knowledge17

http://clabs.link/lab131986

WORK at LIGHTSPEED

Discovery Optimized

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ServiceNow

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servicenow

Speaker Introduction



Name: Kiron Valluri

Title: Advisory Solution Consultant

Function: PreSales Solution Consultant

Company: ServiceNow

Experience: 6 years as Solution Consultant (ServiceNow, Oracle), 13 years of Implementation and Managing IT Applications

Expertise: ServiceNow Platform, IT Operations, Event Management

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Speaker Introduction



Name: Tim Stammann

Title: Sr. Solution Consultant, ITOM Practice

Function: Pre-Sales Consultant focusing on ITOM Solutions

Company: ServiceNow

Experience: Solution Consultant for 4 yrs at ServiceNow, 15 yrs ITSM & ITOM industry experience

Expertise: Cloud Mgmt, Operational Intelligence, Configuration Mgmt

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Objectives

- Leverage core functionality in conjunction with your existing discovery process to add more life to your CIs, extend the capabilities of your deployment and configure your architecture to take your discovery environment to the next level.

- Learn how Discovery can maintain a near real-time CMDB for your vCenter environment, extending your current discovery process.

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Agenda

- Discuss Configuration Item (CI) Life Cycle Management, the “Why”
- Identify Key Points Where Discovery Data Can Assist
- Configure the Platform to Help Manage Base Class CIs
- Work CIs Back in the Game After Being Retired
- Demo: vCenter Event Integration
- Help Detect Planned and Unplanned Changes to CIs

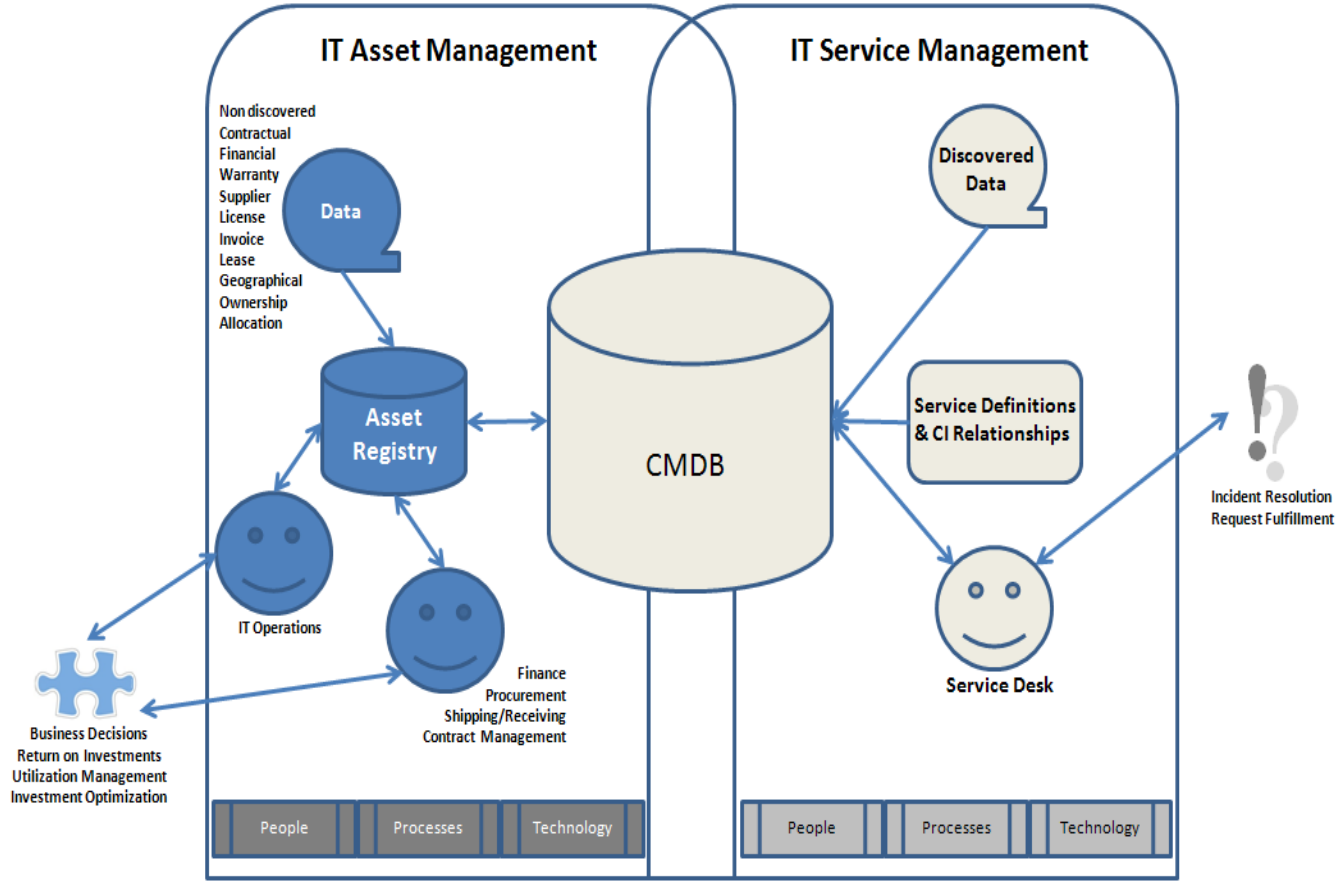
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CI Life Cycle Management

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Diary of a Lost CI

- Configuration items (CIs) are different than assets
  - CIs are something you have
  - Assets are something you own
- CIs come and go
  - Virtualization
  - Employee On/Off-Boarding
  - New and retiring projects
- CI Life cycle can be done standalone or in conjunction with a proper IT Asset Management (ITAM) Program



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Wouldn’t it be nice if ….

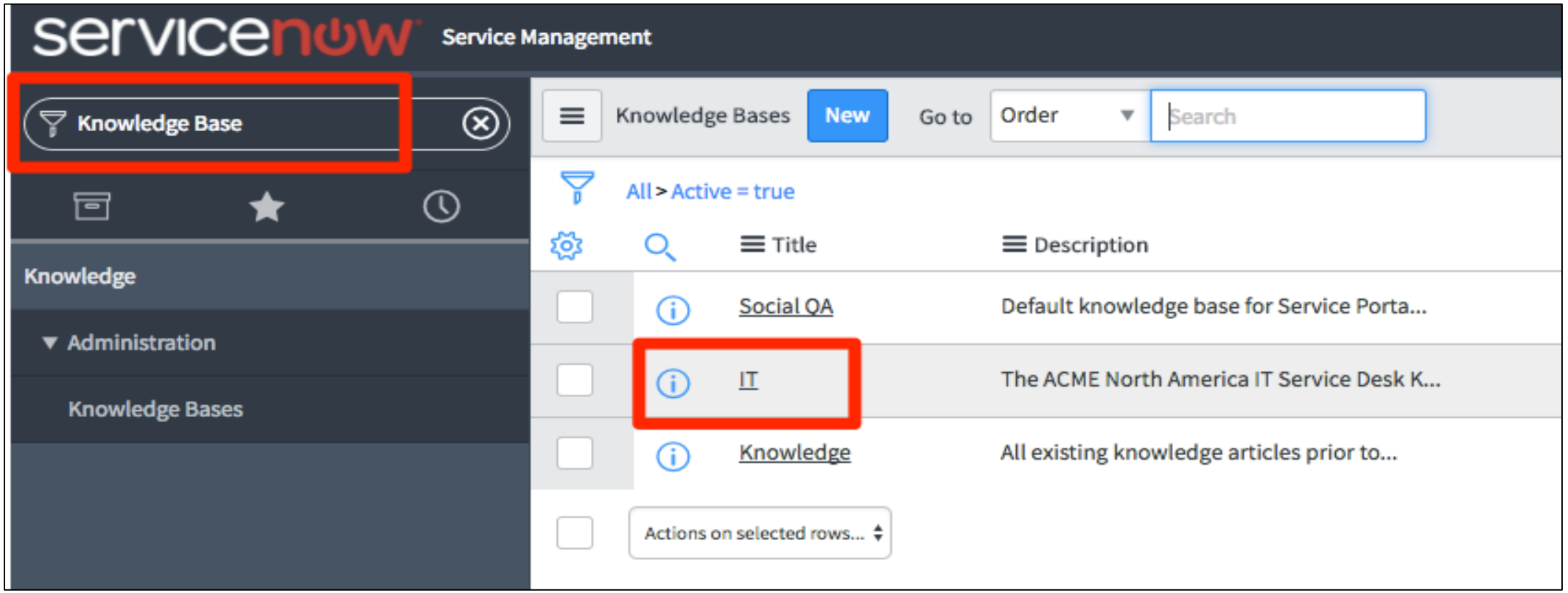
- You could easily identify new CIs that show up in your CMDB?
- You had the ability to control when assets are created?
- You could identify responsible parties when something is broken or has gone off the grid?
- You could properly retire records and clear out non-vital information, but retain critical records for audit requirements?



