Spider Strategies®

What's New in 5.6

Guide to new features in Spider Impact 5.6
Updated October 6th, 2023

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Your success is important to us!

Spider Impact 5.6 delivers improvements in virtually every area of the software, but the theme of this release is getting data in and out of Spider Impact. Forms now have advanced logic so they can react to user input as they collect data. There's a new API for organizations and scorecards, allowing you to see your KPI performance in apps outside of Spider Impact. Most importantly, there's now an ability to import data from any app that has a web service API.

To help you discover everything Spider Impact has to offer, we have free training videos on our website, and we've put together new functionality guides like this one. If you want to maximize your return on investment, we offer paid formal training courses and dedicated consulting engagements. We have more information about all our free and paid services at https://www.spiderstrategies.com/services/

Data Visualization

In version 5.6 text now displays as white when it's shown on darkly colored backgrounds. This applies to every section in the software, including reports and dashboard widgets.

MANAGER NAME	EMPLOYEE NAME	GROWTH OPPORTUNITY AVG.	MEANINGFUL WORK AVG.	POSITIVE WORK ENVIRONMENT AVG.	SUPPORTIVE MANAGEMENT AVG.	TRUST IN LEADERSHIP AVG.	OVERALL AVG.
Mike	Carly	3	3	4.5	3	2	3.1
Mike	Cathy	1.5	2.5	4	2.5	4.5	3
Mary	Kirk	4	5	5	2	5	4.2
Mary	Caitlin	2	5	5	4	1	3.4
Mary	Kevin	3	3	5	3	3	3.4


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Financial
6.9
1
Organizational Capacity
3.5
3
Customer
3
2
Internal Processes
5.3


All Scoring Colors 1
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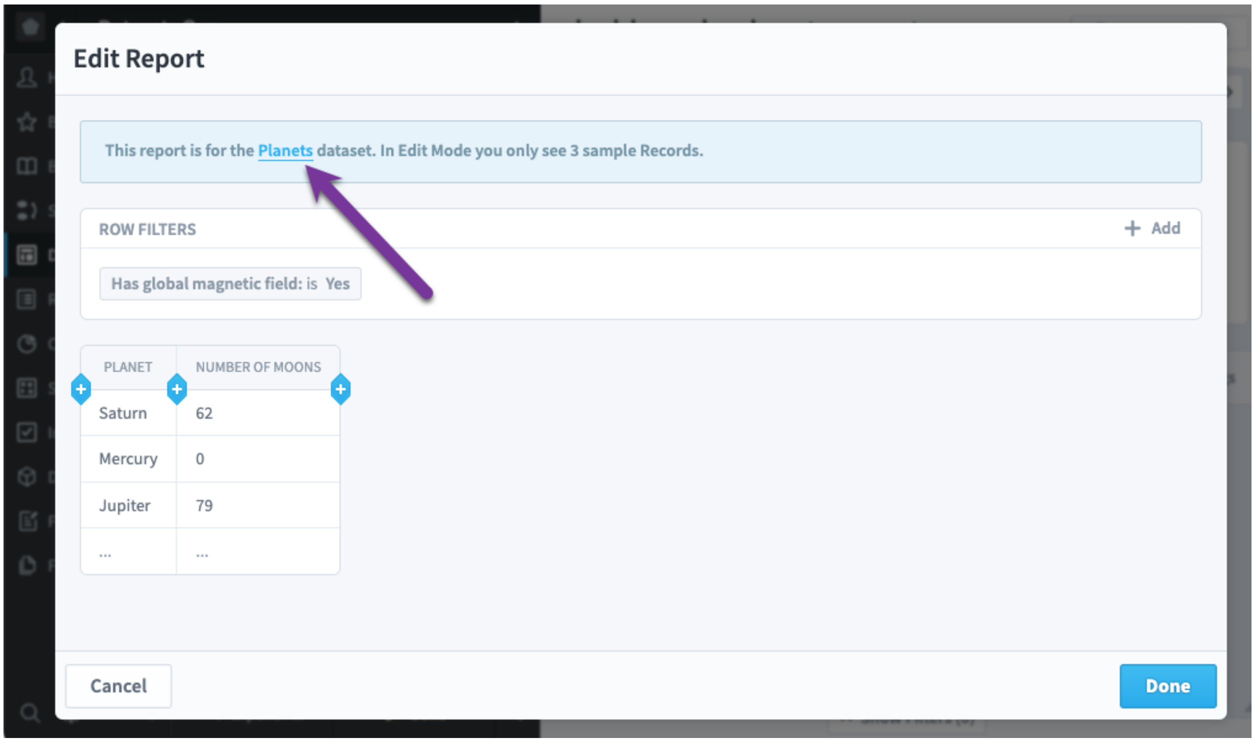
Dashboards

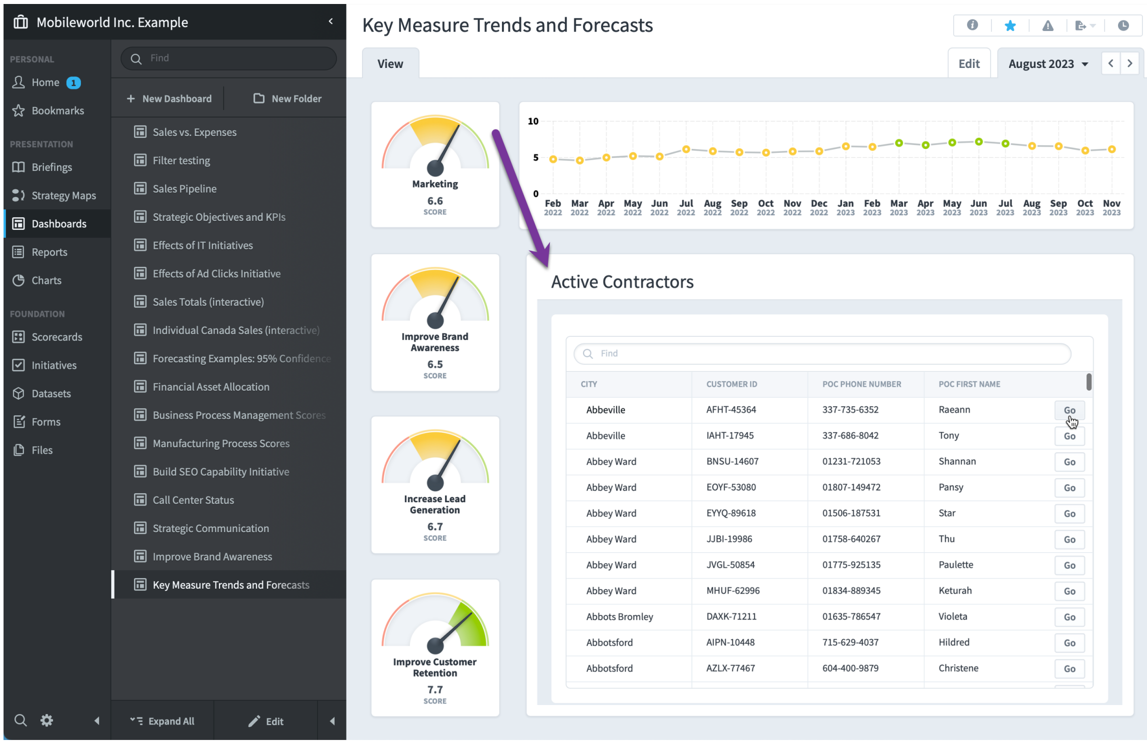
Dataset info when editing report dashboard widgets

When you're editing report dashboard widgets, the name of the report's data is now shown in the blue info box. Clicking on the dataset name takes you to that dataset.

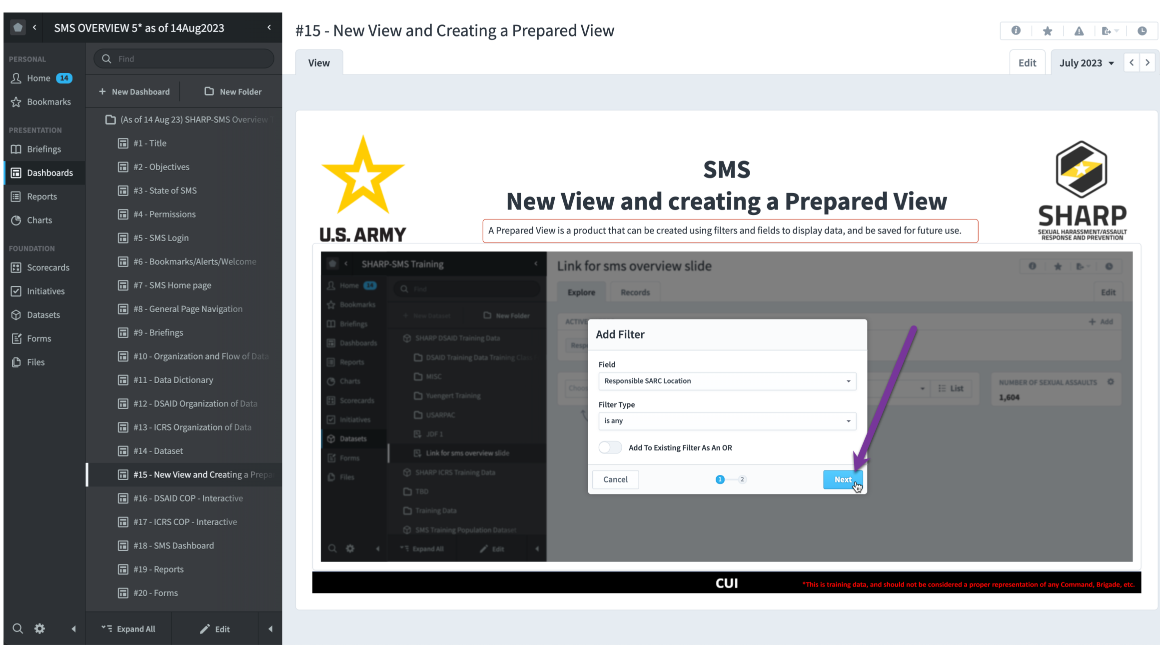


Shared forms in embedded content dashboard widgets

Forms can now be embedded directly in dashboard embedded content widgets. This allows you to present and collect information on the same dashboard.



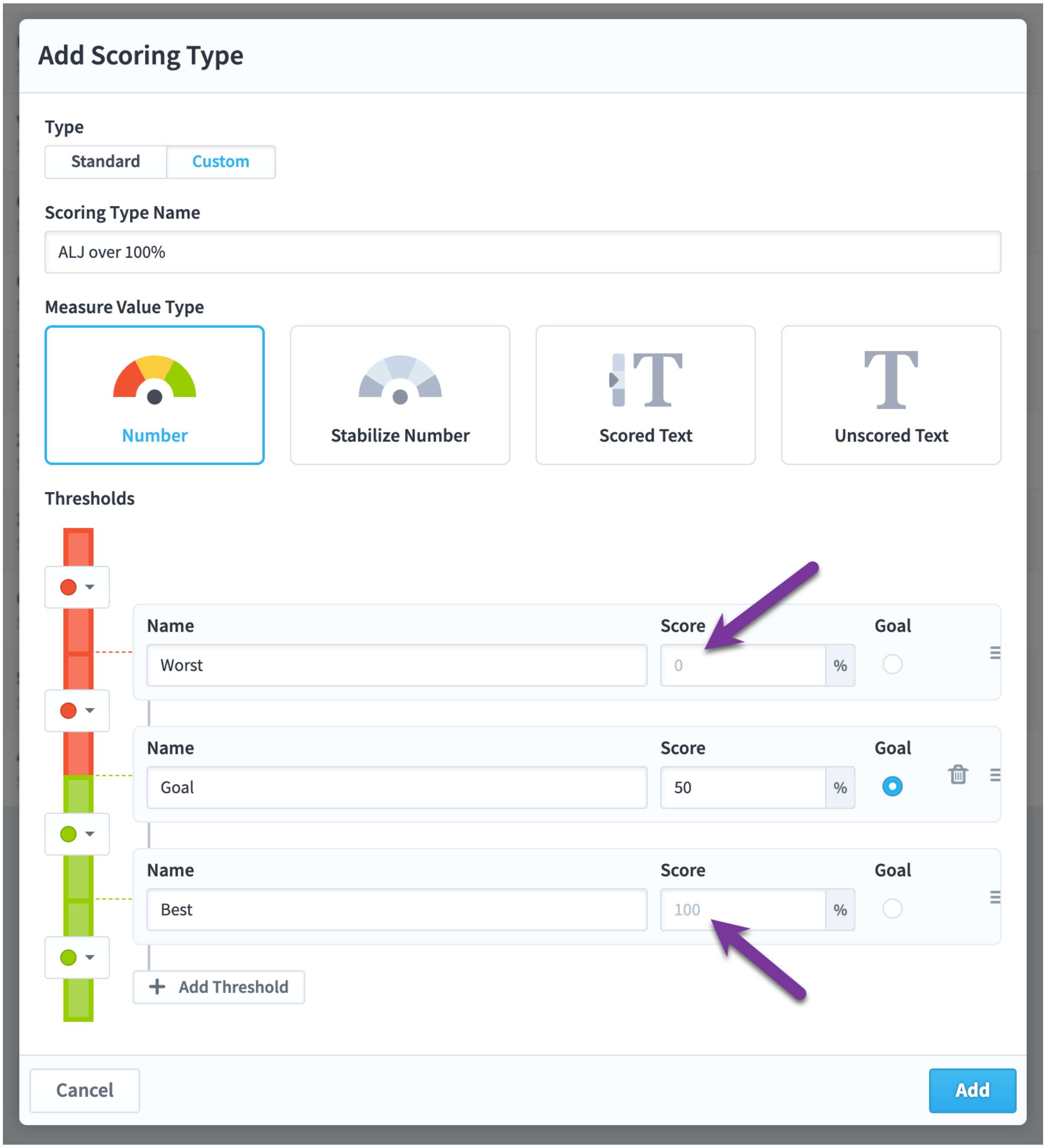
Although this isn't a common use case, you can even embed the entire Spider Impact app. In this example, the US Army has created a briefing for internal Spider Impact training. When presented full screen, each slide covers a different Spider Impact topic like Reports, Permissions, or Datasets. Instead of including screenshots to illustrate points, however, the Spider Impact application is shown via embedded content widgets, allowing for live interactive demonstration.



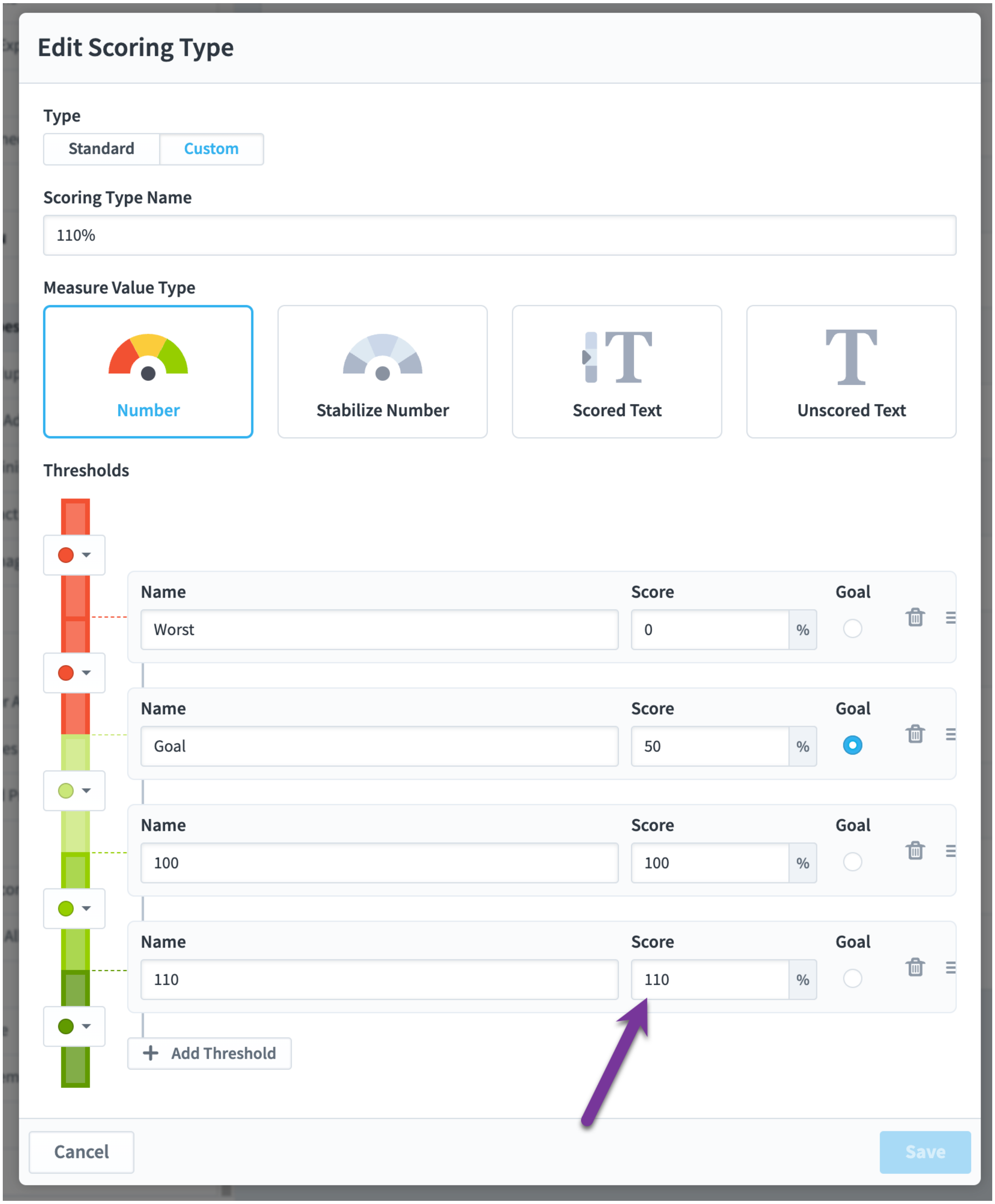
Scorecards

Percentage Scoring with thresholds beyond 0% to 100%

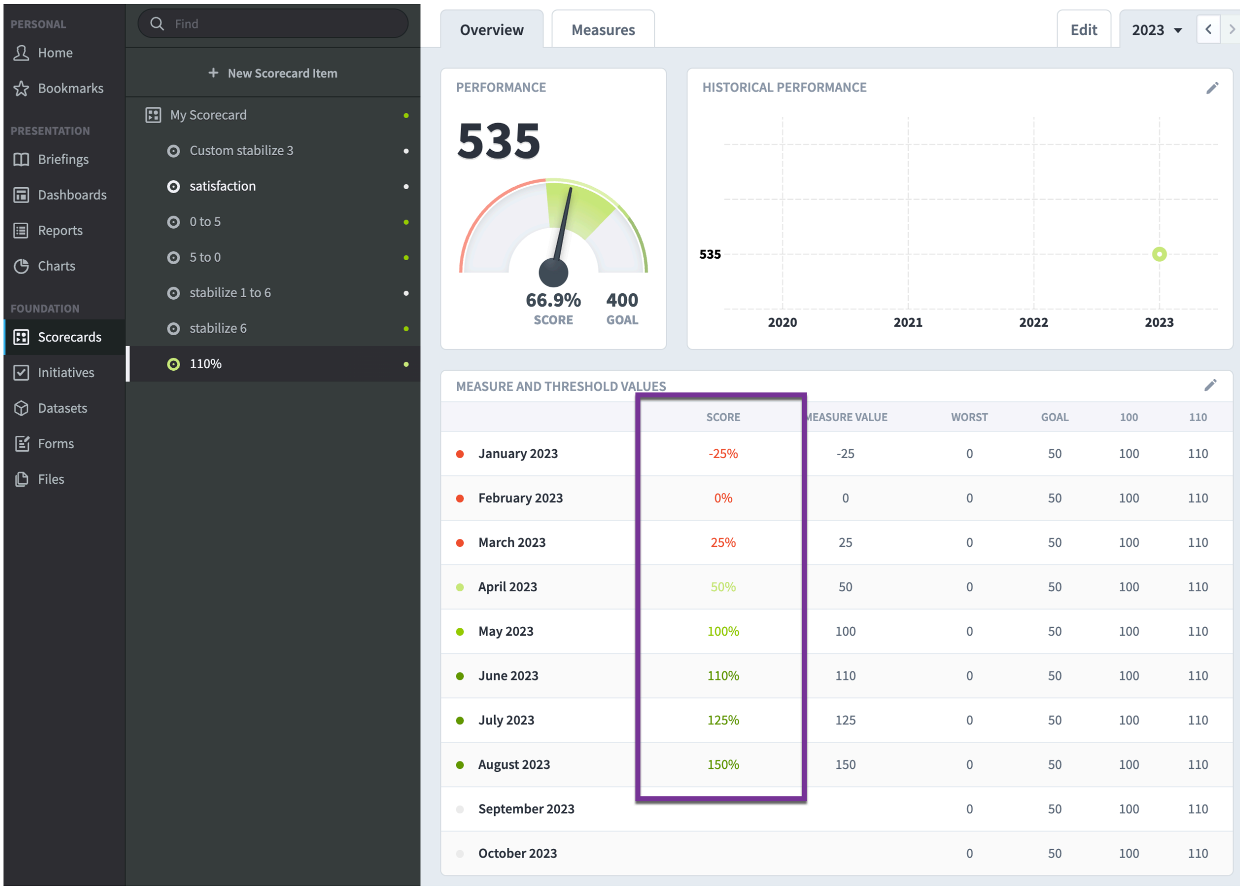
In previous versions of Spider Impact, the lowest percentage possible was 0% and the highest possible percentage was 100%. All custom scoring had these thresholds locked in.



You can now set thresholds above 100% and below 0%.

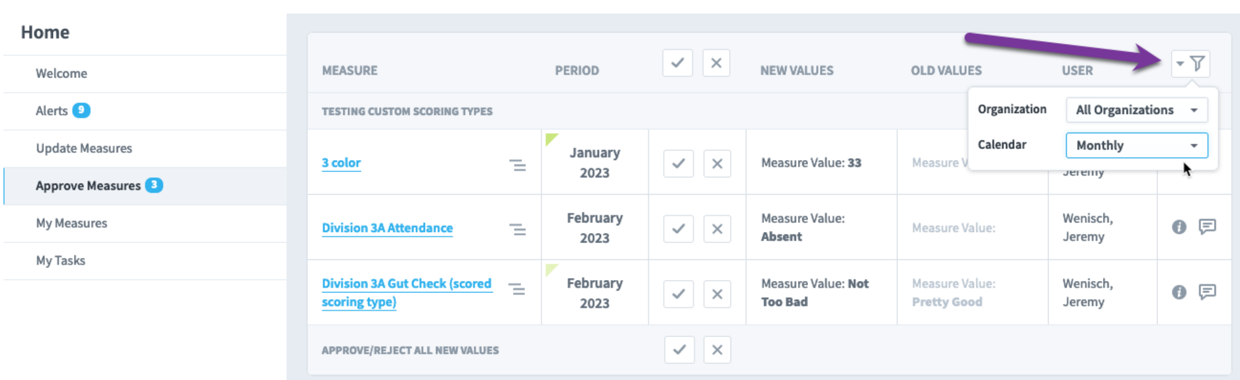


This allows you to create scoring like the example below where scores between 50% and 100% are light green, and anything above 100% are dark green.



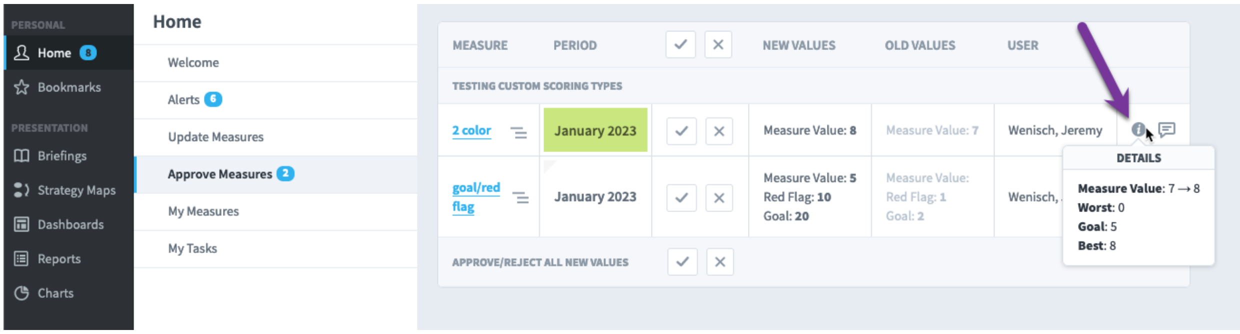
New filters on KPI value approval screen

There are now filters for Organization and Calendar on the KPI value approval screen. This allows supervisors to choose to see only see values for monthly KPIs, for example, or values in a particular organization.



