knowledge15®
April 19–24, 2015 • Mandalay Bay • Las Vegas, NV

Lab Guide

Domain Separation:

Multiple Tenants Welcome!

We Have Vacancies

Bobby Edmonds & Sajeev Pillai

Default Login / Password:

admin / Knowledge15

itil / Knowledge15

employee / Knowledge15

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Lab Agenda

- Domain Separation Overview
- Prerequisites
- Exercise 1 – Domain Basics (hierarchy, choice lists, sys_domain, sys_overrides)
- Exercise 2 – Applications & modules
- Exercise 3 – Emails Notifications
- Exercise 4 – Record Context
- Additional resources
- Q & A

Domain Separation Overview

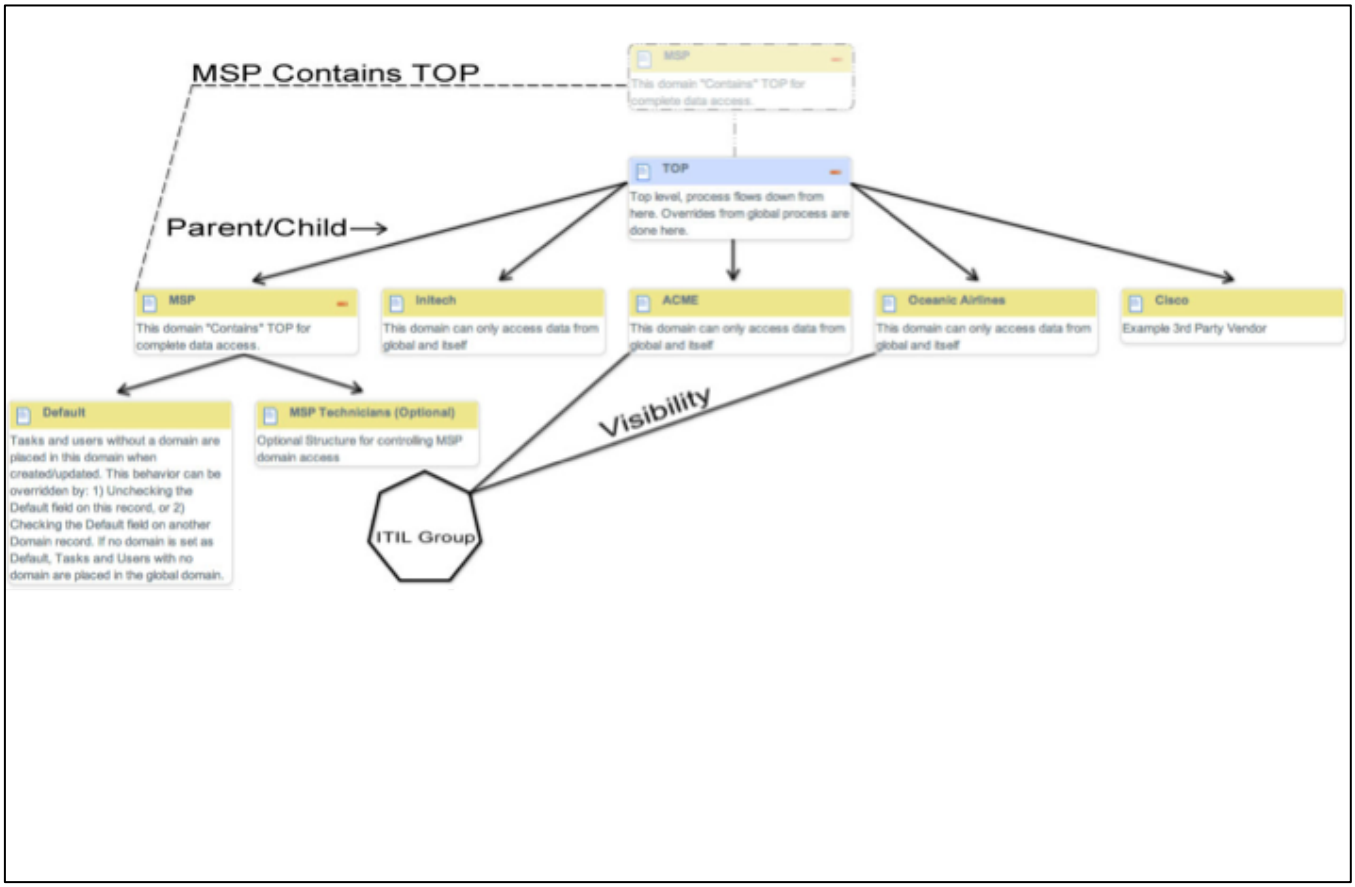
- This workshop provides a working knowledge of the key domain administration concepts and features, and the knowledge required to properly architect a domain hierarchy for your instance.
- Prerequisites – Experience as a ServiceNow administrator

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Lab Goal

- Parent/Child–Process & Data
- Visibility–Data (Always visible once granted)
- Contains–Data

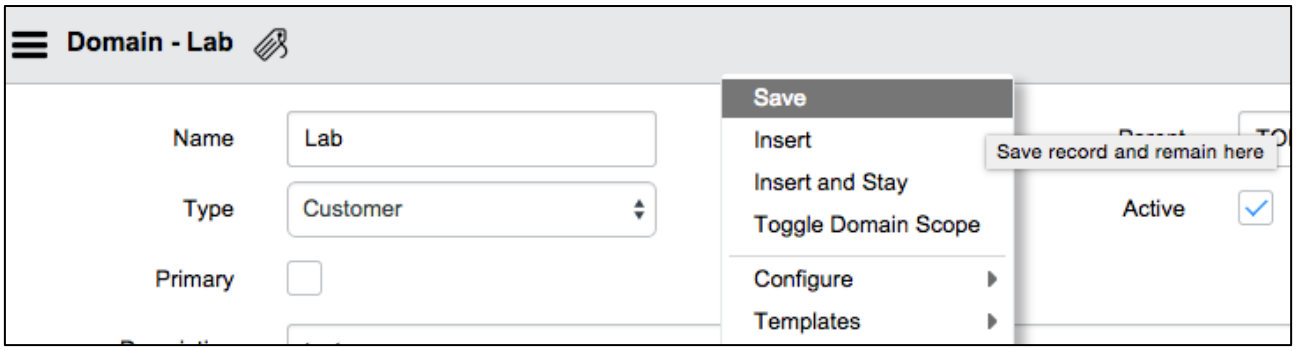
Lab 1.1
Domain Hierarchy



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Create a New Domain

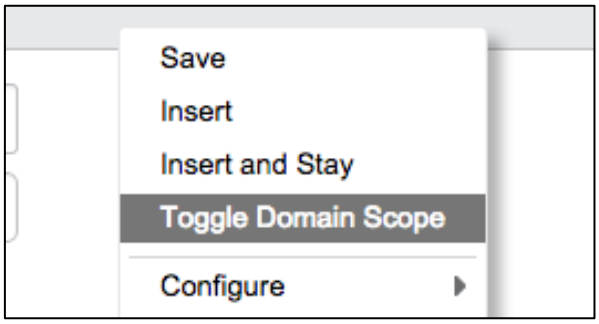
1. Navigate to **Domain Admin > Domains** and click **New**.
2. Select **Name** and type **Lab**.
3. Select **Customer** from the **Type** field dropdown.
4. Select **Parent** and type **TOP**.
5. Right-click the **header** and select **Save**.



