

# iSheets Reference Guide

Commercial in Confidence



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### **Document Purpose**

This document provides a technical explanation of the iSheets module available on the Collaborate platform. Every feature and capability of the iSheets module is explained in detail. This document is *not* intended to serve as an introduction or tutorial on iSheets. Instead, it is intended as a reference guide for Site Administrators, to assist in the creation of complex iSheets, to understand the full potential of the module, and to help troubleshoot if questions or issues should arise.

There are two halves to the iSheets module. The first is the creation and configuration of an iSheet, work performed by an Administrator. That topic is the primary focus of this document. The second is the experience of the typical end user accessing an iSheet, which may include viewing and searching for data, adding new rows and editing existing rows. This document touches on the end-user experience, but primarily as a way of illustrating the configuration of an iSheet and the impact various settings on the end-user.

### **Overview**

An iSheet provides a way to track and collect information, information that can be shared with other people who have access to the same Collaborate site. For example, an iSheet can be used to track all of the commercial properties owned by a client or all of the pleadings filed in a case. A single site may contain multiple iSheets, each tracking different types of information.

Virtually any type of data can be included in an iSheet: text, dates, numbers, etc. Each individual piece of data is referred to as a "column" or "field." An iSheet may contain any number of columns. For example, an iSheet tracking real property could contain these fields:

- Shorthand name for the property
- Address (which could be one field or multiple fields)
- Country in which the property is located (a pick list)
- Type of Property (from a picklist, such as: office space, retail space or rental apartments)
- Property Manager's name
- Purchase Price
- Purchase Date
- Sale Date

A set of columns related to a single thing covered by the iSheet (for example, a particular piece of real property) is referred to as an "item" or "row." In essence, an iSheet is a database for laypeople, giving everyday users the power to track data that is relevant to their work and their clients' business without a programming background or the need to involve the IT department.

Once an iSheet has been designed, certain users can be given the right to populate the iSheet with data and keep it up to date, while other users can be limited just to viewing this data.

Each iSheet can be associated with one or more "views". A view typically includes a subset of the all of the columns in the iSheet. (And certain columns may be displayed only to certain users or under defined conditions.) Further, certain rows of data may be filtered out of the view. For example, the real property



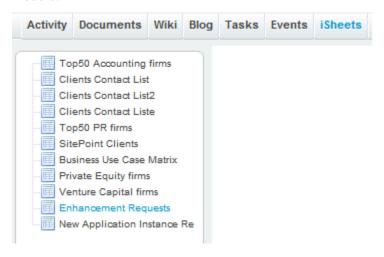
tracking iSheet could include a "UK Property Manager View." This view would include only those columns needed by the property manager: the type of property and address, but not other columns related to the purchase and sale of the property. This view would also be limited to properties located in the United Kingdom. By using security groups and permissions, property managers in the United Kingdom could be restricted from seeing any other rows in the iSheet, such as those related to properties located in the United States.

There are three principal types of iSheets:

- Basic iSheets. These iSheets are self-contained and only list data that is added through the iSheets interface.
- Document-Related iSheets. These iSheets allow additional fields of information to be added to a site's Documents module. For example, if the Documents module contains pleadings in a litigation matter, with a document-related iSheet it is possible to track additional information for each pleading, such as: Docket Number, Type of Pleading, Filing Party, Date Filed, etc.
- Folder-Related iSheets. Instead of or as a complement to adding fields of information to
  individual documents, fields can be added to folders. For example, if a group of documents in a
  folder all share the same characteristics, using a folder-related iSheet allows this document
  information to be added just one time, in the parent folder of those documents.

### **An Introduction to End-User Features**

An iSheet has various features accessible to end users. First, depending on a user's access rights, a user will see a list of all of the iSheets in a site that are available to them, when they click on the iSheets module:





Next, for each iSheet, there is the form to enter a new item, which looks like this (with the actual fields varying from iSheet to iSheet):

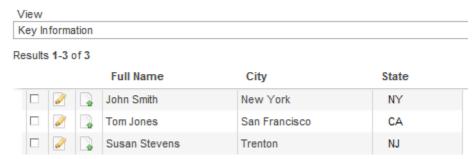


(Not all users will have the right to add new items to a particular iSheet.)

A user can also view items that have already been created. Multiple items are displayed in a table format, which in this case shows all of the columns in the iSheet:



As noted above, there can be different views of the table format of data, with some views showing a subset of the available columns, like the "Key Information" view, which contains only three columns from the view above:

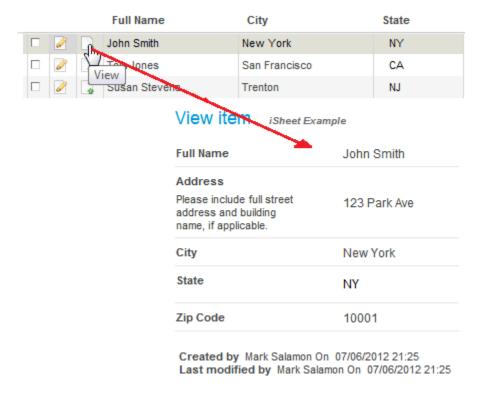


And if a user has permission, they can click on the "Edit" button ( ) next to an item to edit it.

Finally, clicking on the "View" button ( ) next to an item displays a single page listing ALL of the columns for that item that are available to the user, not limited just to the columns in the view being



### accessed:



### iSheets Compared with SharePoint Lists

For those familiar with SharePoint Lists, iSheets are conceptually similar, but cure some of the shortcomings. For example, iSheets provide these capabilities not available in SharePoint:

- Restrict any group of users' rights to specific columns, limiting edit and/or view rights
- Restrict certain groups of users from accessing specific views
- Provides an out-of-the-box, parameterized search form
- Allow subscriptions to email alerts based on selected values and conditions
- Contingent columns: a column or group of columns will only be revealed based on the value entered in another column or group of columns
- Columns may be grouped into sections
- Column widths can be adjusted

## Getting Started: Creating and Configuring iSheets

### **Enabling the iSheets Module**

Only a System Administrator or Site Administrator (collectively, "Administrators") can enable the iSheets module for a particular site, which will make the iSheets module visible to end user once iSheets have been created. (Until any iSheets are created, even if enabled, the module will not be visible.) Administrators are the only user who can create and modify iSheets.



To enable the iSheets tab, go to the *Admin* tab, click on the "Modules" page, check the box next to iSheets and hit "Save":

# Modules Select the modules you would Home Activity Documents Wiki Blog Tasks Events Q&A

An Administrator can create and configure an iSheet from the *Admin* tab without enabling the iSheets module, but any iSheets they create will remain hidden until the iSheets module is enabled. The iSheets module can be enabled after iSheets have been created and configured. Enabling and then disabling the iSheets module does not delete iSheet data that was previously entered; it just makes that information no longer visible.

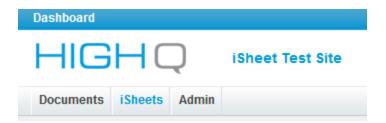
There are two conditions governing a user's ability to see the iSheets module on a site besides an Administrator enabling the iSheets module:

- At least one iSheet needs to be created.
- The end user accessing the site must have access to one of those iSheets.

Once both of these conditions have been satisfied, the iSheets tab will be visible to the end user. (If the user has access to an iSheet but lacks access to any views of that iSheet, the iSheets tab will still be visible but the user will receive a message that there are "No views available.")

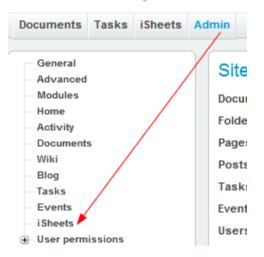
Once the iSheets module has been enabled and made visible, the iSheets tab will appear at the top of every page for that site;





### **Configuring the iSheets Module**

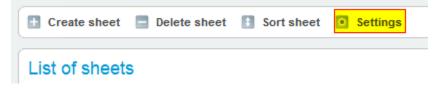
Once the iSheets module has been enabled, there are a few settings that can be applied to the entire module. Click on the "iSheets" page in the *Admin* tab:



The List of sheets page that appears lists all of the iSheets (if any) for that site:

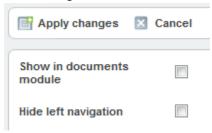


To configure the module settings, click on the "Settings" button near the top of the page:

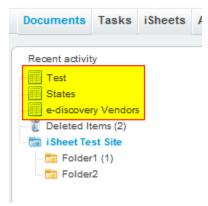




Two settings will be shown on the next page:



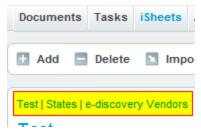
• Show in documents module. When this option is selected, the list of iSheets for a site that a user has access to will be visible not only in the iSheets module but also at the top of the tree view of the Documents module (if the Documents module has been enabled):



• **Hide left navigation.** By default, a left navigation pane will appear in the iSheets module, listing vertically all of the iSheets available to a user:



By selecting the "Hide left navigation" option, the left navigation pane will disappear and instead a list of all of the iSheets will appear horizontally, near the top of every iSheets page:



The advantage of removing the left pane is that it frees up more horizontal space and more columns can be displayed in an iSheet without scrolling.

To apply any changes that have been made to the *Settings* page, click "Apply changes"; otherwise, click "Cancel."



### Setting up an iSheet

Setting up an individual iSheet initially involves three steps, although it is likely that changes will be made to the iSheet's design and configuration over time. (Remember that the iSheets module must be enabled as well, or no one but the Administrators will see these iSheets.)

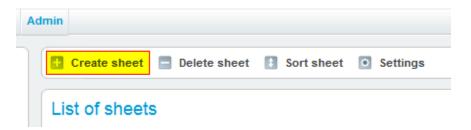
- 1. Create the iSheet and configure the various settings that apply to the entire sheet.
- 2. Add columns to the iSheet. Other than the system-generated columns (Created by, Created date, Modified by and Modified date), a new iSheet does not have any columns where users can enter data. (Document- and folder-related iSheets contain additional default columns related to documents and folders, respectively.) Columns can be added at first and more columns added later.
- 3. (Optional) Create additional views. By default, one view is created that includes all of the columns that were added to the default view. You can add more views and select a different one to be the default.

Once an iSheet has been created, start adding data. (This is best done by a team of people who are knowledgeable about the subject matter of the site, which is not necessarily the Site Administrator(s).)

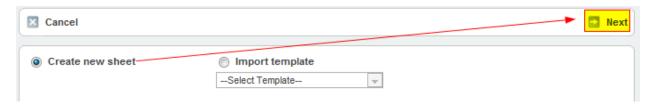
Over time, based on real-life usage, it may be necessary to modify the iSheet: change existing columns, add new columns, modify labels and descriptions, etc. The most important thing to remember is to capture as much information as possible from the beginning. The "look and feel" of the iSheet can easily be changed, but a failure to capture pertinent information initially will require a lot of effort down the road to add this missing information back later.

### Creating an iSheet

Navigate to the *List of sheets* page and click on "Create sheet":

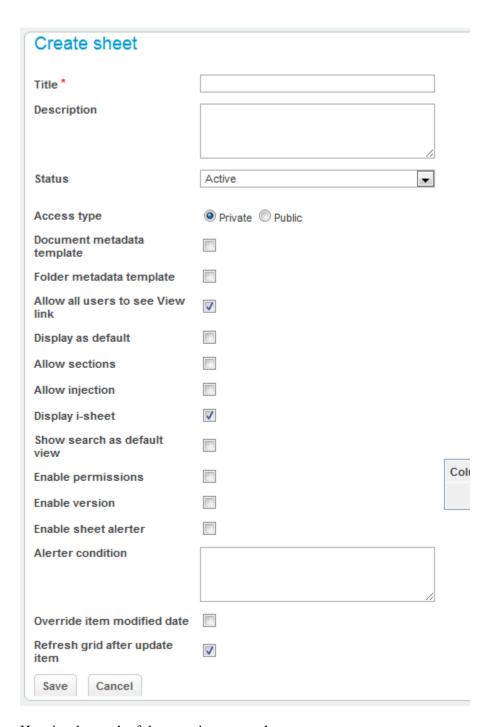


On the next page, the "Create new sheet" radio button is already selected; click "Next":



On the *Create sheet* page that appears, a large number of settings are presented (certain settings may be set by default differently in your instance of Collaborate based on the system-wide configuration settings that your organization chose):





Here is what each of these settings controls:

- \**Title*. The title must be unique among all of the iSheets within a given site. (Title is the only required iSheet setting.) The title cannot contain the following characters: \/:\*?"<>|.
- *Description*. The description is only for internal purposes, visible only to Administrators.
- *Status*. There are two choices: Active and Pending. Pending iSheets are not viewable by anyone except Administrators, and then only from the iSheets administrative page. While an iSheet is still under developed, it is recommended that its status be set to Pending and changed to Active



- only when the iSheet is ready. By default, all users with access to the site will be able to see an Active iSheet.
- Access Type. The choices are Public and Private. A "Public" iSheet is available to be used for injection and join from any site. A "Private" iSheet is not available to be used for injection or join in another site, except for System Administrators and users who are Site Administrators on both sites.
- Document Metadata Template and Folder Metadata Template. Use these settings to associate
  the fields of the iSheet with the documents and folders, respectively, in the Documents module.
  These settings are discussed in more detail below.
- *Allows users to see View link*. As discussed further <u>below</u>, when a user looks at the data in an iSheet in a table-formatted view, they can click on a View icon ( ) to see all of the item's columns in the *View item* page (subject to security restrictions on any columns). If this box is unchecked, then non-administrative users will not see that icon and cannot access the *View item* page. However, do *not* use this feature to limit which columns a user can see, on the assumption that the user will only be able to see the columns in the views the user can access. The only guaranteed way to restrict access to a column is to use column-level security, discussed below.
- *Display as Default*. If a site contains more than one iSheet, the one marked as default for that site (only one iSheet can be the default) with be displayed automatically when the iSheets module is selected. If a given user does not have access to the default iSheet, they will simply see the first listed iSheet.
- Allow Sections. This setting allows the fields of an iSheet to be organized into sections to make
  data input easier and the review of an individual item more readable. This only applies when
  adding or editing an iSheet item or when viewing an individual iSheet item.
- *Allow Injection*. Selecting this setting allows this iSheet to be accessed by other iSheets in *any* site for purposes of performing either an injection or join, which is discussed further <u>below</u>. If this is not enabled, then the iSheet can be used only in a join in the same site.
- *Display i-Sheet*. By default, every iSheet will be listed by default in the iSheets module, visible to every user. However, if there is a need to create an iSheet that will be referenced in another iSheet as a join or injection (see <a href="below">below</a>), but the referenced iSheet should not be visible on its own, uncheck the box for this setting. The iSheet will no longer be shown in the iSheets module to non-administrative users. The alternative way to hide an iSheet is to use permissions, but that also limits who can view the contents of that iSheet when it is used for a join or injection.
- Show Search as Default View. With this setting enabled, when a user first views this iSheet, they will see the iSheet search form instead of a table-formatted view of the data in that iSheet. Therefore, no data from the iSheet will be shown immediately. (Searching iSheets is discussed <a href="here">here</a>.) When that search is run, the view that is marked as default is the view that will be used for the search results. (If a user does not have access to the default view, then the first listed view they have access to will be used instead.)
- *Enable Permissions*. By default, every *active* iSheet is available to be viewed by every security group (and every user in such group) that exists in that site. When this setting is selected, an Administrator can restrict which security groups (or organizations, depending on how access rights have been configured for the site) can access the iSheet and what type of access rights they have (edit, read-only, etc.). Enabling permissions also allows an Administrator to restrict access



to individual columns or to specific views. (Configuring iSheet permissions for <u>columns</u> and <u>views</u> are discussed below.)

O Assuming the site has been configured to use group-level security, when "Enable Permissions" is selected, a matrix will be displayed with a row for every security group in the site, with access *disabled* for every security group by default. (If "Enable Permissions" is not enabled, every group has access to the iSheet by default.)

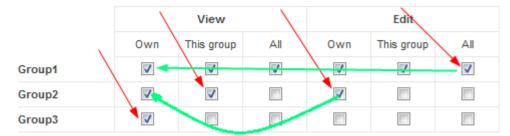
	View		Edit			
	Own	This group	All	Own	This group	All
Group1						
Group2						
Group3						

As shown above, iSheet-level permissions are divided into two categories: View and Edit:

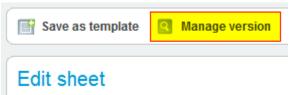
- "View" allows a user in a group to view (and search for) iSheet items that satisfy certain conditions:
  - "All" means the user can view *any* iSheet items, no matter who created them. Because "All" is all inclusive, when "All" is selected, the other choices in the View category are selected as well.
  - "This group" means a user in a security group can view any items created by anyone in the same group. Because "This group" includes every user in that group, when "This group" is selected, the "Own" checkbox is selected as well. If a user is member of multiple security groups with different permissions, that user will have the most expansive permissions available to all of their groups combined.
  - "Own" means a user can only view items the user created him- or herself.
- "Edit" allows a user in a security group to edit or delete iSheet items that match the same criteria as above (All, This group or Own). Also, if a group can edit items then by definition they can also view those same items. (But View rights can be granted without Edit rights.) Clicking checkboxes under Edit for a given group will also check the corresponding checkboxes under View. If a group has been granted any edit rights, then they can add new items to the iSheet.
- Therefore, there are two "hierarchies" of iSheet permissions: giving Edit access rights enables corresponding View rights and giving rights to All items enables access to group and individual items (and group access dictates individual access within that group) in the same category.
  - The screen shot below provides a good illustration of this. Group1 has been granted Edit/All rights; all other access rights follow. Group2, has been granted Edit/Own rights; View/Own rights follow. Group2 is also granted View/This group rights separately. Finally, Group3 is limited to View/Own, so each group member was limited to viewing the items they



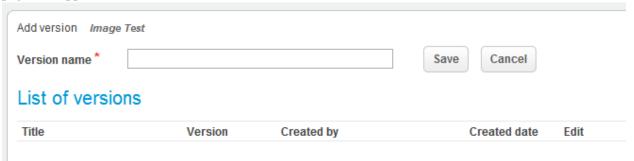
created individually.



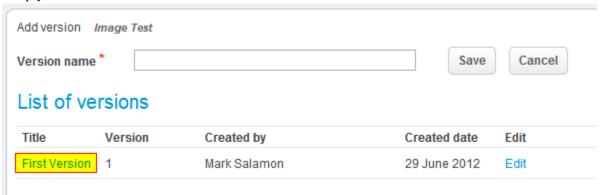
- O Be aware: if permissions are enabled on an iSheet and later disabled, any permissions that had been applied at the iSheet, column or view levels will be reset.
- *Enable Version*. This setting is useful if the iSheet needs to be significantly modified such as when new columns are added or existing ones removed after the iSheet has been released to production and data has been entered. This setting provides the option to create a snapshot of the iSheet data *before* any changes are made. After selecting this setting and returning to *Edit sheet* page, a new button, "Manage version," will appear at the top of the page:



Before making a significant change to the iSheet, click on the this button and the *Add version* page will appear:



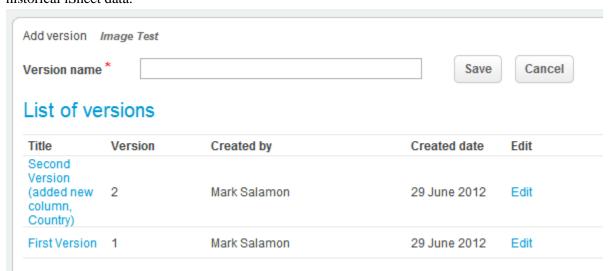
Simply enter a version name and click "Save". The new version will now be listed.



Click on the name of the new version and an Excel file will be downloaded to your computer that contains all of the rows and columns in the iSheet that existed up until that moment. If another



change needs to be made to the iSheet at a later date, such as adding a new column, simply create another version in advance and there will be two versions holding different sets of historical iSheet data:



The version feature can also be used simply to take a snapshot of the iSheet data at a moment in time that is not connected to changes to the iSheet itself. To change the name of a version, click on the "Edit" button. If the "Enable version" setting is later deselected, any versions that had been created will not be deleted, just hidden. Simply re-enable that setting and the "Add version" page will be available with all of the previously created versions.

