

# Automation of Catalyst Center (SWIM) for ITSM

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## Executive Summary

The purpose of this document is to provide an overview of the Catalyst Center-ITSM (ServiceNow) architecture and key components. This document is intended for ITSM professionals and Catalyst Center administrators. The document is organized as follows:

Table of Contents | Overview of Catalyst Center-ITSM (ServiceNow) Architecture and Key Components

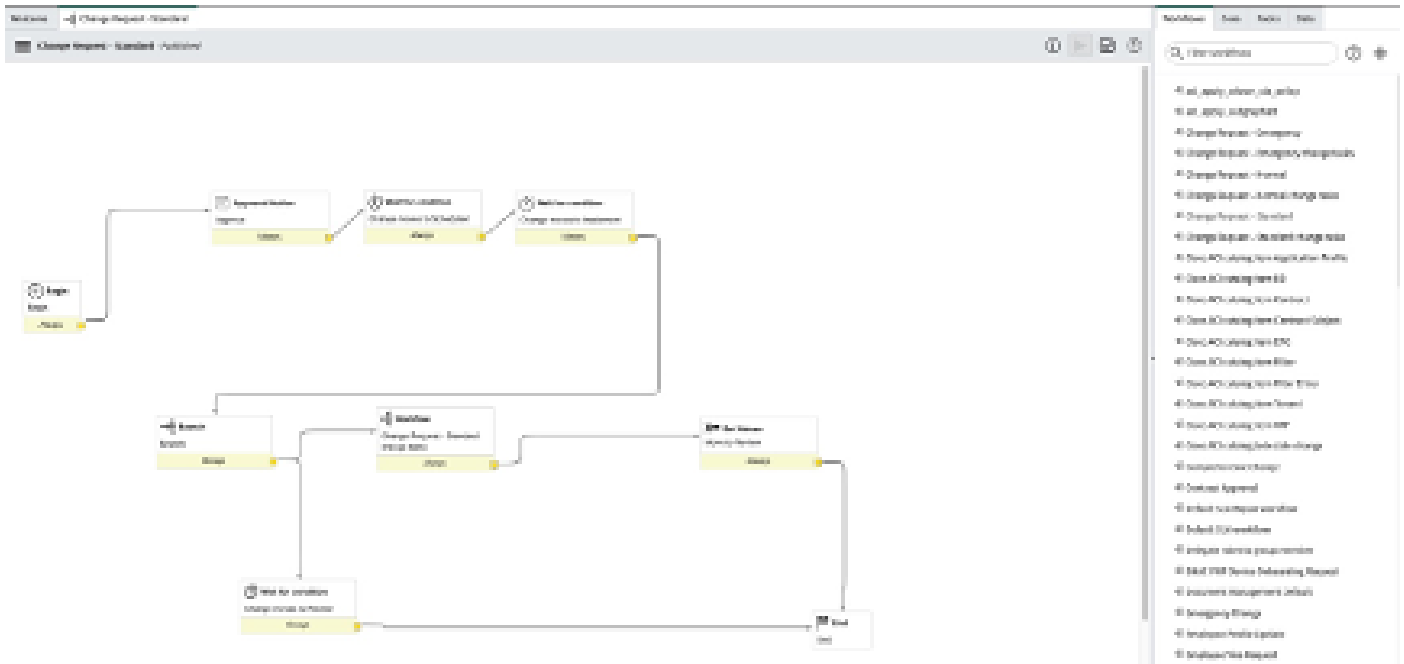
## Cisco Catalyst Center-ITSM (ServiceNow) Architecture

Catalyst Center-ITSM (ServiceNow) Architecture: Overview and Key Components

[Catalyst Center-ITSM \(ServiceNow\) Architecture: Overview and Key Components](#)







- لي لحت متي و ليوحت ل طئارخ دحأ ذي فننت متي ، لمعلا ريس رشؤم رارق يلع انب بس انم ل فدهل لودجل ال ا هطي طخت و يلحرمل ل يغش لت لودج ي ف ة دوج و مل ت اناي بل ل SWIM. ث دح ة لاج ي ف ريغت وه ي ذل.

servicenow All Favorites History Workspaces Admin Table Transform Maps

Table Transform Maps Name Search

All > Source table contains dna > Name > Change CommandOutputUpdate

Name	Source table	Target table
Change CommandOutputUpdate	Change CommandOutputUpdate [x_caci_cisco_dna_change_commandoutputupdate]	Change Request [change_request]
Change DNA Update	Change DNA Update [x_caci_cisco_dna_change_dna_update]	Change Request [change_request]
Change Status Update	Ticket Status Update [x_caci_cisco_dna_ticket_status_update]	Change Request [change_request]

- بل ط ة فدهت سمل جئاتنل ي ف Cisco نم ة يمقرلا ة كبشلا ة ينب قي بطت ي رثي موق ي Cisco Catalyst Center نم ة كبشلا زاه ل لي صافات مادختساب ITSM ريغت Cisco Catalyst زكرم ي ف REST API اعادتساب Cisco نم ة يمقرلا ة كبشلا ة ينب قي بطت ليمعلاو مدختسمل او رادصل او زاهل ل ثم ة فلتخم عاونأ نم ة ارثال تامولعم بلجل اهائش نإ مدختسمل ا ق ي تال ة ركذلل.

