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April 27–May 1, 2014 • Moscone Center • San Francisco, CA

Lab Guide

Asset Management 102:

Track Licenses with

Software Asset Management

Ben Sweetser & Bryan Boyle

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

Login / Passwords:

admin / Knowledge14

itil / Knowledge14

employee / Knowledge14

Lab Goal

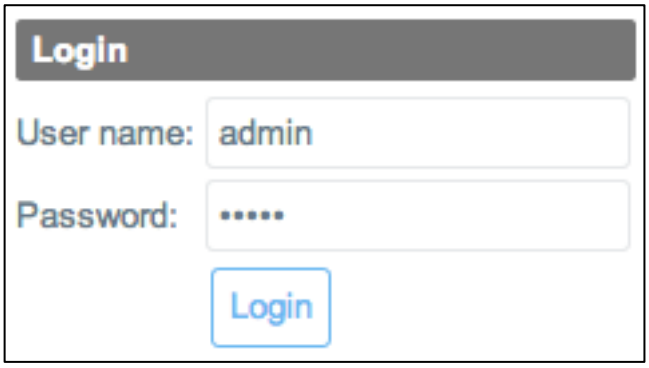
Different software in your environment requires various levels of reporting for vendor compliance and internal compliance. Identify the level needed and configure the appropriate options.

Software Compliance

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.



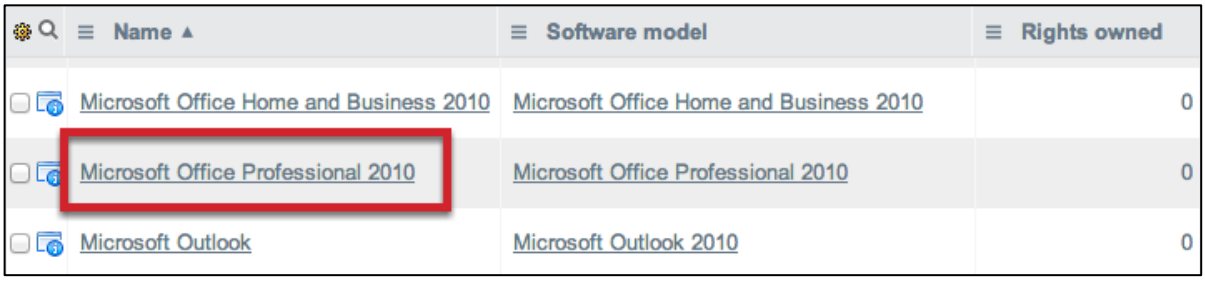
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External Compliance Only

You have an enterprise license with Microsoft and install Microsoft Office to all personal computers in your company. Because of this, you are not concerned with the specifics of who has the software installed or any kind of information around entitlement. You only need to work with the number of installations in your environment.

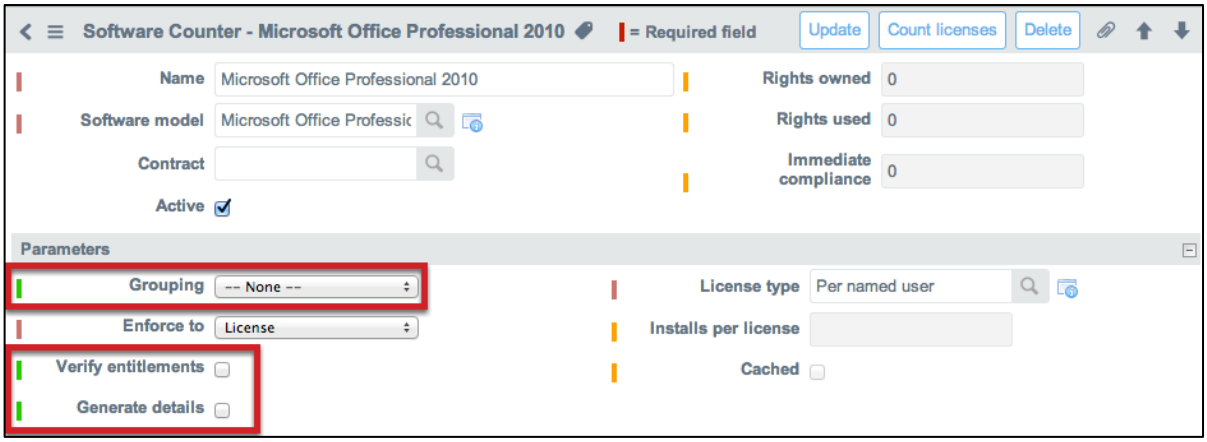
1. Navigate to **Software Asset Management > Reconciliation > Software Counters**.

2. Find and open the **Microsoft Office Professional 2010** counter.



3. In the Parameters form section, change the options as follows:

   Grouping: **--None--**
   Verify entitlements: **deselect**
   Generate details: **deselect**



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4. Click **Count licenses**.



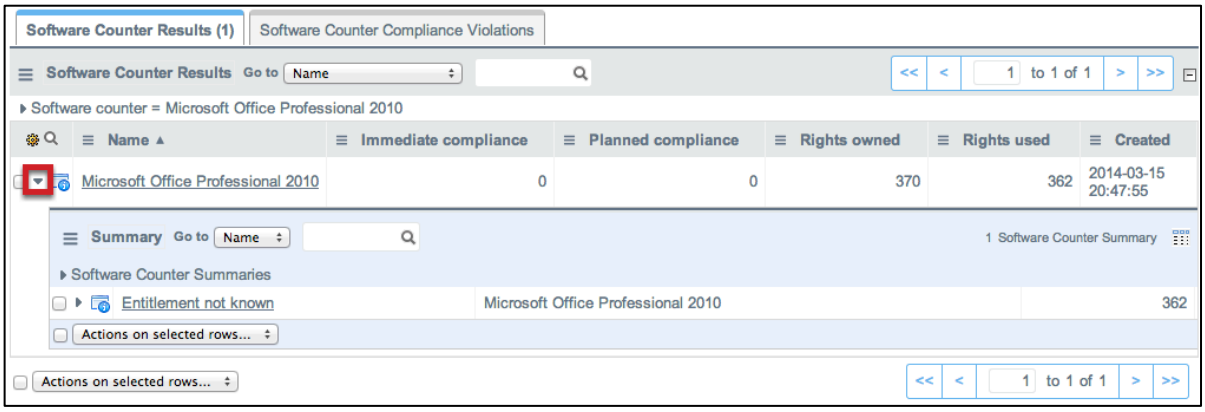
5. Right-click the form header until it no longer indicates that the software count is in progress. The count may take about 20 seconds.

