

Normalize software discovery models

Lab 2.4

15-20 minute

Lab objectives

You will achieve the following objectives:

- Software discovery model manually normalized.
- Pattern normalization rule defined.

Lab Dependency: *Requires the completion of Labs 1.1, 2.1, and 2.2*

Required Resources: *None*

Scenario

Rick Lemm, Software Asset Manager at Cloud Dimensions, Ltd. (CloudD), has reviewed discovery models and their associated installations. For those models that could not be normalized, Rick needs to manually normalize them so they can be mapped to the appropriate software models.

Requirements Summary

User Stories

- STRY020401 – Update software discovery models

As a software asset manager, I need to ensure all software discovery models are normalized, so that we have known, consistent values that can be mapped to appropriate software models.

STRY020401 – Update software discovery models

Section 1 View a normalized software discovery model

The discovered values from the software installations appear on the software discovery model as discovered publisher, discovered product, and discovered version. These values are normalized to consistent values from the content database and additional information, if available, is added to enrich the data. These normalized values are then used to match the software installations to software entitlements through the software model.

1. If not already, impersonate **Rick Lemm**.
2. Navigate to **Software Asset Workspace > License operations** then click **Discovery models** under Discovery.
3. Open the **Microsoft Access MUI (English) 2013 15.0.4569.1506** software discovery model.



Software Discovery Model
Microsoft Access MUI (English) 2013 15.0.4569.1506

Display name: Microsoft Access MUI (English) 2013 15.0.4569.1506

Normalization status: **Normalized**

Publisher: Microsoft

Product: Access

Version: 2013

Publisher: Microsoft

Display name: Microsoft Access MUI (English) 2013

Version: 15.0.4569.1506

Additional Information

Product Type: Licensable

Platform: Windows

Language: English

Edition:

Full version: 15.0.4569.1503 SP1

Update Revert Normalization

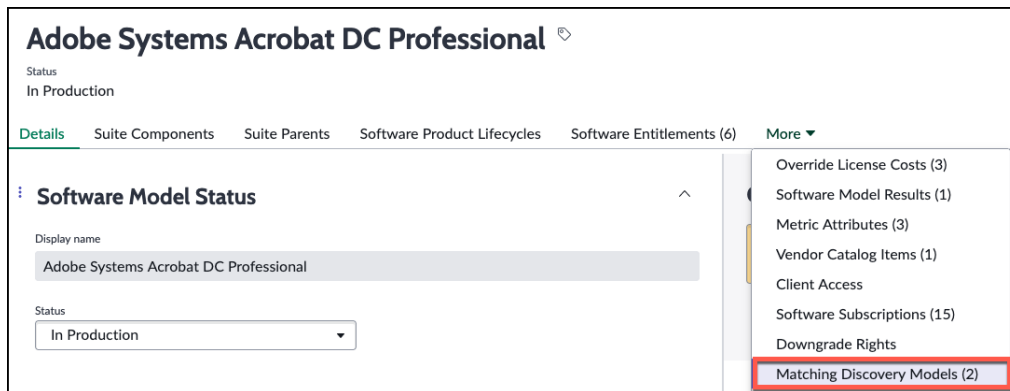
Knowledge Check: Refer to the Answer Guide at lab's end.

1. What is the Normalization status for this software discovery model?
2. What are the normalized values for Publisher, Product, and Version?
3. What other details are available for the discovery model?
4. What information can be modified on this normalized discovery model?

Section 2 Manually normalize a software discovery model

On occasion, Rick might discover a software discovery model title that does not normalize or does not normalize completely. In these situations, Rick might choose to manually normalize the software discovery model. This normalization is important to match the software discovery model to the software model. Rick begins by looking at the software model "Adobe Systems Acrobat DC Professional" to see which discovery models ARE associated to that software model record.

1. Navigate to **Software Asset Workspace > License operations** then click **Software models** under Licensing.
2. Open the **Adobe Systems Acrobat DC Professional** software model.
3. From the More menu, click **Matching Discovery Models**.



4. The matching Software Discovery Models are displayed.

The screenshot shows the 'Matching Discovery Models' table for the 'Adobe Systems Acrobat DC Professional' software model. The table has columns for Display name, Normalization status, Publisher, Product, Version, and Edition. There are two rows of data.