- Enable Sheet Alerter (and the related fields "Alerter Conditions" and the "Column selector"). Discussed in more detail <a href="here">here</a>, enabling the Sheet Alerter permits users to subscribe to receive email notifications (immediately, daily and/or weekly) about updates to the iSheet, based on criteria that the subscribing user chooses. For example, if an iSheet tracks changes to employment laws in different jurisdictions, the user may only be interested in changes to New York State law.
- Override Item Modified Date. If this setting is enabled, then on the Edit item page, a user can adjust the Modified date value using the following input field:



The choices are: Current time (use the current date and time, which is the default way for handling Modified dates), No changes (keep the existing value of Modified date) or enter any date and time. This should only be enabled in rare circumstances, such as when data from another system is being brought it and must be backdated.

• Refresh Grid After Update Item. If this setting is selected, after an update is made to an item in the current view, the entire view is refreshed to take into account the changes that were just made. That might result in the item being shown with the new values or not being shown at all, which might happen if the changes affected the order in which the items is sorted (and the item appears in another page) or if the item no longer satisfies a filter applied to the current view. The main

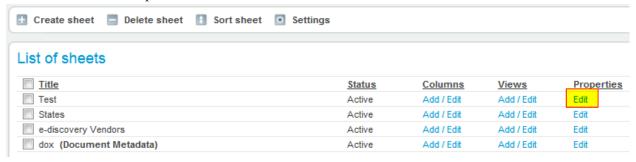


advantage of turning off this setting is that the table-formatted view of the items is shown immediately, without having to be refreshed. This setting is typically enabled.

Hit "Save" to save any configuration changes that have been made to the new iSheet.

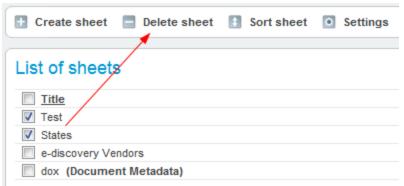
### **Editing and Deleting iSheets**

To edit an iSheet, simply navigate to the main iSheets administration page (*List of sheets*) and click on the "Edit" button in the Properties column across from the iSheet:



The configuration screen will be displayed in which every iSheet configuration setting can be changed.

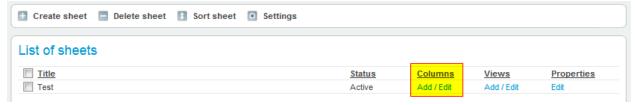
To delete one or more iSheets, click on the checkbox next to the iSheet(s) to be deleted and select "Delete sheet":



A prompt will be displayed to confirm that the selected iSheet(s) should in fact be deleted. However, as long as one iSheet is referenced by another iSheet in an injection or join column (see <u>below</u>), the first iSheet cannot be deleted.

### **Adding Columns**

After configuring and saving the new iSheet, the next step is to add columns. An iSheet may contain any number of columns, although as a best practice the number of columns should be limited to 50. On the *List of sheets* page, which lists all of the iSheets that have been created to date, click on the "Add/Edit" button under the Columns column, across from the new iSheet, which displays the *List of columns* page:





### **System-Generated Columns**

By default, every basic iSheet includes four system-generated columns, the values of which cannot be manually updated except by an Administrator. The system-generated columns are listed at the bottom of the *List of columns* page:

System Generate	d Fields
Created By	
Created Date	
Modified By	
Modified Date	

### These columns are:

- Created by. The name of the user who created the item. This is a lookup column (see below).
- Created date. The date and time when the item was created. This is a date column (see below).
- Modified by. The name of the user who *last* modified the item. This is a lookup column (see below).
- Modified date. The date and time when the item was last modified. This is a date column (see below). (Note that if the "Override modified date" setting is enabled for the site, then any user with edit rights to an iSheet item can override the default Modified date.)

Although the values in these fields cannot be edited, the properties of these fields can be configured like any other column, including:

- Limiting who can view these columns
- Including these columns (or not) in views
- Allowing these columns to be searched
- Changing a column name
- Changing a column's width
- Any other changes applicable to the particular type of column; for example, changing the date format for Creation date, a date field

Unless restricted, when viewing an individual iSheet item, system-generated columns are only displayed at the bottom of the page:



(There are additional system-generated columns for document- and folder-related iSheets,, discussed <u>here.</u>)



### Creating a New Column

To add a new column, click on the "Add new column" button on the List of columns page:



(This page also lists the column type of every existing column and whether or not the column is mandatory.)

The Create column form will appear:



Create column	Sheet name Test			
Name and type Type a name for this o	column, and select the ty	pe of information you wan	t to store in the column.	
Column name *				
The type of information	on in this column is	Single Line Text	1	
Additional column	ns settings is for the type of informa	ation you selected.		
Description	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
Mandatory	○ Yes <b>○</b> No			
Max. characters	255			
Default value				
Column width	150			
Allow search	<b>v</b>			
Add to default view	<b>V</b>			
Column condition	settings			
Specify condition to dis				
Display Field				
	on(s) under which the abo			
And      C	_			
	is equal to	_		
Add Delete				
And/Or Col	lumn	Operator	Filter Value	
				<b>1</b>
Column Permissi	ions			
Inherited from i- Sheet properties	<b>V</b>			
Save				

(Based on the type of column selected, different fields may appear.)



### Column Settings

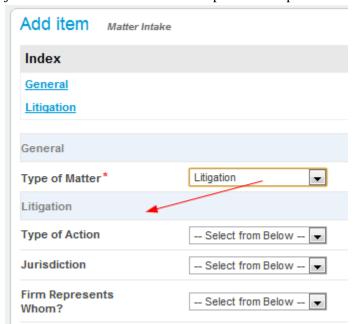
Here is a description of each basic column setting:

- \*Column name. The name must be unique in this iSheet. Although the name can be virtually any length, if the name is too long either: (a) the column's width will need to be very wide to accommodate the length of the column name or (b) part of the column name will be cut off. The column name acts as a label for the column. The column name cannot contain the greater than and less than characters (<>).
- \*Type. This is a pull-down list of the various types of columns available. Each type of column is described in detail below. The default column type is single-line text.
- Description. In the form where a user adds, updates or views an individual iSheet item, the description will be displayed in a smaller font beneath the column name. This provides guidance to the user about what information should be entered in the field. For example, it might describe the format of the information (like a social security number in the format ###-#####). For most fields, a description will not be necessary.
- Mandatory. Whether the field must be completed. (Note that columns that are displayed only if a condition is satisfied, see below, cannot be mandatory.) Certain types of columns cannot be mandatory: attachments, document links, folder links, injects, joins, calculation and auto increment (although no data is entered for the last three).
- Max Characters. The maximum number of characters that can be input into this field (relevant only to single-line text fields).
- Default Value. This value will appear in the field by default when a new iSheet item is created, but can be changed. As a best practice, when a new column is added to an iSheet that already has rows of data, it can be useful to include a default value for the new column initially to ensure that the existing rows have data in that column. After that, the default value can be removed from the column for newly added rows.
- Column Width. This governs the width in pixels of the column when users view an iSheet. (This does not affect the width of the input field.) If the width is too narrow, the column name or data entered into the field may not be fully viewable. If the field is too wide it may force other columns off the page, requiring horizontal scrolling to view those columns.
- Allow Search. This setting controls two related features. If this setting is not selected, then the
  information entered in the column cannot be used as the basis for a search. Also, no separate
  search field will appear for this column in the search form. If checked, the column will be
  searchable and a separate search field will appear in the search form. This setting is typically
  selected.
- Add to Default View. If this setting is selected, when the column is *first* created, the column will be added to the view that is set as the default view *at that time*. If the default view is later changed to another view, existing columns that were set to be added to the default view will not be added to the new default view, only new columns. As a best practice, actively determine which view will be the default and then check this field only if the column should be included in the default view.
- Column Condition Settings. By default, every column will be displayed when a new iSheet item is added. But a column can be made visible or be hidden in the *Add item* or *Edit item* page if certain conditions are met. For example, an iSheet might have a "Country" choice column. If the



country selected is United Kingdom, the iSheet might display a "County" field (a choice field). If the country is United States or Australia, the iSheet instead might display a "State" field (another choice field). For any other country, a text field entitled "Province/Territory" would be shown. Note that multiple conditions can be combined together to determine if a column will be displayed. For example, only show a particular field if the State field equals "New York" and the Industry field equals "Financial Services."

Use Case. A typical use case is to add the same condition to several columns. For example, for a Matter Intake iSheet, when the "Type of Matter" field (a choice between Transactional or Litigation) is selected, a set of fields related to the selected matter type is displayed. For Litigation matters that might be three related fields: type of action, jurisdiction and whether the firm represents the plaintiff or defendant:



All of these fields can be grouped together into a section for a cleaner display. (Sections are discussed <u>below</u>.) The section (and section title) will not appear unless at least one field inside the section is visible. Note: conditional fields will always appear in the iSheets search form provided that they have been configured to be searchable, irrespective of whether the condition to show it has been satisfied.



o Adding a condition. Adding a condition to a column involves these steps:

### Column condition settings

Specify condition to display/hide this column.

© Display Field © Hide Field

Please add the condition(s) under which the above setting should apply.

© And © Or Created By 

is equal to

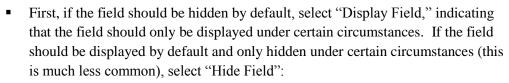


Add	Delete

And/Or Column

Operator

Filter Value





- Next, create the conditions to trigger the display or hiding of the field. This involves five steps:
  - If there is more than one condition, determine whether all or any conditions must be satisfied. For example, if a budget estimate is required only: (a) for matters with a fee cap OR (b) for matters involving new clients, then select "Or" when adding those conditions. On the other hand, if a budget estimate is required only for: (a) fixed fee matters that (b) also involve new clients, then select "And":



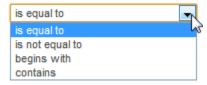
 Second, select the column to use to define the condition for displaying or hiding the column, from all of the other columns in the *same* iSheet:





Note that not every type of column can be used as the basis of a condition, only these types: text (single or multi-line), dates, numbers, choice (which are treated as text) and lookup (people).

- Third, indicate how the value entered in the condition field will trigger the condition. For example, the condition may be satisfied if the value of the field "is equal to" a fixed value. The type of column that is selected will determine the available comparison operators.
  - Text fields (including lookup fields like Created By and Modified By) can use any of these operators:



All text matching is case insensitive.

o Choice fields use the same operators as text fields:

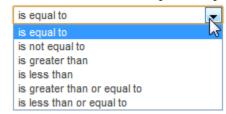


Note that the "contains" operator will match any value in the list of choices, including a substring. For example, if the list includes all US States and the condition is "US State contains 'New", then the condition will be met if the state selected is "New York," "New Jersey" or "New Mexico". If the choice field allows multiple values to be entered, then the match could be any one of them. On the other hand, if the condition is based on multiple possible values in the same text or choice field (for example, "US State equals 'New York' or 'California'"), then create two separate conditions ("US State equals 'New York" and "US State equals 'California'") and "OR" those conditions together:

And/Or	Column	Operator	Filter Value
	US State	is equal to	California
Or	US State	is equal to	New York

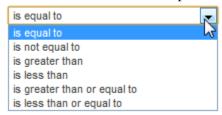


o Date fields use these comparison operators:



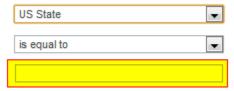
To create a date range (i.e., the date must be between date1 and date1), simply create two conditions and "AND" them together: datefield "is greater than" date1 AND datefield "is less than" date2.

o Number fields use the same operators as dates:



A numeric range can be created in the same way as shown for dates.

• Fourth, determine the value to be matched against. For most column types, this is represented with a blank text field where a static value can be entered:



However, for date fields, enter a date from the date picker:



• Fifth, add the condition to the list of conditions (more than one condition can be listed here):



Multiple Conditions. As noted above, multiple conditions can be entered. Use the
arrows to adjust their order, which may impact the precedence of the "And" and "Or"
operators, such as in the following condition:

And/Or	Column	Operator	Filter Value
	State	is equal to	New York
Or	State	is equal to	California
And	Type of Matter	is equal to	Litigation

Simply select the checkbox next to a condition and click on the up or down arrow to the right. The arrows are also useful when a new condition is added later and needs to be sorted appropriately.

 Removing a Condition. To remove a condition simply click on the checkbox next to the condition and select "Delete":



- Modifying a Condition. There is no way to modify an existing condition directly.
   Instead, first delete the existing condition, then create a new condition, and add the new condition to the list of conditions. If there are multiple conditions, reorder the conditions, if necessary.
- Miscellaneous.
  - Note that conditional columns cannot be made mandatory.
  - Conditional columns are conditional only in the Add item and Edit item pages. If a view includes a conditional column, that column will always be displayed in the table-format view. The conditional column will always appear in the search form, if it has been made searchable.
  - Finally, any column that is used as the condition of another column cannot itself be made conditional. For example, in the example above, if Type of Matter is a condition column for showing other columns, then the visibility of Type of Matter itself cannot be based on the value of yet a third column. Instead, the configuration page for a column used as a condition will list all of the columns that use it as a condition. For example, the Type of Matter field shows this in the condition section:





### Column condition settings

Specify condition to display/hide this column.

Type of Action Jurisdiction Firm Represents Whom?

Therefore, nested conditions are not permitted.

Column Permissions. The Column Permissions section of the form only appears if the iSheet to
which the column belongs had <u>permissions enabled</u>. By default, every column will inherit the
permission settings of the iSheet, in a parent-child relationship:

Column Permissions
Inherited from iSheet properties

 For example, if Group1 had edit rights to the iSheet, Group2 had view rights and Group3 had no access rights (below are what the iSheet-level permission settings would look like):

	View			Edit		
	Own	This group	All	Own	This group	All
Group1	<b>V</b>	<b>V</b>	<b>V</b>	V	<b>V</b>	<b>V</b>
Group2	<b>V</b>	<b>V</b>	<b>V</b>			
Group3						

then the same access rights will apply, by default, to every column in that iSheet.

o If the "Column Permissions Inherited" box is unchecked, then permissions will not be inherited from the iSheet, and access rights for any group with access to the iSheet can be *further restricted*. (A group's rights cannot be expanded nor can any group without any type of access rights to the iSheet obtain rights to a particular column.) In the example above, if the "Column Permissions Inherited" box is unchecked, these options will appear:



(Column permissions will revert back to match the access rights of the iSheet by rechecking the box.)

Note that at the column level, permissions are limited to simple View and/or Edit rights. If a group has edit rights to an entire iSheet but only view rights to a particular column, then that group can create new items, but will not be able to set the value of that column. Whether a user has view or edit rights to all items, items created by anyone in the user's



- group or only items created by that user is governed by the permission settings at the iSheet level, not at the column level.
- o In the example above, because Group3 had no access to the iSheet, the group cannot be given access to *any* columns. And because Group2 did not have edit rights to the iSheet, it cannot have edit rights to the column (it may be difficult to see from the screenshot, but the Edit column is disabled for Group2). But the existing rights available to Group1 and Group2 can be *further restricted* for this column. For example, Group1 can be limited to view rights and Group2's rights can be removed entirely:



Be aware that if access rights are changed at the iSheet level, this may impact the permission settings of a column that has broken inheritance. For example, if Group1's access to the iSheet was removed entirely, it would no longer have any rights to any column, even if those rights had been provided earlier, when inheritance was broken at the column level. Alternatively, if Group3 originally had no rights to the iSheet (or the group did not exist at the time the iSheet was created) but was later granted full access rights to the iSheet, Group3 would not automatically be given any rights to a column that had had its inheritance broken, but those rights could be manually added to the column later.

- Restricting view access rights to a column for a group means that the column will not appear for that group in:
  - Any view of that iSheet, even if the view includes that column and the group has access to the view;
  - The iSheet edit/update form; or
  - The iSheet search form. Moreover, that column cannot be searched on by the group.
- Note that restricting a group's access to a first column and adding a condition to a second column based on the value of the first column will *not* result in limiting that group's access to the second column. For example, certain groups cannot access the "Country" column, and the "US State" column is only displayed if Country equals "United States," but the "US State" column is not otherwise restricted, then all groups will be able to see and search on the "US State" column. Permissions are not inherited simply because a condition has been created between columns.
- Populating iSheet Text Fields from Other iSheets (aka Lookup Glossary)

For all single-line and multi-line text fields, there is now a configuration option to *allow the field to be populated from another iSheet*. This setting, if enabled, allows a text field to be populated with the value found in a selected column in the record of a source iSheet. When the checkbox is ticked for this setting on the column configuration page, the Site Admin will be asked to select a source iSheet and then a view of the selected iSheet that will be used as the source of the data:



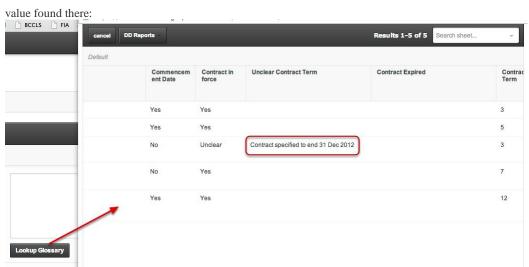


When a user is filling out an iSheet record that includes a text field with this feature enabled, below the text field a

"Lookup Glossary" button will appear:



Clicking on "Lookup Glossary" causes a new window to appear listing all of the records of the previously identified source iSheet, filtered on the selected view. The user can then navigate to the appropriate record of that iSheet, and click on a column



The value of the selected column in that record will be copied back into the text field, in the location where the cursor



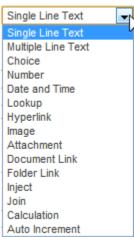
The value of the text field can then be edited. The imported text in that field will not be tied to the source iSheet.

Note that there are some limits on the types of columns from the source iSheet that can be used to populate a text field.



### Types of Columns

There are fifteen different types of columns:



Below is a description of each type. Most of the column types include additional configuration settings as compared with the default Single Line Text column type:

- Single Line Text. The most basic type of column. The only extra field of information available is the *Max. characters* setting.
- Multiple Line Text. This creates a textbox with line wrapping, allowing multiple lines of text to be entered. Three new fields are added:



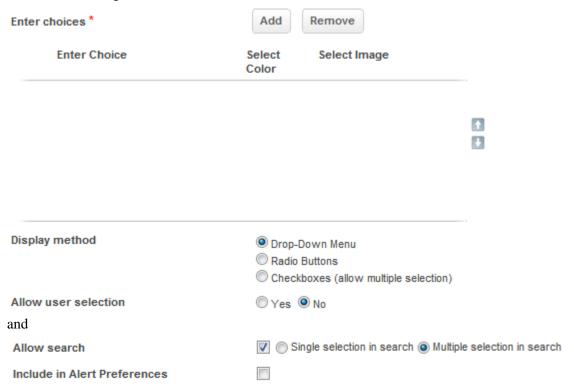
and are relatively self-explanatory. *Number of lines* and *width* govern how large the textbox will appear in the input form, although any number of lines of text can be entered and the textbox will scroll vertically when that number is exceeded. Width is defines the approximate number of characters to show on one line. When the width has been reached, the text will wrap. *Allow rich HTML text* creates a WYSIWYG text editor, which allows basic formatting of text. The editor



### looks like this:



• Choice. A choice field allows the user to pick from a selection of choices. This column type adds several configuration fields:



 First, enter the available choices (at least one is required). To create each choice, click on the "Add" button once and then fill out the information about that choice in the table below:





Enter text in the first column. Optionally indicate a unique color for the choice in the second column. The text will be displayed in that color, which is very useful for status fields, like Not Started, In Progress and Completed. A unique image can be added for each choice, which must come from the Image Library. (The Image Library is maintained by System Administrators. If an image needs to be added, contact your System Administrator, who can go to the iSheets page in the System Admin module and add the image to the Image Library found there.) The images should generally be small, no larger than 44 x 44 pixels, so as not to disrupt the row. When viewing the iSheet items, the colors and images will be shown like this:

### Traffic



The images are displayed in both the table view and in the View item page. The same value cannot be entered twice in the list of choices.