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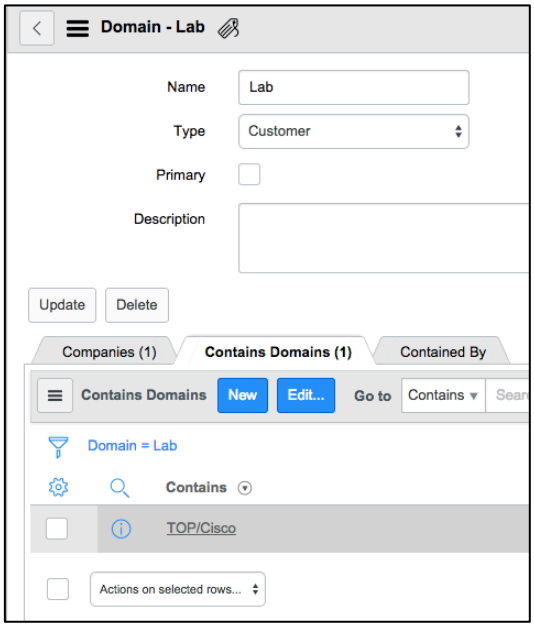
Add a Contains Relationship to the New Domain

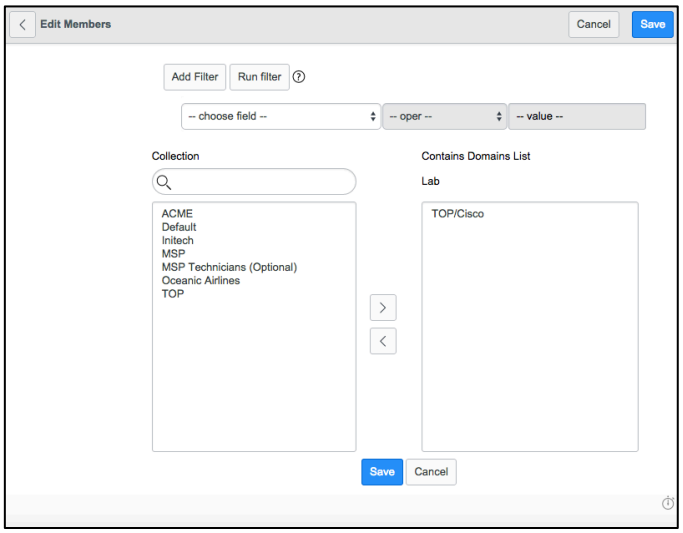
1. Right-click the **header** and select **"Toggle Domain Scope"**.



2. Select the **Contains Domains** related list.

3. Select the **Edit** button, add **Cisco** to **Contains** domain list, and select **Save**.





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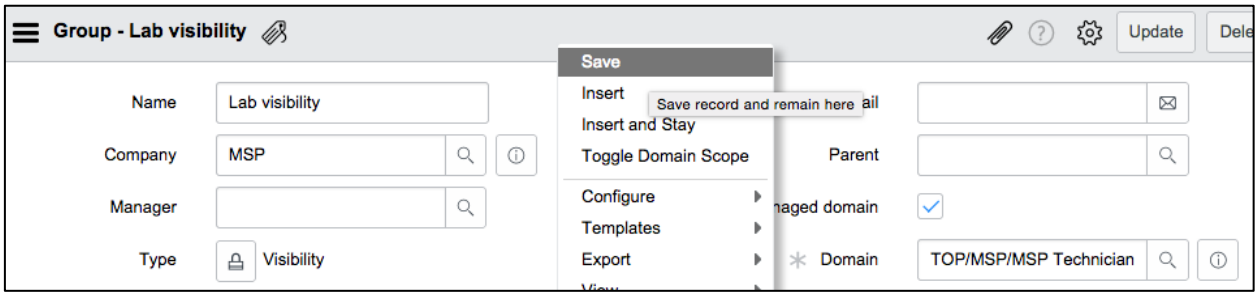
Create a New User Group

1. Navigate to **User Administration > Groups**.

2. Select the **New** button, and complete the following fields:

   Name: **Lab visibility**
   Company: **MSP**
   Type: **Visibility**
   Managed Domain: **True**
   Domain: **MSP Technicians**

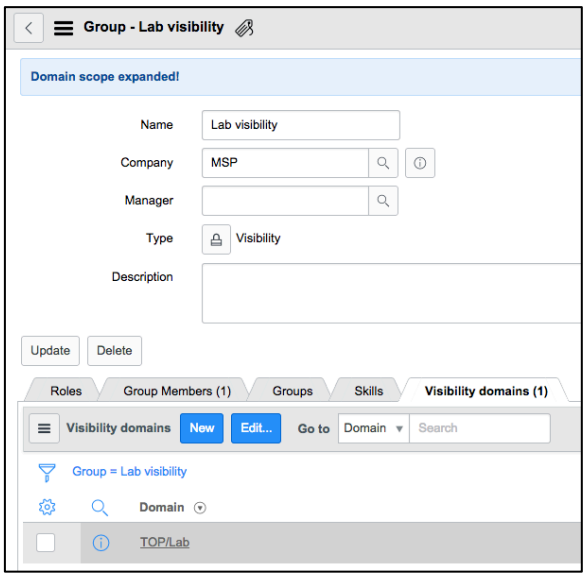
3. Right-click the **header** and select **Save**.

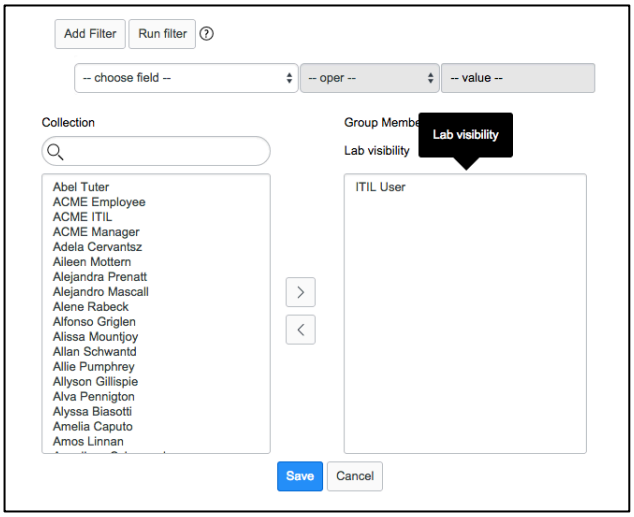


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Add the Visibility Domains Related List to the Group Form

1. Right-click the **header** and select **Configure > Related Lists**.
2. Select **Visibility Domains** and select **Save**.
3. Select the **Visibility Domains** Related List.
4. Right-click the **header** and select **"Toggle Domain Scope".**
5. Select the **Edit** button, add **Lab** to the visibility domain list, and select **Save**.
6. Following the same process, select the **Group members** related list and add **ITIL User**. You do not have to toggle the domain scope again.



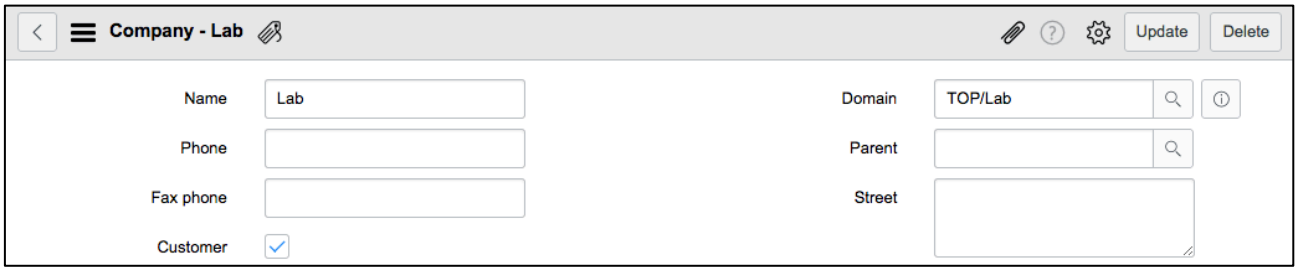


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Create a New Company

1. Navigate to **User Administration > Companies**.
2. Change the view to **Default**.
3. Click the **New** button and complete the following fields:

   Name: **Lab**
   Customer: **True**
   Domain: **Lab**



4. Click **Submit**.

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Create a New User in the Lab Domain

1. Navigate to **User Administration > Users** and open **Joe Employee**.
2. Right-click the **header** and select **Configure > Form Layout**
3. Add the **Company** field under the **Last name** field and click **Save**
4. Modify the following fields:

   User ID: **lab.employee**
   First Nam**e: Lab**
   Company: **Lab**
   Email**: lab.employee@example.com**

5. Right-click the form header and select **Insert** and **Stay**.



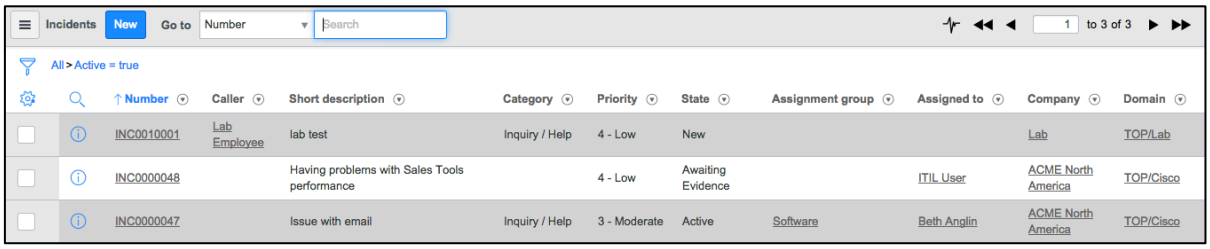
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Activate the Domain Picker

1. Navigate to **System > UI Macros** and set both **domain_select UI Macros** to active.
2. Log out of your instance and back in so the domain changes take effect.
3. Navigate to **Incident > Open**.
4. Personalize the list and add **Domain**.
5. Change some of the global demo incidents to other domains by double-clicking the domain field and selecting different domains. Make sure at least one record in each of these domains: **Cisco, MSP, ACME, and Oceanic**.
6. Change domains to **Lab**.