6. Rights information displays in the upper-right side of the form:



7. Scroll to the bottom of the page to view the **Software Counter Results** related list.

8. Expand the results details. Notice that the details indicate **Entitlement not known**.



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Verify Entitlements

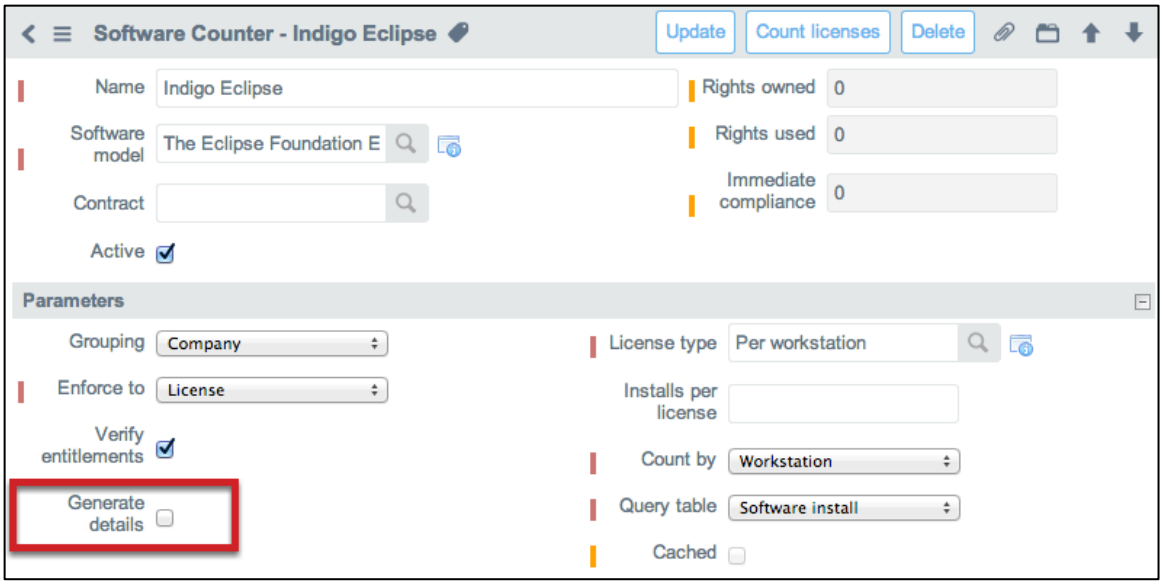
With **Verify entitlements** and **Generate details** deactivated, no additional information is provided for internal compliance. Only metrics related to the number of rights required to determine external compliance are provided. Indigo Eclipse, an Integrated Development Environment (IDE), is open source software. You want some detail on how many installations are entitled and how many exist in your environment for reporting and planning purposes, but you are not concerned with the specifics of where the software is actually installed.

1. Navigate to **Software Asset Management > Reconciliation > Software Counters**.

2. Find and open the **Indigo Eclipse** counter.

3. In the Parameters form section, make the following change:

   Generate details: **deselect**



4. Right-click the form header and **Save**.

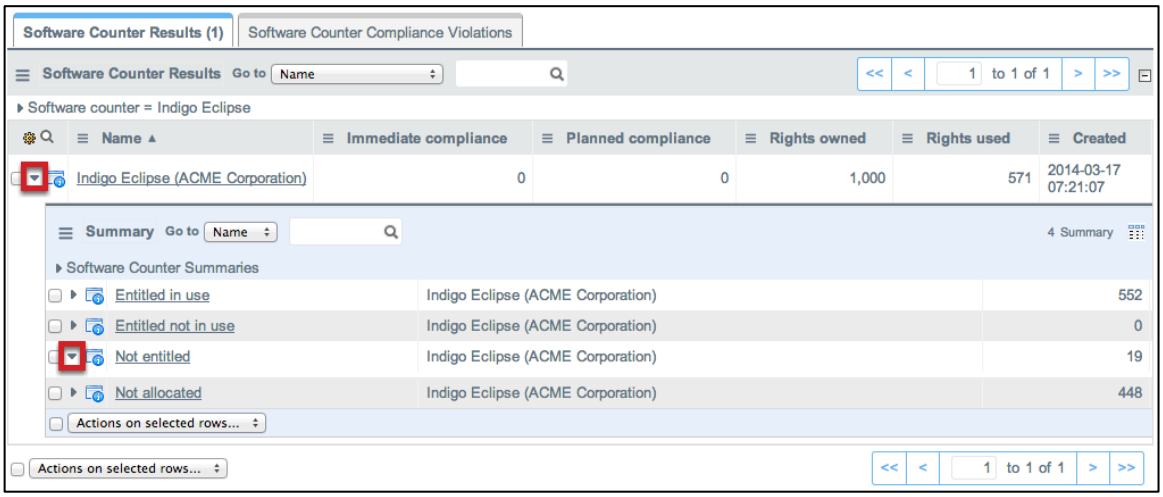
5. Click **Count licenses**.

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6. Right-click the form header until it no longer indicates that the software count is in progress. The count may take about 30 seconds.

7. Scroll to the bottom of the page to view the **Software Counter Results** related list.

8. Expand the results details and try to expand **Not entitled**. Notice there are no additional details on the actual computers on which Eclipse is installed.



Internal Compliance

To completely manage both your compliance with the software vendor and ensure that only the appropriate people in your company run the software, you can generate entitlement details. You want to enforce internal compliance for Seagate Crystal Reports. Configure it to capture all details.

1. Navigate to **Software Asset Management > Reconciliation > Software Counters**.

2. Find and open the **Seagate Crystal Reports** counter.

3. Click **Count licenses**.

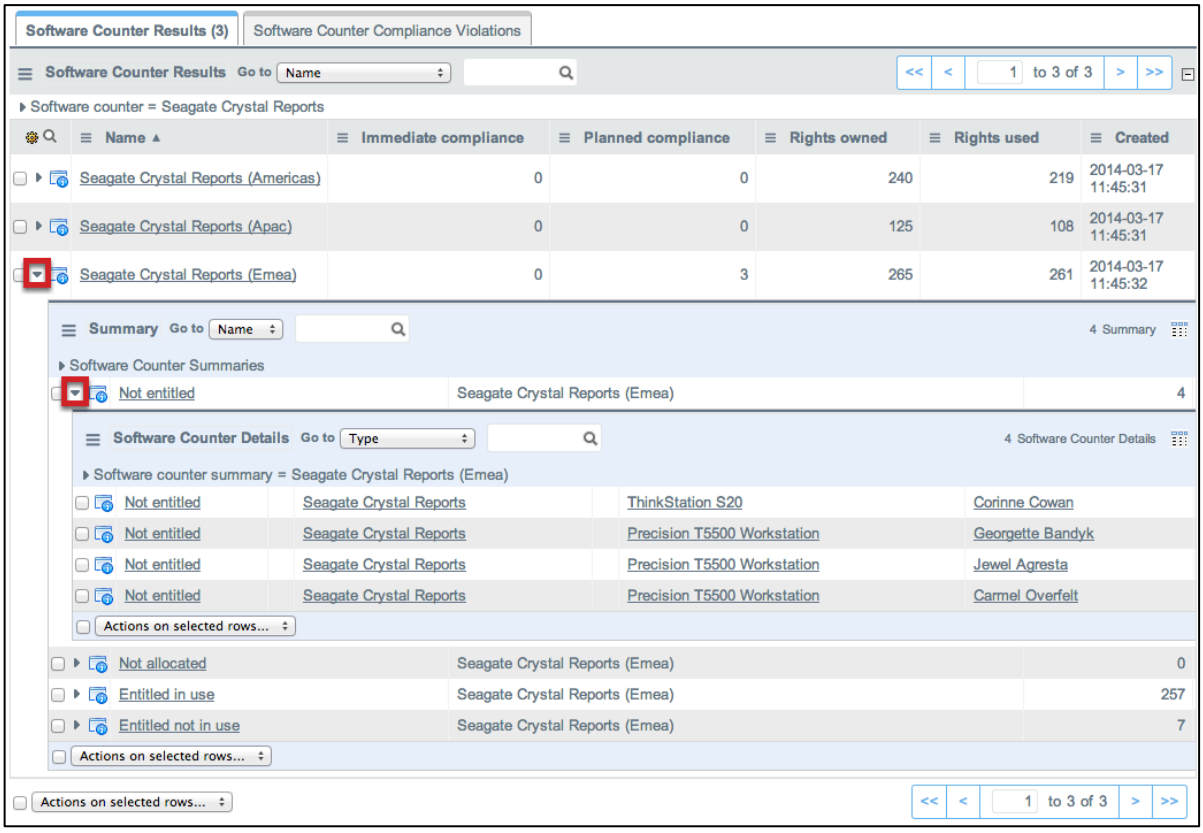
4. Right-click the form header until it no longer indicates that the software count is in progress. The count may take about 30 seconds.

