

Manage software retirement

Lab 5.3

15-20 minutes

Lab objectives

You will achieve the following objectives:

- Software entitlements are expired
- Software installations are removed
- Software model is retired
- Report reviewed for products nearing end-of-support and end-of-life

Lab Dependency: *Requires the completion of Labs 1.1, and 2.1*

Required Resources: *None*

Scenario

Rick Lemm, Software Asset Manager at CloudD, has been informed by the Information Technology Architect that Microsoft SQL Server 2016 Enterprise is being discontinued in the environment. Rick needs to ensure that no additional license rights are allocated, existing allocated license rights are reclaimed and removed, and the software model is retired.

Rick knows that using end-of-support or end-of-life software no longer supported by a publisher could potentially expose CloudD to the risk of security threats. They would like to determine if there are any other software products in their environment nearing end-of-support or end-of-life so they can proactively handle these situations to mitigate potential risk to his organization.

Requirements Summary

User Stories

- STRY050301 – Retire Microsoft SQL Server software

As a software asset manager, I need to retire the Microsoft SQL Server 2016 Enterprise software model, so that the software can be discontinued within the environment.

- STRY050302 – Gain visibility to end-of-life and end-of-support software

As a software asset manager, I need to determine if there are any software products within my environment that are nearing end-of-support or end-of-life so that I can mitigate risk to my organization.

STRY050301 – Retire Microsoft SQL Server software

Section 1 Create software removal candidates

Before expiring all software entitlements related to the Microsoft SQL Server 2016 Enterprise software model Rick Lemm, the software asset manager at CloudD, needs to create removal candidates to remove the existing installations of these in-use rights.

- As **Rick Lemm**, run a reconciliation on **Microsoft**.
- When the Reconciliation is complete, view the software model results for **Microsoft SQL Server** on the License usage view.



> PowerApps

Compliant

> PowerPoint

Not compliant

> Project

Not compliant

> Publisher

Not compliant

> SQL Server

Not compliant

> Any Version and/or Edition

Not compliant

> 2014 Enterprise

Not compliant

> 2016 Enterprise

Compliant

> 2016 Standard

Compliant

> 2016 Standard Windows

Not compliant

> 2017 Enterprise

Not compliant

> 2017 Standard

Not compliant

> 2019 Enterprise

Not compliant

> 2019 Standard

Compliant

> Visio

Not compliant

> Visual Studio

Compliant

> Windows Server

Not compliant

> Word

Not compliant

Details

Software Model Results (9)

Removal Candidates

Entitlements (14)

Remediation options (18)

Software Model Results 9

Last refreshed 1m ago.

Software model result

Status

True-up cost

Over-licensed amount

Potential savings

2017 Enterprise

Not Compliant

\$0.00

\$0.00

\$0.00

2016 Enterprise

Compliant

\$49,579.20

\$108,270.668

\$0.00

2019 Standard

Compliant

\$0.00

\$150,000.00

\$0.00

Any Version and/or Edition

Not Compliant

\$0.00

\$0.00

\$0.00

2016 Standard Windows

Not Compliant

\$0.00

\$0.00

\$0.00

2016 Standard

Compliant

\$0.00

\$62,953.1333

\$0.00

2017 Standard

Not Compliant

\$46,000.00

\$0.00

\$0.00

2014 Enterprise

Not Compliant

\$0.00

\$0.00

\$0.00

2019 Enterprise

Not Compliant

\$200.00

\$0.00

\$0.00

Showing 1-9 of 9

1

20 rows per page

Knowledge Check: Results may vary in your instance.

- In the navigation menu, expand the results for SQL Server and select **2016 Enterprise**.

Knowledge Check: Refer to the Answer Guide at lab's end.

1. What is the Status for Microsoft SQL Server?

4. View the **Remediation Options**.

Details

License Metric Results (4)

Removal Candidates

Entitlements (7)

Remediation Options (8)

Remediation Options

8

Last refreshed just now.

Export

Remediation action	Status	Affects compliance	Display name	Actionable rights	True-up cost
Create Allocations	New	false	Server (Per Instance)	42	\$0.00
Remove Unallocated Installs	New	false	Server (Per Instance)	42	\$0.00
Remove Unallocated Installs	New	false	Per Core	15	\$0.00
Purchase Rights	New	false	Per Core	28	\$43,381.80
Create Allocations	New	false	Per Core	15	\$0.00
Remove Allocations	New	false	Per Core	88	\$0.00
Remove Unlicensed Installs	New	false	Per Core	32	\$0.00
Purchase Rights	New	false	Per Core	4	\$6,197.40

Showing 1-8 of 8

1

20

rows per page

5. Click the **Remove Unlicensed Installs** remediation option.

Details	Licenses Required By (4)	Removal Candidates							Create All Removal Candidates
Licenses Required By 4									
Last refreshed just now.									
Required by	Licenses required				Licensing status				
Computer: ESX2-CVM1-SQL Cluster B	12				Not licensed				
Computer: ESX2-CVM2-SQL Cluster B	12				Not licensed				
Computer: VirtualMachine-LS13	4				Not licensed				
Computer: VirtualMachine-LS4	4				Not licensed				