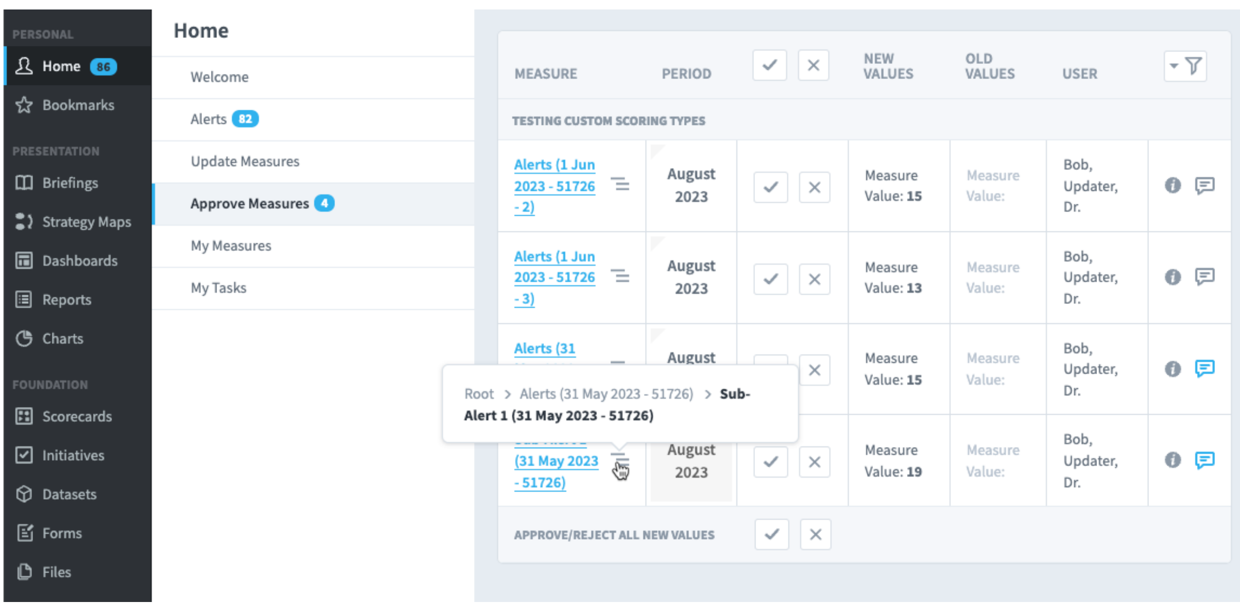
Viewing thresholds while approving KPI values

On the KPI approval screen in the Home section, there have always been columns for old and new values. In version 5.6 there's now a details tooltip that also shows all the values for all series, including the ones that aren't changing.



Viewing scorecard item ancestors on Approve KPIs

KPI values on the "Approve KPIs" page are grouped by organization. You can now see more information about each KPI to disambiguate KPIs with the same name in the same organization.

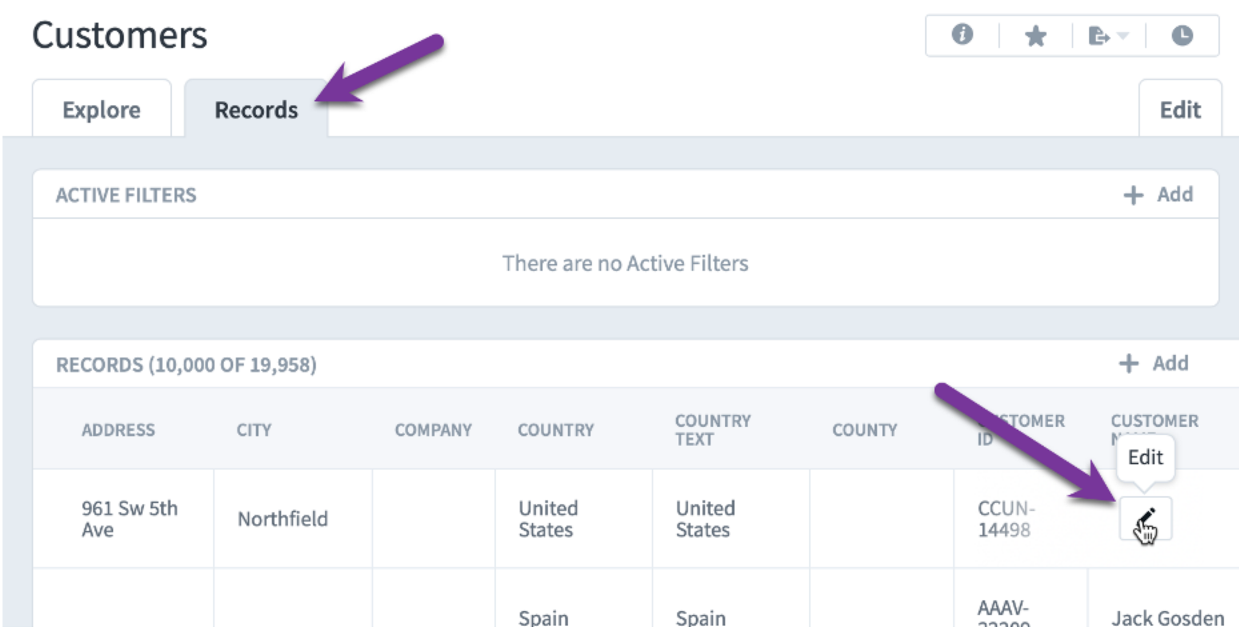


Datasets

New "View Records Tab" permission

One of the most important aspects of dataset security is that all permissions are centrally managed. For example, if a user is given access to see records in a dataset where the "restricted" field is "false", that permission applies throughout the software. All dashboards they view will only show unrestricted data, and all forms they use will only show unrestricted records.

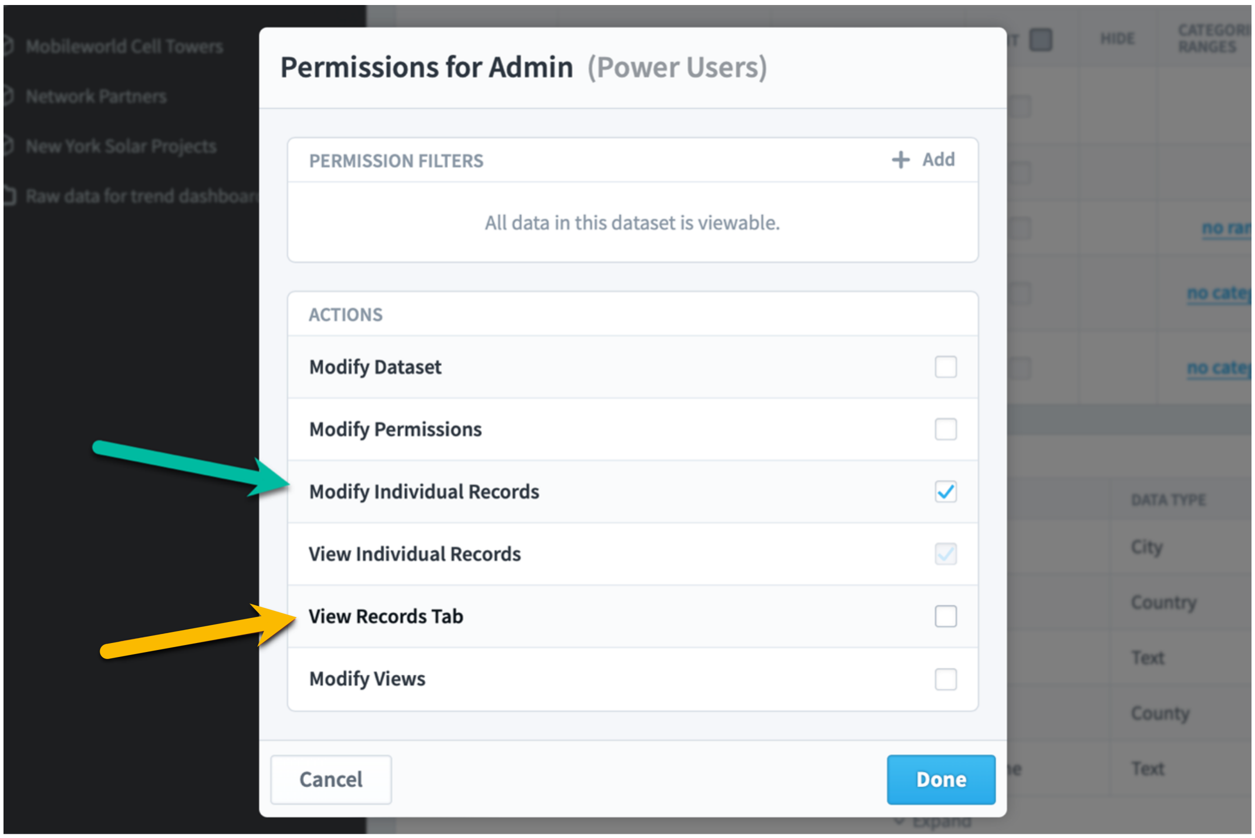
These centrally managed permissions apply to modifying data as well. In order to modify existing records for a dataset, a user needs the "Modify Individual Records" permission. Once granted, this user will be able to modify all records they have permission to view, both inside of forms and on the Datasets Records tab.



This ability to grant blanket edit permissions to all viewable records works well for assigning access to either all fields or no fields. There are times, however, when lower-level users need to be restricted to editing only some of the fields in the records they can view.

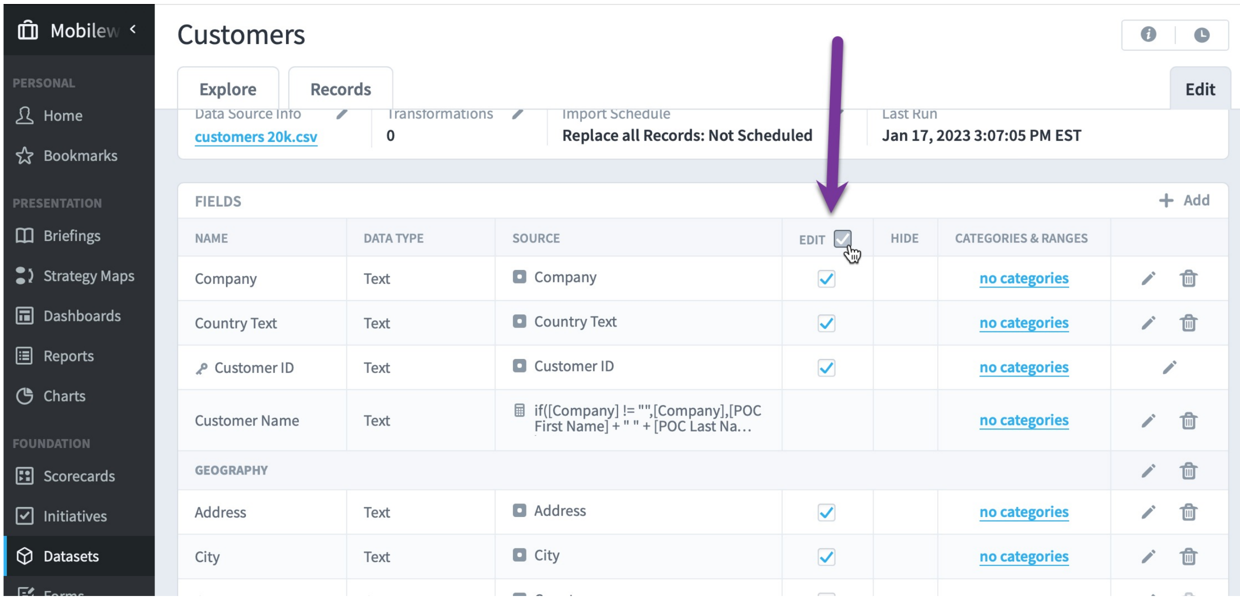
The existing Forms functionality works great for this because the person building the form has control over exactly what data is displayed and which fields are editable. The problem until now, was that in order to use these forms to edit data, the user needed to be given the "Modify Individual Records" permission. This permission also gives the users access to modify all the fields on the Dataset Records tab, which circumvents the restrictions built into the form itself.

To address this need for field-level permissions in Forms, there is a new dataset permission called "View Records Tab". This allows administrators to assign the ability to edit records, while not giving access to the Dataset Records tab.



Quickly managing ability to edit dataset fields

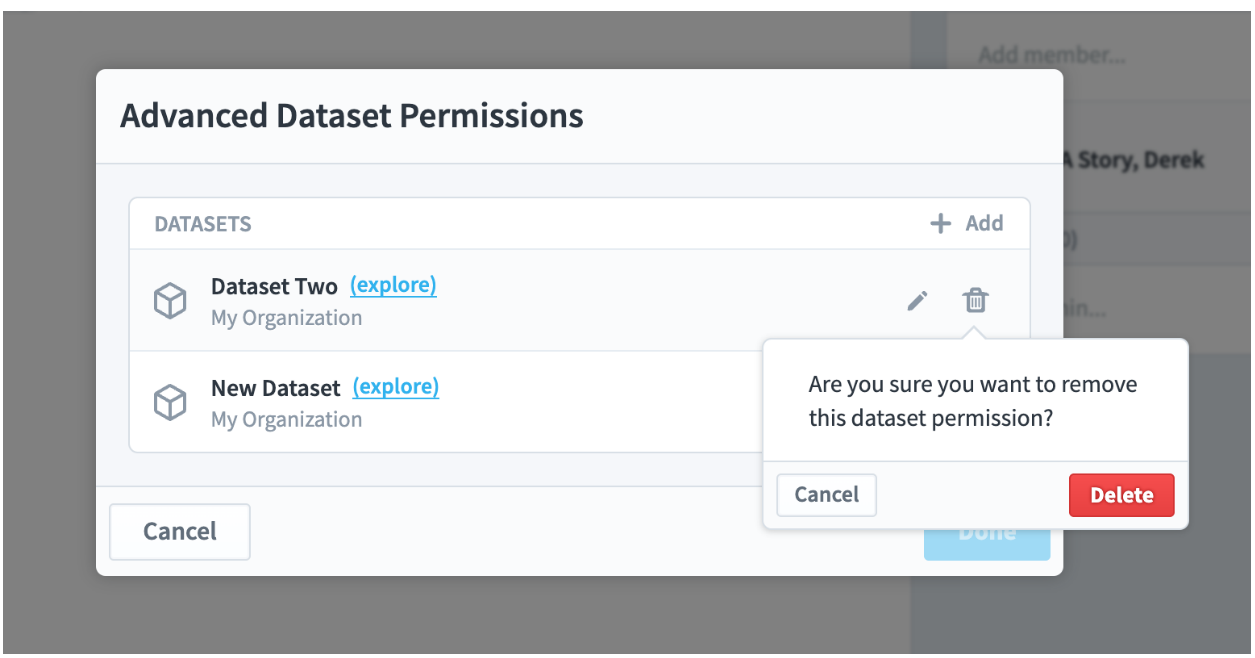
There's a new column on the Datasets Edit tab that allows you to set dataset fields to be editable. You can still set them to be editable when editing individual fields, but this approach is much faster for setting many fields to be editable at once.



Confirmation when removing dataset permissions

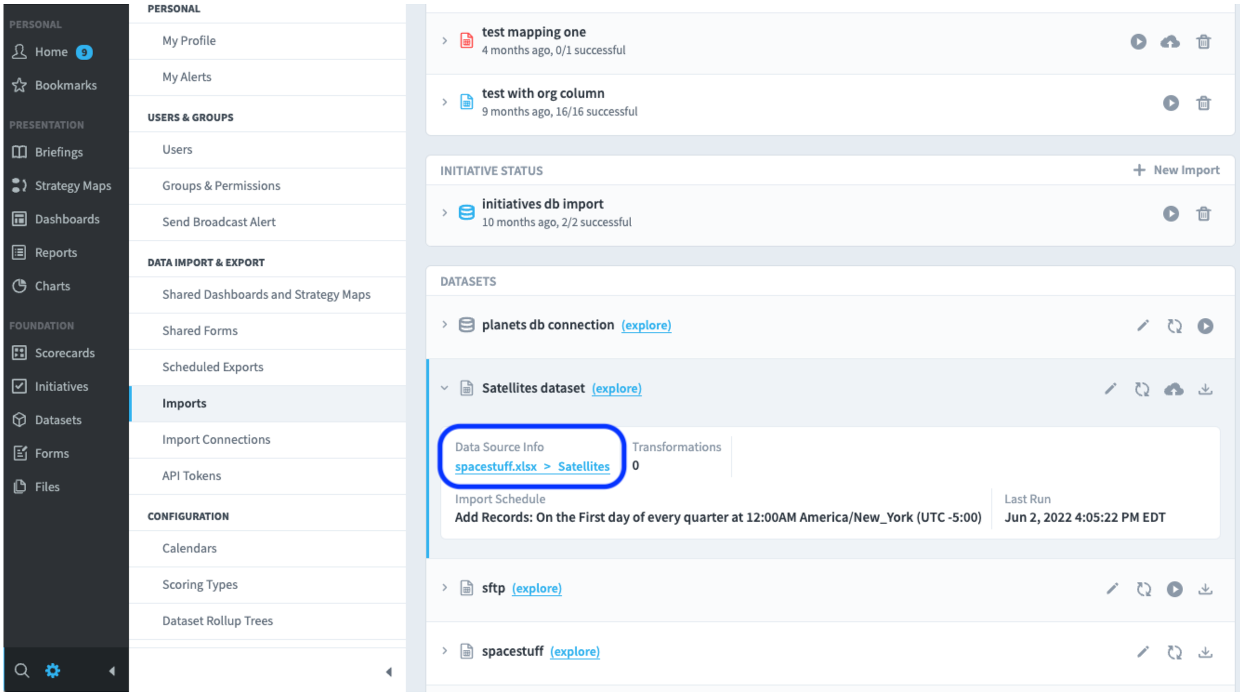
Administrators can modify a user's dataset permissions on the Admin > Users screen. This is a helpful shortcut that shows all a user's permissions in one place, but some administrators may not understand that removing a dataset from this list is removing the user's permission to view that dataset.

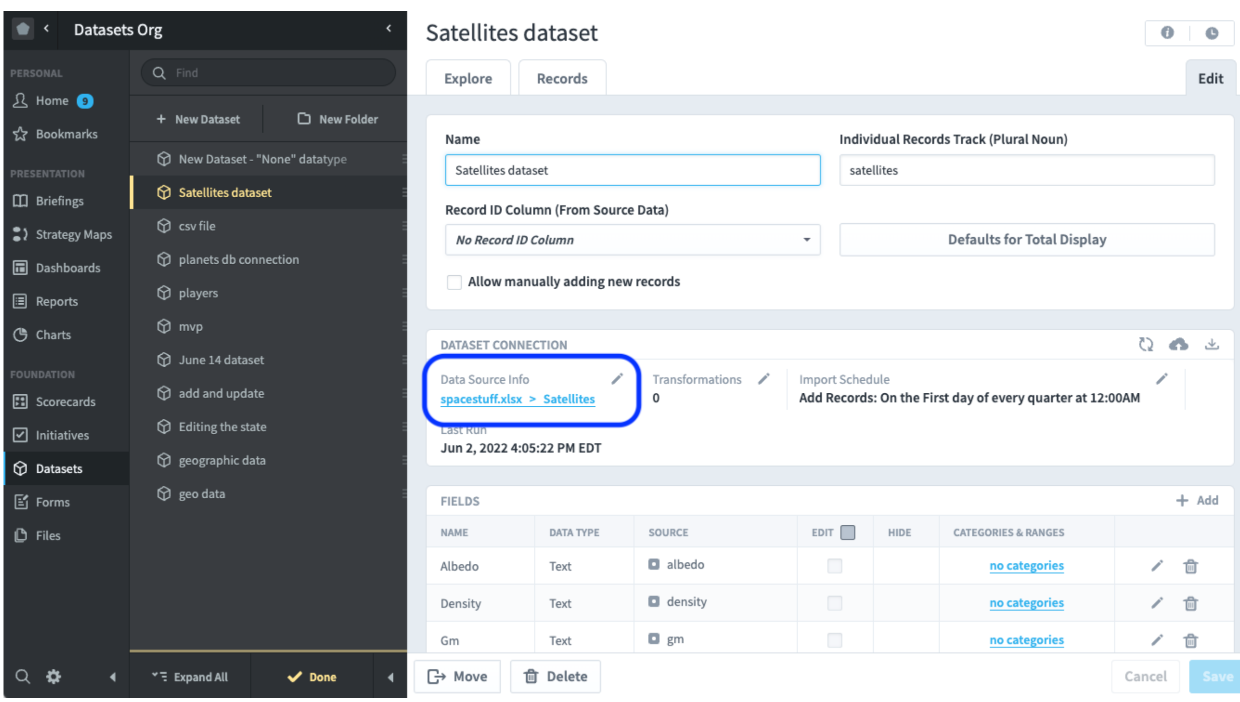
To address this problem, there is now a confirmation when removing a user's permission to a dataset from the Administration section.



Worksheet shown in data source info

When you have a scheduled import from an Excel file or Google Sheet that has multiple worksheets, the worksheet that you're importing from is now listed on the Admin > Imports screen and the Datasets > Edit tab.





Preloaded dataset caches

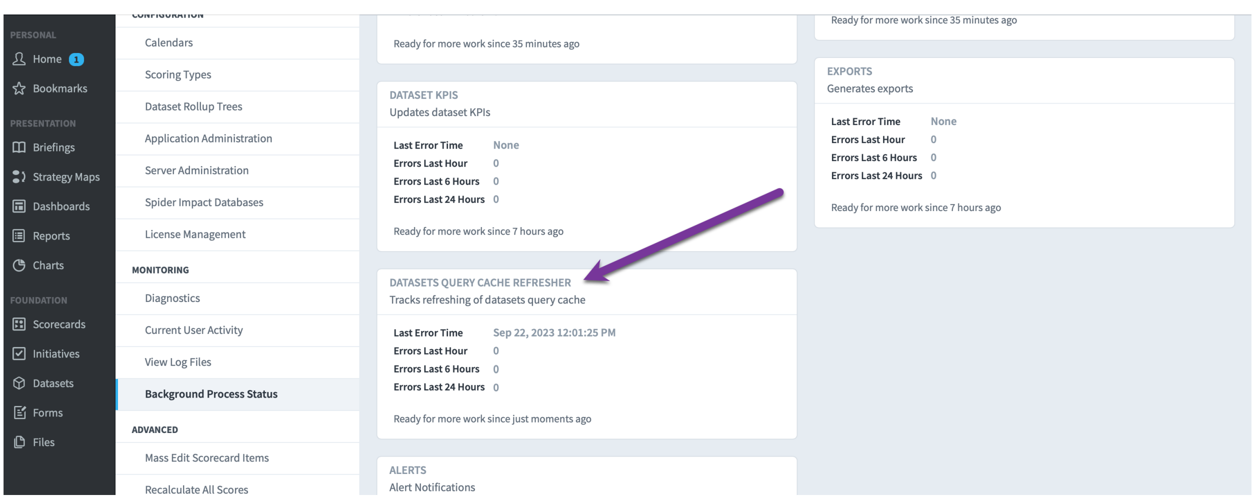
Spider Impact remembers the results of complex equations that take more than a couple seconds to run, showing these cached results the next time that information is displayed. This significantly improves performance by immediately showing data throughout the software.

For example, if a chart on a dashboard takes several seconds to display because it shows data from a complex equation, Spider Impact will cache the result of the equation as it is shown the first time. Then, all subsequent requests for that chart will immediately get the cached version rather than running the calculation every time.

When a dataset is updated with new data, however, all caches are cleared because the cached data can no longer be relied on to be accurate. This means that datasets that are regularly updated with fresh data often show uncached data because people are viewing the data for the first time since it was updated.

Spider Impact has a new cache clearing behavior to improve performance for datasets that have complex equations and are updated frequently. Instead of simply deleting caches when data is updated, Impact now also schedules these caches for automatic recalculation, all with no user interaction.

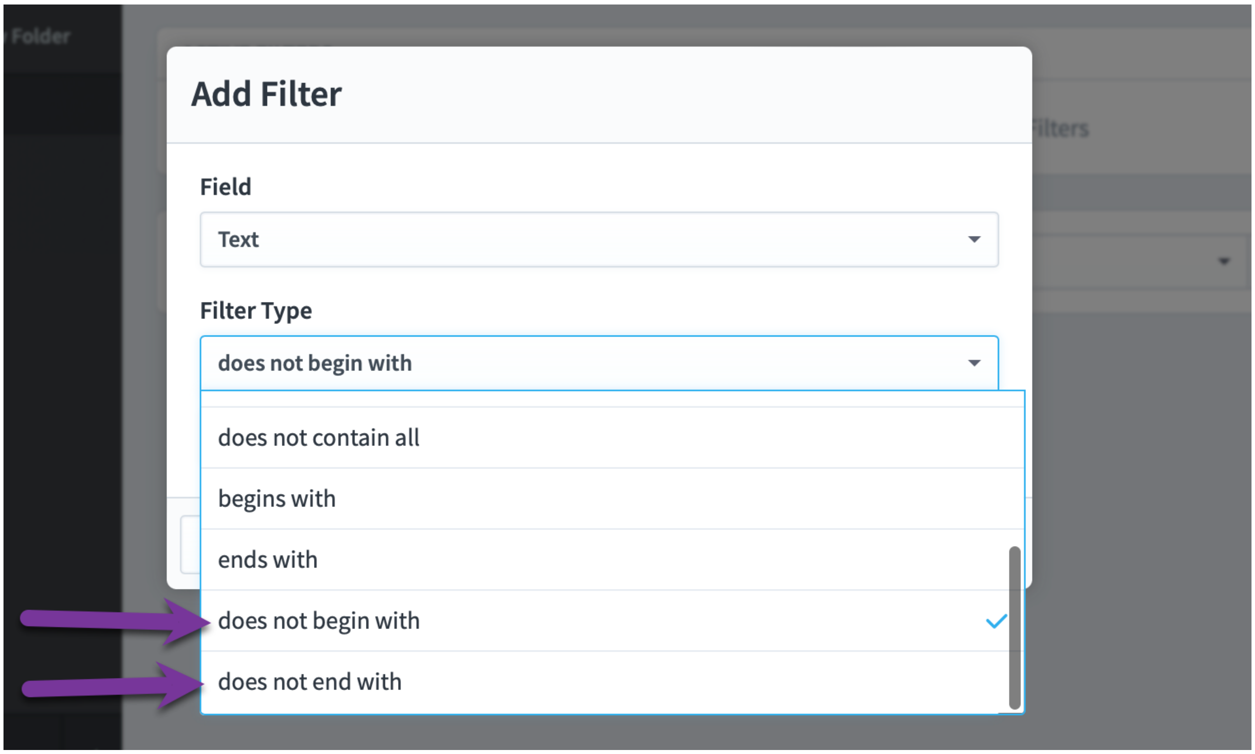
You can monitor this new cache rebuilding along with all of the other background processes on the Admin > Background Process Status screen.