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5. Scroll to the bottom of the page to view the **Software Counter Results** related list.

6. Expand the results details for **Seagate Crystal Reports (Emea)**.

7. Expand the details for **Not entitled**. The computers with Crystal Reports installations that have not been entitled to use the software display.



NOTE: Planned compliance takes into account licenses that entitled, but not currently in use. Though there are four available licenses for Emea and the immediate compliance with Seagate is zero, seven licenses have been entitled, but are not currently in use. If those seven systems had Crystal Reports installed, then you would have a deficit of three. This is the Planned compliance number.

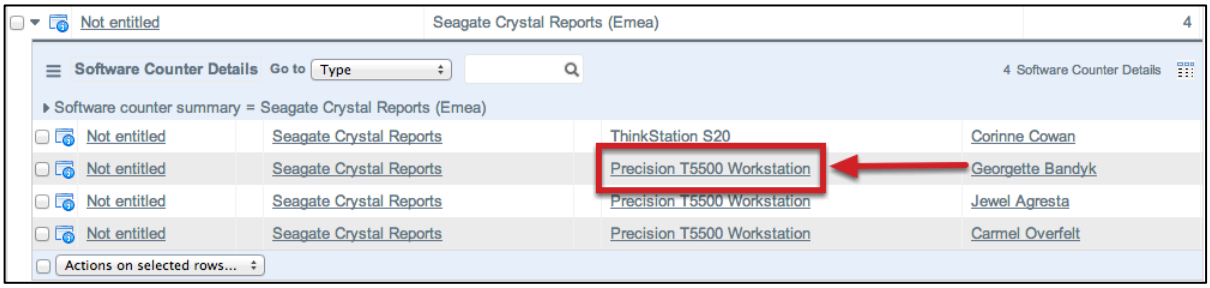
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Software Install Conditions

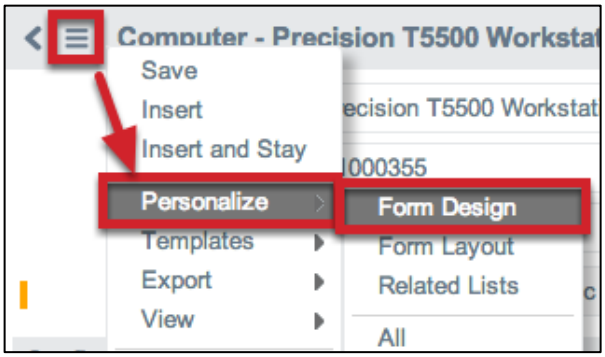
Your Seagate license agreement allows you to run it in your development environment without using rights. The Software Counter allows you to filter those systems out of the license count so it does not count against your available rights.

Before you apply the filter, you can identify the development systems with the **Used for** field on the CI records. Because the field is not displayed by default, you need to add it to the form. Then identify the development systems. Finally, identify the Software installation filter on the Software Counter and rerun the software count.

1. Select the **Precision T5500 Workstation** assigned to **Georgette Bandyk**.

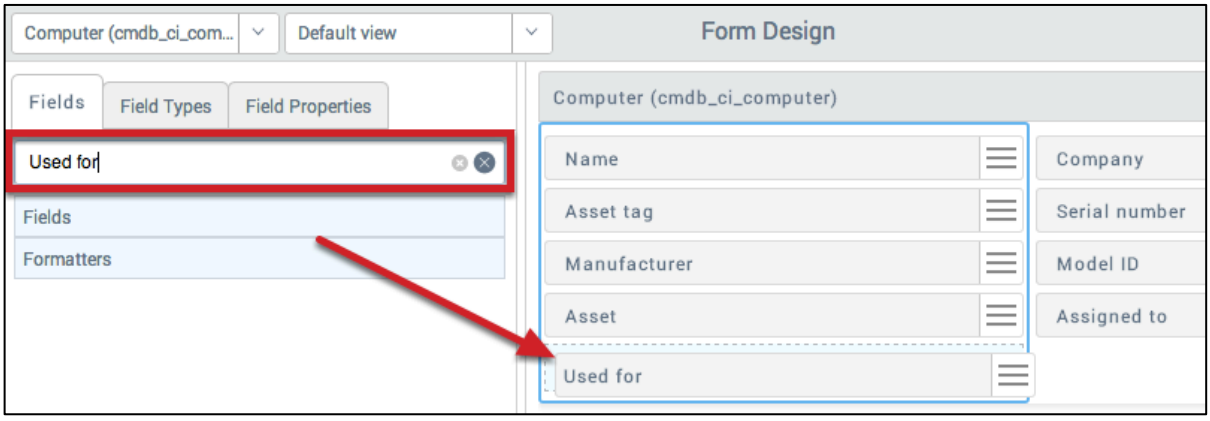


2. Click the **Additional actions** icon on the form header and select **Personalize > Form Design**. This opens the Form Designer in a new tab or window.



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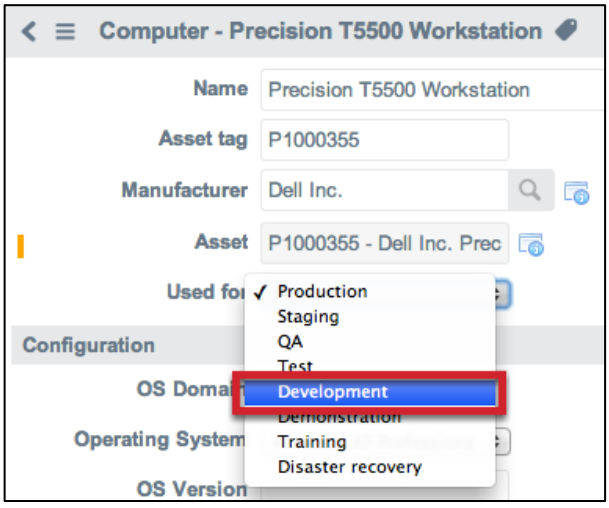
3. On the **Fields** tab, filter for **Used for** and drag the field under **Asset**.



4. Click **Save** and close the tab when the save completes.

5. Click the **Additional actions** icon on the form header and select **Reload form**.

6. Set the **Used for** field to **Development**.



7. Click **Update**.

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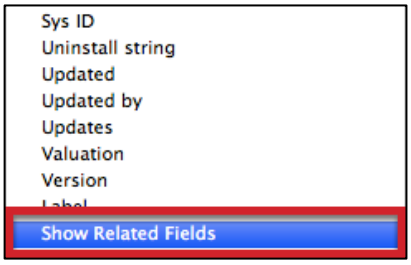
8. Under **Software Counter Results**, expand **Seagate Crystal Reports (Emea)** and then **Not entitled**.

