Update", "Delete", and "Clone Record (DS)". The form fields are:

- Name: Copy State to Incident State
- Table: Incident [incident]
- Application: Global
- Active:
- Advanced:

Original reverted and customization cloned to correct domain

The screenshot shows a list view of Business Rules. The table has columns for Name, Table, When, Active, Insert, Created, Updated, and Domain. There are two records listed:

	Name	Table	When	Active	Insert	Created	Updated	Domain
<input type="checkbox"/>	Copy State to Incident State	Incident [incident]	before	true	false	02-09 13:53	02-09 13:53	TOP/Internal/ITD
<input type="checkbox"/>	Copy State to Incident State	Incident [incident]	before	true	false	2011-11-30 13:42	2014-02-21 15:01	global

Shared custody of the dog



- Visibility of historical departmental records
 - Script to move historical records
- Creation of new records
 - Business Rules to ensure correct domain

Forwarding the mail



- Passing of existing records
 - Business Rules to move to another domain
- Domain override on catalog items
 - Custom field and Business Rule to ensure correct domain

Shared custody of the dog

Scripting to move historical records

```
// Migrate Records to 'ITD'  
// UPDATE 'sys_domain' on 'incident' WHERE ...  
var gr = new GlideRecord( 'incident' );  
gr.addQuery( 'caller_id.department', 'NOT IN', 'department1,department2' );  
gr.addQuery( 'customer.department', 'NOT IN', 'department1,department2' );  
gr.query();  
gr.setDisplayValue( 'sys_domain', 'ITD' );  
gr.setWorkflow( false ); // Do not run any other business rules  
gr.autoSysFields( false ); // Do not update sys_updated_by, sys_updated_on,  
sys_mod_count, sys_created_by, and sys_created_on  
gr.updateMultiple();
```

Shared custody of the dog

Records created in correct domain

< ☰ Domain - Move Incident to ITD/Dept ✎ ✓ ⋮ Update

Name	<input type="text" value="Domain - Move Incident to ITD/Dept"/>	Application	<input type="text" value="Global"/> ⓘ
Table	<input type="text" value="Incident [incident]"/>	Active	<input checked="" type="checkbox"/>
		Advanced	<input checked="" type="checkbox"/>

When to run

When	<input type="text" value="before"/>	Insert	<input checked="" type="checkbox"/>
Order	<input type="text" value="110"/>	Update	<input checked="" type="checkbox"/>
		Delete	<input type="checkbox"/>
		Query	<input type="checkbox"/>

Filter Conditions

All of these conditions must be met

<input type="text" value="Customer"/>	<input type="text" value="changes"/>	AND	OR	✕	
or	<input type="text" value="Caller"/>	<input type="text" value="changes"/>	✕		
<input type="text" value="Assignment group.Domain"/>	<input type="text" value="is"/>	<input type="text" value="ITD"/>	AND	OR	✕

Shared custody of the dog

Records created in correct domain

```
var cust_vis = current.customer.department.u_visibility_domain;
var caller_vis = current.caller_id.department.u_visibility_domain;
var domain;
if ((cust_vis)){ //if visibility domain is set on customer's department, set domain
    domain = cust_vis;
}
else if ((caller_vis)){ //else if visibility domain is set on caller's department, set domain
    domain = caller_vis;
}
else { //else visibility domain is not set for customer or caller, place in the ITD domain
    domain = 'ITD';
}
if (current.sys_domain != domain){ //only update if the incident is not already in this domain
    current.sys_domain = domain;
    gs.addInfoMessage('This Incident has been moved to the appropriate domain');
}
```

Forwarding the mail

Reassigned records move to the correct domain

< ☰ Domain - Move Incident to Dept Domain 📎 📈 ☰ Update

Name: Application: ⓘ

Table: Active:

Advanced:

When to run

Insert:

Update:

Filter Conditions:

All of these conditions must be met

changes

is not 🔍

Actions

Set field values: Same as

Forwarding the mail

Domain override field created for catalog items

Navigation: < | ☰ | Catalog Item | New record | [Submit]

Name	<input type="text" value="Catalog Item"/>	Price	\$	<input type="text" value="0.00"/>	<input type="text"/>
Active	<input checked="" type="checkbox"/>	Recurring price	\$	<input type="text" value="0.00"/>	<input type="text"/>
Availability	<input type="text" value="Desktop Only"/>	Recurring price frequency	<input type="text" value="-- None --"/>		
Catalogs	<input type="text" value="Service Catalog"/>	Picture	Click to add...		
Category	<input type="text" value="Get Help"/>	Domain Override	<input type="text"/>		
Workflow	<input type="text"/>				

