knowledge14
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Lab Guide

Configuration Management:

Get the Most Value from your CMDB

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Lab instance: https://**<<name>>**.lab.service-now.com

Login / Passwords:

admin / Knowledge14

Lab Goal

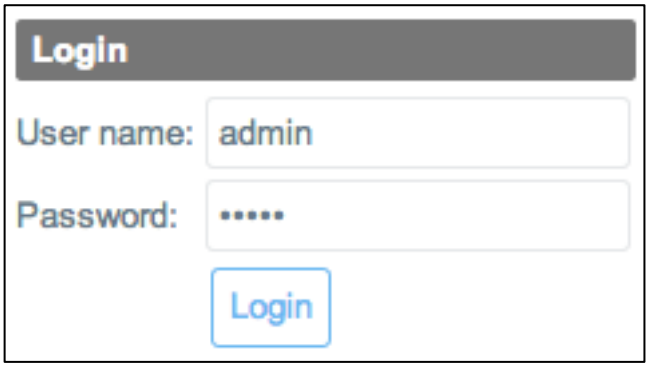
The goal for the first part of this lab is to extend the CMDB by creating a new Class. ServiceNow does not have a CLASS for Mainframes out of the box. For this exercise we will extend a current class called Server. By extending a current class, we will inherit all the fields from that class and have the opportunity to add new fields specific to our new class.

Lab 1.1 Create a New Mainframe Class

Log on to Your Training Instance

1. Your instance URL is on the cover page.

2. Login using the **admin** credentials provided on the cover.



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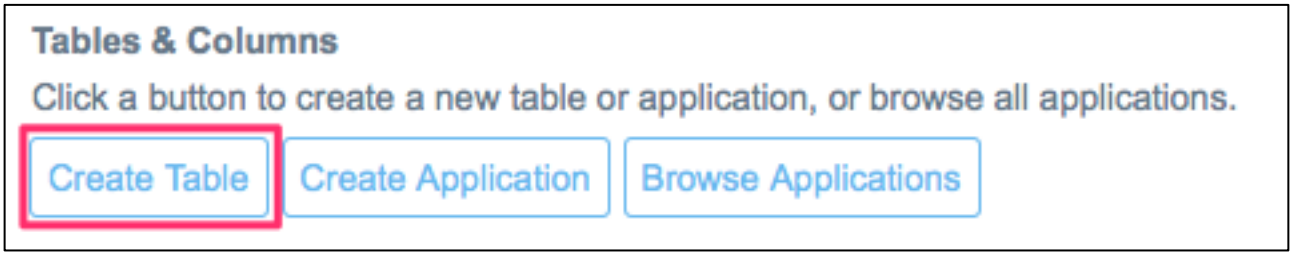
Create a New Class Called Mainframe

1. Navigate to **System Definition > Tables and Columns**.



NOTE: In subsequent labs, these steps will be abbreviated to **Application Name** > **Module Name.**

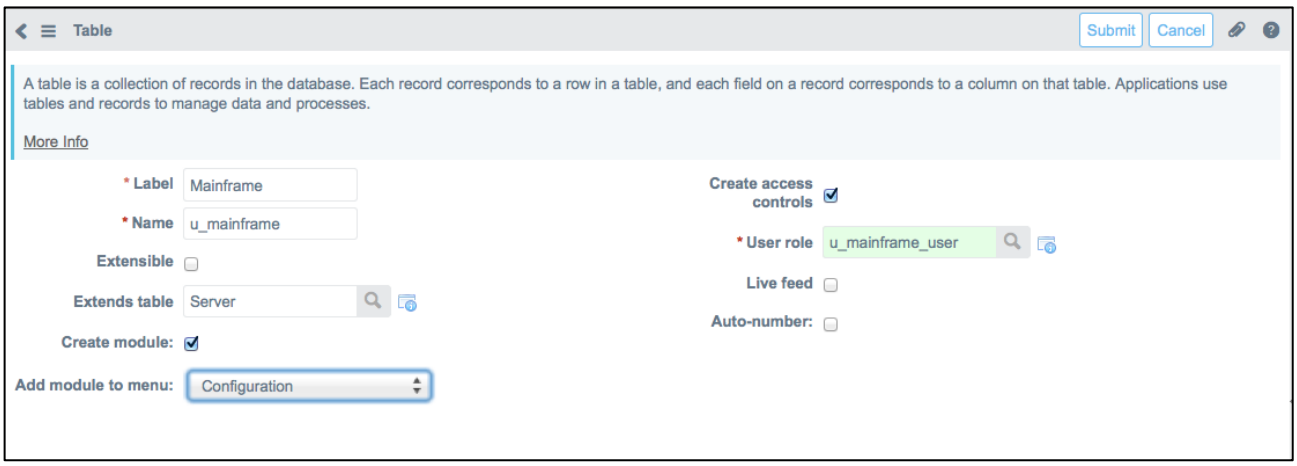
2. Click **Create Table**.



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3. Complete the form as follows and click **Submit**.

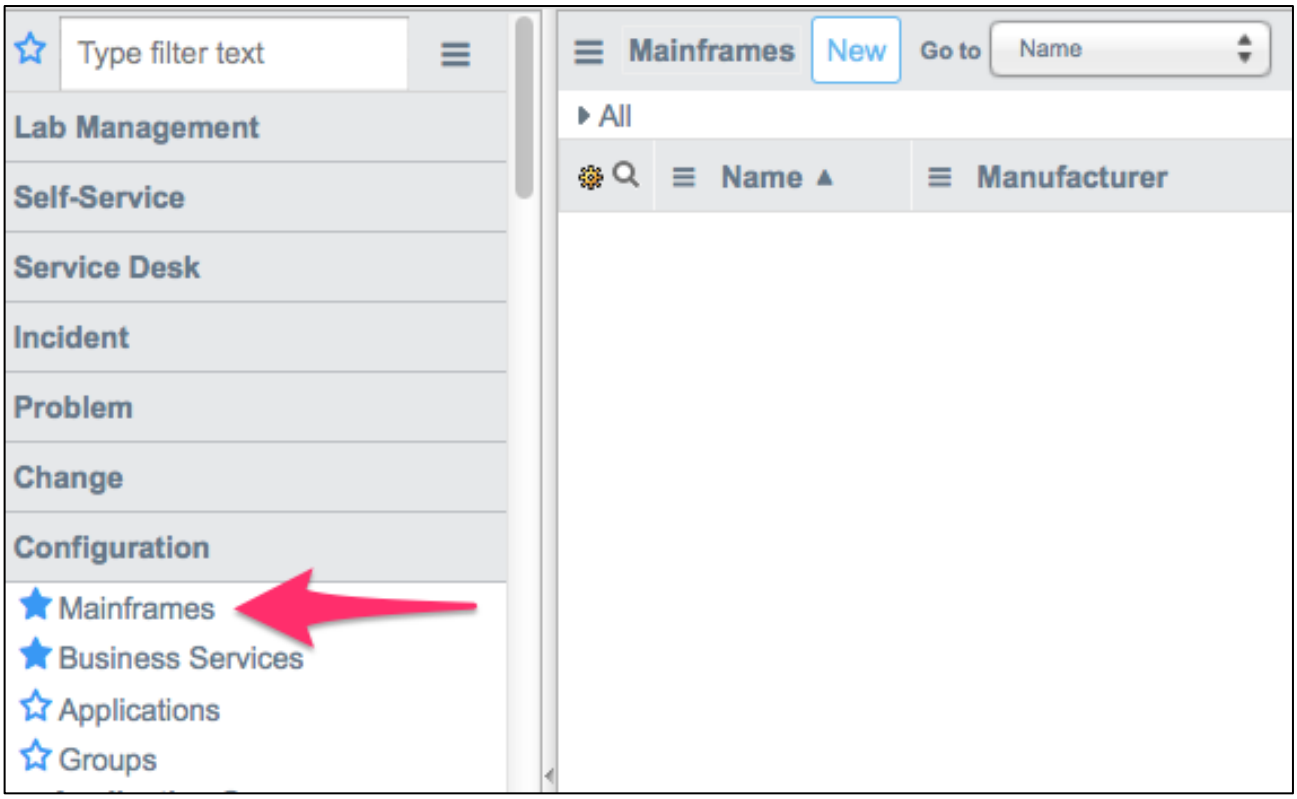
   Label: **Mainframe**
   Name: auto-fills with u_mainframe
   Extends Table: **Server**
   Create Module: **Check**
   Add module to menu: **Configuration**
   Create access controls: **Check**
   User role: auto-fills with u_mainframe_user



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Lab Success Verification

1. Navigate to **Configuration > Mainframes**. Your screen should look like this:



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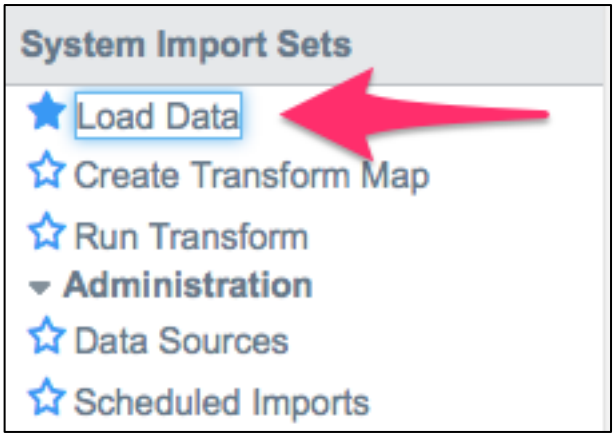
Lab Goal

The goal for this first part of this lab is to import data into the Mainframe class we just created. You will need to download all the spreadsheets from the Knowledge Base.

Lab 2.1 Import Mainframe Data

Create a New Import Set.

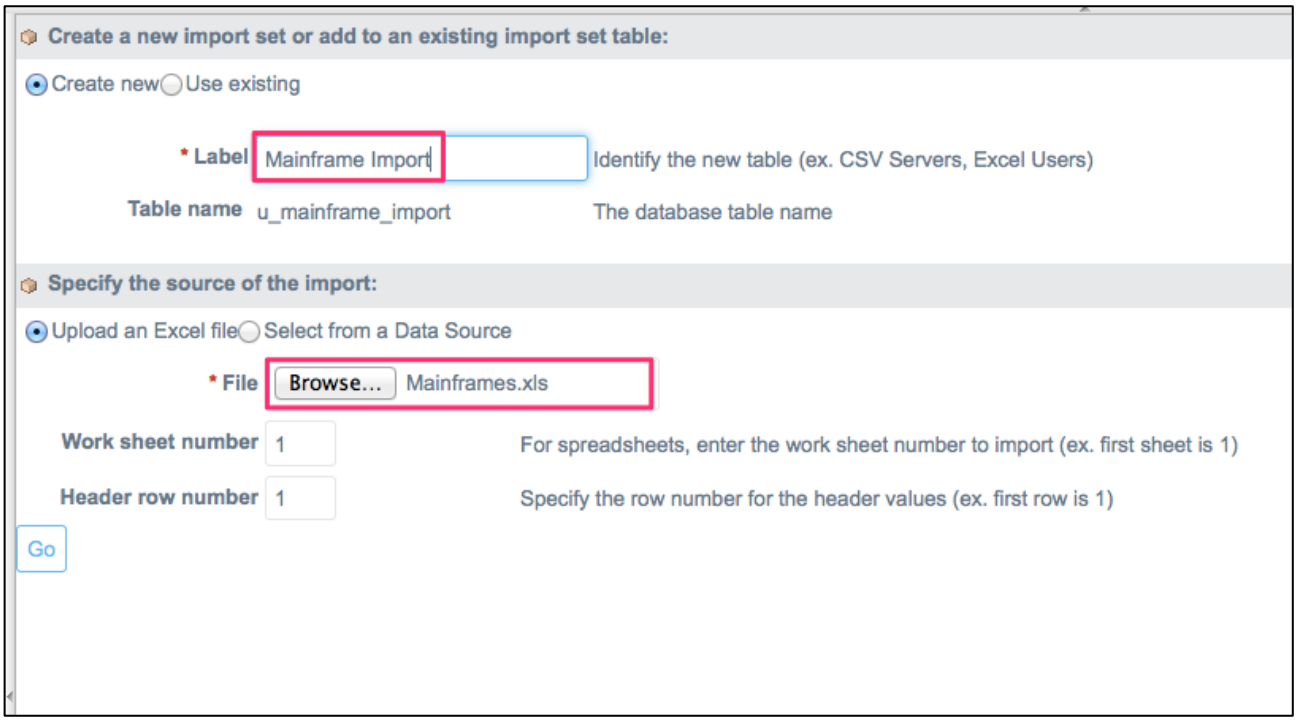
1. Navigate to **System Import Sets > Load Data**.



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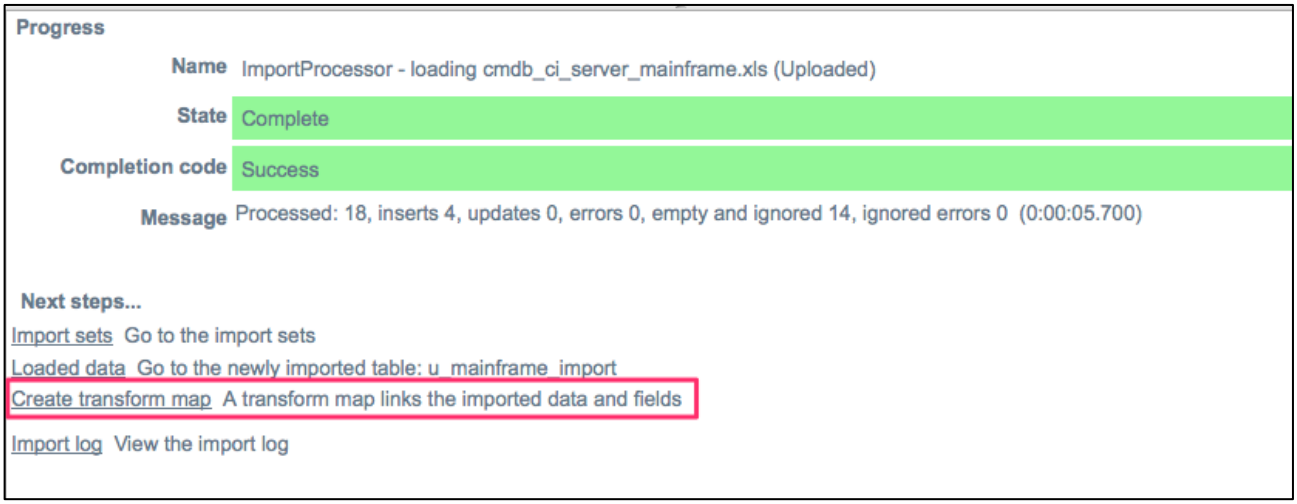
2. Create a new import set.

   Label: **Mainframe Import**
   Table name: auto-fills with **u_mainframe_import**
   Choose File: **cmdb_ci_server_mainframe.xls**
   Click **Go.**



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3. Your screen should look like this. Click **Create transform map**.



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4. Complete the form as follows.

   (1) Name: **Mainframe Import**
   Source table: u_**mainframe_import [u_mainframe_import] (Preselected)**
   (2) Target table: **Mainframe [u_mainframe]**

   Since the fields in the spreadsheet match the fields in the CMDB, the **Auto map matching fields** link is available.

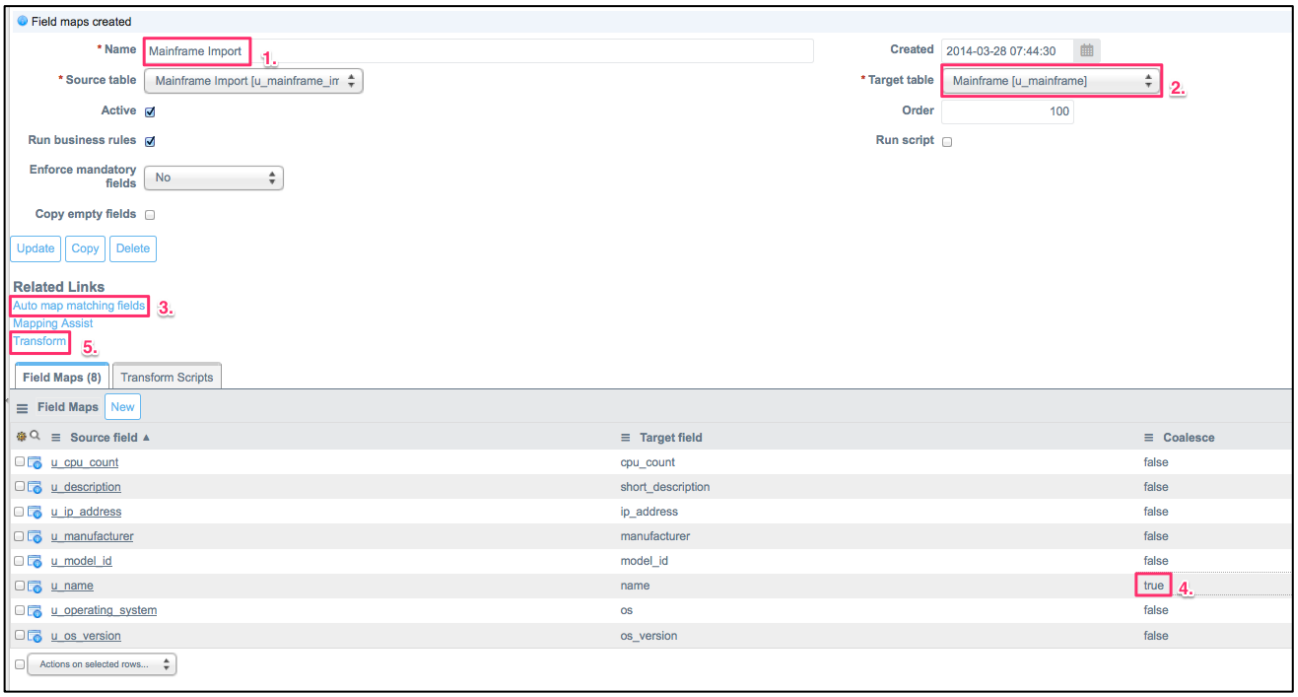
   If the fields did not match, you would need to use **Mapping Assist**. Click the **Mapping Assist** link to see the drag and drop UI for mapping fields. Click **Cancel** when you are done.

   (3) Click **Auto map matching fields**.

   Coalesce fields identified in Step 4 tell the system which field to use as the unique. You can have multiple coalesce fields, but for this exercise:

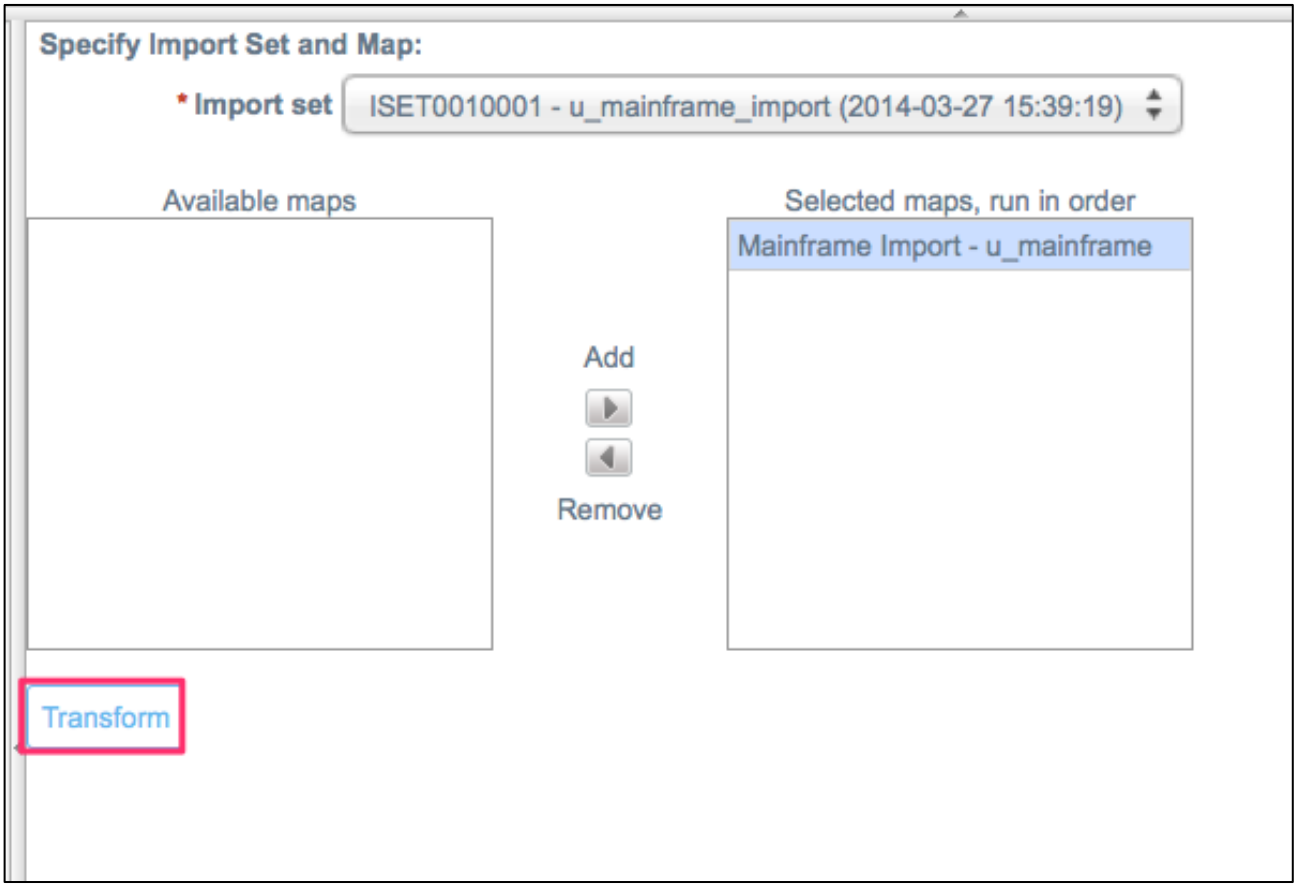
   (4) Coalesce: **name = true**

   (5) Click **Transform**



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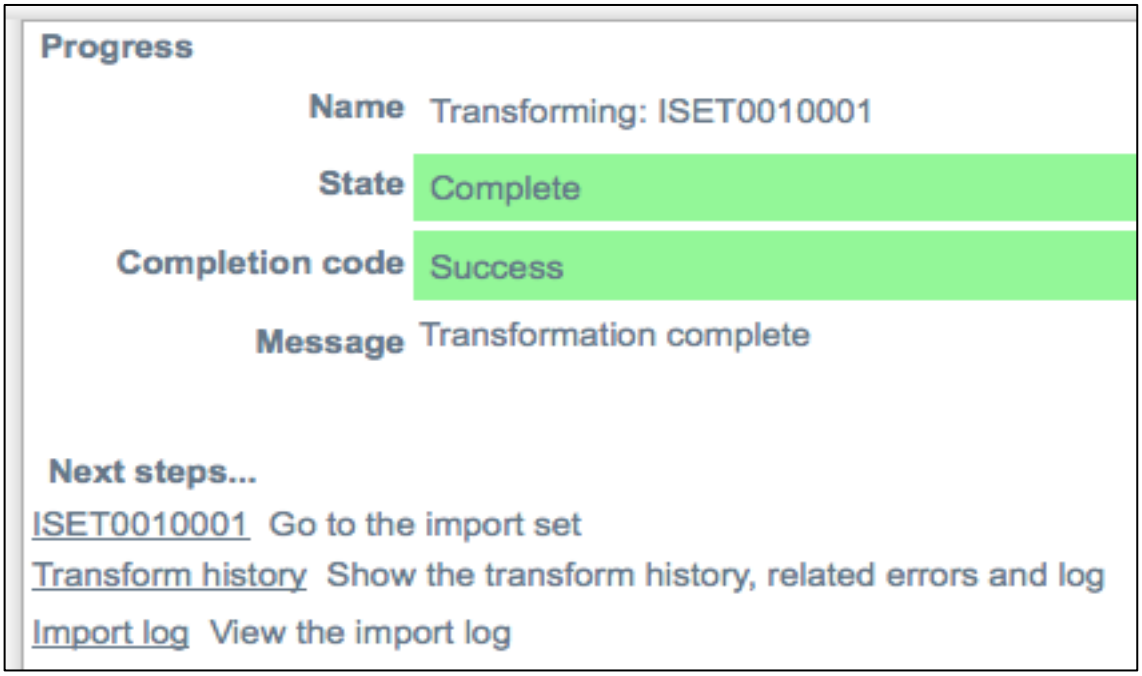
5. Be sure **mainframe – u_mainframe_import** is preselected then click **Transform**.