9. Select the **Precision T5500 Workstation** assigned to **Jewel Agresta**.

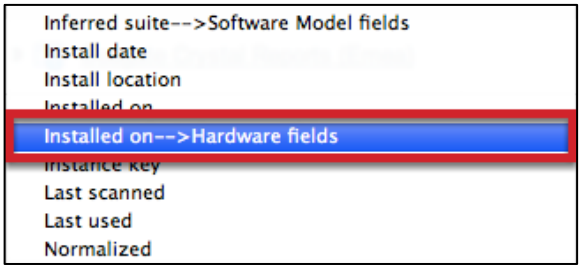
10. Set the Used for field to **Development** and click **Update**.

11. Repeat the steps to set the final **T5500 Workstation**, the one assigned to **Carmel Overfelt**, to **Development**.

12. To leverage the **Used for** field, you need to access the CI record from the software record. Under **Software install condition**, pull down -- choose field -- and select **Show related fields** at the bottom of the list.



13. From the pulldown, select **Installed on-->Hardware fields**.



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14. Select the pulldown one more time and select **Used for**.



15. Set the remaining components of the condition so you end up with **Installed on.Used for | is not | Development**.



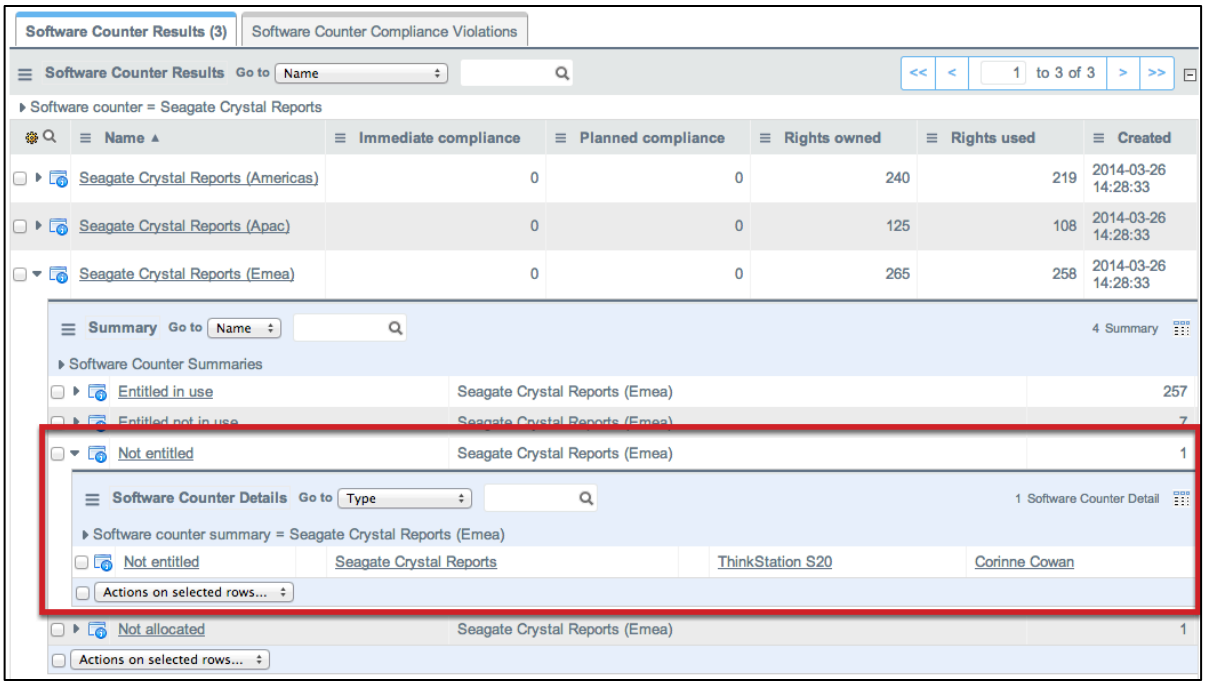
16. Right-click the form header and **Save**.

17. Click **Count licenses**.

18. Right-click the form header until it no longer indicates that the software count is in progress. The count may take about four minutes.

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19. When the count is complete, view the Software Counter Results. How many devices are not entitled?



Challenge: Count Licenses Again

Return to the software counter and count licenses again. Reload the form as necessary. What is the status of compliance now?

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Lab Goal



Software can sometimes be licensed together in suites to get more functionality at a discounted price. Because the different components in a suite can often be licensed separately, how you track the licenses needs to be handled in a way that accounts for this.

Adobe licenses software at the individual title level or as suites at a discounted price. Under the Creative Cloud licenses that run as a subscription, you can license Adobe Dreamweaver, InDesign, and Photoshop for $20 a month on an annual plan, or you can have access to these titles and other titles for $50 a month. At this price point, users who use three or more Adobe titles pay less with the Creative Cloud suite license than individual licenses.

Count Installations of Individual Titles

You have some users who have installed trial versions of the software they need, and you have captured this information. Determine if they should have suite licenses or individual licenses. First create Software Counters for some of the individual titles.

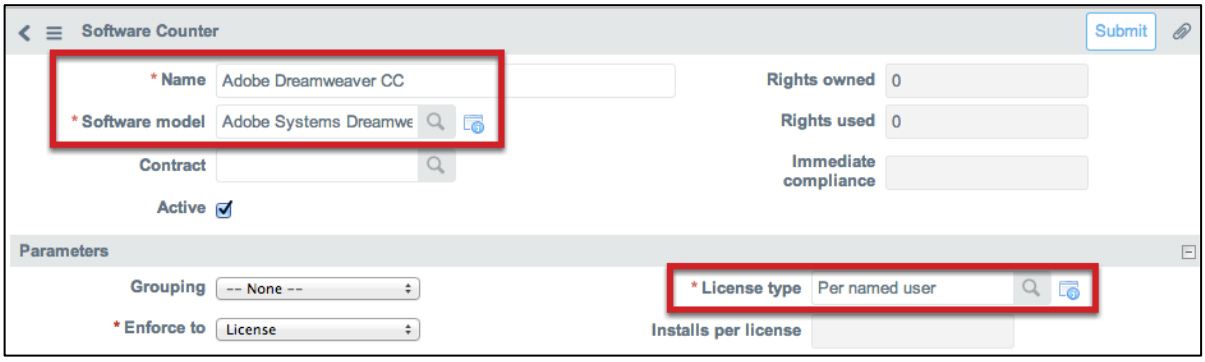
1. Navigate to **Software Asset Management > Reconciliation > Software Counters**.

2. Click **New**.

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3. Complete the form as follows:

   Name: **Adobe Dreamweaver CC**
   Software model: **Adobe Systems Dreamweaver CC**
   License type: **Per named user**



4. Right-click the form header and **Save**.

5. Click **Count licenses**.

6. Click **Update**.

7. Create two more counters with details as follows and count licenses for each:

   Name: **Adobe InDesign CC**
   Software model: **Adobe Systems InDesign CC**
   License type: **Per named user**

   Name: **Adobe PhotoShop CC**
   Software model: **Adobe Systems PhotoShop CC**
   License type: **Per named user**

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8. What are the results of the software counts?