## ة تمأل ش دح ة مزح نيوكت (SWIM)

ة قلعتم ل شادحلأ (ServiceNow) ITSM ل Cisco DNA Center Automation events ة مزح عجرتست دعب ة مزحلل هذل نكم ي Cisco نم DNA زكرم نم اه ل يغشت م ي ت ل جماربلل روص تاثير دح تب تاناي ب رشن نكم ي (Service Now) ITSM ماظن ل رركتم لودج ي ف ش دحل تاناي ب رشن كلذ ServiceNow ي ف شادحلأ لودج ي ف ش دحل.

زكرم ة تمأ شادحلأ نيوكت مسق ل عجا ، (SWIM) ة تمأل ش دح ة مزح نيوكت يلع لوصحلل



Image Update X

1 Analyze Selection
2 Distribute
 3 Activate
 4 Schedule and Clean Up
 5 Summary

**Software Distribution Checks**

You can set an order on Pre and Post checks for your Software Distributes. If you don't see the check you can add a new custom check.

2 Pre and Post checks

<input type="checkbox"/> Pre: Device Upgrade Check <span style="color: blue;">+</span>	<input type="button" value="REMOVE"/> <input type="button" value="PRE"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> Post: Patch check <span style="color: blue;">+</span>	<input type="button" value="REMOVE"/> <input type="button" value="POST"/>	<input checked="" type="checkbox"/>

Not able to see the check you would like to run? You can [add a new check](#).

د. ال م أهی طخت مت دق ةروصل ا طيشنت ناك اذا ام رتخأ.

Image Update X

1 Analyze Selection
2 Distribute
3 Activate
 4 Schedule and Clean Up
 5 Summary

**Software Activation Checks**

You can enable and set an order on Pre and Post checks for your Software Activation. If you don't see the check you can add a new custom check.

Skip Activation:

i Activation is skipped for current Image Update workflow.

e. روصل ا عيزوت ةلودج.

Image Update X

Analyze Selection
  Distribute
  Activate
  4 Schedule and Close Up
  5 Summary

**Schedule**  
Schedule when you want the software distribution and activation tasks to occur.

ⓘ The time zone of the site to which the device belongs will be used as the default site time zone.

**Software Distribution**  
 If the ITSM ServiceNow application is enabled, choose Later.

Now
  Later

Task Name\*  
Software Image Distribution

Start Date/Time  
Aug 1, 2024 📅

1:00 PM ⌵

Time Zone  
Asia/Calcutta ⌵

**Software Activation**  
ⓘ Activation is skipped for current Image Update workflow.

لإسراء قوف رقناو ةحابسلا مهم عجار و.

Image Update X

Analyze Selection
  Distribute
  Activate
  Schedule and Close Up
  5 Summary

**Summary**  
Review your entry and make changes if you wish to do

Devices to Update: 1 | Device Family: 1 | Sites: 1

Device	From Image	To Image	Update Support
The00000-Device00000 (100.18.10.0.00)	csdk_image_00000_00000	csdk_image_00000_00000	

Software Distribution Checks

Scheduled On  
Time: Aug 1, 2024 1:10 PM | Time Zone: Asia/Calcutta (GMT+5:30)

Pre And Post Checks

ةركذتلا قيلعت ةلاح يف و ماهملا > ةطشنأل تحت ةجردم ةحابسلا ةجردملا ماهملا أ. 2.

Activities / Tasks

Multi Step | **Tasks** | View Items

Monitor and manage all your ArubaOS network operations in one place. See OS update details in quick view or learn more details from any page of OS update details with the expanded interface. [Help](#) [Feedback](#)

Search by OS update | [Filter by - Update Time, Most Recent in Order](#) | Last updated: 11:00:00 PM | [Refresh](#)

OS UPDATE  
[Primary](#)  
**Software Image Distribution**

Status: Aug 1, 2024 1:13 PM | Status: **In Progress**

ذئدنعف ، "ذئفنت" ؤلأحل إلهلقن م و ServiceNow إلع رءءرءل ؤركذت ؤامتع ا م اذ ا ب . ؤدمتع م ل "ؤركذتل" إلع Catalyst Center إلع ؤصاأل "م اهل" ؤلأحل رءءرءت

Activities / Tasks

OS UPDATE  
**Software Image Distribution**

Status: Jul 28, 2024 3:40 PM | Status: **Ticket Approved** | **In Progress** | Last updated: 3:40:15 PM | [Refresh](#)

Devices (1) [Go to Image Update Status](#)

Search Table

Update Model: **All** | **In Progress (1)** | Success (0) | Failure (0)

Device Name	Device Family	Date Started	Image Version	Status
88-78arC2608-1.8.8.0.0.000 (172.16.100.33)	Switches and Hubs	Jul 28, 2024	17.09.05-0.75	<b>Estimating Progress...</b> Distributing Config_Josua.17.09...

لءءءم ل ا ؤقولا ف ا ؤءلءل ؤرءل ؤءل ؤالءءم ج .



## ThorC9200L-Access.thor.com (172.19.100.39) Image Distribution

Date: Aug 1, 2024 1:10 PM    Duration: 1 minute 42 seconds    Status: ●  100%  
 Distributing Catalyst\_ite\_image.17...