Reports

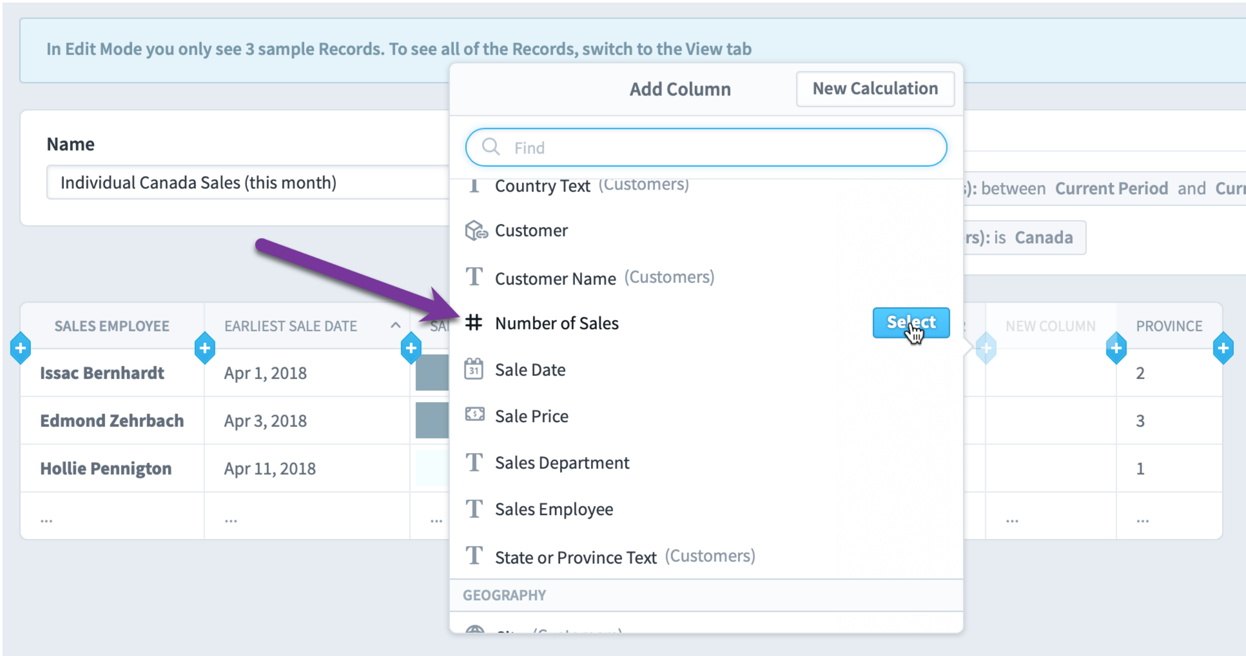
New “does not begin/end with” filters

There are two new filters, “does not begin with” and “does not end with”. These work for all existing filter areas like reports and dashboards, and they work for all item types like dataset fields and scorecard items.



“Number of" report columns

For reports that are hiding individual records, you can now add a “Number of” column that shows how many individual records are being aggregated in each report row.



Dynamically referencing current organization in SQL reports

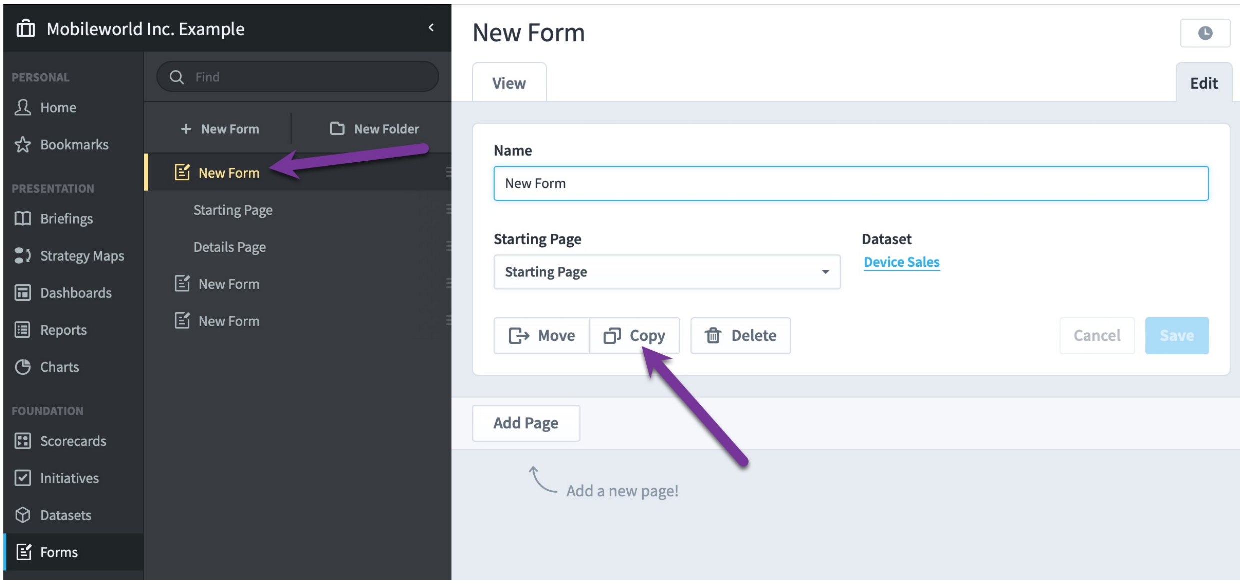
Administrators can now include [organization-id] in the SQL they write for SQL reports to reference the report's organization's ID. This is similar to current functionality that allows references to [calendar-period-id], and it helps administrators to quickly deploy similar reports to multiple organizations.

For more information, see the SQL Reports support article: https://support.spiderstrategies.com/hc/en-us/articles/360041612811-SQL-Reports

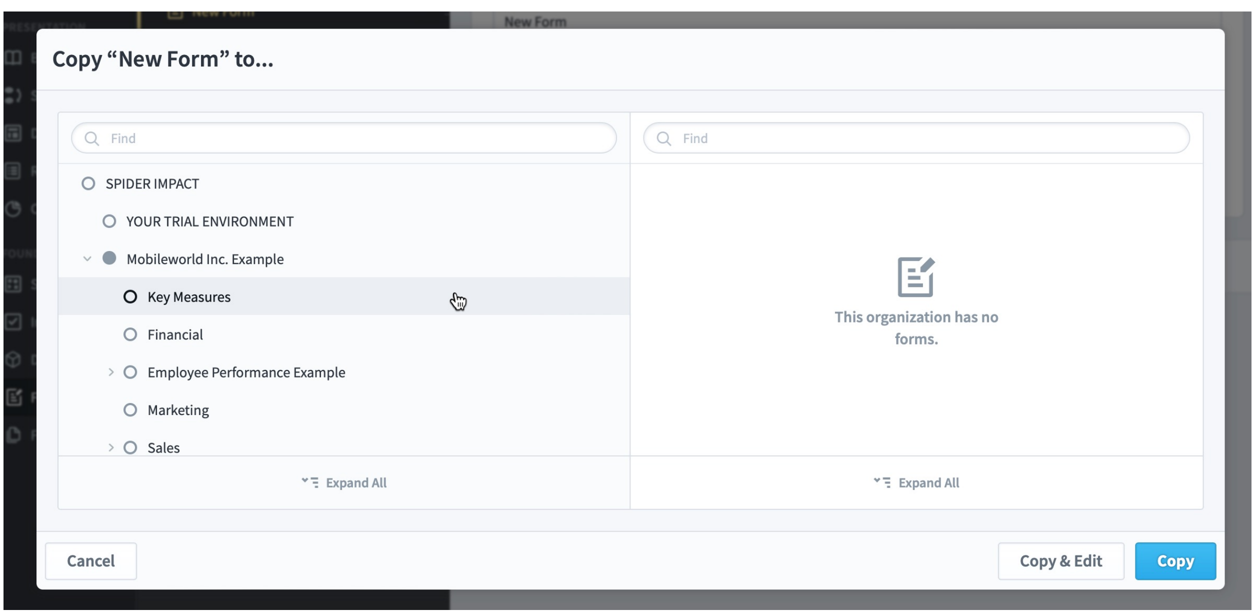
Forms

Copying forms and duplicating form pages

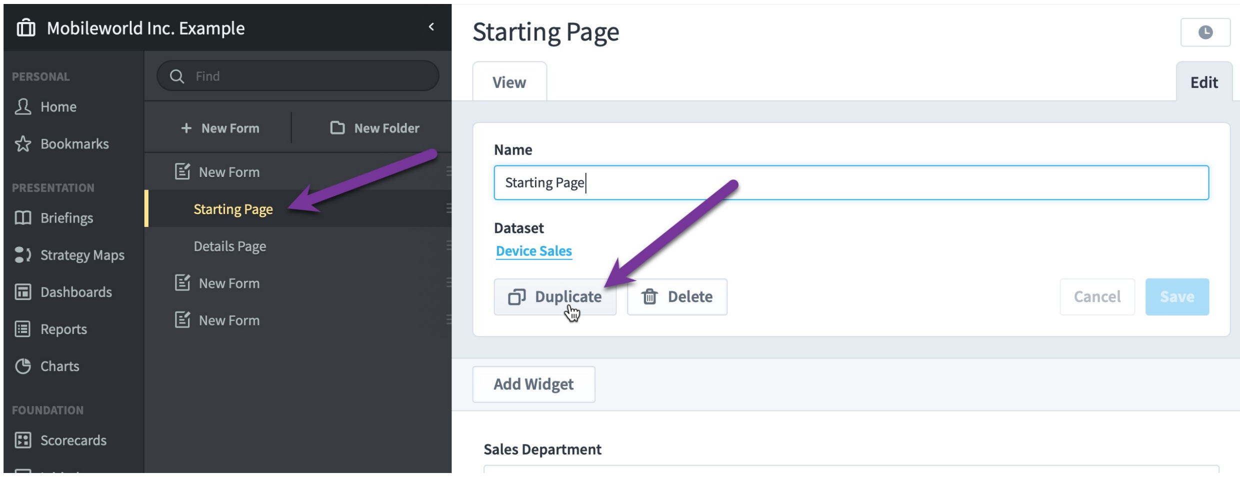
You can now create a copy of a form that includes all of its pages. Just go to the form's Edit tab and click Copy.



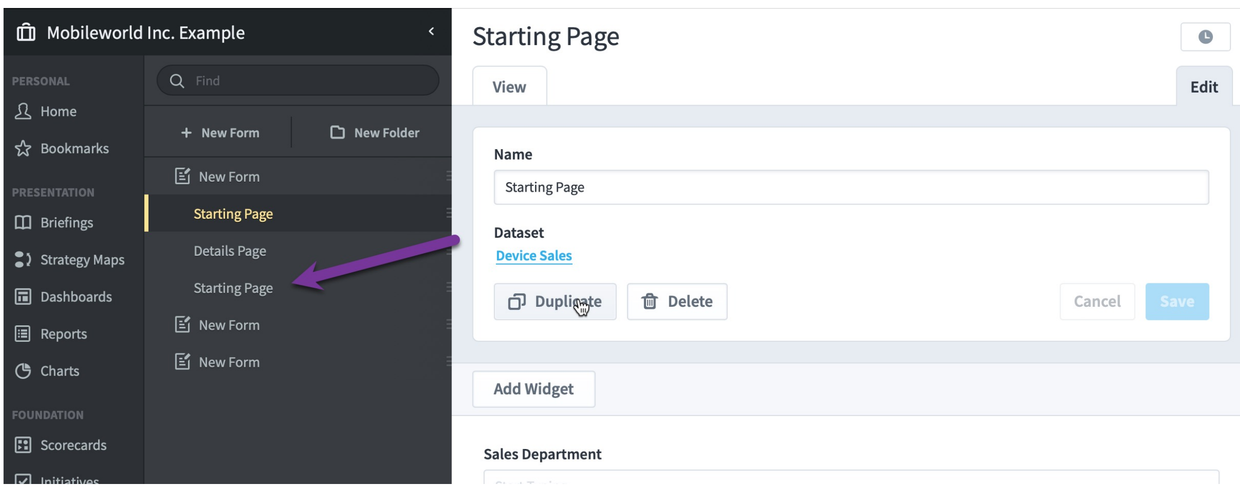
Then choose the organization you want to copy the form to.



You can also duplicate a page within a form. To do this, go to a form page and click Duplicate.



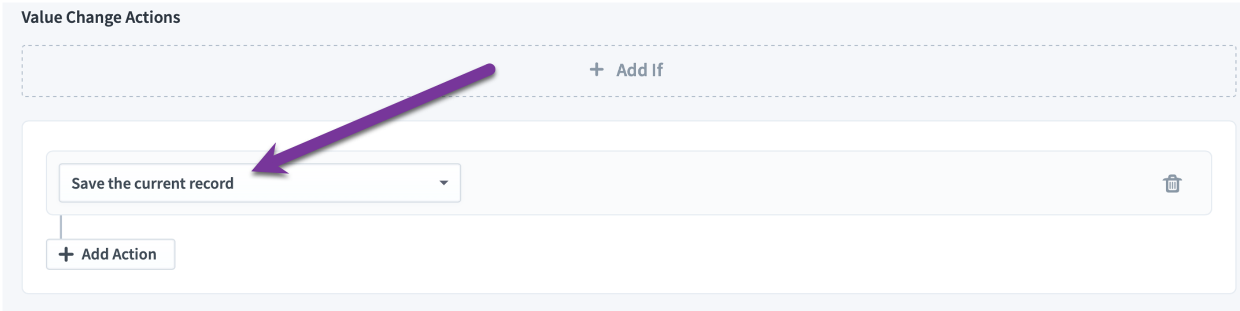
A copy of this form page will show up at the bottom of the list of pages for that form.



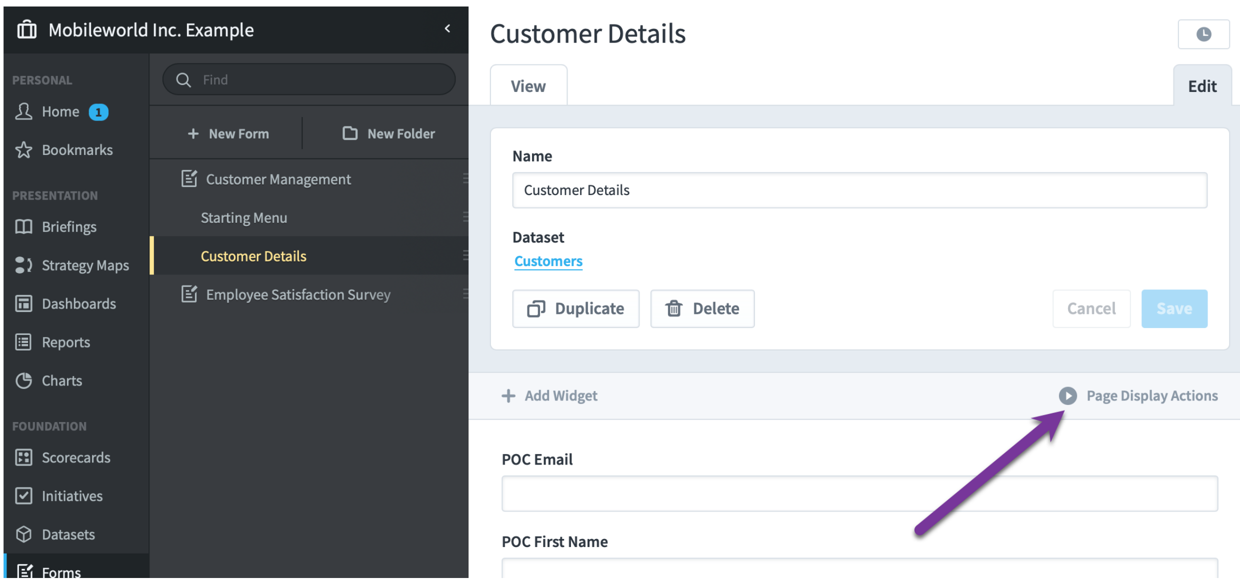
Advanced logic for form actions

Forms now support advanced logic, allowing the creation of surveys and mini-apps that dynamically change based on user input.

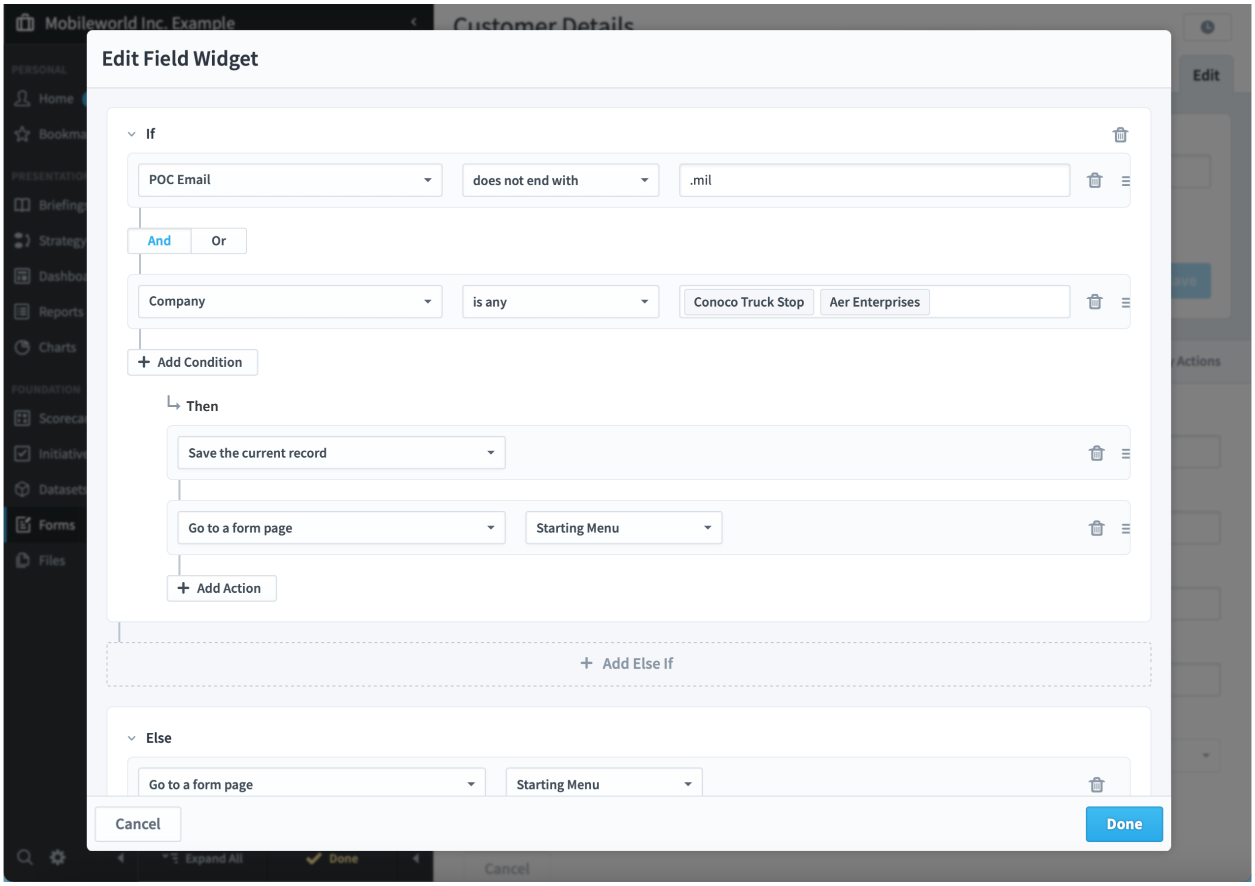
Everything starts with the new ways that form actions can now run. In addition to existing functionality that runs actions when a user clicks a button, form administrators can now choose to run actions when values in Single Field widgets change.



They can also choose to run actions when a page initially displays to set the correct starting values of widgets.



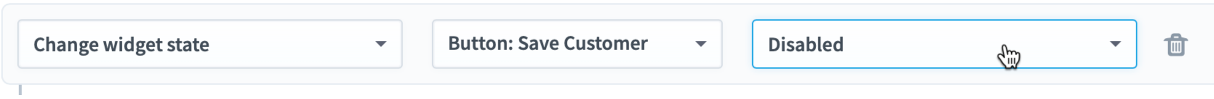
Most importantly, all of these actions support advanced IF/ELSE logic with multiple levels of AND/OR conditions.



Disabled and Hidden widget states

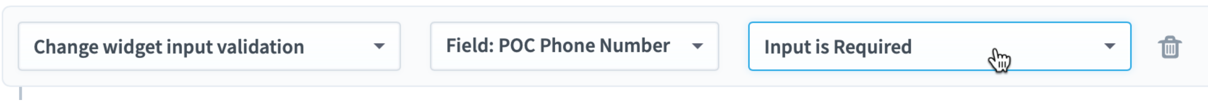
There are two new states that form widgets can be. Disabled widgets appear on the form, but they are grayed out and can't be interacted with. Hidden widgets are not shown at all.

Form actions can take advantage of these new states, creating actions that hide/show and disable/enable form widgets based on other values the user has entered.



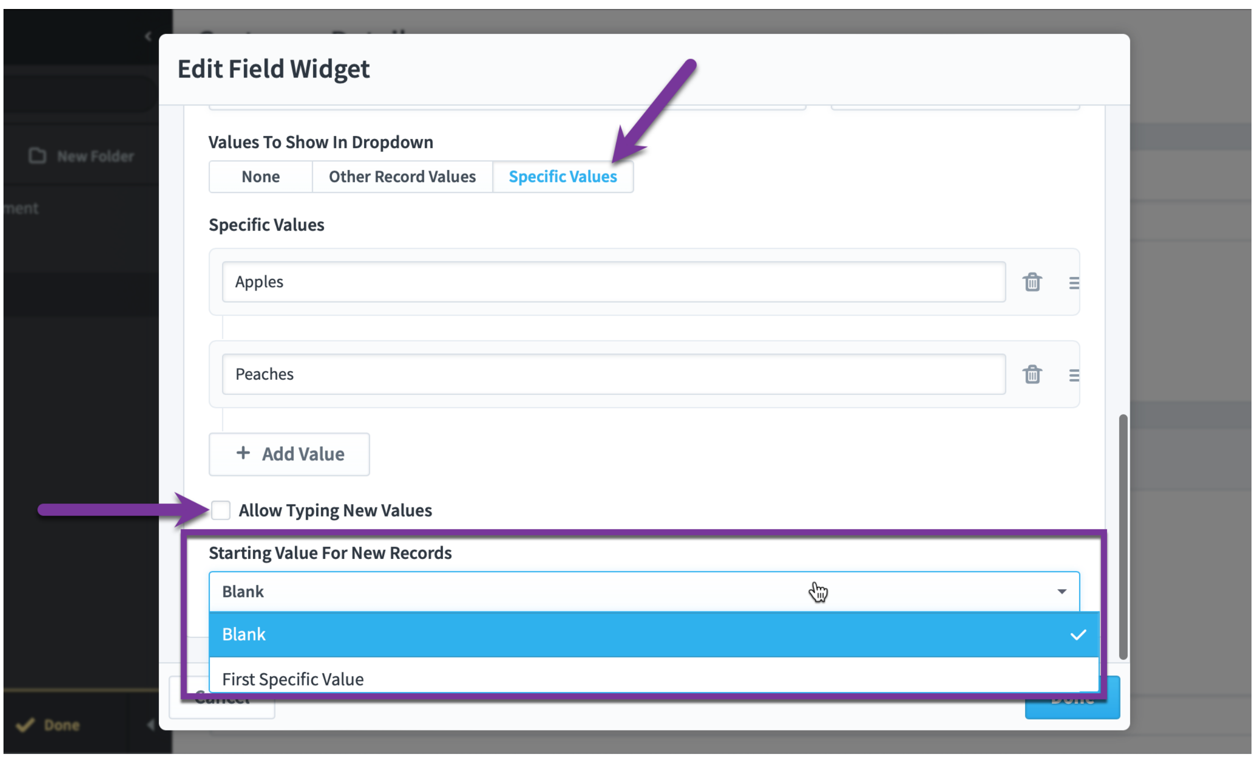
Action to change widget input validation

Another new type of form action is the ability to “Change widget input validation”. This allows administrators to dynamically make input required or optional.