7. Create an incident for **Lab employee**.
8. Notice you can only see incidents that exist in the **global**, **Lab**, and **Cisco** domains. Cisco is added because the Lab domain contains Cisco.
9. Change domains to **Cisco** and notice you can only see **Global** and **Cisco** incidents.



Number	Caller	Short description	Category	Priority	State	Assignment group	Assigned to	Company	Domain
INC0010001	Lab Employee	lab test	Inquiry / Help	4 - Low	New			Lab	TOP/Lab
INC0000048		Having problems with Sales Tools performance		4 - Low	Awaiting Evidence		ITIL User	ACME North America	TOP/Cisco
INC0000047		Issue with email	Inquiry / Help	3 - Moderate	Active	Software	Beth Anglin	ACME North America	TOP/Cisco

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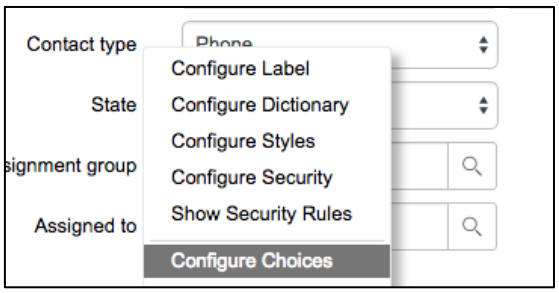
Lab Goal

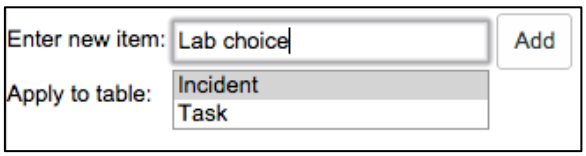
Choice lists in a domain separated instance can be tricky. In this lab we demonstrate the proper way to create and maintain them.

Lab 1.2
Choice List

Create a New Choice List

1. Navigate to **Incident > Open** and select **Lab** from the **Domain Picker**.
2. Open the lab incident by clicking on its number.
3. To configure the **Contact Type** field, right-click the label and select **Configure** choices.
4. Create a new item called **Lab choice** and select **Add**. Click **Save**.

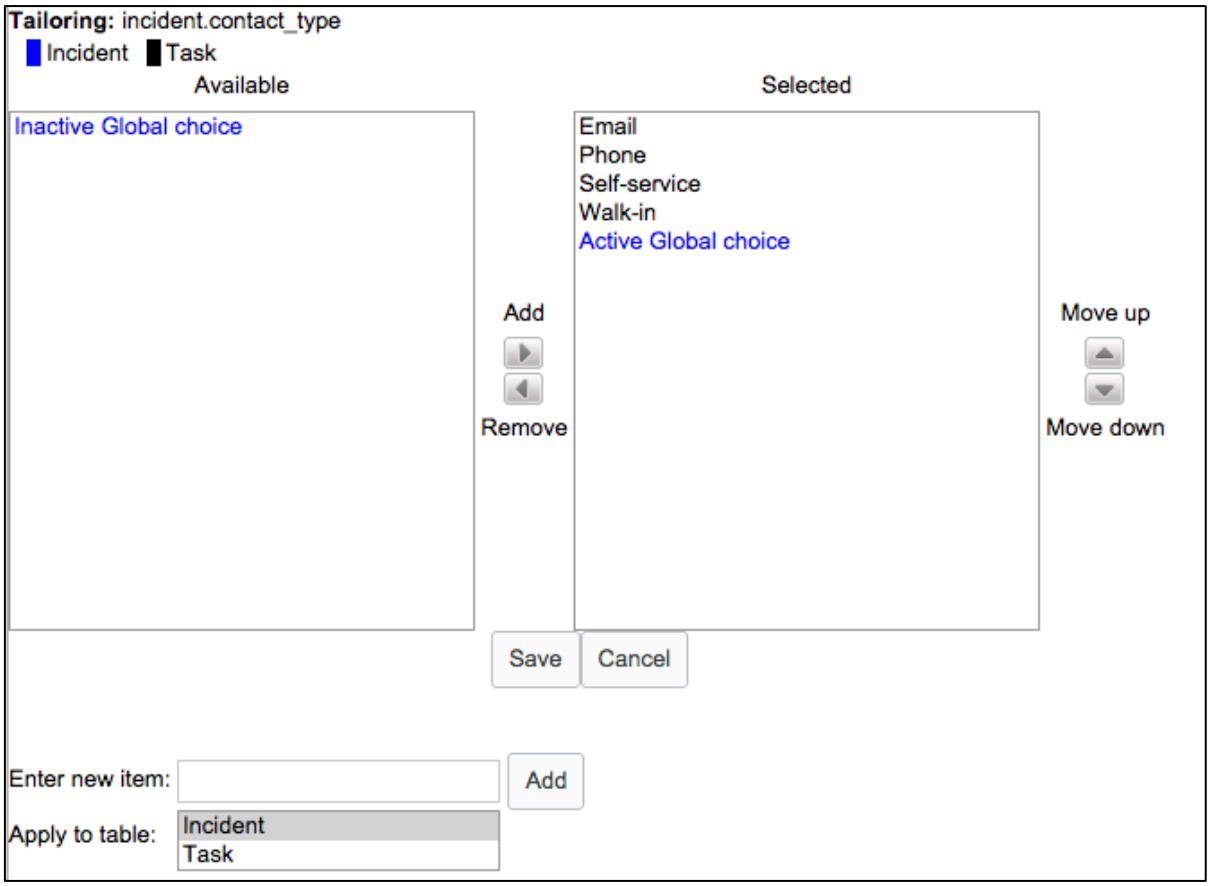




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Create Global Active and Inactive Choices

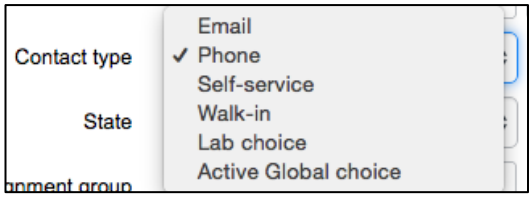
1. Change the **Domain Picker** to **Global**.
2. To configure the **Contact Type** field, right-click the label and select **Configure** choices.
3. Create a new item called **Active Global** choice. Select **Add**.
4. Create a new item called **Inactive Global** choice. Select **Add**.
5. Select **Inactive Global choice** and move it to the **Available** list by clicking **Remove**.
6. Click **Save**.

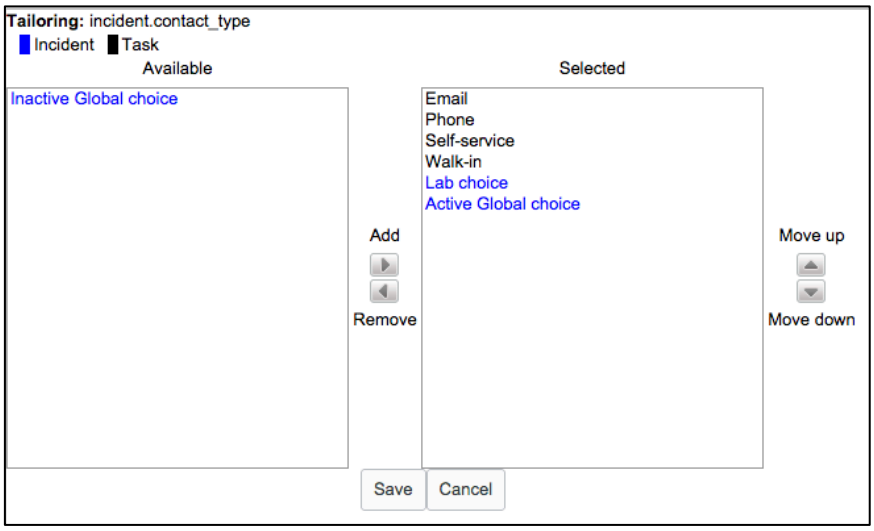


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Test Outcome

1. Change the **Domain Picker** to **Lab**.
2. Open the **Contact Type** dropdown and notice **Active Global choice** was automatically added to the list.
3. To configure the **Contact Type** field, right-click the label and select **Configure choices**.
4. Notice the **Inactive Global choice** is available to add.
5. Notice **Active Global choice** is automatically added to the bottom of the **Domains** choice list.