Operations    Checks

### ▼ ● Distribution

Starting distribution of image: catalyst\_ite\_image.17.12.02.S/90.0m on device: 172.19.100.39 using protocol: HTTP

- > ● Image Integrity Verification(KGV)  
1 second
- > ● Pre Distribution Operation  
1 second
- > ● Distribution  
1 minute 42 seconds

ماظنن لاي غشت تقو تامولعم ةحول في شحك ةلودجم لآ ةحابس لآ ةمهم درس متي . فلأ - اثلاث  
 Catalyst. زكرم في فيساس لآ

### Event Summary ⓘ

1

Events  
 (selected)

DNA Event Severity	Count
1	0
2	1
3	0
4	0
5	0

⏏ Filter

≡ Find

Domain	Event Name	Count
Site Management	<a href="#">SWIM Upgrade Request Creation Image Distribution</a>	1

1 Records

Show Records: 10 ▼ 1 - 1 ◀ ▶

ب لطل ServiceNow طاب تراو ري غت لآ بلط فرعم لى ةلودجم لآ ةحابس لآ ةمهم ل صحت . ب  
 ري غت لآ

ServiceNow على ريغيغتل بلط مركزذت الالاق وريغيغتل بلطل ITSM الالاق ثي دحت متي ج.

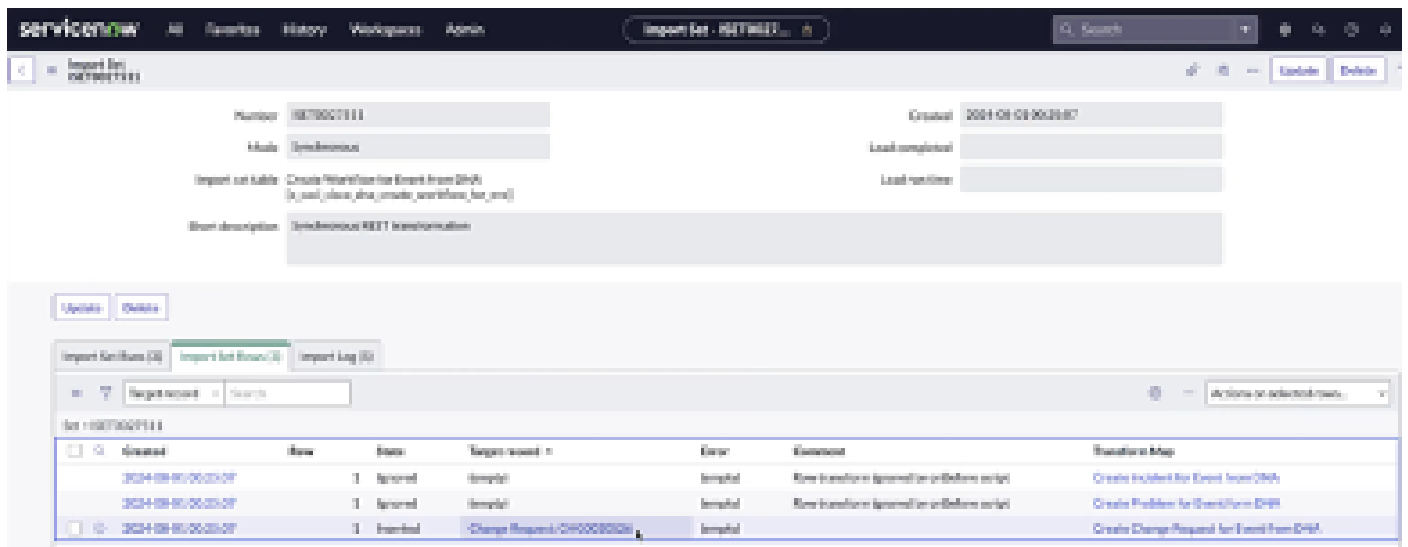
## ITSM-ServiceNow

Import Set Table of ServiceNow ع طساوب Cisco Catalyst Center نم ةحابس الالاق ثح مال تسال متي ةومجم (API) اتاقي ببط ةجم رب تاهجاو ما دختسا ب ServiceNow ل الالاق بال ع فد متي ةم الالاق طاقن و ةحوت فم ال REST اتاقي ببط ةجم رب تاهجاو و ServiceNow ل داريتسال ال ServiceNow في REST اتاقي ببط ةجم رب تاهجاو ل.