Display name ^	Normalization status	Publisher	Product ▾	Version ▾	Edition ▾
Adobe Systems Acrobat DC Professional	Manually Normalized	Adobe Systems	Acrobat	DC	Professional
AdobeAcrobatPROdc 2015	Normalized	Adobe Systems	Acrobat	DC	Professional

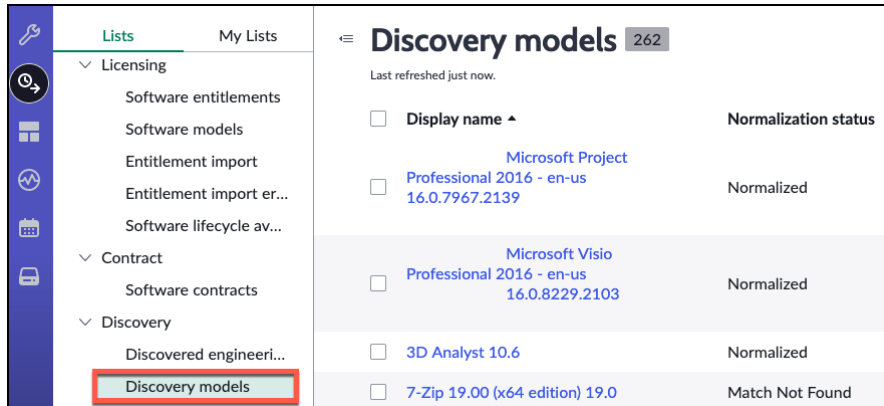
Knowledge Check: Refer to the Answer Guide at lab's end.

5. How many software discovery models match to this software model?

5. Close the Adobe Systems Acrobat DC Professional tab.

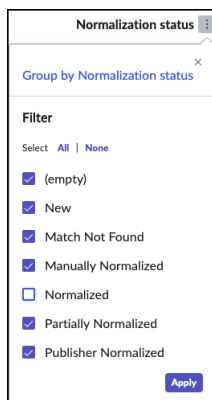
Note: Rick now needs to see if there are any non-normalized discovery models that should be associated to the "Adobe Systems Acrobat DC Professional" software model.

6. Under License operations, click **Discovery models** under Discovery.



Display name	Normalization status
Microsoft Project Professional 2016 - en-us 16.0.7967.2139	Normalized
Microsoft Visio Professional 2016 - en-us 16.0.8229.2103	Normalized
3D Analyst 10.6	Normalized
7-Zip 19.00 (x64 edition) 19.0	Match Not Found

7. Use the filter on the **Normalization status** field to show all records that don't have a status of Normalized then click **Apply**.



Normalization status

Group by Normalization status

Filter

Select All | None

- ☒ (empty)
- ☒ New
- ☒ Match Not Found
- ☒ Manually Normalized
- ☐ Normalized
- ☒ Partially Normalized
- ☒ Publisher Normalized

Apply

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

6. What other Normalization statuses display?

8. Open any **Adobe Systems Acrobat DC Professional** record with a normalization status of **Match Not Found**.

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

7. What information has been normalized?

9. Complete the form as follows:

- Publisher: **Adobe Systems**
- Product: **Acrobat**
- Version: **DC**
- Edition: **Professional**

Adobe Systems Acrobat DC Professional

Details Software Installations (6)

Software Discovery Model

Normalization status
Match Not Found

Publisher
Adobe Systems

Product
Acrobat

Version
DC

Discovered publisher
Adobe Systems

Discovered product
Adobe Systems Acrobat DC Professional

Discovered version
—

Additional Information

Product Type
Licensable

Edition
Professional

10. Click **Save**.

Adobe Systems Acrobat DC Professional

Details Software Installations (6)

Software Discovery Model

Normalization status
Manually Normalized

Publisher
Adobe Systems

Product
Acrobat

Version
DC

Discovered publisher
Adobe Systems

Discovered product
Adobe Systems Acrobat DC Professional

Discovered version
—

Additional Information

Product Type
Licensable

Edition
Professional

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

8. What is the Normalization status now?

9. What fields are available to update?

11. Return to the **Adobe Systems Acrobat DC Professional** Software Model.

12. From the More menu, click **Matching Discovery Models**.

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

10. How many software discovery models match the software model now? Why?

Section 3 Create a pattern normalization rule

Manual normalization for each discovery model may not make sense in every situation. For example, you might have a software product that has frequent minor updates. These minor updates do not appear yet in the content database due to their frequency.