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Bookmark Scripts

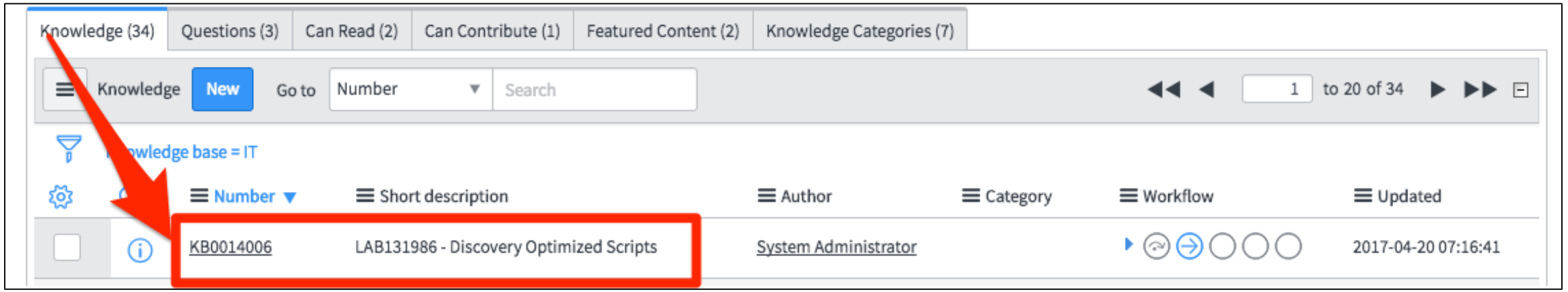
- Navigate to the IT Knowledge Base



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Bookmark Scripts

- Bookmark or Open in New Tab the KB article
  - KB0014006 titled LAB131986 – Discovery Optimized Scripts



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Lab 1.1 New CI

Managing the Creation of New CI

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Managing New CI Records

Lab 1.1

- Using the “hardware status” attribute that, on insert, you’ll set the value to “pending install”
  - This is important because this attribute syncs with the Asset Application!
- Tie the default support group to “procurement”
  - These ensure that new records are easily identified, and the team managing the incoming assets are aware that the system has gone online

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Managing New CI Records

Complete Lab 1.1

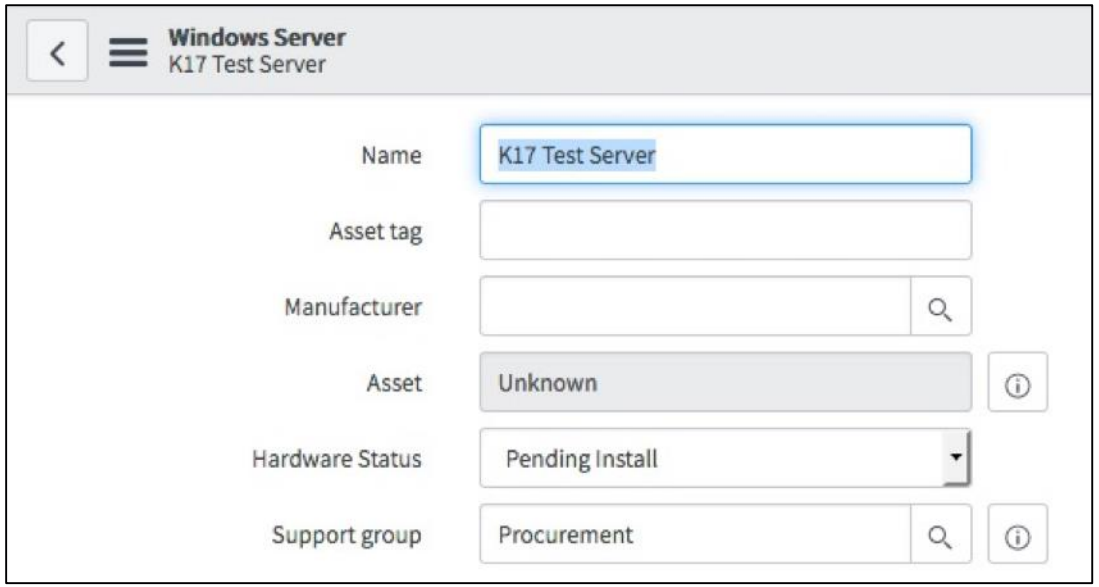


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Managing New CI Records

Lab 1.1

- Now that we have a BR in place that will set the hardware state to pending install and the default support group to procurement, who will be responsible for following through on their processes to get this into production?



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Decision Point Lab

Lab 1.1



How should we interact with the Asset Application?

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Create Asset When a New CI is Created

Out of the Box Business Rules

☐	ⓘ	Create Asset on insert	true	Configuration Item [cmdb_ci]
☐	ⓘ	Create asset on model change	true	Configuration Item [cmdb_ci]
☐	ⓘ	GenerateAssets	true	Model Category [cmdb_model_category]

When to run | Actions | Advanced

Condition: current.asset.nil() || (current.asset.ci != current.sys_id)

Script:

```
1  var ca = new AssetandCI();
2  ca.createAsset(current);
3
4
5
```


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Lab 1.2 CI Ownership

Making Sure There is Someone to Call

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Ownership

Lab 1.2

- We now have control over the insert of the record and making sure that the procurement group knows the CI is in the system …
- Let's put on that procurement hat and now tie that CI to a support group that will be responsible for Business As Usual (BAU)
- This is to ensure that there will always be someone to call upon if there are any issues with the system or it goes off the grid

- Value Add: We will also be locking down the responsible party so they cannot go in and decide for themselves that they do not want the headache without opening a proper change request

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Ownership

Complete Lab 1.2



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Ownership

Lab 1.2



How much idiot-proofing can you do?