- ل الالاق لتنا Cisco Catalyst، زكرم نم ServiceNow ل الالاق بال نم ققحت لل ل لودجل داريتسال ةومجم لالاق نع ثح باو داريتسال ةومجم x\_caci\_cisco\_dna\_cisco\_dna\_inventory\_det

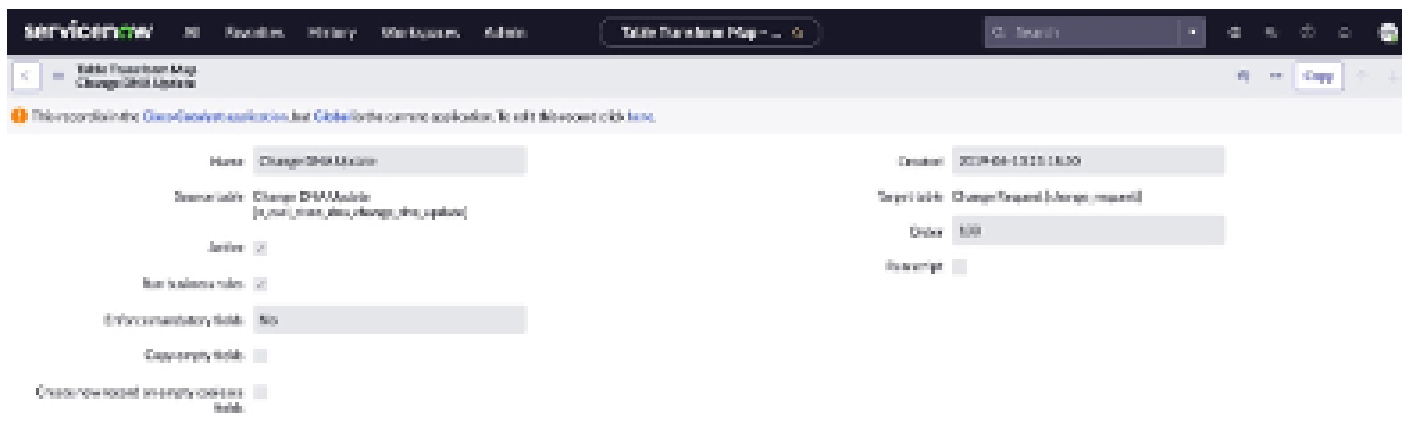
1. لودجل داريتسال ةومجم تامول عم ةحول نم داريتسال ةومجم لالاق ةي فصتب مق x\_caci\_cisco\_dna\_cisco\_dna\_inventory\_det.

يذ ثداحل مقررل داريتسالال ةومجم فوفص صحفو داريتسالال ةومجم لىصافت نم ققحت ةلصللا.



3. إدانتسا ServiceNow: يف ثدحلل هب رمي يذلل لمعل ريس عون "لمعل ريس رشؤم" ددحي. لىوحتلل طئارخ دحل ذىفنت متي، لمعل ريس رشؤم رارق.

iv. ةطيرخ دومع يف يبعشت طايترا قوف رقنا، لىوحتلل ةطيرخ لىصافت نم ققحتلل. داريتسالال ةومجم فوفص صاخلل لىوحتلل.



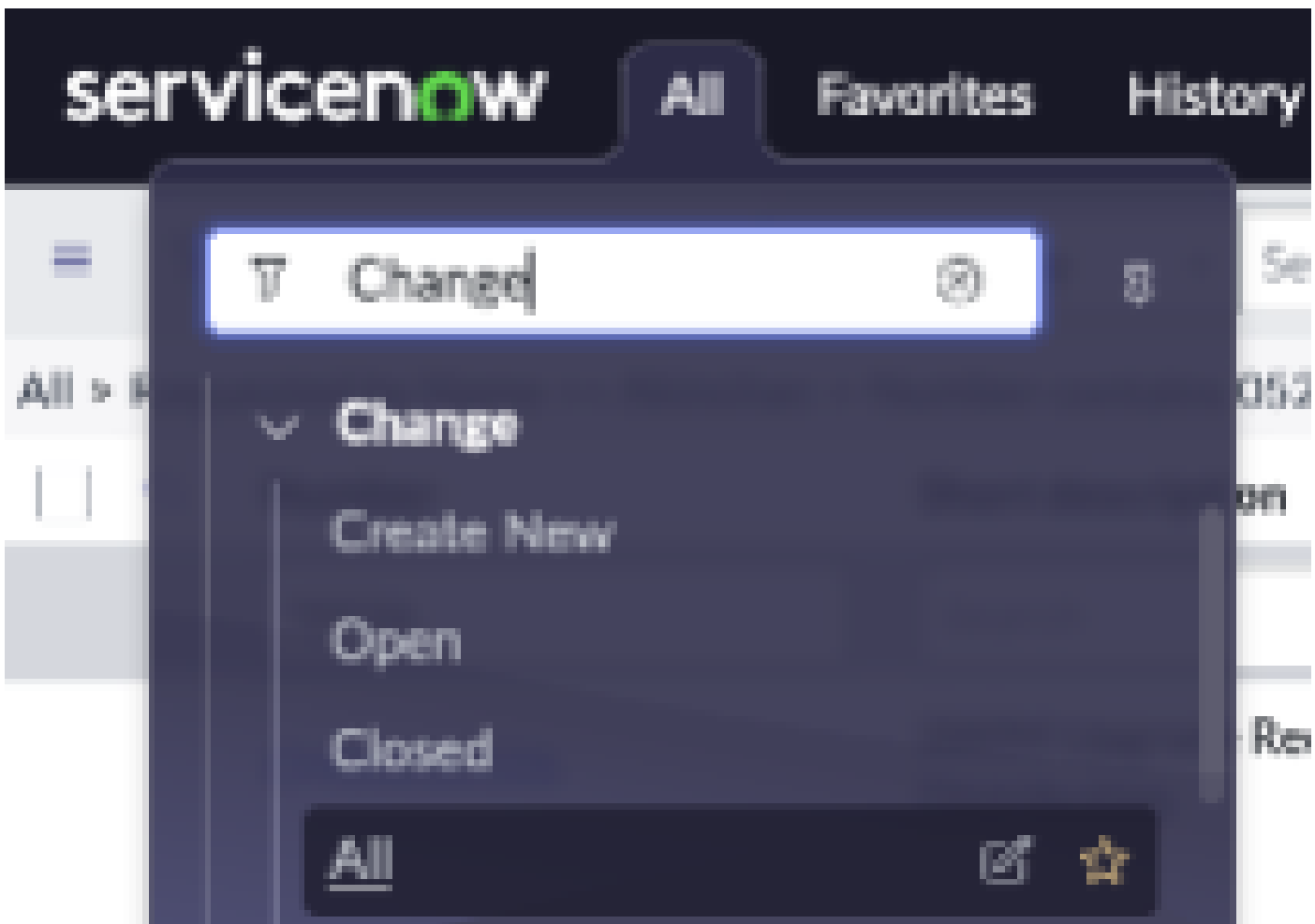
(SWIM): يئاقلئل لىغشتلل ثدحل لىوحتلل طئارخ لواحد