6. Click **Create All Removal Candidates**.

7. Click on the **Removal Candidates** tab to view the Removal Candidates.

Details	record								
4 Reclamation Candidates were successfully created. Updates will be reflected in the results once the reclamation work-flows have completed.									
Details	Licenses Required By	Removal Candidates (4)							
Removal Candidates 4									
Last refreshed 1m ago.									
Number	Name	Publisher	Product	Potential savings	State	Justification			
RCC0000133	Remove Microsoft SQL Server Standard	Microsoft	SQL Server	\$0.00	Ready	Unlicensed			
RCC0000132	Remove Microsoft SQL Server 2016 Enterprise	Microsoft	SQL Server	\$0.00	Ready	Unlicensed			
RCC0000131	Remove Microsoft SQL Server Enterprise (64-bit)	Microsoft	SQL Server	\$0.00	Ready	Unlicensed			
RCC0000130	Remove Microsoft SQL Server 2016 Enterprise	Microsoft	SQL Server	\$0.00	Ready	Unlicensed			

Section 2 Expire software entitlements

Next, Rick needs to expire all software entitlements related to the Microsoft SQL Server 2016 Enterprise software model to prevent any additional licenses from being allocated.

1. Navigate to **Software Asset Workspace > License operations > Licensing > Software models**.



2. Open the **Microsoft SQL Server 2016 Enterprise** software model.

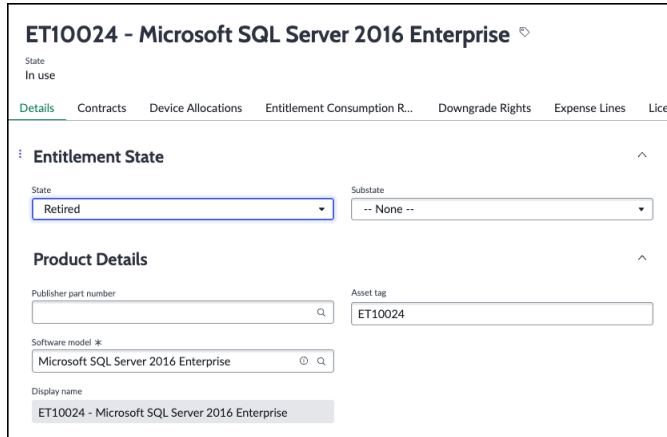
Note: The software model is "Microsoft SQL Server 2016 Enterprise" not "2016 Enterprise Core".

3. In the Software Entitlements tab, click the Display name of **ET10024 - Microsoft SQL Server 2016 Enterprise**.

Knowledge Check: Refer to the Answer Guide at lab's end.

2. How many Active rights and Allocations available does this entitlement currently have?

4. On the **Entitlement State** section of the Software Entitlement form, update State to **Retired**.



ET10024 - Microsoft SQL Server 2016 Enterprise

State
In use

Details Contracts Device Allocations Entitlement Consumption R... Downgrade Rights Expense Lines Licen

Entitlement State

State
Retired

Substate
-- None --

Product Details

Publisher part number

Asset tag
ET10024

Software model #
Microsoft SQL Server 2016 Enterprise

Display name
ET10024 - Microsoft SQL Server 2016 Enterprise

5. Click **Save**.

Knowledge Check: Refer to the Answer Guide at lab's end.

3. How many Active rights and Allocations available does this entitlement now have? Why?
6. Navigate back to the Details view of the Microsoft SQL Server 2016 Enterprise software model.
7. Retire two additional software entitlements with the Display name starting with ET10025 and ET10063.
8. Click **Save** on the Software model record once all Software entitlements are retired.

Note: In a real world setting a fix script would be used to remove installations, for the purposes of time we will assume that has occurred.

Section 3 Retire software model

Finally, once Jet informs Rick that all installations have been removed, Rick needs to retire the Microsoft SQL Server 2016 Enterprise software model.

1. Impersonate **Rick Lemm**.
2. Navigate to **Software Asset Workspace > License operations > Licensing > Software models**.
3. Open the **Microsoft SQL Server 2016 Enterprise** software model.
4. In the Software Model Status section, set Status to **Retired**.
5. Click **Save**.



STRY050302 – Gain visibility to end-of-life end-of-support software

Section 4 Run Software Model Lifecycle Report

Now that Rick has retired one software model, they would like to determine if there are any other software products within the CloudD environment nearing end-of-life/end-of-support. Rick has asked the ServiceNow System Administrator, Jet Blake, to provide them this information. Before generating the report, Jet would like to ensure their environment is configured appropriately to collect this information.

1. Impersonate **System Administrator**.
2. Navigate to **System Definition > Scheduled Jobs**.
3. Find and open the job, **SAM - Get install count for software model**.



Scheduled Jobs

Name

Search

Actions on selected rows...