Name ▲	Software model	Rights owned	Rights used
Adobe Dreamweaver CC	Adobe Systems Dreamweaver CC	0	3
Adobe InDesign CC	Adobe Systems InDesign CC	0	5
Adobe PhotoShop CC	Adobe Systems PhotoShop CC	0	5

Create a Model for the Suite

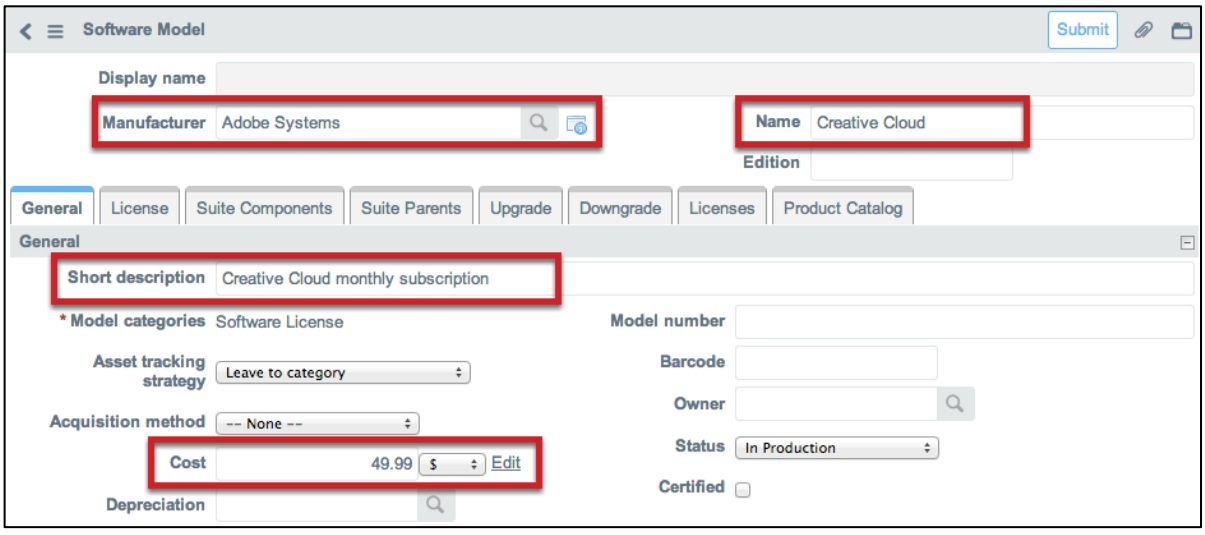
To track the suite installations, create a Software Model and Counter for the Creative Cloud suite.

1. Navigate to **Software Asset Management > Software Models**.

2. Click **New**.

3. Complete the form as follows:

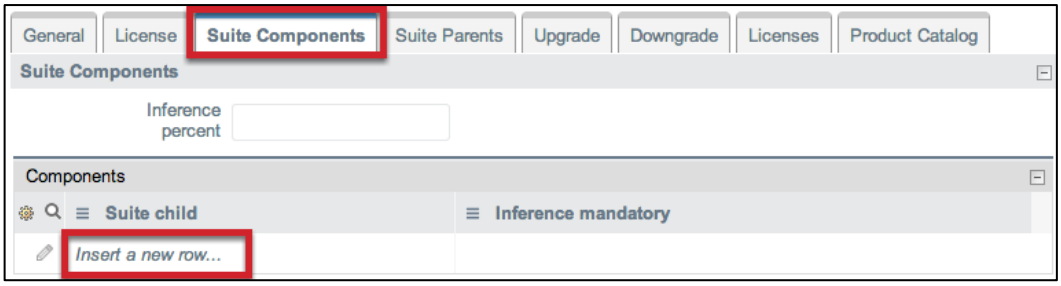
   Manufacturer: **Adobe Systems**
   Name: **Creative Cloud**
   Short description: **Creative Cloud monthly subscription**
   Cost: **$49.99**



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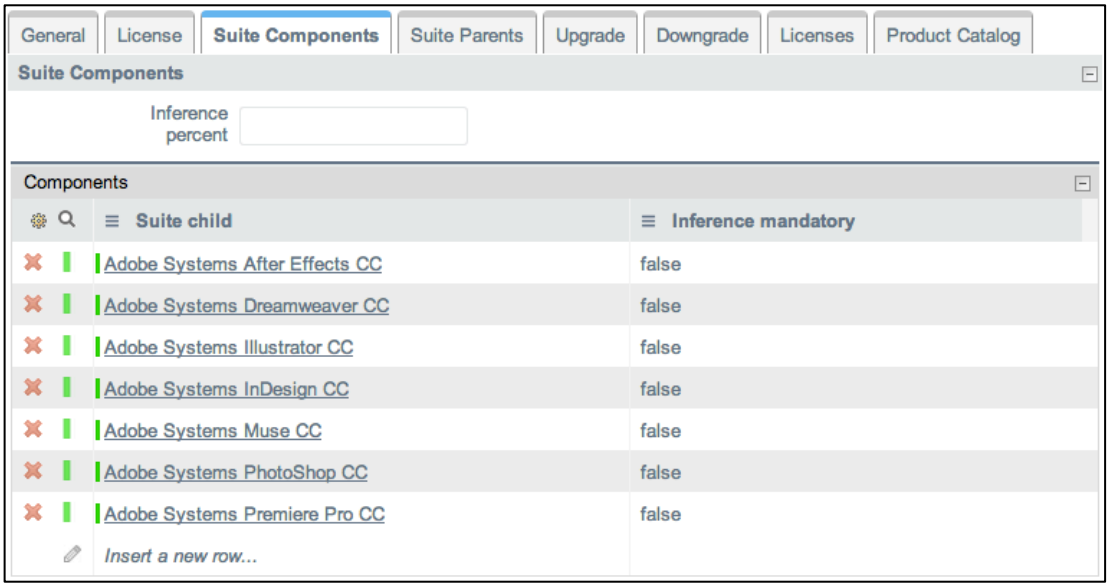
4. Right-click the form header and **Save**.

5. In the Suite Components form section, double-click **Insert a new row…** and add **Adobe Systems After Effects CC**. TIP: Search for ***cc** to find Creative Cloud Software Models.



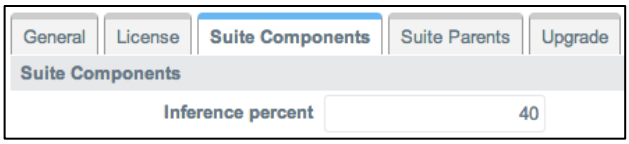
6. Repeat this process to add the following Suite Components:

Adobe Systems Dreamweaver CC
Adobe Systems Illustrator CC
Adobe Systems InDesign CC
Adobe Systems Muse CC
Adobe Systems PhotoShop CC
Adobe Systems Premiere Pro CC



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7. Set the Inference percent to **40**. How many of the Suite children need to be installed for ServiceNow to infer the suite is installed?