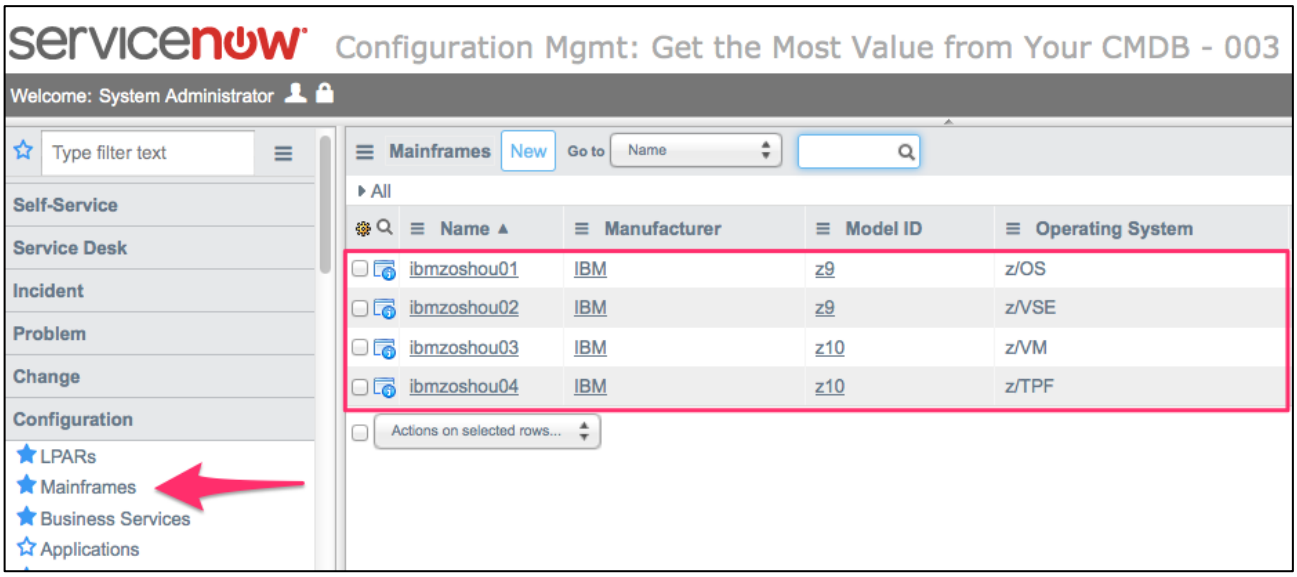
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Lab Success Verification

Your screen should look like this.



Navigate to **Configuration > Mainframes** to see the imported data.



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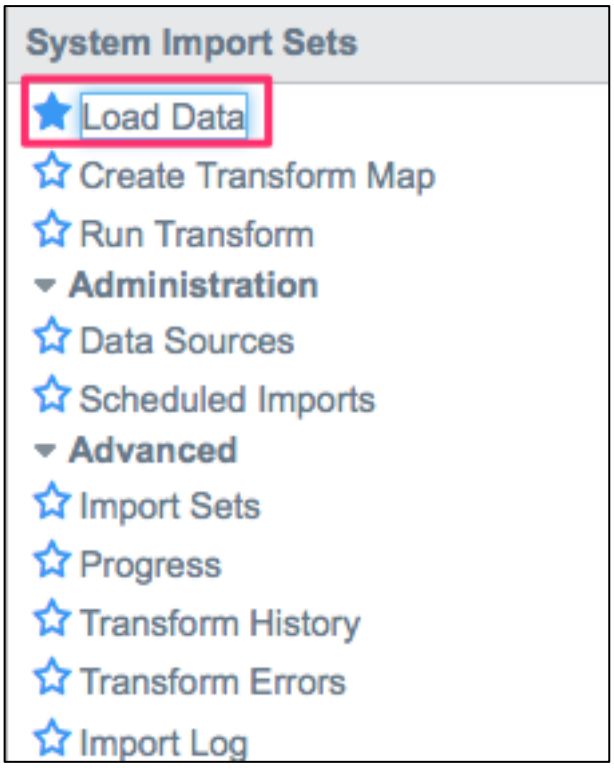
Lab Goal

The goal for this part of this lab is to import data for the Seibel Environment. It will be loaded into the Window Server class that is available out of the box. You will need to download all the spreadsheets from the Knowledge Base.

Lab 2.2 Import Siebel Environment

Import Siebel Servers

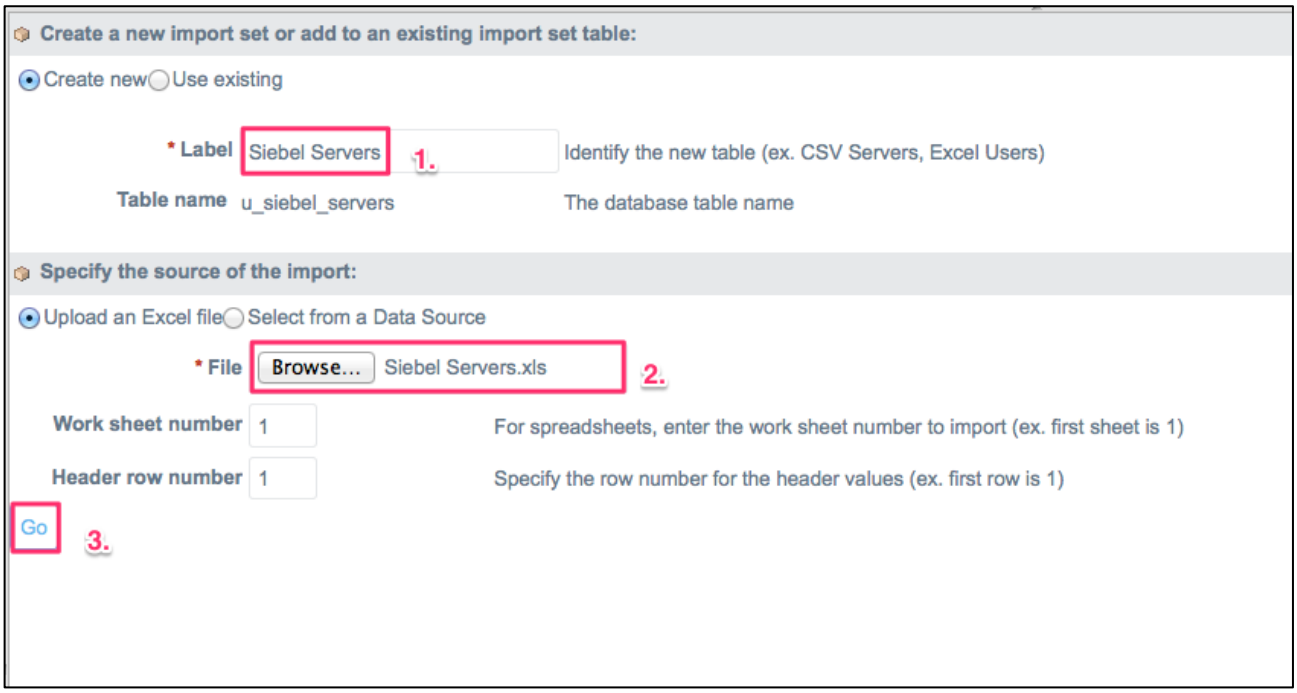
1. Navigate to System **Import Sets > Load Data**.



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2. Create a new import set.

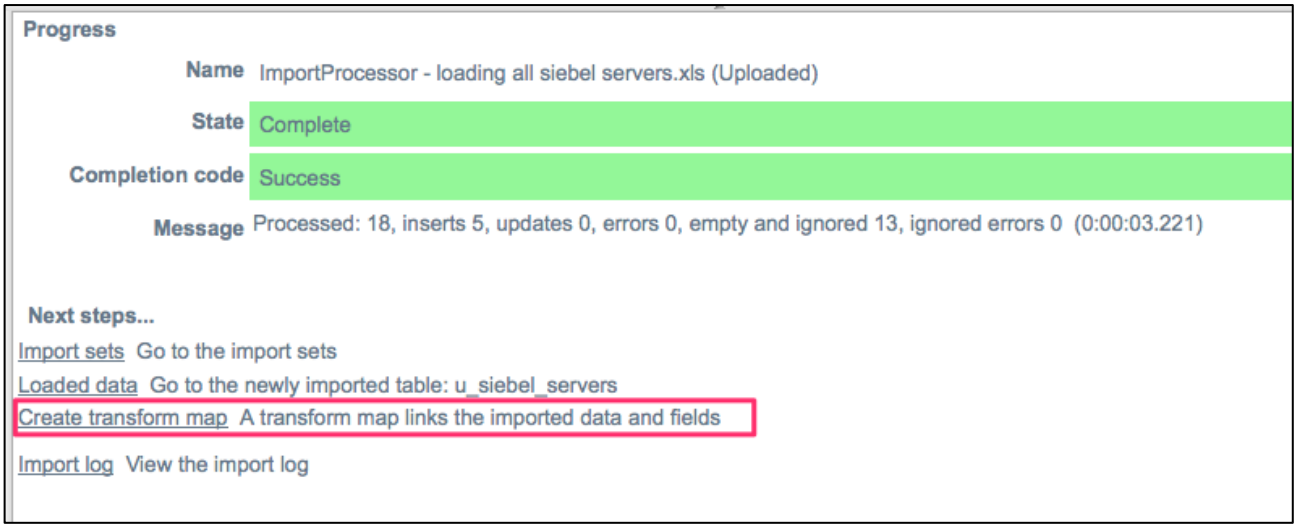
   (1) Label: **Siebel Servers**
   Table name: auto-fills with **u_siebel_servers**
   (2) Choose File: **All Siebel Servers.xls**
   (3) Click **Go.**



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3. Click **Create transform map**.

   Notice 5 inserts were processed.



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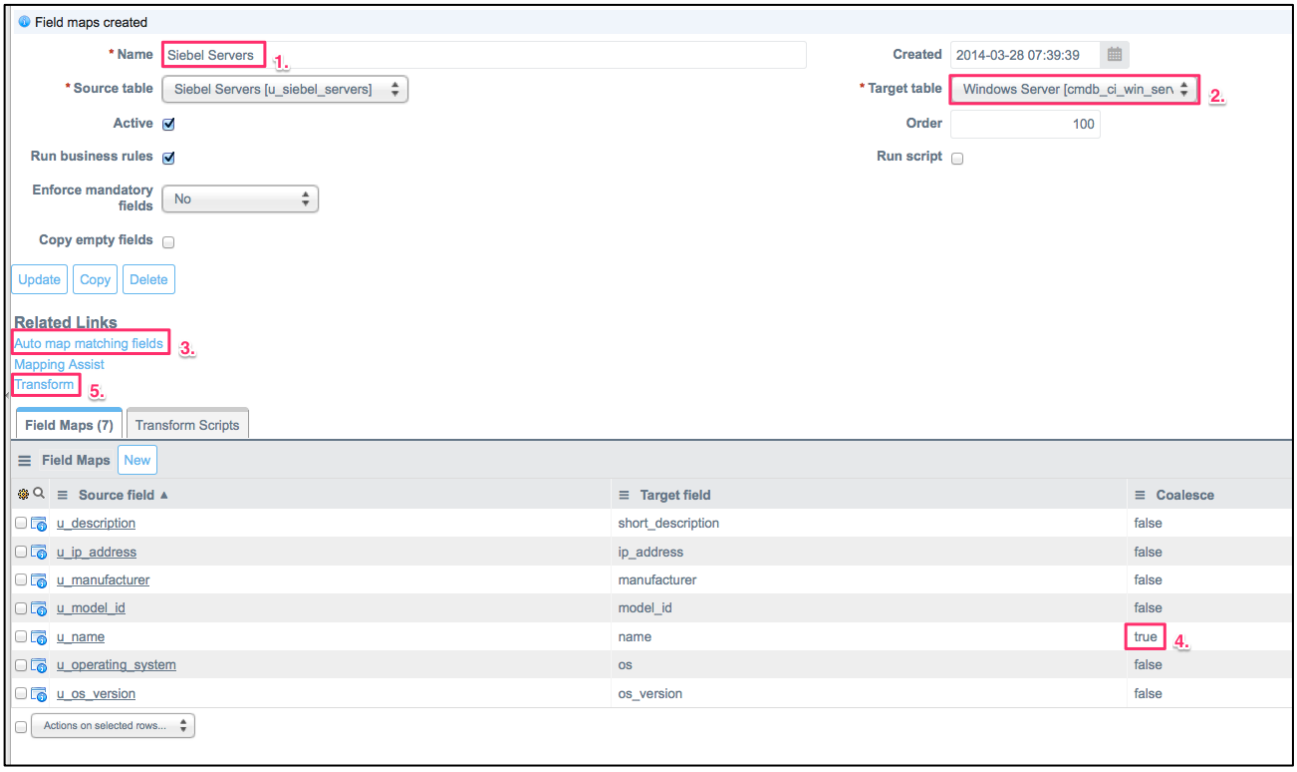
4. Complete the form and follow these steps.

   (1) Name: **Siebel Servers**
   Source table: **Siebel Servers [u_siebel_servers]**
   (2) Target table: **Windows Server [cmdb_ci_win_server]**

   Because the fields in the spreadsheet match the fields in the CMDB, the **Auto map matching fields** link is available.

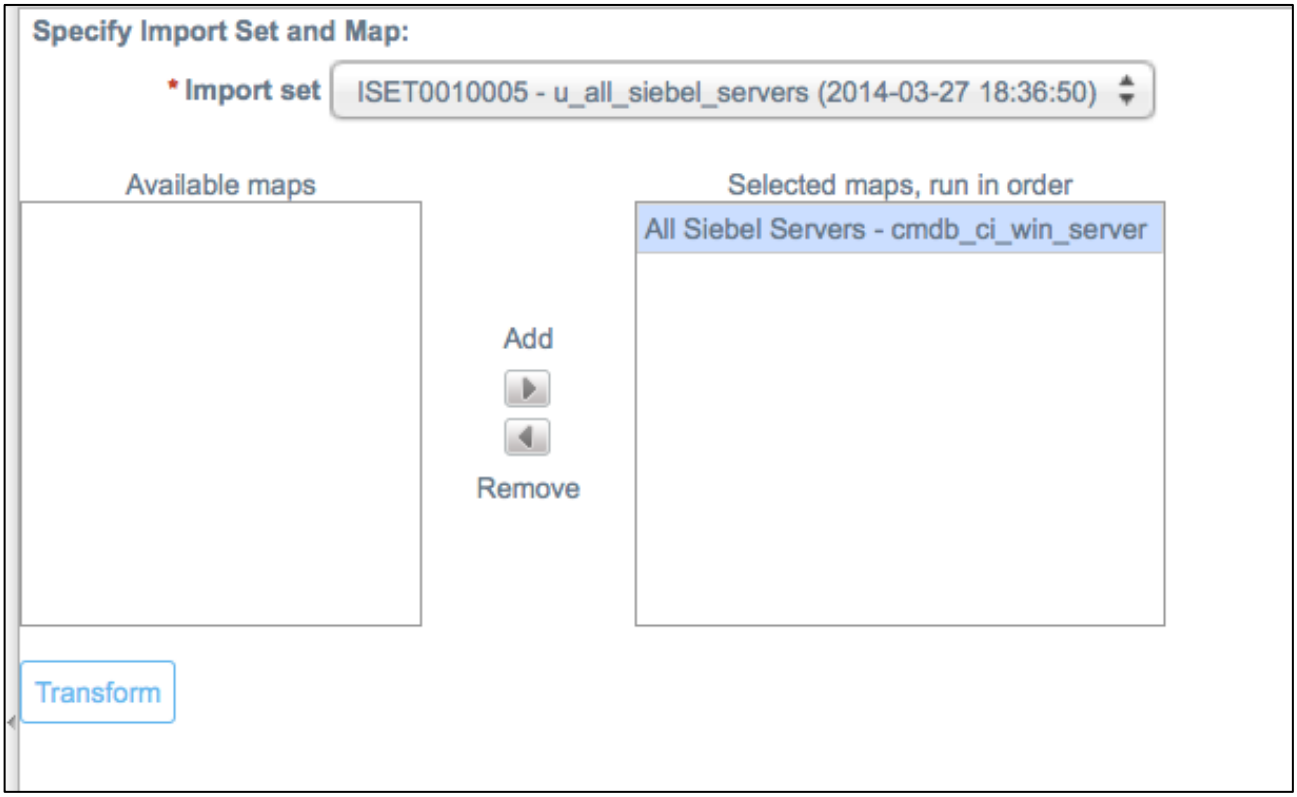
   If the fields did not match, you would need to use **Mapping Assist**. Click the **Mapping Assist** link to see the drag and drop UI for mapping fields. Click **Cancel** when you are done.

   (3) Click **Auto map matching fields**.
   (4) Coalesce fields identified in Step 4 tell the system which field to use as the unique. You can have multiple coalesce fields, but for this exercise just use **name**.
   (5) Click **Transform**.



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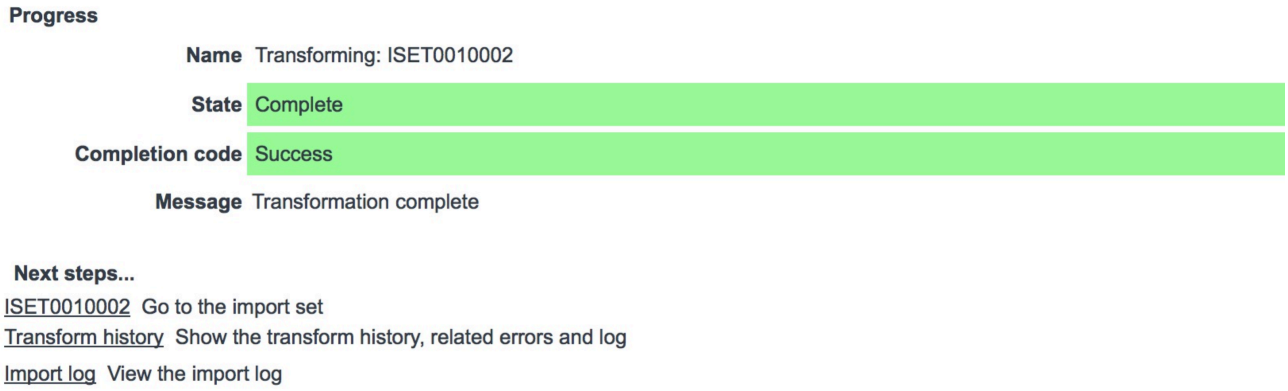
5. Be sure **Siebel Servers – cmdb_ci_win_server** is preselected then click **Transform**.



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Lab Success Verification

Your screen should look like this:



Please verify the import by checking the CMDB.

Note: You can view the **Import Log** if you like.

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Lab Goal

The goal for this part of this lab is to import data for the Seibel Environment. It will be loaded into the Load Balancer class that is available out of the box. You will need to download all the spreadsheets from the Knowledge Base.

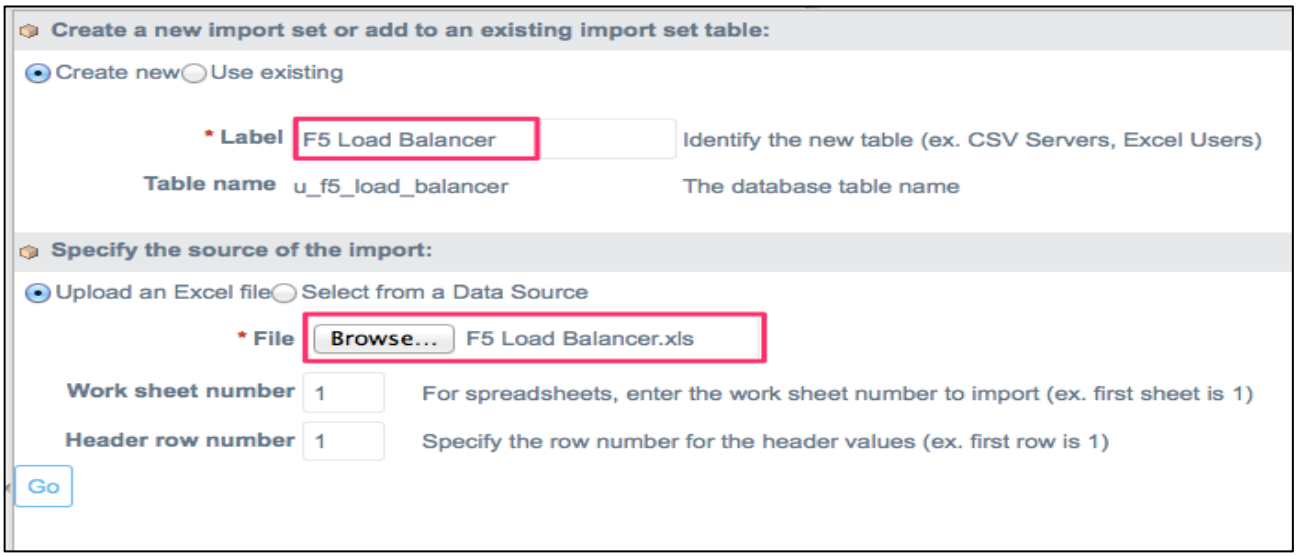
Lab 2.3
Import F5 Load Balancer

Import F5 Load Balancer

1. Navigate to **System Import Sets > Load Data**.

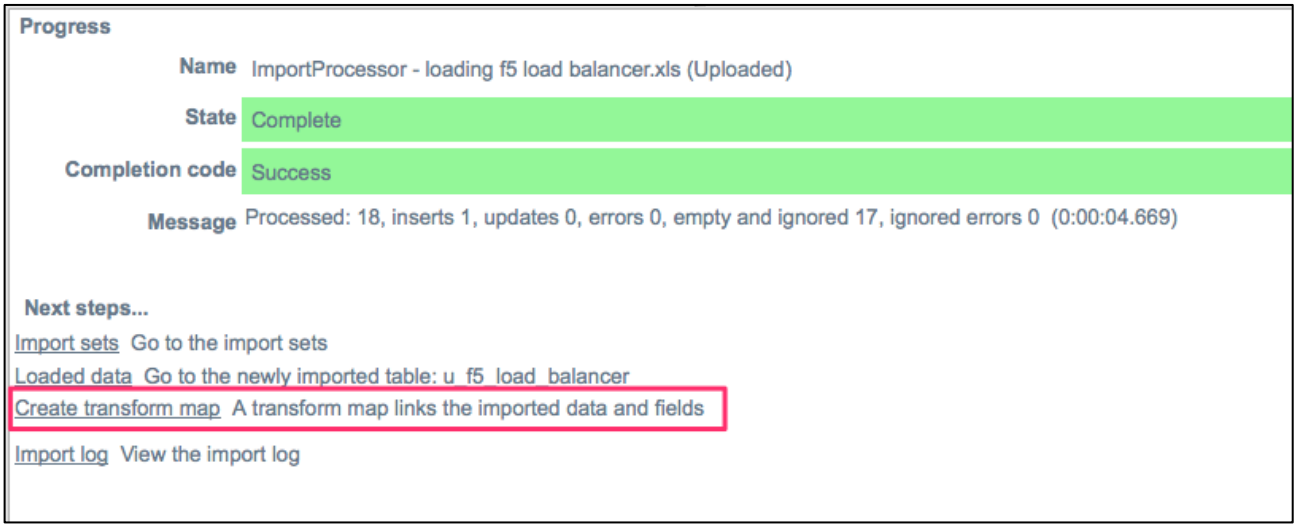
2. Create a new import set.

   Label: **F5 Load Balancer**
   Table name: auto-fills with **u_f5_load_balancer**
   Choose File: **F5 Load Balancer.xls**
   Click **Go**



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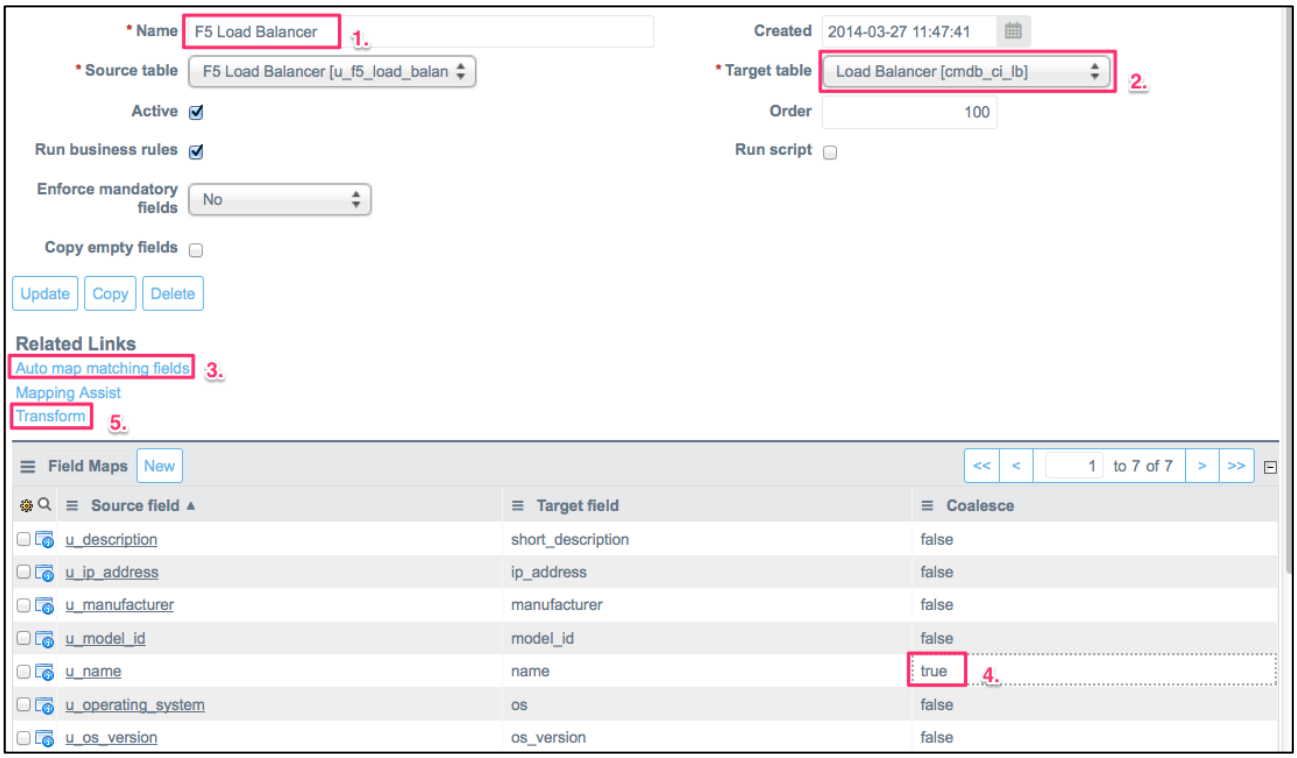
3. Click **Create transform map**.