Forwarding the mail

Business Rule to set domain to override field

```
var visibility = current.customer.department.u_visibility_domain;
var req = current.sys_id;
var item = new GlideRecord('sc_req_item');
item.addQuery('request', req);
item.query();
while (item.next()){
    //if override is populated, set to that domain
    if(item.cat_item.u_domain_override){
        current.sys_domain = item.cat_item.u_domain_override;
    } //if customer visibility domain is populated, set to that domain
    else if(visibility){
        current.sys_domain = visibility;
    }
}
```

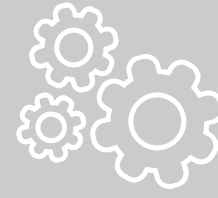
Get your act together



Planning



Organizing



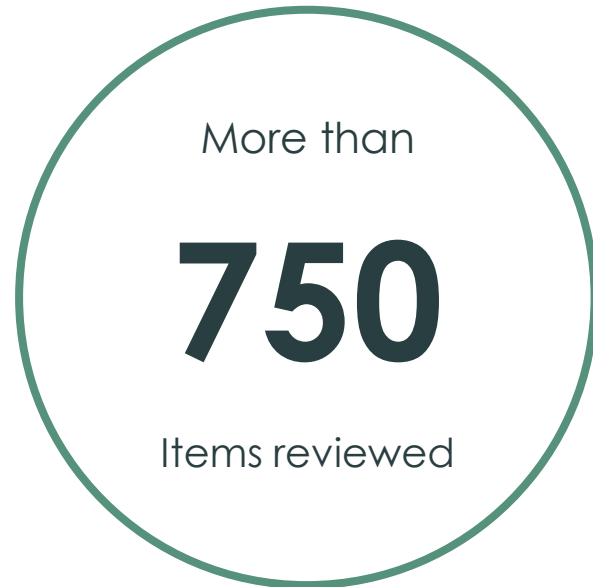
Automating



Succeeding

Monterey County's journey shows that you can succeed

“You aren’t the same person anymore”



Client Scripts, Business Rules, ACLs, Notifications, Form and List Layouts, etc.