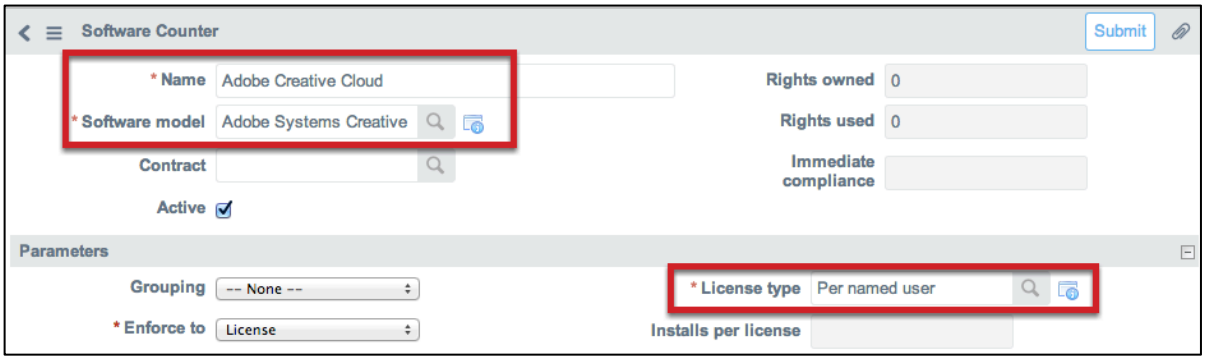
8. Click **Update**.

9. Navigate to **Software Asset Management > Reconciliation > Software Counters**.

10. Click **New**.

11. Complete the form as follows:

    Name: **Adobe Creative Cloud**
    Software model: **Adobe Systems Creative Cloud**
    License type: **Per named user**



12. Right-click the form header and **Save**.

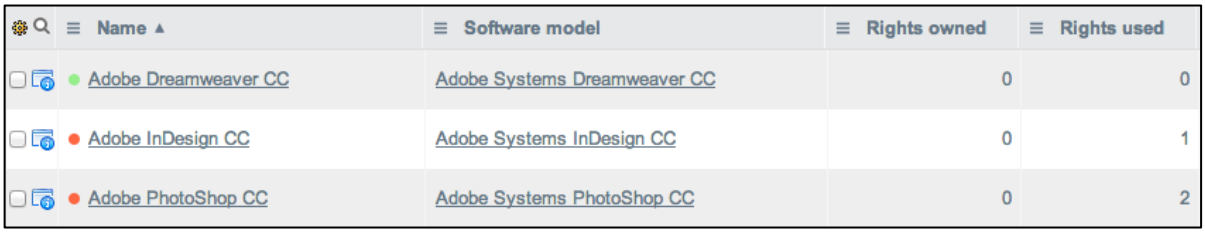
13. Click **Count licenses**.

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14. Right-click the form header and **Reload form** until it no longer indicates that the software count is in progress. The count may take about 30 seconds. How many rights have been used?



15. Rerun the license counts for Adobe Dreamweaver CC, Adobe InDesign CC, and Adobe PhotoShop CC. How do the rights change on these counters?

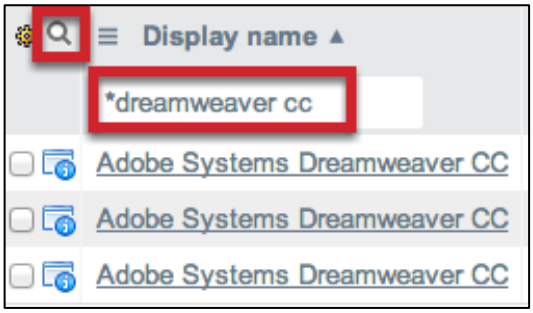


View Suite Inference

To track the suite installations, create a Software Model and Counter for the Creative Cloud suite.

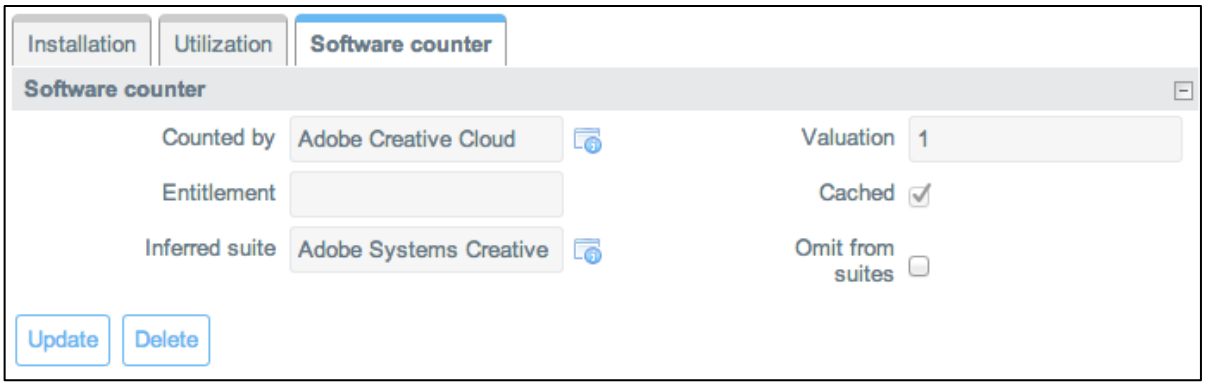
1. Navigate to **Software Asset Management > Discovery > Software Installations**.

2. Click the **Search** magnifying glass icon and search for Display names that contain **dreamweaver cc**. Use the * to denote contains as follows:



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3. Open the first record and view the **Software counter** form section. What are the values for Counted by and Inferred suite?



4. Select **Omit from suites**.

5. Click **Update**.

6. Rerun the license counts for Adobe Creative Cloud and Adobe Dreamweaver CC. What are the results?

Name ▲	Software model	Rights owned	Rights used
Adobe Creative Cloud	Adobe Systems Creative Cloud	0	6
Adobe Creative Suite	Adobe Systems Creative Suite Design & We...	0	0
Adobe Dreamweaver CC	Adobe Systems Dreamweaver CC	0	1
Adobe InDesign CC	Adobe Systems InDesign CC	0	1
Adobe PhotoShop CC	Adobe Systems PhotoShop CC	0	2

7. Return to the Adobe Systems Dreamweaver CC software installation record. What are the values for Counted by and Inferred suite now?

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Lab Goal

In some situations, software publishers may provide upgrade rights or downgrade rights with the license you purchase. For example, the publisher may no longer offer licenses for an older version and allow you to run the software with a license for the new version. If you purchase software licenses near the release of the next version, the publisher may offer upgrade rights with the licenses that allow you to run the new software on that license when it is released.