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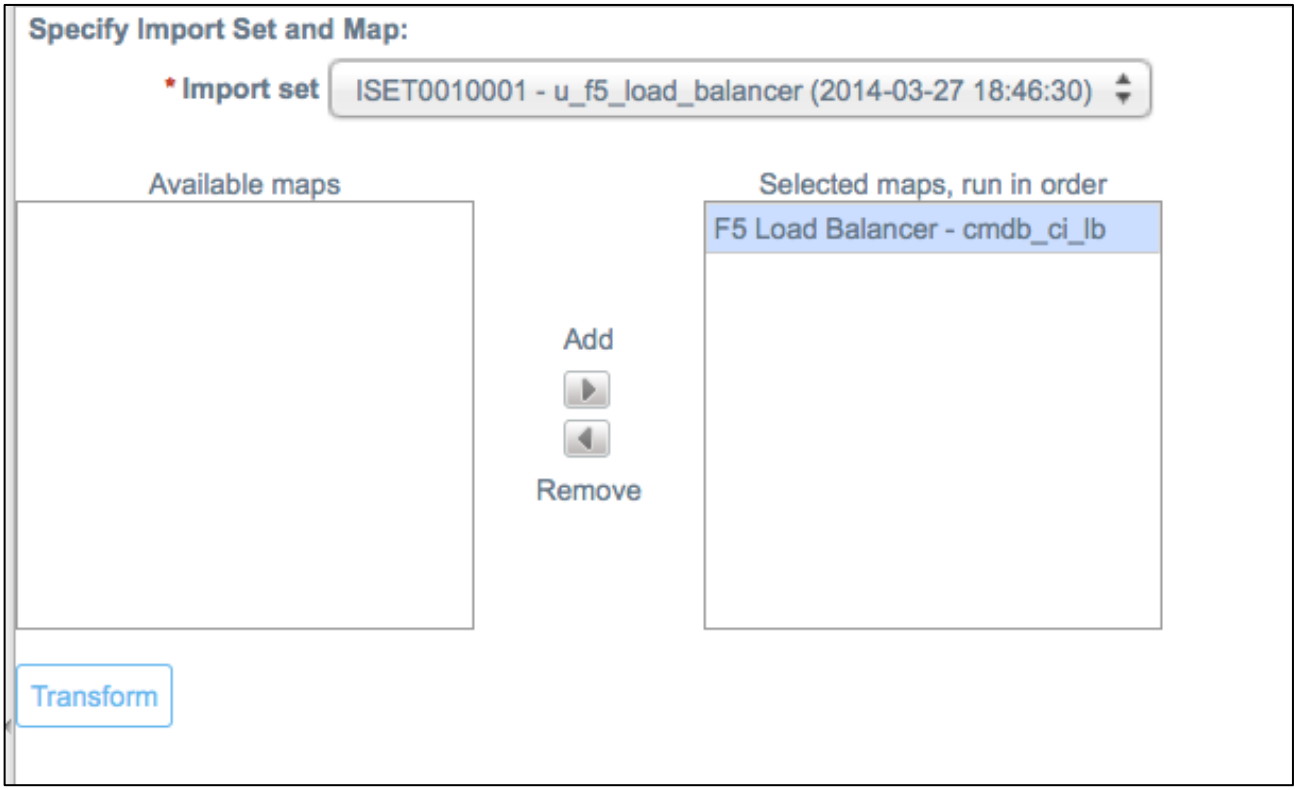
4. Complete the form as follows:

   (1) Name: **F5 Load Balancers**
   Source table: **F5 Load Balancer [u_f5_load_balancer]** should be preselected
   (2) Target table: **Load Balancer [cmdb_ci_lb]**
   (3) Click **Auto map matching fields**
   (4) Coalesce: **name** = **true**
   (5) Click **Transform**



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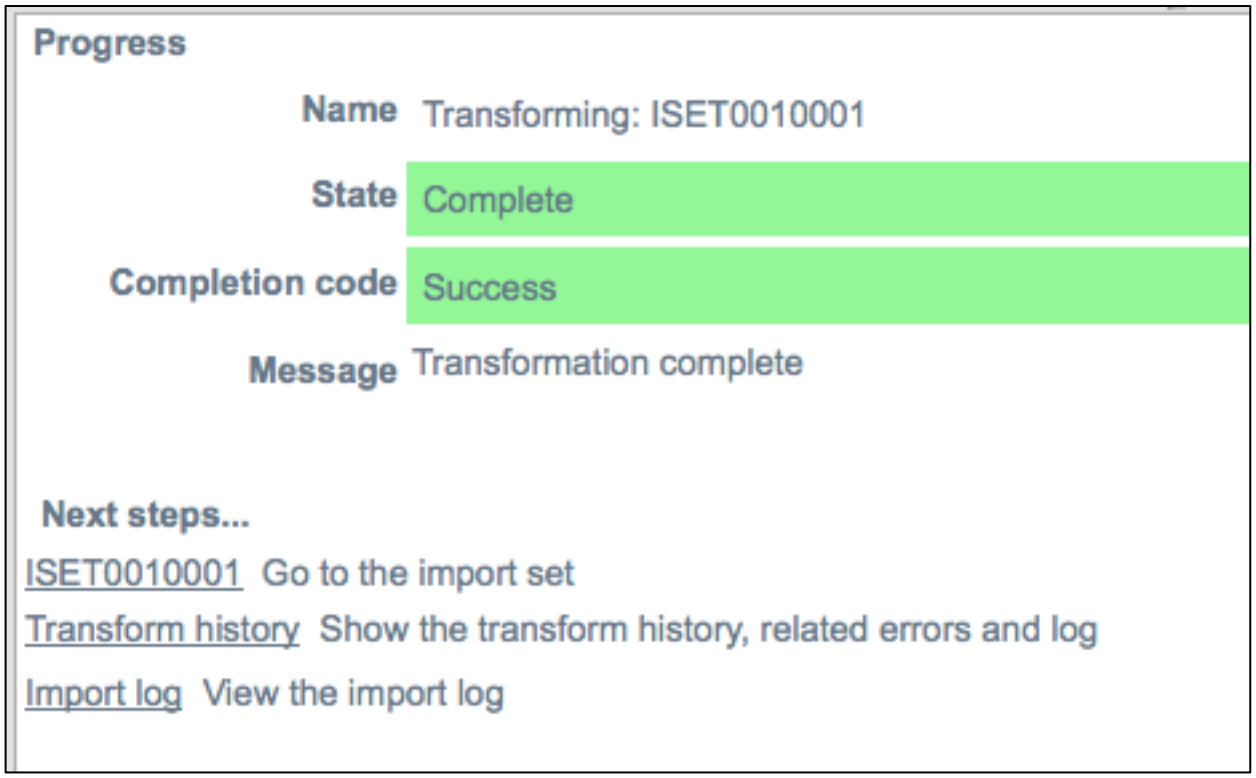
5. The map and transform should be preselected. Click **Transform**.



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Lab Success Verification

Your screen should look like this:



Please verify the import by checking the CMDB.

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Lab Goal

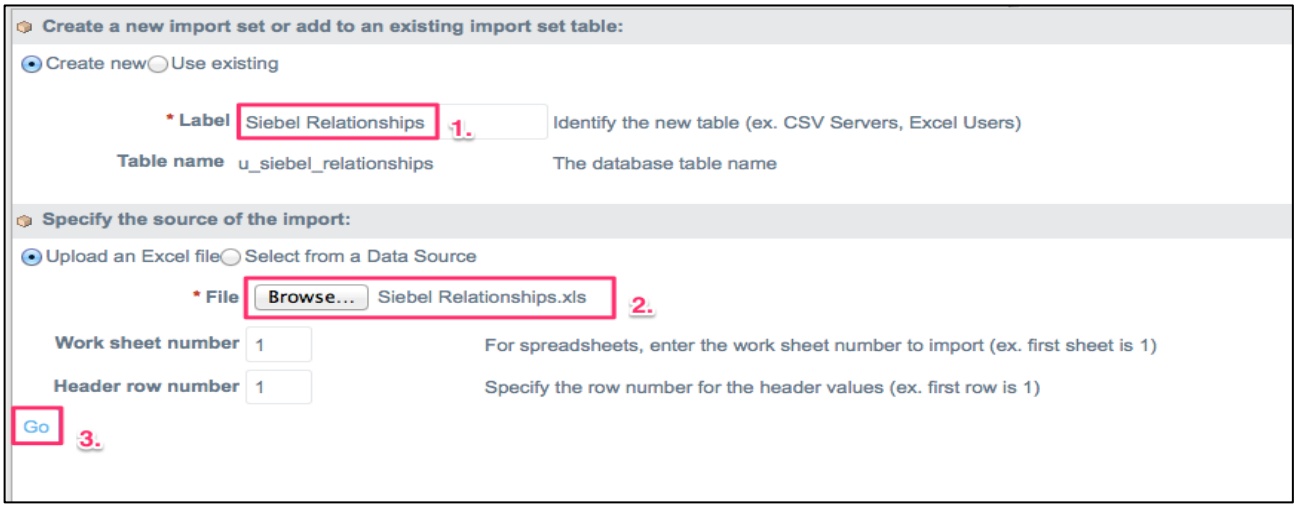
The goal for this part of this lab is to import relationships for the Seibel Environment. You will need to download all the spreadsheets from the Knowledge Base.

Lab 2.4 Import Configuration Item Relationships

Import Configuration Item Relationships

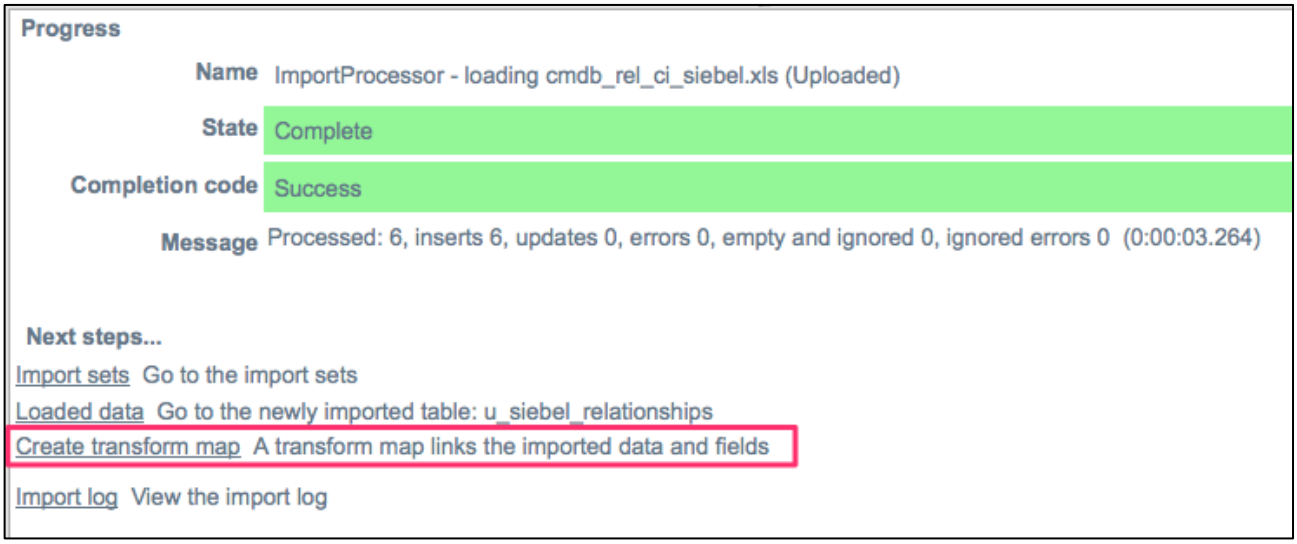
1. Navigate to **System Import Sets > Load Data**.
2. Create a new import set.

   (1) Label: **Siebel Relationships**
   Table name: auto-fills with **u_siebel_relationships**
   (2) Choose File: **cmdb_rel_ci_siebel.xls**
   (3) Click **Go.**



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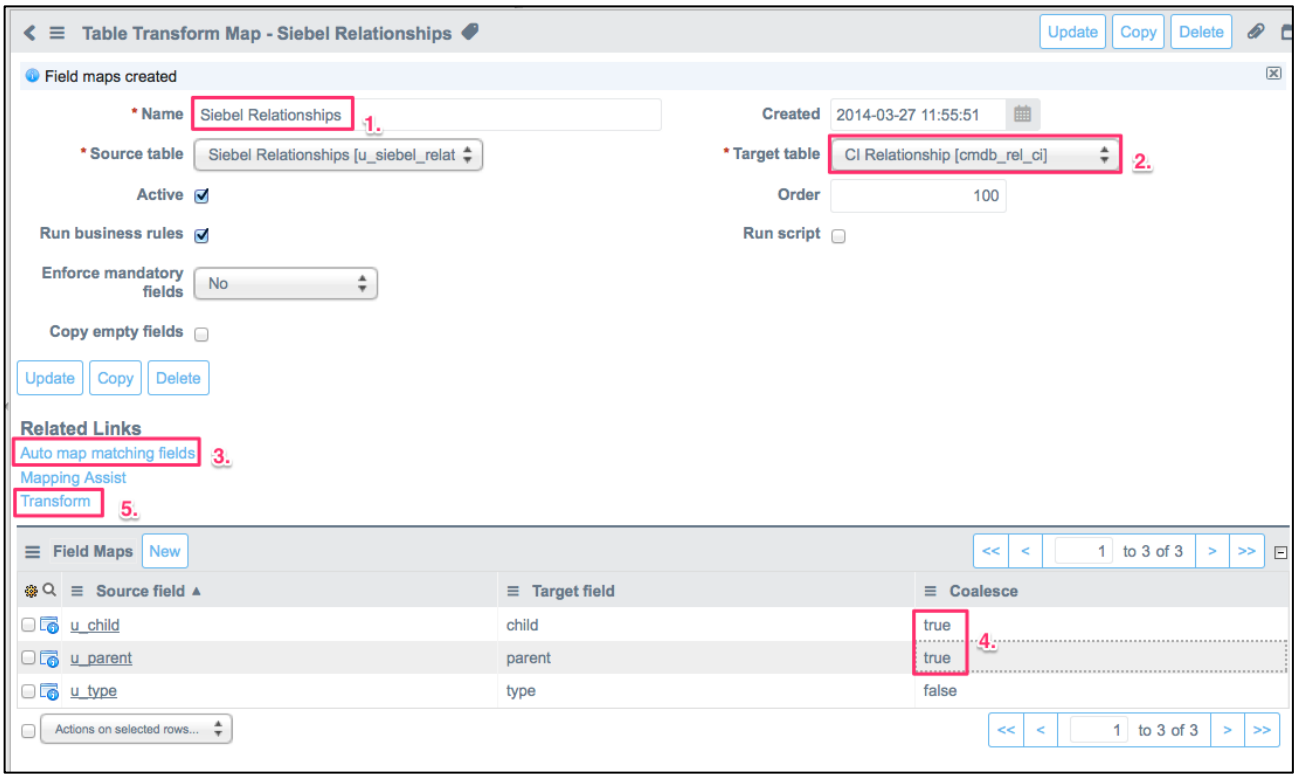
3. Click **Create transform map**.



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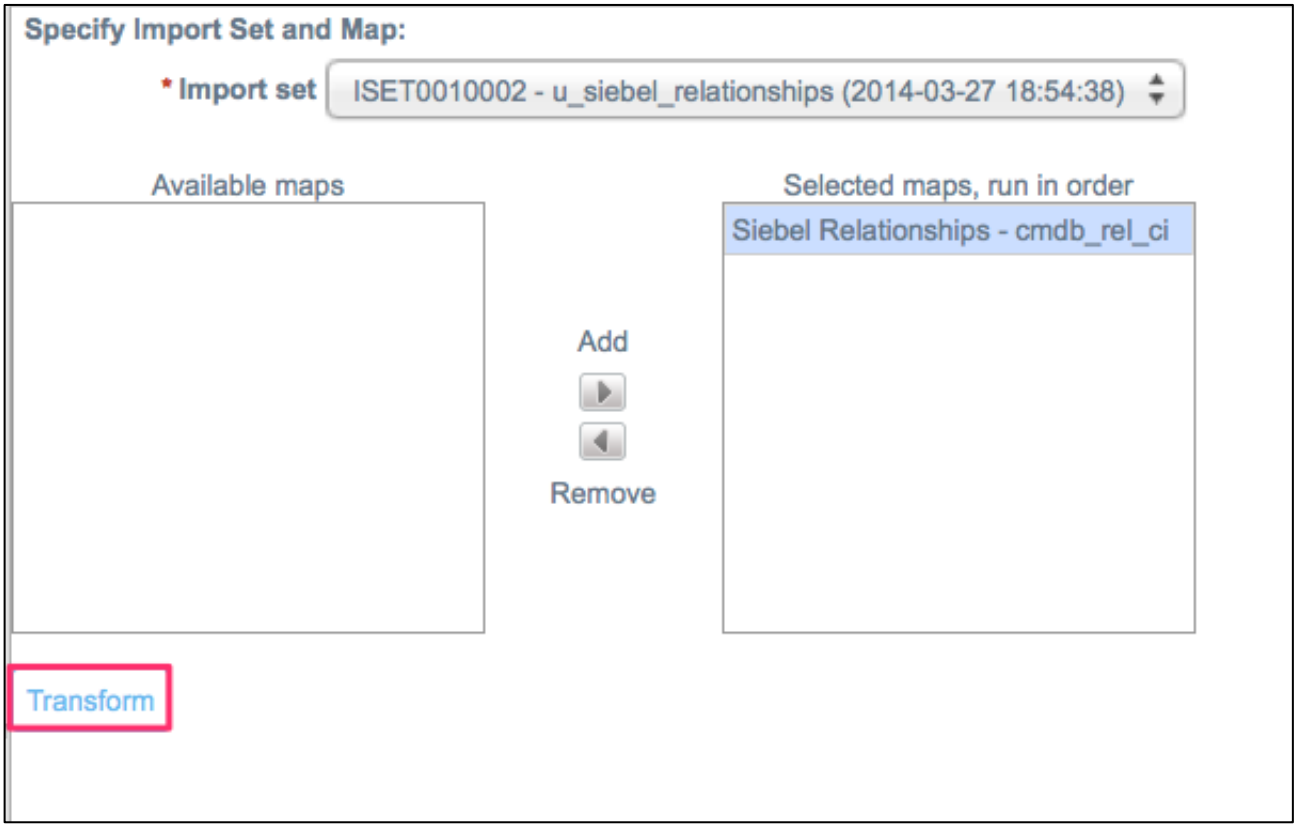
4. Complete the form with the values in the bullets below.

(1) Name: **Siebel Relationships**
Source table: **Siebel Relationships [u_siebel_relationships]** should be preselected
(2) Target table: **CI Relationship [cmdb_rel_ci]**
(3) Click **Auto map matching fields**
(4) Coalesce: **child** = **true** and **parent** = **true**
(5) Click **Transform**



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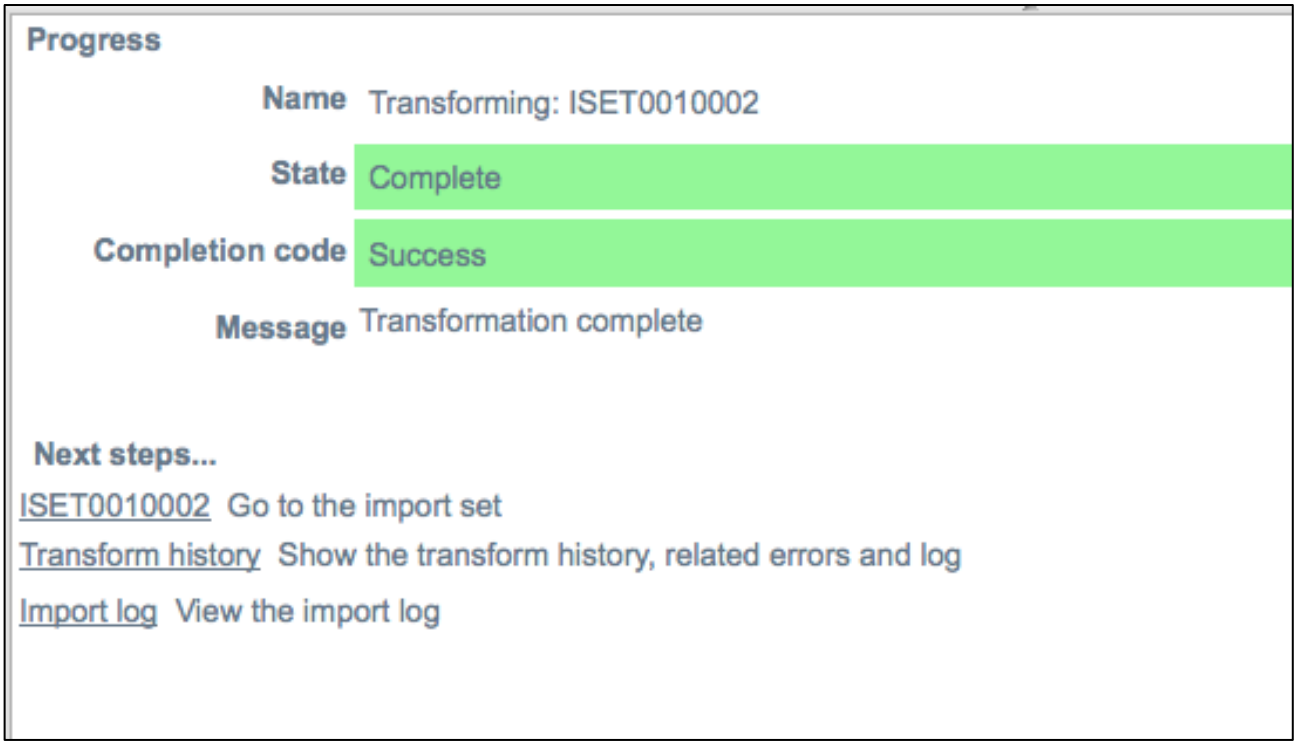
5. Be sure **Siebel Relationships – cmdb_rel_ci** is preselected and click **Transform**.



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Lab Success Verification

Your screen should look like this:



Please verify the import by checking the CMDB.

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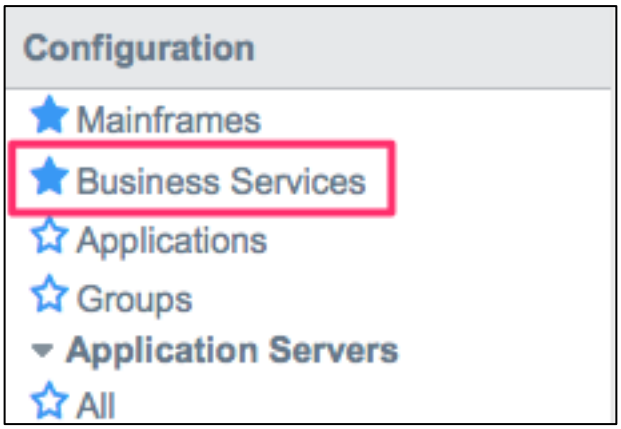
Lab Goal

The goal for this part of this lab is to create a Business Service Map that will tie the underlying infrastructure and relationships to the services they support.

Lab 3.1
Create a Business Service Map

Create a Business Service Map

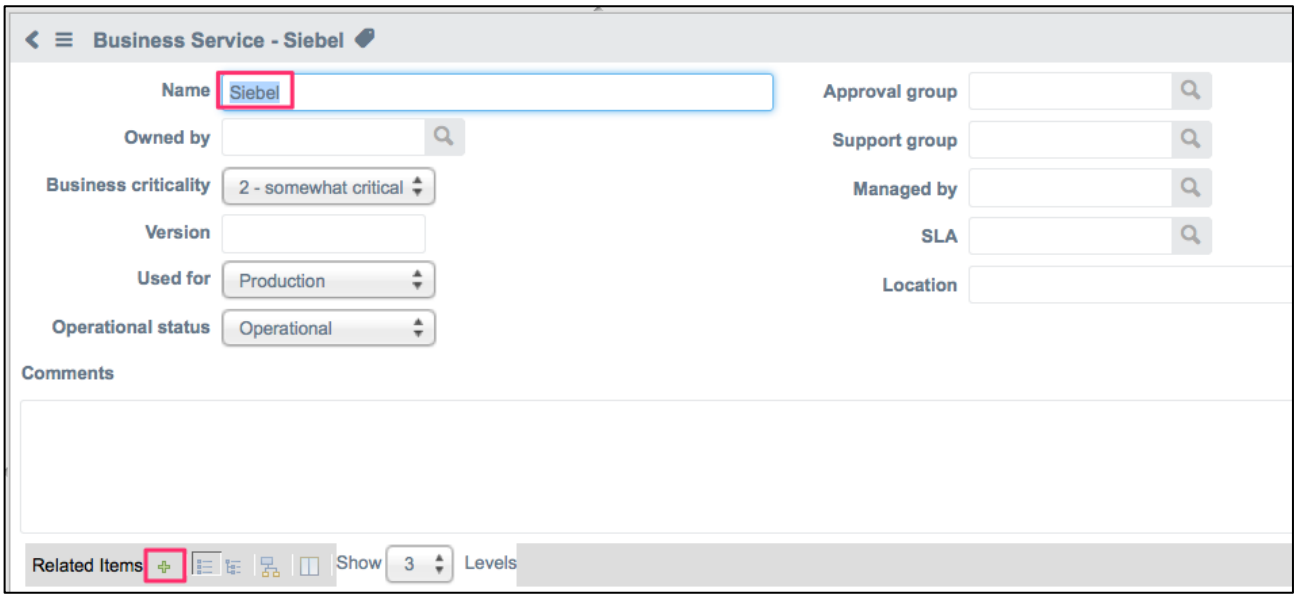
1. Navigate to **Configuration >> Business Services** and click **New**.