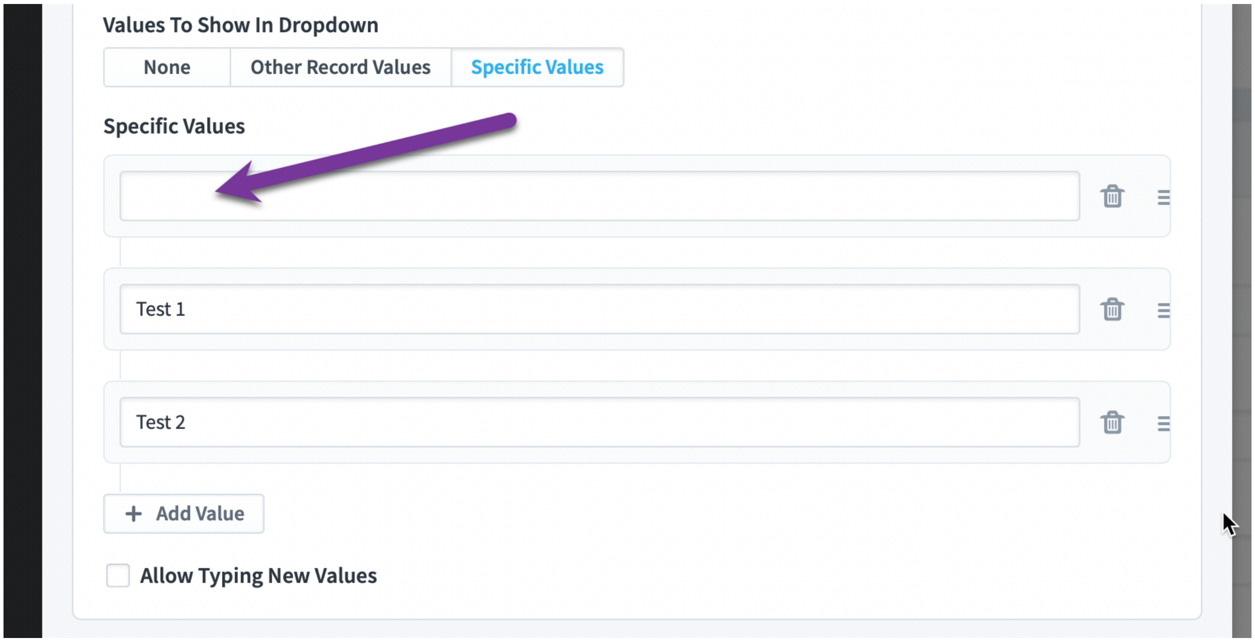
Form widgets can default to blank but still require input

You can now create form widgets that default to blank, but don’t accept blank values as acceptable input. To do this, choose to show “Specific Values” and don’t allow typing new values. You can then choose the starting value for new records to either be blank or the first specific value in the list.

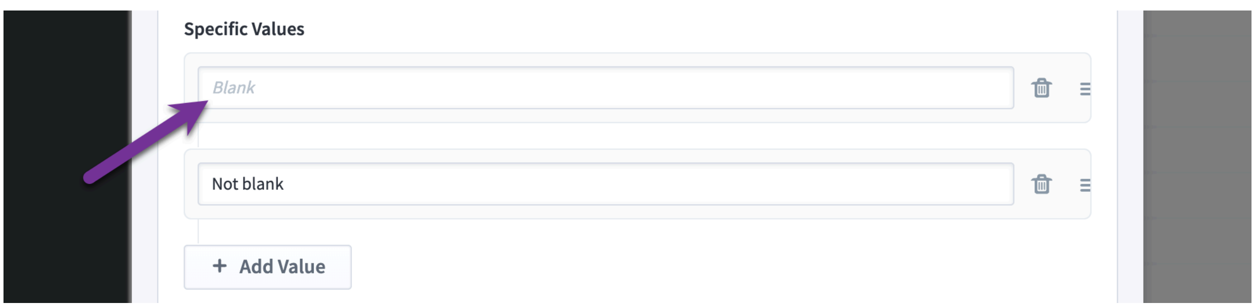


Blank placeholder when editing form widgets

In the past, blank values for form widgets showed as completely empty when editing specific values.

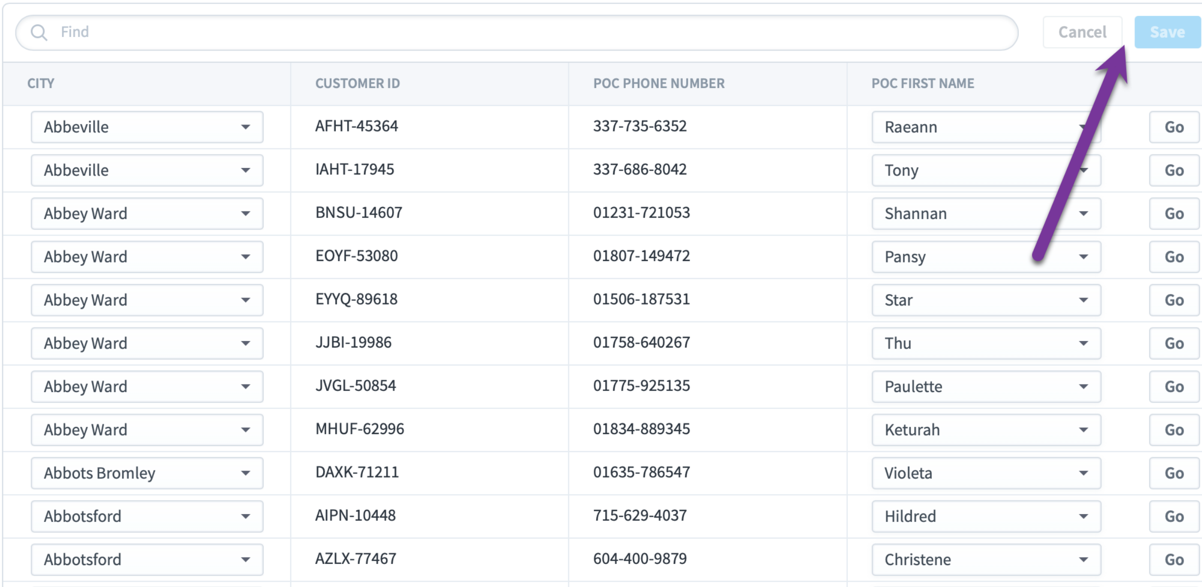


Blank values now have a light gray "Blank" placeholder to make it more obvious that nothing will appear outside of edit mode.

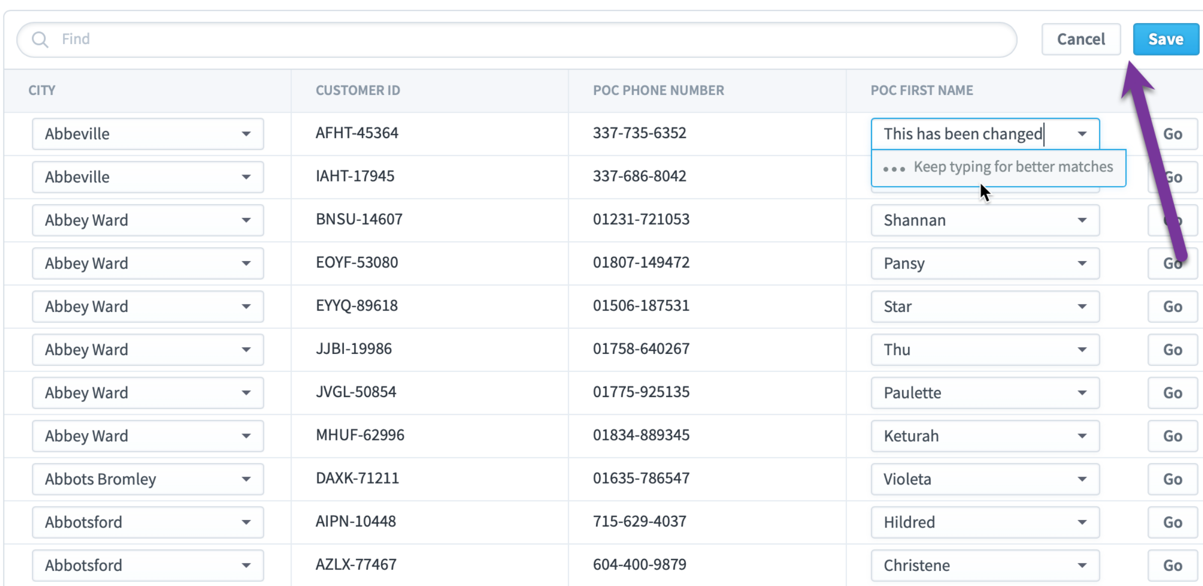


Save and Cancel buttons disabled when record list widgets have no changes

Form record list widgets have Save and Cancel buttons. When there are no changes to save, these buttons now have a disabled appearance and are not clickable.



When there are changes to save, the buttons are enabled. This allows users to see at a glance if their changes have been saved or not.



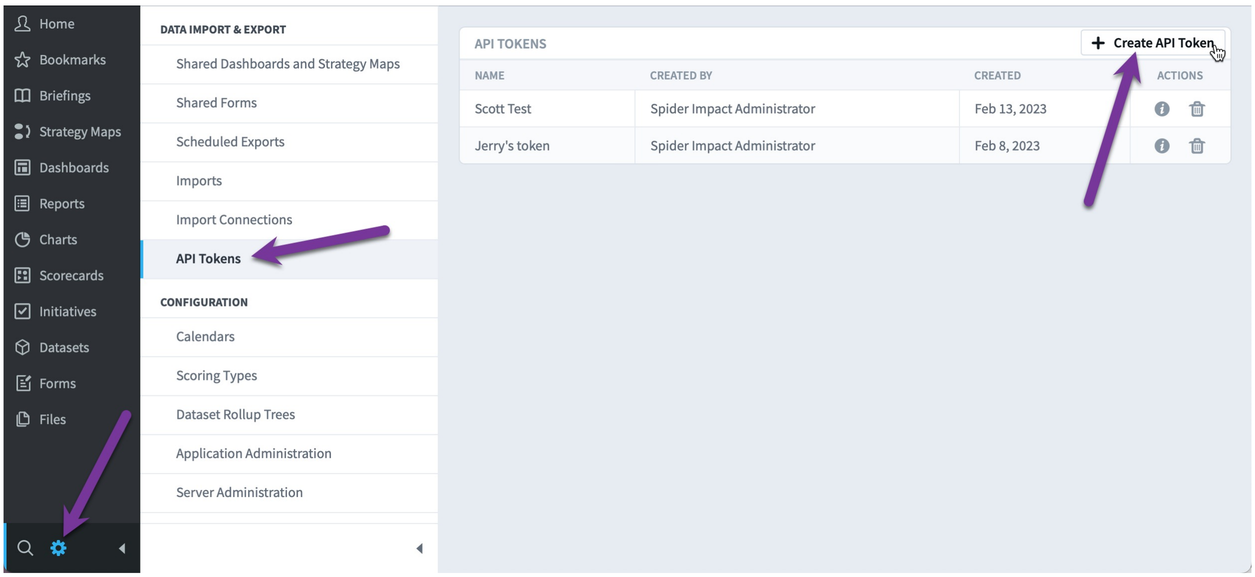
Ability to advance to next form page without any changes

In the past, you needed to make a change on a form page before you could advance to another form page. You can now click between form pages even if you haven't made any changes.

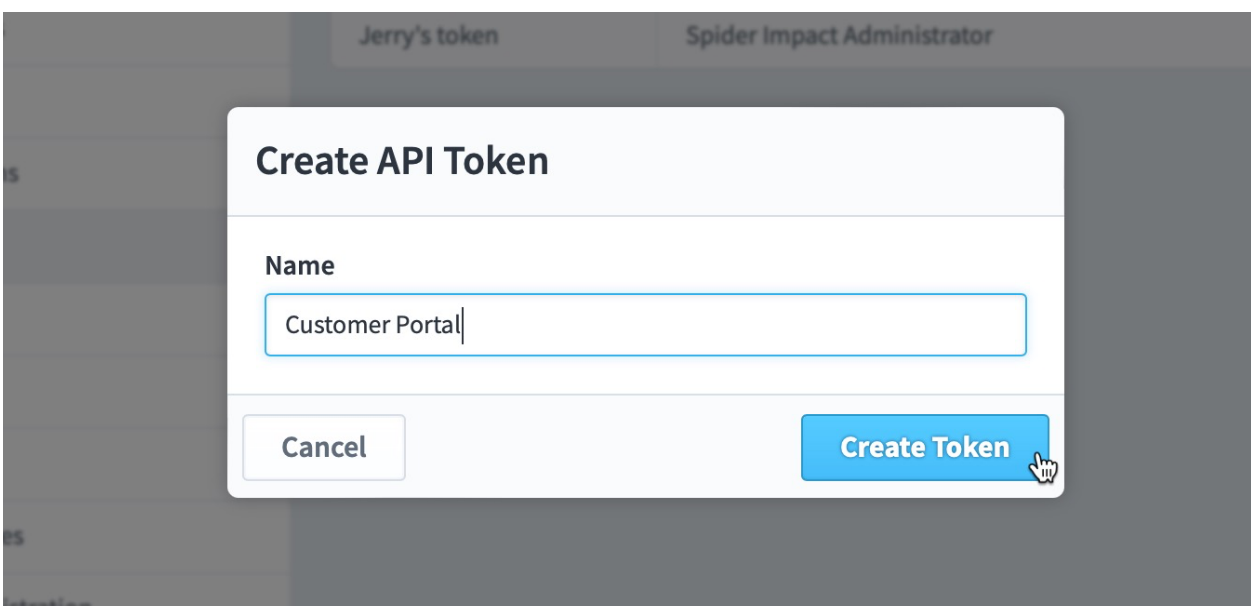
Import & Export

Read-only API for Scorecards

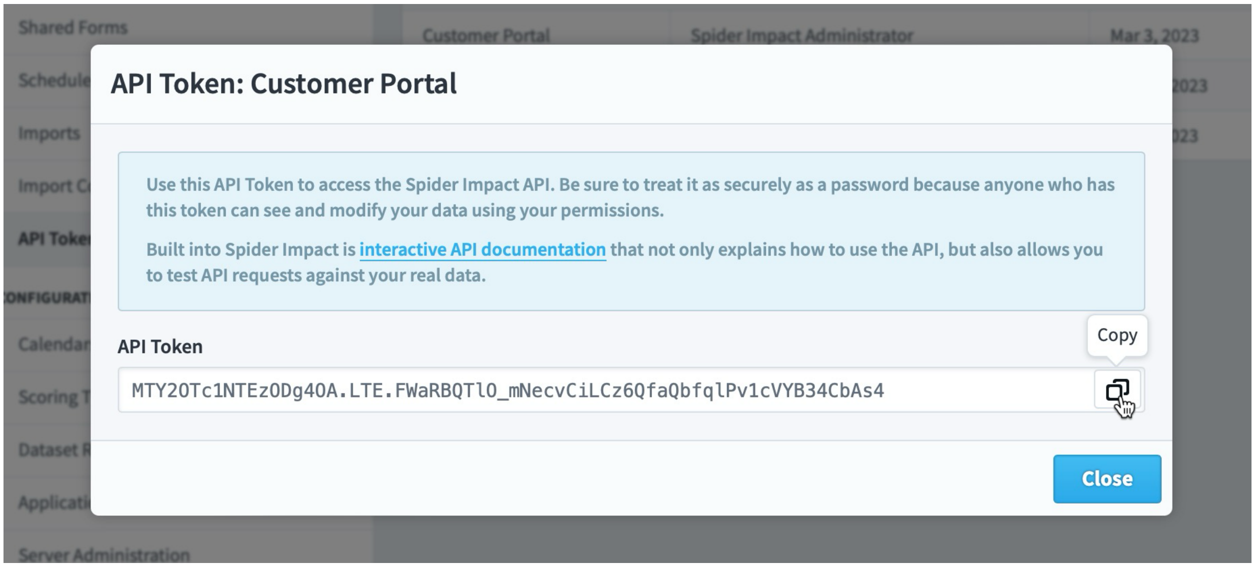
Spider Impact 5.6 introduces an API for other software to read information about organizations and scorecards. To manage API tokens, go to the new API Tokens screen in administration.



When you click "Create API Token" it shows this dialog where you give your new API token a name. It's a good idea to call it something related to the computer or software that will be using it.

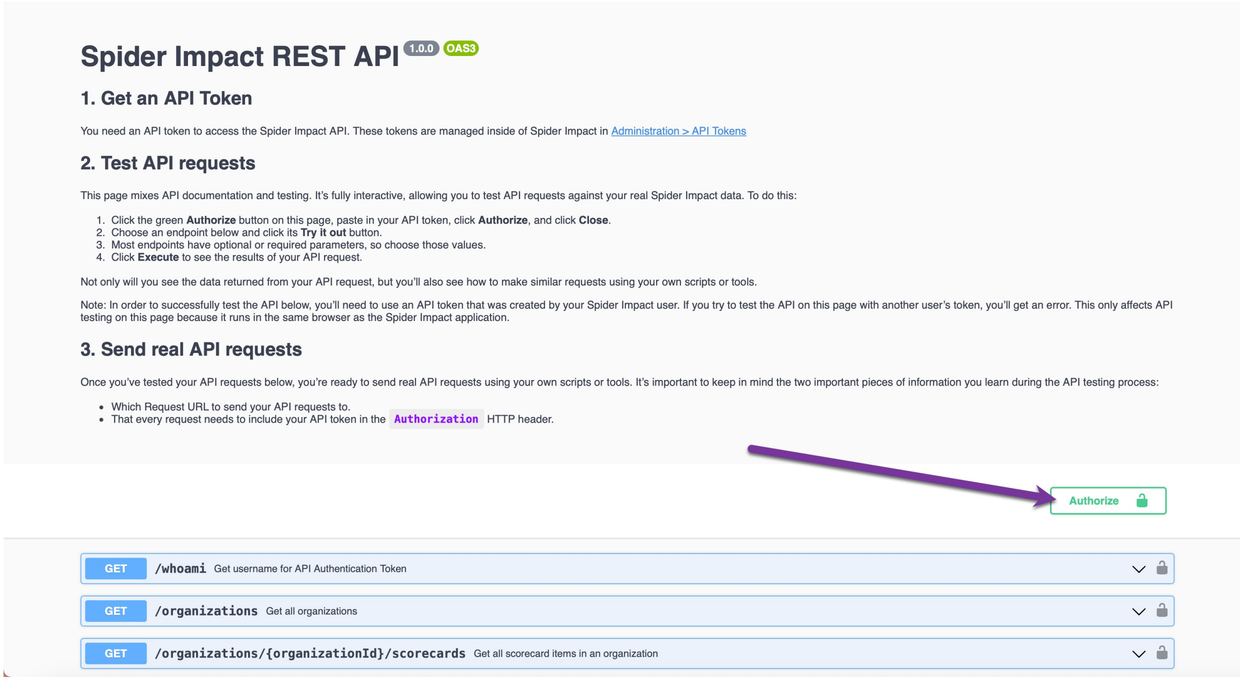


You now have a new API token, and anyone who uses it will interact with Spider Impact as the user you're logged in as right now. Copy the API token by clicking on the Copy link on the right.

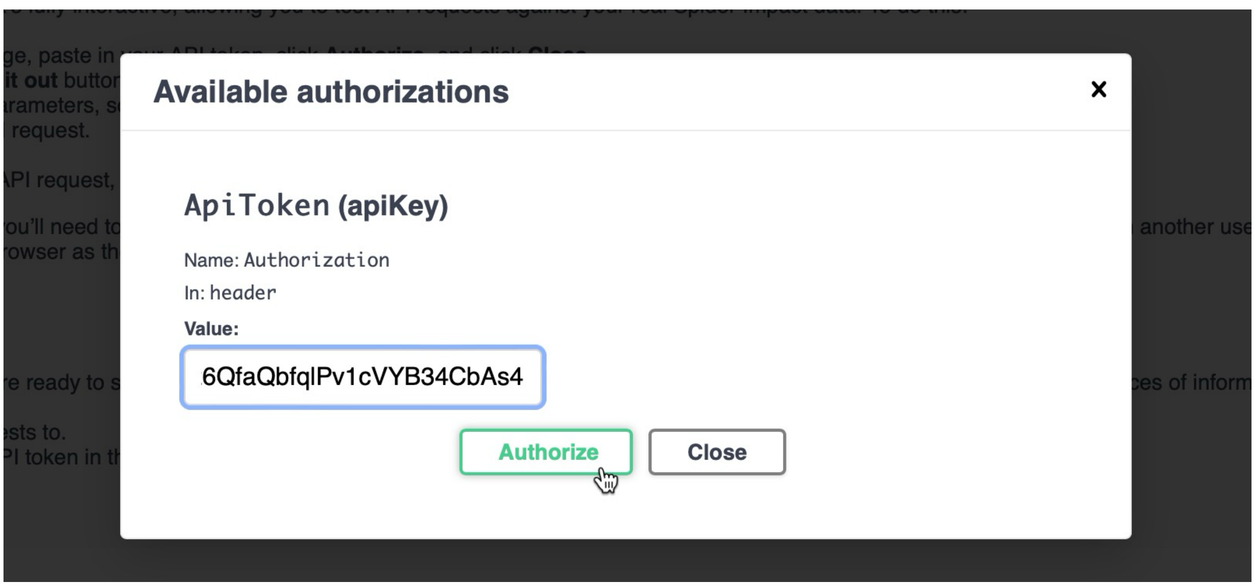


In the blue instructions on top, you'll also see an "interactive API documentation" link. When you click this, you'll be taken to the full API documentation that is part of your installation of Spider Impact. This is accessible at a URL like https://yourserver.com/resources/api-docs/api-docs.html.

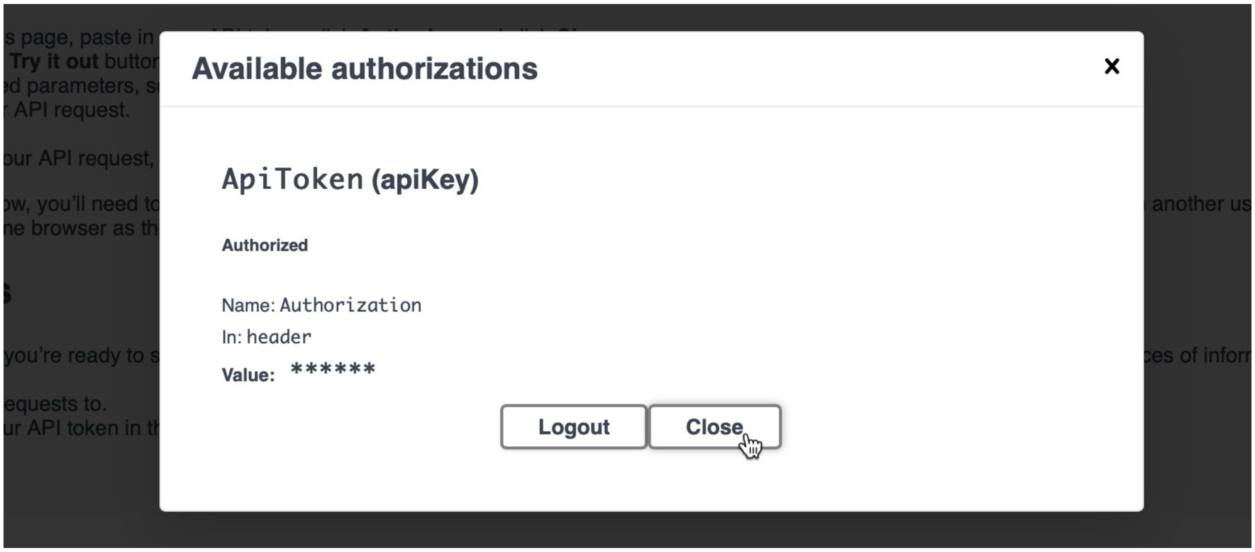
This documentation page explains how to communicate with Spider Impact's API. It also allows you to test the API by interacting with your real data. To start, click the green Authenticate button.