Software Upgrade and Downgrade Licenses

Downgrade Licenses

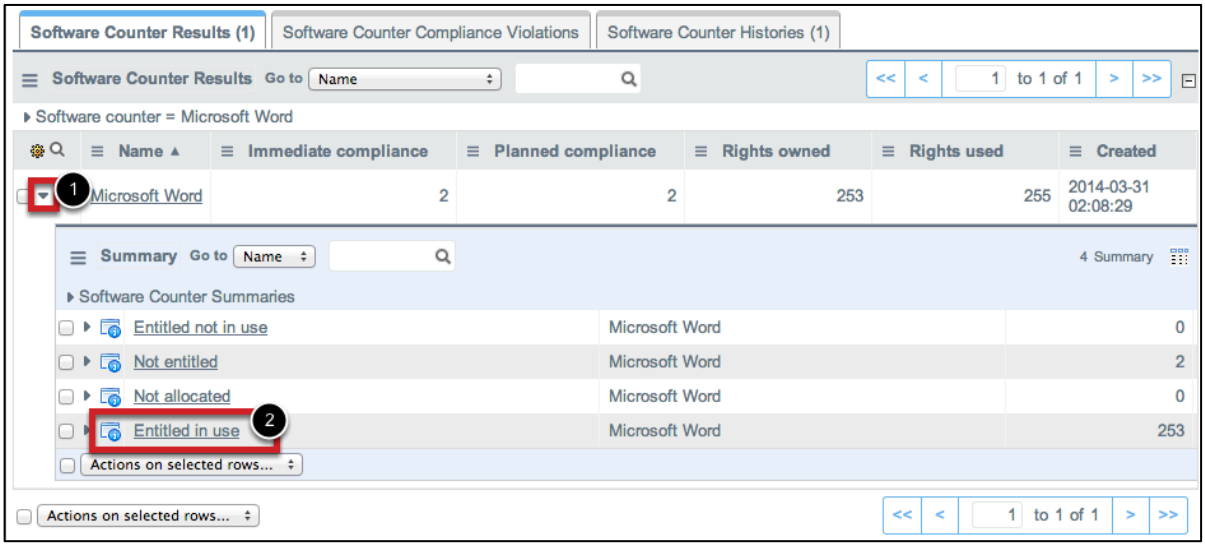
Microsoft Word is sometimes licensed as part of a suite and sometimes licensed separately. Your organization has installations of Microsoft Office 2010 and 2007, but you currently only own licenses for Word 2010. Word 2007 is still required on some systems for compatibility reasons. This is currently configured in your instance to correlate Word 2007 installations with your Word 2010 licenses. Not all the licenses you own allow for downgrade rights, though. You need to remove that from the Software Model and add it to a Software License.

1. Navigate to **Software Asset Management > Reconciliation > Software Counters**.

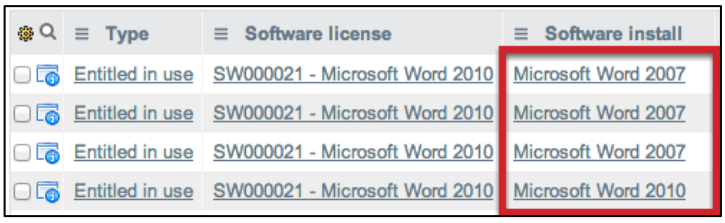
2. Find and open the record for **Microsoft Word**. How many rights are owned and how many are used?

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3. In the Software Counter Results related list, expand **Microsoft Word** and select **Entitled in use**.



4. Notice that some of the Software installs are for **Microsoft Word 2007** and some are for **Microsoft Word 2010**.

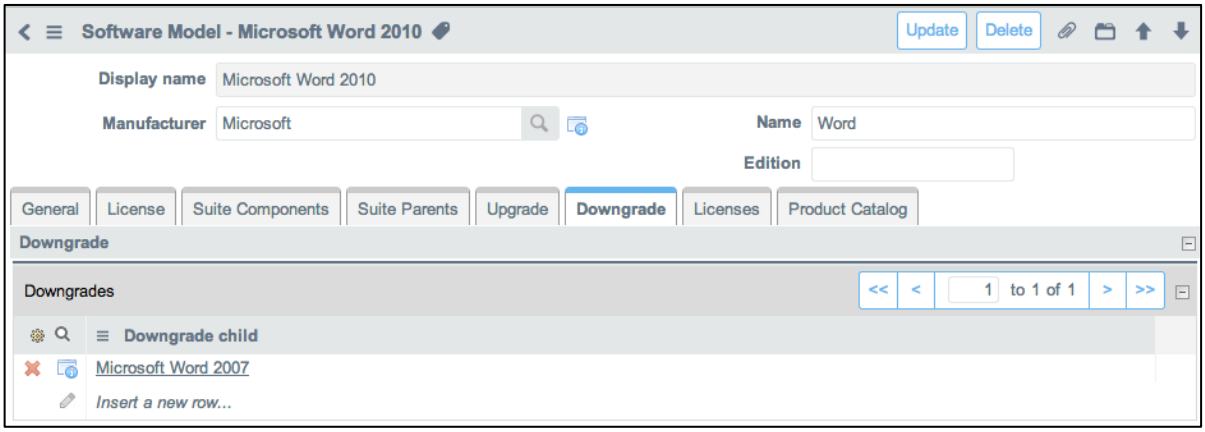


5. Navigate to **Software Asset Management > Software Models**.

6. Find and open the record for **Microsoft Word 2010**.

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7. View the Downgrade form section. Notice Microsoft Word 2007 is listed as a Downgrade child.



8. Click the **Mark deleted** red x.

9. Click **Update**.

10. Navigate to **Software Asset Management > Reconciliation > Software Counters**.

11. Find and open the **Microsoft Word** record.

12. Click **Count licenses**.

13. Right-click the form header and **Reload form** until it no longer indicates that the software count is in progress. The count may take about one minute. How have the compliance details changed?

14. Navigate to **Software Asset Management > Software Licenses**.

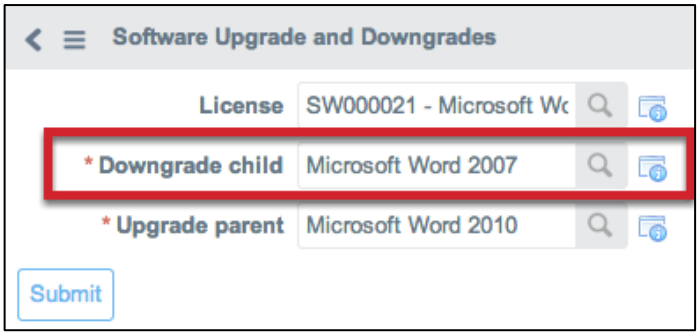
15. Find and open the Software License with the Asset tag **SW000021**.

16. Under the Software Upgrade and Downgrades related list, click **New**.

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17. Complete the form as follows:

    Downgrade child: **Microsoft Word 2007**



18. Click **Submit**.

19. Return to the **Microsoft Word** Software Counter and **Count licenses**. What are the results?

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Lab Goal

ServiceNow accounts for many different license types to calculate your compliance, but sometimes software may require more complex calculations. You can now create custom license calculations as a license type to help identify compliance.

Custom License Calculation

License Types

Microsoft's licensing for SQL Server is now based on CPU cores rather than Client Access Licenses (CALs). The details are as follows:

- Up to four cores uses four rights (one core uses four rights, two cores use four rights)
- More than four cores uses a number of rights equal to the number of cores (five cores use five rights)

This method does not match any of the available license types so you need to create a custom license calculation. Before you create and test the new counter, view your current compliance with the old license model.

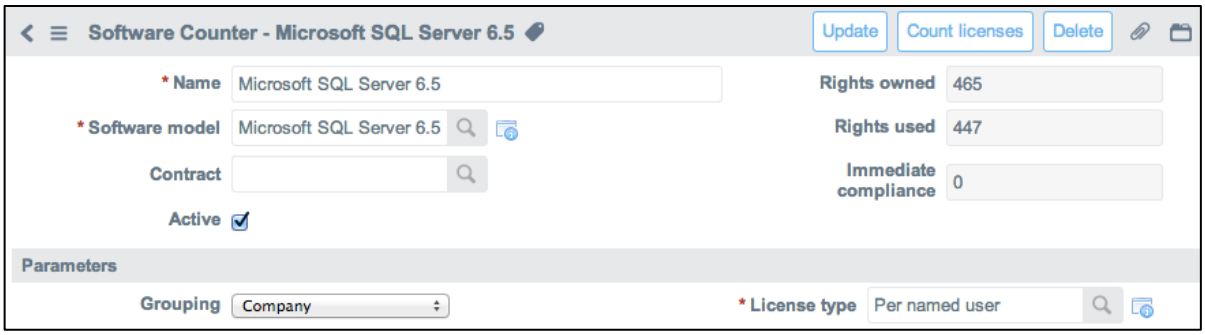
1. Navigate to **Software Asset Management > Reconciliation > Software Counters**.