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2. Create a **New** Business Service.

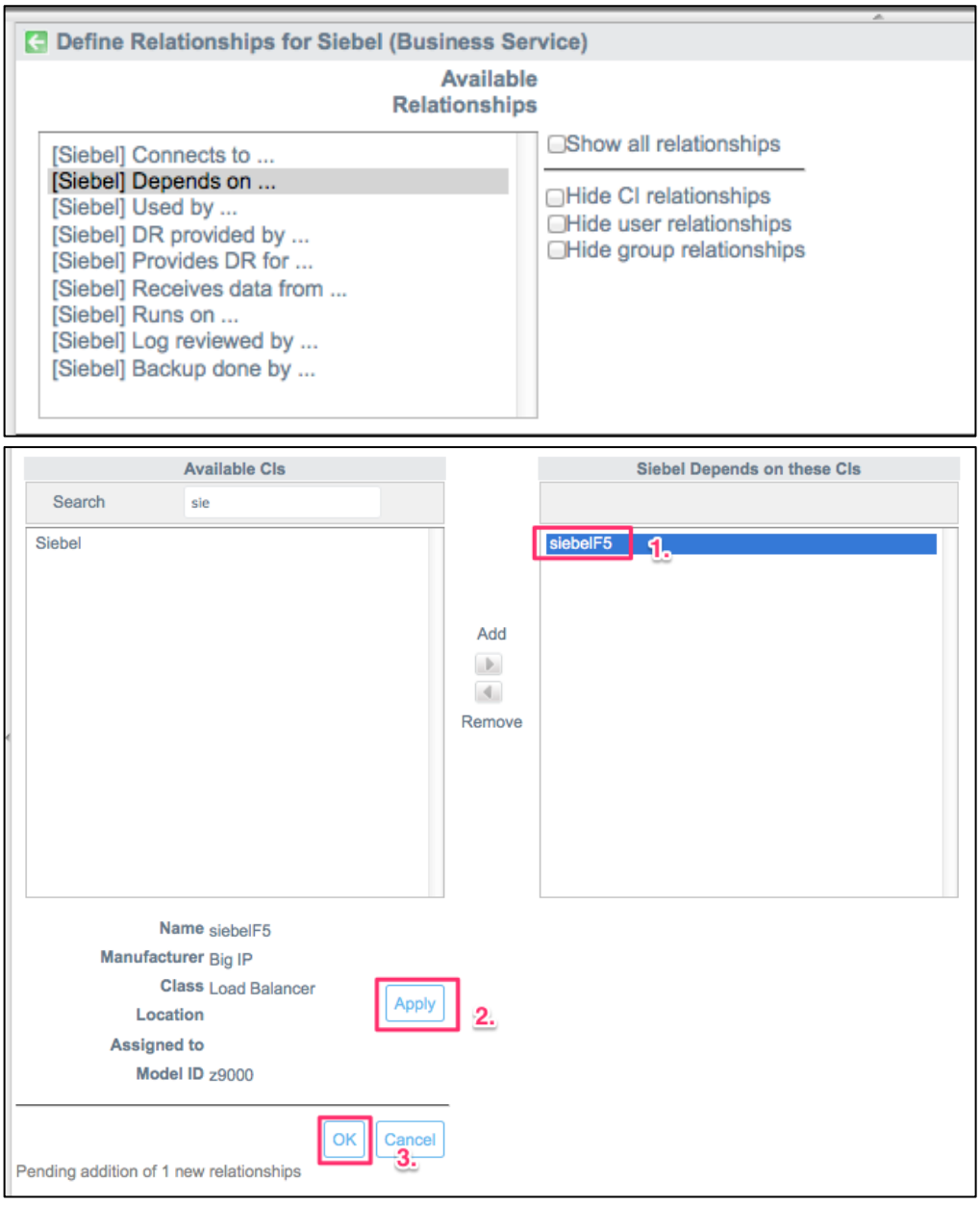
   Name: **Siebel CRM**
   Business criticality: **1 – most critical**
   Used for: **Production** is default
   Operational status: **Operational** is default



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3. Click the **green plus sign** to define relationships as follows below.

   Click **[Siebel] Depends on …**
   (1) Add **SiebelF5** from **Available CIs** to **Siebel Depends on these CIs**
   (2) Click **Apply**
   (3) Click **OK**

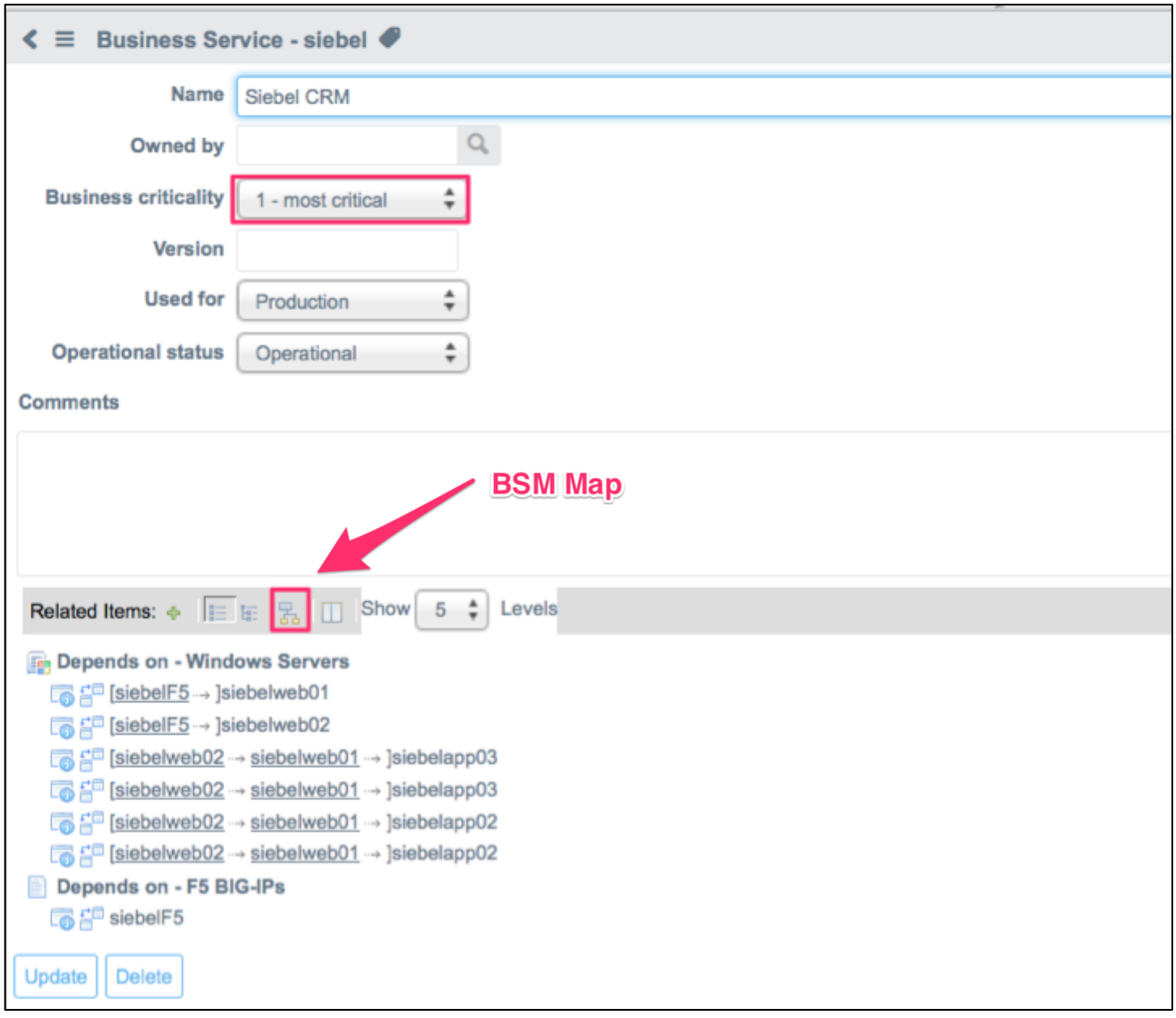


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Lab Success Verification

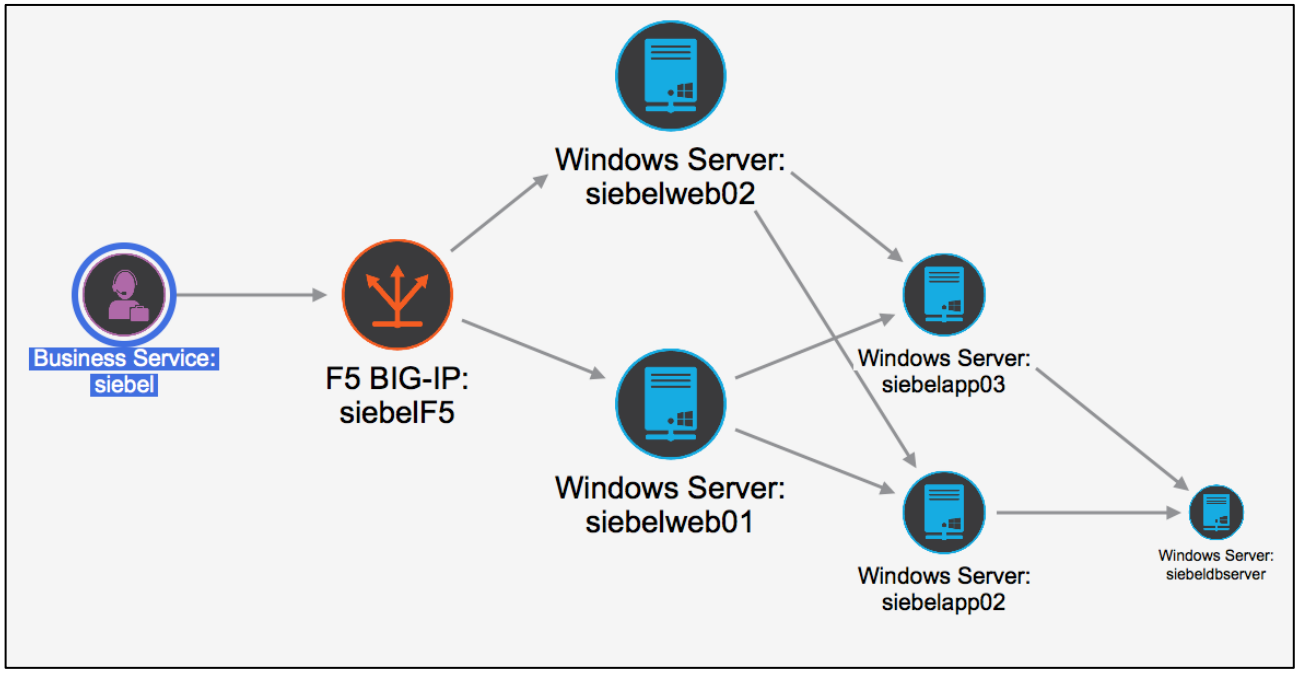
Your screen should look like this.

Click the **BSM Map** icon.



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Your screen should look like this after clicking the **BSM Map** Icon.



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Lab Goal

The goal for this lab is to use your new Business Service Map (BSM) to walk through Incident and Change Management.

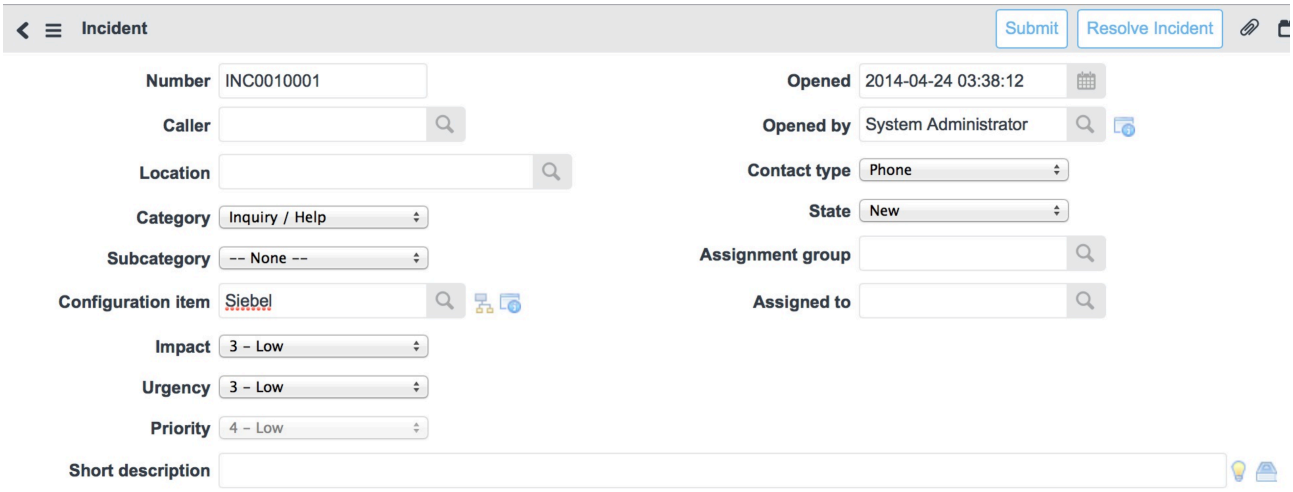
Lab 3.2
Using the Business Service Map

Manage Configuration Items from Incident and Change

1. Navigate to **Incident > New** to create an incident.

   Configuration Item: **Siebel**

   Mouse over the icons on the right side of the red box, then click on the **BSM icon** in the left side of the red box.

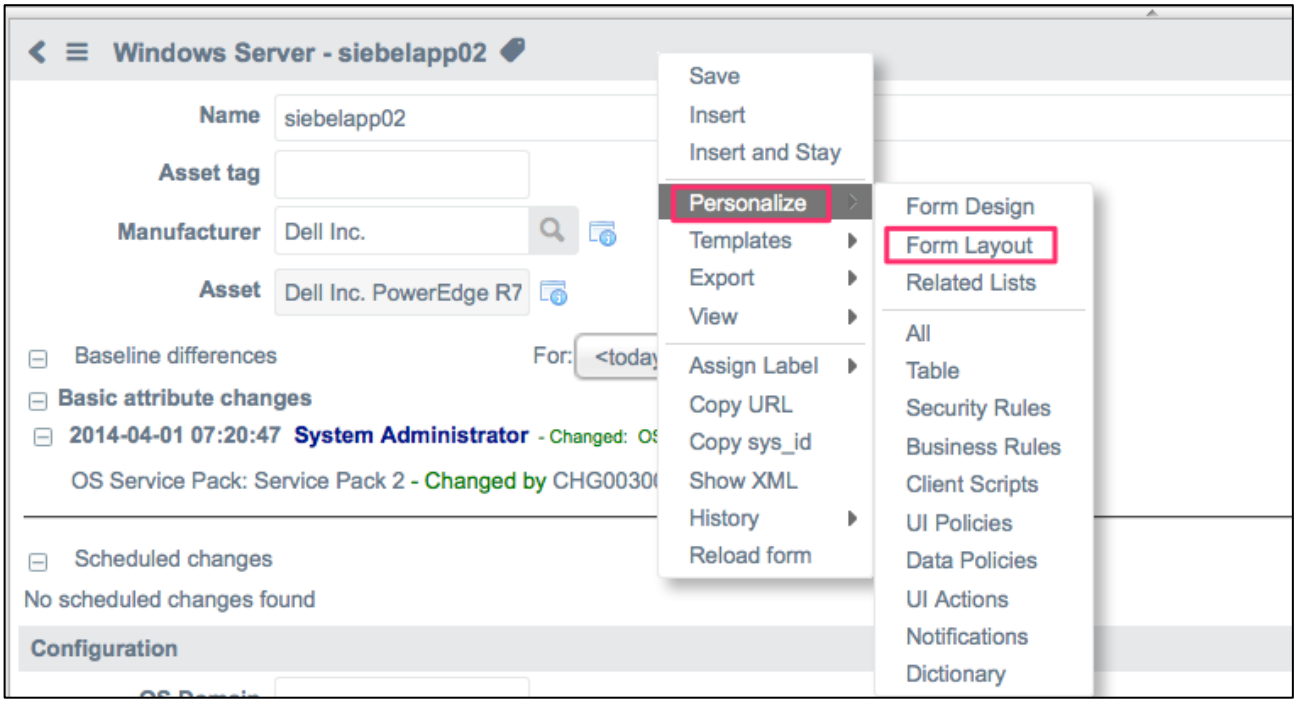


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2. We need to 2 new fields to the form for this exercise.

   Navigate to **Configuration > Windows Serve**r and open up any on you find in that list.

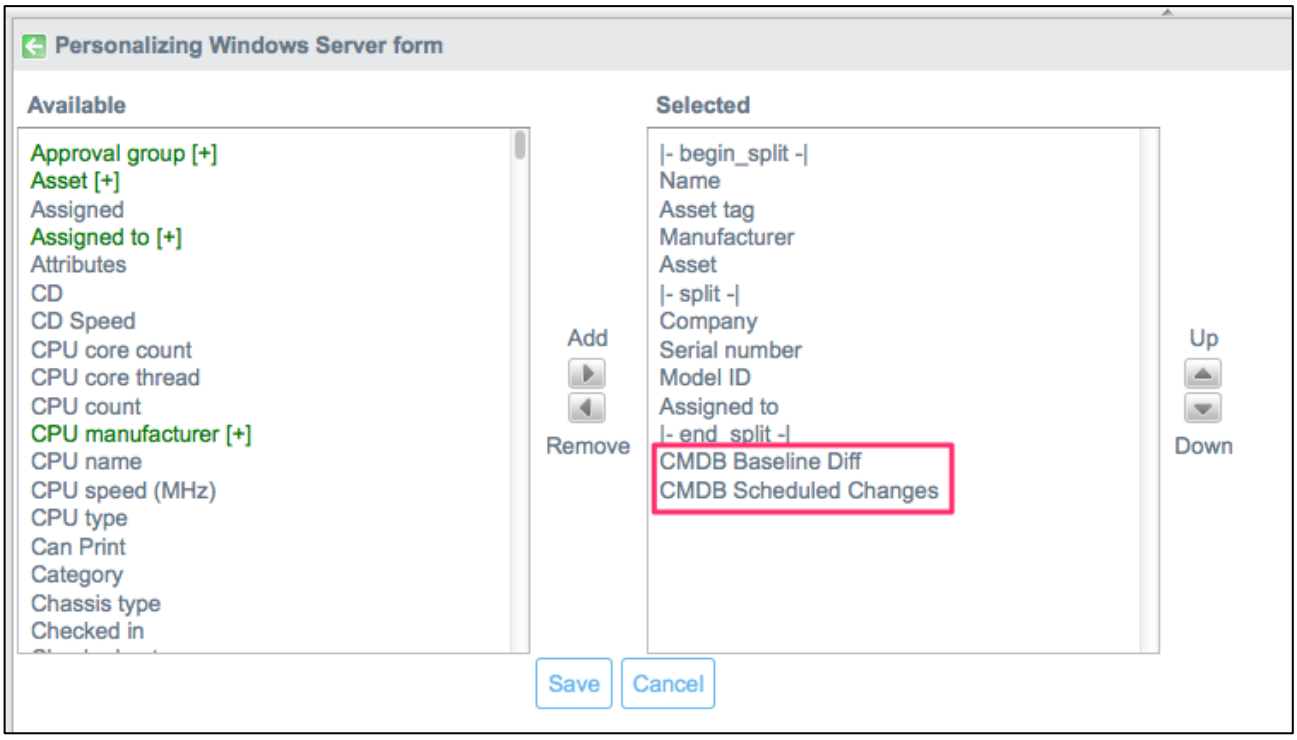
   Right click on the **Form Header** and choose **Personalize Form Layout**.



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3. Add the two fields highlighted in Red.

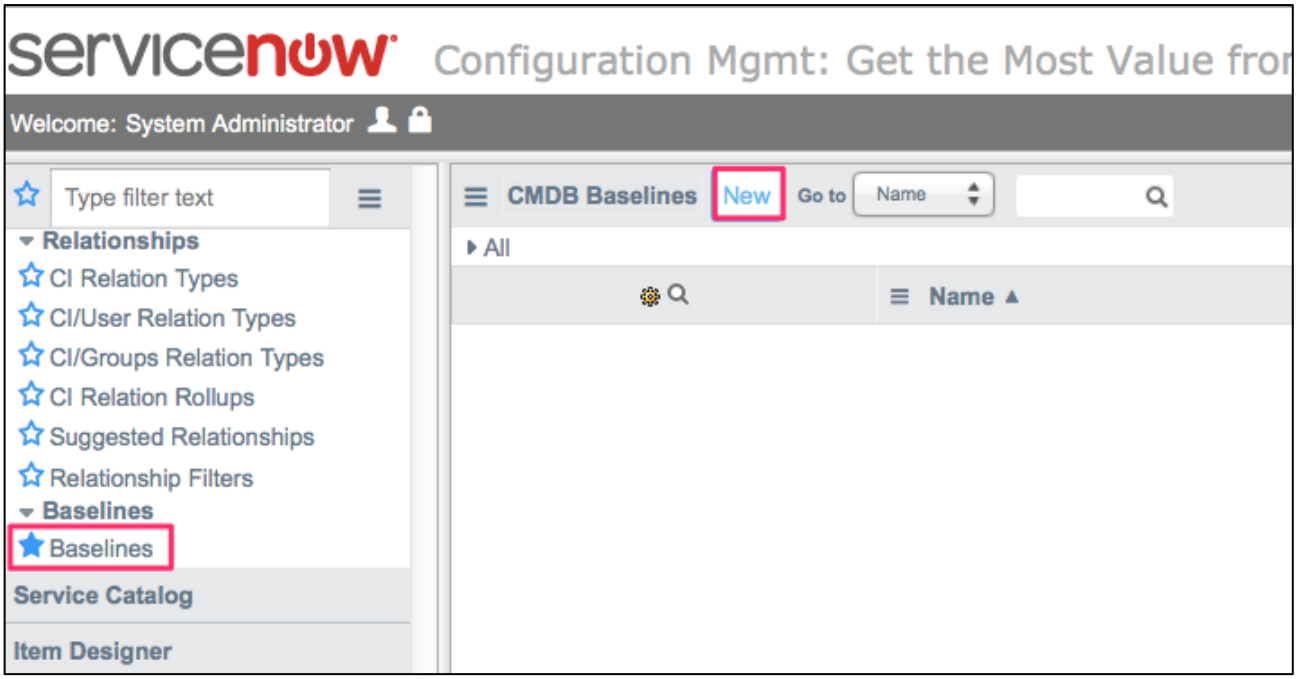
CMDB Baseline Diff
CMDB Scheduled Changes



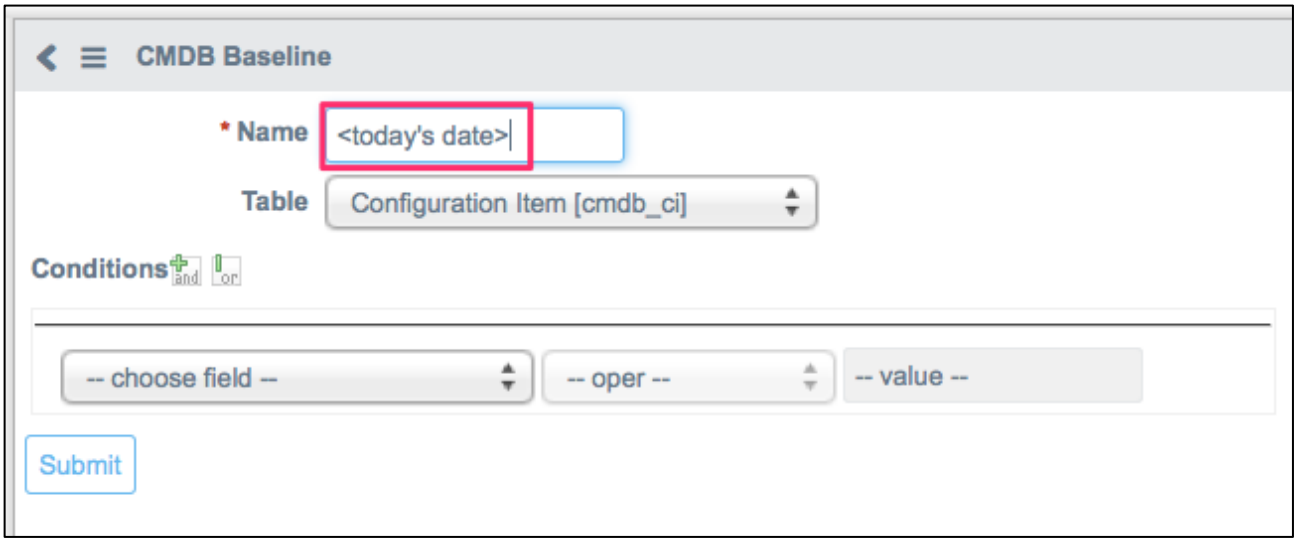
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4. Navigate to **Configuration > Baseline** and click **New**.