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Decision Point Lab

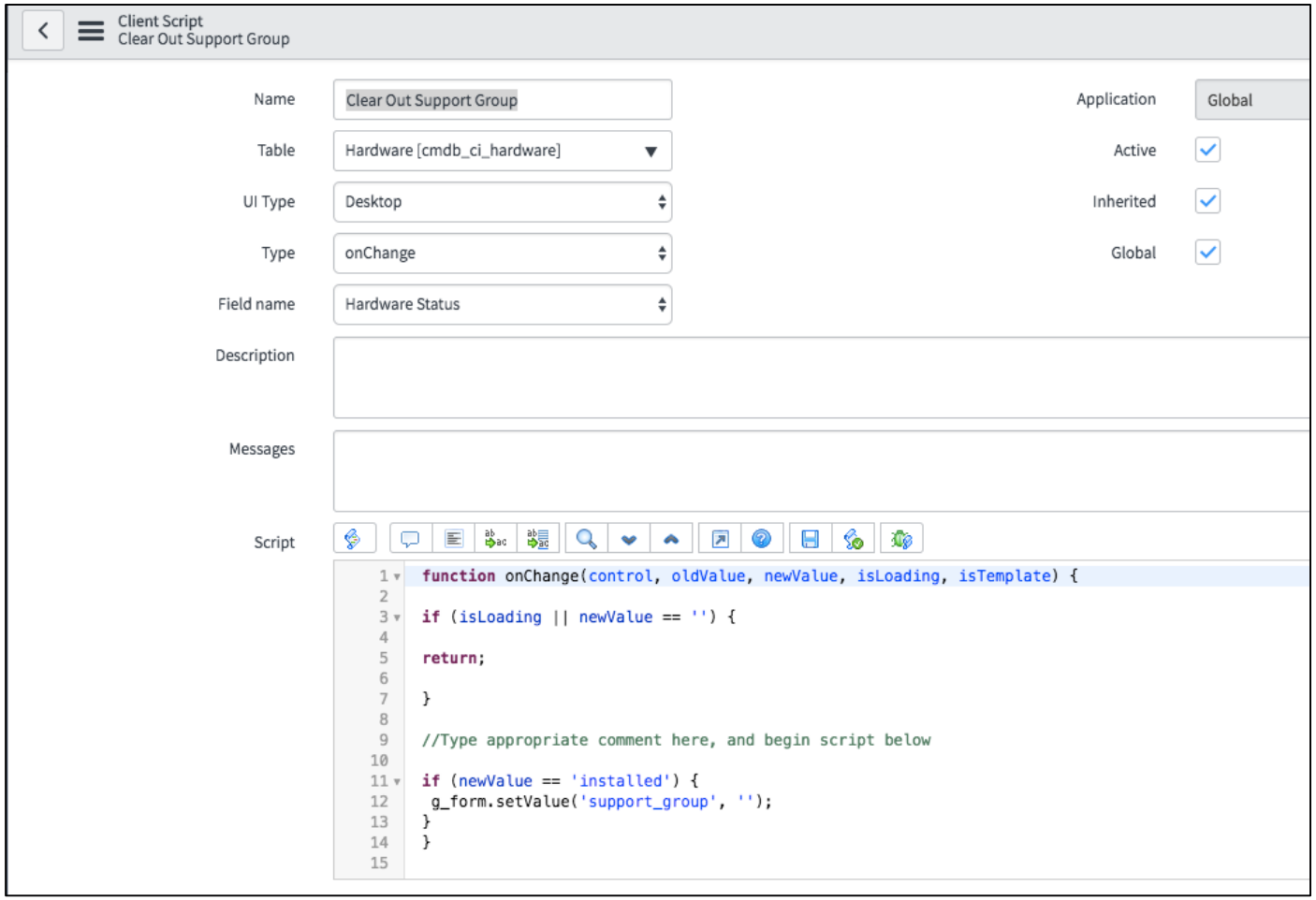
Lab 1.2



Support Group is required but it still set set to Procurement

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Client Script to Clear Out Support Group



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Lab 2.1 Life of a CI

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Life of a CI

Lab 2.1

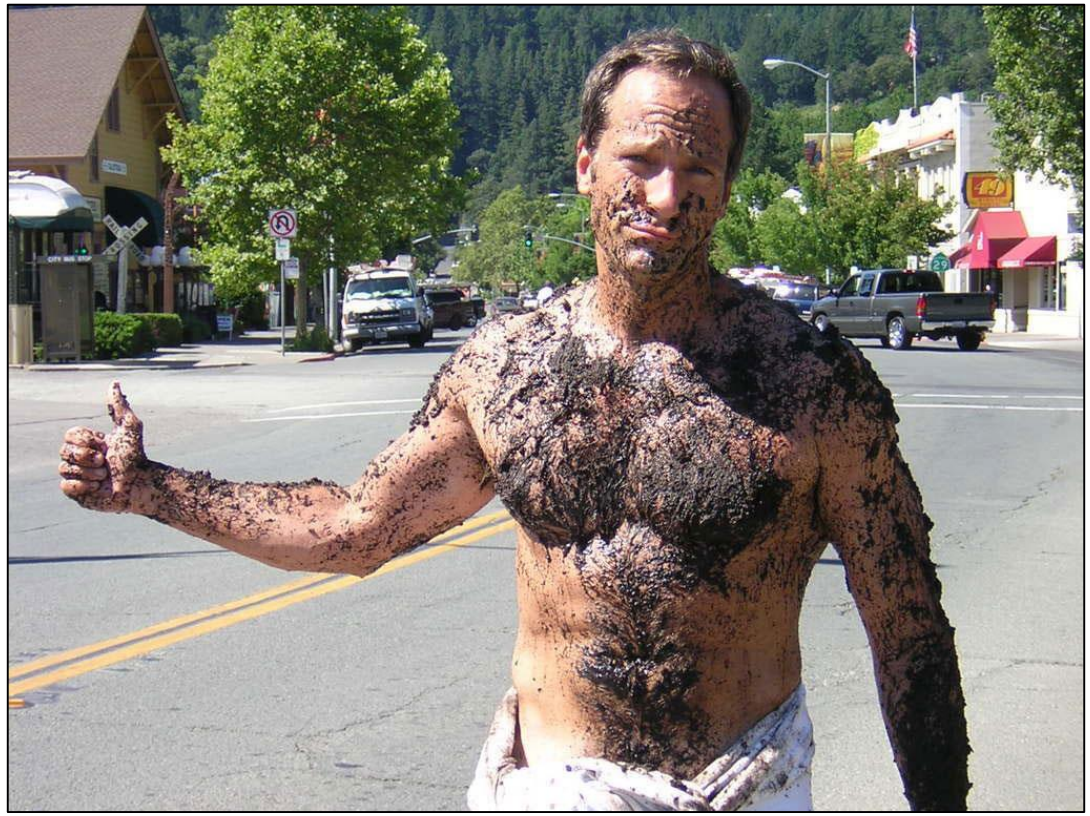
- The biggest concern for those that live in the CMDB is stale data, servers, applications that have gone offline, and no one really knows the current state of a CI
- Having an automated method to determine the state of a CI will give you that near-immediate notification that something may be amiss
- Aligned with the responsible support group, you will have the ability to notify them on your schedule that a computer/asset they are responsible for is missing

- Value Add: While we are using out-of-box state values, you absolutely have the ability to use your own naming conventions to set the state of different systems

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Life of a CI

Complete Lab 2.1



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Life of a CI



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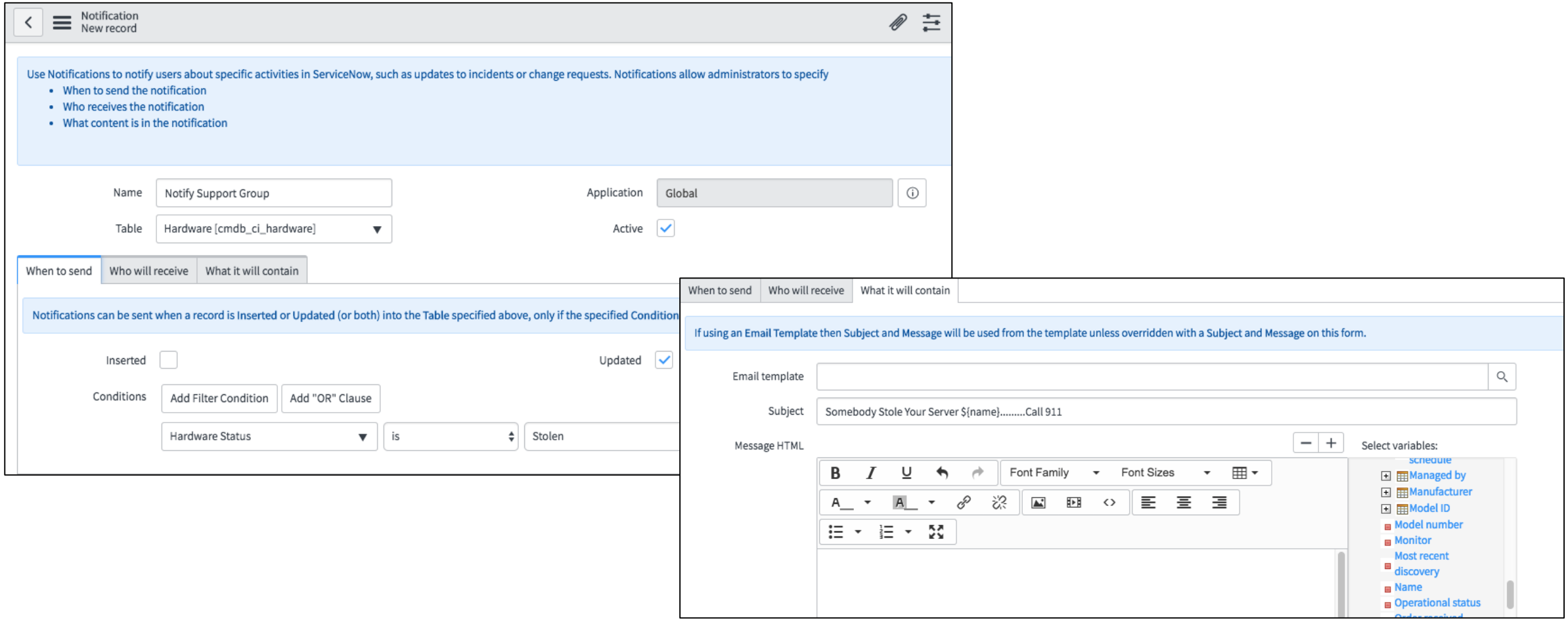
Life of a CI



