

New Settings > SSO, now with Custom SAML mapping rules!

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Reason for the change

It's not often we rearrange things within KnowledgeOwl, but when we do, it's because we see a real need. Or, in this case, several real needs:

The **Settings > Security** page was getting quite lengthy. If you were setting up SAML SSO, it wasn't easy to figure out which fields were required, and several important steps were only accessible by clicking a hyperlink and viewing a pop-up.

We've also had many customers struggle with the [direct mapping](#) setup we've always used for [SAML SSO](#), often due to their SAML SSO not using groups, or not using the same groups they used in KnowledgeOwl. This made the setup process a lot more involved and sometimes required far more technical resources or infrastructure changes on their side or in their knowledge base setup.

So really, we had three issues:

- Clutter
- Unclear functionality/steps

- Missing useful functionality that would make customers' lives easier

We wanted to solve all these problems, and perhaps against our better judgment, we decided to do it all at once. Go big or go home, huh?

Change 1: New Settings > SSO menu

We moved the entire [SAML SSO](#), [remote authentication](#), and [Salesforce SSO](#) setup out of [Settings > Security](#) and created a new top-level Settings section dedicated to SSO:

The screenshot shows the KnowledgeOwl settings interface. At the top, there is a navigation bar with a dark blue background and white text. The navigation bar includes a Knowledge Owl logo, a dropdown menu for 'Knowledge Base', a dropdown menu for 'Library', a dropdown menu for 'Settings' (highlighted in yellow), a dropdown menu for 'Reporting' with a notification icon, and a 'View KB' link. Below the navigation bar is a sidebar with a light gray background. The sidebar contains several menu items: 'Basic' (gear icon), 'Security' (shield icon), 'SSO' (person icon, highlighted in white), 'Search' (magnifying glass icon), 'Style' (pencil icon), 'Article Ratings' (thumbs up icon), 'PDF' (document icon), 'Comments' (speech bubble icon), and 'Subscriptions' (bell icon). The main content area has a white background and a tabbed layout. The tabs are 'SAML Settings' (active), 'SAML Attribute Map', 'Remote Auth', and 'Salesforce SSO'. Below the tabs, the 'SAML SSO Settings' section is visible. It features a light blue information box with an 'i' icon and text: 'Restrict Access to SSO will trump Public Default Access, requiring everyone to authenticate using SSO. Choose Restrict by Reader Logins as the Default Access to allow optional manual reader logins in addition to SSO.' Below this, there are three checkboxes under the heading 'Enable SAML': 'Enable SAML SSO' (with a link to 'View tutorial'), 'Restrict Access to SSO', and 'Enable Debug Mode'. At the bottom, there is a text input field for 'SP Entity ID' with the value 'https://app.knowledgeowl.com/sp'. A dark blue banner at the bottom of the screenshot contains the text: 'The new SSO Settings menu is located in Settings, beneath Security'.

We've added a tabbed layout here, so you can get at [SAML Settings](#), the [SAML Attribute Map](#) (which was previously only accessible by clicking a link to open a pop-up), the [Remote Authentication](#) setup, and [Salesforce SSO](#) easily, without having to scroll past sections of the page that aren't relevant to you.

Change 2: Custom Rules for SSO Mappings

This isn't just a set of layout changes. Most importantly, we've added a brand-new feature: the ability to create [Custom Attribute Map Rules](#) (CAMR for short) for SAML SSO integration.

These rules greatly expand the capabilities with SAML SSO.

Previously, you could only do "Direct" reader attribute mappings--passing a field directly as it exists in your IdP into KnowledgeOwl.

The new custom rules allow you to define logic to match certain conditions and set fields in KnowledgeOwl as a result of those conditions.

We created them to handle some of the common questions/use cases we get from customers trying to set up SAML/SSO, including things like:

- We want to assign all readers coming from our SAML IdP to a single reader group or a set of [reader groups](#).

Create Advanced SAML Map Rule
✕

IdP attribute name

IdP attribute value matching type

Exact matches ?
 Regex pattern ?
 Default ?

*Only one default is allowed per IdP attribute name

Reader attribute

Reader Groups ▼

Assign to reader groups

👤 Production ✕
👤 Support ✕

Cancel
Create Rule

- We want to "translate" multiple groups coming from our SAML IdP into one or two reader groups in KnowledgeOwl.

Reader field: Reader Groups

IdP attribute: groups

Rule logic:

IF

groups

MATCHES

/EXT_/i

SET

Reader Groups

TO

👤 External users

Rule to set any reader with an incoming group containing "EXT_" to the External users reader group

Direct mappings will always override CAMRs, so customers with existing SAML SSO setups should experiment with these with care--you may need to remove some existing direct reader attribute mappings to see the custom rules work.

See the [Direct Reader Attribute Map](#) and [Custom Attribute Map Rules](#) documentation for more information!

Change 3: Other layout changes

Moving SSO into its own Settings menu and adding the tabs wasn't the only layout change we made.

In the SAML SSO Settings section, we've added an explicit section for the **IdP Certificate**, which makes it easier to figure out where to upload/how to update that certificate, and will display some details about the certificate that's being used. This should make it easier to tell when a certificate has expired, too:

IdP Certificate
[Update](#)

Common name: Google
Valid starting: 04/15/2021 2:39 pm EDT
Valid until: 04/14/2026 2:39 pm EDT

[View KnowledgeOwl SP Metadata](#)

In the **SAML Attribute Map** tab, we directly show all of the direct reader attribute map options instead of hiding them behind a hyperlink. We also added some messaging at the top to better describe what happens with the mappings.

SAML Settings | SAML Attribute Map | Remote Auth | Salesforce SSO

Direct Reader Attribute Map

i Map incoming user attributes from your IdP to reader attribute values in KnowledgeOwl. The reader attributes below will be set using the exact values passed via your IdP. Direct Reader Attributes will overwrite Custom Attribute Map Rules. Enable debug mode to view the incoming user attributes and exact values.

SSO ID
This field is required. Email address is allowed.

Username / Email
This field is required.

First Name

Last Name

User Icon
Expecting URL to image.

Reader Groups
Can use a comma separated list or an array to assign multiple reader groups.

Custom Field 1

Custom Field 2

We've updated all of our SSO documentation to match these changes.

If you've struggled with your SAML SSO setup, or you've been considering it but couldn't use it due to some mapping challenges, please take a look through this new functionality. (And even if none of those situations apply

to you, you're welcome to take a look at the new layout and tell us what you think!]