To automate the normalization, Rick can create a pattern normalization rule to automatically normalize software discovery models with his settings. Again, Rick begins by looking at the software model "Microsoft Excel 2013 Windows" to see which discovery models are associated to that software model record.



1. As **Rick Lemm**, navigate to the **Software models** under Licensing.
2. Open the **Microsoft Excel 2013 Windows** software model.
3. From the More menu, click **Matching Discovery Models** and make note of how many are listed.
4. Click the **Display name** of the matching discovery model and view the details.
5. Navigate to License operations and open the **Discovery models**.
6. Filter on the Display name field to find and open **Microsoft Excel MUI (English) 2013 15.1.2515.9876**.

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

11. What is the Normalization status of this software discovery model?
12. What normalization details are missing to fully normalize this software discovery model?

7. Take note of the discovered information.

The screenshot shows the details of a software installation. The title is "Microsoft Excel MUI (English) 2013 15.1.2515.9876". Below the title, there's a "Details" tab and a "Software Installations (4)" link. The main section is titled "Software Discovery Model". It contains several fields: "Display name" (Microsoft Excel MUI (English) 2013 15.1.2515.9876), "Normalization status" (Partially Normalized), "Publisher" (Microsoft), "Discovered publisher" (Microsoft), "Product" (Excel), "Discovered product" (Microsoft Excel MUI (English) 2013), "Version" (empty), "Discovered version" (15.1.2515.9876), "Additional Information" section with "Product Type" (Licensable) and "Edition" (empty).

8. Navigate to **Software Asset > Administration > Pattern Normalization Rules**.

Note: This is accessed in the left-hand navigator, not through the Software Asset Workspace.

9. Click **New**.

10. Complete the form as follows:

- Name: **Microsoft Excel 2013**
- Discovered publisher contains: **Microsoft**
- Discovered product contains: **Microsoft Excel MUI (English) 2013**
- Publisher: **Microsoft**
- Product: **Excel**
- Version: **2013**
- Platform: **Windows**

The screenshot shows the "Pattern Normalization Rule" form. The title is "Pattern Normalization Rule" and the subtitle is "New record". The form has a "Submit" button in the top right. The "Name" field is "Microsoft Excel 2013". The "Discovered publisher contains" field is "Microsoft". The "Discovered product contains" field is "Microsoft Excel MUI (English) 2013". The "Active" checkbox is checked. The "Discovered publisher is empty" checkbox is unchecked. The "Normalized Attributes" section is expanded. It contains the following fields: "Publisher" (Microsoft), "Product" (Excel), "Edition" (empty), "Product type" (Licensable), "Version" (2013), "Platform" (Windows), and "Language" (Anything). The "Submit" button is at the bottom left.

11. Click the **Additional actions** menu on the form header and select **Save**.

12. Click **Apply Rule**.

Note: Rick wants to see if the pattern normalization rule (now applied) helped match any additional discovery models to the software model record.

13. Return to the **Microsoft Excel 2013 Windows** software model in the Software Asset Workspace.

14. From the More menu, click **Matching Discovery Models**, and note if there is a difference.



Congratulations! You have completed this lab!

You are now ready to begin learning about opting in to ServiceNow's Content Service and validating Software Asset Management jobs.

Knowledge Check Answer Guide

1. **What is the Normalization status for this software discover model?**
 - Normalized
2. **What are the normalized values for Publisher, Product, and Version?**
 - Publisher: Microsoft
 - Product: Access
 - Version: 2013
3. **What other details are available for the discovery model?**
 - Discovered information
 - Additional product details
 - Discovered software installations.
4. **What information can be modified on this normalized discovery model?**
 - Edition
5. **How many software discovery models match to this software model?**
 - 2
6. **What other normalization statuses display?**
 - Manually Normalized
 - Match Not Found
 - Partially Normalized
7. **What information has been normalized?**
 - None
8. **What is the normalization status now?**
 - Manually Normalized

9. **What fields are available to update?**

- Publisher
- Product
- Version
- Product Type
- Platform
- Language
- Edition
- Full version

10. **How many software discovery models match the software model now? Why?**

- 3
- Because the Adobe Systems Acrobat DC Professional software discovery model was manually normalized to match a software model.

11. **What is the Normalization status of this software discovery model?**

- Partially Normalized

12. **What normalization details are missing to fully normalize this software discovery model?**

- Version

Lab takeaways



- Why would you manually normalize a software discovery model?
- What is the value of pattern normalization rules?