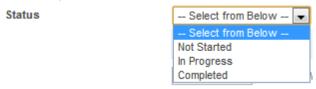
Values in the list of choices can be removed by selecting the checkbox next to the value and clicking "Remove". However, a value cannot be removed if any existing iSheet items include that value. Those items need to be deleted or the value in that column of those items must be changed first. Values in the list of choices can be modified later (for example, if there was a spelling error in the original list). In that case, the changes will propagate to any items that had included the original value. The main danger with changing a choice value is if there was a column condition based on the value that was changed. That condition will need to be manually corrected to match the new value. Similarly, if an email subscription was based on a value that was changed, the subscription will need to be redone.



• The order in which the choices appear can be changed by selecting the checkbox next to the item and using the up or down arrow:



- o Second, select the input display method that makes the most sense.
  - There are three available choices:
    - a drop-down menu (only one value can be selected and, if the field is not mandatory, the value can be unselected):



 vertical radio buttons (one on top of another; only one value can be selected; there is no way to deselect all values once one value has been selected):



• or vertical checkboxes (in which case more than one value can be selected on input):



- If a default value is used, then the matching value in the choice list will be preselected. (The default value must match one of the list values.)
- A choice column can be changed from one input format to another at any time, but note if the format is changed from checkbox to either drop-down menu or radio buttons, data may be lost, because the other input formats can only hold a single value.
- o If *Allow user selection* is enabled, then the user adding a new iSheet item may enter a value that is not on the list. An "Other" choice will be shown and, if "Other" is selected,



a textfield will be enabled where the user can enter a different value. For example:



The "Allow search" setting has been modified to indicate how the search form will appear for this column. One of two methods is permitted: single selection or multiple selection. With single selection, in the search form, a user will be limited to searching on a single value from all the available values in the choice field. This is implemented using a pull-down menu:



Alternatively, with multiple selection, any number of values (NY or NJ) can be selected, in which case the search will be satisfied if *any* of those values are found in an iSheet item. This is implemented with checkboxes:

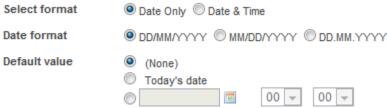


- The "Include in Alert Preference" setting is discussed <u>here</u> and relates to email alerts on iSheets.
- Number. The number column type adds these configuration fields, all of which are self-explanatory.



Number fields can be used in Calculation fields, discussed further below. If a default value is entered it must be a number.

• Date and Time. The date and time column type adds these configuration fields, all of which are self-explanatory:



On the input form, the user will be a date picker to choose a date.



- User Lookup. The user lookup column type is used to select an individual user from among different groups of users in the system. For example, if an item in an Issues iSheet is assigned to someone, that person can be selected with a lookup column.
  - o The user lookup column type adds two configuration fields:



• *Select lookup* is used to limit the pool of users from which a user can be selected and includes four self-explanatory choices:



Note that if "All System Users" is selected, this will reveal *all* users in *all* other sites, even sites that users of the current site do not have access to. It is likely a good idea to avoid this choice except for iSheets and columns available only to internal users.

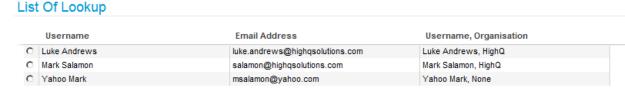
• *Field display* indicates which fields about the selected user will be displayed when the iSheet is viewed:



o For example, this is how a lookup column appears in the add iSheet item form:



Clicking "Add" reveals a list of all of the users in the configured pool of users:



Select a person, and the field display value (below, username and organization) will be shown in the entry form:



and that display value is also shown in the view of the iSheet.

- Only one user can be selected in a lookup column. To change the current user, click on the "Clear" button to remove the current selection and then use the "Add" button to add a new selection.
- Hyperlink. The hyperlink column type allows a user to enter both a link and the text that will appear for that link:



Enter display name			
Enter URL	Try It		

When viewing the link in an iSheet item, only the display name is revealed. Clicking on the link opens the URL in a new window or tab (depending on the browser settings). If the display name is not entered, the URL will be used as the display name.

- Image. The image column type allows a user to add an image to an iSheet, which will be displayed and can be downloaded. All standard image file types are supported.
  - The image column type adds this additional setting to the new column form:

Select method	Image as attachment
	Image as URL

This setting determines whether a user must upload an image that is available locally (such as on the user's C: drive), or instead must provide a link to an image somewhere on the Web by entering the URL for the image.

• When the attachment (i.e., upload) option is selected, the user adding a new iSheet item will see this data entry field:

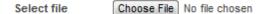
Image	Browse your computer for Image:
image	Choose File No file chosen

When a file has been selected, the "No file chosen" text is replaced by the name of the file.

• On the other hand, when the URL method is selected, the user will see this data entry field and can copy a valid URL into the field:



- Note that the image file will NOT be resized, so make sure that the image is not too large. In the table view of an iSheet, the image's height will govern the height of the iSheet row while the column width setting in pixels for the column will govern how much of the image's width is shown. Therefore, a wide image may be cutoff. In a single item view, the entire image will be displayed in its full size.
- Attachment. The attachment column allows users to add individual attachments to an iSheet:



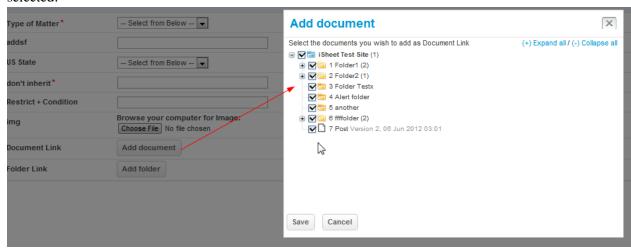
Any file type can be uploaded, with no size limitation. Multiple files can be uploaded in each attachment column. Simply select a file using the file picker and click "Upload." To select another file, repeat these steps. These attachments are not added to the Documents module and exist only as a data element in an iSheet item. Note that, unlike the documents in a document-related iSheet, the content and title of these attachments are *not* searchable. In the view of the item, the attachment can be downloaded by clicking on the file name link. Attachment columns cannot be mandatory.

• Document Link and Folder Link. Both of these column types are similar to each other. They allow a user to reference any document(s) or folder(s) in the Documents module of the same site.



Multiple documents and folders can be referenced in the same column. Each reference provides a pointer to the document or folder for easy access.

 For the Document Link column, an "Add document" button will appear on the input form. Clicking on that link will display the full document tree from the Documents module, from which the user can select one or more documents. In addition, if a folder is selected:

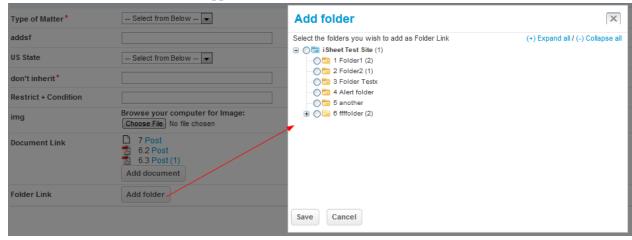


then all of the documents in that folder (and all subfolders) will be selected:



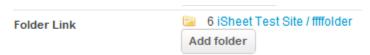
Once a document has been referenced, clicking on the linked document will display the information page for that document or will open up the document directly, depending on the instance-wide configuration. The document links can be removed or changed by clicking on "Add document" again and selecting or deselecting documents from the tree.

 For a Folder Link column, an "Add folder" button appears. When clicked, the full folder tree from the Documents module appears, with radio button selectors:

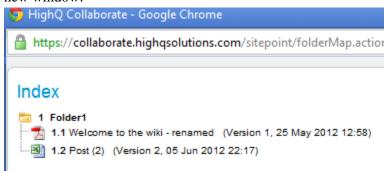


permitting the user to select a *single* folder, which is displayed with the full path to the folder:





Another folder can be selected by clicking on "Add Folder" again. Clicking on a referenced folder will show the index of files (and subfolders, if any) in that folder in a new window:



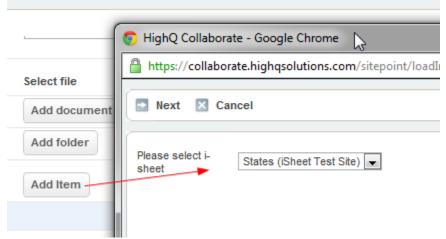
A folder link can be removed using the "remove button" to the right.

- If a document or folder is moved or renamed, the link will continue to appear (and will be renamed, if appropriate). If the underlying document or folder is deleted, the link is also deleted.
- These two column types are subject to the following restrictions:
  - Neither the document or folder name, nor their contents, can be searched from the iSheet search.
  - When choosing a document or folder, the only content in the document tree that will be exposed are the ones that the user adding the iSheet item has access to.
  - The iSheet item will only reveal the name and path of the document or folder being linked to if the user has at least read access to the documents and folders.
- Inject and Join. The inject and join column types introduce a new concept: referencing data from *another* iSheet into the current (primary) iSheet. (In traditional database parlance, this is referred to as a join.) Inject and join are similar philosophically but different in practice. Below is a list of the key differences between the two column types and suggestions for when it is more appropriate to use one column type over the other. If there is a need to create an iSheet that will be referenced as a join or injection, but the joined/injected iSheet should not be visible on its own, a best practice is to hide that iSheet by unchecking the *Display i-sheet* setting. The iSheet will no longer be listed. The alternative is to use permissions on the joined/injected iSheet, but that also limits who can view the contents of that iSheet when it is used for a join or injection.
  - Inject. (Note that starting in version 3.2, the "Inject" column has been renamed "Lookup Basic". More information is provided below about the "Lookup Advanced" column type.) The basic idea is to allow a user to manually select one or more items from another iSheet and associate them with an item in the primary iSheet. For example, if the injected iSheet contains a list of the firm's clients and the primary iSheet tracks events, then for each event it is possible to select one or more clients from the injected iSheet who have been invited to the event.
    - These additional configuration fields appear when the Inject column type is selected in the *Add column* page:



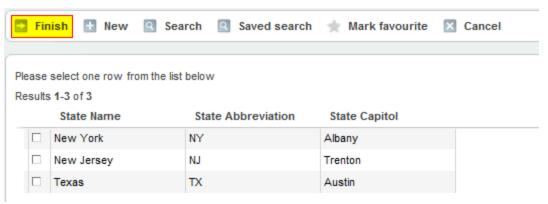
List of sheet*	Business Use Case Matrix (HighQ Intranet) States (iSheet Test Site)
Default link value *	

- **List of Sheet.** This field references the other iSheet(s) to be accessed from the primary iSheet. Only iSheets that have been designated to "allow injection" will be shown here. That list will include *every* "injectable" iSheet from *every* site. Notice above that the list of sheets displays in parentheses the name of the site in which the available iSheet is located. For as long as an injectable iSheet is being referenced by another sheet, it cannot be deleted nor can the injection setting be disabled.
- **Default link value**. This is the text that will appear representing the value from the injected iSheet in the current iSheet, as shown below.
- Example. Assume there is an injected iSheet that contains a list of US States, their abbreviations and capitals. In the primary iSheet, create an inject column that references the US States iSheet. On the new iSheet item form, an "Add Item" button will appear for the inject column field. After clicking "Add Item," the user will be asked to select the injectable iSheet to use, in case more than one injectable iSheet had been associated with this column:



Select an iSheet, then click "Next". The window will then show the list of items in the injected iSheet, in this case a list of states:





Select one or more choices and then click "Finish". (It is also possible to add a new item to the injected iSheet, if the user has edit privileges, by clicking on the "New" button.) The primary iSheet item that was added will now show an entry for *each* item selected (for example, assume two states were selected), with the Default Link value shown (in this case the word "State"). The word "State" appears twice, for each state selected:



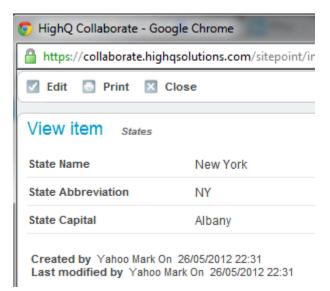
This creates a static relationship between the primary iSheet item and the injected iSheet item(s)

When the primary iSheet item is viewed later, the inject column is shown as follows:



Clicking on one of the "State" values will display the injected item (in its default view) in a new window:



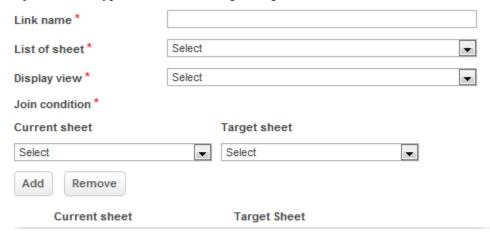


(The injected item can also be edited or printed, if the viewing user has sufficient privileges.)

- Note that inject columns are subject to security restrictions imposed on the injected iSheet. If the user clicking on the link to the injected item does not have access to the injected item, they will be told that the item is not available. But the display link will still appear for them.
- If the injected item is later deleted, the link will still exist, but the user clicking on it will be told that he item is no longer available.
- It is not possible to search on an inject column.
- Injected items can be removed later using the "remove" button.
- o *Join.* The basic idea is to *automatically* select one or more items from the joined iSheet and associate those with the primary iSheet item by joining on common data elements. For example, if the joined iSheet contains a list of every case the firm has ever worked on including the judge for each case and the type of case, and the primary iSheet tracks information on new cases, including the judge in the new case, then the two iSheets can be joined on the judge column. (It is possible to join a table against itself, in which case every item that matches the join, including the item itself, will be listed.) This way, it would be possible to automatically determine all of the other cases the firm has worked on that involve the same judge as the new case. Joined iSheets typically do not act as static reference data but contains dynamic data, whereas an injected iSheet often contains reference data (like a list of states).



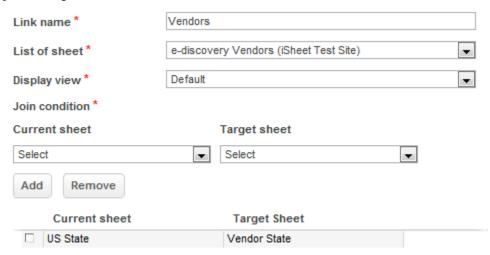
A join column type adds the following configuration fields



- **Link Name.** Similar to the display name used for inject columns. Static text that will be used to link to the joined data.
- **List of Sheet.** Similar to the list of sheet field for inject columns, but only one iSheet can be selected and it must either be another iSheet in the same site or any injectable iSheet in another site.
- **Display View.** Indicates which view of the iSheet being joined should be displayed when the link is selected.
- Join Condition. Restricts which rows of the joined iSheet will be displayed when the link is clicked. For example, the iSheet being joined may contain a list of e-discovery vendors including the state in which the vendor is located. (If the join is on a multi-choice column, the match can work against any value selected if more than one exists.) If the primary iSheet tracks e-discovery projects by state and there is a need to show all of the vendors doing business in that state, simply join the state field from the project iSheet against the state field in the e-discovery vendor iSheet to display the matching vendors. Here is an example of a simple



## join configuration:



Joins create a one-to-many relationship. Because the join relationship is automatic, based on the join condition, there is no entry form for a join. When a user views the primary iSheet item, they simply see a link to the matching data:



If the user clicks on the join link, they will see a list of the matching vendors from the joined iSheet in the same window. (If the column matching on is a choice column that allows multiple values, then a match can be on any of the selected values.) In this case, if the state was "NY", then the vendors shown will all be in NY:

Results 1-2 of 2



Multiple join conditions can be included (for example, must match on both the state and the e-discovery vendor's specialty, for example).

- Any matching items that are deleted from the join iSheet will not be displayed the next time the link is clicked, nor will any items that were changed in such a way that the join condition is no longer satisfied.
- If the user clicking on the link does not have permission to see a joined item, then that item will simply not appear in the matching list of joined items. If the user does not have access to the joined iSheet at all, when the user clicks on the link they will receive a message that there are no items to see. If the user does not have access to the view of the joined iSheet used in the join configuration, they will receive the same message. Finally, if the user does not have access to the joined column, the user will still see joined items, but the joined column will not be displayed.



- It is not possible to search on a joined column.
- Calculation. The calculation column type allows for the creation of numeric calculations based
  on any number columns in the iSheet (but not injected or joined numeric data). A calculation
  may include: one or more number columns in the same row of data, numeric constants and
  mathematical operators. The number columns that are available are listed in a grey table, along
  with a shorthand name (the Operand) for referencing them in the calculation. The calculation
  field includes these additional settings:



In the *Formula* field, enter the calculation, using the operands of the available number columns and numeric operators and constants. In the example above, there are two number columns, Sales and Costs. The calculation is equal to: 120% of the profit margin, which would be:

$$((col_1291 - col_1322)/col_1291)*1.2$$

which amounts to 1.2 \* (sales - costs)/sales).

The formula must be validated before saving or updating the column. To do so, click on "Validate Formula" link, which will reveal a *Check Formula* screen, asking the user to enter test data for each column included in the formula:

#### Check Formula



Click "Evaluation" and, when the result is displayed, click on "Agree" to validate the



#### formula:

## Check Formula

Formula	((col_1291 - col_1322)/col_1291)*1.2	
col_1291	20	
col_1322	15	
Formula result	0.3	
Evaluate	Agree	

• Auto Increment. The auto-increment column type adds these fields to the new column form:

Start value	1
Prefix	
Postfix	

The auto-increment column type provides a unique integer for every record in an iSheet, starting from 1 by default (or any number you choose in the "Start value" field) and incrementing by 1. If an auto-increment column is added after rows have been inserted into the iSheet, every row still will have a correct and unique number. If an item is deleted, there will be a gap in the auto-increment series, but that will not alter the proper incrementing of number for new items. And if the start value is changed, all of the existing auto increments will be renumbered accordingly. Both a prefix and postfix can be added to the integer value. For example, if a prefix of "XYZ-" is used, the auto increment will appear as "XYZ-1". Using a prefix or postfix makes the auto increment easier to read and use.

## Lookup – Advanced Column Type

A new type of iSheet column has been added in Collaborate 3.2: Lookup columns. A lookup column permits a user to select data from another iSheet and have that data display in the current iSheet. For example, create a list of countries and related information in one iSheet, then reference that data in one or more other iSheets to include the country data. The country information will be viewable directly in those other iSheets.

As part of this enhancement, the existing "Inject" column has been renamed "Lookup - Basic," with the new column type called "Lookup - Advanced."

Configuring Lookup Columns

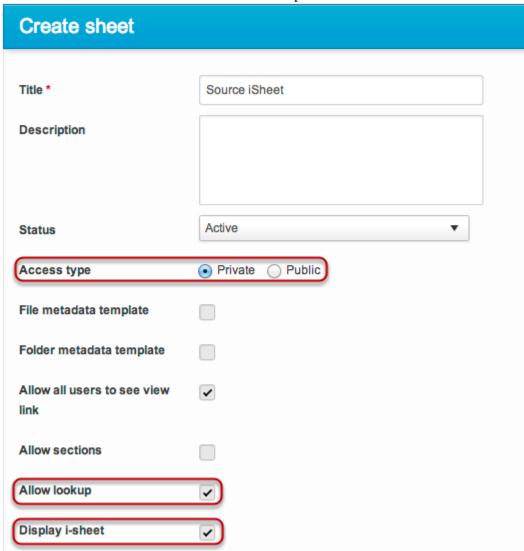
#### Source iSheet and Main iSheet

The lookup data will come from an iSheet that is referred to as the "source iSheet." That lookup data will be presented in another iSheet, the "main iSheet". Note that one or more main iSheets may reference data in the same source iSheet.



## Source iSheet Properties

There are three configuration settings that are relevant when deciding whether and how to permit an iSheet to be used as the source iSheet in the lookup column of another iSheet:



Allow lookup. (This was previously called "Allow inject".) This setting must be enabled for any other iSheet to use this source iSheet as the source of the lookup data. This also means that any type of iSheet, including a file- or folder-metadata iSheet, can be the source iSheet.