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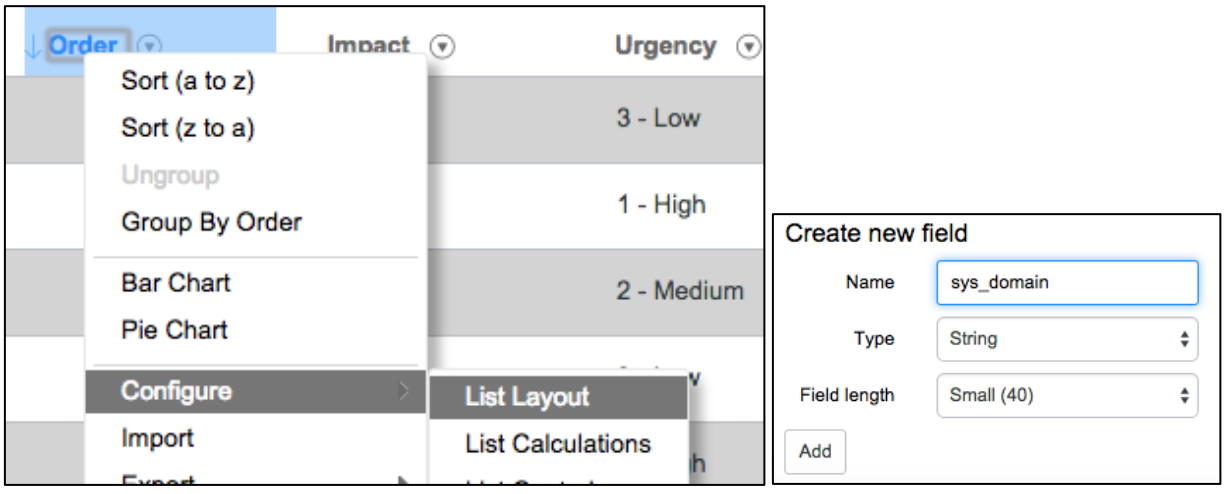
Lab Goal

In this lab you will lean how to domain separate a table. You will also gain an understanding of how data accessibility works.

Lab 1.3
sys_domain

Add sys_domain Field to the Priority Lookup Rules Table

1. Change Domains to **Global**.
2. Navigate to **System Policy > Priority Lookup Rules**.
3. To configure the list layout, right-click the list header and select **Configure > List Layout**.
4. Create a new field named **sys_domain**. Do not change any other attribute.
5. Select **Add**, and then **Save,** select **Close** in the popup once complete.
6. Notice the Domain field was created correctly.



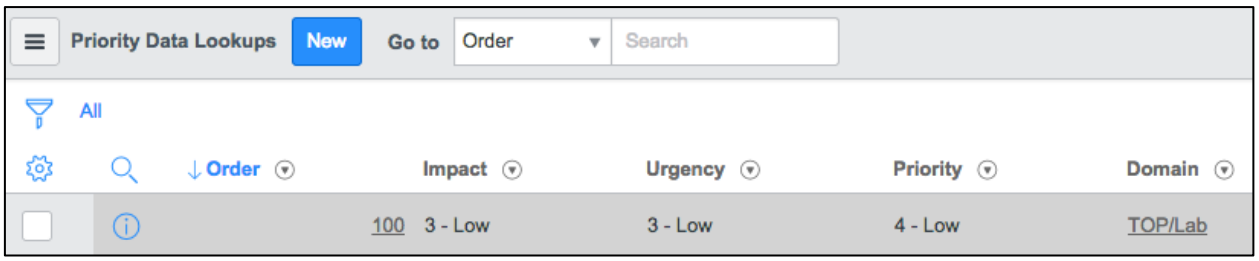
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Test Outcome

1. Continuing with the **Priority Lookup Rules** table, change the domain of all existing records to **TOP**.

2. Change domains to **Lab** and create a new record with **Low** as the selection for **Impact/ Urgency/Priority**.

3. Change domains between **TOP** and **Lab**, notice in the Lab domain you can only see the lab record, but in the **TOP** domain you can see all of them.



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Lab Goal

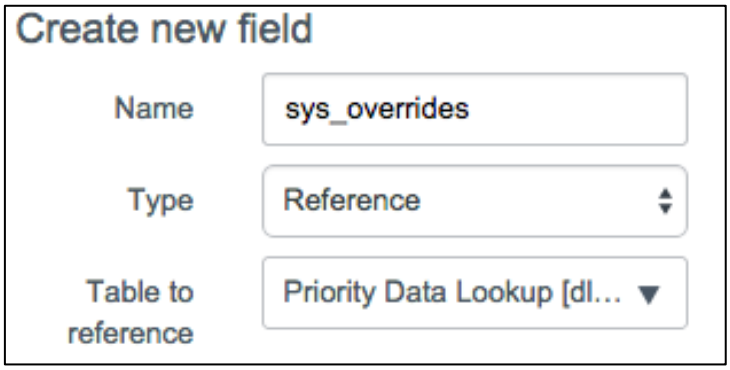
The sys_overrides field exists on domain separated process tables and allows you to override process defined at a higher level in the domain parent/child hierarchy. In this lab we will add it to a table to transform the table into process.

Lab 1.4
sys_overrides

Add sys_overrides to the Priority Data Lookup Table

1. Change Domain to **global**.
2. Navigate to **System Policy > Priority Lookup Rules**.
3. To configure the list layout, right-click the list header and select **Configure > List Layout**.
4. Create a new field, **sys_overrides**

   set **Type** to **Reference**
   set **Table to reference** to **Priority Data Lookup**.
5. Select **Add**, and then **Save.** Select **Close** in the popup once complete.



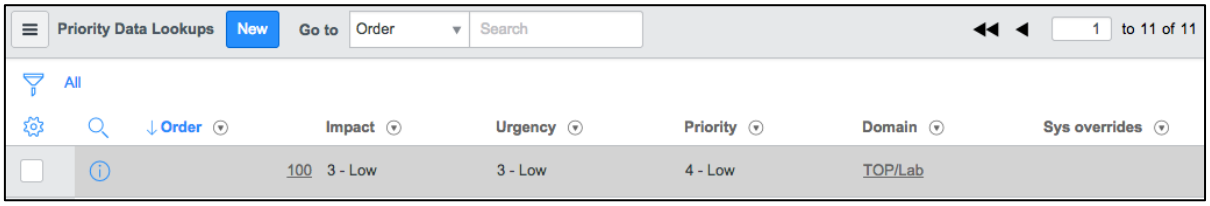
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Test Outcome

1. Change domain between **TOP** and **Lab** and notice that the visibility has reversed direction. All records can be seen in **Lab**, but the Lab record cannot be seen in **TOP**.

2. Change the domain to **Lab**, and open the **TOP** record **high/high/critical**. Change the Priority to **High**. Click **Update**.

3. Notice a new record was created that now overrides the TOP record, and the TOP record is no longer in the list. The list row count will still show 11 records because the record being overridden was fetched from the database. The record is subsequently removed from your view by the application.



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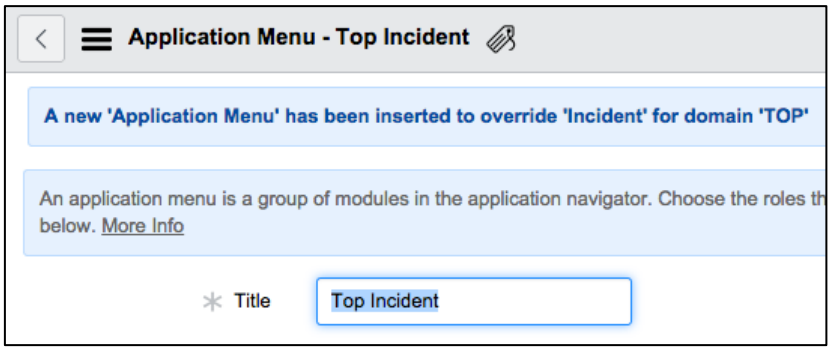
Lab Goal

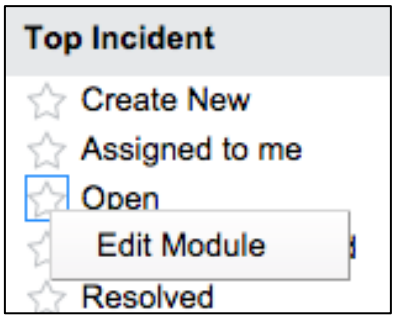
Applications and modules can both be domain separated. In this lab we will show you the difference in domain separation between the two, and why domain separating modules is usually the best course of action.