Name	Source table	Target table
Change CommandOutputUpdate	Change CommandOutput Update [x_pcd_class_dna_change_commandoutputupdate]	Change Request [change_request]
Change DNA Update	Change DNA Update [x_pcd_class_dna_change_dna_update]	Change Request [change_request]
Change Status Update	Ticket Status Update [x_pcd_class_dna_ticket_status_update]	Change Request [change_request]

## ةتمأل شح لمع ريس ذي فنت نم ققحتلا

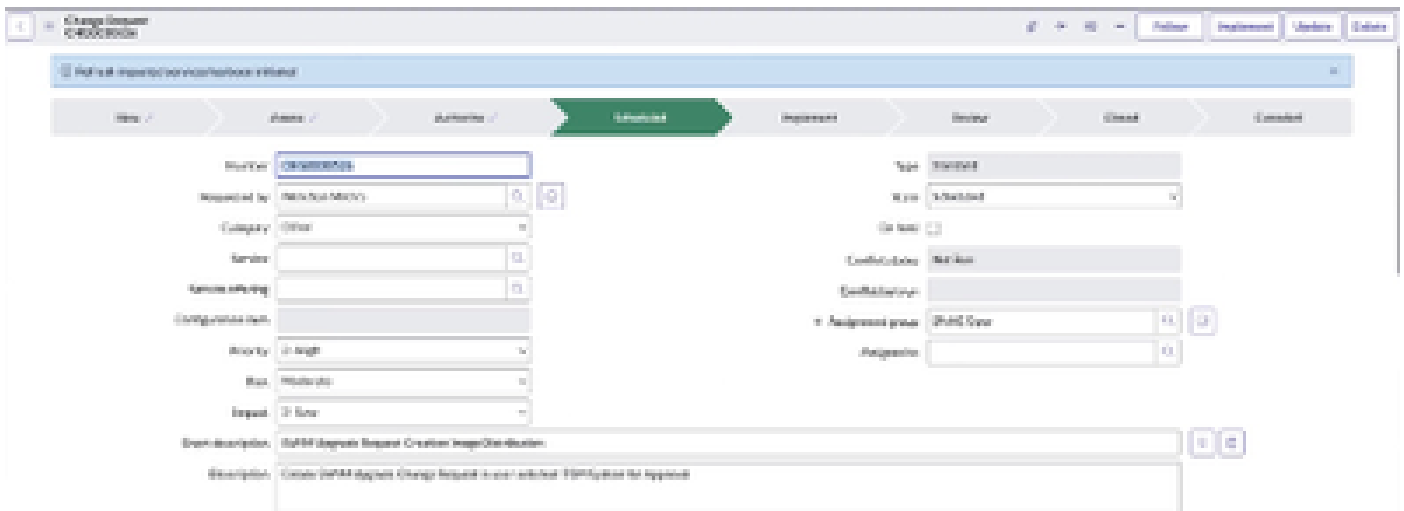
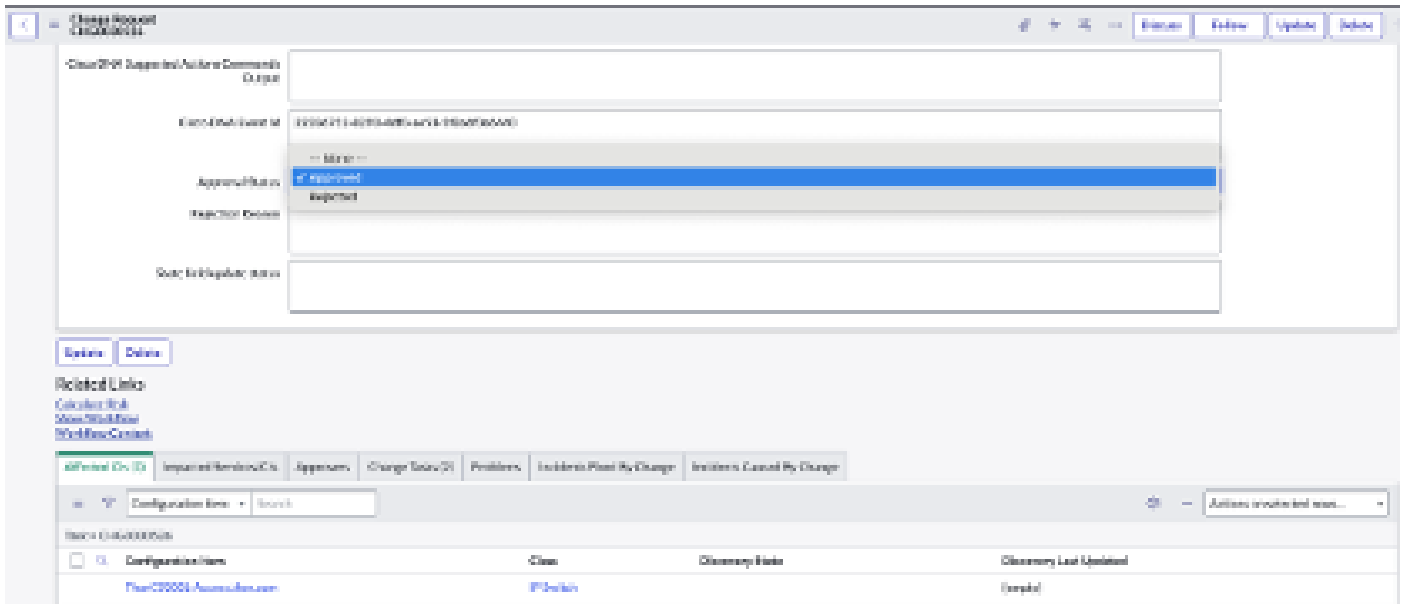
- زاهجلا لي صافب ريغيغتلا بلط عاشنإ متي، حاجنب ةحابسلا لمع ريس ةلودج درجمب ه. له SWIM ةيقرت ةلودج تم تيذلا