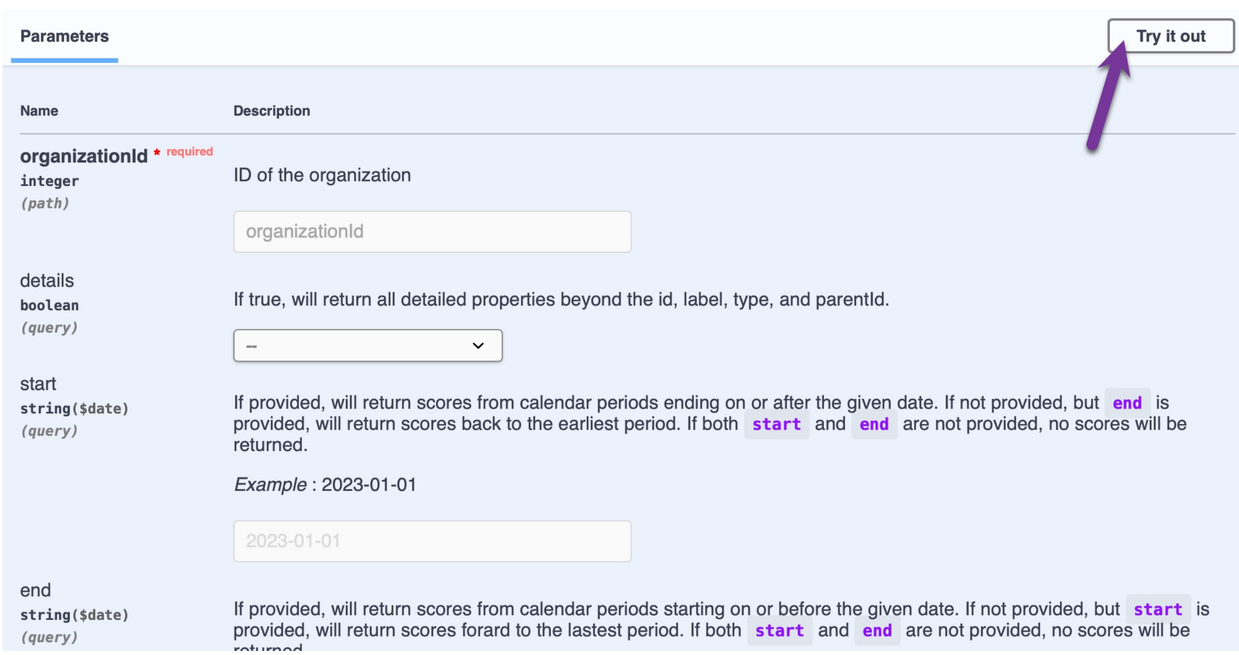
Then paste in your API Token and click Authorize.



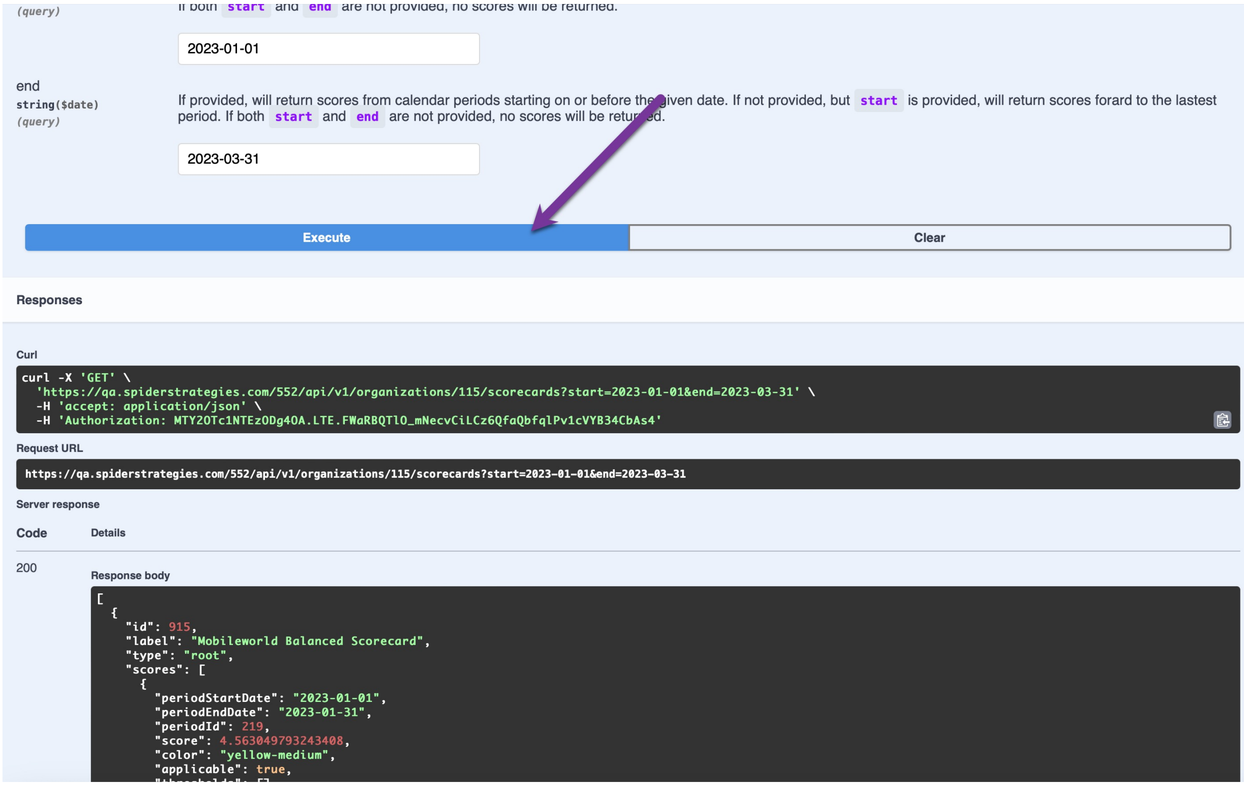
Finally click Close.



Now, when you're viewing the API documentation, you'll be able to click the "Try it out" buttons.



These allow you to directly interact with your real data. In this example we've chosen to view information about a specific scorecard, and then clicked the Execute button. The interactive documentation not only shows you the results from the server, but it also shows you the exact request you need to make to the API to get that same data.

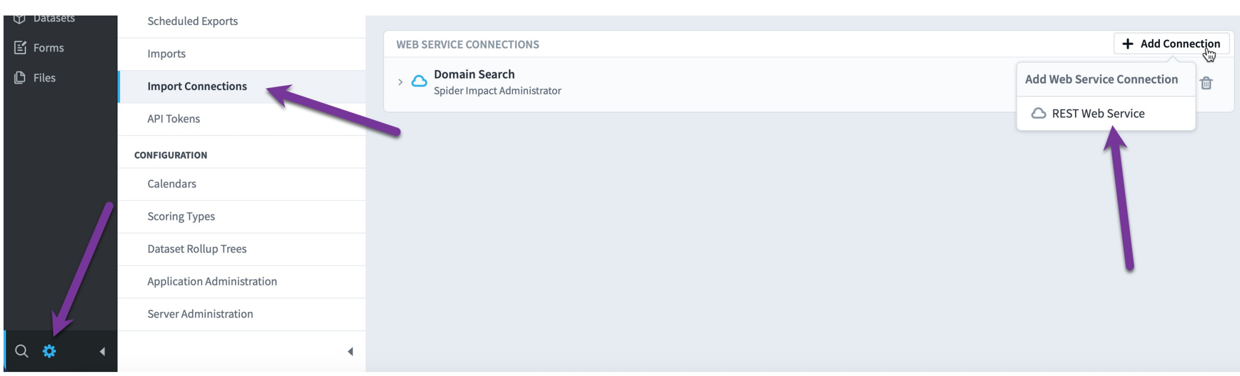


Importing data from REST web services

Spider Impact can now pull data from REST Web Services. This significantly expands the number of data sources that are available for importing scorecards, KPI values, initiatives, initiative values, and datasets.

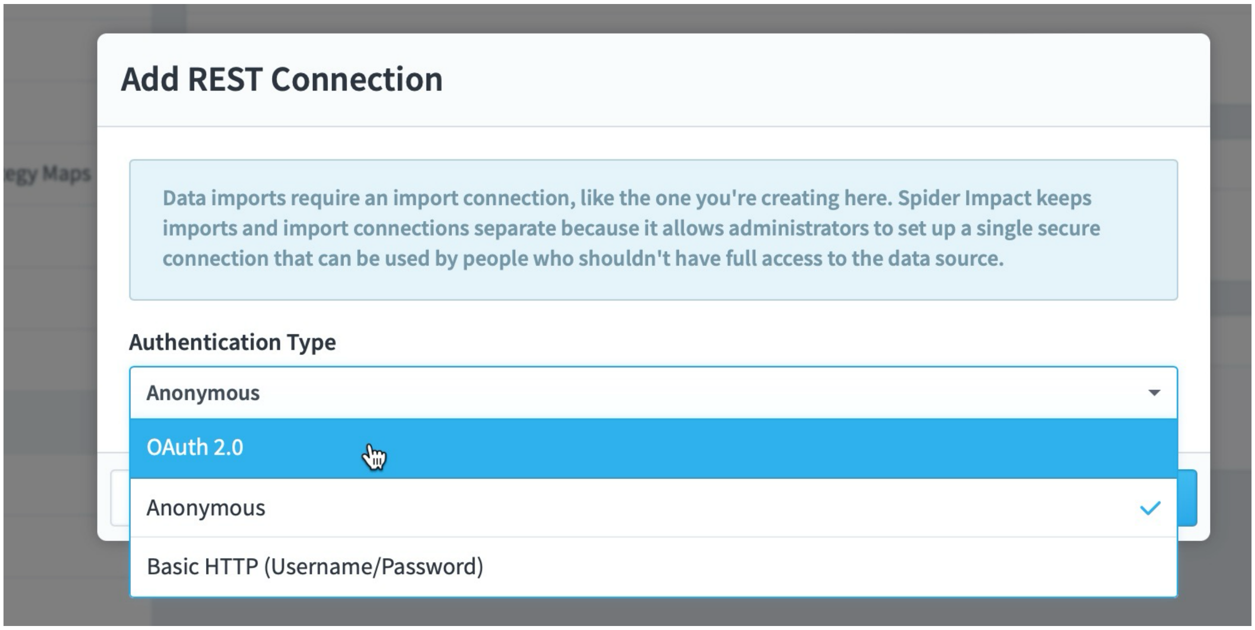
REST Import Connections

REST import connections are managed with the other import connections on the Admin > Import Connections screen. To create a new connection, click "Add Connection" and choose "Rest Web Service".



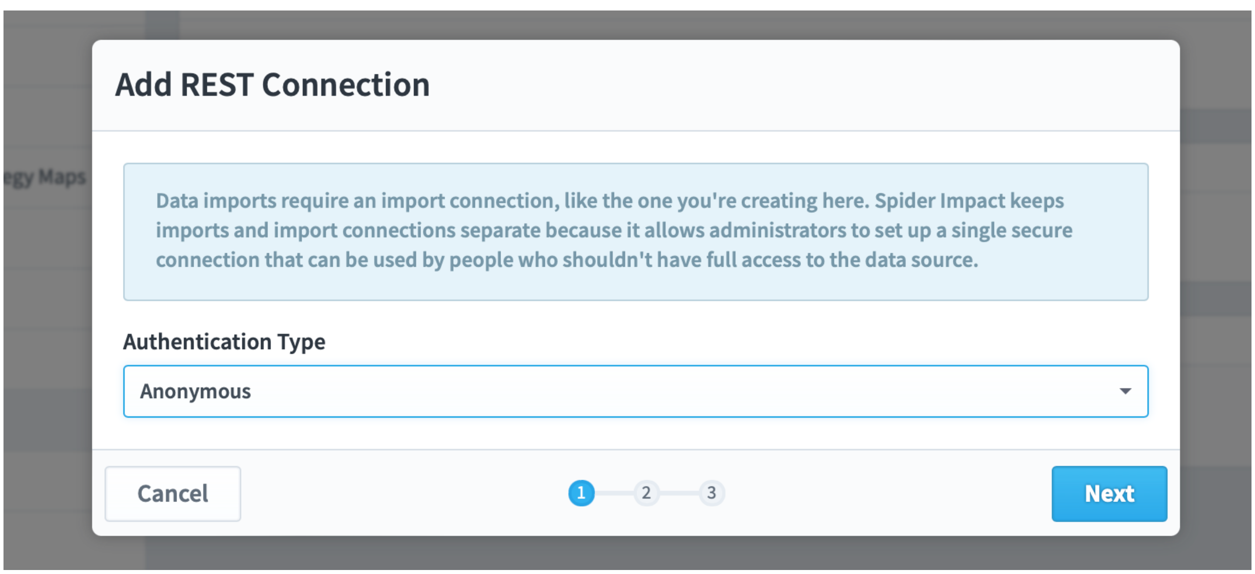
There are three authentication types:

- OAuth 2.0
- Anonymous
- Basic HTTP (Username/Password)

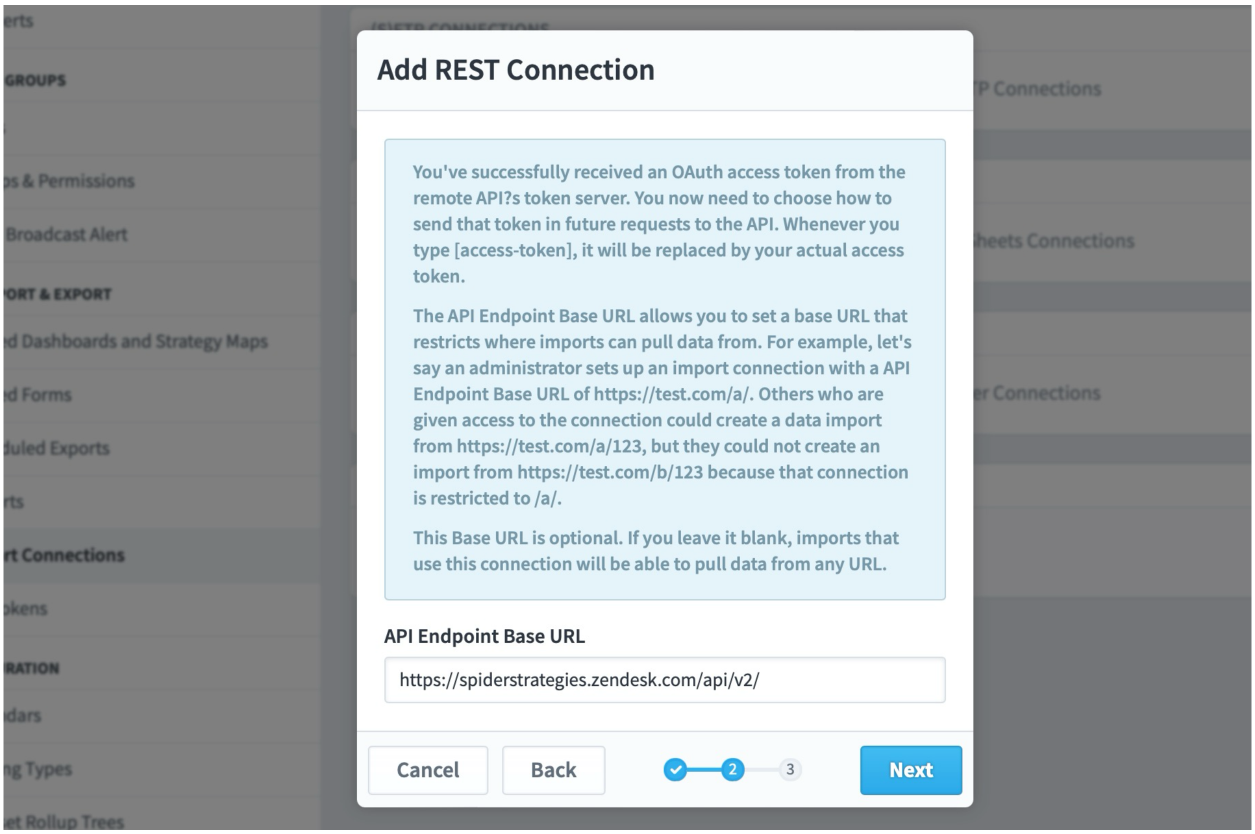


Anonymous Authentication

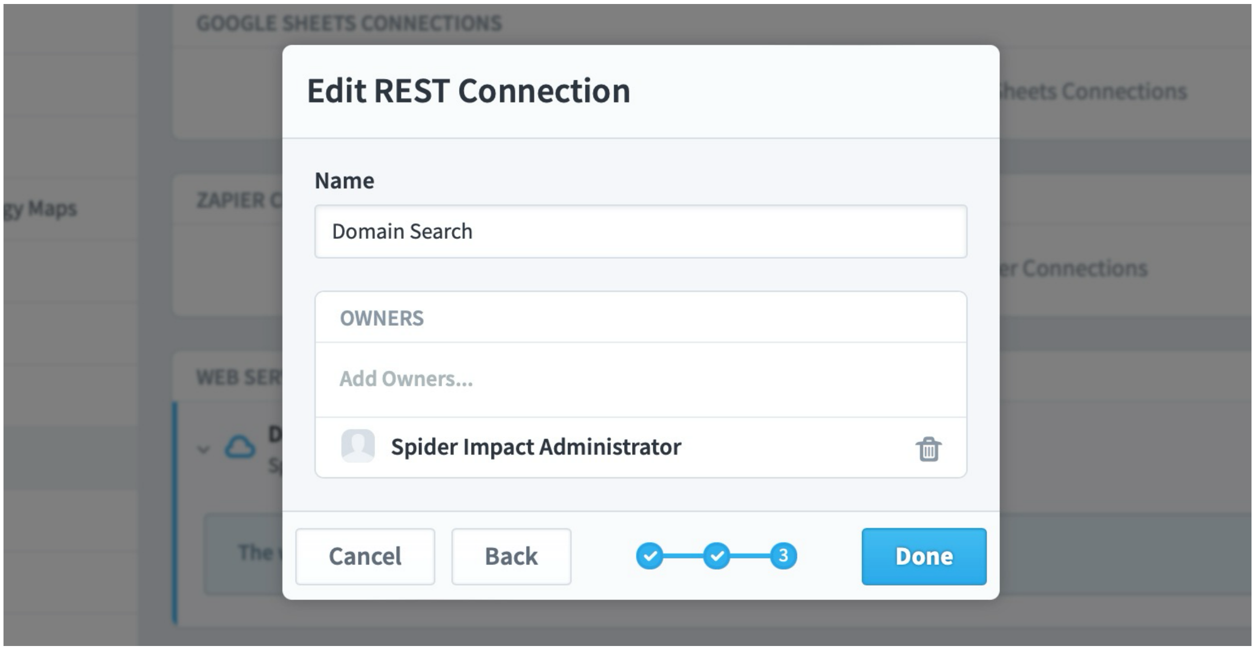
Anonymous authentication is the simplest and allows you to pull data from web services that don't require authentication. You can find data sources for testing at https://github.com/public-apis/public-apis.



The API Endpoint Base URL is an optional field that allows you to restrict what URLs you can visit with this connection. For example, if you used `https://spiderstrategies.zendesk.com/api/v2/` for the base URL, imports using this connection could pull data from `https://spiderstrategies.zendesk.com/api/v2/metrics` but they couldn't pull data from `https://spiderstrategies.zendesk.com/something`. If you leave the Base URL blank, imports will be able to use any URL.

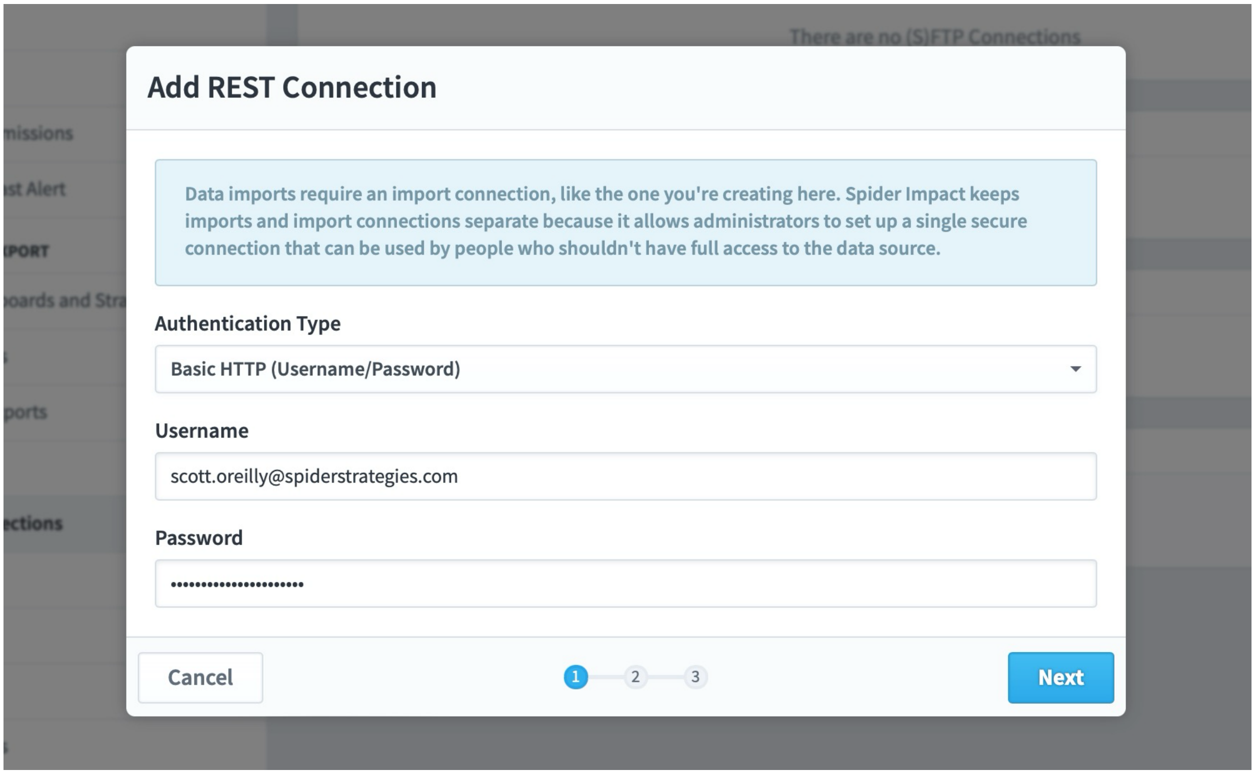


The final step is assigning owners who can use this import connection.



Basic HTTP (Username/Password) Authentication

Basic HTTP authentication sends a username and password to the API server.

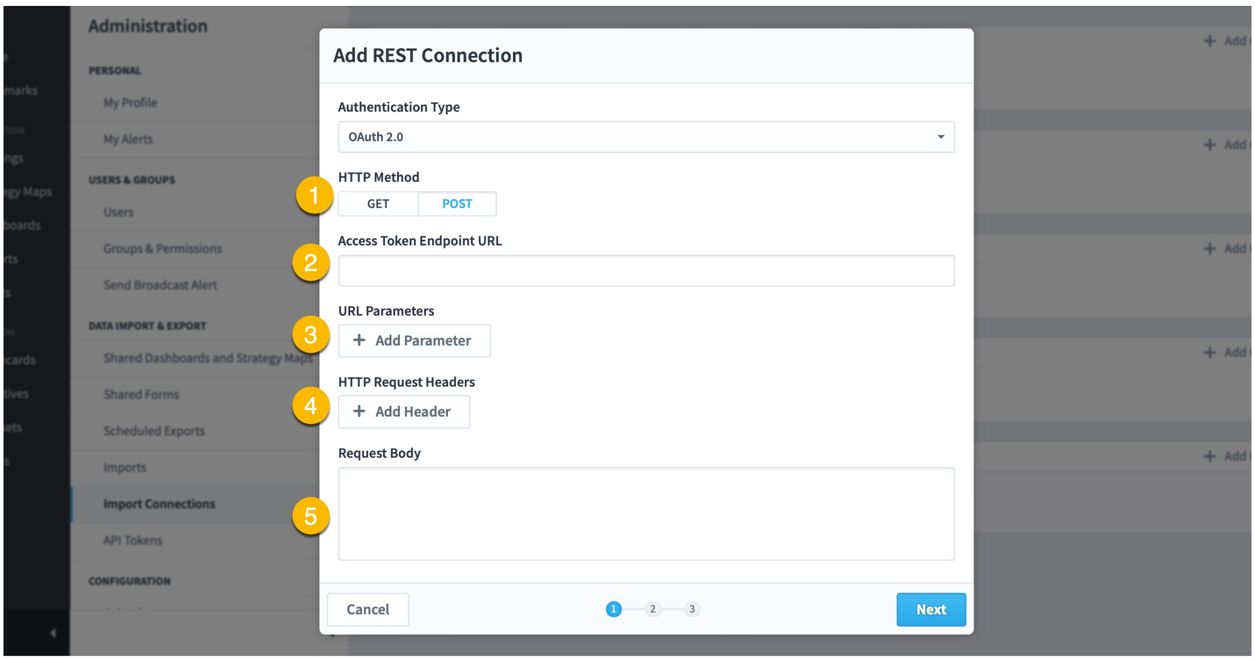


Steps 2 and 3 for Basic authentication are the same as Anonymous authentication. You choose an API Endpoint Base URL, and then assign ownership to the connection.

OAuth 2.0 Authentication

OAuth 2.0 is the most complicated authentication type because there are two parts. First you get an Access Token. Then you use that Access Token in all further communication with the API get the data you want.

The first step in the new import connection wizard is all about the first part of OAuth communication. We need to send information to the Access Token server in order to get back an Access Token. The way you send this information is different for every API, so there are quite a few options available.