What actions would your business like to take when a record goes missing?

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Sample Notification



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Lab 2.2 Life as an Application CI

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Life as an Application CI

Lab 2.2

- Applications provide for business services among other things, but they still need a lifecycle
- Applications can be spun up and down and really don't cost anything beyond the processing power it takes to execute them – the dollars are in the installed software that generates them
- Being able to see when an application is just no longer running in an environment can go a long way in keeping a tidy CMDB

- Value Add: You can set up notifications to the business service owners when applications that they depend on have changed

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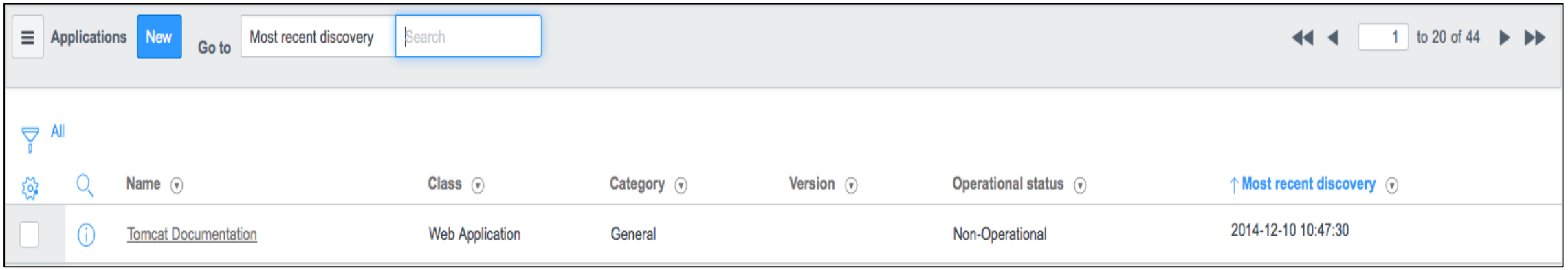
Life as an Application CI

Complete Lab 2.2



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Life as an Application CI



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Life as an Application CI

Decision Point: What actions would your business like to take when an application stays down for an extended period?



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Lab 3: Time to Say Goodbye

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Time to Say Goodbye

Lab 3

- Systems come and go and eventually clutter the CMDB
- Utilizing the state of the hardware in conjunction with Reference Qualifiers can help users not have to search through CIs that have long been out to pasture
- There could be critical audit and regulatory reasons to keep the base computer record in the CMDB
- Leftover software records! Those cost money ...

- Value Add: You can set up notifications to the CMDB owner when a long retired CI magically appears back on the network when trying to update a record that is “retired”

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Time to Say Goodbye

Complete Lab 3



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Time to Say Goodbye



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Time to Say Goodbye



Decision Point: What should be done with Virtual Machines that were really just ether-ware in the first place?

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Demo vCenter Event Collector
Ensure Private Cloud CIs are Up to Date in Near Real-Time

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vCenter Event Collector

Demo

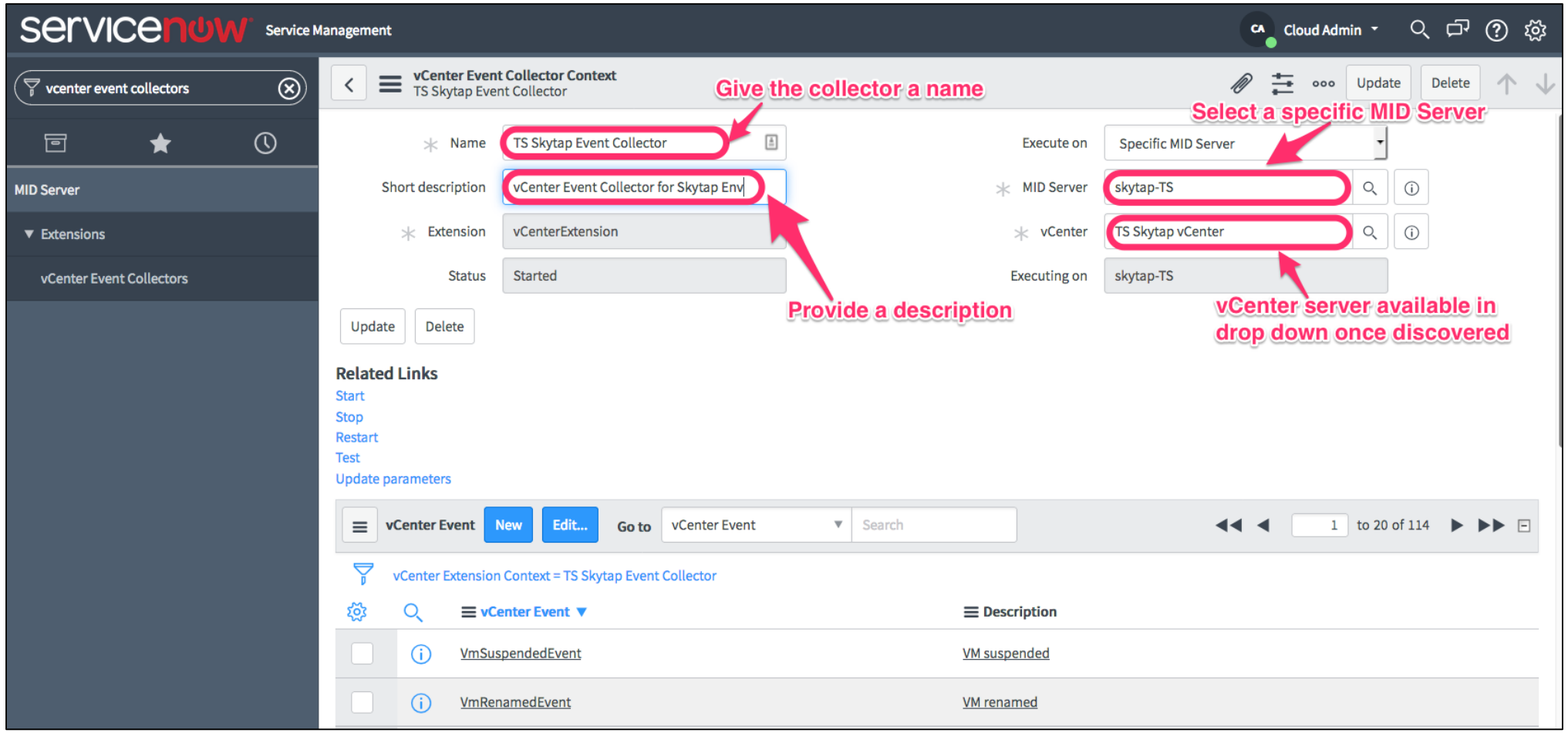
- The vCenter event collector is a MID Server extension that listens for vCenter-related events.
- The event collector detects changes to virtual machines and updates their status in the CMDB in addition to the updates that are detected by Discovery. A change to a virtual machine is sent as an event from vCenter to the vCenter event collector. When an event is received, the CMDB is updated accordingly. Full vCenter Discovery does not need to rerun to track current state of managed virtual machines.