1. لكلا > ريغت > يمومع شح

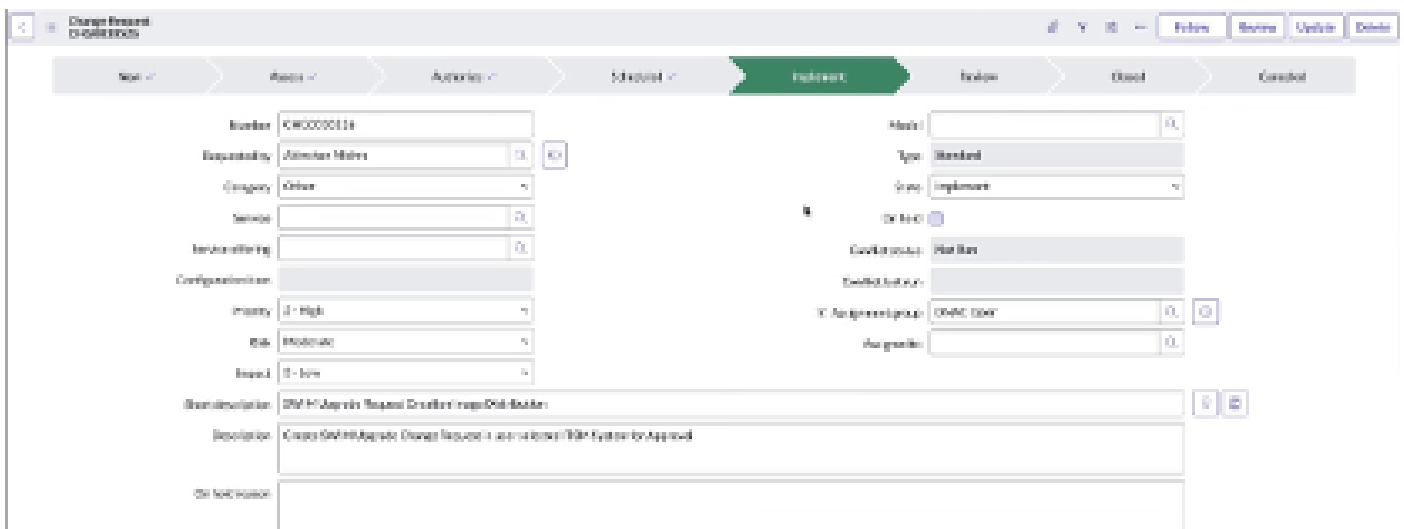


ii. ريغتلا تابلط تامولعم ةحول نم ريغيغتلا بلط ةيفصتب مق.





ريغيغتال ذيفنتورريغيغتال بلط ليرصافات نم ققحتال ج.



لالخ نم ايئاقولت قالغإ ةلاح ىلإ ريغيغتال بلط لقتني، حاجنب SWIM لمع ريس مامتإ دعب د. ةق لغملا ةق لجال ةمتأ.



Import Set

ALL RESULTS

▼ Contact Tracing

▼ Devlo

Devlo Users Risk Report L..

▼ System Import Sets

Load Data

Create Transform Map

Run Transform

> Administration

▼ Advanced

Import Sets



لي صافات لال نم ققحت ل ل اهدي دحت و داريت سالا ة عوم جم في رع ت .