Display i-sheet. This will be checked by default.

- If checked, the source iSheet will be listed like any other iSheet in the iSheets module, available for all users to access (if they have been given permission).
- If unchecked, then only Site Administrators (and System Admins and Content Admins) will be able to access the source iSheet from the iSheets module. The primary purpose of this setting is to populate an iSheet with data that will be used solely for lookup purposes, not to be accessed directly. For example, if the source iSheet is simply a list of countries, there is no reason to allow regular users to access that iSheet directly, as the list of countries is static. It only has relevance when referenced in a lookup column of another iSheet



Access Type (Public or Private). A "Public" iSheet is available to be used for lookup and join purposes from any site. A "Private" iSheet is only available to be used for lookup or join purposes by the same site.

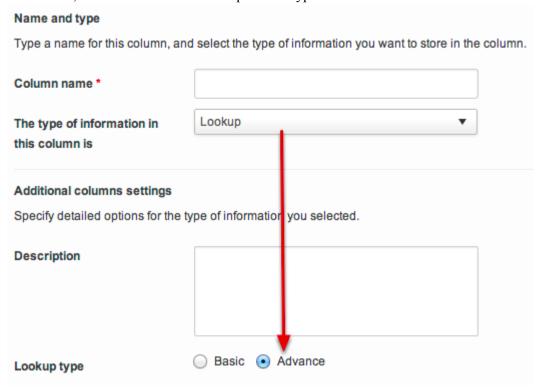
Other than these three settings, a source iSheet should be configured like any other iSheet.

## Configuration of the Lookup Column

The existing "Inject" column has been renamed "Lookup". Therefore, there are now two types of "Lookup" columns:

- 1. Basic -- the existing Inject column
- 2. Advanced -- the new Lookup column

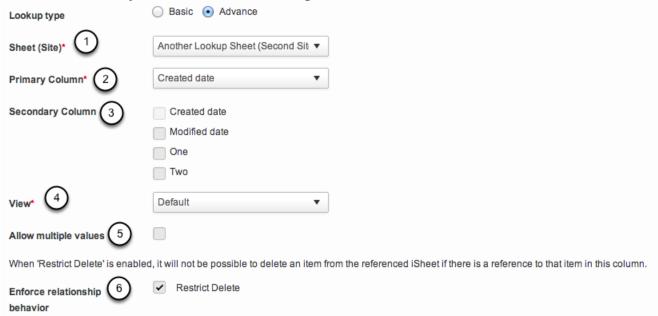
When the Lookup column type is selected for a new column, the type of Lookup column defaults to "Advanced," as most situations will require that type of column:



If this is toggled to "Basic," the column can be configured like the existing Inject column. (Note that once a Lookup column of one type is saved, it cannot be converted to the other type of Lookup column.)



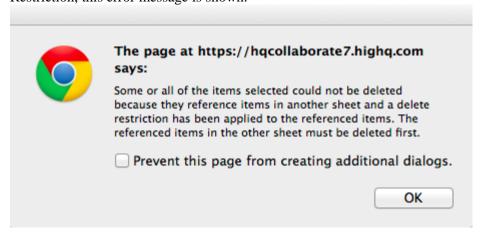
The Advanced Lookup column has these new settings:



- 1) *Source iSheet*. First, select the source iSheet. This pull-down menu will list every iSheet that has been flagged as "Allow lookup" and which is either in the same site or is in a different site where the iSheet has its Access Type set to Public. Indeed, a source iSheet can even reference itself in a lookup column, although an item cannot reference itself.
- 2) *Primary Column*. Select the column from the source iSheet that will serve as the "primary" column in the lookup column. The primary column contains the values that will appear when a user is entering data in the lookup column and searching for possible values in the source iSheet, as shown below. The primary column will be matched for type ahead purposes (as described below). The primary column will also be a link to the source iSheet item.
  - a) The primary column can be any of these types of iSheet columns:
    - i) Single line text
    - ii) Date (including system generated date columns)
    - iii) Number
    - iv) Calculation (number)
    - v) Auto Increment
  - b) Note that the primary column cannot have security applied to it in the source iSheet that is different from the security applied to the source iSheet as a whole. If a column with unique security is selected as the primary column, an error will be shown on save.
  - c) As a best practice, the primary column in the source iSheet should be mandatory. If that value is left empty, it may not be possible to locate that item to include it in the lookup column.
- 3) Secondary Columns. Optionally, select one or more secondary columns from the source iSheet. Secondary columns are columns from the same record as the primary column, and are available to be included in views in the main iSheet. Like for a primary column, secondary columns cannot have unique security applied to them in the source iSheet. A secondary column can be of any type that a primary column can be, plus these types of columns:
  - (1) Choice (single or multi-select)
  - (2) Multi-line text (regular or rich text)
- 4) *Source iSheet View*. Select the view from the source iSheet that will serve as the lookup view. The lookup view will determine which rows of data from the source iSheet are available to be selected from the main iSheet. For example, the source iSheet contains a list of customers, some of whom are



- no longer active. As a result, the source iSheet is configured with an "Active Customers" view. The main iSheet tracks new orders and each order references a customer, which information can be brought in via a lookup column. Because only active customers can place orders, the lookup column view field will be configured to point to the "Active Customers" view. The primary and secondary columns do NOT need to be included in this view.
- 5) Allow multiple values. Optionally, multiple values from the source iSheet may be selected in the lookup column. If the setting is changed from multiple back to single, previously entered values will NOT be lost, but if an attempt is made to edit any of the records with multiple items, those edits cannot be saved until only one item is left in the lookup field.
- 6) Enforce relationship behavior. It is possible to apply deletion restrictions on rows of the source iSheet. This setting is enabled by default. For example, if the lookup column includes a reference to the item the corresponds to "Canada" in the List of Countries iSheet, then the "Canada" item cannot be deleted from the source iSheet for as long as a lookup reference exists. With this setting disabled, items in the source iSheet can be freely deleted. Note that even with this setting enabled, referenced items in the source iSheet can still be edited and updated and individual field values can be cleared, including the primary column. When a user attempts to delete an item that is subject to a Delete Restriction, this error message is shown:



A few other things to note about the configuration of the Advanced Lookup column:

- 1. It cannot be mandatory.
- 2. It is not possible (at this time) to convert a Basic Lookup column to an Advanced Lookup column, or vice versa.

#### Restrictions on Source iSheet & Related Content

When a lookup column is created and references a source iSheet, the existence of the lookup column may impose restrictions on the source iSheet, as well as on the primary and secondary columns and the lookup view of the source iSheet. For example:

## Restrictions on Source iSheet

The following restrictions are imposed on the source iSheet as a whole:

- 1. The source iSheet may not be deleted.
- 2. The status of the source iSheet may not be changed to Pending.

However, it is possible to disable the entire iSheets module on the site where the source iSheet exists, as well as to change the status of the site where the source iSheet exists to archived or preparation. Doing so, however, may remove the values in the source iSheet from being viewable in the lookup column.



## Restrictions on Primary and Secondary Columns

Any columns in the source iSheet that are marked as primary or secondary columns are subject to the following restrictions:

- 1. They cannot be deleted from the source iSheet.
- 2. The permissions on those columns cannot be changed but must inherit the permissions of the iSheet as a whole. (Indeed, any column that already has unique permissions will not appear in the list of primary and secondary columns available to be used in the lookup column.)

These columns must first be removed from being a primary or secondary column in the lookup view before they can be deleted.

## Restrictions on Lookup View

In a lookup column, one view of the source iSheet will be designated as the lookup view. There are two restrictions on the lookup view:

- 1. It cannot be deleted from the source iSheet.
- 2. The permissions on the lookup view cannot be changed but must inherit the permissions of the iSheet as a whole.

But a different view can be configured as the lookup view, and then the former lookup view can be deleted. If a different view is selected later, all existing items selected in the lookup column will still appear in the main iSheet, even if those items do not match the filter of the new view. For example, if the previous view was "US Clients" and the new view is "UK Clients," any US clients previously added in the lookup column will still appear.

Similarly, if the value of an item in the source iSheet is changed in such a way that it no longer fits within the filter of the lookup view, it will continue to appear in the lookup column.

The rule is that the item selected from the source iSheet must satisfy any filter in the lookup view ONLY at the time that its value is populated in the lookup column, not later.

## Analyzing a Restriction

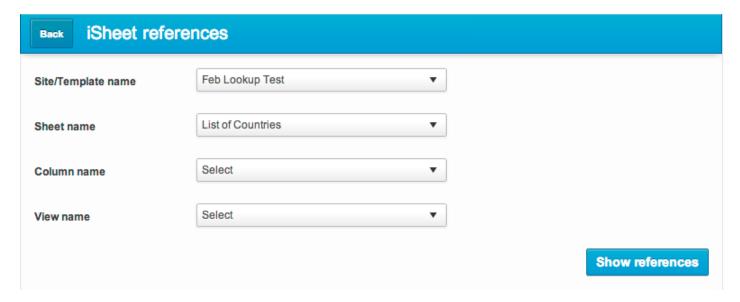
When an action is attempted that is restricted, the user simply sees an error message like this:

This iSheet cannot be deleted because it is referenced in another column. Please contact a System Administrator for more information

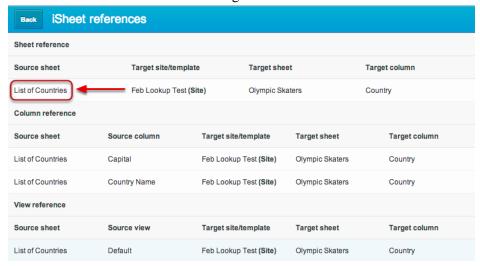
The source of the restriction is not revealed, as the Site Admin configuring the source iSheet may not have access to the main iSheet where the lookup column exists. (If the Access Type of the source iSheet was private, then the source iSheet would not typically be referenced by an iSheet in another site.)

In that case, to determine what is causing the restriction, the Site Admin would need to contact a System Admin to investigate. The System Admin has a new tool available, in the System Admin console, under iSheet admin > iSheet references:





This search form allows the System Admin to search for any source iSheet and find the other iSheets that reference it through a lookup or join column. For example, looking for all references to the "List of Countries" iSheet reveals the following:



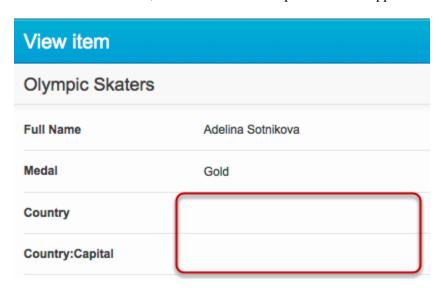
This page shows the primary column that was used for the lookup, any secondary columns that were referenced, and any views that were referenced. If the "List of Countries" iSheet was referenced by additional other iSheets, those would be listed as well.

## iSheet Permissions and Lookup Columns

Column- and row-level permissions applied to the source iSheet will always be respected in the lookup column. For example, for a regular iSheet, if group-based permissions that have been applied (like "External Users" can only see items their own group create) that will be respected. If a file or folder metadata iSheet is the source iSheet, then file and folder security will be respected. A user will never have access to a row or column in the source iSheet through a lookup column if they do not have row or column access to it directly in the source iSheet.



Because row-level permissions are respected, this may lead to some strange results in practice. For example, the source iSheet is configured so that members of the External Users group can only view and edit items created by members of their own group, but not items created by members of the Internal Users group. The main iSheet lookup column references this source iSheet and only a single value is permitted. Members of both groups can add and edit any items in the main iSheet. A member of the Internal Users group creates an item in the main iSheet and uses the lookup column to reference an item in the source iSheet created by another Internal User. If a member of the External Users group views that item in the main iSheet, the value in the lookup column will appear blank:



Moreover, when the External user edits that item, the lookup column value will appear blank. If the External user tries to add a value to the lookup column, they will receive an error message that there is a value in that field already that they do not have access to:



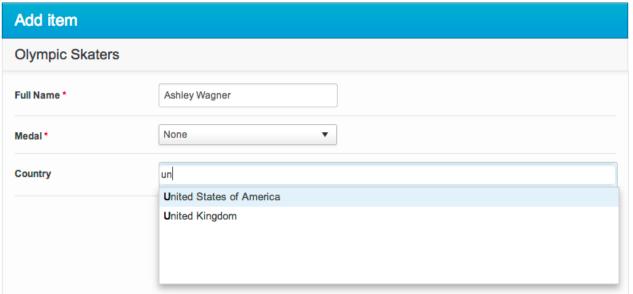
## Using the Lookup Column in Practice

An example will be used to illustrate how Advanced Lookup columns work in practice. The source iSheet is called "List of Countries" and contains a list of every country, including each country's capital, currency and flag, and the continent the country is in. Because this list is fixed, it will be set not to display. In other words, the Site Admin can update this list, but it will not be directly accessible to regular users.

The main iSheet is called "Olympic Skaters" and includes a list of Olympic skaters, the medal they won (if any) and their country. The country information will be a lookup column, pointing to the List of Countries iSheet. When the lookup column is configured, the Country Name field will be the primary column, and the Capital field will be a secondary column. The currency, continent and flag columns will not be shown in the lookup column. (As an image field, the flag column could not be included as a secondary column anyway.)



Adding an item to the Olympic Skaters iSheet looks like this, where "Country" is the lookup column:



The lookup field, Country, uses a type ahead. Simply start to type and any matching values in the primary column field (Country Name) of the source iSheet will appear. (This will only match on values in the primary column, not values in any other column of the source iSheet.) If there are two or more rows in the source iSheet with the same primary column value, then that value will be shown multiple times. Simply select the appropriate value.

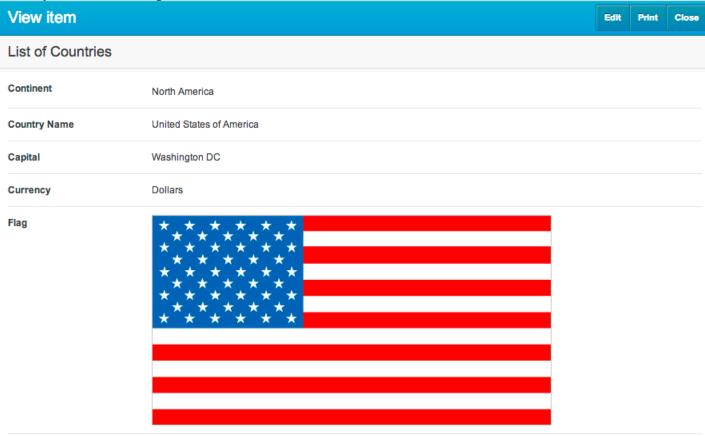
Once the item has been saved, it looks like this in the grid view:



The primary column is displayed as a link. Clicking on it will bring up the full item from the source iSheet in the "View item" window. For example, click on "United States" and the full item, including



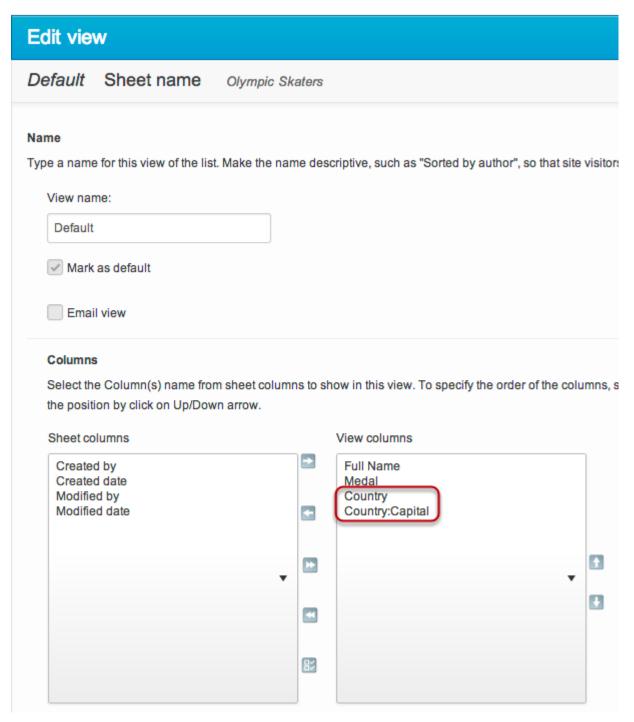
currency, continent and flag, will be shown:



Any secondary columns are also displayed in the grid view of the main iSheet, with this format: [Lookup Column Name]: [Secondary Column Name].

Note that in the main iSheet, the primary and secondary columns can be configured to be included or excluded in any view, either together or separately.







However, only the primary column can serve as a link to the referenced item in the source iSheet.

The data in the source iSheet is fully dynamic. If the value in a given column in a referenced iSheet item changes, then it will change in the main iSheet. For example, if the capital of Russia is changed to Sochi, that will automatically be reflected in the "Country: Capital" field when the Olympic Skaters iSheet is refreshed.

The primary and secondary columns referenced in the lookup column can be exported like any other column.

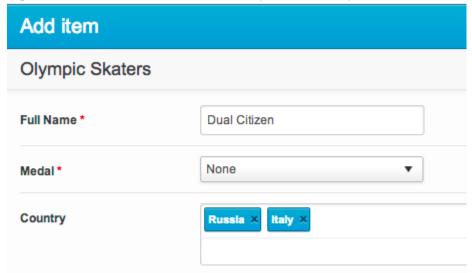
In the example above, the delete restriction was enabled in the lookup column. Therefore, if someone wanted to delete the "United States" item from the List of Countries iSheet, they would get this error:



# The page at https://hqcollaborate7.highq.com says:

Some or all of the items selected could not be deleted because they reference items in another sheet and a delete restriction has been applied to the referenced items. The referenced items in the other sheet must be deleted first.

It is also possible to permit more than one value from the source iSheet to be included in the lookup column. If the example above is changed to reflect the fact that a skater may have dual citizenship, then it is possible to include more than one country in the Country field:





And in the grid view of the Olympic Skaters iSheet, it would look like this:



Each value is shown, both in the primary and secondary columns, separated by semi-colons. Each primary column value is a link to a different source iSheet item.

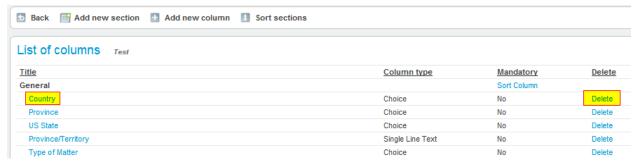
## Future Advanced Lookup Features

Note that, currently, the following features are not available:

- 1. The values in the lookup column cannot be searched upon in the main iSheet.
- 2. The lookup column cannot be used as the basis for a column condition or view filter.
- 3. It is not possible to rename secondary columns. They will always show like this: [Lookup column name]: [Secondary column name].
- 4. It is not possible to create a join on the lookup column, which would allow a user to see every item in the main iSheet that references a particular item in the source iSheet, when viewing a source iSheet item.
- 5. It is not possible to run a full search of the source iSheet to locate an item for lookup purposes; only the type ahead match against the primary column is permitted.
- 6. Several types of columns cannot yet be used as primary or secondary columns, including files and file links, folders and folder links, user lookups, hyperlinks, attachments and images.

#### **Editing and Deleting Columns**

Once a column has been created it can be edited or deleted. Simply go to the *List of sheets* page and click on the "Add/Edit" link under "Columns," across from the iSheet of the column to be edited or deleted. This will display a list of all of the columns for that iSheet. Click on a column name to edit that column. Click on the "Delete" link across from the column name to delete the column:



The *Edit Column* page is identical to the *Add Column* page used initially for configuring the column. Any configuration setting for the column can be changed, *except* the type of column (with one exception: a single line of text can be changed into a multiline text field). If there is a need to change the type of



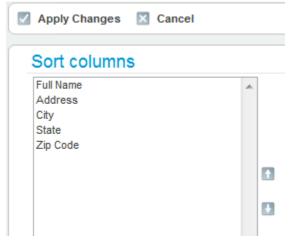
column after items have already been added to an iSheet, first create an entirely new column with the correct column type, then move the data from the old column into the new column. (Depending on the type of data and number of rows, this can be done by manually reentering the data or by using the <a href="import">import</a> process to copy the data to Excel and then copying and pasting data from one column to another.) Only then, once the data has been copied and brought back in to the iSheet, should the old column be deleted.