- Important: You must run a full discovery of the vCenter before the events are correctly processed. The virtual machine must already exist in the CMDB. The extension only modifies the state of an existing virtual machine in the CMDB.

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Configure the vCenter Event Collector Extension

Demo

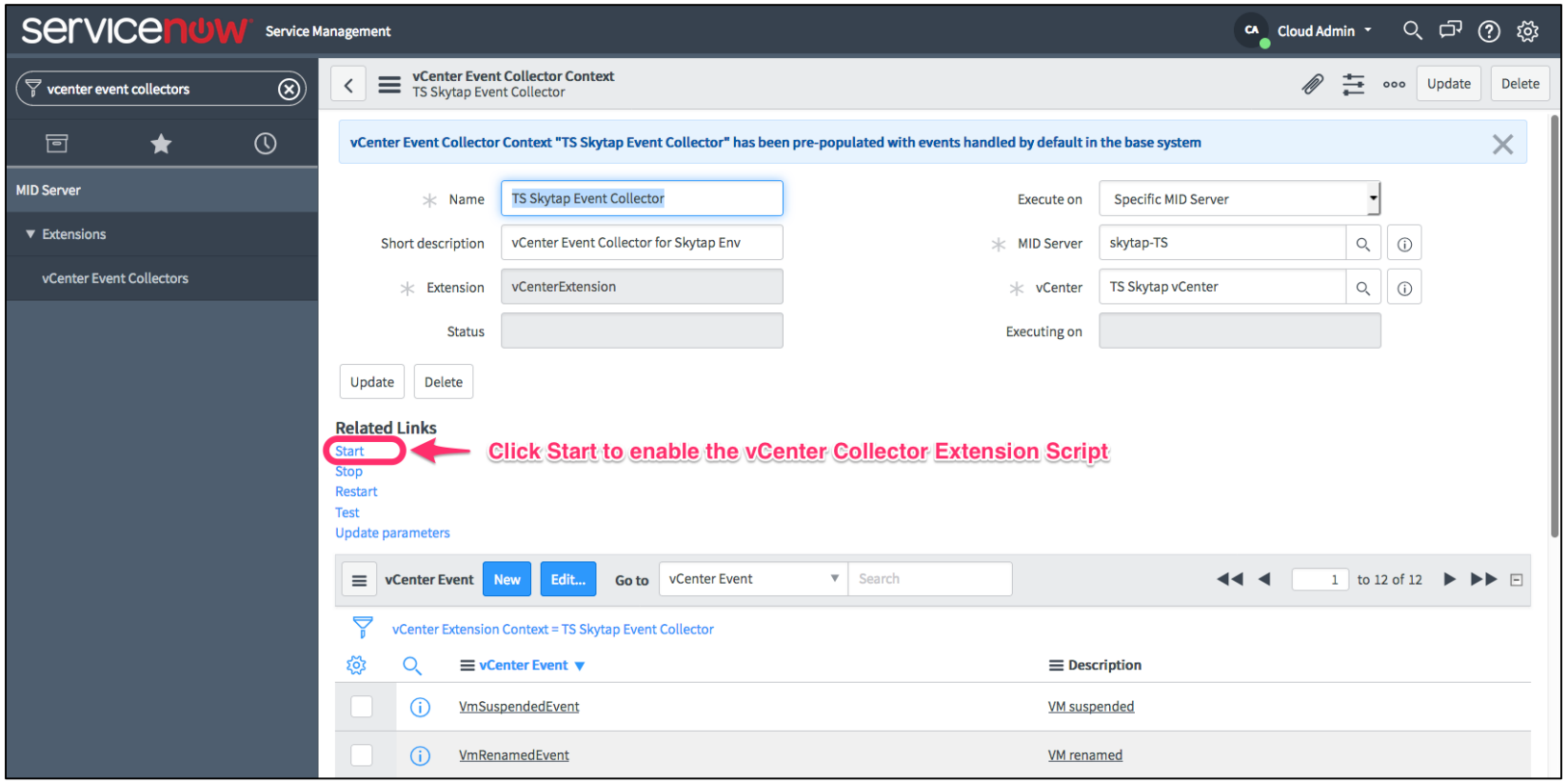


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Configure the vCenter Event Collector Extension

Demo

- Save the record and you will notice that the system will prepopulate the events handled by default in the base system.

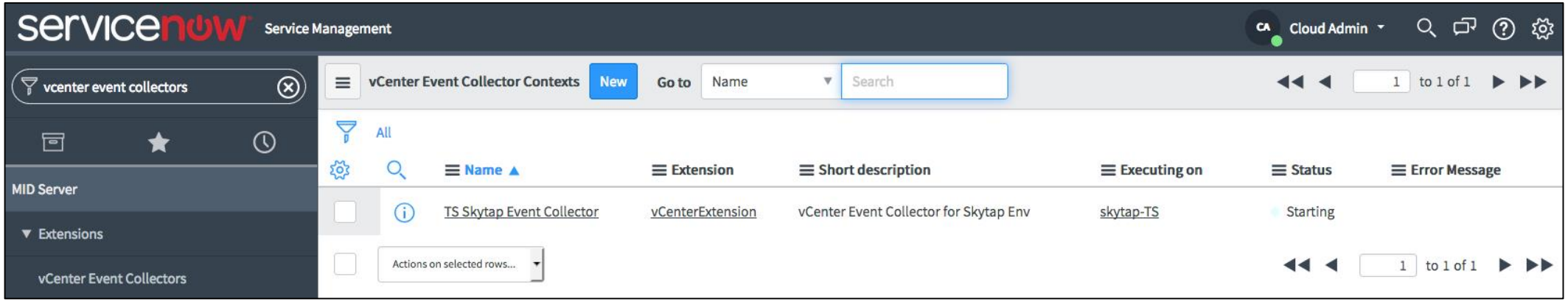


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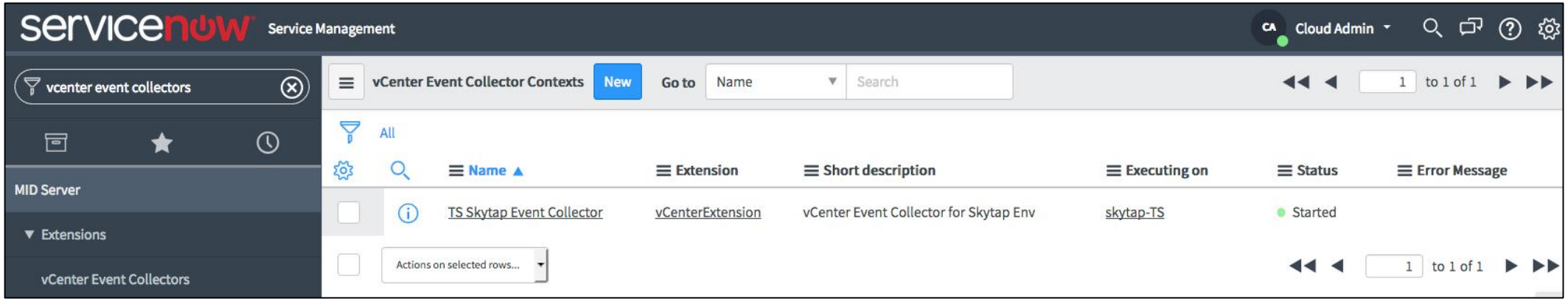
Configure the vCenter Event Collector Extension

Demo

- The collector will enter the starting state.