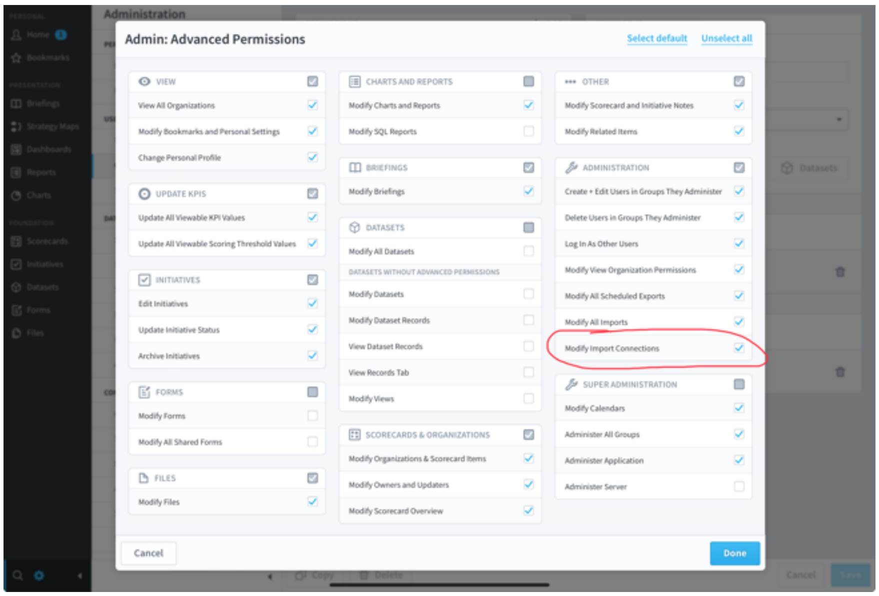
1. The HTTP Method is either GET or POST. If you're unsure, stay with the default of GET.
2. The Access Token Endpoint URL is the URL of the server you're communicating with to get the Access Token.
3. Specify any URL parameters here rather than in the query string. For example, rather than using an endpoint URL of `https://test.com?var1=apple&var2=orange`, you'd use an endpoint URL of `https://test.com` and set `var1` and `var2` as URL parameters. This automatically encodes the information you're sending and allows other URL parameters to be added later.
4. It's common to set HTTP Request Headers like Authentication and Accept.

5. The Request Body is only available when the HTTP Method is POST.

When you click Next, Spider Impact will get an access token from the API server and will move you to step 2 of the wizard. This second step is all about choosing what data you want to send along with every future request to the API.

Security Note for Self-Hosted Customers

It's important to note that all users who have the Modify Import Connections permission have the ability to communicate from the Spider Impact server to other servers. This is by design so Spider Impact can pull in data via web services.



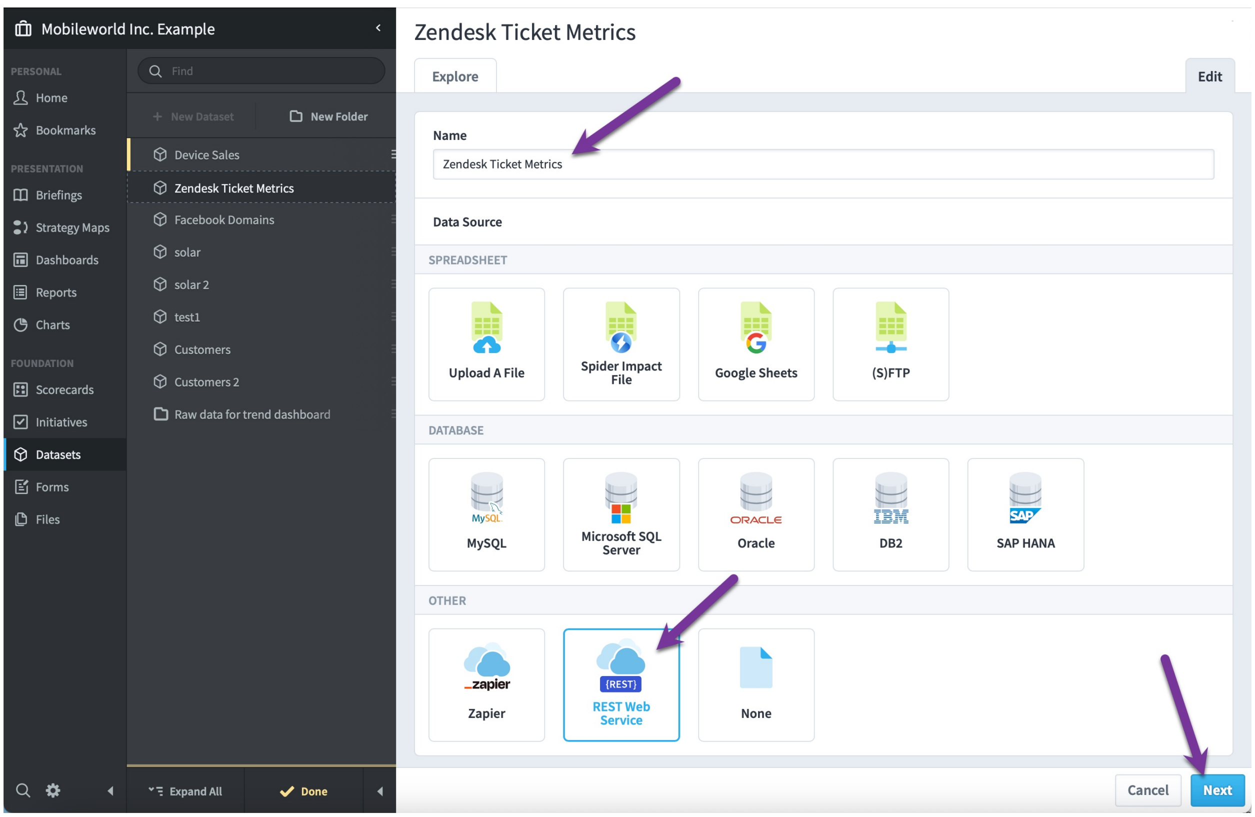
It is the responsibility of customers who manage their own instances of Spider Impact, however, to ensure that the Spider Impact server is properly restricted from accessing sensitive internal information. This can be accomplished via router configuration, hardware firewalls, or on the operating system via Linux IP Tables or Windows Firewall. This is already managed by Spider Strategies for hosted customers.

For example, if you have Spider Impact installed at an internal datacenter and the Spider Impact server isn't restricted from communicating with other servers at that datacenter, users with the Modify Import Connections permissions can communicate with those other servers. Again, this design is intentional for pulling in data via web services, but it's important to note.

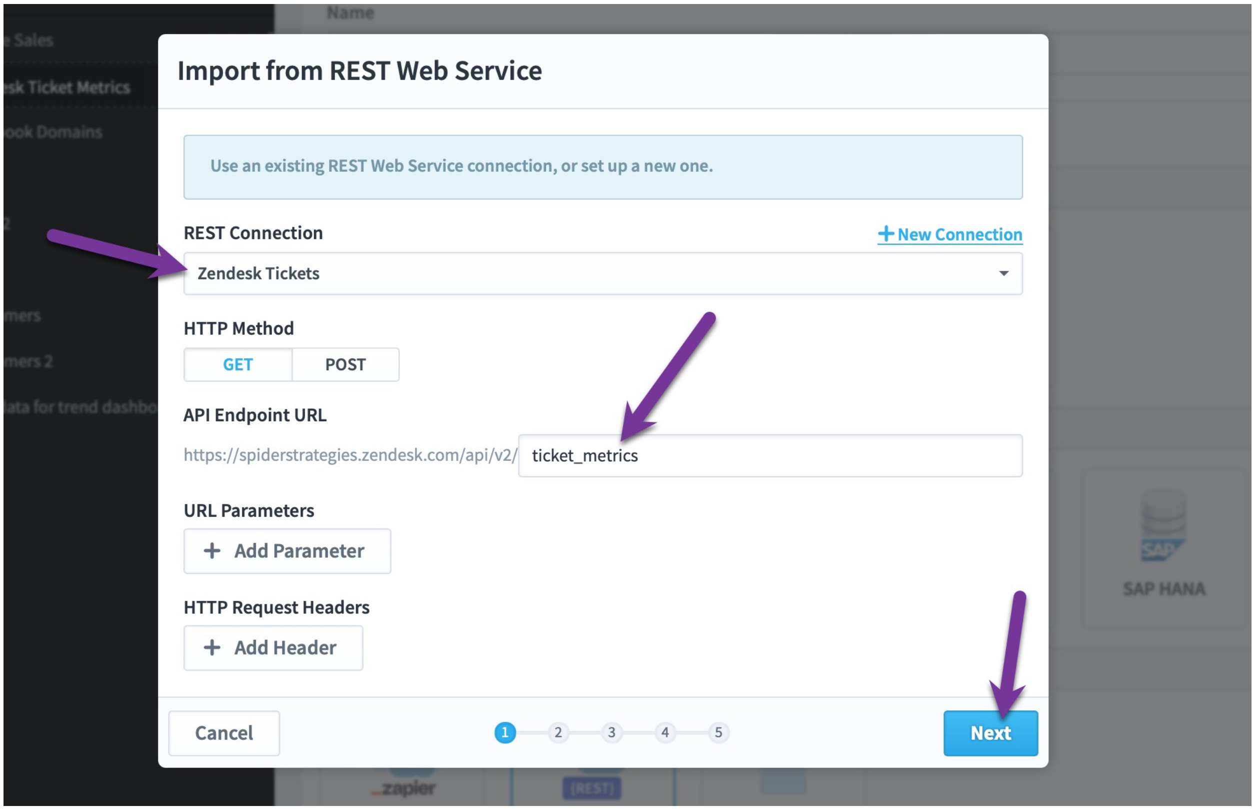
Spider Impact was designed to have import connections separate from actual data imports for this very reason. System administrators with open network access can set up connections to data sources, and then normal users can use those data source connections to securely build data imports.

REST Imports

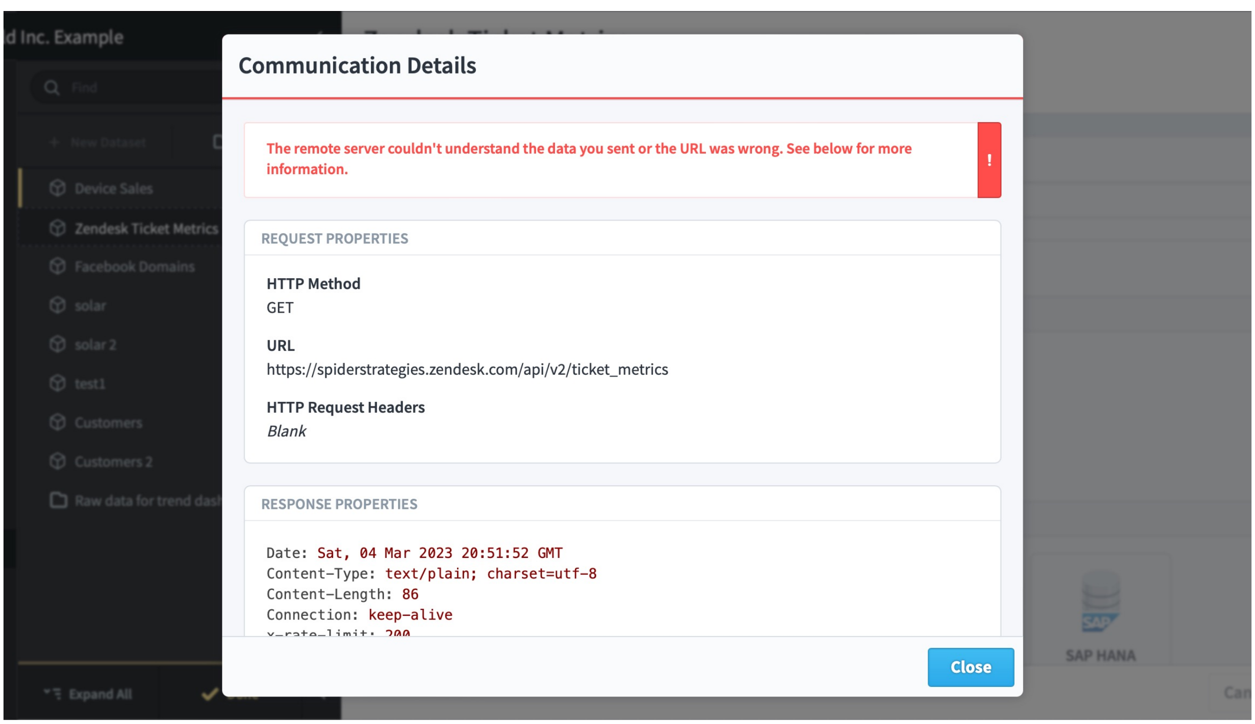
To import data from a REST Web Service, choose the new "REST Web Service" item in the data source menu.



Because we've already specified all the authentication information as part of the import connection, all we have to do is add `ticket_metrics` to the end of the API URL. We'll try to advance to the next step by clicking Next.

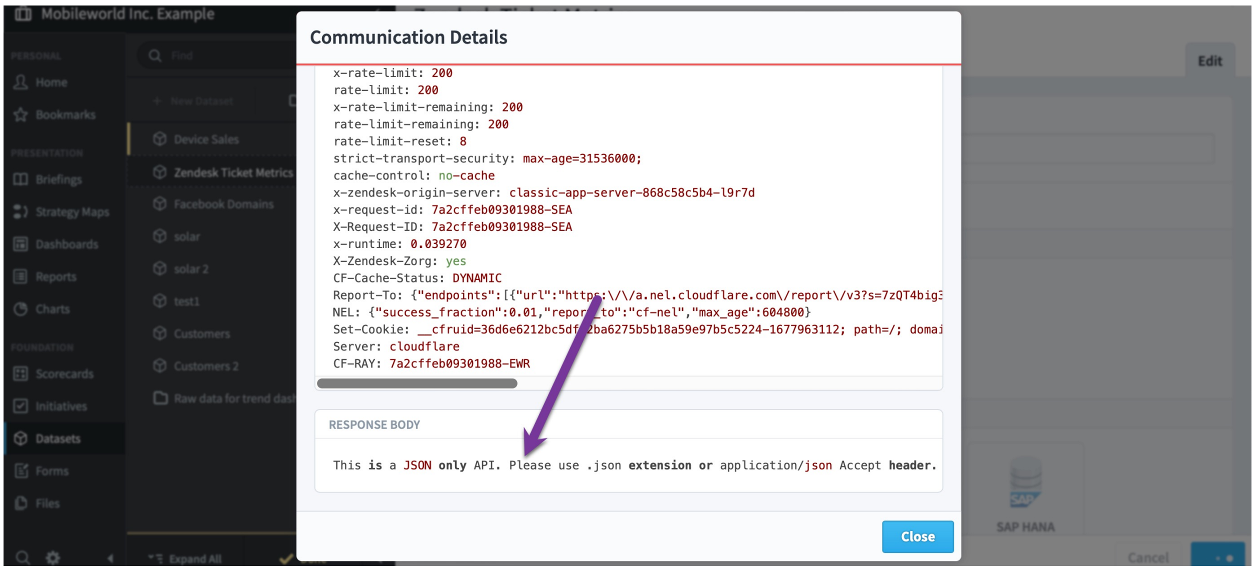


In this example there's an error getting data from the server. When that happens, Spider Impact will show a second-level dialog that contains the error message and debugging info.

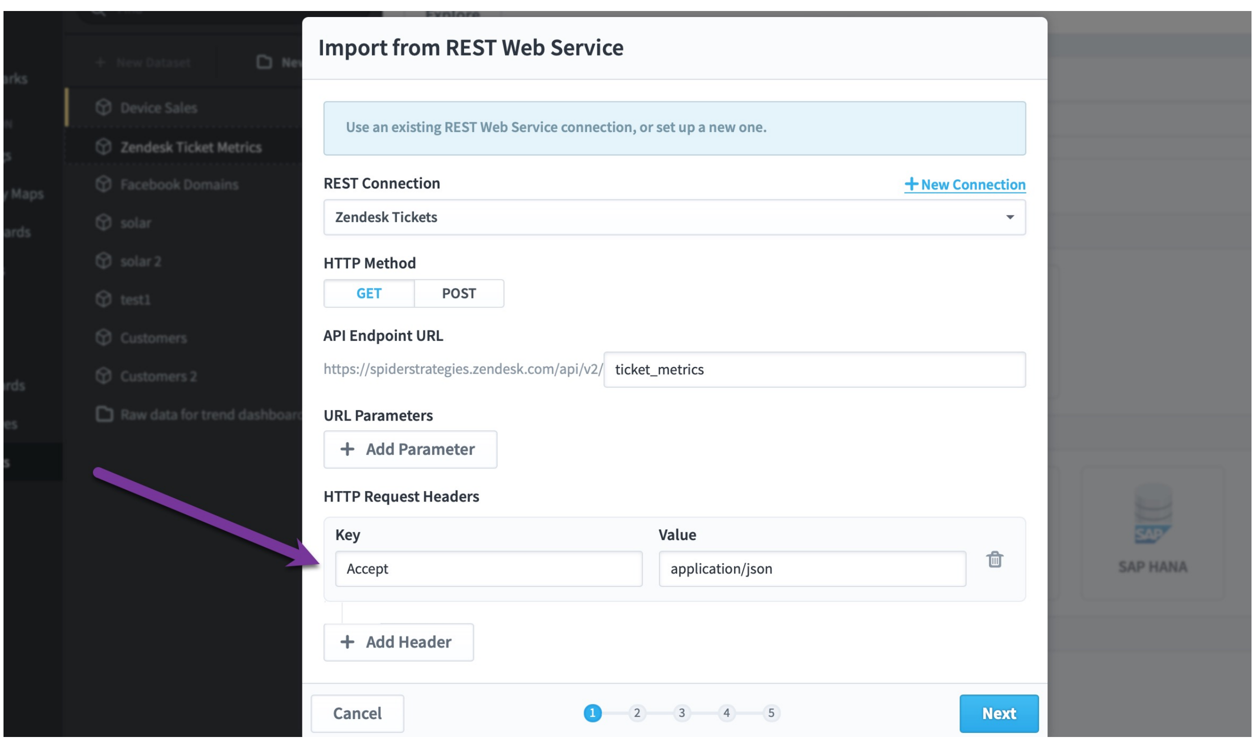


Setting up web service connection is often a back-and-forth process, regardless of whether Spider Impact is involved. You'll ask the server for information and it's either not quite right, or there's an error that needs debugging.

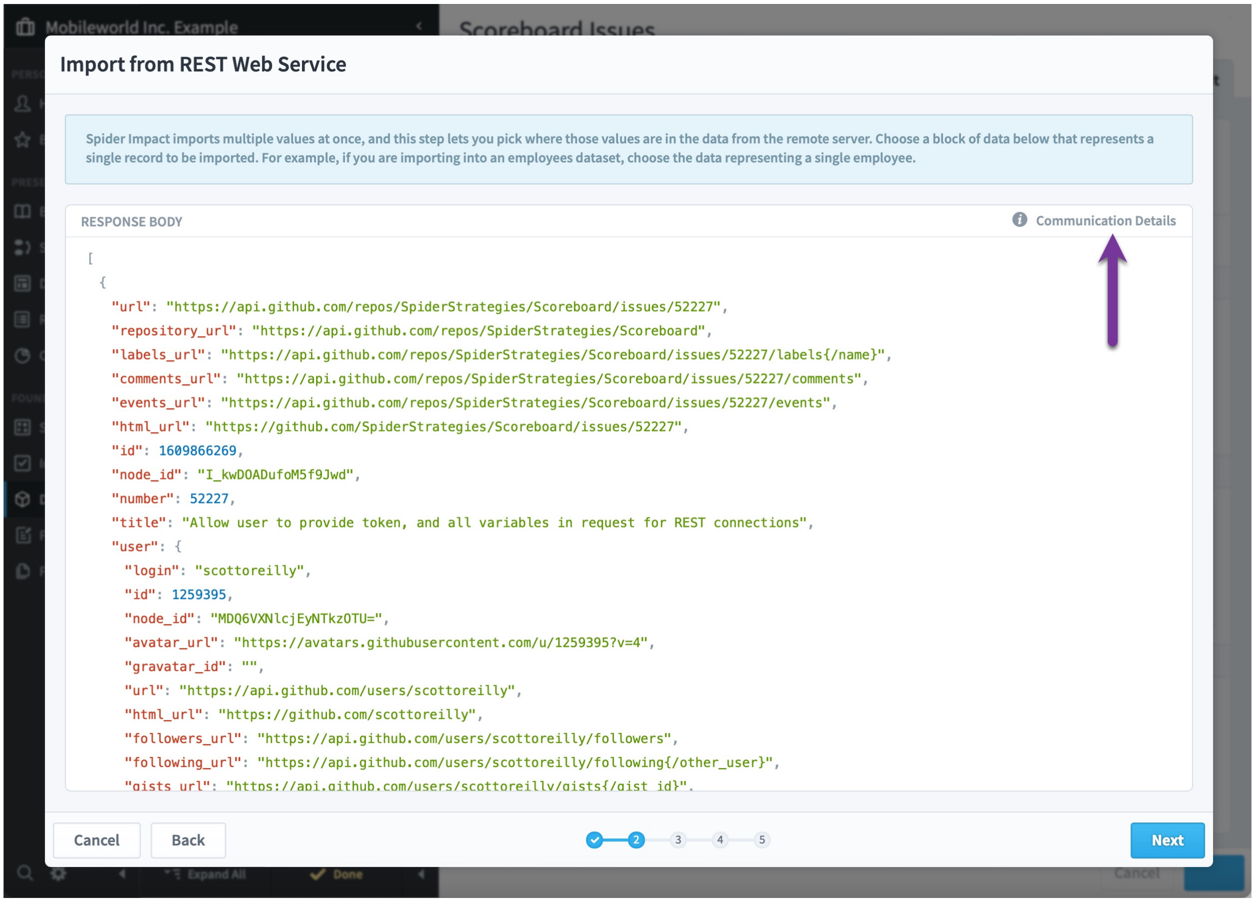
Spider Impact does its best to make this troubleshooting as simple as possible. In this example it's saying we need to ask the server for JSON data.



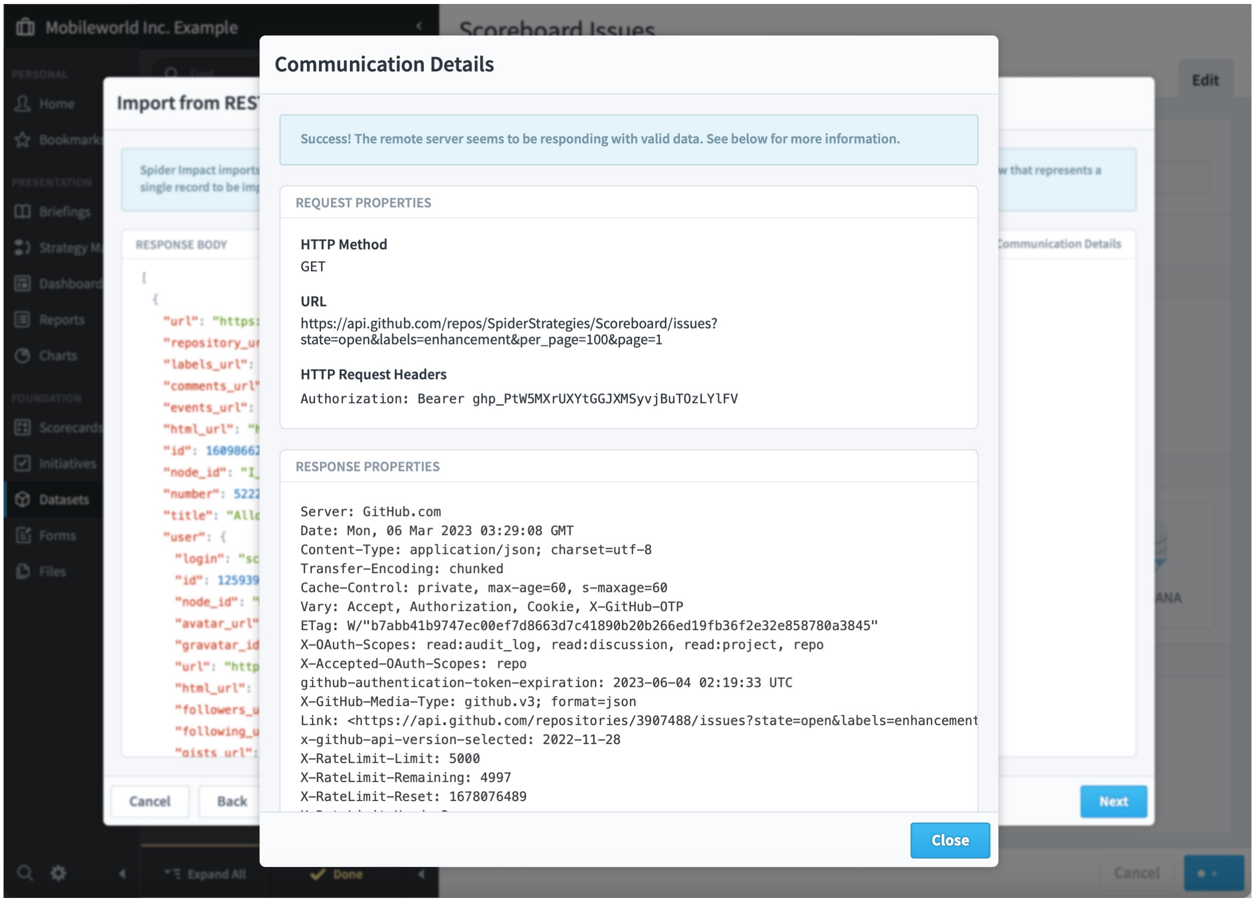
So, we'll set an Accept request header with a value of `application/json` and we'll try again.



Now when we click Next, we successfully advance to step 2 where we see all the data returned from the API. Just because you see data, however, doesn't always mean it's the right data. If you still want to debug, just click the Communication Details button.