## **Resorting Columns**

By default, the columns are sorted in the *Add item*, *Edit item* and *View item* pages in the order in which the columns were created. However, that order can be changed. On the *List of columns* page, there is a "Sort columns" button:



(This button will not appear if sections have been enabled, as described <u>below</u>.) This brings up a straightforward form for changing the order of the columns:



Note that the order in which columns appear in a table format view is governed by each view configuration, as described below.

## **Organizing the iSheet by Sections**

The columns in an iSheet can be organized into sections, for better readability. There are only two pages where data that has been organized into sections can be viewed:

- The *Add/Edit item* page
- The *View item* page

Sections have no impact on the views showing multiple rows of data, which are always displayed in a table format.

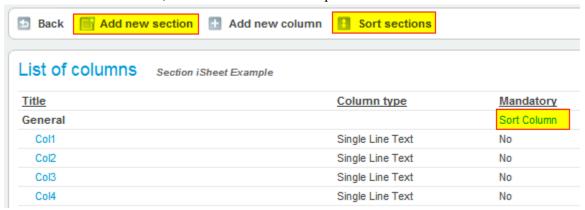


## **Enable Sections**

To add section to an iSheet, first enable the "Allow sections" setting for the iSheet, on the *Create/Edit sheet* page:



Now, when the *List of columns* page is accessed for that iSheet, there will be two new options, "Add new section" and "Sort sections," and the "Sort columns" option will be moved:



The system adds a "General" section by default. If sections are enabled *after* columns have been added to the iSheet, then all existing columns will be added to the "General" section by default, as shown above.

## **Adding Sections**

Ideally, create all sections *before* any columns are added to the iSheet, as this will save time later, but existing columns can be organized into later-added sections. To add a new section, click on the "Add new section" button on the *List of columns page*, and on the next page provide a section name (which must be unique within that iSheet) and an optional description:

## Add new section

Name *			
Descripti	on		
			/
Save	Cancel		

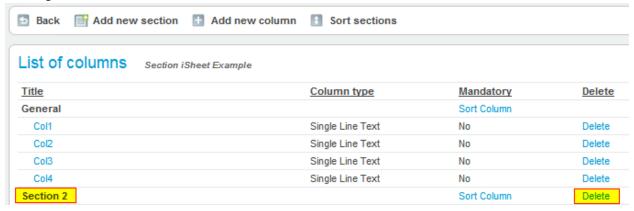
The description will appear on the Add/Edit item and View item pages:

Section 2	
This description is optional.	

The new section now appears in the *List of columns* page. Each section name is a link to an *Edit section* page. Click on the section name to edit its name or description. Also, a section can be deleted by



clicking on the "Delete" button across from it:



However, as long as there is one column inside a section, the section cannot be deleted (and the "Delete" button will not appear):



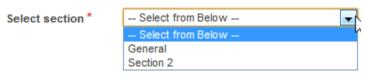
Move any columns in the section to another section before attempting to delete the section. The "General" section cannot be deleted, even if it contains no columns, but it can always be renamed.

## Adding Columns to a Section

As noted above, columns created before sections are enabled for an iSheet will be added to the "General" section by default. Columns created after sections are enabled, however, must be assigned to a section, even if there is only one section. With sections enabled, a new, mandatory field will be added to the *New column* page, indicating what section the column be added to:

#### Additional columns settings

Specify detailed options for the type of information you selected.



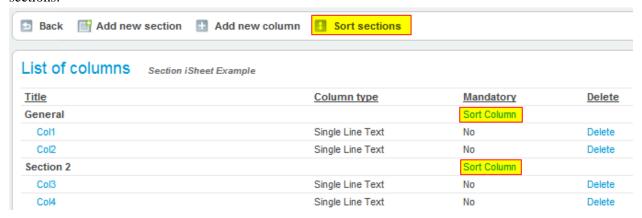
Any column's selected section can be changed using the *Edit column* page.

#### Sorting Columns and Sections

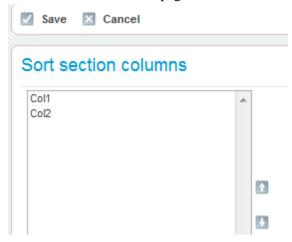
Once sections have been created and columns assigned to them, it may be necessary to reorder either the columns in each section or the sections in the iSheet. Click on "Sort Column" across from a section name



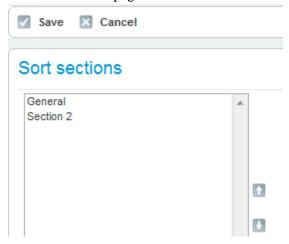
to sort the columns in that section, and click on "Sort sections" at the top of the page to sort the sections:



The Sort section columns page looks like this, showing only the columns in that section:



The *Sort sections* page looks like this:





making it easy to reorder the sections. After reordering, the sections and columns might look like this:

## List of columns

<u>Title</u>	
Section 2	
Col4	
Col3	
General	
Col1	
Col2	

## Sections: What the End User Experiences

As noted above, the end user will see sections on the *Add item* and *Edit item* pages and on the *View item* page. For example, the *View item* page might look like this:



Notice at the top of the page there is an index, listing all of the sections. Each section name in the index is a quick link to that section below. For iSheets with many sections and columns, this can make viewing and navigating much simpler. Below the top part, the page is organized by sections, with the optional section descriptions.

If a section does not contain any columns, it will not be displayed at all. As noted <u>above</u>, if a group of columns is conditioned on the value of another column and all of those columns are organized into a single section, then the section (and its columns) will not appear until the condition is satisfied. Indeed, if there is more than one column based on the same condition, it is suggested that those conditional columns be organized into a single section.



#### **Views**

A view enables an Administrator to customize what fields of information are displayed when multiple rows are shown in a table format. Each iSheet can have one or more views, one of which must be the default view and will be shown by default when the iSheet is selected. (If a given user does not have access to the default view, they will see the first view that is available to them. If a user does not have access to any of the iSheet's views, then the iSheet will not be available to them at all.)

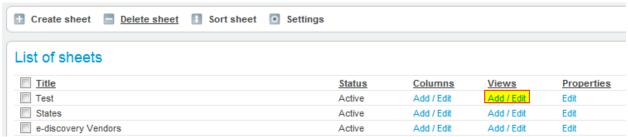
A view embodies column-level, row-level and security-group level security. At the column level, an Administrator determines which subset of columns to include in the view. At the row level, using filters, the Administrator determines which rows of data to include. Finally, if permissions are enabled for the current iSheet, then the Administrator can restrict which groups have access to a given view.

Row- and security-group-level permissions can be used in combination to restrict which rows a security group can access. This would be the case, for example, if a group has been granted access *only* to a single view and that view employs a filter that returns a subset of the iSheet's rows of data. For example, Group1 is given access only to the "New York" view and the "New York" view employs a filter that only lists cases filed in New York state. Group1 can only see the New York state items in the iSheet.

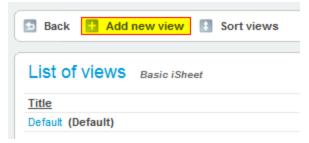
It should be emphasized that while a view can be used to restrict which rows of data a group will have access to, only column permissions can be used to restrict which columns of data they will see. For example, if a group is given access only to a view that contains 3 of 10 columns in the iSheet, but the other 7 columns have not been restricted, when a user from that group clicks on the *View item* page to view an individual item, *every* column available to the user will be displayed.

#### Adding a View

By default, every iSheet comes with one view called "Default", which is the default view. To see this view or create new views, click on the "Add/Edit" button under the "Views" column across from the iSheet on the *List of sheets* page:

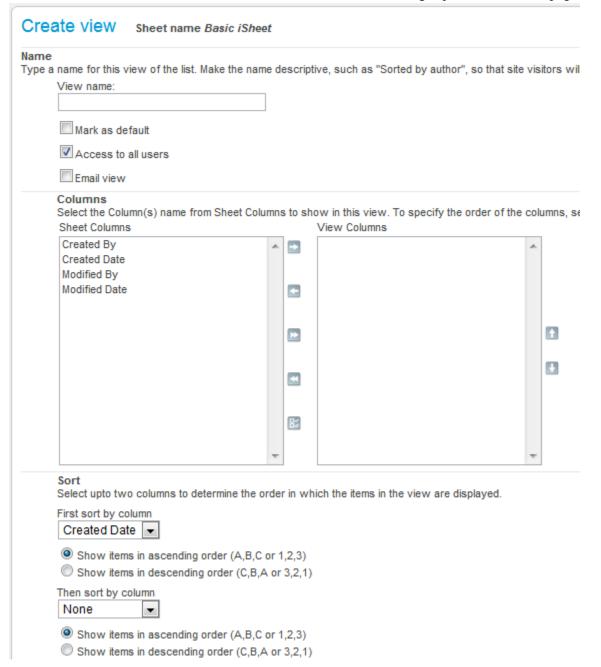


This displays the *List of views* page:

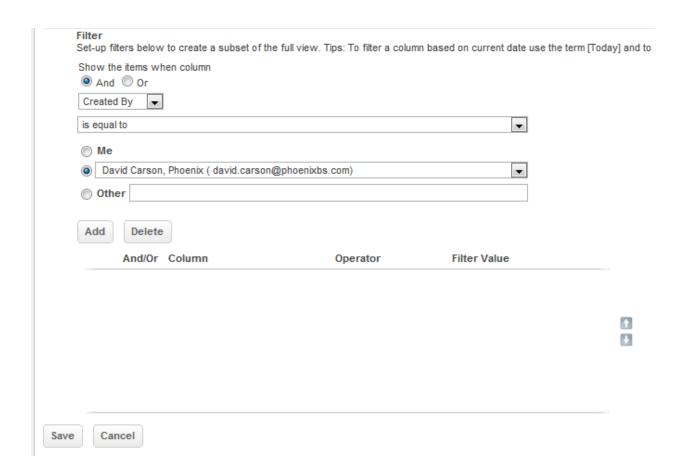




Click on the "Add new view" button to create a new view, which brings up the Create view page:









## The settings on this page are:

- \*View name. Every view must have a name that is unique in that iSheet.
- *Mark as default*. One view must be set as the default view, the one that is shown when the iSheets module is selected. (The view "Default" that is created with every iSheet is initially the default view.)

Mark as default

To make a new view the default, enable the "Mark as default" field. If a user does not have access to the default view, they will see the first view accessible to them. The other views will be listed in order based on when they were created, unless the order is changed later. The default view is always shown with a "(Default)" flag in the *List of views* page:

## List of views



• Columns. Choose which columns to include in the view, including the system-generated columns. A view will respect any permissions applied to a column. For example, if Column1 is included in a view, and GroupA does not have permission to see Column1 but has access to that view, then Group1 can see the view but for them it will not contain Column1. To determine which fields to include in a view, highlight the fields and use the arrows to move the fields between the Sheet Column and View Columns lists. The fields in the View Columns will be active for the view. Use the "Shift" and "Ctrl" keys to select multiple fields to be moved.

#### Columns

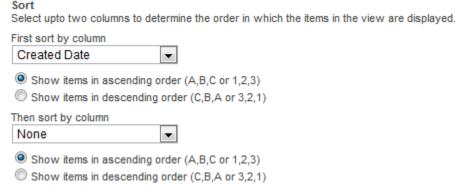
Select the Column(s) name from Sheet Columns to show in this view. To specify the order of the columns Up/Down arrow.



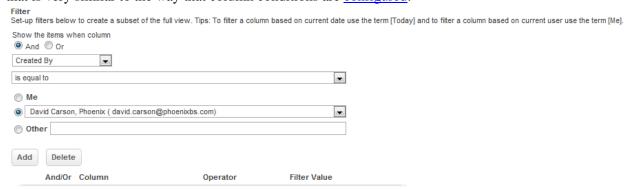
• *Column Order*. Choose the order in which the columns are displayed in the view. Select one or more columns in the righthand list (above) and use the up and down arrows to change the order in which the columns are displayed.



• Sort order. It is possible to set the default order in which the rows in the view will be displayed when the view is first shown (although the rows can be resorted by a user on any column). The default sort for the view can be set on any column, in ascending or descending order. Up to two columns can be used to set the default sort order. For every new view, the rows are sorted from the oldest to the newest, based on creation date. These are the fields for configuring the sort order:

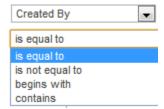


• *Filters*. Using filters, it is possible to restrict which rows of data (*i.e.*, which items) from the iSheet are displayed in a view. For example, if an iSheet tracks litigation, a *New York* view could be created that it only includes cases filed in New York. The view filters are configured in a way that is very similar to the way that column conditions are configured:



Include as many filter conditions as are necessary and combine them using AND and OR operators. The comparison operators available are based on the type of column used for filtering.

 Lookup/User-Selection Columns (including Created by/Modified by columns). The comparison operators are:



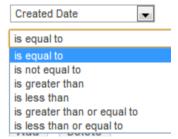
and can be compared against any single user in the instance (from a pull down menu), which includes the person's name, organization and email address, or against any ad hoc text, or can be matched against "Me":





"Me" is a dynamic placeholder that stands for the current user. If a view is limited to display rows where Created by equals [Me], then a user will only see the items they created.

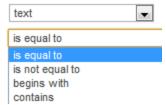
O Date Columns (including Created date and Modified date). A filter on a date-type column can use the following comparison operators:



and can be compared against either today's date (or a range of days around today's date) or against a fixed date:

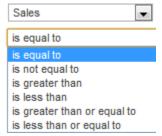


 Text Columns (Single or Multiline and Choice). The text-based columns use these comparison operators:



compared against any ad hoc text that is entered. The match is case insensitive.

 Number Columns (including Calculation Columns). Number columns use these comparison operators:



compared against any ad hoc numeric value.

o Note that the following column-types *cannot* be used to filter a view:



- Autoincrement
- Image
- Attachment
- Hyperlink
- Document Link
- Folder Link
- Inject
- Join

# View Security

If the iSheet at issue has permissions enabled, then it is possible to limit access to a given view to one or more groups. First, by default every view is available to every group that has view access to the iSheet. To change this behavior, uncheck "Access to all users":



At the bottom of the page, a list will be displayed showing all of the groups that have *at least* view access to the iSheet (groups without view access will not see the iSheet or any view of the iSheet and cannot be given access to a view):



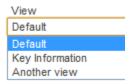
This table should be familiar, as it is similar to the tables used to configure <u>iSheet</u> and <u>column-level</u> permissions. In this case, however, the rights that can be made available to a group are broken down into view, print and export rights. Without view rights a group cannot print or export. <u>Printing</u> and <u>exporting</u> are discussed further below.

Remember that <u>iSheet-level permissions</u> already can be used to create row-level security based on the identity of the person who created the iSheet item, by limiting a user to viewing items created by the user him/herself or to items created by anyone in the user's security group. Therefore, if iSheet permissions have limited the rows in an iSheet available to a given group, that serves as the outer boundary of the rows that can appear in ANY view for that iSheet. View-level permissions can *further* restrict which items a group can access.

# Reordering Views

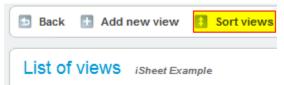
As noted above, the default view is always shown first when an iSheet is selected from the iSheets module. A user without access to the default view is shown the first view they can access.

When an end user accesses an iSheet in the iSheets module, the views for that iSheet are listed in order in a pull-down menu, with the default view selected by default:

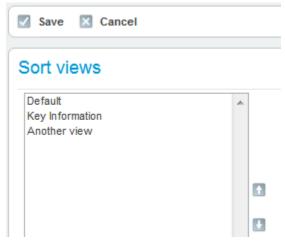




To change the order in which the views appear in the pull-down, go to the *List of views* page for that iSheet and select "Sort views":



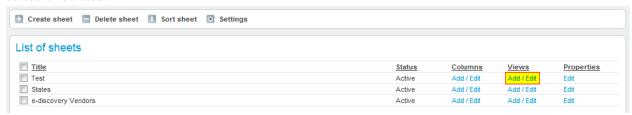
Then change the order of the views from the Sort views page:



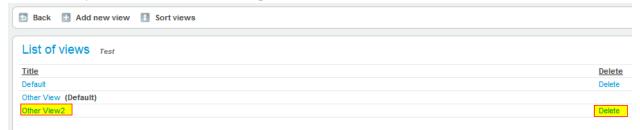
Note the setting on the iSheet properties page that allows for <u>search to be the default view</u>. If that setting is enabled, users will not see a table-format view when they select an iSheet, but will instead see the search form. When a search is run, the results will be shown in either the default view or the view selected by the user.

# **Editing and Deleting Views**

To edit or delete a view, go to the *List of sheets* page. From there you will see a list of every iSheet in the current site. Click on the "Add/Edit" link under "Views" across from the iSheet whose view will be edited or deleted.



A list of every view for that iSheet will be presented:





To edit a view, click on its name. The *Edit view* page is identical to the *Add view* page and any setting can be changed.

To delete a view, click on the "Delete" button across from the name of the view. You cannot delete the default view directly (the "Delete" button is missing for that). Instead, first make another view the default view and then come back to the *List of views* page and delete the previous default view. There must be at least one view per iSheet, so it is not possible to delete every view.

#### **Document and Folder Metadata iSheets**

#### **Overview**

As noted above, there are three types of iSheets: basic, document-related and folder-related.

Document-related iSheets (aka Document Metadata iSheets) permit additional fields of information to be added to documents uploaded to the Documents module. Only one document-related iSheet is allowed per site. Folder-related iSheets permit additional fields of information to be added to folders in the Documents module. Only one folder-related iSheet is allowed per site. While both a document-related and a folder-related iSheet can be associated with the same site, the same iSheet cannot be used for both purposes.

Associating an iSheet with documents or folders is useful for tracking additional information about the documents in the site. Also, as the number of documents in a site grows and the number of branches in the folder tree increases, it becomes harder and harder to locate documents. Searching by iSheet metadata can make it easier to pinpoint just the documents that are needed.

#### Additional Fields

Once an association has been made between an iSheet and the site documents, when a new document is added, the user uploading the file is asked to complete the fields of information found in the related



# iSheet:

Add document	
File	Choose File No file chosen
Name *	
Tags	
Version Notes	
Document disclaimer	
Notifications	Respect user preference
Location	iSheet Test Site 2 (Edit)
Metadata	
col1	
Save Cancel	

Similarly for the iSheet associated with folders. When folders are associated with an iSheet, for new folders added in the Documents module, the *Add folder* form includes the fields from the folder-related



iSheet (like the field "F1" below), in the "Metadata" section:

# Add folder Enter folder name \* Comments Document view None Folder view None iSheet Test Site (Edit) Permissions Metadata F1 Save Cancel

Document- and folder-related iSheets are a good place to use conditional columns. By using conditional columns, it is possible to vary which input fields are displayed when a certain type of document is added or folder created. For example, a site contains leases and there is a folder of Office Leases and a folder of Retail Leases, and different information needs to be tracked for each type of lease. In that case, set up a conditional choice column: "Type of Lease," with the choices of Office and Retail. Create a series of questions for each lease type that will be displayed when the appropriate lease type if selected. Then, when a new office lease is added, select "Type of Lease" equals "Office" and the appropriate fields will be shown. This feature can be used in conjunction with views to show only the appropriate documents fields in the two folders. The Office Leases folder can show the Office Lease view and the Retail Leases folder can show the Retail Leases view. Applying different views for document- and folder-related iSheets is described below.