- Refresh to verify it is started.

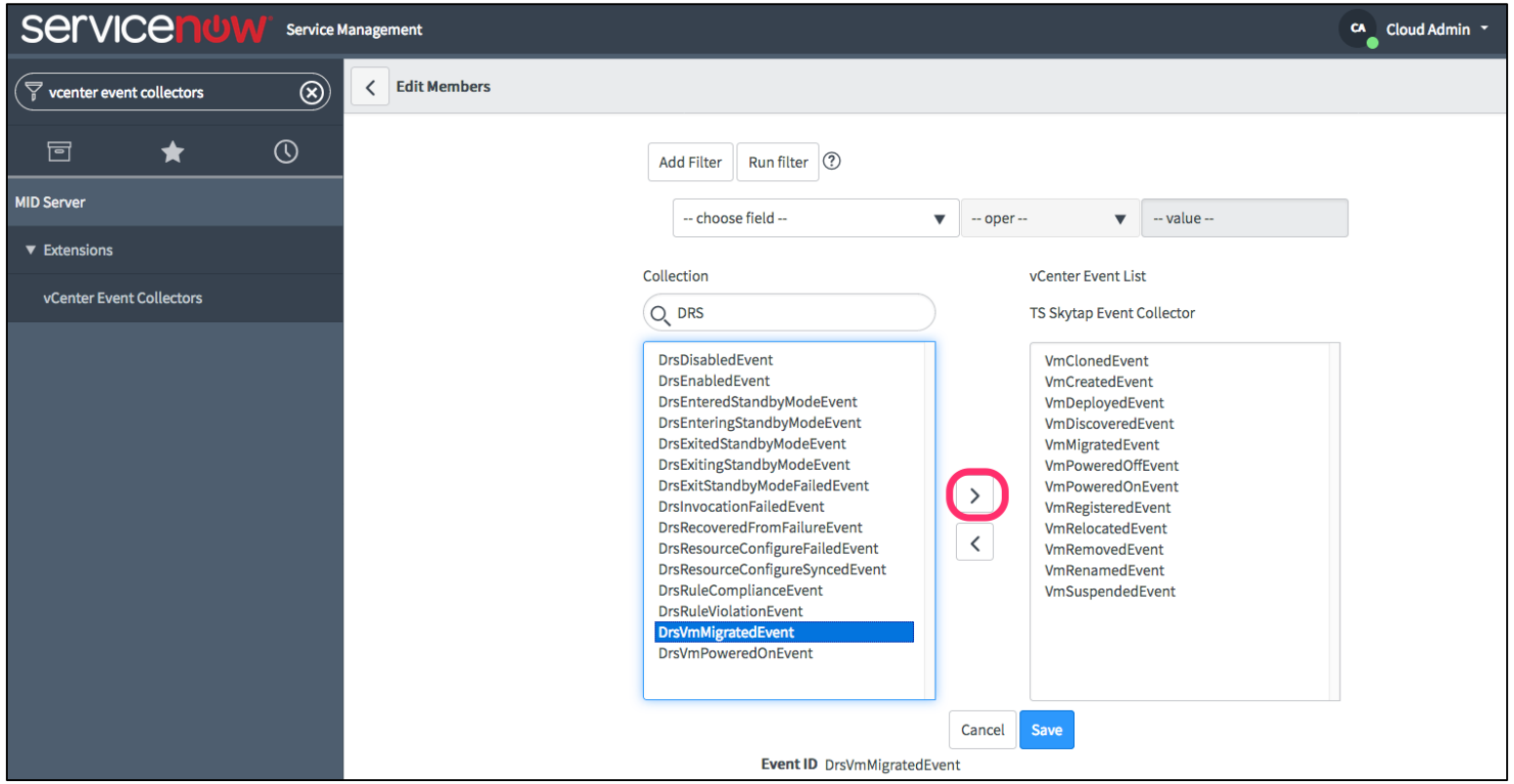


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Configure the vCenter Event Collector Extension

Demo

- Select additional desired events and click the arrow to move to the collector list.

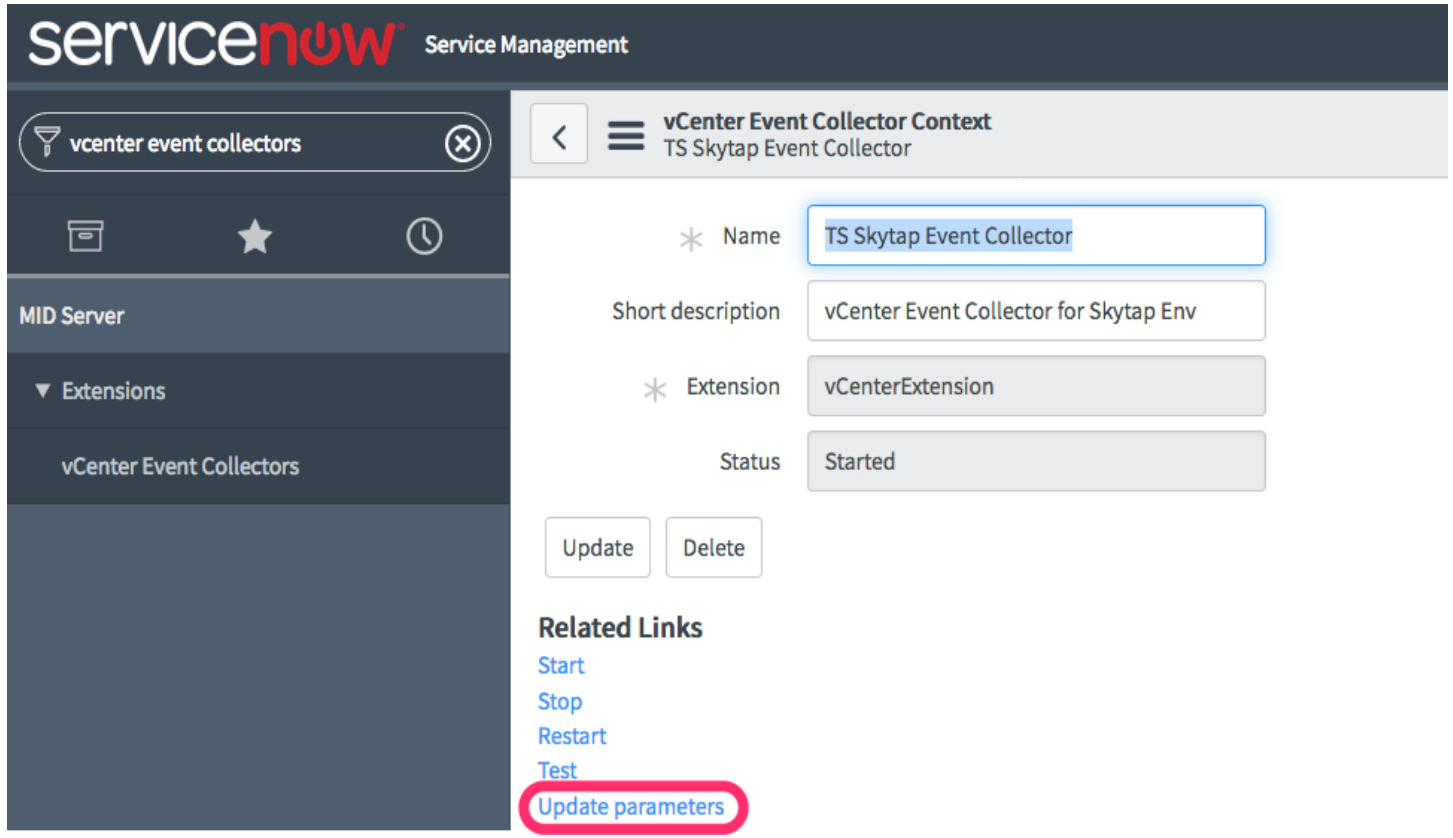


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Configure the vCenter Event Collector Extension

Demo

- Click Update parameters. Sends updated parameters to the collector. Any changes you make to the collector while the MID Server is running do not take effect immediately when they are saved.
- If the parameters are valid, the extension disconnects from the vCenter server and reconnects with the new parameters.