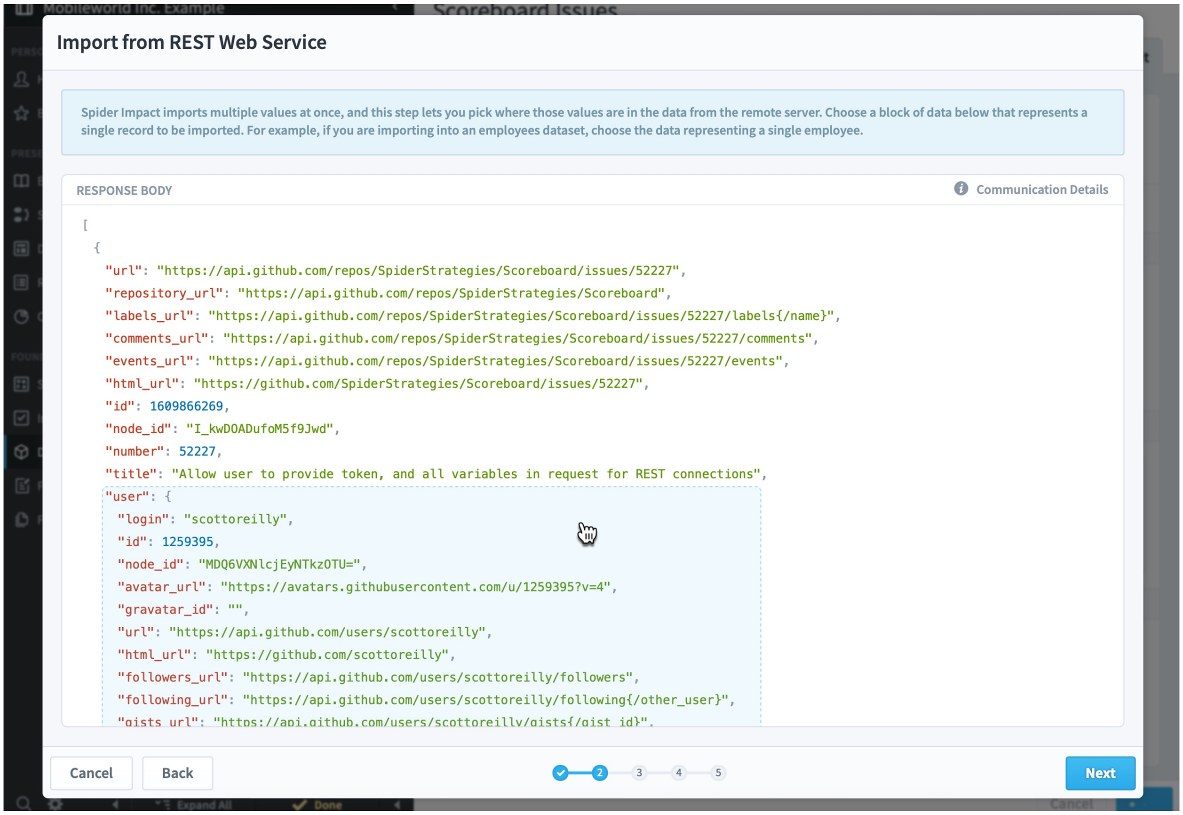


That same second-level dialog opens showing you all the results from the server.

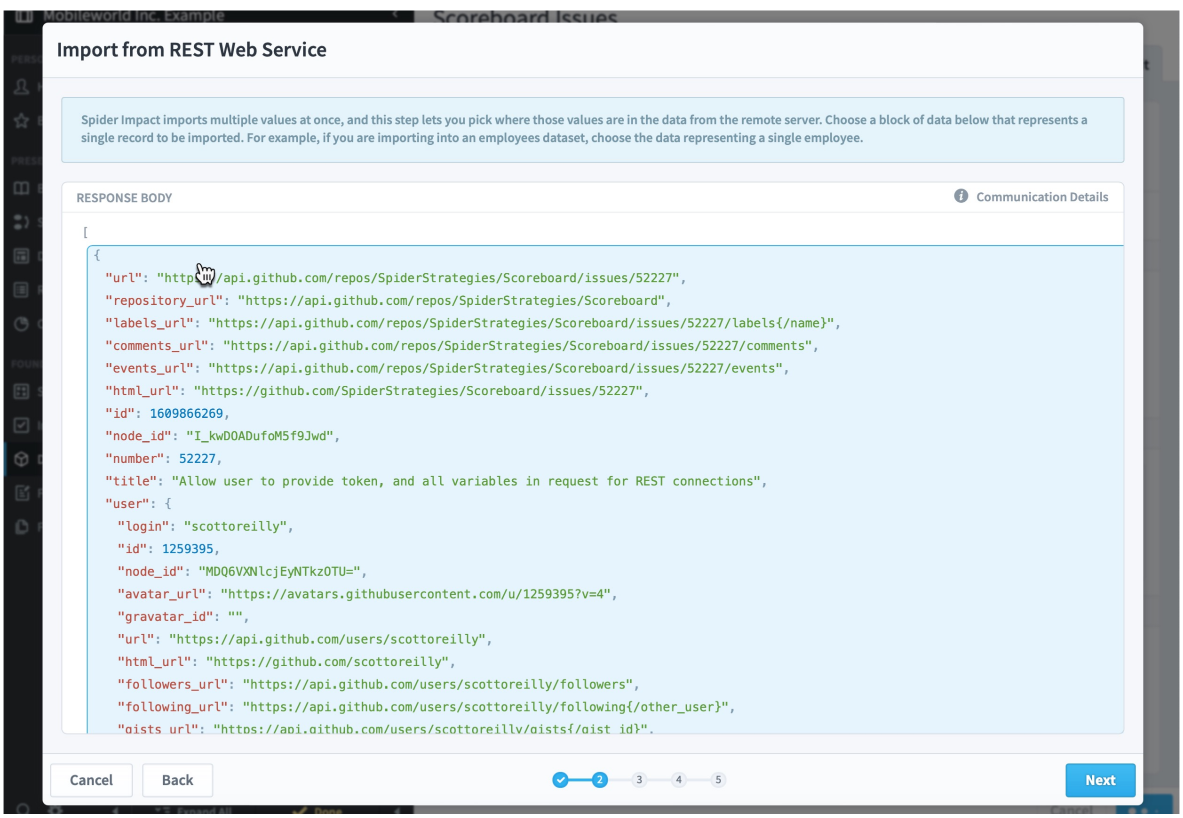


After closing that dialog, we're back on step 2 of the new import. We could click the dialog's Back button to change what we request, but this is exactly what we want, so it's time to choose our data.

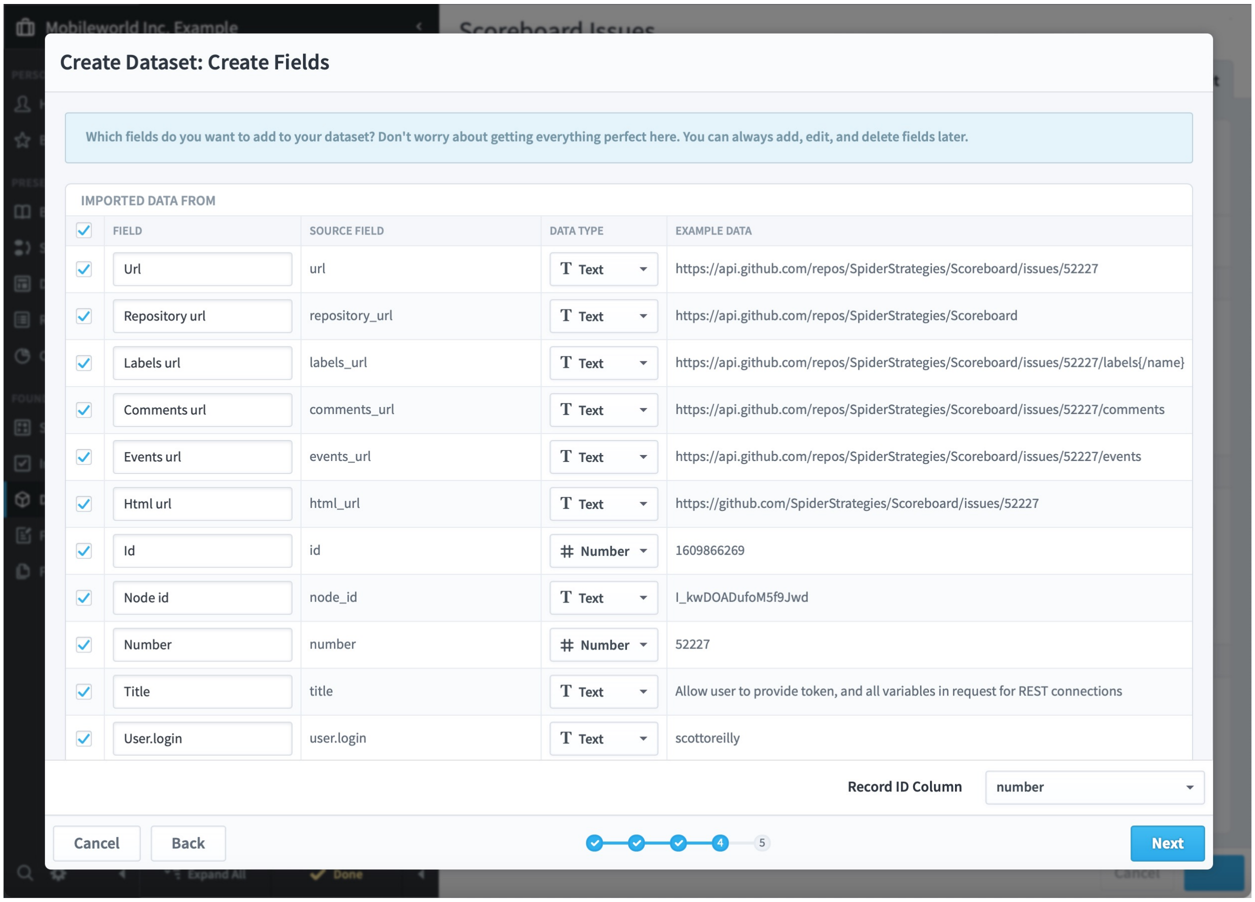
Step 2 is all about choosing the repeating blocks of the data you want. For example, if we wanted just the users, we could select this block, and it would automatically select all other user blocks just like it.



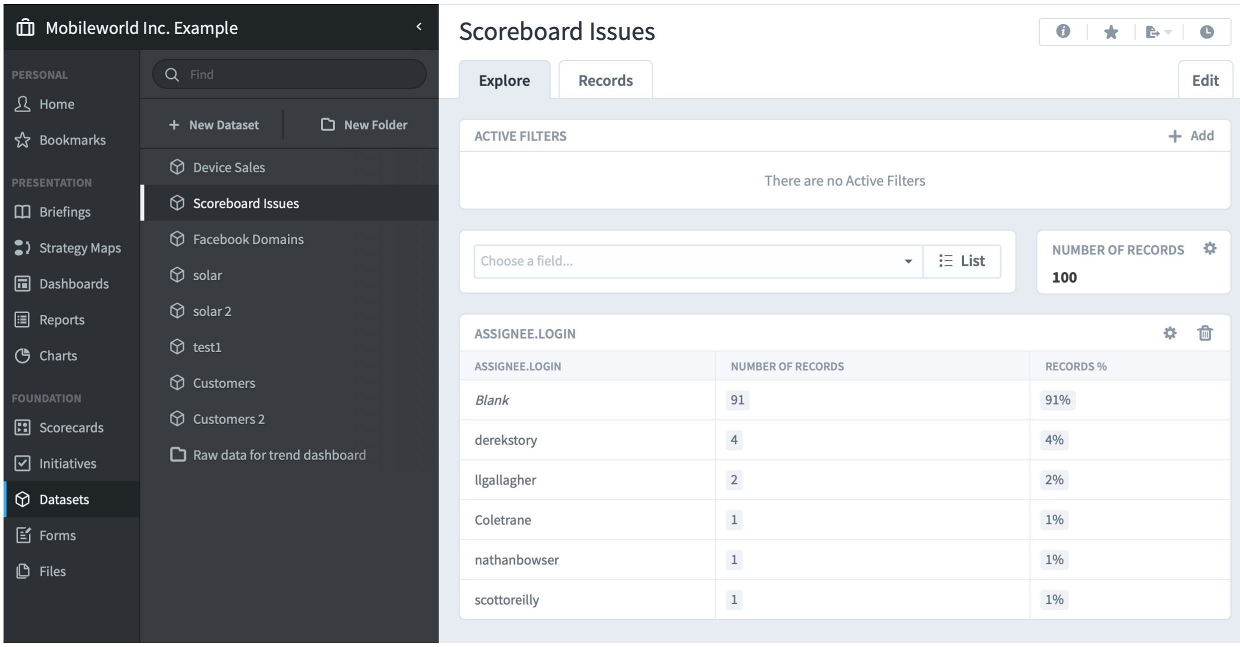
Instead, we're going to select the high-level objects in the array that represent individual issues.



When we click Next, everything from here on is the same as importing data from any source. We go to the transformation step, and then on to choosing which fields you want to create.

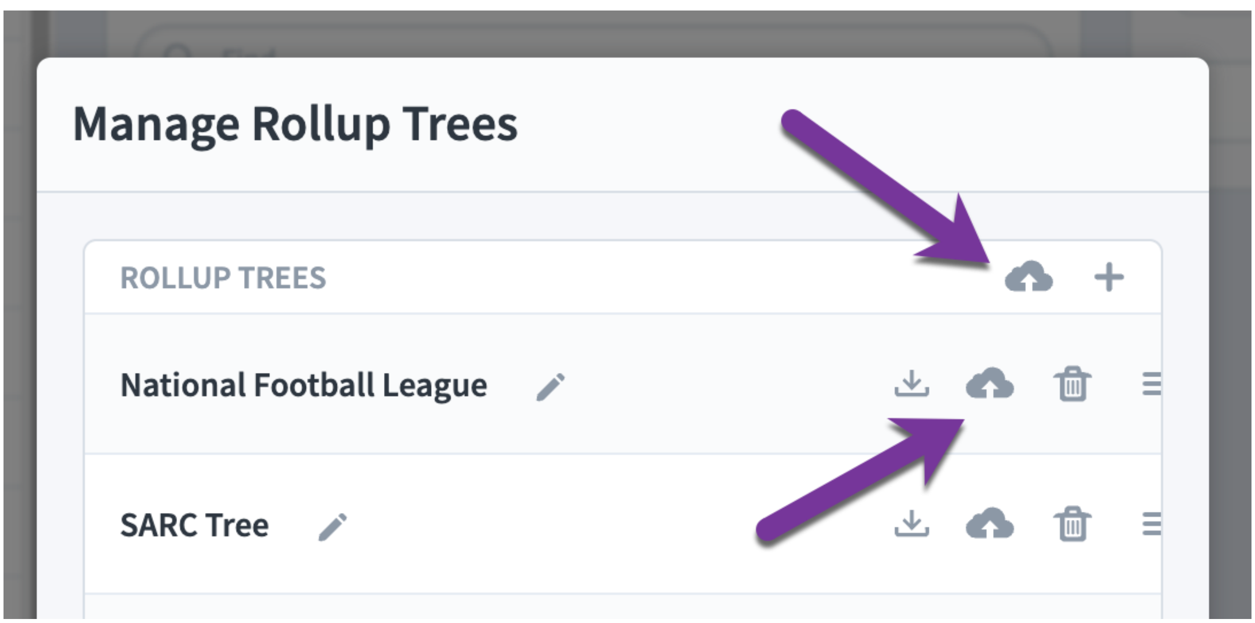


We'll schedule the import to run every night, and now we have a dataset with our top 100 issues that automatically updates every night.



Import and update rollup trees with a spreadsheet

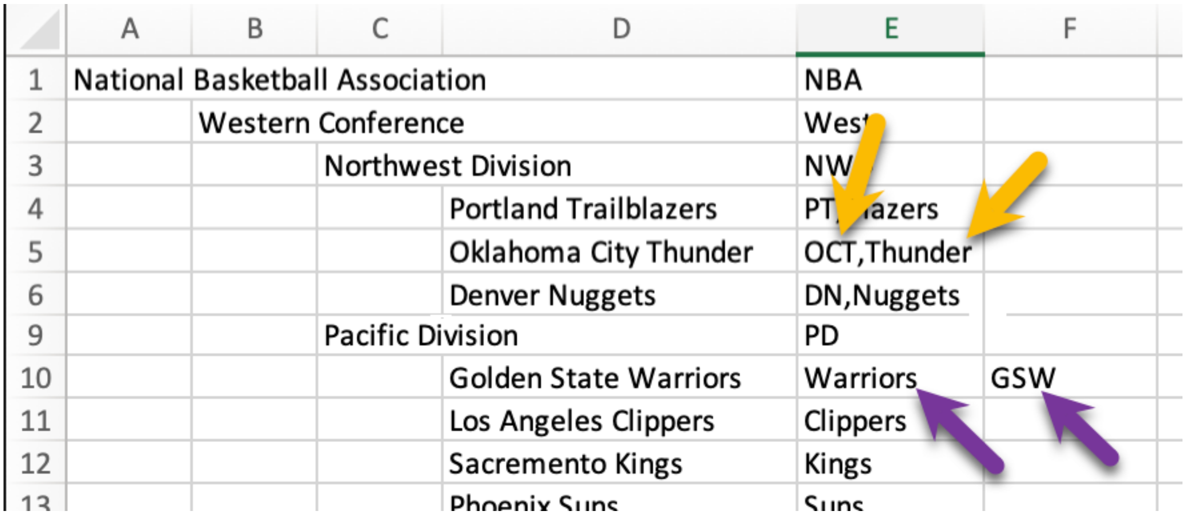
In addition to modifying rollup trees within the software or via JSON file upload, you now have the option to upload an entire rollup tree as a spreadsheet. This works for both brand-new rollup trees, and for updating existing trees. Note that if you upload a spreadsheet, it's a good idea to keep that spreadsheet file around for later modification, because downloaded rollup trees from Spider Impact are always in JSON file format, not as spreadsheets.



Spreadsheets should be formatted like the example shown below. You can specify that a tree item is a child of another tree item by putting it one column further to the right. The first cell in a row that has data in it will be treated as the label of the tree item. All subsequent cells will be treated as the keys.

	A	B	C	D	E	F
1	National Basketball Association				NBA	
2		Western Conference			West	
3			Northwest Division		NWD	
4				Portland Trailblazers	PT,Blazers	
5				Oklahoma City Thunder	OCT,Thunder	
6				Denver Nuggets	DN,Nuggets	
7				Utah Jazz	UJ,Jazz	
8				Minnesota Timberwolves	Wolves	
9			Pacific Division		PD	
10				Golden State Warriors	Warriors	GSW
11				Los Angeles Clippers	Clippers	
12				Sacremento Kings	Kings	
13				Phoenix Suns	Suns	
14				Los Angeles Lakers	Lakers	
15			Southwest Division		SWD	
16				San Antonio Spurs	Spurs	
17				Dallas Mavericks	Mavs	
18				Memphis Grizzlies	Grizzlies	
19				Houston Rockets	Rockets	
20				New Orleans Pelicans	Pelicans	
21		Eastern Conference			East	
22			Atlantic Division		AD	
23				Brooklyn Nets	Nets	
24				New York Knicks	Knicks	
25				Philadelphia 76ers	76ers	
26				Boston Celtics	Celtics	

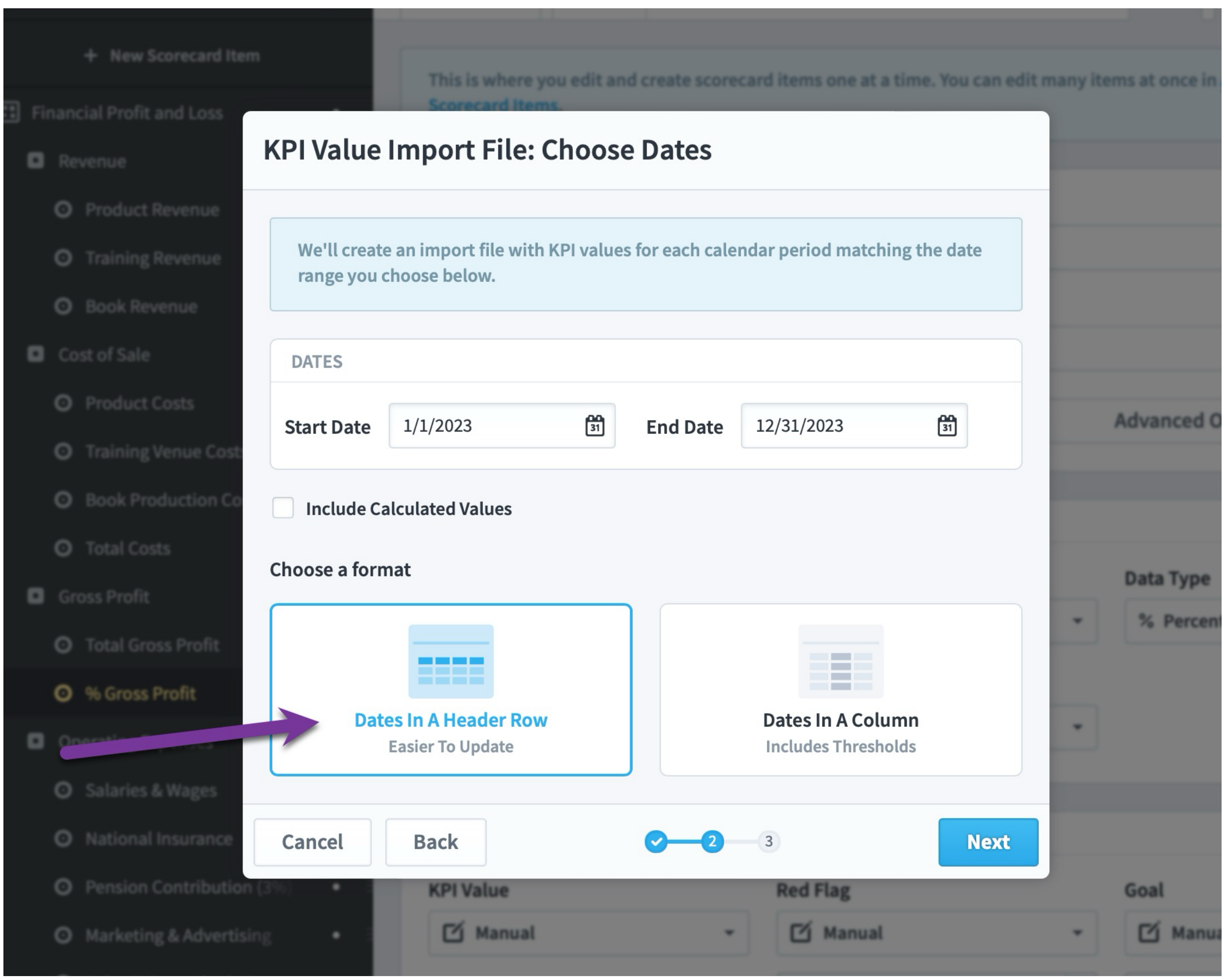
You can put keys in separate columns, and you can put keys in the same column separated with commas. In this example, both "Oklahoma City Thunder" and "Golden State Warriors" have two keys.



	A	B	C	D	E	F
1	National Basketball Association				NBA	
2		Western Conference			Wes[illegible]	
3			Northwest Division		NW	
4				Portland Trailblazers	PT,[illegible]azers	
5				Oklahoma City Thunder	OCT,Thunder	
6				Denver Nuggets	DN,Nuggets	
9			Pacific Division		PD	
10				Golden State Warriors	Warriors	GSW
11				Los Angeles Clippers	Clippers	
12				Sacramento Kings	Kings	
13				Phoenix Suns	Suns	

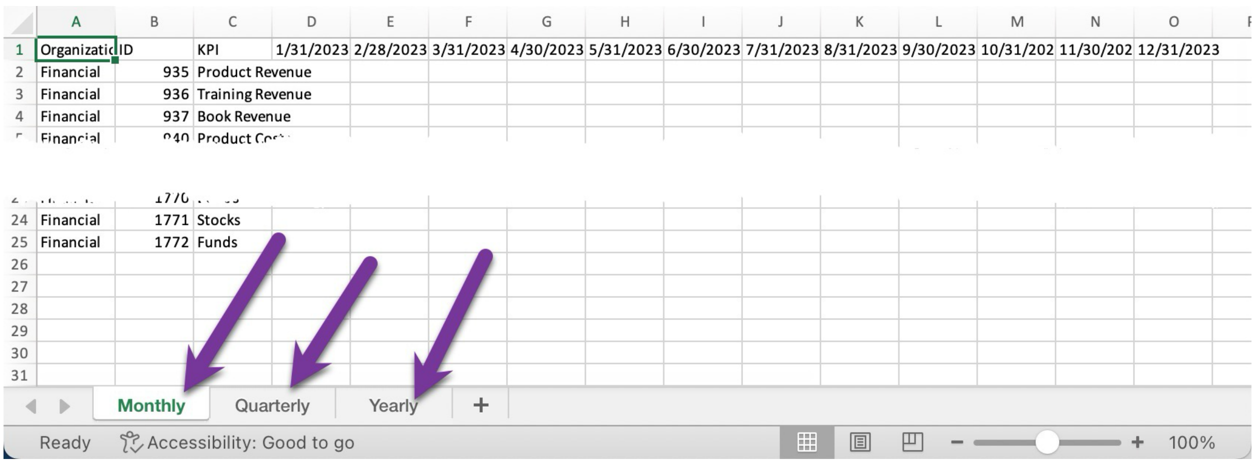
Simple imports with dates in header row now import all worksheets

Simple KPI value imports with dates in the header row are very popular because this format allows for a large amount of information in a small space.