#### Creating a Document or Folder Metadata iSheet

An iSheet can be associated with documents or folders by enabling the "Document metadata template"	' 01
"Folder metadata template" setting, respectively, on the Add/Edit sheet page:	

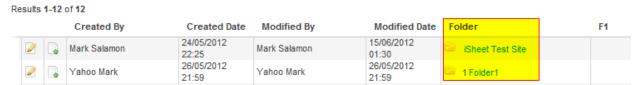
Document metadata template	
Folder metadata template	

which will result the following changes to the iSheet compared to basic iSheets:



- Permissions cannot be enabled on the iSheet. Instead, access to the iSheet and the related
  documents or folders are governed by the permission settings in the Documents module. This
  also means access restrictions cannot be applied to individual columns or views.
- For the folder-related iSheet, there is an additional system-generated column: Folder, which is a link to the associated folder. The width of this column and the column name can be configured in the *Edit column* page. This column can be included in views.

  folders



• For the document-related iSheet, there are two additional system-generated columns: Document, which is a link to the document, and Folder, which is a link to the document's parent folder, both of which can be included in views.

# dox



The width of these columns and the column names can be configured in the *Edit column* page.

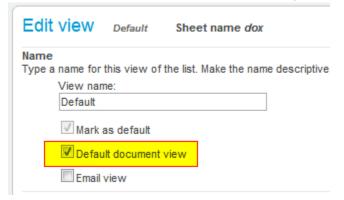
• For the document-related iSheet, there is an extra view setting: default document view, discussed below. Only one view can have this setting.

These fields are like any other iSheet fields. They can be mandatory, conditional based on other columns, etc.

#### View the iSheet Data in the Documents Module

The extra fields in a document- or folder-related iSheet can be viewed in the Documents module, along with the document and folders themselves.

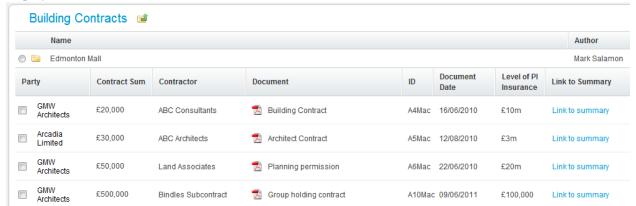
As noted above, in the document-related iSheet, you can set one view as the "Default document view":



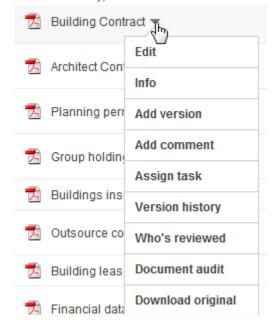


This means that every folder added *after* the view is created will show the documents in that folder with that view.

Here is what the Documents module might look like with the a view of the document-related iSheet displayed:



Note the extra fields from the iSheet. This is just one possible view of the data. The view can include the document name and other document information or not. If the document name field is shown (which is recommended), the document actions menu will be associated with it:



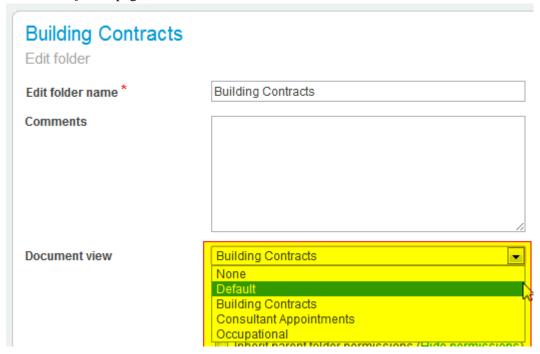
It is possible to choose which view of the document-related iSheet will be shown in any given folder. As noted above, the default document view will be shown by default, but there is no requirement to create a default document view, although it is recommended. If there is no default document view, then documents will simply be shown in the regular way.

To set the view that will be used to display the documents for a given folder, click on the Edit button of the folder in which those documents reside:



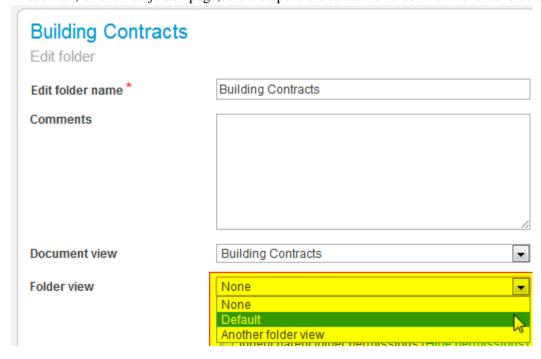


On the *Edit folder* page, there is a choice field to select the documents view for that folder:



Unless there is a default document view or the folder was created before the document-related iSheet was created, the view will be set to 'None' (the regular way documents are shown).

In addition, on the *Edit folder* page, it is also possible to set the folder view for that folder:

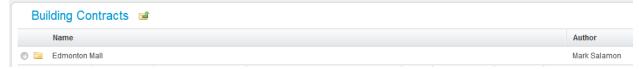




Once the folder view has been set, the extra fields will appear in all of the direct subfolders of the folder, *not* in the folder itself. For example, if the "Default" folder view was set for the "Building Contracts" folder, the extra iSheet fields will be shown in its subfolders, after navigating into that folder:



Note the difference between this view (with extra fields) and the regular folder view:



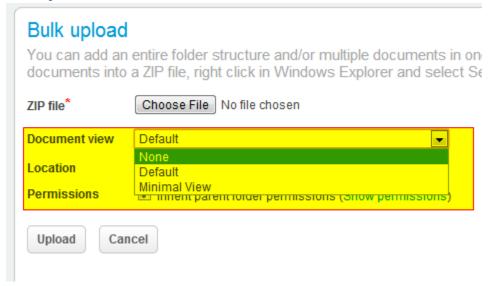
Creating multiple views for document- and folder-related iSheets, and applying different views to different folders, provides flexibility to display the appropriate fields when the type of documents vary by folder. For example, a folder containing retail leases might show different fields than a folder containing office leases.

If there is a need to add extra fields to the Documents module (either for folders or documents), as a best practice the iSheets should be created *before* any documents or folders are added. Once the document-and/or folder-related iSheets have been added, edit the top-level, default folder in the Documents module and apply a document view and a folder view. That way, any documents saved to the top-level folder will use these views. Going forward, every time a new folder is added, make sure to set a folder view (if appropriate) and the document view.

Note that the folder and document views selected for a given folder will not be inherited by any subfolders that are created. And if the folder or document view of a folder is changed, those changes will not be applied to any subfolders.



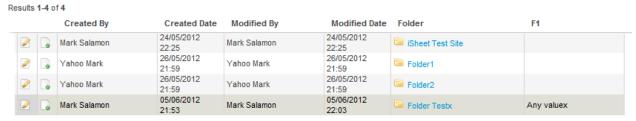
# **Bulk Uploads**



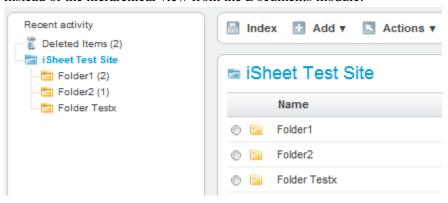
When a user attempts to bulk upload files and folders to a site with a document-related iSheet, the user will be asked to select a Document View. That view will then be applied to any folder that is included in the bulk upload. If no view is selected, the Default view will be applied.import

# iSheets View of Documents and Folders

It is also possible to view the document- and folder-related iSheets, and the extra fields, from the iSheets module. Unlike the view from the Documents module, the view of a document- or folder-related iSheet from the iSheets module is flat. The documents and folders are not presented in a tree or hierarchy, but as a flat list of every folder and/or document in the Documents module the user can access. For example, this is how a folder-related iSheet appears in the iSheet module:



instead of the hierarchical view from the Documents module:





The document-related iSheet is a useful way of showing all of the documents in the Documents module at once, irrespective of folders or hierarchy. This iSheet can also be exported to Excel, but without the documents or folders attached, to provide a simple list of every document in the site, along with other metadata. When exporting a documents-related iSheet, make sure to include the Folder system-generated column in the view.

Clicking on a document name in a document-related iSheet will open that document's document information page, in the same window. Clicking on a folder name in a document- or folder-related iSheet will open up a new window listing that folder and any subfolders and documents, similar to the document index feature:

# Index



Every document and folder on that screen is clickable and can be opened.

#### **System-Generated Columns**

The regular, system-generated fields are calculated in a slightly different way for document- and folder-related iSheets than for a basic iSheet. The date the folder is created or the document is added is the Creation date. The original author populates the Created by field. Modified date and Modified by are determined by the last change made to the document or folder or to the related iSheet fields. For example, if the folder name is modified, that will determine the folder's Modified date. If an iSheet field is updated, that will determine the Modified date. If an iSheet is associated with documents or folders after the documents or folders were added, the Modified date becomes the date that association was made.

Note, however, that changes to a document's iSheet metadata are not considered new versions of the document and do not impact a document's version history. The document-related iSheet fields are associated with every version of a document.

# Editing an Item

From the iSheet view of documents or folders, it is possible to edit an item:



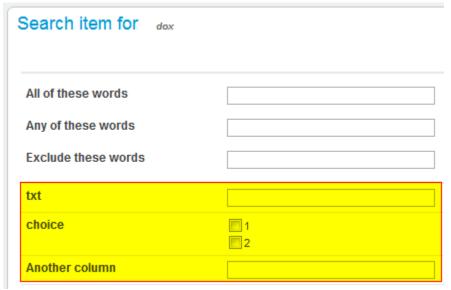


but only the iSheet fields can be edited, not the regular folder or document fields:

Edit item	folders	
F1		Any valuex
•	ark Salamon On 09 by Mark Salamon	5/06/2012 21:53 i On 05/06/2012 22:03

# **Searching**

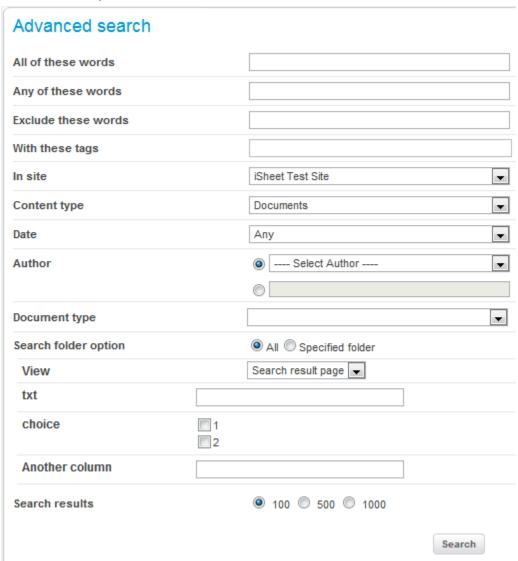
A search against the document- or folder-related iSheet can be performed from the iSheets module or from the Documents module. When searching from the iSheets module, only the iSheets fields are displayed:



When searching from the Documents module, all of the fields are displayed (document or folder fields



# and iSheet fields):



#### **Email Alerts**

Like other iSheets, document- and folder-related iSheets can be configured for email alerts, which provides another way to let users know that documents that satisfy certain conditions have been added to the site. If the email alert includes the document name, that will be a link in the email to the document information page.



#### Miscellaneous

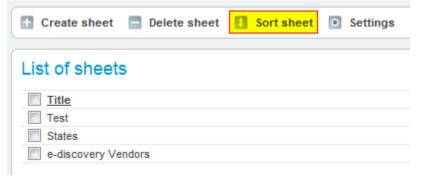
To determine which iSheets, if any, are document- or folder-related, look at the *List of sheets* page, which includes an indicator:

# List of sheets Title Test States e-discovery Vendors dox (Document Metadata) folders (Folder Metadata)

Conditional columns and sections can be used to display different iSheet fields for different types of documents. For example, the following mandatory choice column could be added to an iSheet associated with documents: Type of Lease, with two possible values: Commercial or Residential. If Commercial is selected, then fields related to that choice are shown, otherwise residential-related fields are show. These two different groups of questions can be organized into sections. When a user adds a new lease to the site, they are asked what type of lease and then shown the questions relevant to that type of lease.

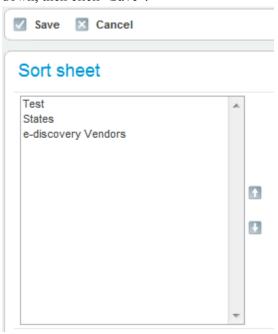
# **Order of iSheets**

The order in which the iSheets appear (either in the lefthand navigation or across the top of the iSheets page) is governed by the order in which the iSheets are listed on the *List of sheets* page. To change the sort order, click on the "Sort sheet" button at the top of that page:





On the *Sort sheet* page, highlight the iSheet to be resorted and use the arrows to move it up or down, then click "Save":



#### **Email Alerts**

In addition to permitting users to come to the site to view iSheets, alerts about new and updated iSheet items can be pushed out to users via email, if the iSheet is appropriately configured and the user chooses to subscribe to email alerts. The basic idea is to permit a user to determine whether and when to receive an alert when an iSheet they have access to is updated. (A user cannot subscribe to an iSheet's alerts if they do not have access rights to the overall iSheet and view access to that iSheet's email view.)

These iSheet alerts are separate from the site-wide alerts that the user can configure from the *Email alerts* page accessible from beneath the user's name in the upper righthand corner of each page:



Not only are the iSheet alerts configured in a different place, but iSheet alerts are sent separately from the other site alerts, which cover new documents, changes to a wiki, etc. Each email-enabled iSheet will send out its own daily or weekly alerts. All daily and weekly alerts (iSheet alerts and regular alerts) are sent out at the same time of based on the time zone of the instance of Collaborate.

The sections below walk through the steps required to configure the email alerts.

# **Enabling Alerts**

There are a number of steps that must be performed by the Administrator to trigger an email alert when changes are made to the contents of an iSheet. Here is what the relevant portion of the *Add/Edit sheet* page looks like:



	Column title	Oprand
Enable sheet alerter		
Alerter condition		

First, check the box next to "Enable sheet alerter":

Enable sheet alerter

Second, at least one Choice column must be included in the iSheet. Optionally, each user can be permitted to choose which value(s) in the Choice column will trigger the alert, which is discussed below. To give users the right to choose, on the *Edit column* page for a Choice column (see <u>above</u>), enable the "Include in Alert Preferences":

Include in Alert Preferences

Otherwise, users will have no control over which values in the Choice column will trigger the alert.

On the *Add/Edit sheet* page there is a list of all of the Choice columns that have had the "Include in Alert Preferences" enabled:

Column title	Oprand
US State	#{col_1283}
US State	#{ucol_1283}
Country	#{col_1281}
Country	#{ucol_1281}

This information can be used when configuring the alert conditions, discussed next.

Next, there is an editable section on the iSheet configuration page where the alert conditions can be defined, using one or more of ANY of the Choice columns in the iSheet:

Alerter condition		
		/

The syntax for the condition is described below.



Finally, one (and only one) of the views in the iSheet must be designated as the "Email view." The columns in this view (and the order of those columns) define the content that will be sent in the email alerts. A user who wishes to receive alerts must have access to this view.

As alluded to above, there are two primary use cases for alerts. The first one is governed by an Administrator, who configures the iSheet alerts. The Administrator can determine that the iSheet will be triggered only when certain choice values are selected and the user has no involvement in picking the values that will trigger the alert. These values are hardcoded into the alert rules. For example, the alert condition might be triggered only when the State = NY. The user who subscribes will receive an alert only under those conditions. This first use case involves any Choice column. They do not need to have the "Include in Alert Preferences" enabled.

The other use case puts the decision in the hands of the end user. Instead of the Administrator determining which values will trigger the alert, the end user makes this choice, from the available values in a Choice column. This second use case involves Choice columns that do have the "Include in Alert Preferences" enabled.

#### **Alert Conditions**

The condition defined by the Administrator must adhere to a specific syntax. The basic idea is that the condition formula must evaluate to true (or 1) in order for the condition to be satisfied and the alert triggered. Looking at the grey box above that lists certain Choice columns, a very simple condition might look like this:

```
containsAnyOf(#{col_1283}, 'NY')
```

The blue text comes from the table that lists some of the available Choice columns. This rule simply says: if col\_1283 (i.e., "US State") contains the value "NY", then trigger the alert. These "containsAnyOf" conditions can be combined together using AND and OR operators, and parentheses to group them properly. For example, if the rule should be: trigger the alert when the US State is NY or NJ, the condition would be:

```
containsAnyOf(#{col_1283}, 'NY') || containsAnyOf(#{col_1283}, 'NJ')
```

(The  $\parallel$  means OR; the && operator means AND.) It is possible to combine any number of columns together. For example, trigger the alert only when the US State = NY AND the Type of Litigation = Antitrust. It is also possible to have the condition be satisfied if ANY value in the choice column (except the "Other" choice, if applicable) is used. The condition syntax to allow any value is as follows:

```
containsAnyOf(#{col_1283}, #{ucol_1283})
```

This means: trigger the alert if *any* value that was selected by the user in their alert preferences is entered for col\_1283 (US State), where ucol\_1283 means "user" selected preferences.

If the alert condition involves more than one column, that can impact the behavior of the alerts. For example, if the following condition is used (this describes the logical condition, not using the condition syntax):

```
(US State = [user selection]) AND (Type of Litigation = [user selection])
```



then the value in *both* columns must match the user's selections for the alert to be triggered. On the other hand, if the condition is set up this way:

(US State = [user selection]) OR (Type of Litigation = [user selection])

then the value in either column must match the user's selections to trigger the alert.

If the Choice column allows a user to add their own values (the "Other" option), it is not possible to set up a condition that is triggered when an "Other" value is selected. Subscribing to any or all values in a Choice column will *not* cover this situation.

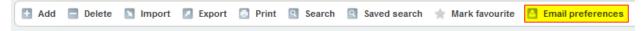
As noted above, ANY Choice column can be used in the condition. The ones listed in the grey box are the Choice columns that allow the user to set their own preferences (discussed further below). To use one of the other Choice columns in the condition, determine the unique number for that column. The easiest way to do that is to temporarily enable that column to be Included in Alert Preferences, then come back to the iSheet settings page and make a note of the column number in the grey box (like col\_####), then change the column setting back. (This is a shortcoming in the platform that will be remedied.)

Indeed, because the condition must evaluate to a value of true (or 1), it is possible to simply enter the number 1 by itself in the condition field. Then every item that is added to the iSheet will trigger an alert, an alert will be sent out, provided a value is entered in the choice column.

Note that a filter in the email view can also be used to to limit which items are included. (For example, the filter could limit the rows in the view where US State equals "NY".) If the email view filter and the condition are in conflict with each other, that will impact when alerts go out.

#### Subscribing to Alerts

Each user with access to the iSheet who wishes to subscribe should navigate to the iSheets module and select the iSheet they wish to subscribe to. At the top of the page, if the iSheet has been enabled for alerts, there will be a button entitled "Email Preferences":



Click on this link and a page will be displayed allowing the user to set when and under what circumstances they will receive alerts.

First, the user should select how often to receive alerts: immediately upon a triggering event, as a daily digest and/or as a weekly digest. Each iSheet's daily and weekly digest are sent separately.



Below that is a list of any of the Choice columns in the site that were *set to be Included in Alert Preferences*, like:

Email preferences Test				
Immediate Daily Weekly				
Country	All USA Canada France UK			
US State	All NY NJ TX			

(Note that any Choice columns *not* set to be Included in Alert Preferences will not be shown here.) The user can select which values should trigger the alert for them, or can select "All". If none are selected, the alert will not be triggered.

A note to Administrators: If a Choice column is set to be Included in Alert Preferences but the related condition limits when an alert will go out to a subset of values in the Choice column (for example, only send the alert if the US State equals "NY" or "NJ"), the Email Preferences page will still show the user *all* of the available values for that Choice column. In this case, if the user chooses to receive alerts when US State equals "TX," they will never receive an alert, because that will not match the condition. Therefore, if the condition will have hardcoded values from the Choice column, do not set that Choice column to be Included in Alert Preferences. Otherwise, that gives the user the false impression that they can control what values for that Choice column will trigger the email alerts when, in fact, the person designing the iSheet has already taken that choice away from the user.