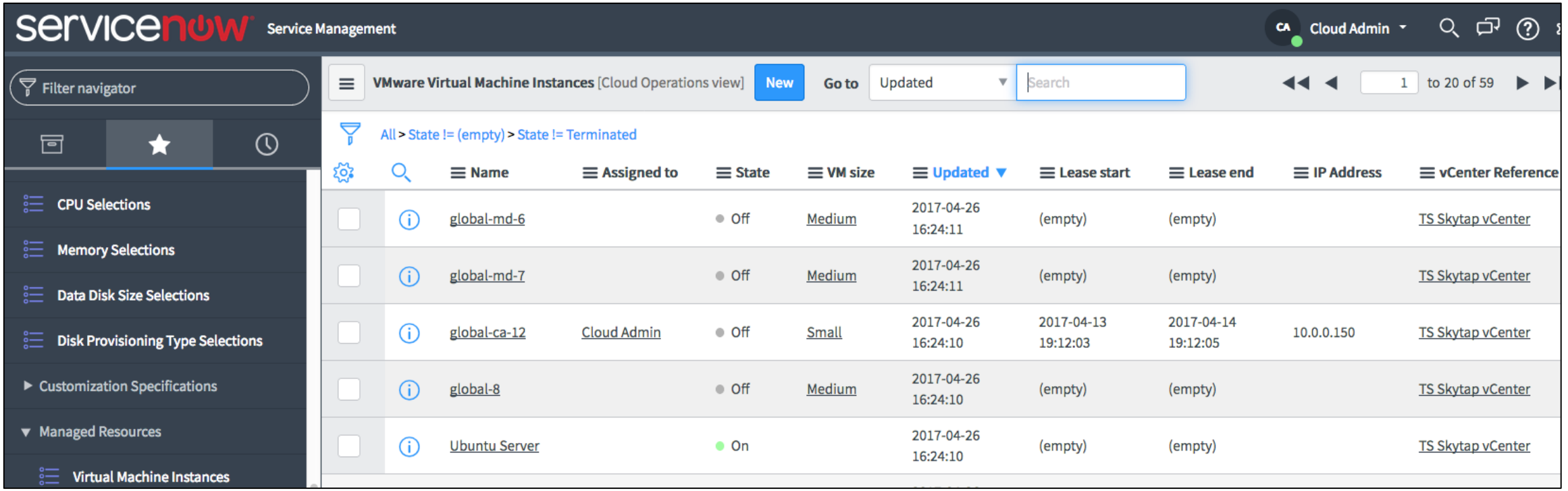


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Configure the vCenter Event Collector Extension

Demo

- Current state of **Ubuntu Server** is On updated by Discovery.

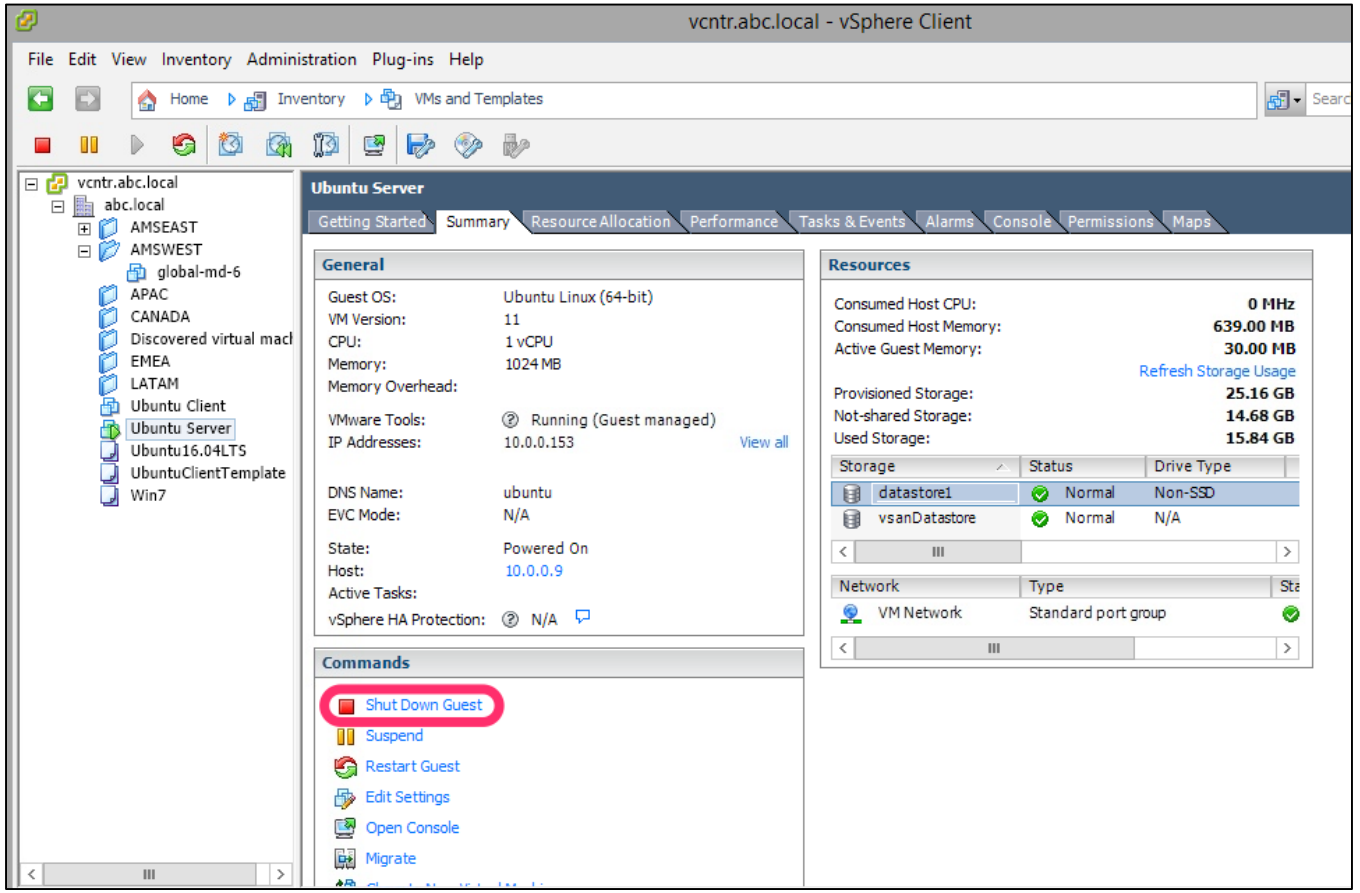


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Configure the vCenter Event Collector Extension

Demo

- Shut down the guest OS in vCenter.

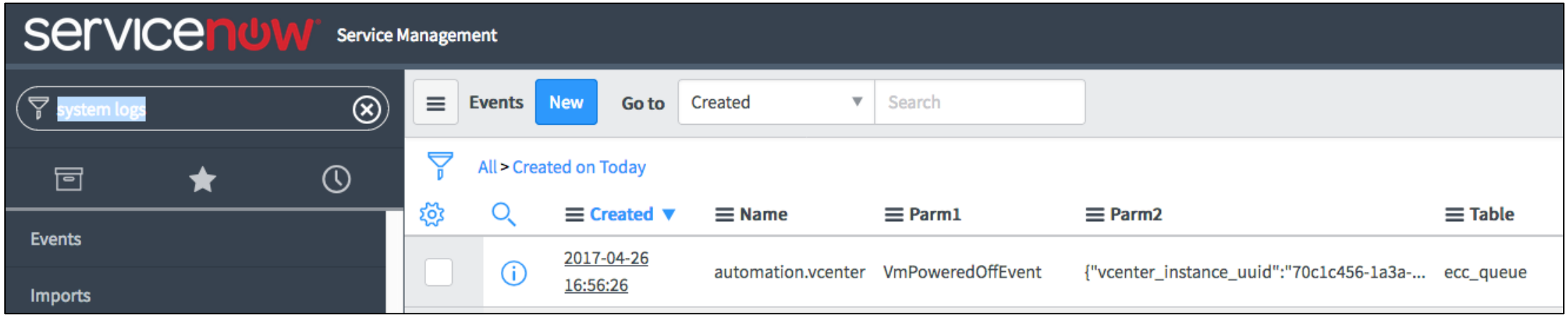


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Configure the vCenter Event Collector Extension

Demo

- The vCenter Event Collector receives the VmPoweredOffEvent, parses the payload with a business rule that converts the vCenter event into a ServiceNow system event.