New

All

>

Name contains sam - get

Name

Active

Class

Updated

*sam - get

Search

Search

Search

SAM - Get install count for software model

true

Scheduled Script Execution

2019-08-01 22:13:51

4. Review the job properties.

Scheduled Script Execution
SAM - Get install count for software model

Name:

Active: ☒

Application:

Conditional: ☐

For scheduled job types that require an entered time, you have the option to enter an associated time zone. If no time zone is selected, the job will run at the entered time in time zone of the user who entered the time. If the System Time Zone is selected, the entered time will run in the time zone of the instance running the job.

Run: Weekly

Day: Monday

Time zone: -- None --

Time: Hours: 00 Minutes: 00

Run this script:

```
1. sampleInstallCountForSH();
2. Function sampleInstallCountForSH() {
3.   var jobLog = new $JitterRecord('sample_job_log');
4.   jobLog.insertLine();
5.   jobLog.setValue('name', 'SAM - Get install count for software model');
6.   jobLog.setValue('status', 'in progress');
7.   jobLog.insert();
8.
9.   try {
10.    new $sampleInstallCountForSoftwareModel().process();
11.    jobLog.setValue('status', 'completed');
12.    jobLog.insert();
13.    jobLog.setValue('status', 'failed');
14.  }
15.  }
16. }
```

Knowledge Check: Refer to the Answer Guide at lab's end.

4. How often is the job scheduled to run? Is the job Active?

5. Click **Execute Now**.

Note: Even though the job is currently scheduled to run weekly, Jet would like to ensure he gets Rick the most up-to-date information for his evaluation.

6. Navigate to **Reports > View / Run**.

7. Search for **Software Lifecycle Report**.

Reports | My reports | Group | Global |

Type	Title	Table	Scheduled	Published
	Citrix Software Lifecycle Report	Software Lifecycle Report [sam_sw_product_lifecycle_report]		
	IBM Software Lifecycle Report	Software Lifecycle Report [sam_sw_product_lifecycle_report]		
	Microsoft Software Lifecycle Report	Software Lifecycle Report [sam_sw_product_lifecycle_report]		
	Oracle Software Lifecycle Report	Software Lifecycle Report [sam_sw_product_lifecycle_report]		
	Software Lifecycle Report	Software Lifecycle Report [sam_sw_product_lifecycle_report]		
	VMware Software Lifecycle Report	Software Lifecycle Report [sam_sw_product_lifecycle_report]		

Note: The search is not case-insensitive, but do not use a wildcard in the search string to search for the report. Search for software lifecycle.

8. Click the **Title** to open the report.

The screenshot shows the 'Edit report' interface for a report titled 'Software Lifecycle Report'. The interface includes a left sidebar with tabs for 'Data', 'Type', 'Configure', and 'Style'. The 'Configure' tab is active, showing options for 'Choose columns', 'Group by' (set to '-- None --'), 'Additional group by', and 'Configure function field'. The main area displays the report title, a search bar, and a table of data. The table is titled 'Table: Software Lifecycle Report [sam_sw_product_lifecycle_report]' and contains the following data:

Publisher	Product	Version	Full version	Edition	Software model	Installs	Product owner	Lifecycle phase
Microsoft	PowerPoint	2013			Microsoft PowerPoint 2013 Windows	761	Carla Humble	End of Extended Support
Microsoft	PowerPoint	2013			Microsoft PowerPoint 2013	761	Carla Humble	End of Extended Support
Microsoft	OneNote	2013			Microsoft OneNote 2013	467	Carla Humble	End of Extended Support

Knowledge Check: Refer to the Answer Guide at lab's end.

5. What Lifecycle phases are the products in?

6. What Lifecycle types are the products in?

Note: Once Jet provides him with this information, Rick will use it to mitigate risk to CloudD using remediation actions such as buying extended support, planning for software upgrades, and/or removing software from their environment.

Congratulations! You have completed this lab!

You are now ready to begin learning about Software Asset Management reporting and analytics.

Knowledge Check Answer Guide

1. **What is the Status for Microsoft SQL Server 2016 Enterprise?**
 - Compliant
2. **How many Active rights and Allocations available does this entitlement currently have?**
 - Active rights = 25
 - Allocations available = 25
3. **How many Active rights and Allocations available does this entitlement now have? Why?**
 - 0 for both
 - The entitlement has been retired. This stops any additional allocations from occurring against this entitlement.
4. **How many Unlicensed Installs, Rights owned, Rights used, and Rights available are now?**
 - Unlicensed Installs = 0
 - Rights owned = 0
 - Rights used = 0
 - Rights available = 0
5. **How often is the job scheduled to run? Is the job Active?**
 - Weekly, yes
6. **What Lifecycle phases are the products in?**
 - End of Extended Support
 - End of Support
 - End of Life
7. **What Lifecycle types are the products in?**
 - Publisher

Lab takeaways



- Remove software installations
- Retire software models
- Review software lifecycle report