Lab 2
Applications and Modules

Edit Application and Module Titles

1. Change domain to **TOP**.
2. Right-click the **Incident** application and select **Edit Application**.
3. Change the title to **TOP Incident** and click **Update**.
4. Change the domain to **Lab**.
5. Right-click the **TOP Incident > Open** icon and select **Edit Module**.
6. Change the title to **Lab Open**. Click **Update**.

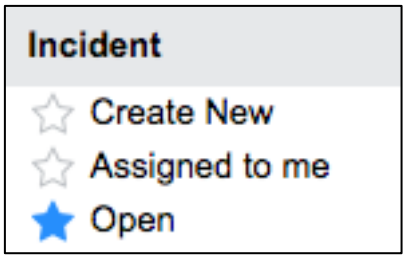




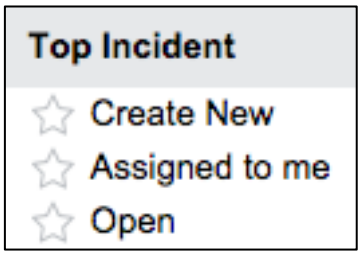
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Test Outcome

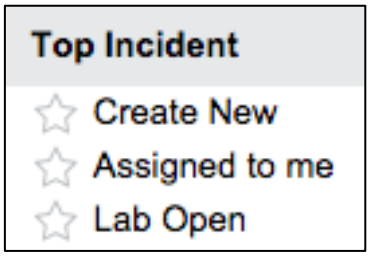
1. Change domains between **Global**, **TOP**, and **Lab**.
2. Notice how the overrides affect which applications and modules are visible.
3. For **Global** (Global application and Global modules).



4. For **TOP**(TOP domain application and TOP modules cloned from Global).



5. For **Lab** (TOP domain application and modules with one overridden Lab module).



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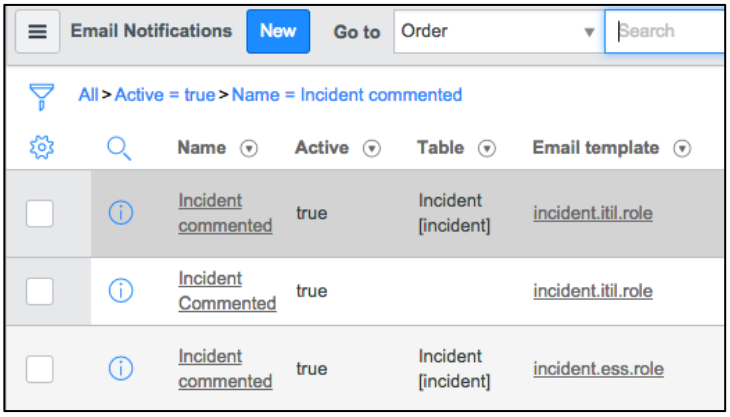
Lab Goal

Email notifications are domain separated in ServiceNow. In this lab we will show how to create notifications for a specific domain, and discuss ways to provide domain specific content without domain separating.

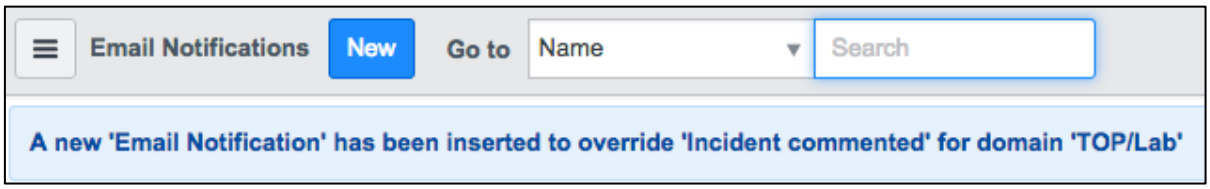
Lab 3
Email
Notifications

Update Email Notification

1. Change domain to **Lab**.
2. Navigate to **System Policy > Notifications** and open the **Incident commented** notification with the **incident.ess.role** email template.



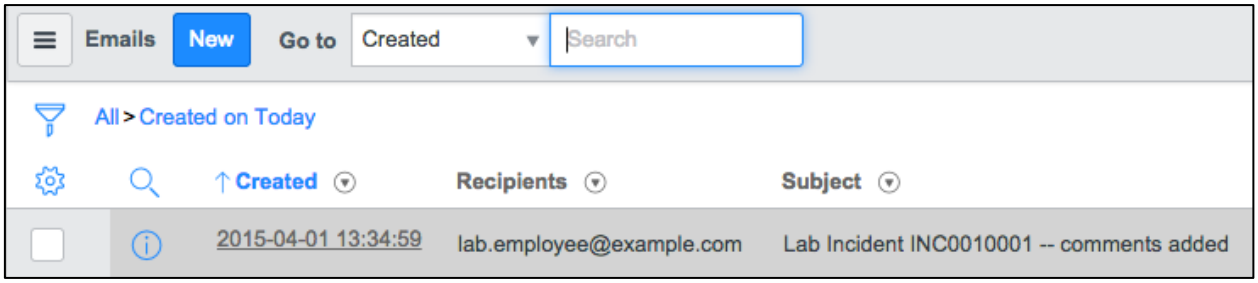
3. Add **Lab** to the start of the name.
4. Select the **What it will contain** form section and add **Lab** to the beginning of the subject. Select **Update** and you will see that the original notification has been overridden.



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Test Outcome

1. Change domain to **TOP**.
2. Navigate to **TOP Incident > Open**, and select our Lab domain incident.
3. Apply a comment. Right-click the header and click **Save**.
4. Navigate to **System Logs > Emails** (you may have to wait a minute for the email to be created).
5. After the email appears in the list, notice that even though you were in the TOP domain, the Lab notification was sent because the domain of the task was Lab.



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Lab Goal

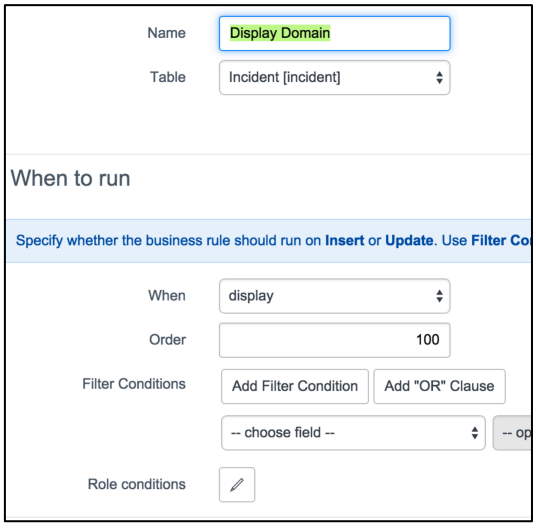
The Fuji release of ServiceNow contains many domain enhancements. This lab will demonstrate the record context features that control data access, UI & process selection, and process context based on the domain of the record.

Lab 4
Record
Context

Create Advanced Display Business Rule

1. Change your domain to **Global.**

2. Create an advanced Display Business Rule on the **Incident Table** in the **Global** domain and override it in the **MSP** and **ACME** domains.
   - You must change the domain picker to the appropriate domain before updating each record. The Business Rules will display a custom message for each of the domains.
   - Click **Update** to insert each record so you are taken back to the list and can verify the override occurred.
   - The **MSP** and **ACME** rules must both override the **Global** rule.



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3. Use the script examples below to populate the Display business rules. Scripts are case sensitive so make sure to copy them exactly.