Number	Description	Status	Inserted into	Destination	Created	Last/Completed	Last run time
007000111	Transfer from PDB to Transformation	Processed	Create Problem for Event from DPA (k:\data\logs\logs\create_work_flow_log.xml)	Import	2014-08-04 11:14:07	Import	

داريت ساو داريت سال اة وومجم لي غشت نم ق قحت ، داريت سال اة وومجم لي صافات تحت .  
 اة وومجم ل فوفص

ServiceNow Import Set Details

Number: 007000111  
 Mode: Periodic  
 Import set table: Create Problem for Event from DPA  
 (k:\data\logs\logs\create\_work\_flow\_log.xml)  
 Status: Completed  
 Last run time: [Empty]

Import Set Log

Created	Row	Status	Target record	Error	Comments	Transaction log
2014-08-04 11:14:07	1	Imported	Import	Import	Row transfer (group) by workflow script	Create Incident for Event from DPA
2014-08-04 11:14:07	1	Imported	Import	Import	Row transfer (group) by workflow script	Create Problem for Event from DPA
2014-08-04 11:14:07	1	Imported	Change Record: 010001001	Import	Row transfer (group) by workflow script	Create Change Record for Event from DPA

لثم SWIM ثدح لي صافات ىل ع الطال ري غت ل ل بل ط ل Import Set Row ل اذ قوف رقا .  
 كل ذى ل اموخ سن ل او زا ح ل ل لي صافات

```

Event Details
[{"@type":"com.snc.importset.event","@version":"1.0","@xmlns":"http://schemas.xmlsoap.org/wsdl/","@xmlns:xsi":"http://www.w3.org/2001/XMLSchema-instance","@xmlns:soap":"http://schemas.xmlsoap.org/soap/envelope/","@xmlns:ns1":"http://schemas.xmlsoap.org/soap/envelope/","@xmlns:ns2":"http://schemas.xmlsoap.org/soap/envelope/","@xmlns:ns3":"http://schemas.xmlsoap.org/soap/envelope/","@xmlns:ns4":"http://schemas.xmlsoap.org/soap/envelope/","@xmlns:ns5":"http://schemas.xmlsoap.org/soap/envelope/","@xmlns:ns6":"http://schemas.xmlsoap.org/soap/envelope/","@xmlns:ns7":"http://schemas.xmlsoap.org/soap/envelope/","@xmlns:ns8":"http://schemas.xmlsoap.org/soap/envelope/","@xmlns:ns9":"http://schemas.xmlsoap.org/soap/envelope/","@xmlns:ns10":"http://schemas.xmlsoap.org/soap/envelope/","@xmlns:ns11":"http://schemas.xmlsoap.org/soap/envelope/","@xmlns:ns12":"http://schemas.xmlsoap.org/soap/envelope/","@xmlns:ns13":"http://schemas.xmlsoap.org/soap/envelope/","@xmlns:ns14":"http://schemas.xmlsoap.org/soap/envelope/","@xmlns:ns15":"http://schemas.xmlsoap.org/soap/envelope/","@xmlns:ns16":"http://schemas.xmlsoap.org/soap/envelope/","@xmlns:ns17":"http://schemas.xmlsoap.org/soap/envelope/","@xmlns:ns18":"http://schemas.xmlsoap.org/soap/envelope/","@xmlns:ns19":"http://schemas.xmlsoap.org/soap/envelope/","@xmlns:ns20":"http://schemas.xmlsoap.org/soap/envelope/","@xmlns:ns21":"http://schemas.xmlsoap.org/soap/envelope/","@xmlns:ns22":"http://schemas.xmlsoap.org/soap/envelope/","@xmlns:ns23":"http://schemas.xmlsoap.org/soap/envelope/","@xmlns:ns24":"http://schemas.xmlsoap.org/soap/envelope/","@xmlns:ns25":"http://schemas.xmlsoap.org/soap/envelope/","@xmlns:ns26":"http://schemas.xmlsoap.org/soap/envelope/","@xmlns:ns27":"http://schemas.xmlsoap.org/soap/envelope/","@xmlns:ns28":"http://schemas.xmlsoap.org/soap/envelope/","@xmlns:ns29":"http://schemas.xmlsoap.org/soap/envelope/","@xmlns:ns30":"http://schemas.xmlsoap.org/soap/envelope/","@xmlns:ns31":"http://schemas.xmlsoap.org/soap/envelope/","@xmlns:ns32":"http://schemas.xmlsoap.org/soap/envelope/","@xmlns:ns33":"http://schemas.xmlsoap.org/soap/envelope/","@xmlns:ns34":"http://schemas.xmlsoap.org/soap/envelope/","@xmlns:ns35":"http://schemas.xmlsoap.org/soap/envelope/","@xmlns:ns36":"http://schemas.xmlsoap.org/soap/envelope/","@xmlns:ns37":"http://schemas.xmlsoap.org/soap/envelope/","@xmlns:ns38":"http://schemas.xmlsoap.org/soap/envelope/","@xmlns:ns39":"http://schemas.xmlsoap.org/soap/envelope/","@xmlns:ns40":"http://schemas.xmlsoap.org/soap/envelope/","@xmlns:ns41":"http://schemas.xmlsoap.org/soap/envelope/","@xmlns:ns42":"http://schemas.xmlsoap.org/soap/envelope/","@xmlns:ns43":"http://schemas.xmlsoap.org/soap/envelope/","@xmlns:ns44":"http://schemas.xmlsoap.org/soap/envelope/","@xmlns:ns45":"http://schemas.xmlsoap.org/soap/envelope/","@xmlns:ns46":"http://schemas.xmlsoap.org/soap/envelope/","@xmlns:ns47":"http://schemas.xmlsoap.org/soap/envelope/","@xmlns:ns48":"http://schemas.xmlsoap.org/soap/envelope/","@xmlns:ns49":"http://schemas.xmlsoap.org/soap/envelope/","@xmlns:ns50":"http://schemas.xmlsoap.org/soap/envelope/","@xmlns:ns51":"http://schemas.xmlsoap.org/soap/envelope/","@xmlns:ns52":"http://schemas.xmlsoap.org/soap/envelope/","@xmlns:ns53":"http://schemas.xmlsoap.org/soap/envelope/","@xmlns:ns54":"http://schemas.xmlsoap.org/soap/envelope/","@xmlns:ns55":"http://schemas.xmlsoap.org/soap/envelope/","@xmlns:ns56":"http://schemas.xmlsoap.org/soap/envelope/","@xmlns:ns57":"http://schemas.xmlsoap.org/soap/envelope/","@xmlns:ns58":"http://schemas.xmlsoap.org/soap/envelope/","@xmlns:ns59":"http://schemas.xmlsoap.org/soap/envelope/","@xmlns:ns60":"http://schemas.xmlsoap.org/soap/envelope/","@xmlns:ns61":"http://schemas.xmlsoap.org/soap/envelope/","@xmlns:ns62":"http://schemas.xmlsoap.org/soap/envelope/","@xmlns:ns63":"http://schemas.xmlsoap.org/soap/envelope/","@xmlns:ns64":"http://schemas.xmlsoap.org/soap/envelope/","@xmlns:ns65":"http://schemas.xmlsoap.org/soap/envelope/","@xmlns:ns66":"http://schemas.xmlsoap.org/soap/envelope/","@xmlns:ns67":"http://schemas.xmlsoap.org/soap/envelope/","@xmlns:ns68":"http://schemas.xmlsoap.org/soap/envelope/","@xmlns:ns69":"http://schemas.xmlsoap.org/soap/envelope/","@xmlns:ns70":"http://schemas.xmlsoap.org/soap/envelope/","@xmlns:ns71":"http://schemas.xmlsoap.org/soap/envelope/","@xmlns:ns72":"http://schemas.xmlsoap.org/soap/envelope/","@xmlns:ns73":"http://schemas.xmlsoap.org/soap/envelope/","@xmlns:ns74":"http://schemas.xmlsoap.org/soap/envelope/","@xmlns:ns75":"http://schemas.xmlsoap.org/soap/envelope/","@xmlns:ns76":"http://schemas.xmlsoap.org/soap/envelope/","@xmlns:ns77":"http://schemas.xmlsoap.org/soap/envelope/","@xmlns:ns78":"http://schemas.xmlsoap.org/soap/envelope/","@xmlns:ns79":"http://schemas.xmlsoap.org/soap/envelope/","@xmlns:ns80":"http://schemas.xmlsoap.org/soap/envelope/","@xmlns:ns81":"http://schemas.xmlsoap.org/soap/envelope/","@xmlns:ns82":"http://schemas.xmlsoap.org/soap/envelope/","@xmlns:ns83":"http://schemas.xmlsoap.org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 
```