   Name the baseline: **<today's date>**



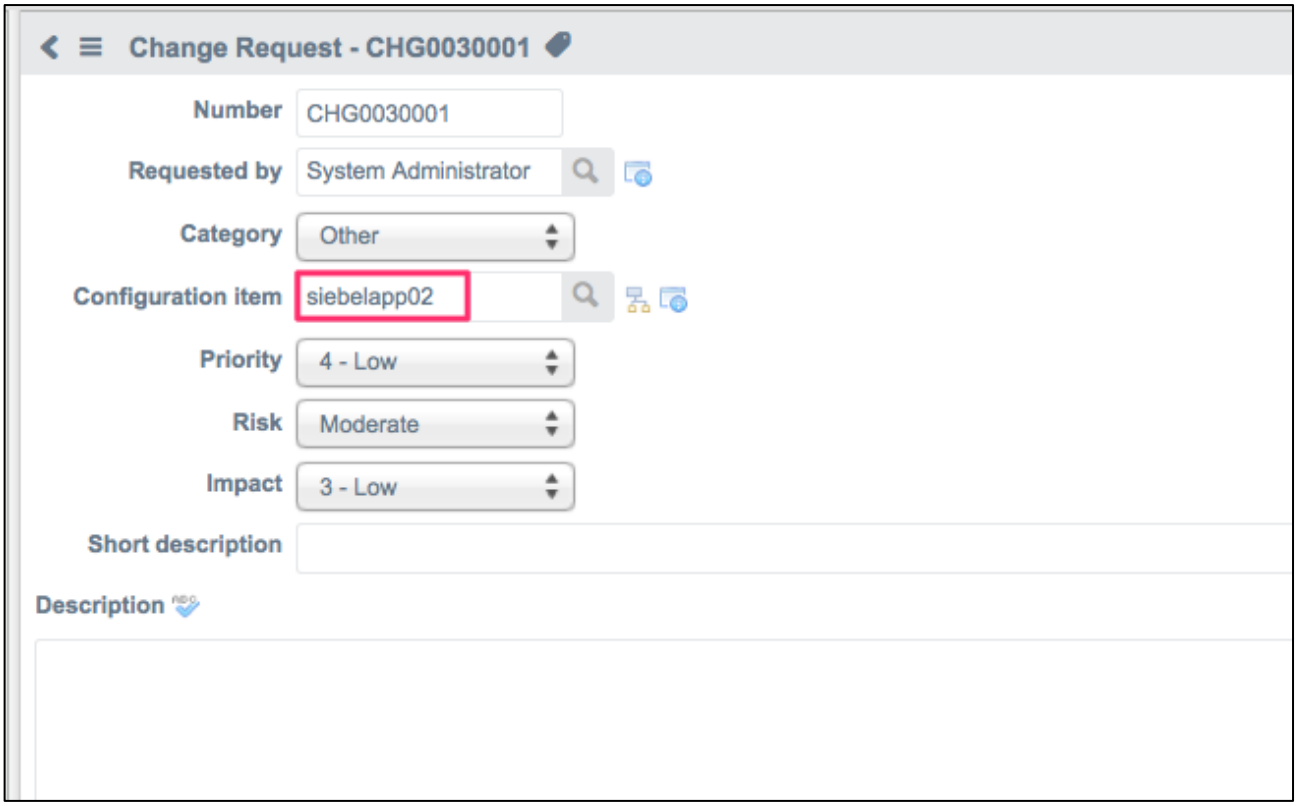
Your screen should look like the following.



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5. Navigate to a **Change Request > New**

   Configuration item: **siebelapp02**

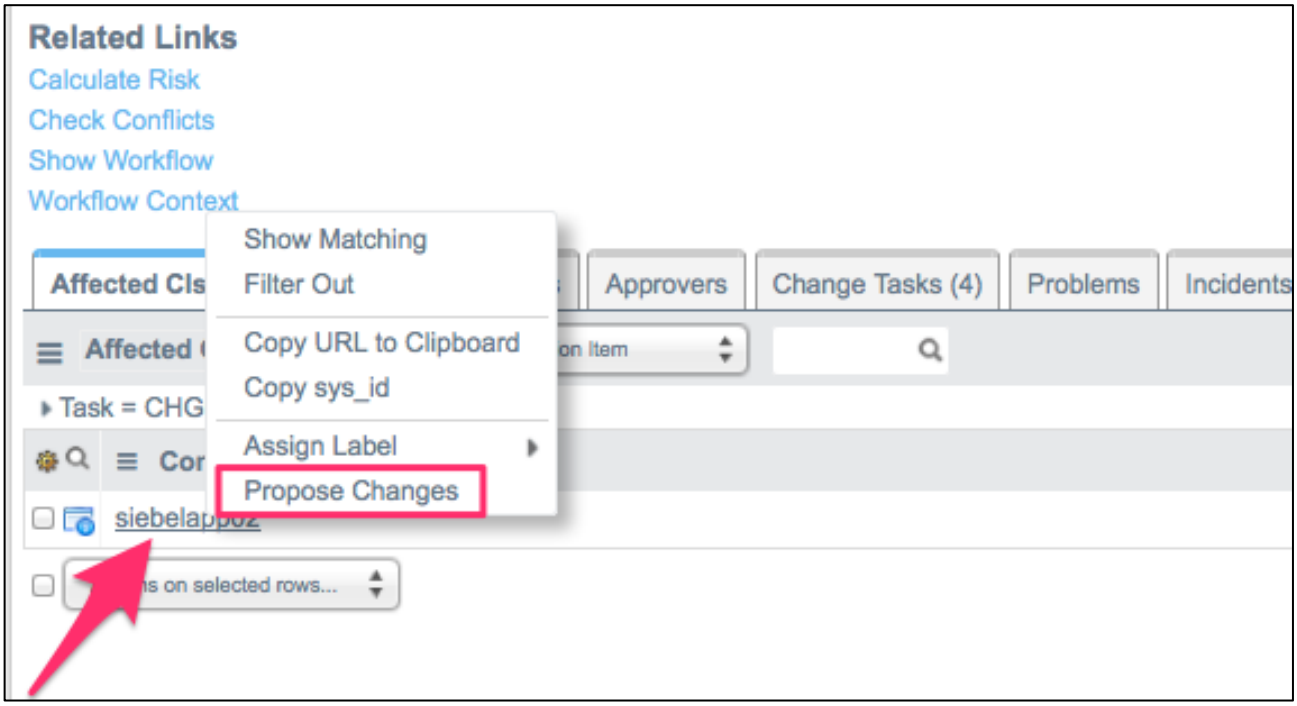


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6. Scroll to the related lists of the Change Request and look for the list named **Affected CI**.

   Right click on the **siebelapp002** CI and click **Propose Changes**.

   This will take you to a form where you can input the proposed change.



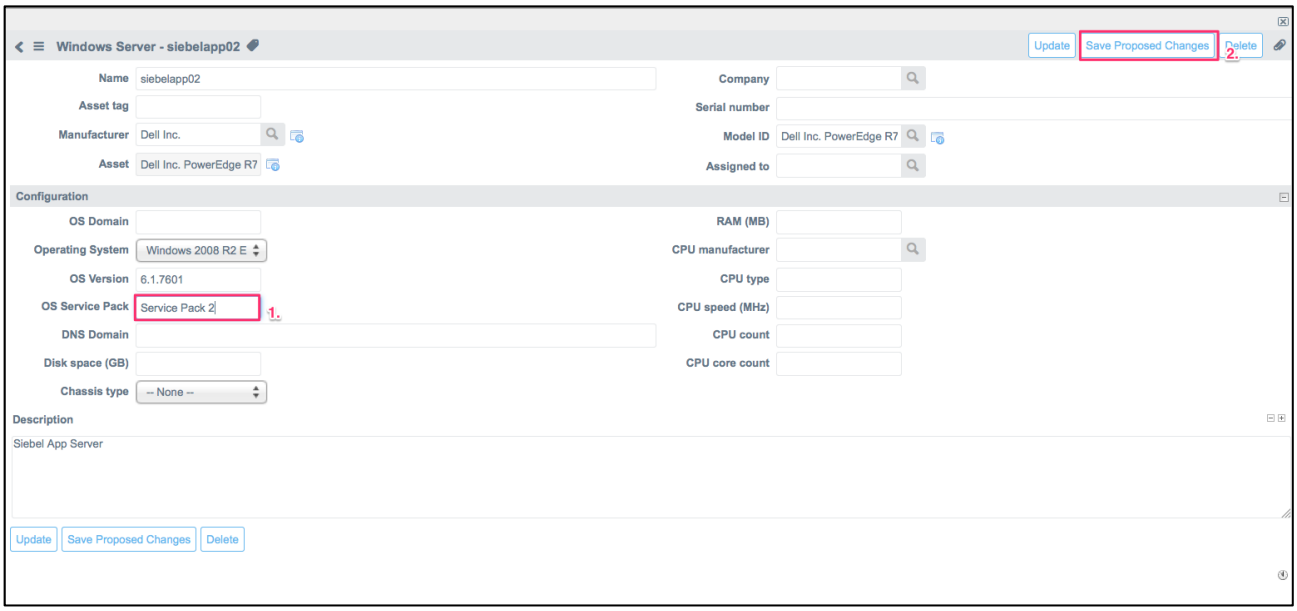
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7. You should now be looking at the Windows Server form. These are the fields that you can Propose Changes on. We are going to upgrade the operating system.

   OS Service Pack field: **Service Pack 2**

   Click **Save Proposed Changes**

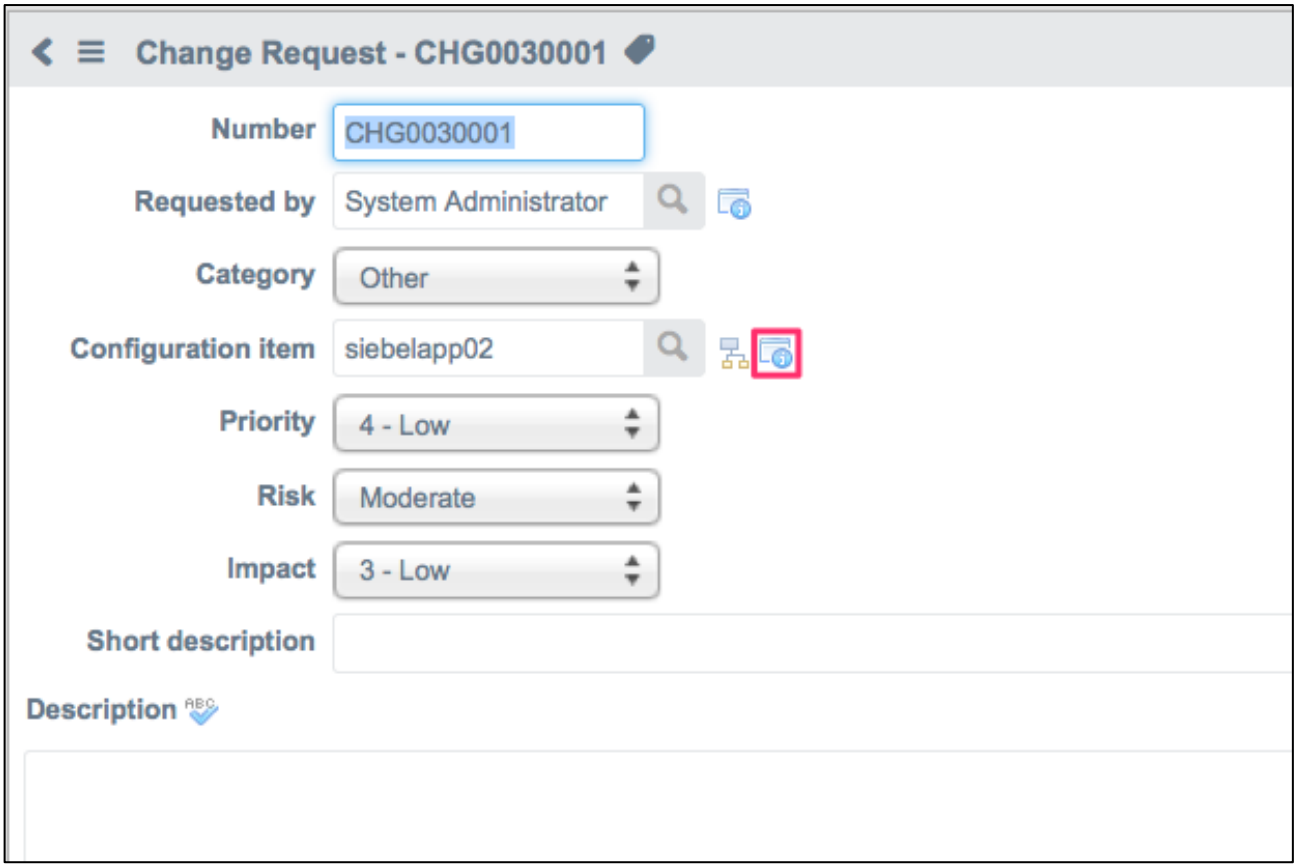
   This will log a Scheduled Change against the CI and take you back to the Change Request.



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8. **Click on the icon** in the red box.

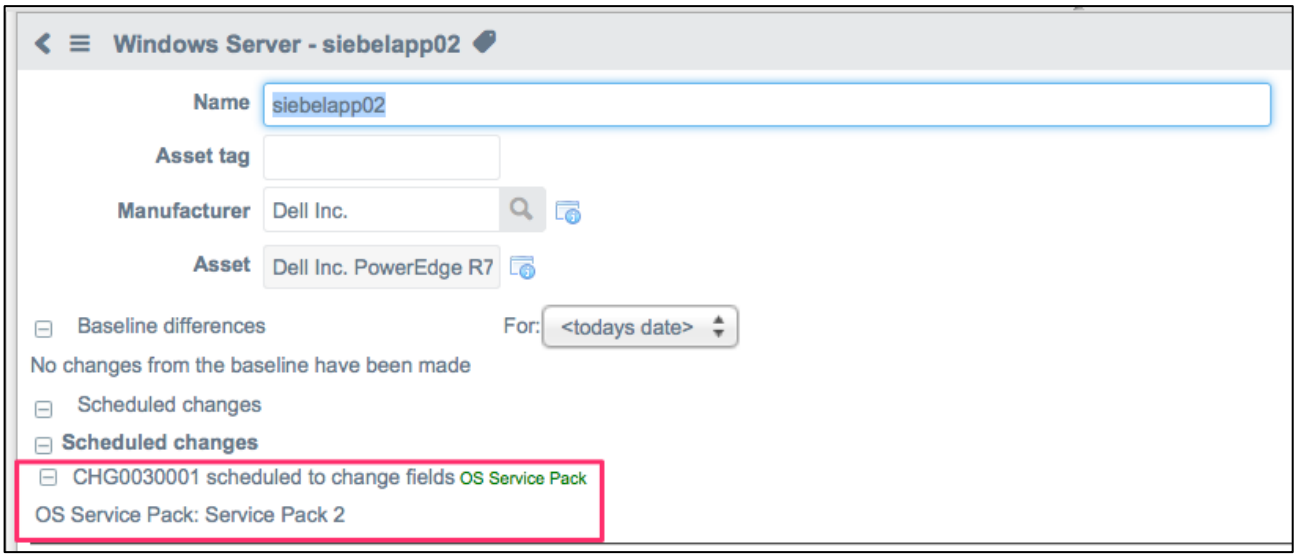
   This will take you directly to the CI.



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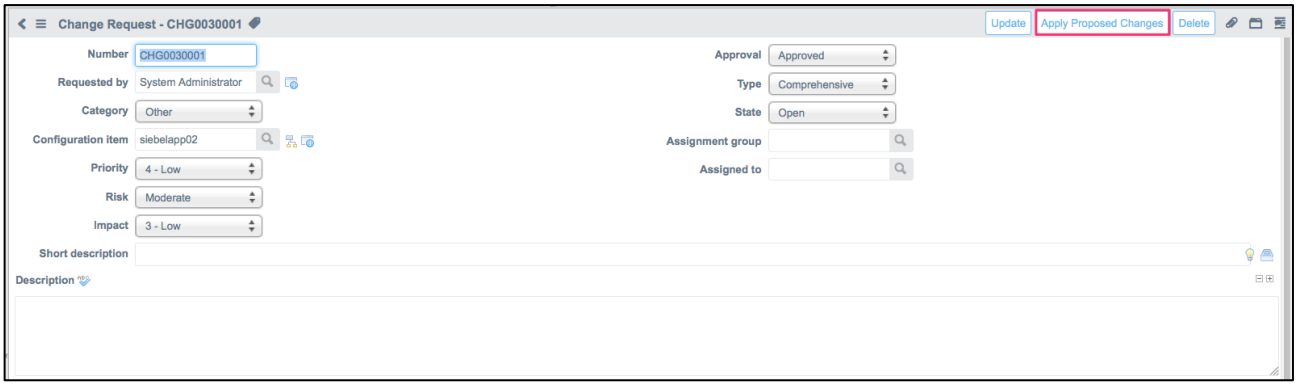
9. Take a look at **Scheduled Changes** and **Baseline Differences**. Once the change has been approved, affected and verified, it will become a real Baseline Difference.

   Click the **Change Request number**.



10. Now the change has been completed, let's close out the request and promote our Scheduled Change to a real Baseline Difference.

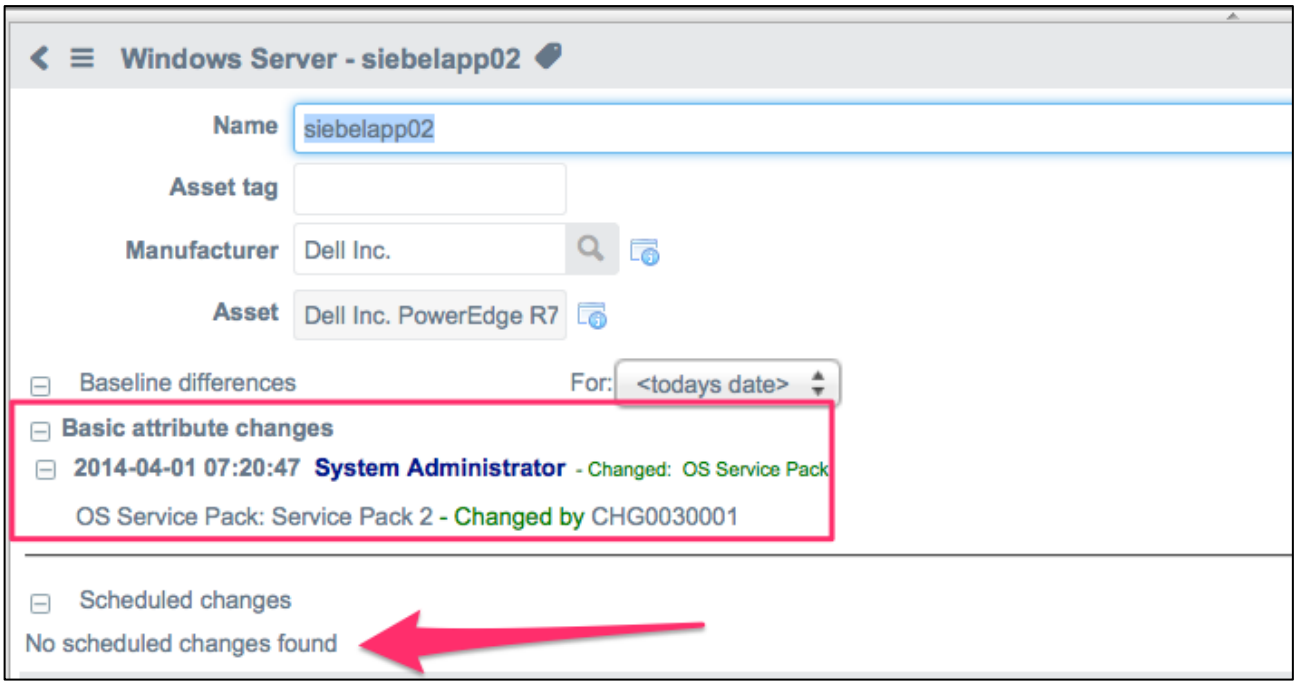
    Click **Apply Proposed Changes**.



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Lab Success Verification

You should be back on the Windows Server form and see that there is no longer a Scheduled Change, but now a Baseline Difference.



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Lab Goal

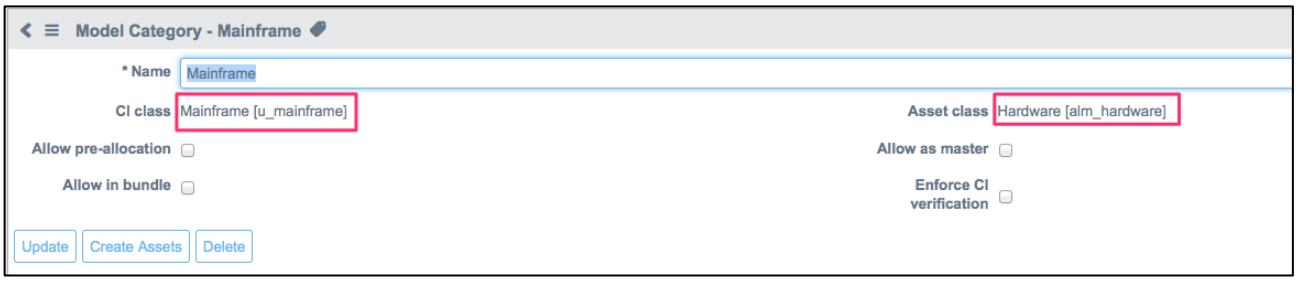
Not all CIs become assets and not all assets become CIs. This exercise will walk you through creating a new Model Category for the Mainframe class created earlier and establishing a relationship between the CMDB and asset repository.

Lab 4.1
Create a New Model

Create a New Model Category

1. Navigate to **Product Catalog > Model Categories**.
2. Click **New**.

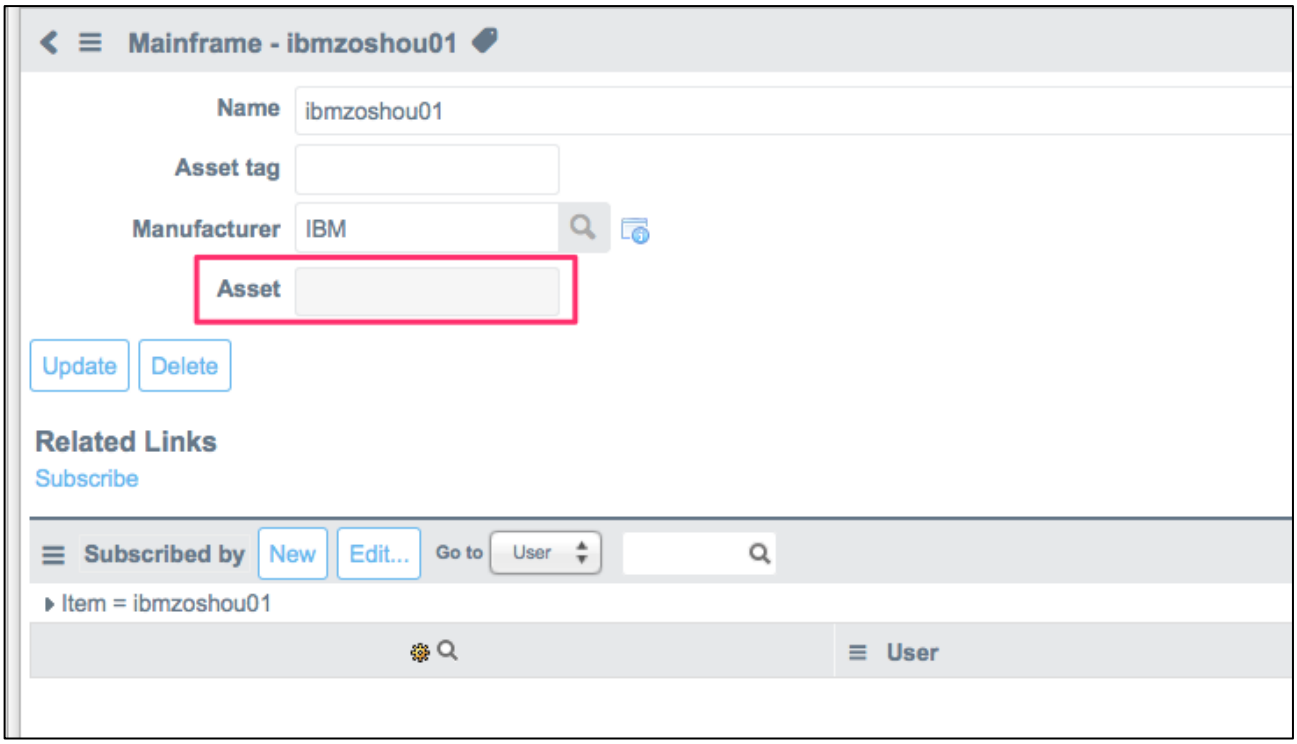
   CI class: **Mainframe**
   Asset class: **Hardware**
   Click **Submit**



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Enable a Mainframe CI to also be an Asset

1. Navigate to **Configuration > Mainframes** and open one of the Mainframe CI's we imported.
2. Notice there is no Asset Record associated with the record yet.