Global:

```
function onDisplay(current, g_scratchpad) {
    gs.addInfoMessage("Global Processes running.");
}
```

ACME:

```
function onDisplay(current, g_scratchpad) {
    gs.addInfoMessage("ACME Processes running.");
}
```

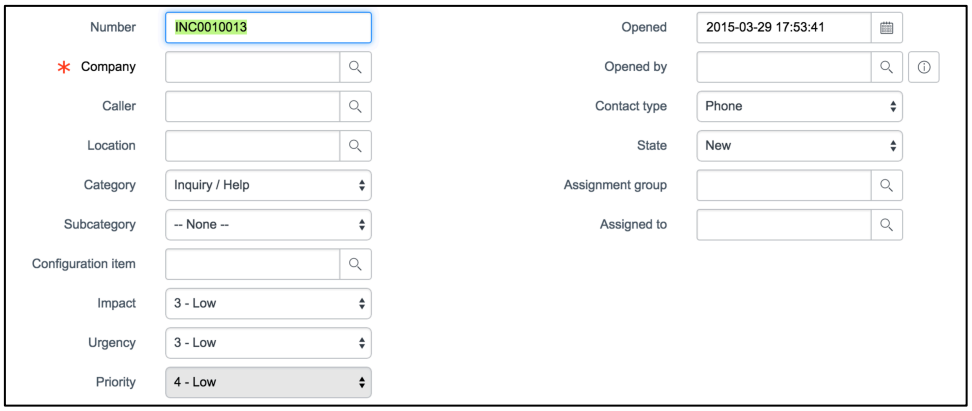
MSP:

```
function onDisplay(current, g_scratchpad) {
    gs.addInfoMessage("MSP Processes running.");
}
```

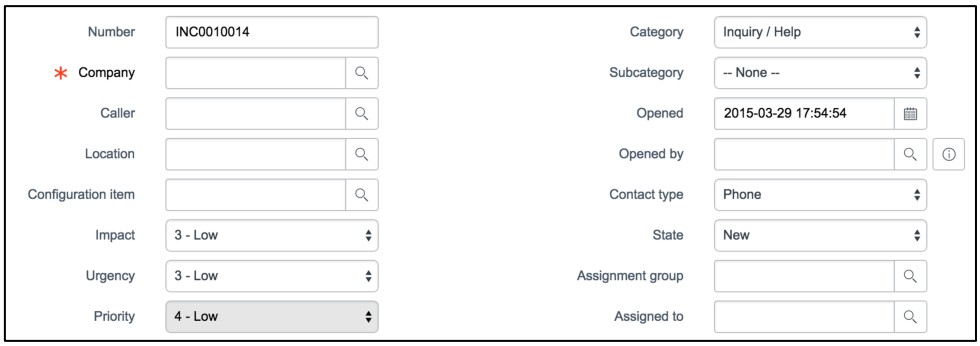
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4. Configure the **Default** form view on the Incident Table for each of the following domains. Adjust the **Category** and **Subcategory** field locations for each of the views based on the images below. Remember to select the appropriate domain before each **Update**.

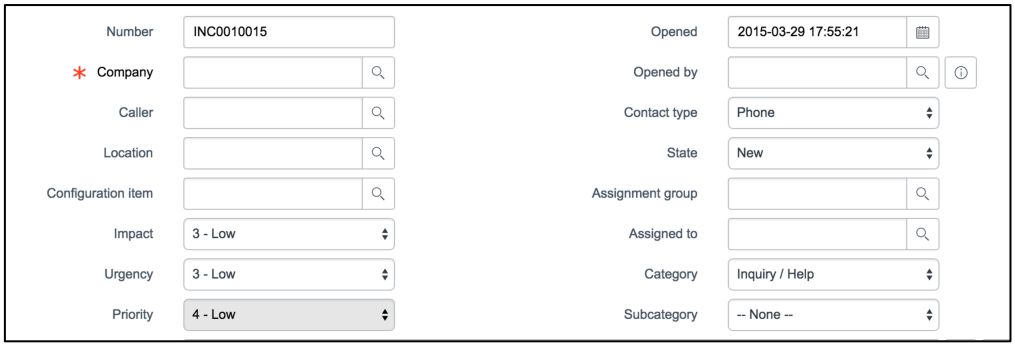
Global:



ACME:



MSP:

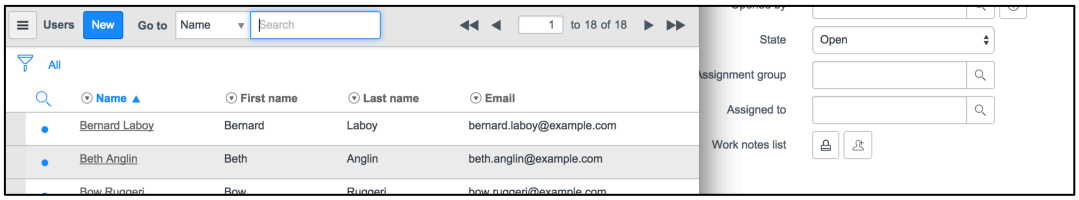


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Reference Field Record Context

1. Change your domain to **MSP**.

2. Open a **Lab** domain incident and go to the **Assigned to** field. You will only see users from the **Global**, **Lab** and **Cisco** domains.



Working with Records from Multiple Domains

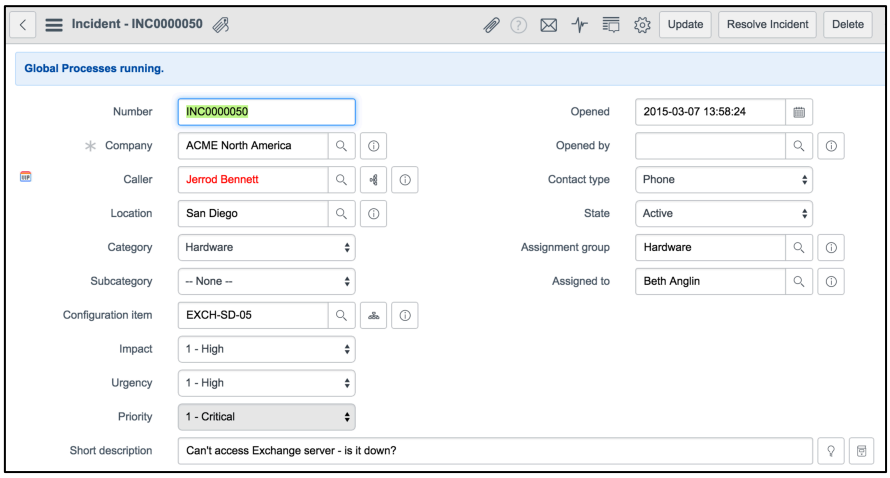
1. Navigate to the incident list view

Number	Caller	Short description	Category	Priority	Domain	State
INC0010006			Inquiry / Help	5 - Planning	global	New
INC0000054		SAP Materials Management is slow or there is an outage	Software	1 - Critical	TOP/MSP	Awaiting User Info
INC0000053		The SAP HR application is not accessible	Request	1 - Critical	TOP/ACME	Active
INC0000052		SAP Financial Accounting application appears to be down	Software	1 - Critical	TOP/MSP	Active

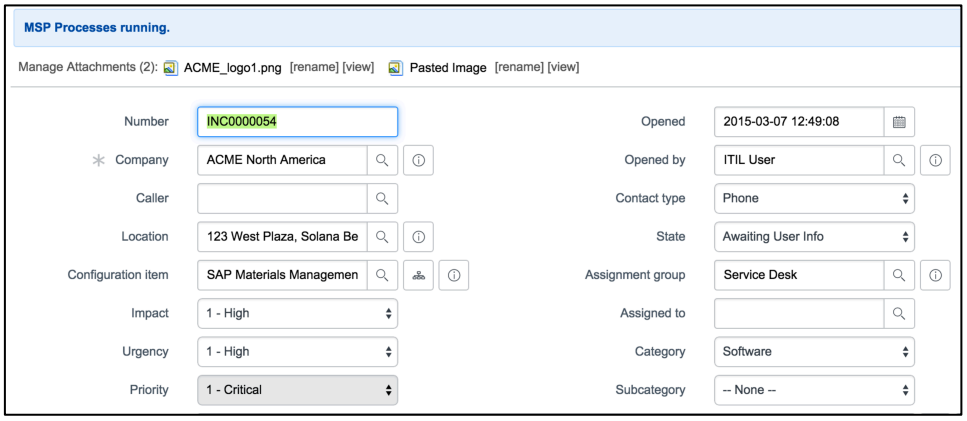
2. Open **Lab**, **MSP**, and **ACME** incidents one after the other in separate tabs in the same browser window. Notice the **Info Message** and location of the **Category** and **Subcategory** fields. This indicates that for the same session, you are receiving the appropriate UI, process, and data access based on the context of the records domain.