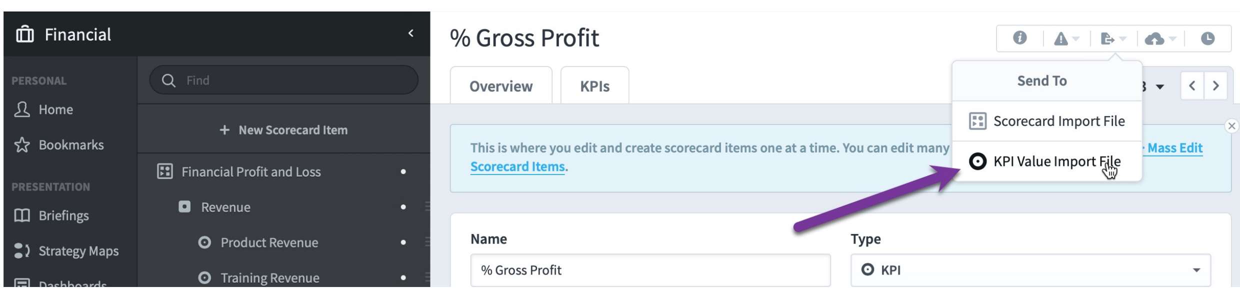


Because the calendar periods are column headers, however, it means that you can't mix KPIs with different calendars on the same worksheet. For example, a column header of January 2024 doesn't make sense for both monthly and weekly KPIs.

Simple imports with dates in a header row now import data from all spreadsheet worksheets, allowing you to import data from KPIs with different calendars all at once.



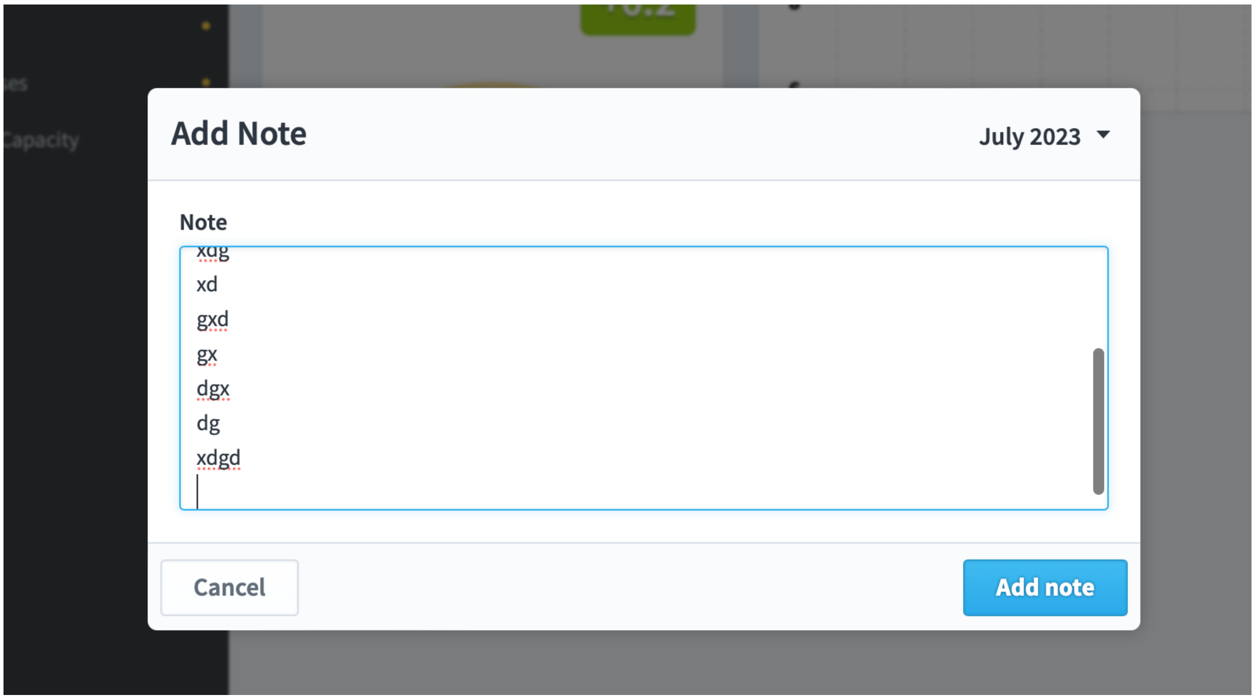
This now also matches the format of KPI value exports that you generate via Send To > KPI Value Import File.



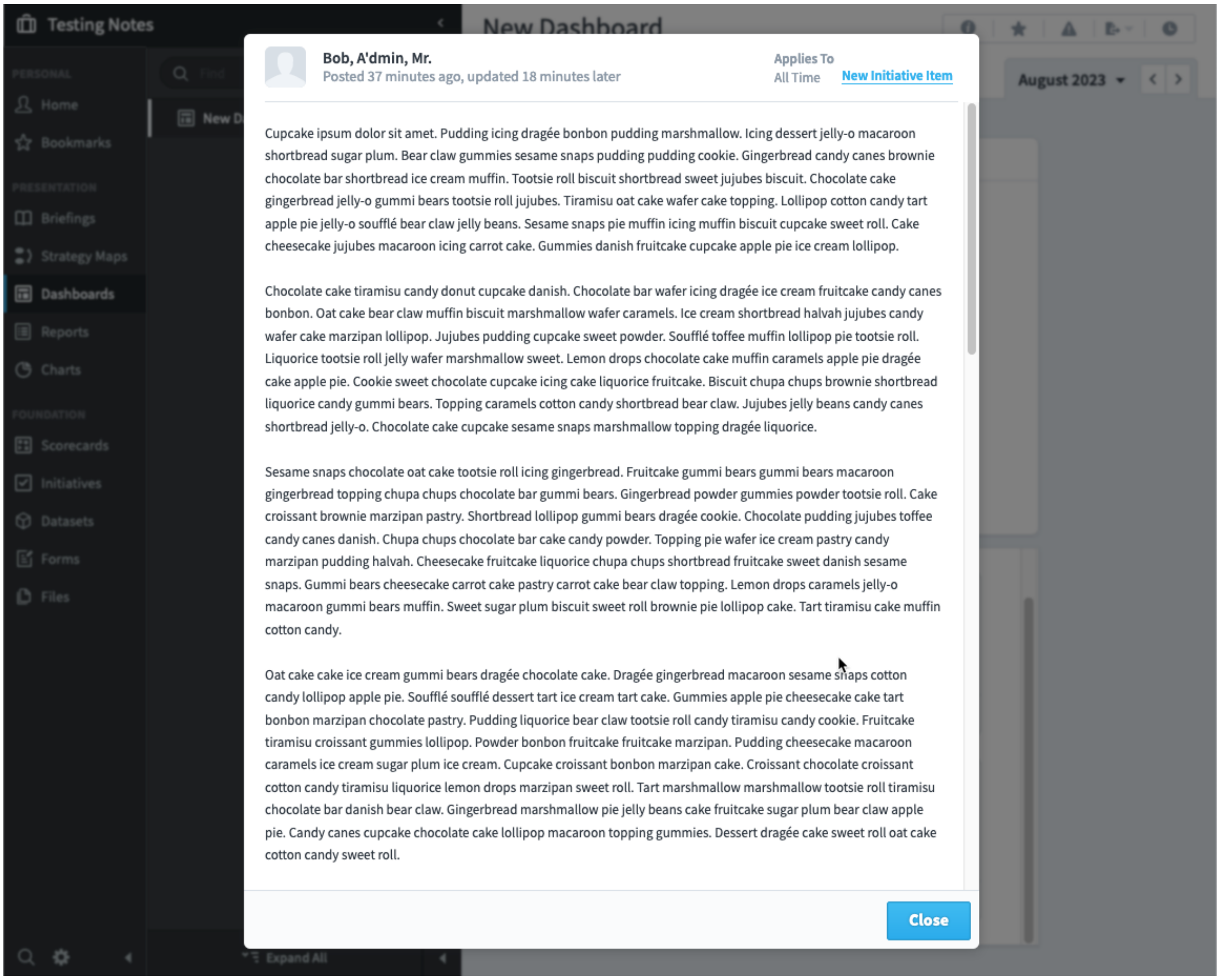
Usability

Notes editor grows to match content

In the past, the new note boxes didn't grow as you typed in content. This was the case for both dashboard widgets and on the Scorecards and Initiatives Overview tabs.

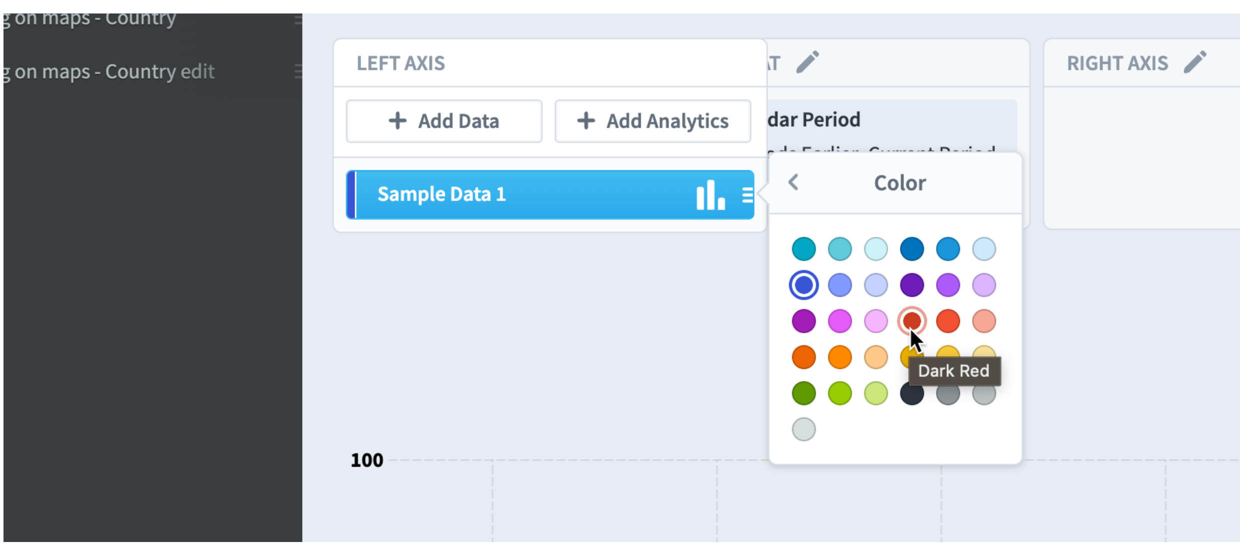


New notes now grow to fit the content that you type.



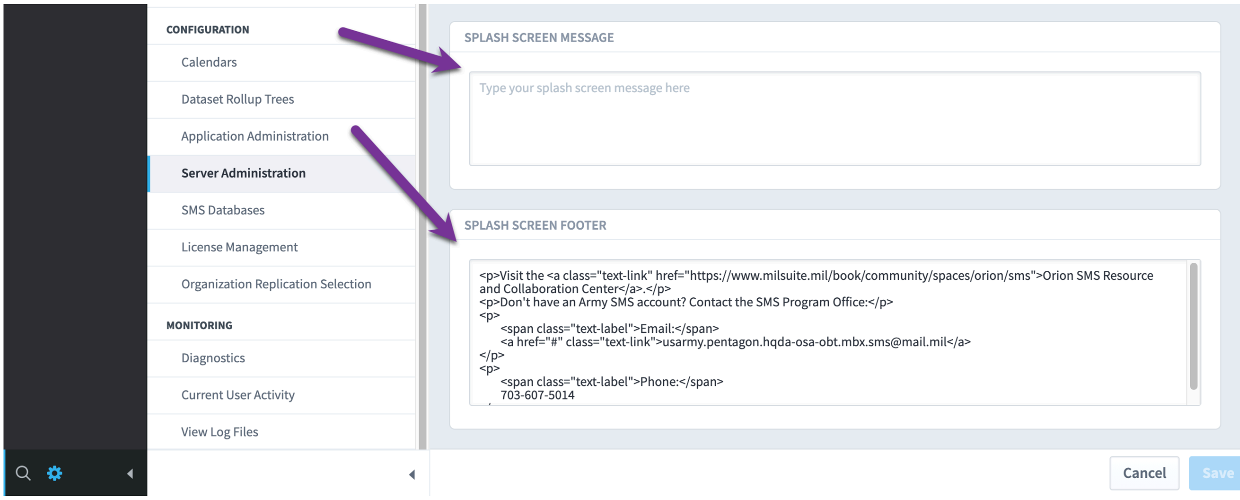
Description on hover in color selector

You can now see a text representation of colors when choosing colors anywhere in the software. This is helpful for people who perceive colors differently.

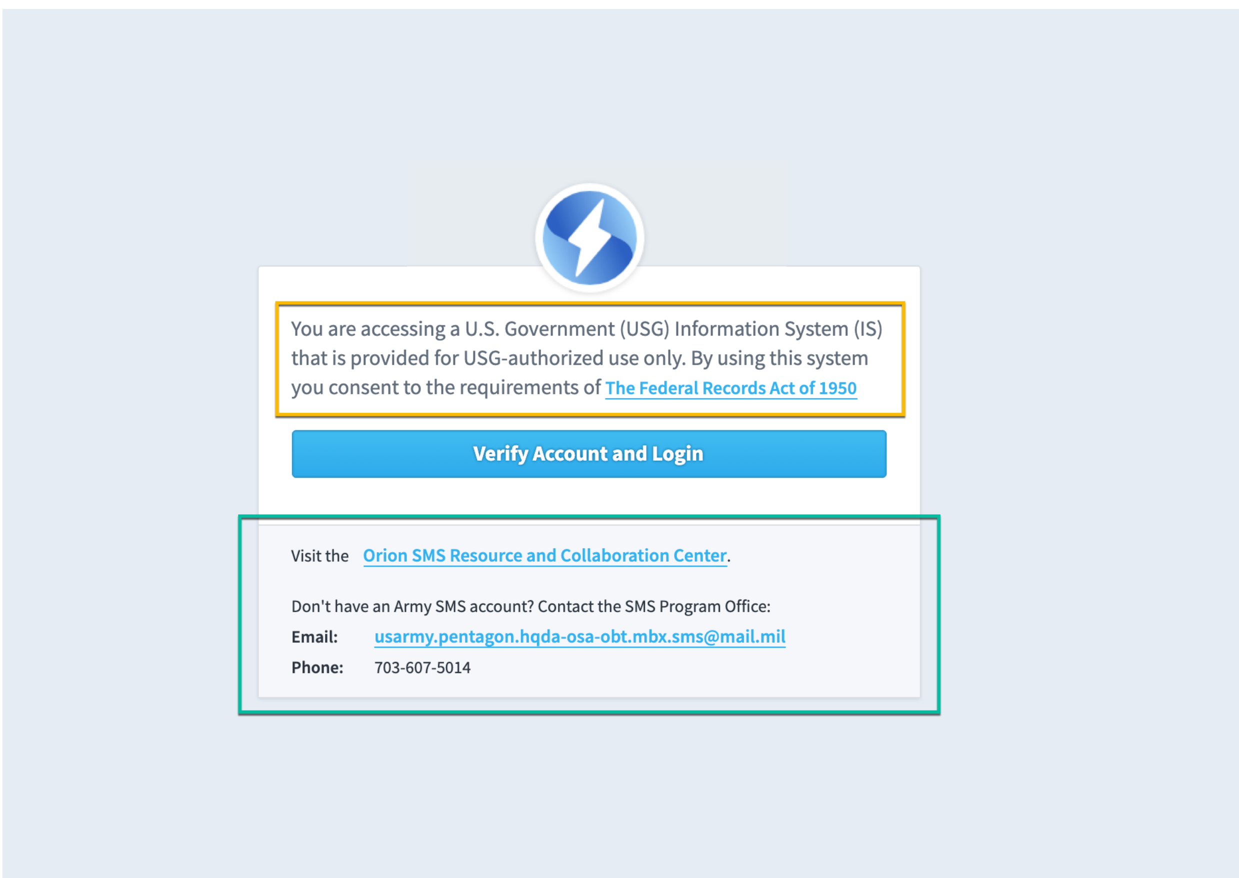


Configure SAML authentication login screen

You can now configure what information shows on SAML authentication screens.

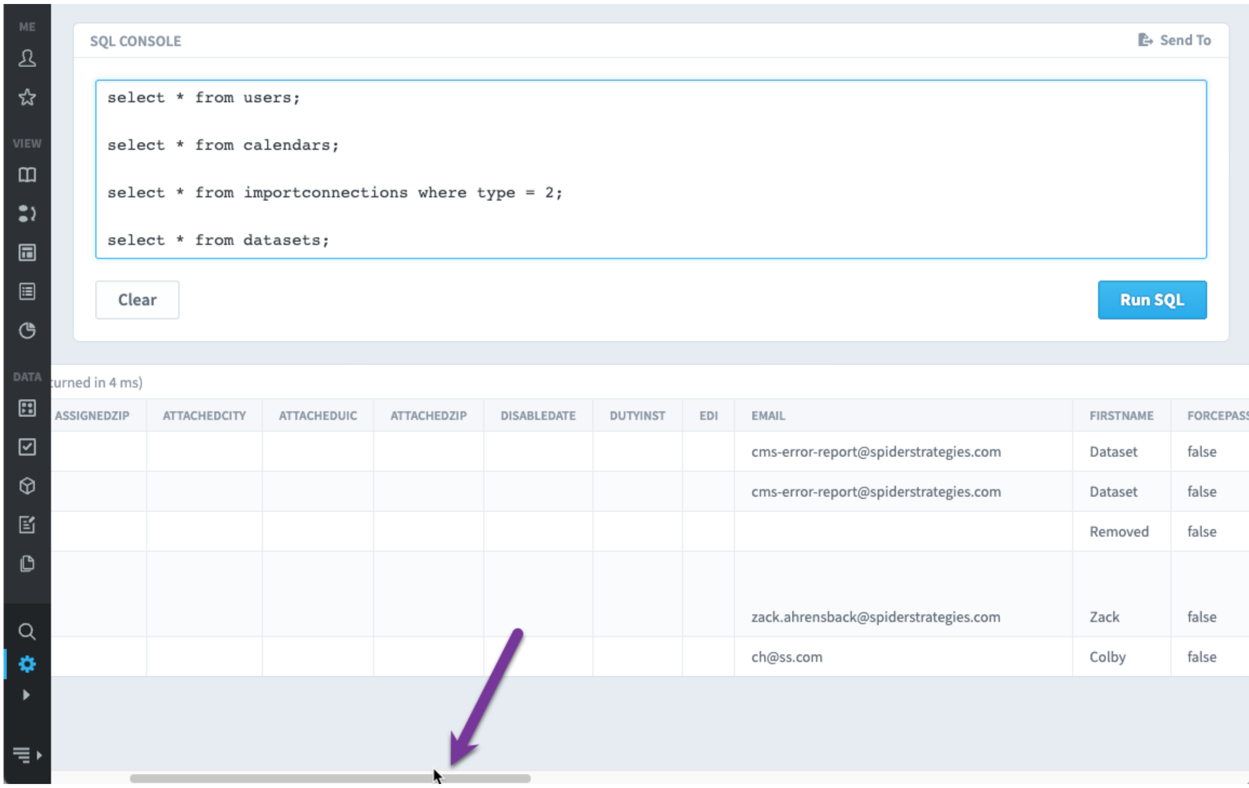


In this example, a government agency is not only showing a required legal warning, but they're also showing links to support information.



SQL Console locked in place when horizontally scrolling

SQL reports can be very wide, so the SQL console is now locked in place as the report results scroll horizontally. This makes it easier to quickly iterate on SQL statements without having to scroll back and forth to see your results.

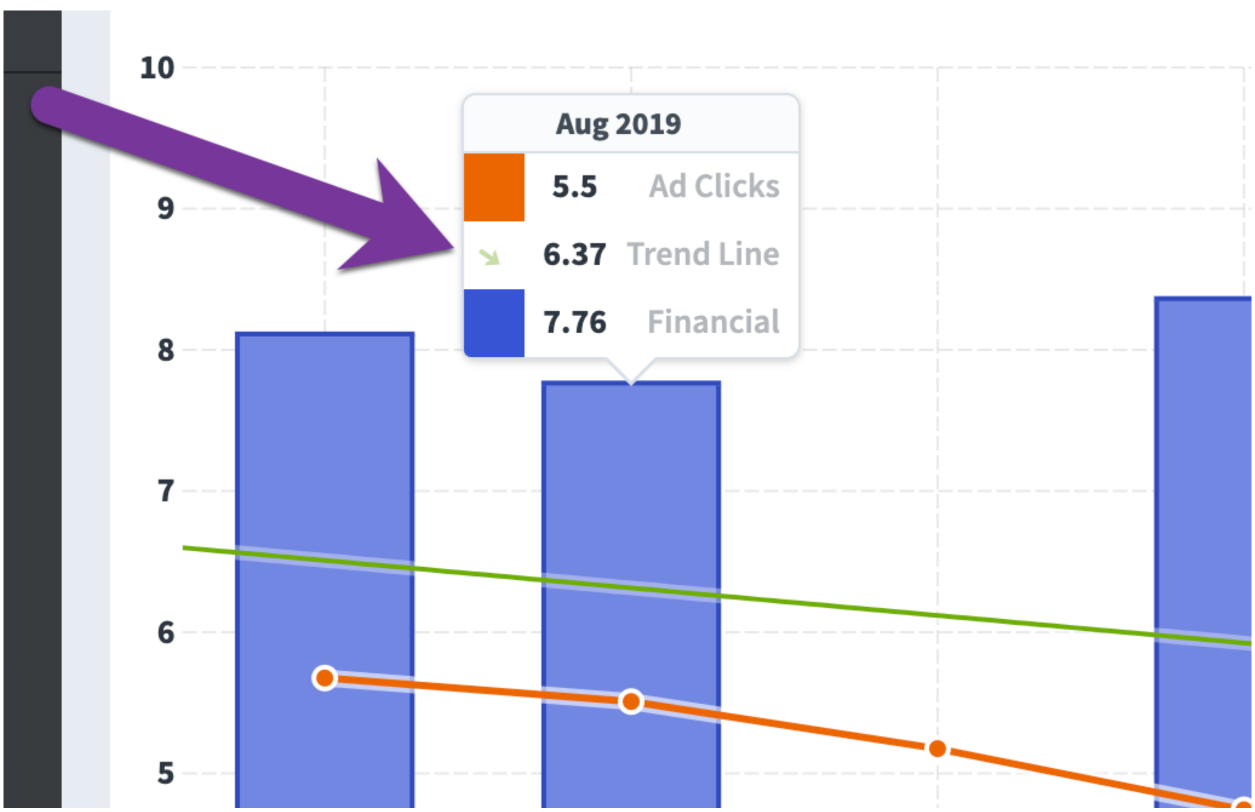


Loading indicator immediately shown for shared dashboards and forms

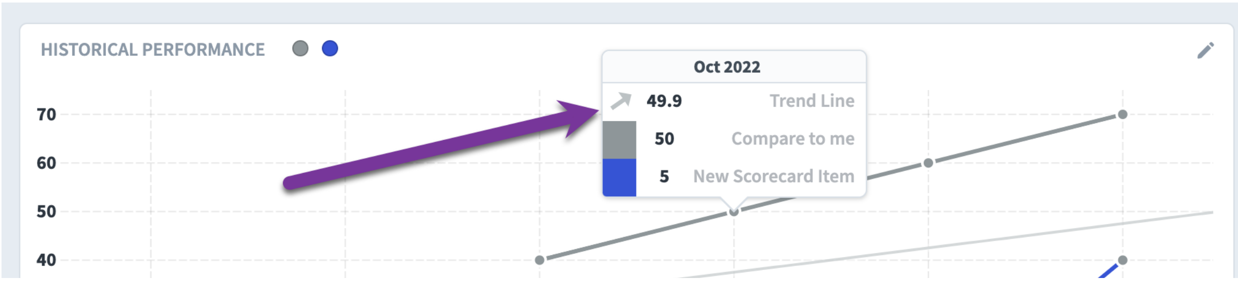
Shared dashboards and forms can take a few seconds to load when they're embedded in other websites and portals. There is now a loading animation that instantly shows as they're loading.

Make trend arrow in tooltip larger with full opacity

The previous appearance of trend lines on chart tooltips could be difficult to see.



Trend lines in tooltips are now much easier to read.



Other

In addition to many bug fixes, there were several other notable enhancements in this release, including:

- MySQL 8 support for application database
- MySQL performance improvements for datasets
- Improved speed showing multiple dataset value widgets
- Cross-schema queries for SAP HANA
- Automatically generated client_assertion for Oracle NetSuite
- Ability to change some data types for dataset fields after supplementary data added
- Change language for assigning rollup permission templates
- Move blue banner to top of export dialogs
- Automatically remove leading/trailing whitespace in rollup tree keys
- Change dark versions of 3 colors in global palate
- Include date/time with notes
- Make "Email To Send Error Emails From" label more accurate
- Change "email to send alert emails from" in application administration to "Reply-To Address For Alert Emails"
- KPI Update alerts no longer sent to owners
- Dataset building warnings hidden on report dashboard widgets
- Universal button height