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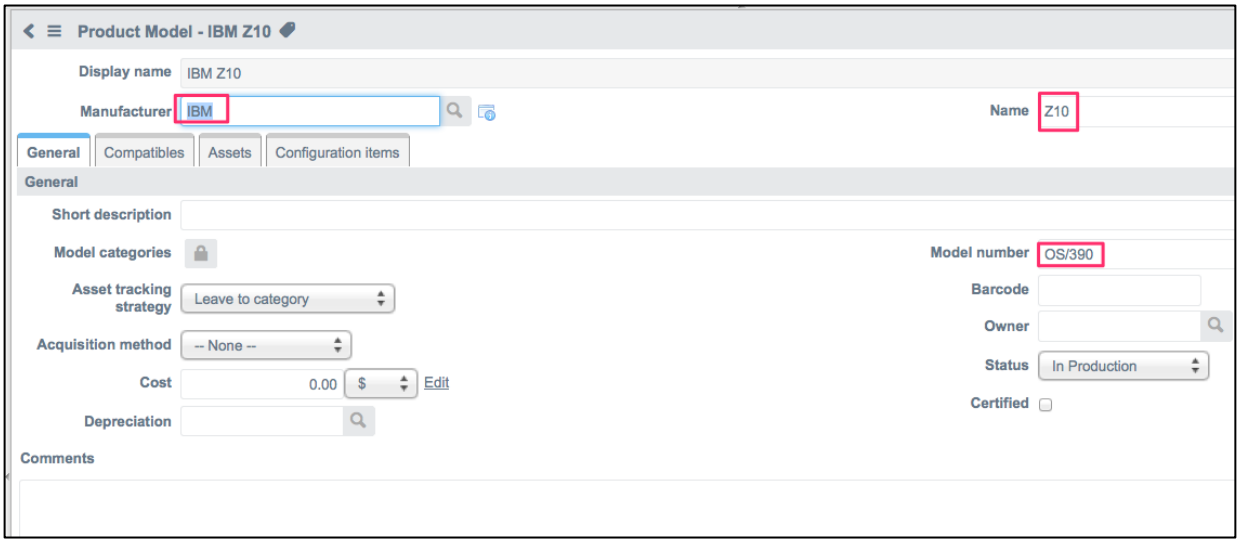
Create a New Model Called IBM Z10

1. Navigate to **Product Catalog > All Models**

   Click **New** to create a model.

   Name: **Z10**
   Model number: **OS/390**
   Manufacturer: **IBM**

   When done, right click on the header and choose **Save**.



2. Navigate to **Configuration > Mainframes** and create a **New** Mainframe like the one below.

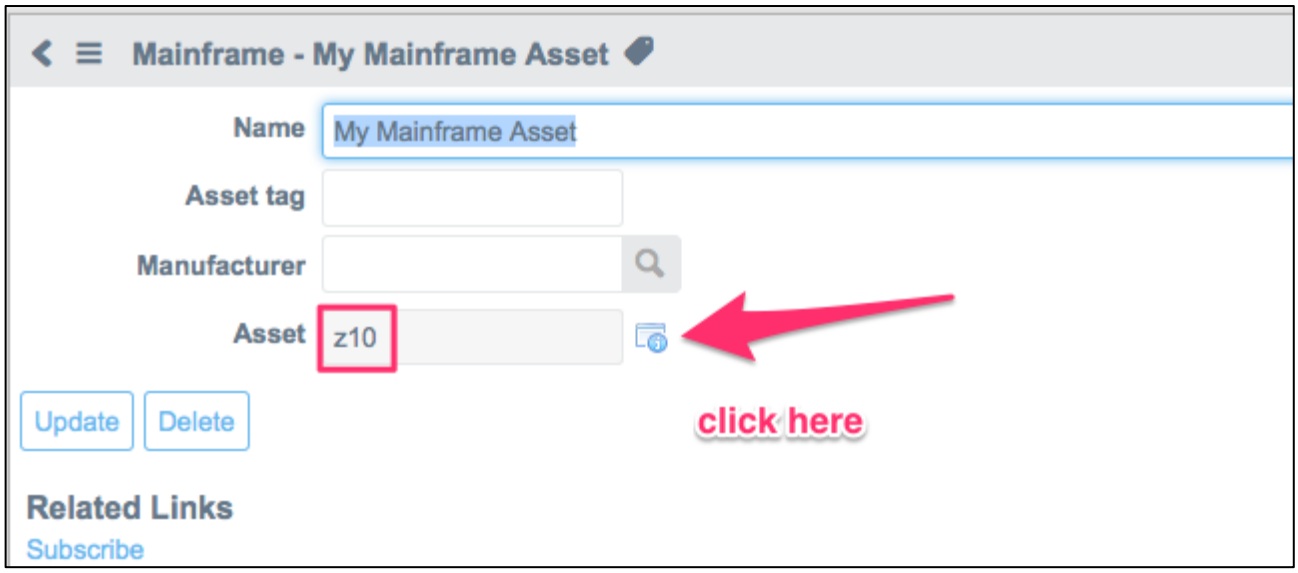
   Name: **My Mainframe Asset**
   Model: **Z10**



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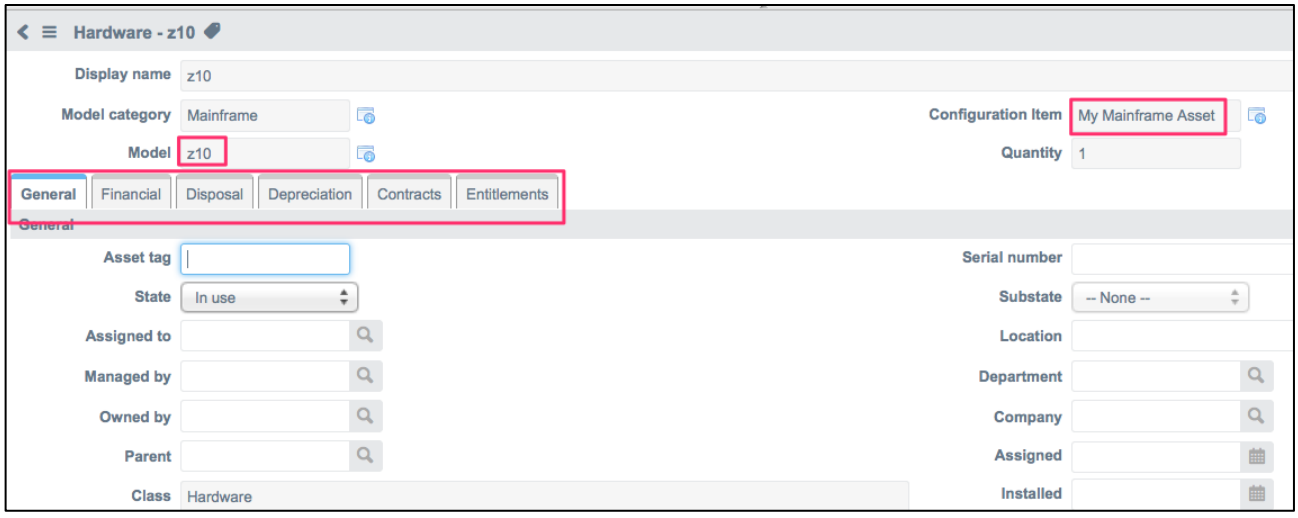
Lab Success Verification

Notice there is now an Asset Record associate with this CI.



Click the **Asset Record icon** next to the Asset Field to view the new record.

Your screen should look like this.



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Lab Goal

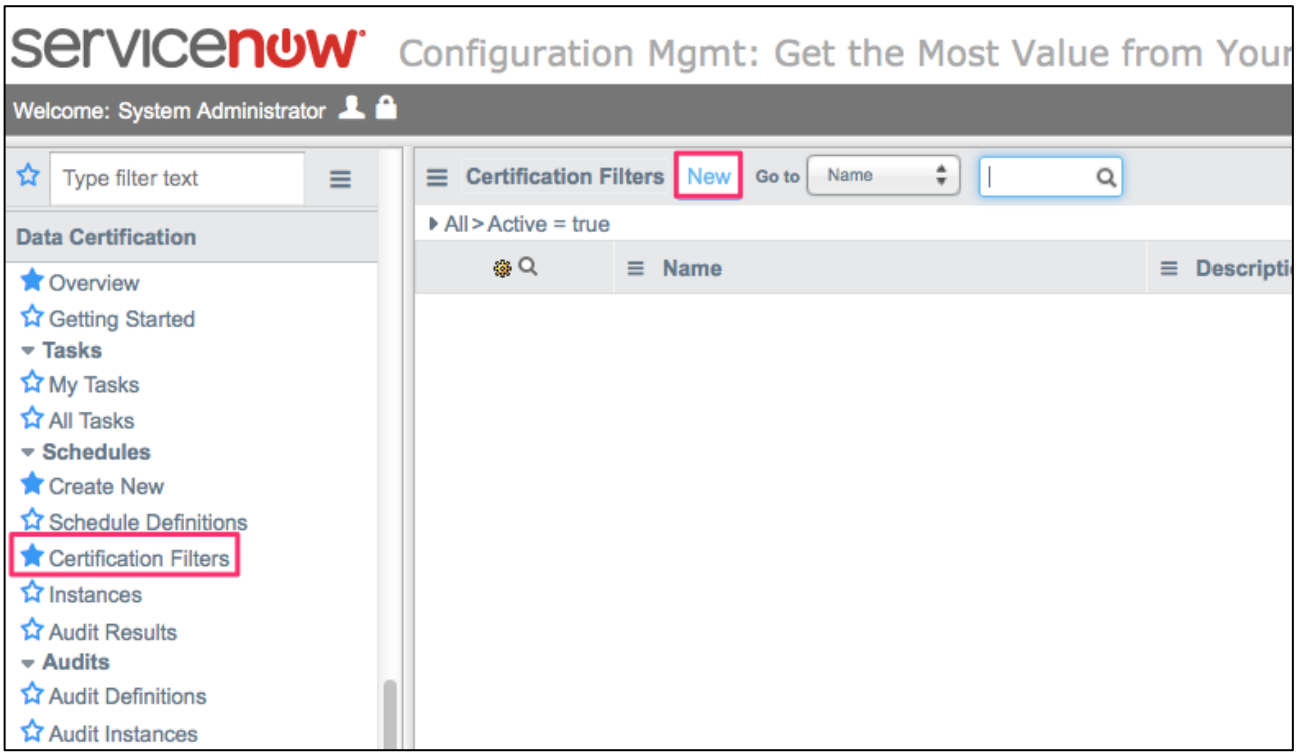
The main theme for Dublin was the Compliance application, which is an Extension of Data Certification. This exercise will walk through first of 3 basic types of Audits – Data Certification.

Lab 5.1
Data Certification

Create Certification Schedule

1. First we will need to create a Certification Filter.

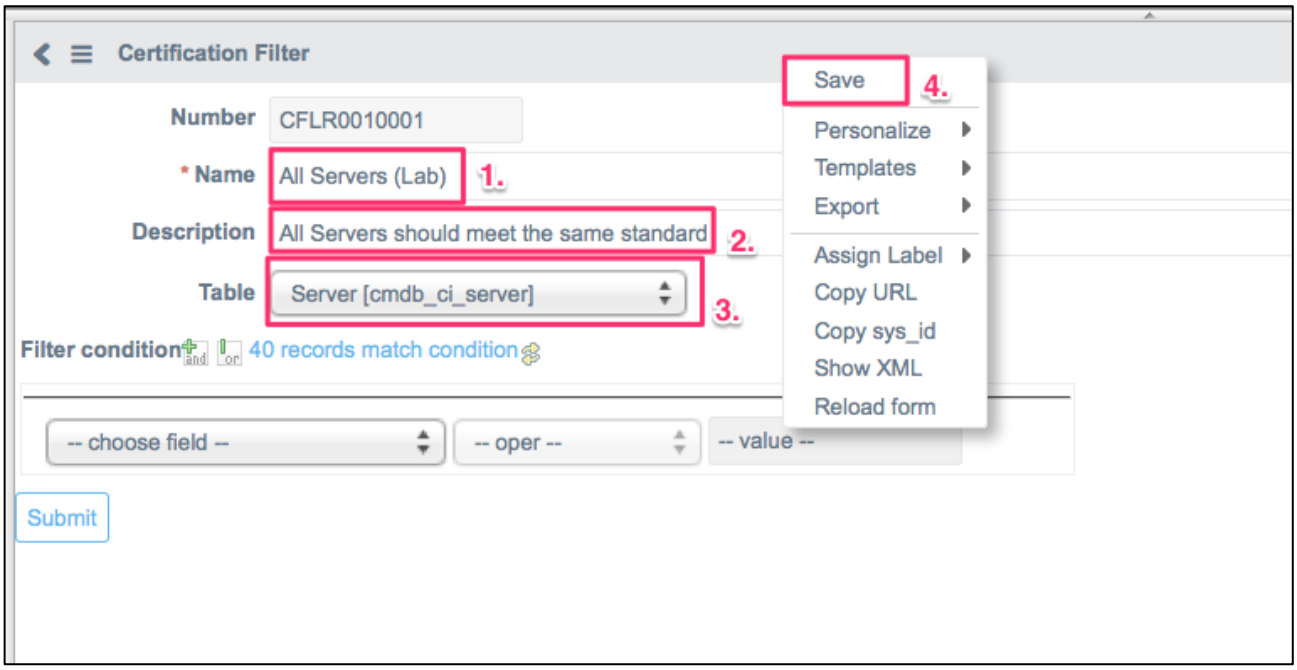
   Navigate to **Data Certification > Certification Filters** and Click **New**



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2. Fill out the form as follows.

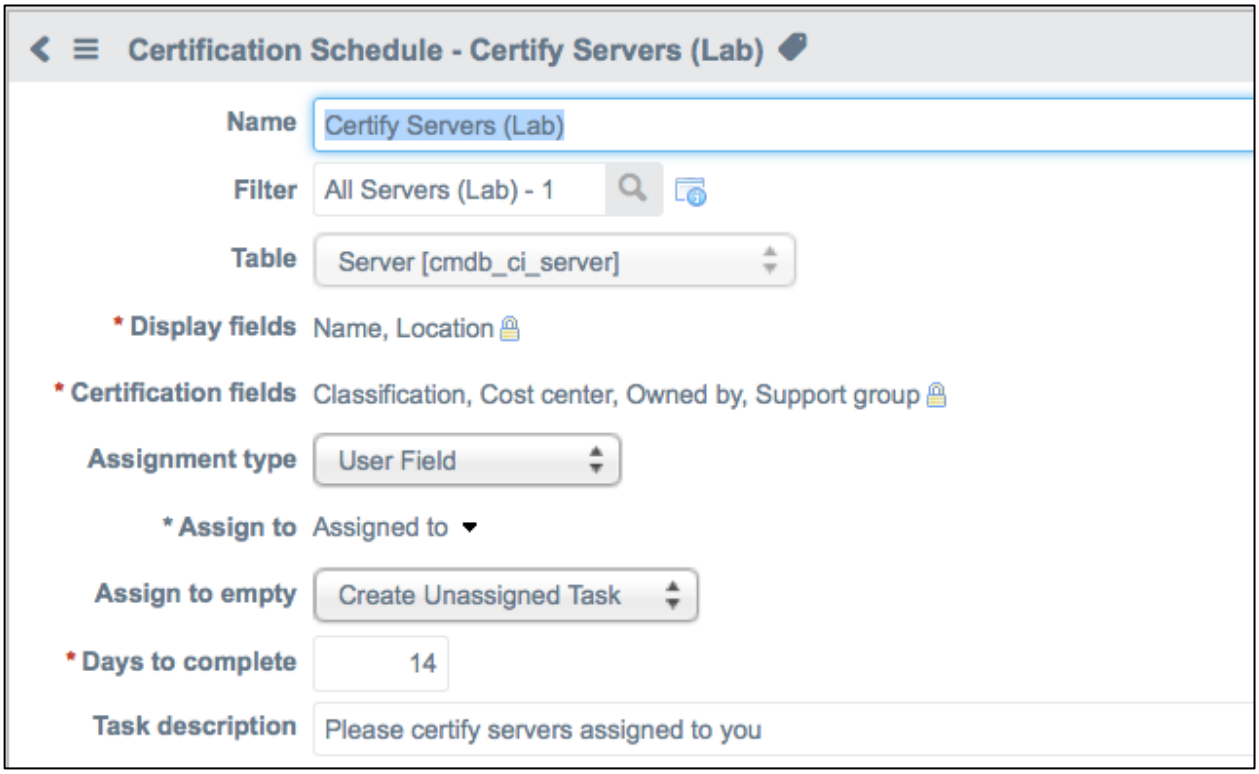
   (1) Name: **All Servers (Lab)**
   (2) Description: **All Servers should meet the same standard**
   (3) Table: Server: **[cmdb_ci_server]**
   (4) Click **Save**



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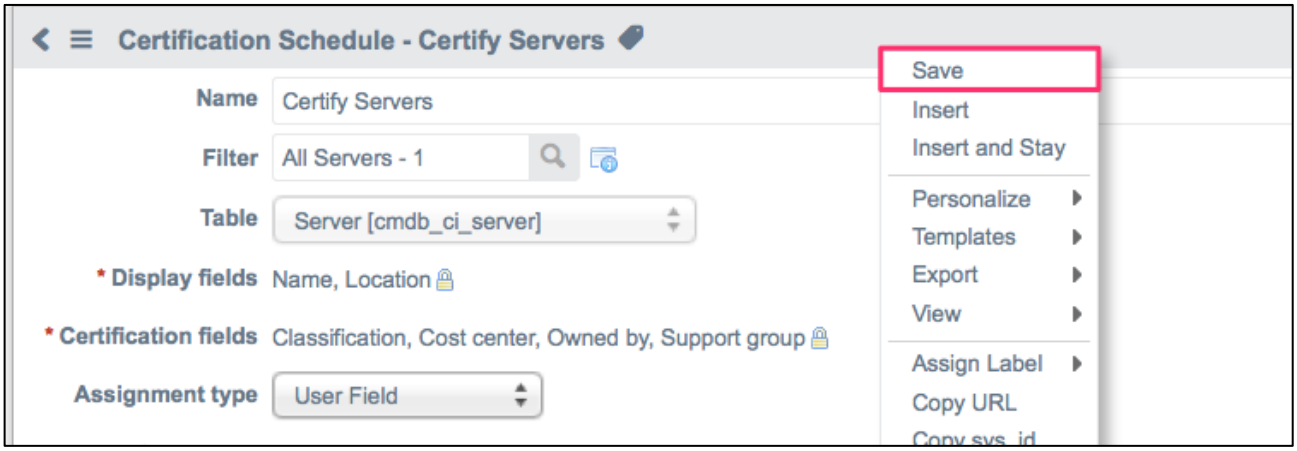
3. Navigate to **Data Certification > Create New** and complete the form as follows.

   Name: **Certify servers (Lab)**
   Display fields: **Name, Location**
   Certification Fields: **Classification, Cost Center, Owned by, Support Group**
   Assignment Type: **User Field**
   Assign to: **Assigned to**
   Assign to Empty: **Create Unassigned Task**
   Days to complete: **14**
   Task Description: **Please certify servers assigned to you**

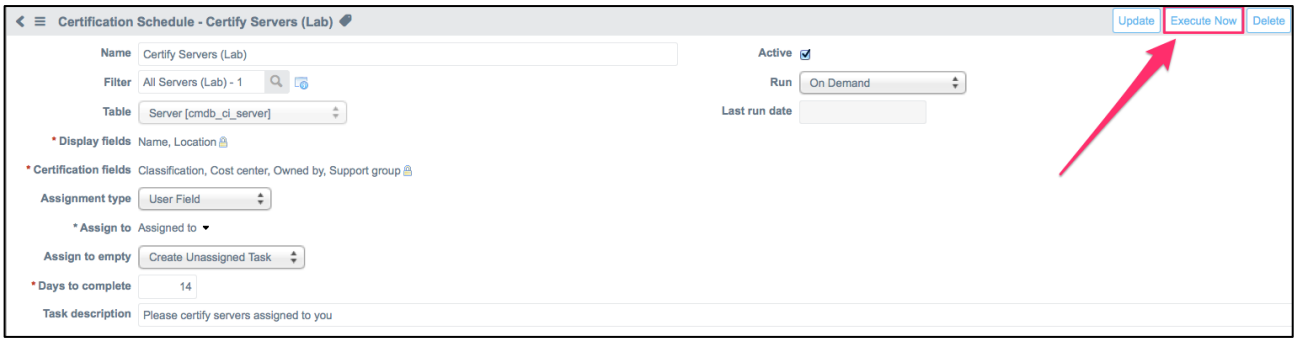


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4. Right click on **Form Header** and click **Save**.

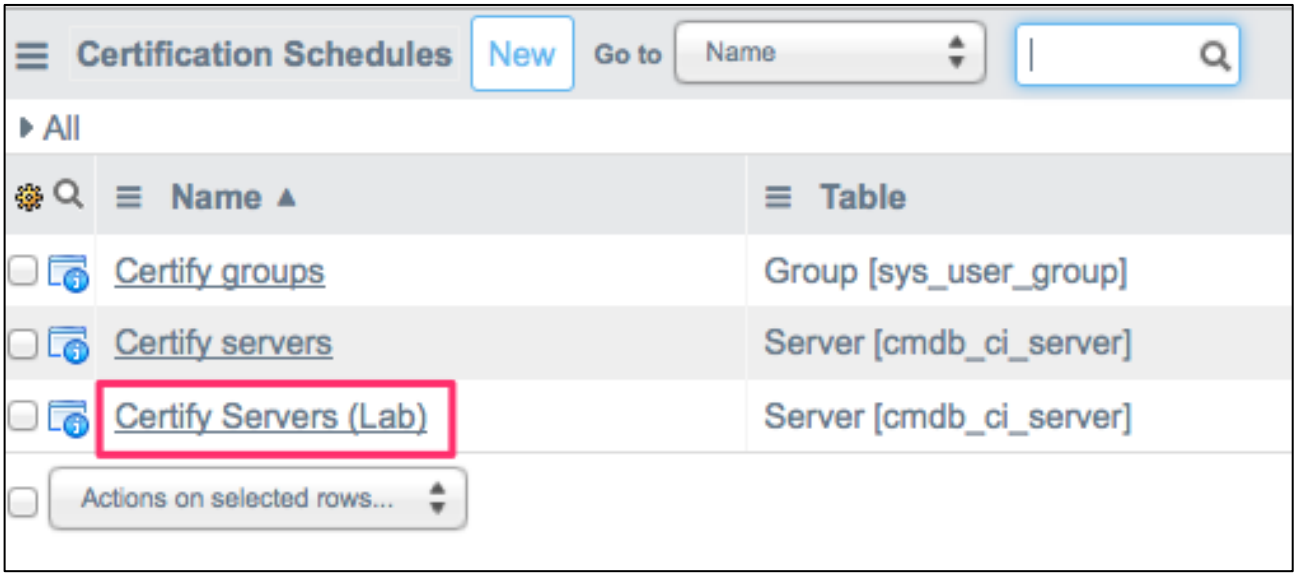


5. Click **Execute Now**.



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6. Click into the Certify Servers (Lab) Certification Schedule.

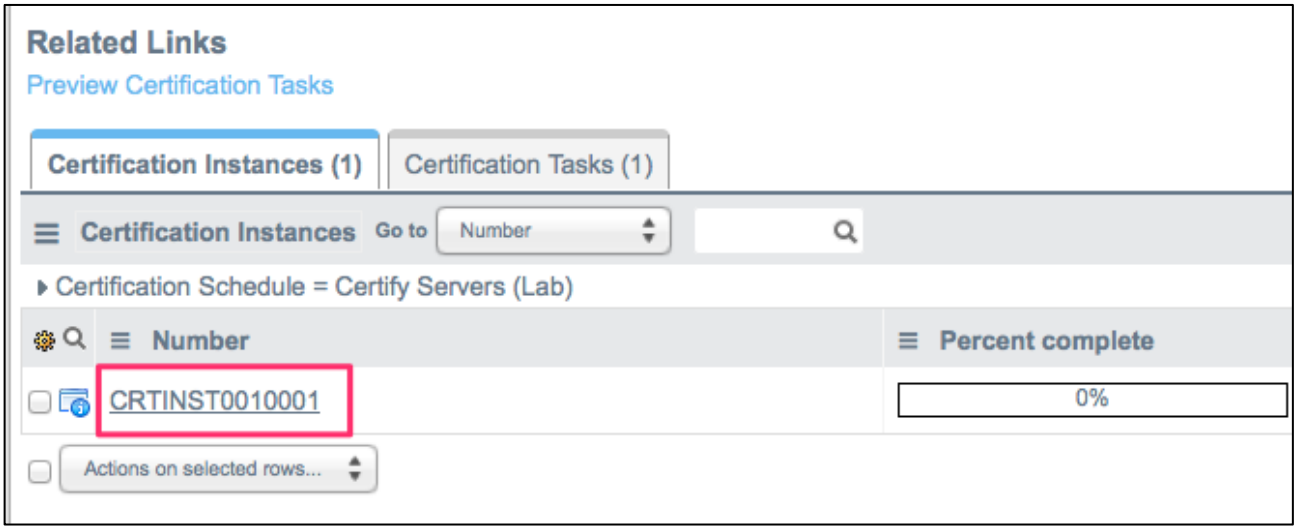


7. Turn on Tabs if they are not already.



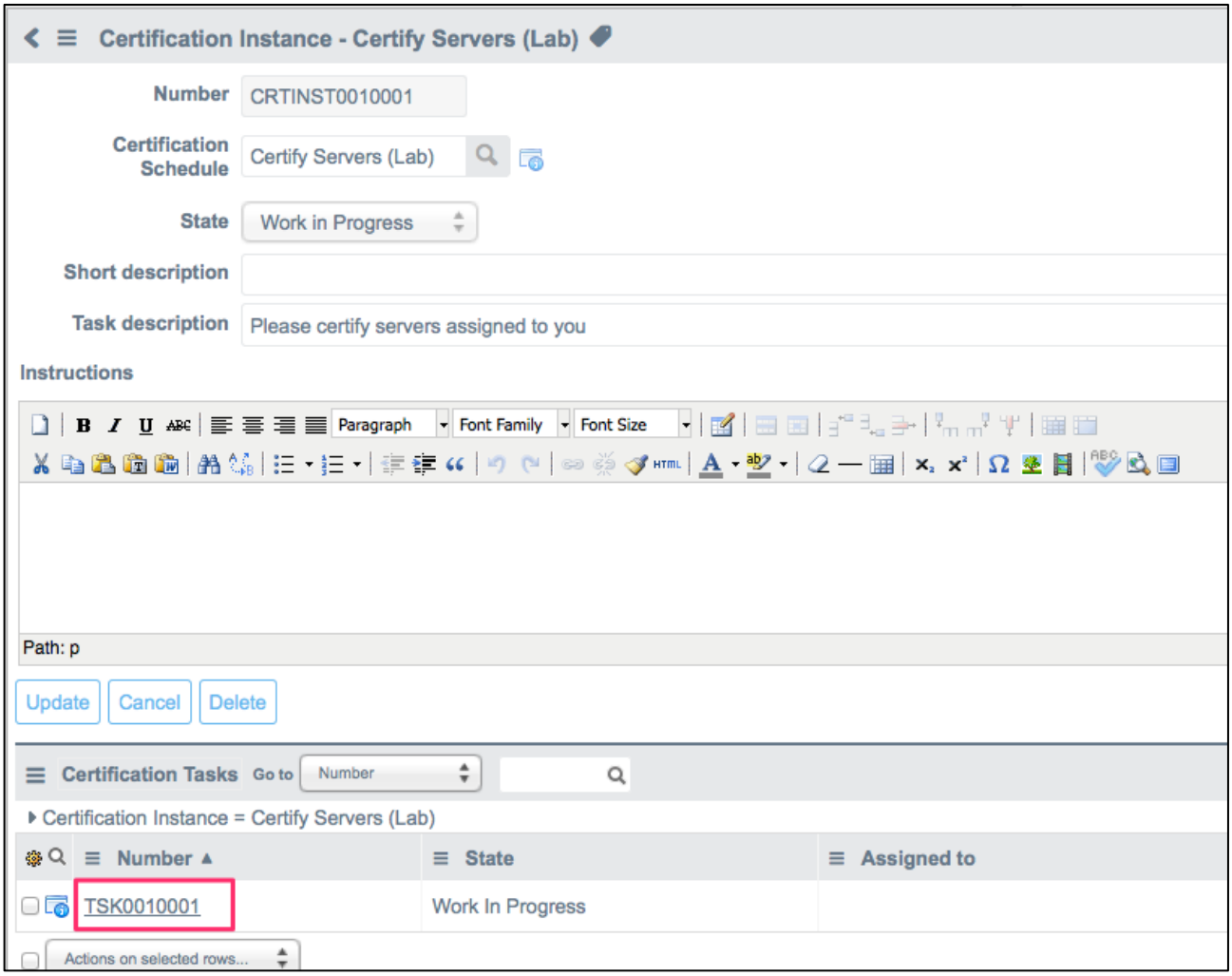
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8. Click the **Certification Instance** in the Related List.