2. Find and open the record for **Microsoft SQL Server 6.5**.

3. Click **Count licenses**.

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4. Right-click the form header until it no longer indicates that the software count is in progress. The count may take about one minute.



5. Navigate to **Software Asset Management > Reconciliation > License Calculations**.

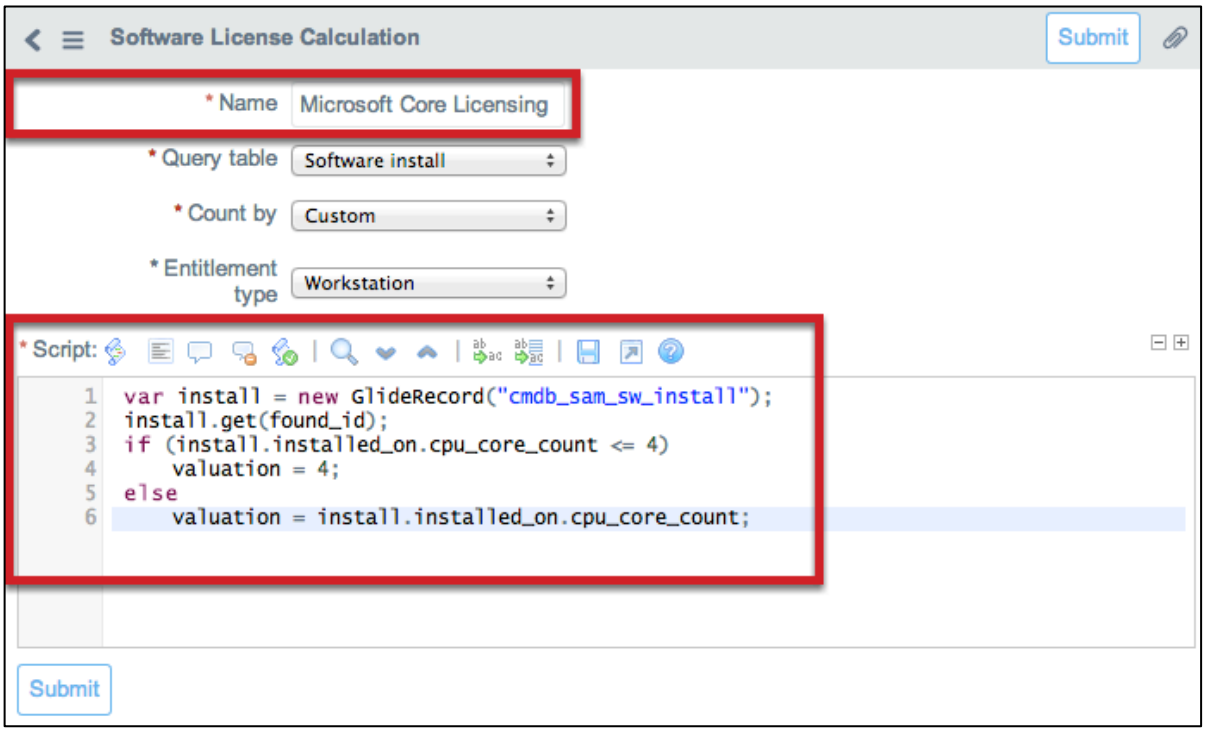
6. Click **New**.

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7. Complete the form as follows:

   Name: **Microsoft Core Licensing**
   Script:

```
var install = new GlideRecord("cmdb_sam_sw_install");
 install.get(found_id);
 if (install.installed_on.cpu_core_count <= 4)
   valuation = 4;
 else
   valuation = install.installed_on.cpu_core_count;
```



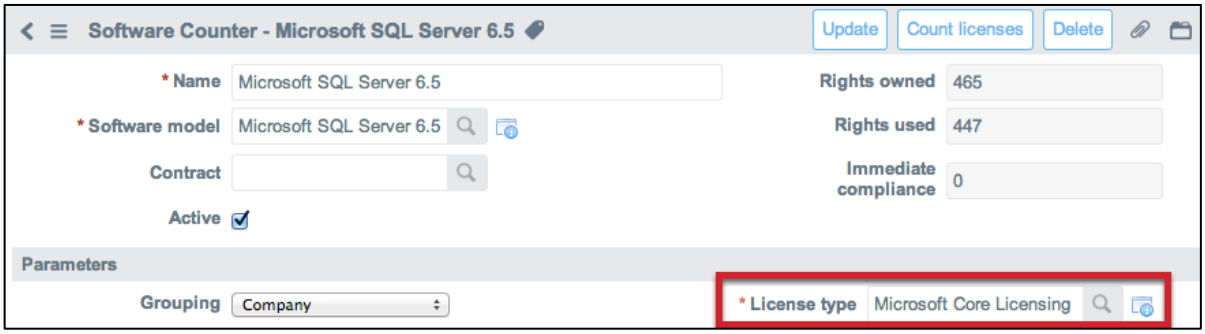
8. Click **Submit**.

9. Navigate to **Software Asset Management > Reconciliation > Software Counters**.

10. Find and open the record for **Microsoft SQL Server 6.5**.

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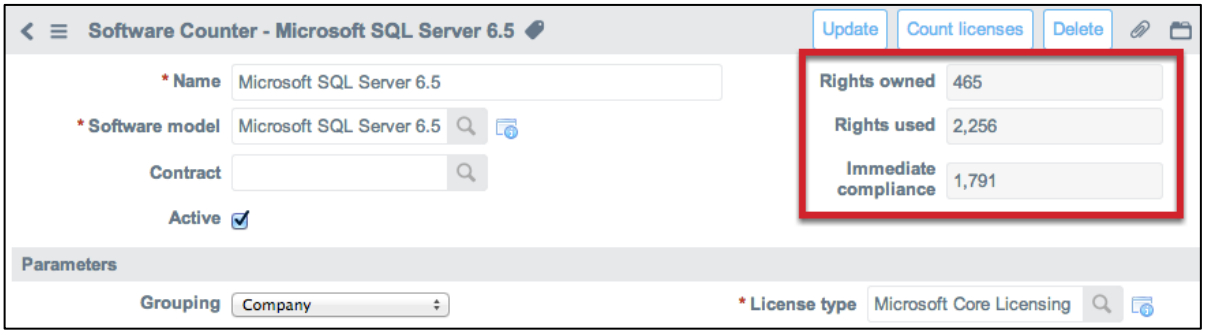
11. Change the License type to **Microsoft Core Licensing**.



12. Right-click the form header and **Save**.

13. Click **Count licenses**.

14. Right-click the form header until it no longer indicates that the software count is in progress. The count may take about 90 seconds.



15. What is the current compliance level?

    NOTE: With the change to core licensing, Microsoft adjusted the cost. To get a completely accurate count here, you would also need to update the rights owned to match the new model.

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