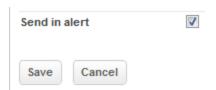
Also, if a Choice column is set to be Included in Alert Preferences but is not actually used in the condition, it will appear on this page but will have no impact on when alerts are triggered. Therefore, if a Choice column is not used in the alert condition, do not set it as Include in Alert Preferences.

If all of the Choice columns used in the condition are not "Included in Alert Preferences," then the Email Preferences form will include the frequency checkboxes (Immediate, Daily or Weekly) and nothing else. The user will receive the alerts whenever the item satisfies the condition established by the Administrator who configured the iSheet. In that case, at least one value in the condition must be hardcoded.

#### User Adding or Updating Item Must Choose to Include it in Alert

The final requirement to trigger the alert is that, when a new iSheet item is added or an existing one is updated, the user performing the action must check the box next to "Send in alert" in the *Add/Edit item* form:





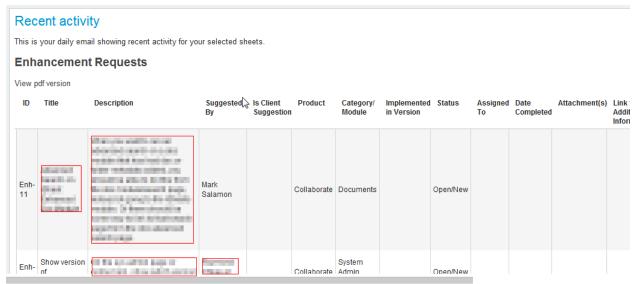
If that box is not checked, then the iSheet item will not be included in any alert (immediately daily or weekly). This is useful especially on updates, when the changes are minor, so other users are not deluged with emails about insignificant changes. The "Send in alert" field is checked by default on all emailenabled iSheets. Also, the user must enter *some* value in the Choice field that the condition is based on. Leaving this value null will not trigger the alert.

Note that alerts are only sent when a new item is added that satisfies the alert condition, or when an item is updated and after the update the item satisfies the alert condition. For example, the user subscribed to receive alerts when US State equals "NY." An iSheet item is added that satisfies that condition and an alert is triggered. A week later that iSheet is updated and the state value is changed to "CA." The subscription condition is no longer satisfied; no alert will be triggered. But if some other field in that item had been updated, the condition will still be satisfied and another alert would have been sent. Alerts are not sent when items are deleted.

Also note that alerts are sent when anyone, including the subscribing user, inserts or updates an iSheet item themselves. This means a user will receive a notification about items they add.

#### Alert Email

A daily email alert looks like this, listing all of the new or updated items in a table format, based on the columns in the email view:



Clicking on the "View pdf version" brings up a PDF file with the same information shown above.

# Alerts for Documents and Folders

Email alerts can also be configured for document- and folder-related iSheets, just like for any other iSheets. These alerts are configured in the same way, but alerts will not be sent in the following situations:



- When documents are bulk uploaded, immediate alerts will not be sent out, because there
  could be so many individual emails, but daily the documents will still be included in daily and
  weekly alerts.
- When new folders are added, immediate alerts will not be triggered, only daily or weekly digest alerts.

#### Date-Based iSheet Alerts

Beginning in version 3.3 of Collaborate, iSheet email alerts have been enhanced. It is now possible to trigger alerts based on the value in a Date column compared to the value of another date, typically today's date or some adjustment to today's day (like 30 days after today's date). The basic idea is that, through the passage of time alone, an iSheet alerter condition that previously was false will become true, which will cause the alert to be triggered. A common example would be for a tenant to receive a notification in advance of the expiration of a lease, to give the tenant sufficient time to make a renewal decision.

These new date-based alerts can be used in conjunction with the existing iSheet alerts conditions involving Choice columns. Indeed, the same requirements for configuring iSheet alerts apply:

- The iSheet must be configured to send out email alerts by checking the "Enable sheet alerter" setting on the Properties
  page.
- 2. An alerter condition must be entered on the Properties page.
- 3. One of the iSheet views must be configured as the "Email view."
- 4. The person who wishes to receive alerts MUST sign up for alerts at a frequency of immediate, daily and/or weekly.

# How Date-Based Alerts are Configured

First, the iSheet must contain at least one date column. (Note that every iSheet already contains two date columns: Created Date and Modified Date. Both of these columns *can* be used as the basis for date-based alerts, but typically a different date column will be used.) For example, an Expiration Date column in a Lease iSheet.

Second, the business rule for triggering the alert must be determined. For example, imagine that a Lease iSheet contains these two columns: (i) Expiration Date, the date a lease expires, and (ii) Renewal Notice Deadline, the minimum number or days in advance of the Expiration Date when the landlord must receive an indication that the tenant wishes to renew for another year. (The Expiration Date and Renewal Period values will vary from lease to lease.) In order to make a proper decision, a tenant needs to be notified about a lease's expiration with sufficient notice. The business rule in this situation could be: send the alert 30 days prior to the Renewal Notice Deadline, in advance of the Expiration Date. For example, if a lease expires on December 31, 2014, and there is a 90-day Renewal Notice Deadline for that lease (or approximately on October 1, 2014), send the alert 30 days earlier, or on September 1, 2014. Then create the alerter condition that matches the business rule and add that to the iSheet Properties page.

Third, configure the iSheet in all of the other ways that are required for alerts (listed above).



Finally, any user who wishes to receive an alert must sign up to receive the alerts with *any* frequency. Unlike regular alerts, in the case of date-based alerts, if a user signs up for alerts under *any* frequency, that user will receive a date-based alert *any time* the alert evaluates to to be true, which could be immediately after the record is added or updated, or at some date in the future.

# Creating the Date-Based Alerter Condition

There are several new elements that should be added to the alerter condition field on the iSheets properties page to enable datebased alerts:

- 1. **dateEval()**. This method compares two dates and will be used to determine whether an alerter condition evaluates to true or false. Typically, this method will be used to compare the value in a Date column against another date value.
  - 1. This method takes three arguments: dateEval([date1], [logical operator], [date2])
  - 2. The two "[date]" arguments can be one of four types of date values:
    - A date column in the iSheet, which would be written like: #{col\_172} (note that date columns in an iSheet
      will appear to the right of the alerter condition in the iSheets Properties page, as shown below. If the value of
      the date column is empty (such as if no date was entered for a given record), then dateEval() will always
      evaluate to false.
    - 2. Today's date, which is referenced as: **getDate()**,
    - 3. An adjustment to a Date column or to today's date, using the dateAddDays() method, discussed below, or
    - 4. A hardcoded date value, in this format: 'DD MMM YYYY'. Note that the date value must be surrounded by single quotes, such as: '03 Nov 2013'
  - 3. The [logical operator] defines the relationship between the two dates, such as whether they must be equal, one must be greater than another, etc. There are 6 possible logical operators, which must always be surrounded by single quotes: 'EQ' (equals), 'NE' (not equals), 'LT' (less than), 'GT' (greater than), 'LTE' (less than or equal to) or 'GTE' (greater than or equal to).
  - 4. Here is an example of the dateEval() method: dateEval(#{col\_172}, 'EQ', getDate()), which means that column 172 (assume that is the Expiration Date column) must equal today's date, in order for the alert to be triggered. Therefore, the alert will be triggered when the Expiration Date for a given iSheet record has been reached.
- dateAddDays(). This method is used to take a date value and adjust it by a number of days, such as: Expiration Date less
  Renewal Notice Deadline, and create a new date value from that.
  - 1. This method takes two arguments: dateAddDays([date], [number of days])
  - 2. The "[date]" argument can be any of the four types of date values listed above, but typically will be a date column or today's date (getDate()). If the value of the date is empty (such as if no date was entered for a given record), then dateEval() will always evaluate to false.
  - 3. The "[number of days]" argument can be any one of a few different types of number values:
    - 1. A hard coded number, like '5' or '-7'.
    - 2. A reference to a column in the iSheet. This can either be:
      - 1. A Number column. Note that if the number column is left blank in a record, and that number column is used in the dateAddDays() method, then the alerter condition will *always* evaluate to *false* for that



- record. Therefore, it is recommended that any such number column always be a required column in the iSheet.
- A Calculation column. Note that if a calculation column is based on a number column that has been left blank, the calculation column will always evaluate to zero, which may lead to unanticipated alerts being triggered. Therefore, it is recommended that any number column used in a calculation field always be a required column in the iSheet.
- 3. A Single-Line or Multi-Line (non-rich) Text column. Note that the value that is in that column must be a number; a non-number value will not work. Also, the column number for text columns -- like '#{col\_175}' -- are not listed in the Properties page, so the column number will need to be obtained another way.
- 4. Note that the source of the number CANNOT be a choice field, such as if you wished to create a "Days In Advance" choice field, with choices of 1, 5, 10 and 20, to allow the user to pick one, which would govern when the alert is triggered.
- 3. A nested dateAddDays() reference, as demonstrated below.
- 4. The value in the "[number of days]" argument MUST always be surrounded by single quotes, regardless of what type of value it is. For example, it should be written as: '-7' or '5' or '#{col\_432}' if that is a number or calculation column.
- 3. **recordModified()**. An alert will typically be sent out EVERY day that the alerter condition evaluates to true for a given record. For example, if the condition is: Expiration Date is less than or equal to Today's Date: (dateEval(#{col\_172}, 'LTE', getDate()), once the Expiration Date matches today's date, then every day thereafter the alert will be triggered, unless the Expiration Date is updated, or some other part of the condition causes the alert to be false. However, by adding the recordModified() flag to the condition, you are telling the system to send out the alert only when the rest of the condition is true AND the record has just been modified (or created). For example, if the alerter condition was: dateEval(#{col\_172},'LTE',getDate()) && recordModified(), then the alert would only be sent after the Expiration Date had been reached for a given record AND someone manually updated that record.
- 4. **dateDate**(). As noted above, the getDate() method returns a date value equal to the current date. This is used in other methods, like dateEval() and dateAddDays();

These new elements that can be used in the alerter condition must be used *exactly* as written above, including the case of the letters in the methods and the use of parentheses. Using "recordmodified()" with a lower case 'm' will not work. Also, make sure to always use "simple" single quote characters, not the single quote characters found in Microsoft Word. (In other words, do not use Word to create the formula and then copy and paste a formula from Word.)

These new alerter elements can be used by themselves or in conjunction with the existing alerter elements, such as by checking for the value of a choice field. Operators like AND (&&) and OR (||) should be used as well to combine multiple conditions, along with parentheses to group conditions. As before, for an alert to be triggered, the *entire* condition must evaluate to true.

Note that if the value in a Date column includes a time element as well as the date, for purposes of date-based alerts, the time portion of the date value will be *ignored* entirely. The same applies to the getDate() method; only the date portion is relevant. Dates with times will NOT be rounded up or down to the nearest date; the time element will simply be ignored.



If a number with decimals is used in dateAddDays(), it will be rounded to the nearest whole number, where .5 rounds up.

# Alert Frequency

When an alerter condition includes the dateEval() method, some special rules apply that affect when alerts are sent:

- If the condition is true at the time the record is created or modified (like Expiration Date is less than Today), then the alert will be sent *immediately* to anyone who has subscribed to alerts at *any* frequency.
- For each day that the condition is true, an alert will be sent at midnight at the start of that day, based on the time zone of the relevant Collaborate instance.

These immediate and daily alerts will be sent out to every user who has signed up to receive alerts for ANY frequency, even if they have not signed up to receive immediate or daily alerts. For example, if a user signs up for weekly alerts and the "Expiration Date is less than Today" alert is triggered for a newly added item, that user will receive an immediate alert. The reason for this is based on the assumption that a user would prefer to receive a date-based alert as soon as possible. For example, a user should not wait a week to be alerted about an upcoming expiration date, as the expiration date may have been passed by the time the user receives the weekly alert digest.

Also, if a regular date-based alerter condition is used, alerts will still be sent out when that condition is true for a given record, even if notifications were turned off when that record was added or updated.

#### **Date-Based Alert Best Practices**

Here are a few best practices when creating date-based alerts.

# Use the Equals Logical Operator Most of the Time

If any logical operator besides equals ('EQ') is used in the dateEval() method, there is the risk that every recipient of those alerts will start to receive an alert EVERY day that the condition evaluates to be true. This is rarely the intended behavior. Typically, using the 'EQ' operator is the best approach, as that will only cause an email alert to be sent on the one day that the condition evaluates to true.

A different logical operator is best used when the recipient is required to take some action to ensure that the condition no longer evaluates to true. Until that occurs, the daily alerts will continue to be sent. (Similarly, in the case of tasks, the task reminder will no longer be sent if the task is marked as completed.) For example, in the lease expiration context, add a column to the iSheet called "Lease Renewal In Progress" (Yes or No). In the email view, filter for only those leases where the renewal is not in progress. Once a recipient receives an alert for a lease coming due, they can change the value of this field to "Yes," which will cause alerts for that lease to stop. But until the user changes the value of the lease renewal in progress column, the user will continue to receive alerts. If the lease is extended, then the user can modify the lease Expiration Date to be in the future and set the Lease Renewal in progress column back to "No," so that next year an alert will be sent when the lease is expiring.



# Filter on [Me]

Configure the email view to be filtered based on the value of an assignee column. For example, add an "Assignee" column -- a user type column -- to the iSheet. This way, you can make a person responsible for each lease. In the email view, filter for records where Assignee = [Me]. That way, only the person who is responsible for a given lease will receive a lease expiration alert for it, not every user who signs up for alerts. This would be similar to assigning a task to a specific user.

# Multiple Alerts

It is possible to set up multiple alerts for the same record to be triggered on different dates, just like you can set up multiple reminders for the same task. For example, if you want to set up an alert to go out both 60 and 30 days before the Expiration Date, use this format:

dateEval(#{col\_172}, 'EQ', dateAddDays(getDate(),'60')) || dateEval(#{col\_172}, 'EQ', dateAddDays(getDate(),'30'))

This tells the system: send out an alert when today's date, plus 60 days, equals the Expiration Date (i.e., 60 days before the expiration), OR send it when today's date, plus 30 days, equals the Expiration Date.

# Date Comparisons and Positive and Negative Days

The same condition above could be written as:

dateEval(getDate(), 'EQ', dateAddDays(#{col\_172},'-60'))) || dateEval(getDate(), 'EQ', dateAddDays(#{col\_172},'-30')))

This tells the system: send out an alert when the Expiration date, less 60 days, equals today's date (i.e., 60 days before), OR send it when the Expiration date, less 30 days, equals today's date.

Which leads to an important point. In those cases where the alert should be sent some number of days *before* the date has been reached, then the date value will be AFTER today's date. Using the 'EQ' operator, that means the date less a number of days equals today's date, or today's date plus a number of days equals the date. In contrast, when the alert should be sent some number of days *after* the date has been reached, then the date value will be BEFORE today's date. Using the 'EQ' operator, that means the date plus a number or days equals todays's date, or today's date minus a number of days equals the date.

There are usually two different ways to write the same condition. Write it the way that makes the most sense to you... and test the alerts before releasing it to production.

#### Using Calculation Columns

One of the main reasons to use Calculation columns is because the dateAddDays() method can only take a hardcoded number or a column reference to represent the number of days. For example, if you want to trigger an alert 30 days before the Renewal Notice Deadline before the Expiration Date, you may NOT write it this way (with the key section in peach):

dateEval(dateAddDays(getDate(), #{col\_175}+30'), 'EQ', #{col\_172})



(where column 175 is the Renewal Period column). Instead, create a calculation field called "Renewal Period Plus 30 Days" (column 176) and reference THAT calculation column instead:

```
dateEval(dateAddDays(getDate(), #{col_176}), 'EQ', #{col_172})
```

There are alternatives, like nesting the dateAddDays() method to achieve the same result, although this gets hard to read:

```
dateEval(dateAddDays(dateAddDays(getDate(),'#{col_175}'),'30'), 'EQ', #{col_172})
```

# Combining Date and Choice Conditions

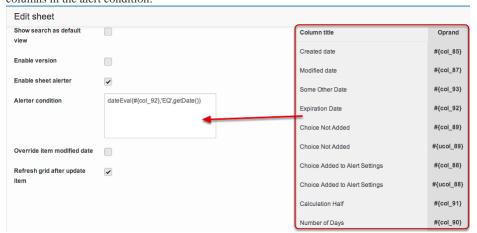
As noted above, an alerter condition may contain both date parts and choice column parts, like:

```
dateEval(getDate(), 'EQ', #{col_14}) && containsAnyOf(#{col_10}, 'blue')
```

Which means alert me when choice column (column number 10) is set to "blue" AND the date column (number 14) equals today's date.

# Miscellaneous Changes related to Date-Based Alerts

- 1. It is no longer necessary to add a choice field to the iSheet in order for alerts to be triggered.
- On the iSheet properties page, every Date, Number and Calculation column is listed, to make it easier to reference those columns in the alert condition:



# **Bulk Changes**

If a bulk upload of documents or a mass update of iSheets items using the Import feature results in more than one iSheet item being updated, this will trigger only a *single* iSheet alert, not a separate email for each item that was added or updated, assuming a user has subscribed to receive immediate notifications.

# **Summary**

Successful email alerts involve a subtle choreography between three players: the Administrator, who configures the iSheet and the alert condition; the recipient of the alerts, who must configure their Email Preferences appropriately; and the user adding or updating an iSheet item, who must choose to send the item in an alert and must enter a value in the Choice field.



In order to enable iSheet alerts, all of the following steps must be completed.

- For the Administrator:
  - Enable the iSheet for alerts and make sure at least one group has access to this iSheet, if permissions are applied to the iSheet. (By default, every group will have access.)
  - Create at least one Choice column, which optionally can be configured to be included in the alert preferences page.
  - Create a condition that will evaluate to true (1), which can be based on any Choice column(s) in the iSheet.
  - Enable a view for email alerts and make sure at least one group of users has read access
    this view, if permissions are enabled on the view. (By default, every group with access to
    the iSheet will have access to the email view.)
- For the recipient of the alerts:
  - o Subscribe to receive iSheet email alerts (immediately, daily or weekly).
  - If applicable, define under what circumstances (for example, US State equals "New York") the alert should be triggered, which circumstances match the condition established by the Administrator.
- For the person adding or updating an iSheet item:
  - The box next to "Send in alert" must be checked on the *Add/Edit item* page when adding or updating an iSheet item.
  - o Select a value in the Choice column that is used in the condition.

The most important piece is for the Administrator to set up the alerter condition appropriately so that the user subscribing to alerts has choices that make sense.

#### Miscellaneous

When iSheet items are added in bulk through the <u>import process</u>, there is a flag that can be enabled to trigger alerts on the new and updated items in the import:



# **iSheet Templates**

Any existing iSheet can be saved as a template by a System Administrator. A template is simply the structure of the selected iSheet, with all of the data removed. Once an iSheet has been saved as a template, that iSheet can be recreated in any site in the same Collaborate instance.

Creating a template preserves the following feature of an iSheet:

- The main configuration of the iSheet itself
- All columns and their configurations

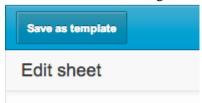


- All views and their configurations
- Any sections and the order of columns

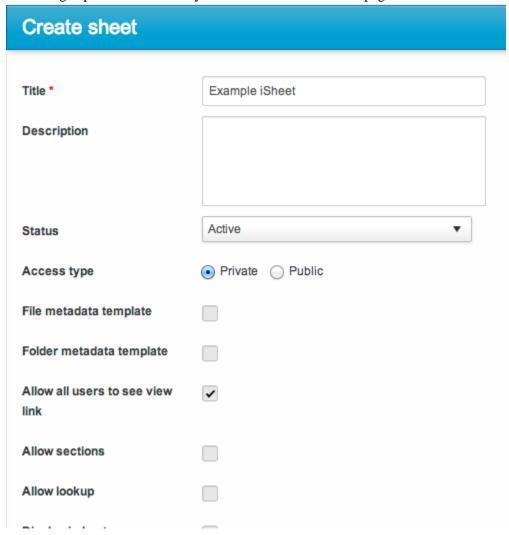
However, the template cannot include any unique permissions.