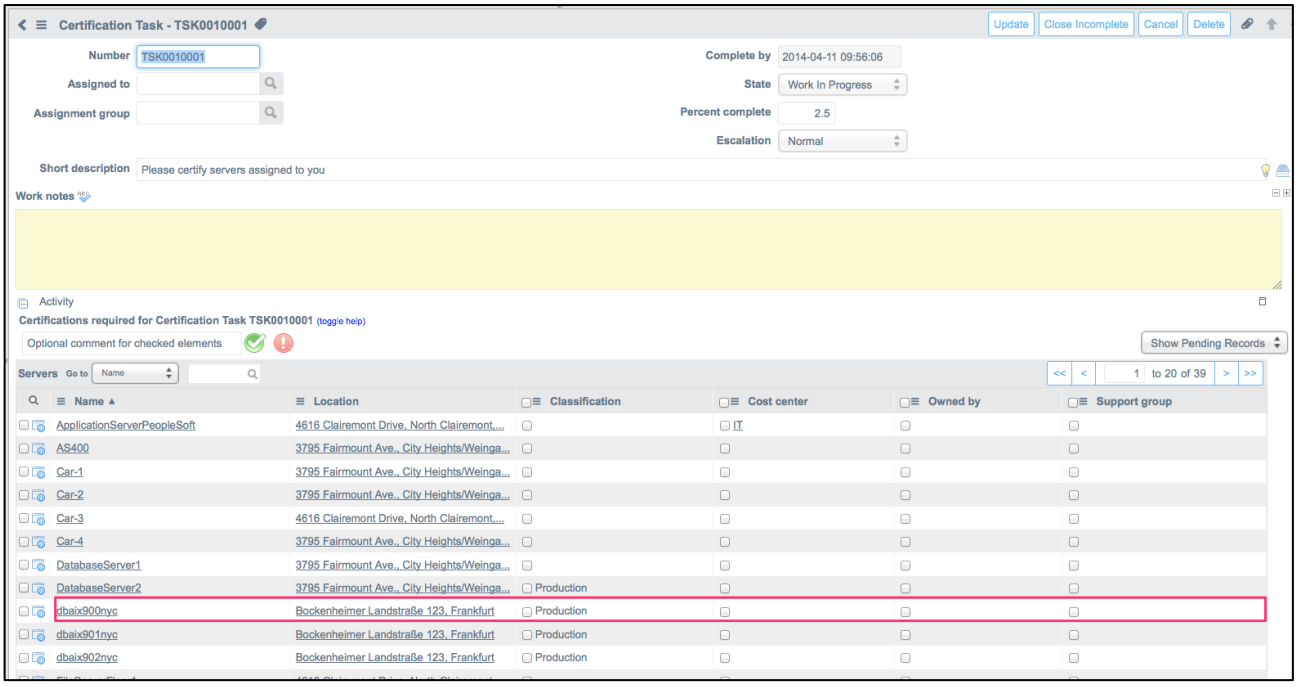
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9. Next click the **Certification Tasks** at the bottom of the form.



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10. One Task was created to certify many servers. For this exercise we will use the AIX server named dbaix900nyc. Notice the Classification field is populated, it just needs to be certified. The other 3 fields have no value, so we will have to add values and certify the data.



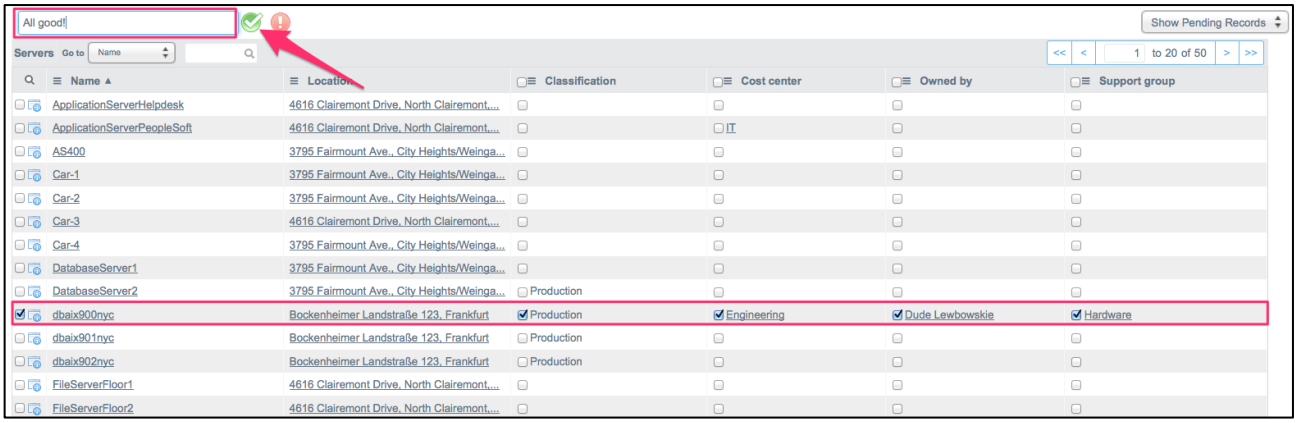
11. Notice Cost Center, Owned by and Support Group are blank.

    Double click each cell and input the values below and check all the boxes.

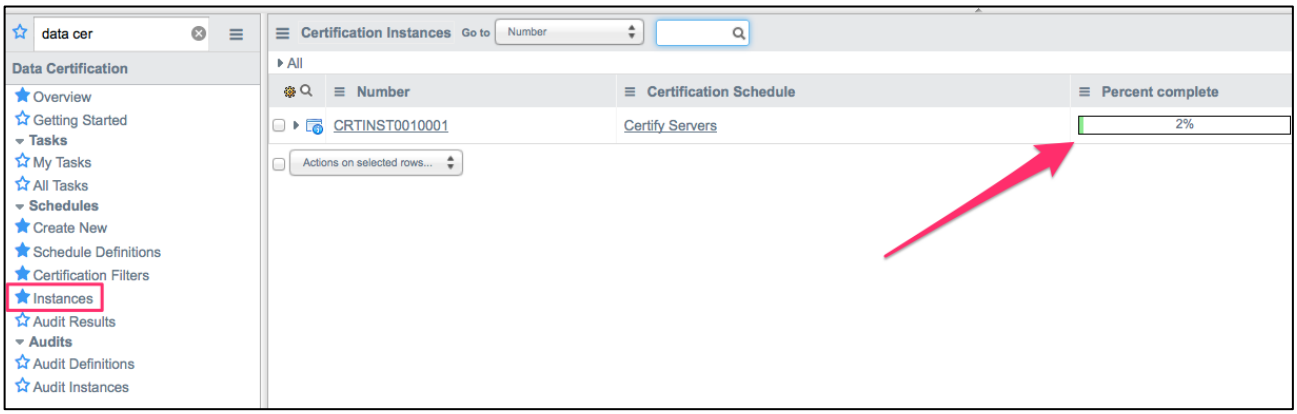
    Cost Center: **Engineering**
    Owned by: **Dude Lewbowskie**
    Support Group: **Hardware**
    Optional comment for checked elements: **It's all good!**

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12. After adding the fields above, place a check mark in each field. Enter in the option comments in the top left portion of the form and then click the green check mark indicating that you have certified the data. The server will now be removed from the list.



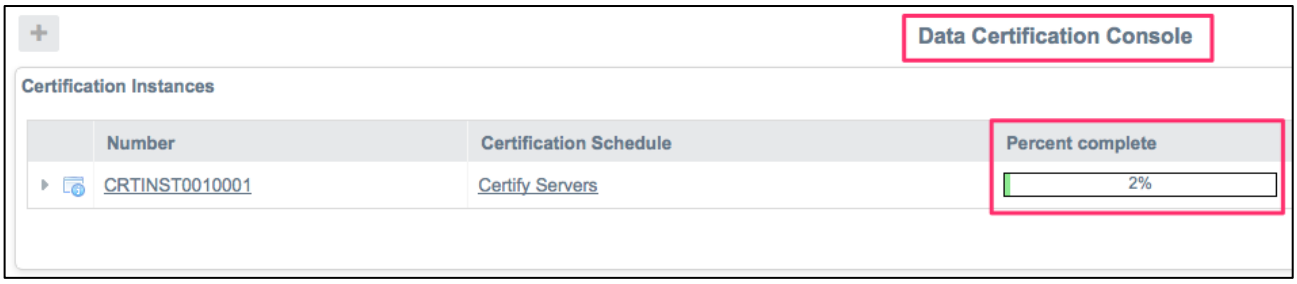
13. Navigate back to **Data Certification > Instances** to see the Progress being made.



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Lab Success Verification

Navigate to **Data Certification > Overview** to see the Homepage reflecting our Progress.



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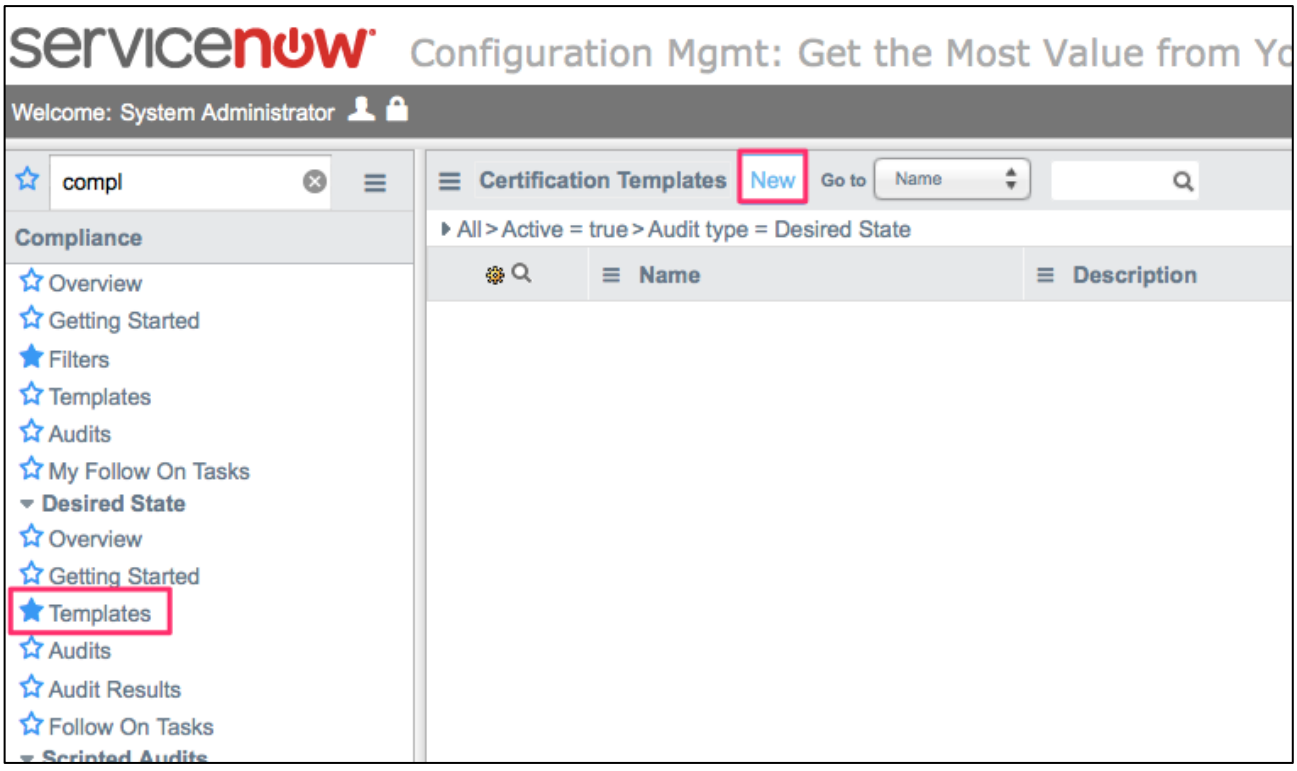
Lab Goal 5.2

The main theme for Dublin was the Compliance application, which is an Extension of Data Certification. This exercise will walk through the second of the 3 basic types of Audits – Desired State.

Lab 5.2 Desired State

Create Certification Template

1. Navigate to **Compliance > Desired State > Templates** and click **New**.



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2. Complete the form as follows.

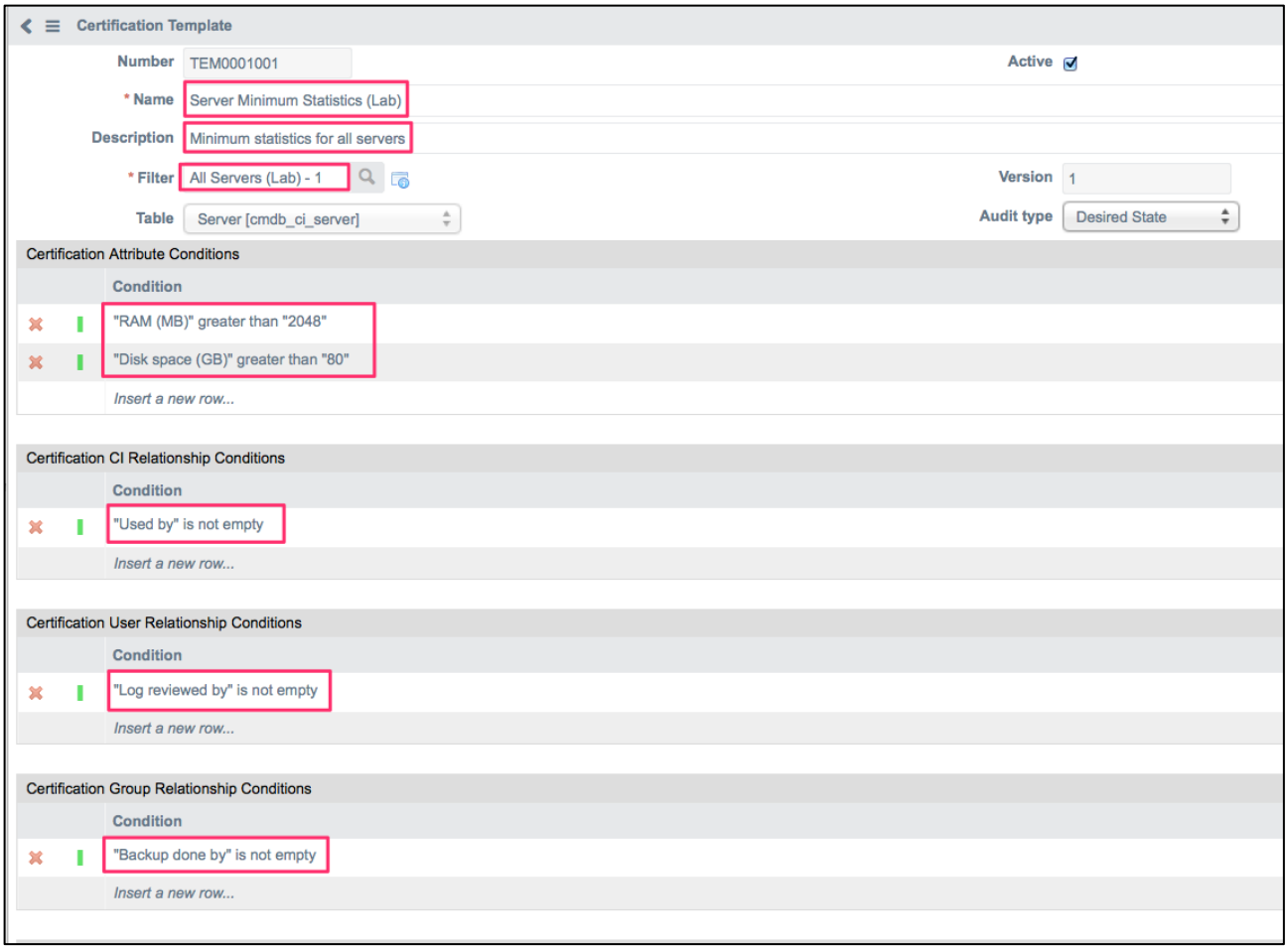
Name: **Server Minimum Statistics**
Description: **Minimum statistics for all servers**
Filter: **All Servers (Lab)**

Attribute Conditions
"**RAM (MB)**" greater than "**2048**"
"**Disk space (GB)**" greater than "**80**"

User Relationship Conditions
"**Log reviewed by**" is **not empty**

CI Relationship Conditions
"**Used by**" is **not empty**

Group Relationship Condition
"**Backup done by**" is **not empty**



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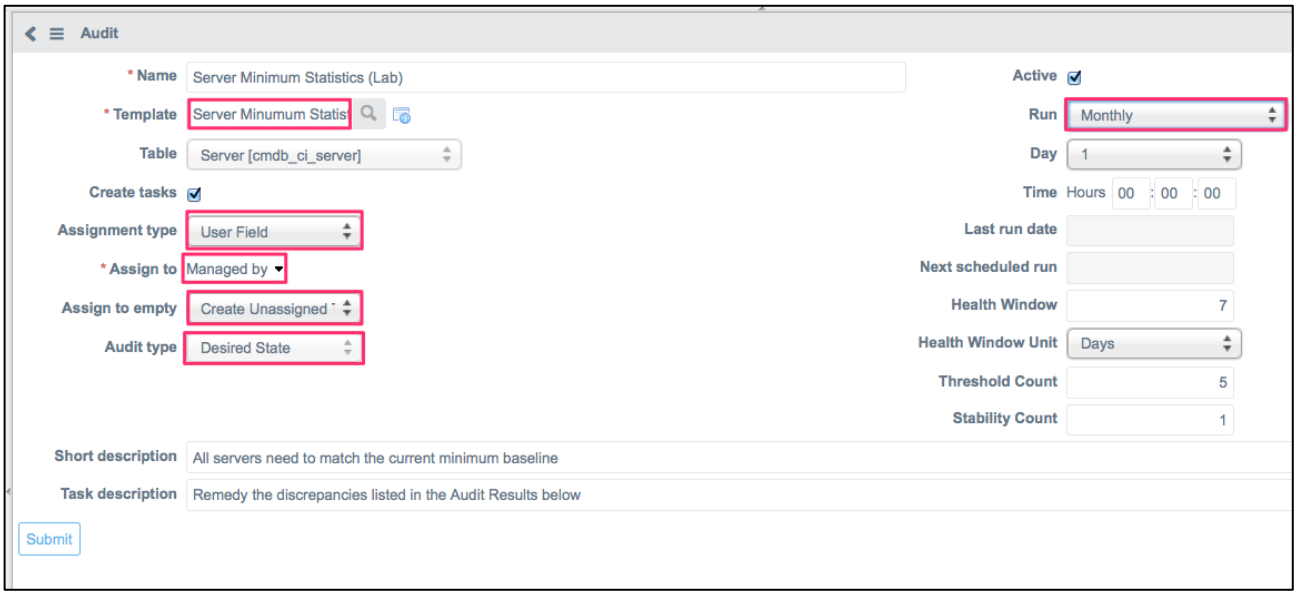
Create and Run an Audit

1. Navigate to **Compliance > Desired State > Audits** and click **New.**

   Complete the form as follows

   Template: **Server Minimum Statistics**
   Run: **Monthly**
   Create tasks: **check**
   Assignment Type: **User Field**
   Assign to: **Managed By**
   Short description: **All servers need to match the current minimum baseline**
   Task Description: **Remedy the discrepancies listed in the Audit Results below**

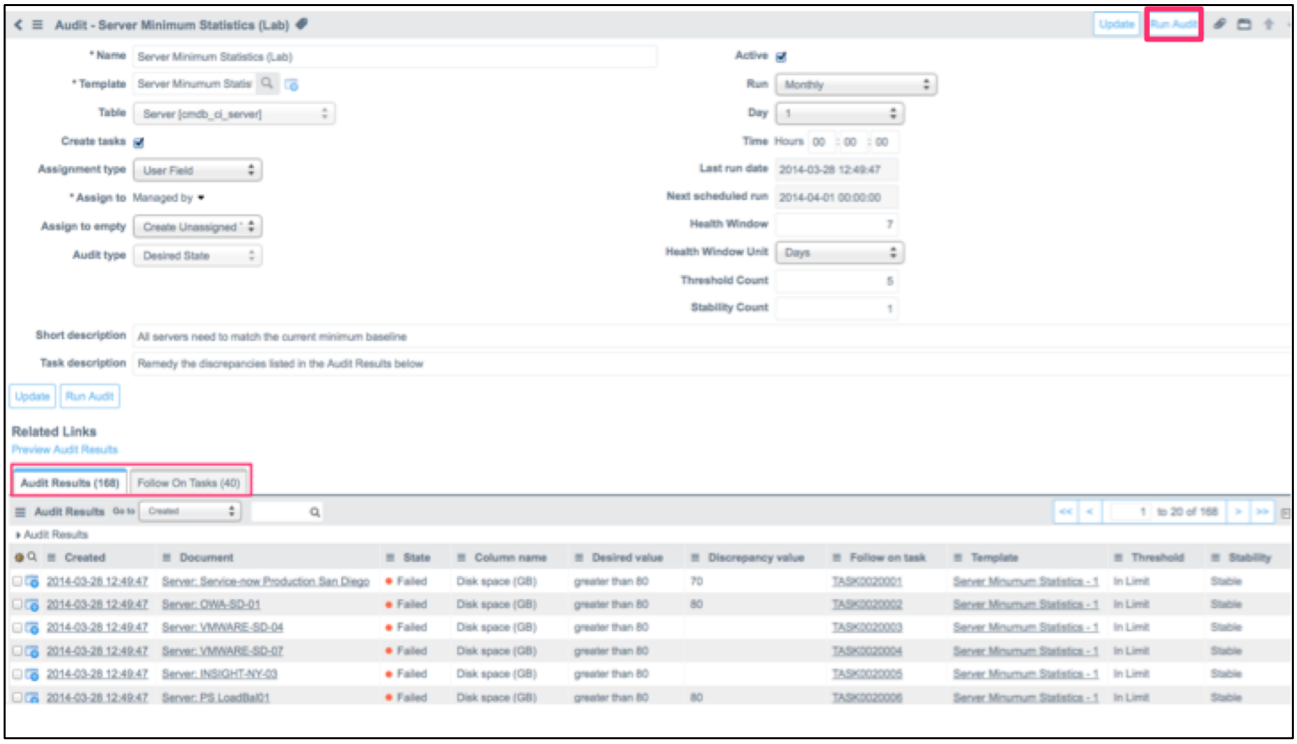
   Click **Submit**



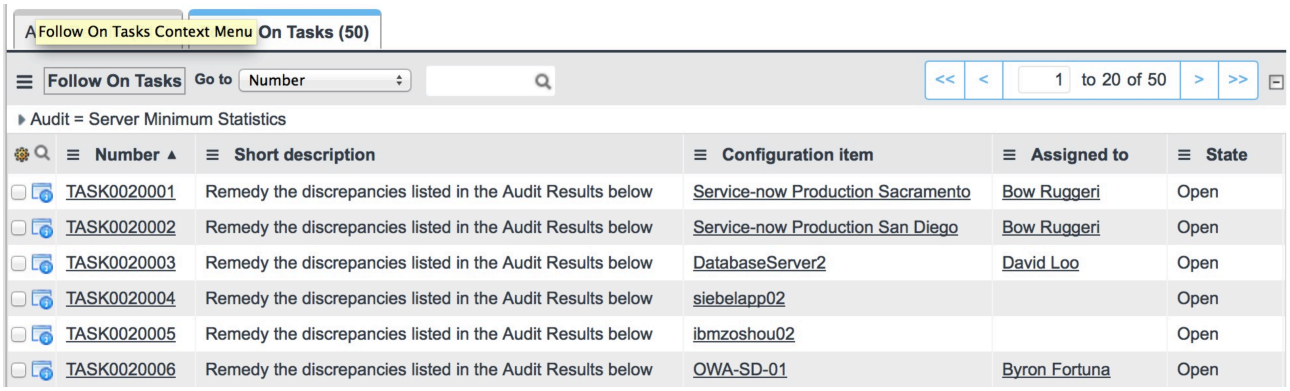
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2. Click back into the Server Minimum Statistics (Lab) Audit and click **Run Audit**.