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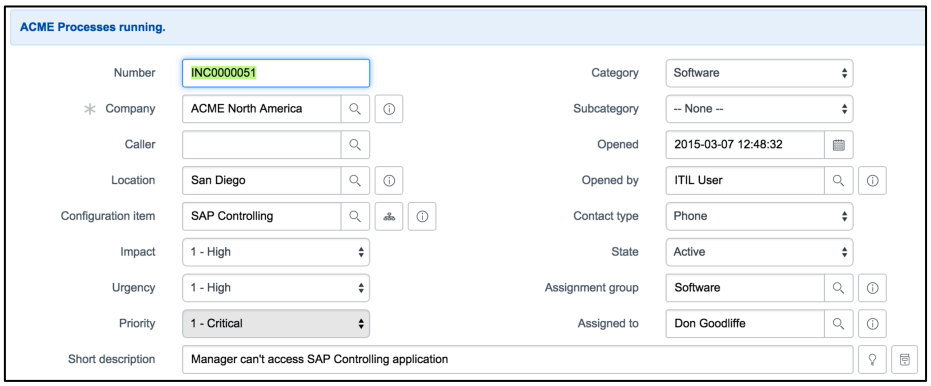
Global:



MSP:



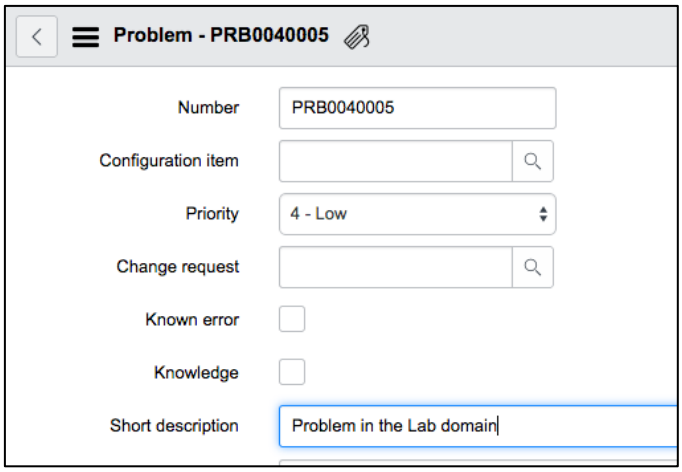
ACME:



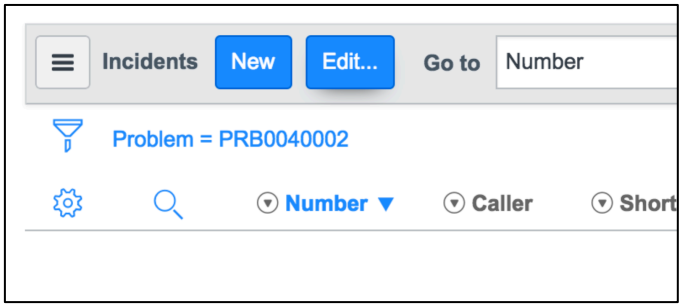
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Related List Record Context

1. Change your domain to **Lab**.
2. Create a new **Problem** record and click **Save**.
   The record will be created in the **Lab** domain.

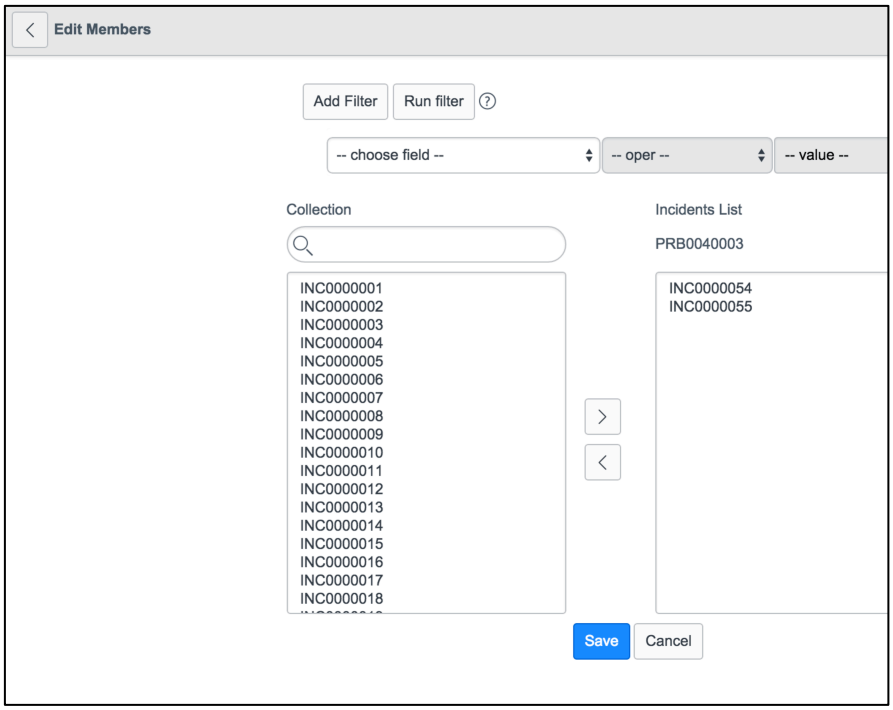


3. Change your domain to **MSP**.
4. Open the problem record you just created in step 2.
5. Go to the **Incidents** related list, and click **Edit**.

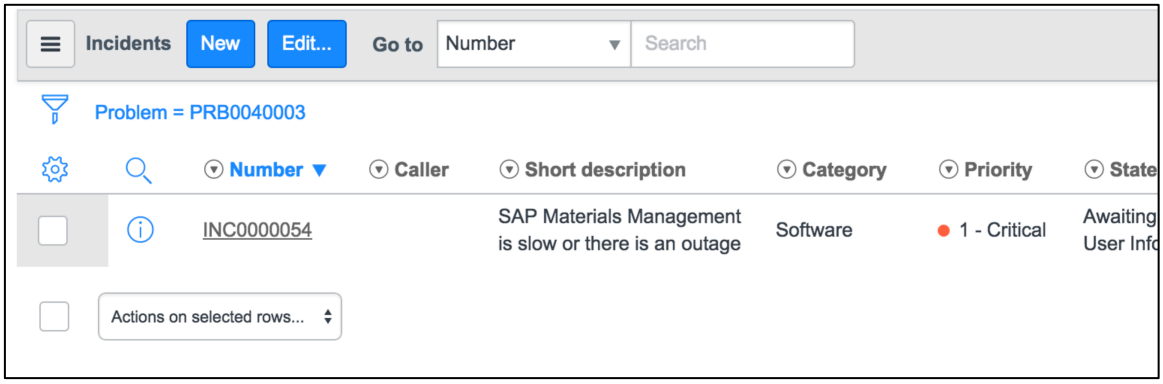


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6. Note incidents from the **Global**, **Lab** and **Cisco** domains. Select a **Lab** incident. You can find a **Lab** incident by creating a filter for **domain=Lab** and running it. You cannot see **MSP** incidents even though your domain is **MSP** because the **Lab** incident is controlling data accessibility. You can test this by creating a filter where **domain=MSP** and clicking **Run filter**.



7. Once you are back in the Problem form, you can see the incident from the Lab domain.

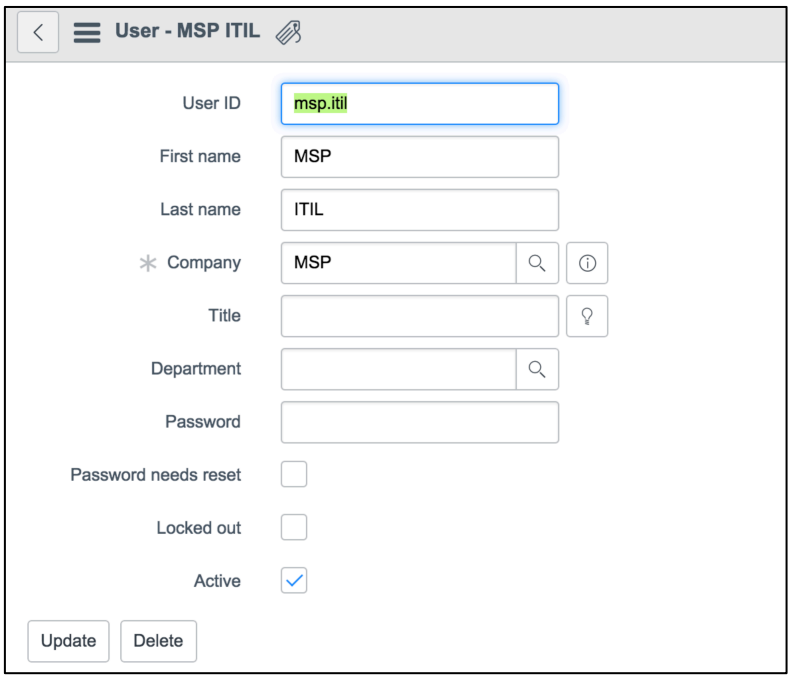


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Expand Domain Scope Functionality