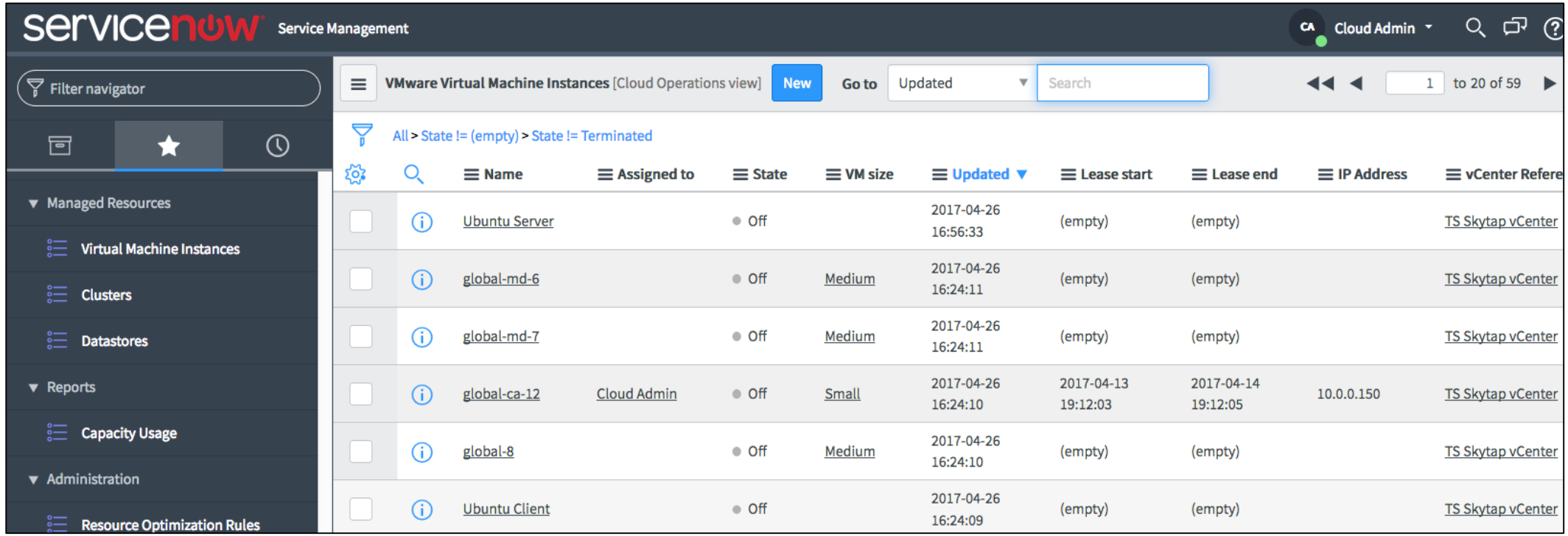


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Configure the vCenter Event Collector Extension

Demo

- When we review the **Ubuntu Server** CI after receiving the event the status has been set to Off.



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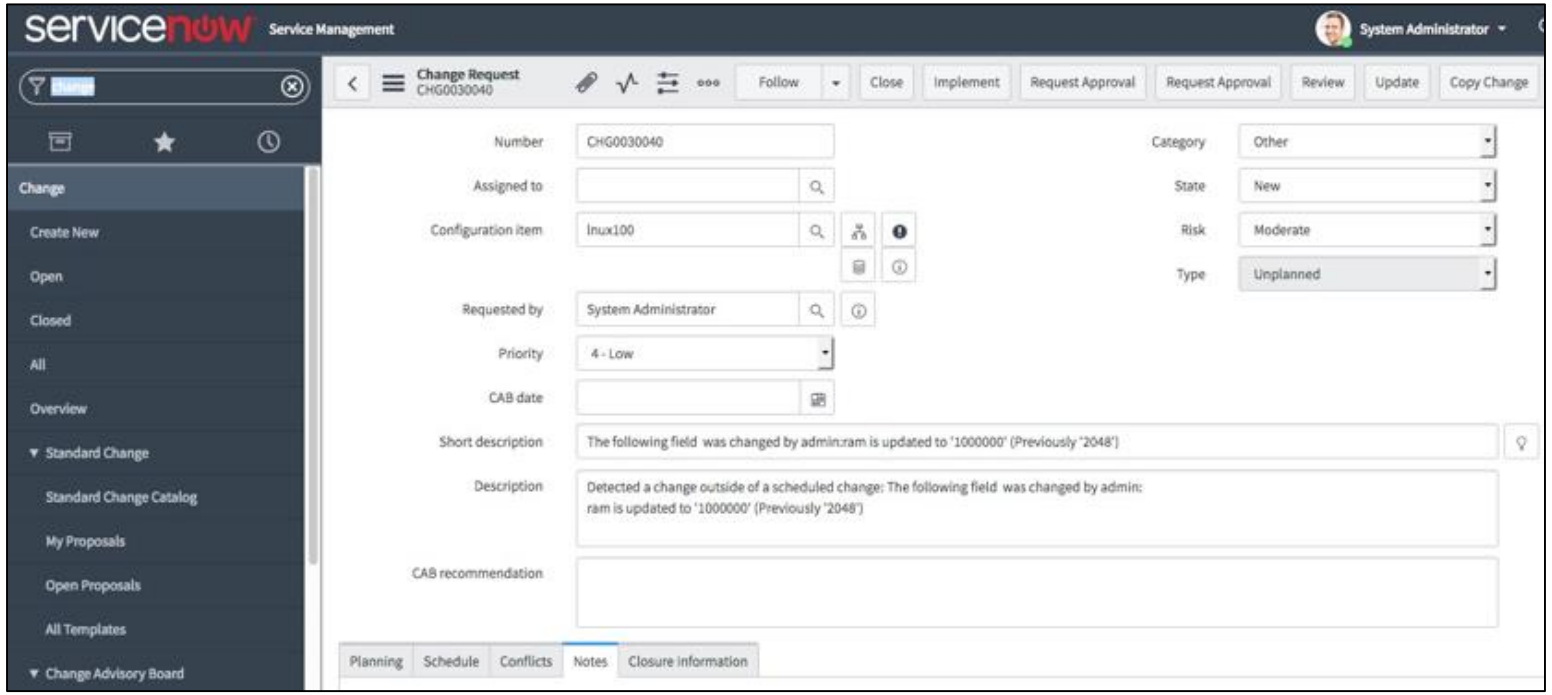
Lab 4: Changes to CI

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Change

Lab 4

- In this lab you will create a method to track unplanned changes to CIs.
- By utilizing the simplicity of a business rule, you will be able to help track all those modifications to CIs who didn't follow "the process."



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Changes

Complete Lab 4



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Changes



Decision Point: Are you ready to start such a process in tracking all your unplanned changes in your environment?

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Top Takeaways

1

Implementing a solid CI lifecycle Program can help ensure that your CMDB never gets stale

2

Managing CIs is as important as “discovering” them in the first place. It’s your inventory; keep it fresh or customers go elsewhere

3

Utilize Private/Public cloud event notifications to keep your cloud infrastructure CIs up-to-date in near real-time

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