   In this example, 168 servers were audited and 40 Follow On Tasks were created.



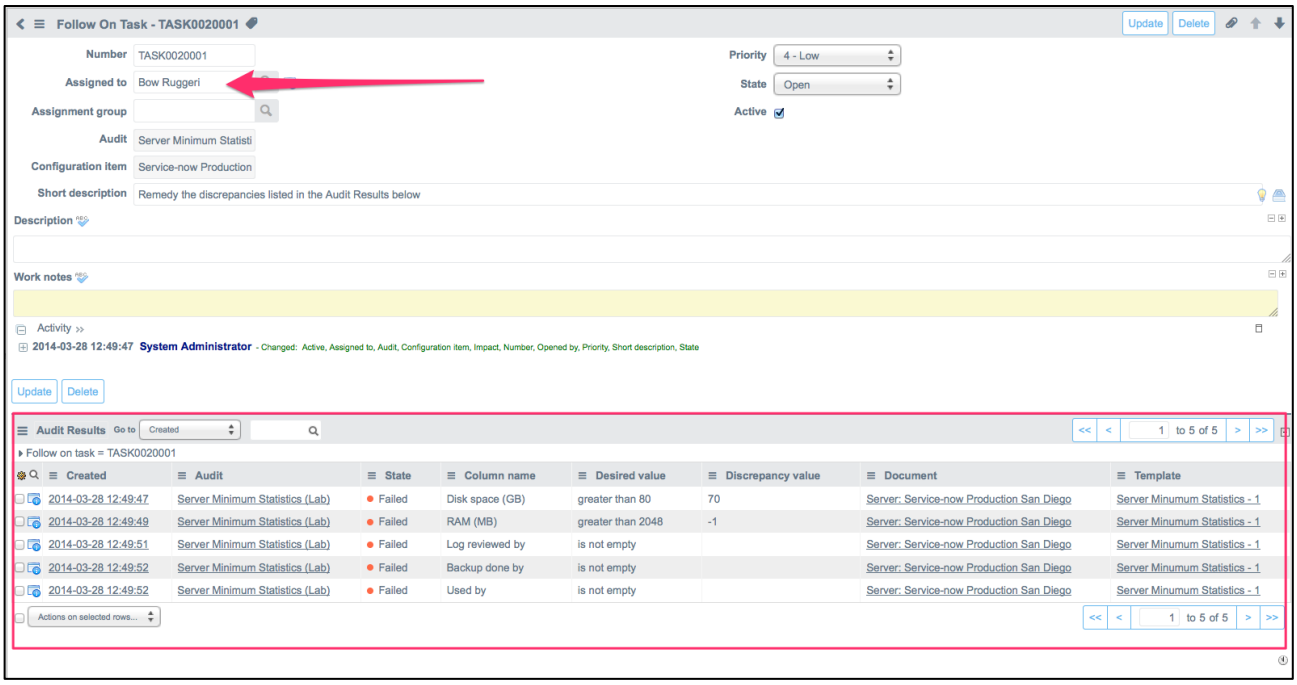
3. Click the **Follow-on Tasks tab**.



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Lab Success Verification

Click the first Task record for details. Your results should look similar to this.



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Lab Goal 5.3

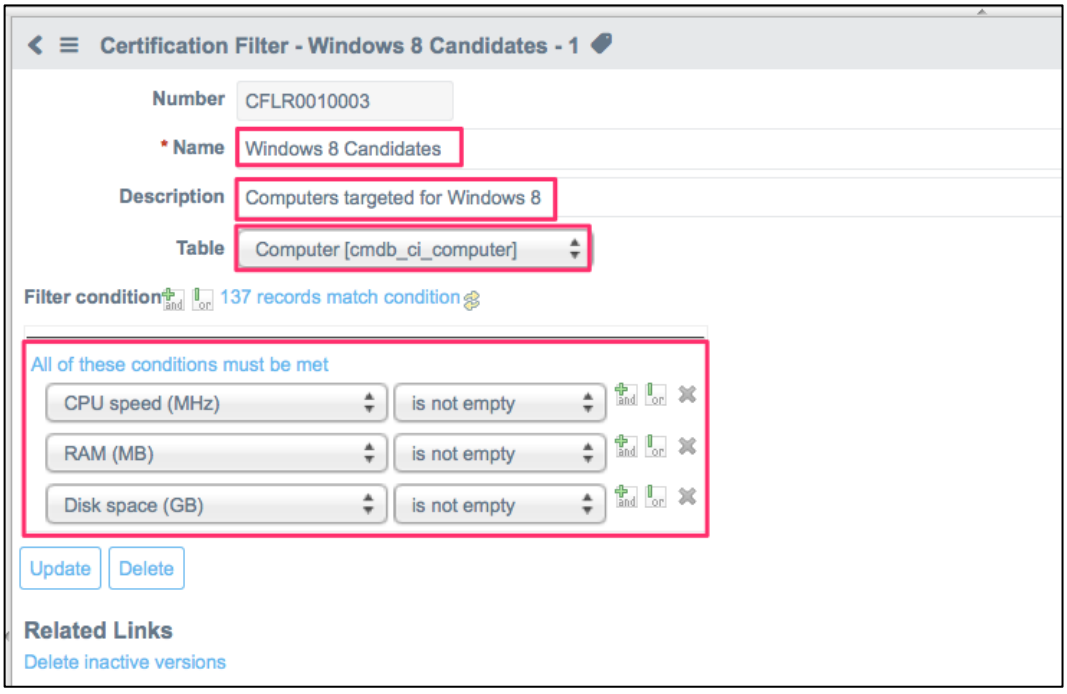
The main theme for Dublin was the Compliance application, which is an Extension of Data Certification. This exercise will walk through the second of the 3 basic types of Audits – Architecture Compliance.

Lab 5.3
Architecture Compliance

Create a Compliance Filter

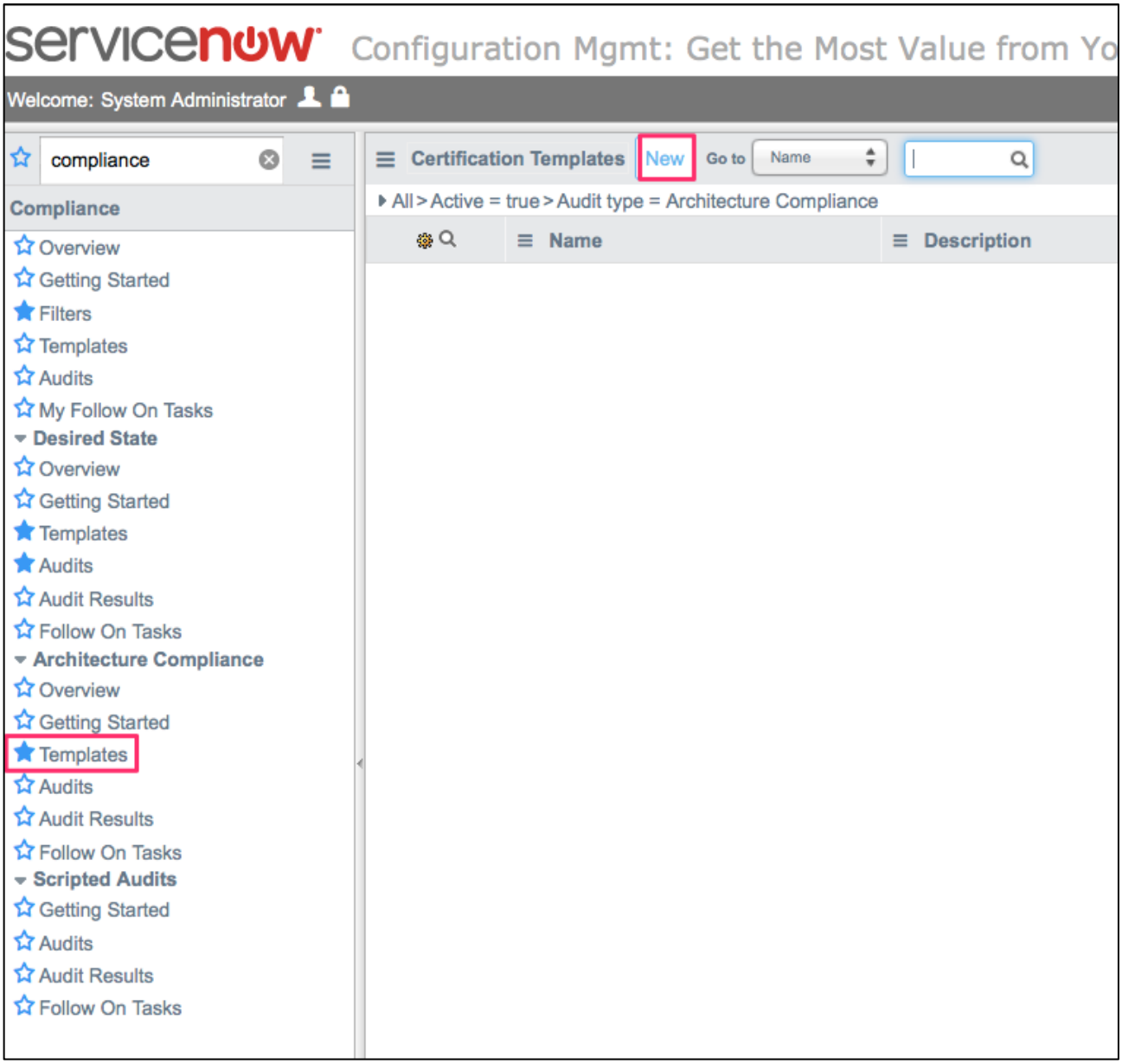
1. Navigate to **Compliance > Filters** and click **New** to create a filter as follows.

   Name: **Windows 8 Candidates**
   Description: **Computers targeted for Windows 8**
   Table: **Computer [cmdb_ci_computer]**
   CPU speed (MHz) is not empty
   RAM (MB) is not empty
   Disk Space (GB) is not empty



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2. Navigate to **Compliance > Architecture Compliance > Templates** and click **New**.

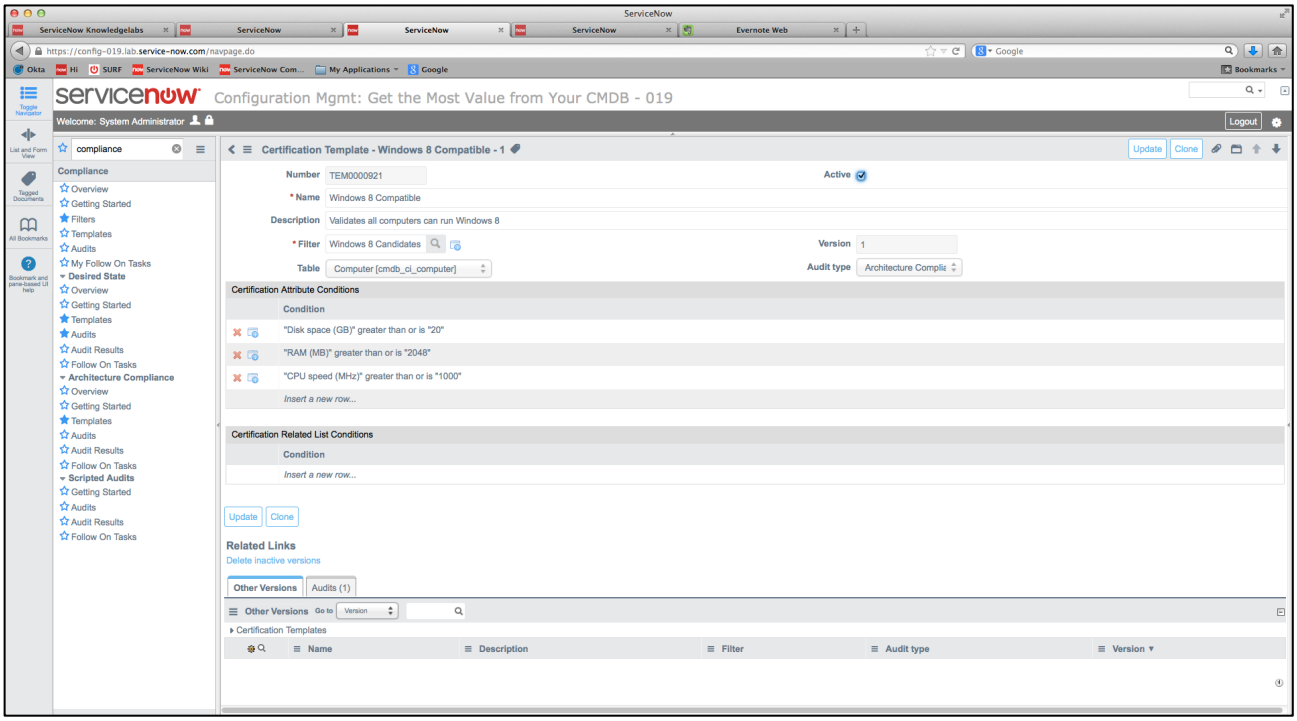


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3. Complete the **Certification Template** form as follows.

   Name: **Windows 8 Compatible**
   Description: **Validate all computers can run Windows 8**
   Filter: **Windows 8 Candidates – 1**

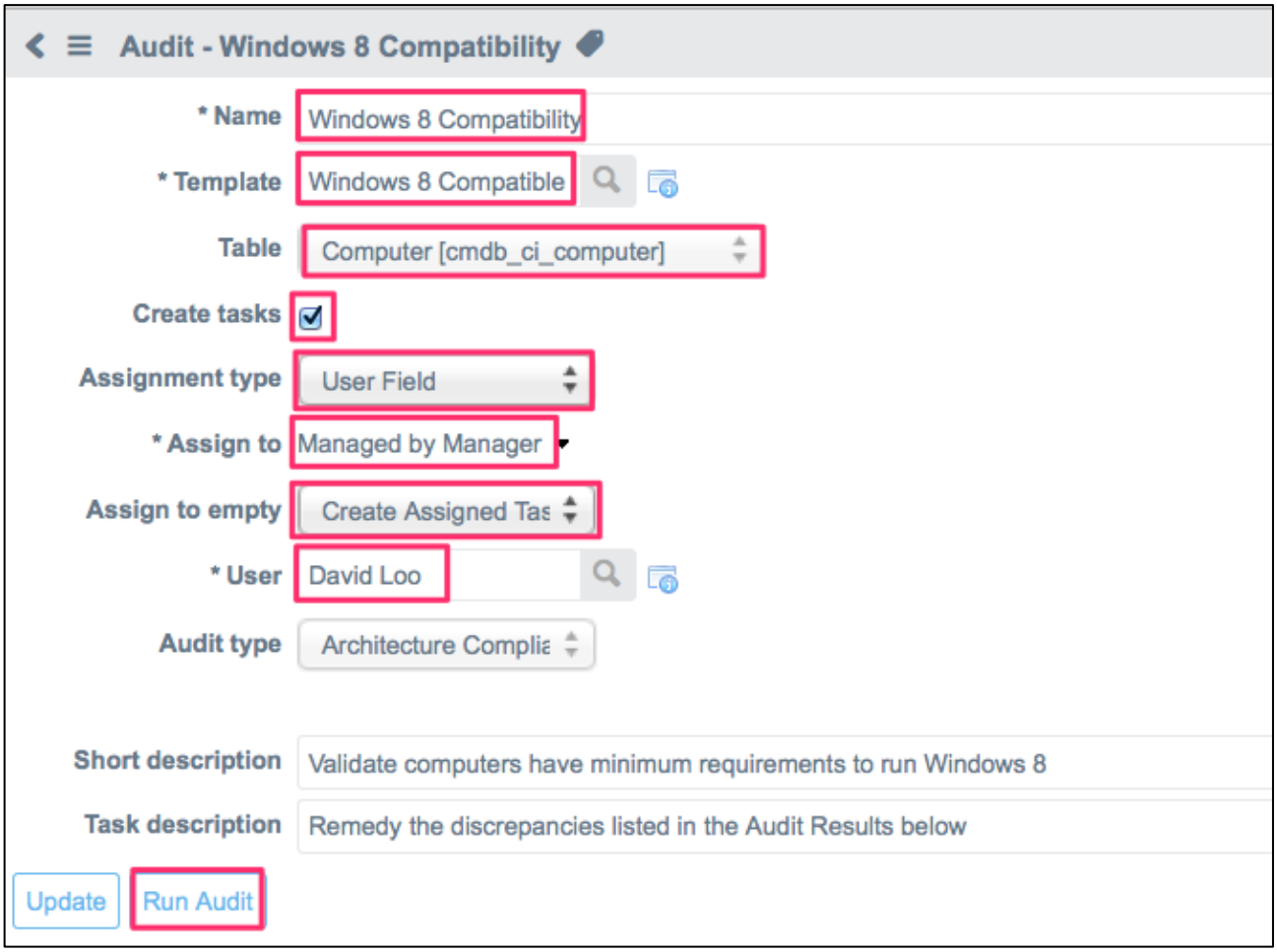
   "Disk space (GB)" greater than or is "20"
   "RAM (MB) greater than or is "2048"
   "CPU speed (MHz)" greater than or is "1000"



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4. Navigate to **Compliance > Architecture Compliance > Audit** and click **New** to create an Audit.

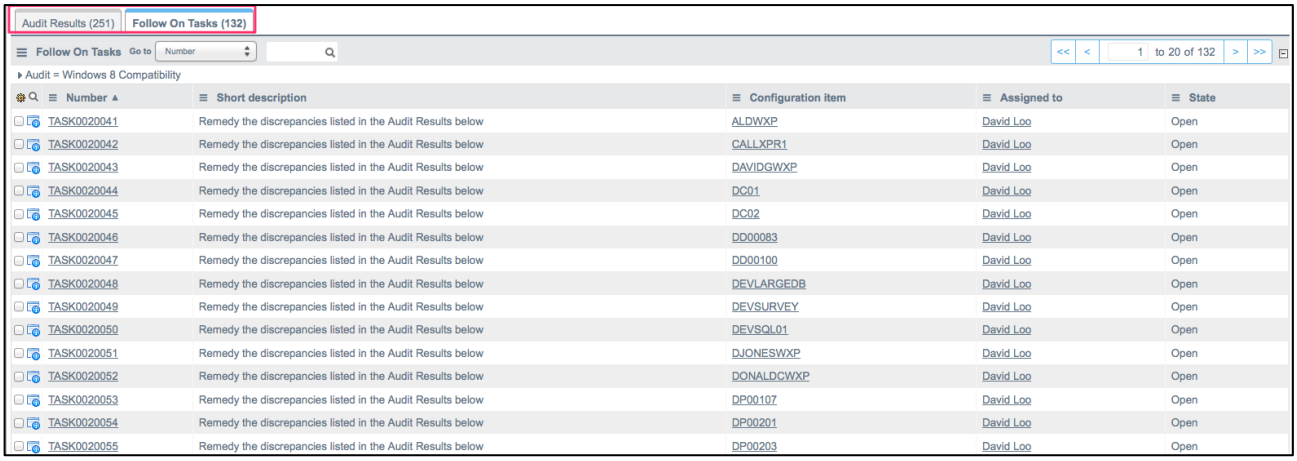
   Name: **Windows 8 Compatibility**
   Template: **Windows 8 Compatible**



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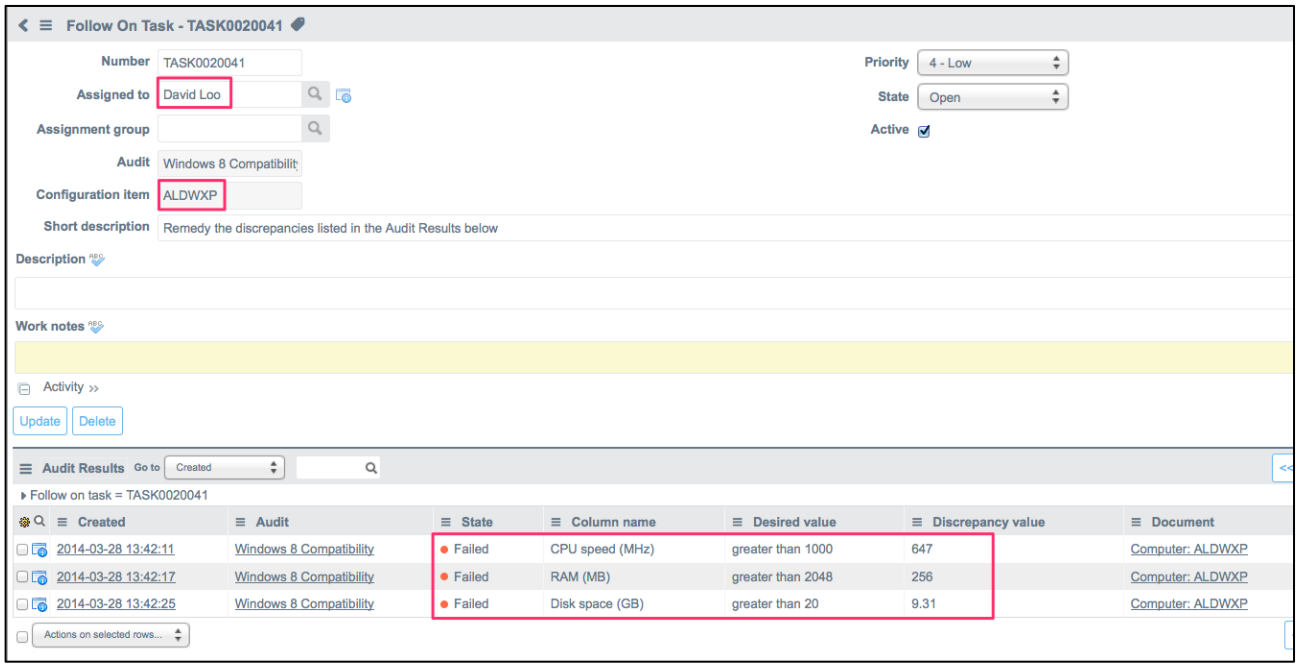
Lab Success Verification

Click **Run Audit**. Reload the form after a few seconds and scroll to the bottom to see the results. There were 251 matching CI's with 132 Follow-on Tasks. Drill into the first task.



Number	Short description	Configuration item	Assigned to	State
TASK0020041	Remedy the discrepancies listed in the Audit Results below	ALDWXP	David Loo	Open
TASK0020042	Remedy the discrepancies listed in the Audit Results below	CALLXPR1	David Loo	Open
TASK0020043	Remedy the discrepancies listed in the Audit Results below	DAVIDGWXP	David Loo	Open
TASK0020044	Remedy the discrepancies listed in the Audit Results below	DC01	David Loo	Open
TASK0020045	Remedy the discrepancies listed in the Audit Results below	DC02	David Loo	Open
TASK0020046	Remedy the discrepancies listed in the Audit Results below	DD00083	David Loo	Open
TASK0020047	Remedy the discrepancies listed in the Audit Results below	DD00100	David Loo	Open
TASK0020048	Remedy the discrepancies listed in the Audit Results below	DEVLARGEDB	David Loo	Open
TASK0020049	Remedy the discrepancies listed in the Audit Results below	DEVSURVEY	David Loo	Open
TASK0020050	Remedy the discrepancies listed in the Audit Results below	DEVSQL01	David Loo	Open
TASK0020051	Remedy the discrepancies listed in the Audit Results below	DJONESWXP	David Loo	Open
TASK0020052	Remedy the discrepancies listed in the Audit Results below	DONALDCWXP	David Loo	Open
TASK0020053	Remedy the discrepancies listed in the Audit Results below	DP00107	David Loo	Open
TASK0020054	Remedy the discrepancies listed in the Audit Results below	DP00201	David Loo	Open
TASK0020055	Remedy the discrepancies listed in the Audit Results below	DP00203	David Loo	Open

The machine below failed all three conditions. The Task was assigned to David Loo.



Created	Audit	State	Column name	Desired value	Discrepancy value	Document
2014-03-28 13:42:11	Windows 8 Compatibility	Failed	CPU speed (MHz)	greater than 1000	647	Computer: ALDWXP
2014-03-28 13:42:17	Windows 8 Compatibility	Failed	RAM (MB)	greater than 2048	256	Computer: ALDWXP
2014-03-28 13:42:25	Windows 8 Compatibility	Failed	Disk space (GB)	greater than 20	9.31	Computer: ALDWXP

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