## ةلص تا ذ تام ول عم

- [ITSM و Catalyst Center لم اکت ق اطن ل ة ی س اس ا ل ا م ی ه ا ف م ل ا](#)
- [ServiceNow CMDB ما ظن عم Catalyst زکرم نوزخم ةن ما زم](#)
- [Catalyst Center Issue ل ITSM ةک بش اارثا و ةب قارم ما ذخت سا](#)

ةمچرتل هذه ل و ح

ةلأل تاي نقتل ن م ة و مچ م ادخت ساب دن تسم ل ا اذ ه Cisco ت مچرت  
م ل ا ل ا ا ن ا ع مچ م ف ن م دخت س م ل م عد و ت م م م دقت ل ة م ش ب ل و  
م ك ة ق ي ق د ن و ك ت ن ل ة ل ا ة مچرت ل ض ف ا ن ا ة ظ ح ا ل م م چ ر ي . ة ص ا خ ل م ه ت غ ل ب  
Cisco ي ل خ ت . ف ر ت م م مچرت م ا ه م د ق ي ي ت ل ا ة ي ف ا ر ت ح ا ل ا ة مچرت ل ا م ل ا ح ل ا و ه  
ل ا ا م ا د ا د ع و چ ر ل ا ب ي ص و ت و ت ا مچرت ل ا ه ذ ه ة ق د ن ع ا ه ت ي ل و ئ س م Cisco  
Systems (ر ف و ت م ط ب ا ر ل ا) ي ل ص ا ل ا ي ز ي ل چ ن ا ل ا دن ت س م ل ا