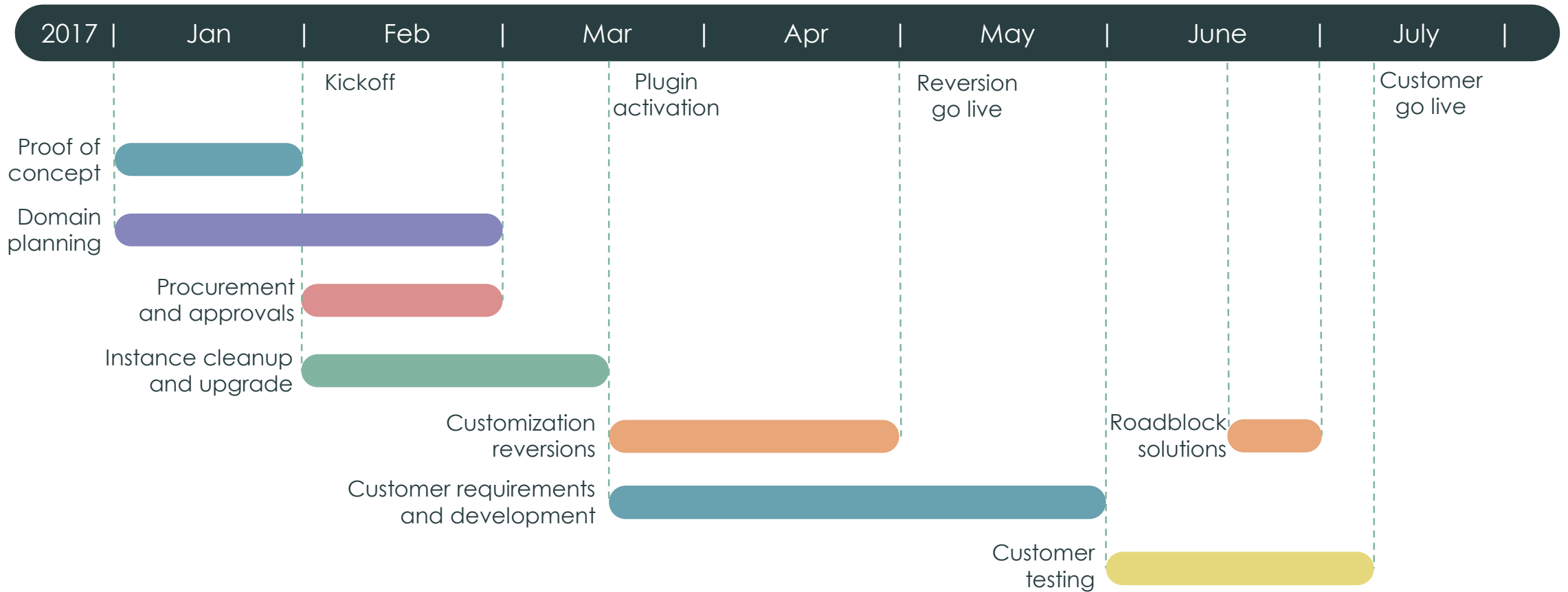


Customizations moved to TOP or MSP domain as needed, or cloned and reverted in Global



Existing records moved from Global to MSP and department domains

“But I gave you three years of my life”



“What did I do wrong?”

- Hindsight is 20/20
 - Knowing future paths helps planning
- Practice makes perfect
 - Plug-in activation timeline
- New challenges may mean revisiting old ones
 - Some resolutions are only a temporary fix



Putting yourself back out there

HELLO

MY NAME IS

Single

- Introduction of Asset Management
 - Shared assets between domains
 - Reporting and billing benefits
 - Orchestration with SCCM
- Four new customer domains planned for FY18/19
 - New challenges to solve
- Upgrade to Kingston
- Convert our CMS to the new Service Portal

Top takeaways

1

Take a planned and organized approach

2

Expect to hit some roadblocks

3

Think creatively: success is possible



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Questions?

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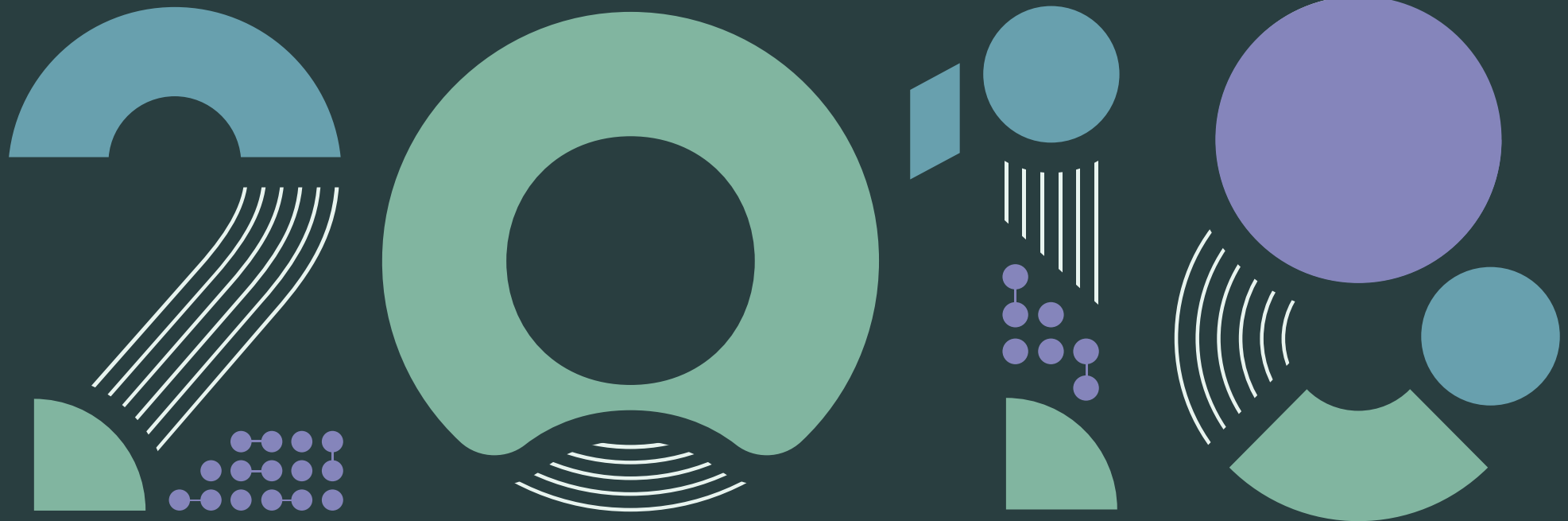
Thank you

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knowledge



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