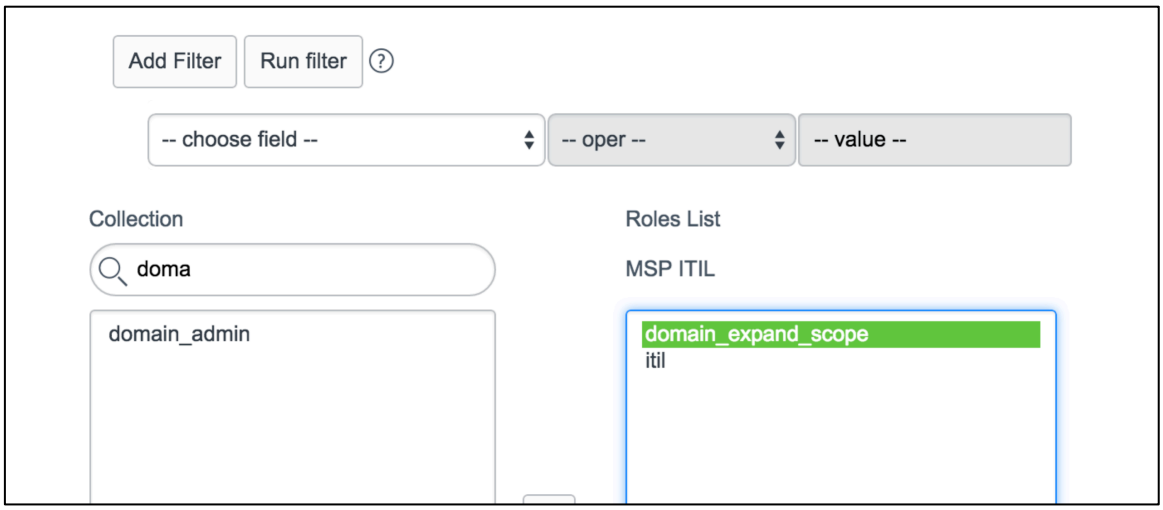
1. The data accessible to a record is restricted to that records domain context by default. This restriction can be toggled between the users domain context and the records domain context if the user has the appropriate role.

2. Create an **msp.itil** user. Complete the fields as shown in the image below and click **Update**.



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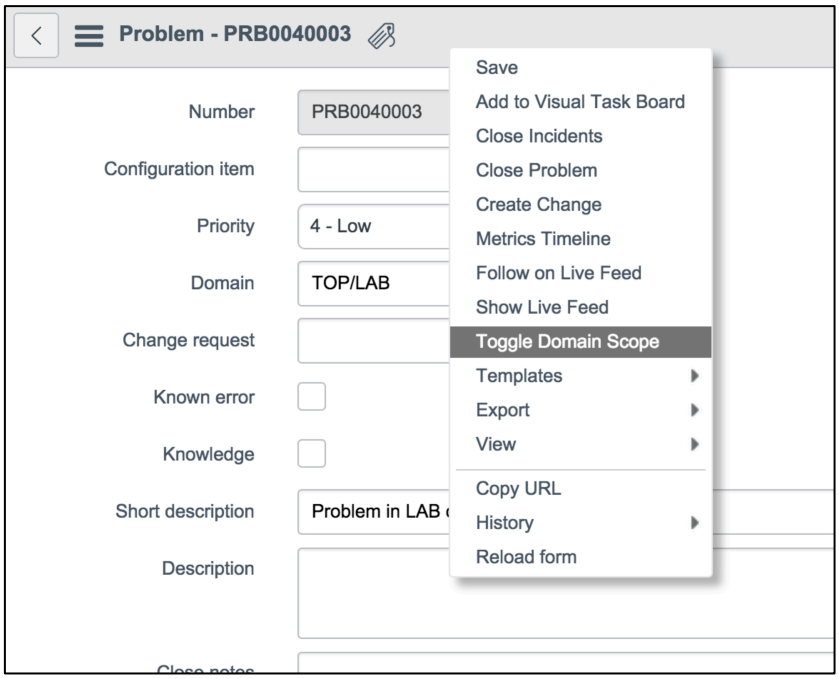
3. Assign the user the **itil** and **domain_expand_scope** roles.



4. Impersonate the **MSP itil** user and navigate to a problem in the **Lab** domain.

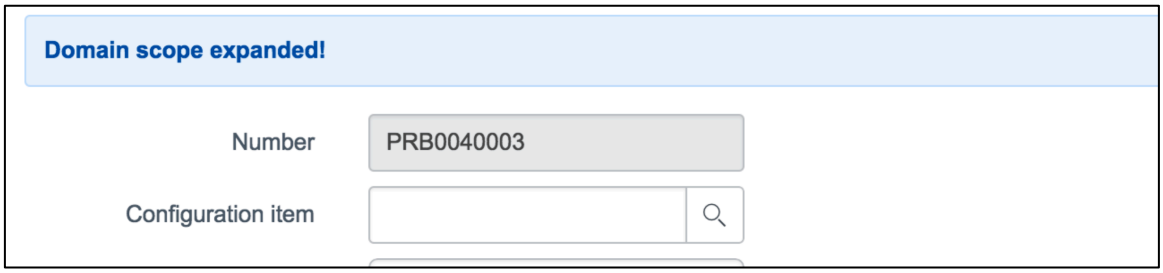
5. Note that you cannot see any users outside of **Global**, **Lab** and **Cisco** domains when you try the reference field of **Assigned To**. Try to find the **MSP itil** user you just created.

6. Select **Toggle Domain Scope** by bringing up the context menu in the **Problem** form.

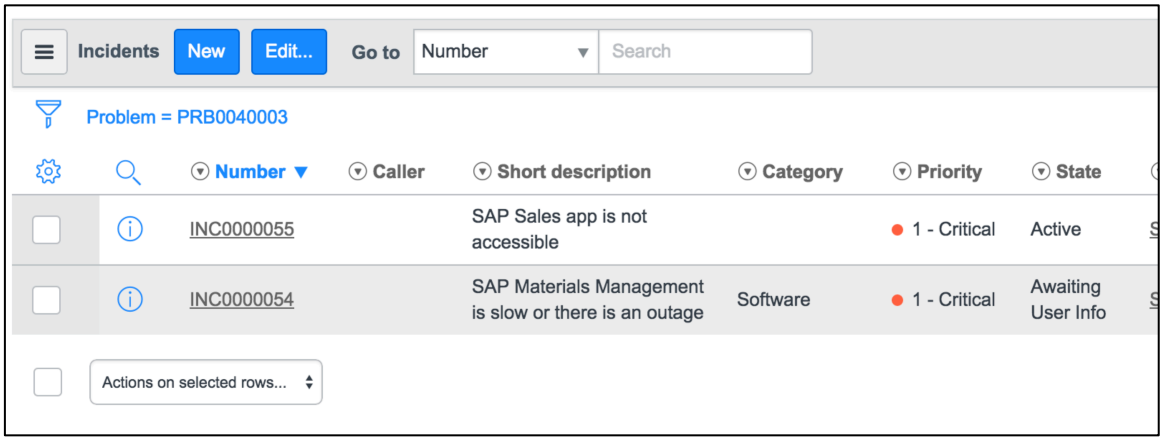


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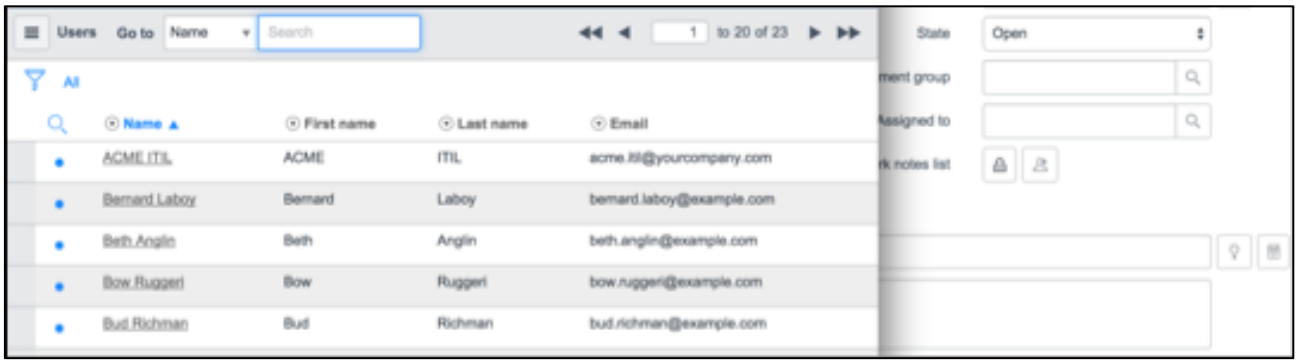
7. Once the domain scope is expanded, there is an info message at the TOP indicating that the user can access more data.



8. Select **Edit** on the incidents related list now and an MSP incident can be selected.



9. Go to the **Assigned To** reference field. Users from the context of the MSP domain are now visible.



Congratulations on finishing the Lab!

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