# **Creating a Template**

An iSheet can be saved as a template by a System Administrator by navigating to the *Edit* properties page for that iSheet and clicking on the "Save as template" button at the top:



This brings up a form that is very similar to the *Create sheet* page:



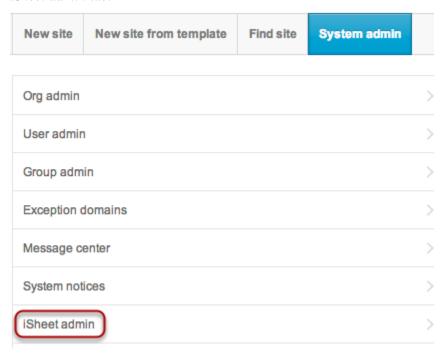
Every setting that was enabled on the selected iSheet is enabled in the template. At this point, the template's settings can be modified before the template is created. (But any changes made to the iSheet



after it is turned into a template will not change the template.) Simply give the template a name that is unique across all existing iSheet templates. (Any iSheet template that is created will be available to every Site Administrator to use as the basis of a new iSheet. Templates are not personal to particular users.)

# **Managing iSheet Templates**

System Administrators can manage existing iSheets from the System Admin console, by navigating to the *iSheet admin* tab:





On that page is a list of existing iSheet templates and also several available action buttons:

Back	Create template	Delete template	Sort template	Image library	ISheet references			
List of iSheets templates								
	Title					Status	<u>Properties</u>	
	Imrans test templa	ate				Active	Edit	
	Travis's Template	Sheet				Active	Edit	
	MS					Active	Edit	
	Travis Big Data					Active	Edit	
	Tax Template					Active	Edit	
	Template Alerter i	Sheet				Active	Edit	
	Travis Testing Ter	mplate from SysAdr	min			Active	Edit	
	Test Template2					Active	Edit	
	Board Voting					Active	Edit	

From this page it is possible to update and delete existing iSheet templates, create a new template, as well as sort the list of templates.

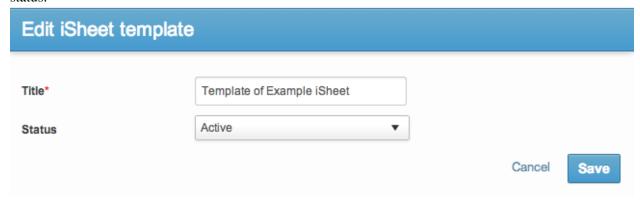
# **Updating Existing Templates**

An iSheet template does not represent merely a single iSheet. It is a container, that can contain a set of related iSheets templates. When a template is created from an existing iSheet, it is populated with that iSheet, but other iSheet templates can be added later.

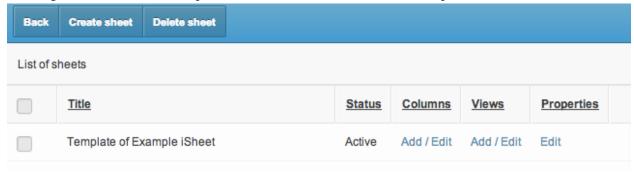
On the *List of iSheet Templates* page there is an indication of whether the iSheet is active or pending. Pending iSheets cannot be used as the basis of new iSheets. There is also an "Edit" link, which when clicked brings up an *Edit iSheet template* page, where is it possible to change the template's name and



#### status:



Clicking on the name of the template reveals the list of iSheets in that template:

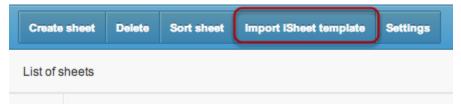


The iSheet that was turned into a template will have the same name by default as the template container that was created. From here each iSheet template can be modified as if it were a regular iSheet, such as by adding or editing columns, adding or editing views, or modifying the iSheet template's properties.

In addition, new iSheet templates can be added, and existing templates deleted by using the "Create" and "Delete" buttons at the top of the page.

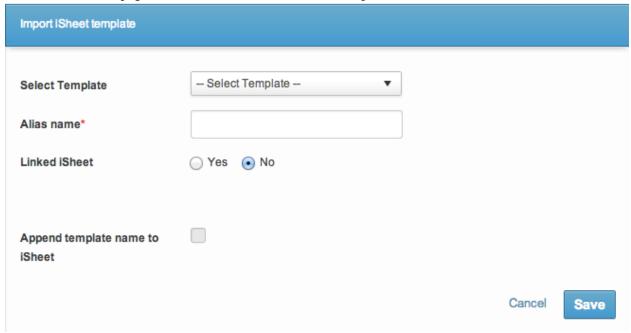
# **Creating a New iSheet from a Template**

A new iSheet can be created based on a template, with all of the template's configuration settings, columns, and other properties. To do so, from the top of the *iSheets admin* page of a site, click the "Import iSheet template" button:





which will reveal a page that lists all of the active iSheet templates:

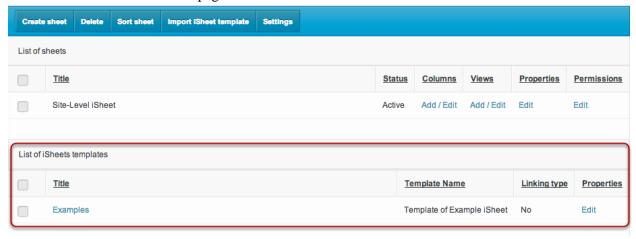


Simply select a template and give the new iSheet template container an alias that will be used in the site. There are two other options on this page:

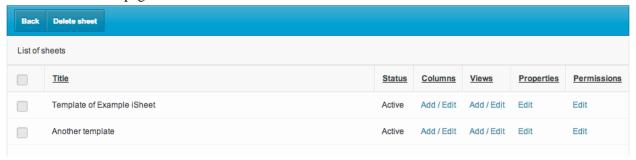
- Linked iSheet. This setting determines whether the new iSheet that is created from the template can be modified or, alternatively, whether it cannot be modified but instead will be tied to the underlying template, so if there are any changes made to the template, those will be applied to the linked iSheet. If the iSheet is NOT linked, then the template merely provides a starting point for the new iSheet, which can be altered based on any changes required for the particular site. Be aware that if the iSheet IS linked, then changes to the template will impact the iSheet that is created, including if any columns are removed from the template, they will be automatically removed from the iSheet as well, possibly resulting in the loss of data. Note that permissions that are unique to the site can be applied to an iSheet, whether or not it is linked to the template.
- **Append**. The second setting merely governs how the iSheets that were created from the template will be listed. For example, if the template is given an alias of "Matter Data" and it contains two iSheets: "List of Matters" and "Matter Bills", if the template name is not appended, then in the list of iSheets those iSheets will simply be shown as "List of Matters" and "Matter Bills". If the template name is appended, the iSheets will be shown as "List of Matters (Matter Data)" and "Matter Bills (Matter Data)".



Once this step has been taken, the new iSheet template container and related iSheets will appear at the bottom of the *iSheets admin* page:



The "Examples" template container in this example contains two iSheets. Clicking on the "Examples" links will show this page:



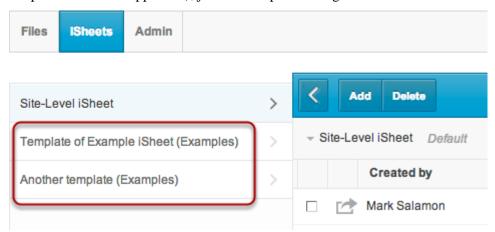
These iSheets are now iSheets that are fully available in the site, and can be managed just like any other iSheets. In particular, whether the iSheets are linked to the template or not, the permissions for each iSheet can be configured. Out of the box, permissions on iSheets created from a template are not set and simply use the default permissions. If the iSheets are linked to the template, then it will NOT be possible to edit those iSheets, and the page would look more like this:



(If the iSheet is a file- or folder-metadata iSheet, then the permissions will be set based on the permissions in the *Files* module. Because each site can only contain one file-metadata iSheet and one folder-metadata iSheet, if the site already contains a file- or folder-metadata iSheet, then it will not be possible to add iSheets from a template that includes a file- or folder-metadata iSheet.)



As shown below, these two iSheets from the template are now available in the site (with the template alias name appended), just like the pre-existing iSheets:



# **Importing iSheet Data**

New data and changes to existing data can be imported into an iSheet using Excel. Excel often provides a better and faster interface for updating a large number of rows of existing data or for adding new rows of data in bulk. Alternatively, data can be queried from a database or other content repository, formatted in the appropriate manner, saved to an Excel spreadsheet and quickly added to the iSheet. Also, an Excel file provides a mechanism for users who do not have access to the site to review and update the iSheet information, and then an Administrator can import any changes back into the iSheet.

Importing is also an efficient way to make changes to documents that were uploaded in bulk to the Documents module if the Documents module has been enhanced with iSheet fields. Typically, when documents are uploaded in bulk and the Documents module has extra iSheet fields, the only way to add data into those fields is to do so one document at a time, by clicking "Edit" on each document, updating the iSheet fields, and then moving on to the next document. This process can be *very* time consuming. As an alternative, perform the bulk document upload, then navigate to the iSheets module, select the document-related iSheet, and walk through the iSheet import process described below. Quickly fill out the appropriate information in the Excel file for many documents at one time, then upload the updated Excel file back into Collaborate. (New documents cannot be uploaded to Collaborate using the iSheet import process.)

# **Four-Step Process**

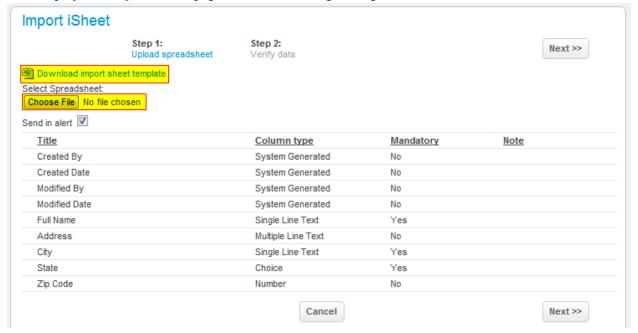
Importing is only available to Administrators, due to the risk of data errors. (An Administrator may always give the Excel file to be used for importing to another person to make changes, but the Administrator will have to load the file back into Collaborate.

Importing *cannot* be initiated by first exporting an iSheet. (Exporting, which is a one-way process, is discussed <u>below</u>.) On any iSheet page, selects the "Import" button at the top:





That displays the *Import iSheet* page, like the following, listing *all* of the columns in the iSheet:



Certain column types that cannot be imported will be shown in the Note column (see the column on the right, with red text):



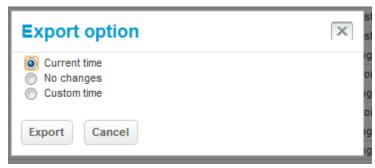
Note that *all* of the rows in the current view will be included as part of the import process. If you first run a search which returns fewer than all of the rows of that view and click on "Import" from the search results page, then the import process will include only the rows in the search result.

# Step1: Download the iSheet in Excel

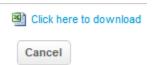
The first step is to click on the "Download import sheet template" link to download the iSheet into an Excel file.

If the "Override item modified date" setting had been enabled for this iSheet, this prompt will be presented immediately after, allowing the Modified date to be changed:





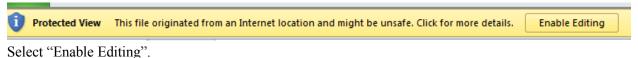
After a few seconds of processing, the data will be converted to Excel (2003 version) and made available for download:



Click on the download link, download the file to the desktop and hit "Cancel" to return to the prior page.

# Step 2: Edit the Excel File

Second, open the Excel file (called "ItemData.xls") in Microsoft Excel. When the file is first opened, you may be presented with a message like this (depending on your version of Excel):



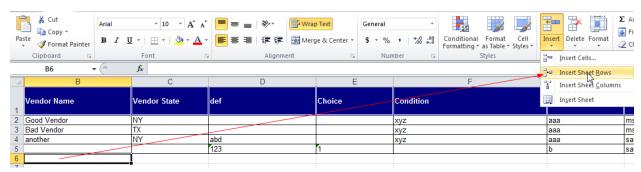
The Excel file looks like this, with a header row showing all of the column names.

4	В	С	D	Е	F	G	Н
1	Text Field	Choice Field	Number Field	Date Field	Conditional Field		multline html formatting
2	ok	other value	ф		not 1	0	
3	dddddd	1	7.00		111	14	asdfsasadf
4	good	1	9.22	06/11/2012	tttt	18	<b>bold</b>
5	asdas				_	0	
6	asdfas					0	

The first column (A) of the Excel file is hidden. That field contains a unique row identifier. Do not unhide that column or change the values in that column or make any changes to first row which shows the column names. Keep the format of the Excel file and do not add additional columns.

Generally, every column in every row of existing data can be modified, with certain exceptions noted below. You can also insert new rows AFTER the last row shown in the Excel file. (However, if you try to add new rows for document- and folder-related iSheets, they will be ignored.) To add new rows of data, put the cursor on the row *after* the last row of data and use Excel's Insert → Row feature to insert a new row or rows:

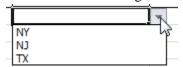




Doing so will copy the formatting of the row directly above and apply it to the newly inserted row. (If you simply start to add data below the existing rows, that will not work. The newly added rows must have the formatting of the existing rows.) Then enter the appropriate types of data in each column. (Do not put a value in the first column (A) if it is unhidden. The system will enter an appropriate value on import.)

Certain column types and features require additional instruction for importing purposes, while other column types and features cannot be added through the import process:

• Choice Columns. Single-value choice fields are also set up in Excel as choice fields:



When you put the cursor in the cell, a pull down arrow will appear. You must select one of the values offered or there will be an error later in the process. However, if the choice column is configured to allow a user to add their own value, then you can enter another value and it will be treated as the "Other" value. Multi-choice fields are set up the same way, but you can include multiple values by putting a line break between the values.

- Conditional Columns. These types of columns are supported. For example, if the State column is only shown in the iSheets module if the Country column equals "United States," then you can enter a value in the State column. (*Every* column will be included in the Excel spreadsheet, even conditional fields.) However, if the condition is not satisfied when the data is imported back, then the value in the conditional field will be ignored. For example, if you enter "France" as the country, you can still enter "New York" as the state in the Excel file, but Collaborate will ignore that value on import.
- Mandatory Fields. You may receive a warning if you do not select a mandatory image file and
  certain other mandatory column types, but you can import new rows without them. You can
  import other rows or modify existing rows if other types of mandatory information are missing.



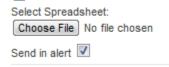
- URL Fields. All URL and image URL fields must be valid URL's. For regular URL's, if the field merely contains a URL, then the display name will be the same as the URL. If you use the Excel feature to inset a hyperlink into that field, then the display name will be the same one used in Excel.
- Lookup fields. These fields are permissible. Enter the email address of the user as entered into Collaborate. Also, the person entered must be within the scope of users allowed in the column, or it will be rejected. For example, the column may be limited to just site users or to all users of all sites.
- Date fields. The date format must be correct.
- HTML-Formatted Multiline text fields. In the Excel file, these fields will show the HTML markup. This markup can be edited. For new rows, either plain text or HTML markup can be used. Any HTML markup used must be valid or it will be rejected.
- Text fields. Minimum and maximum length restrictions will be respected.
- Number Fields. Minimum and maximum value restrictions will be respected. If the number field
  contains a restriction on how many decimals are allowed you attempt to import a number with
  more decimals, you will receive a warning, but the number can be imported with the extra
  decimals removed.
- System Generated Fields (Created by, Creation date, Modified by and Modified date). In addition to the need to comply with the requirements for lookup and date fields, it is possible to change the value of existing system-generated fields and for system-generated fields in new rows.
- Attachments. Attachments and image attachments cannot be imported.
- Document- and Folder-Related iSheet. New document- and folder-related iSheets rows cannot be imported; documents and folders must be added through the Documents module. However, existing document- and folder-related iSheets rows can be modified using the import process.
- Miscellaneous. Document links, folder links, joins and inject, calculation and auto-increment columns should be left empty if new rows are added during the update process, even if they are required. If there is a new value entered in one of these columns during the import process, it will be ignored.

Note that you may not delete a row using Excel; deletions will only be recognized from the web interface. Any row deletions you make in the Excel file will be ignored on import.

After making your changes, save the updated Excel file on your local computer.

#### Step 3: Upload the Excel File

Third, from the web page above, select "Choose File," navigate to the location where you saved the modified Excel file and select it, then click "Next" at the top or bottom of the page. Optionally, if you would like any changes (updates or new rows) to the iSheet to be eligible to be sent in an email alert, check the "Send in alert" checkbox.



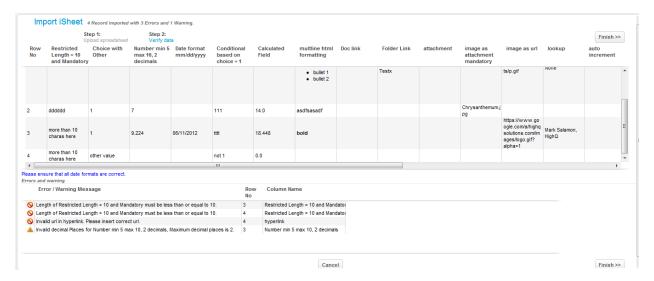


## Step 4: Review Changes

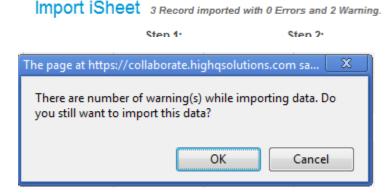
Fourth, you will be shown every row of data in the iSheet as it will look after the updated Excel file is processed, along with a report about the changes in the Excel file. At the top is a summary report noting (a) the number of rows to be imported – the total number originally in the Excel file plus any new rows that were added, (b) the number of warnings -- minor data problems that can be ignored by the system, and (c) the number of errors -- more serious problems that make it impossible for the system to import the data:

Import iSheet 6 Record imported with 2 Errors and 1 Warning.

At the bottom of the page there is additional detail, describing each warning (yellow triangle) and error (red circle with a line through it), if any, and the corresponding row and column that is triggering the message.

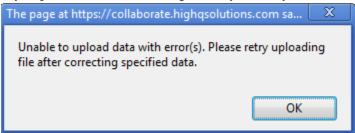


If you proceed and choose to ignore any warnings, you will see this prompt:





If you proceed and choose to ignore any errors, you will see this message:

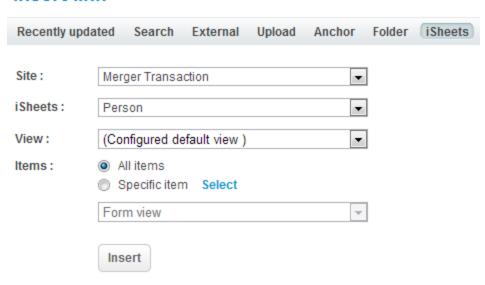


With errors, you cannot continue and insert the updated data. To fix any warnings or errors, click on the "Cancel" button at the bottom of the page and you will be returned to the iSheet view. Make the appropriate changes to the Excel file saved locally. Then try importing the file again by clicking on "Import" and select "Choose File" to upload the corrected file.

# **Embedding iSheet Data on a Page**

In almost any WYSIWYG page, like a wiki page, blog post, event, task or the *Home* module, it is possible to include links to iSheet information in a site and in other sites. See <u>this article</u> in the Knowledge Base for more details on adding such a link. A link can open a view of a particular iSheet or an individual iSheet item, either in grid format or "View Item" format:

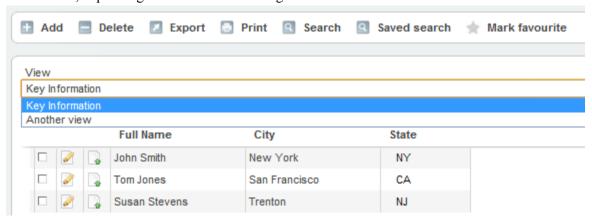
# Insert link





# The End User Experience: Using iSheets

A user without administrative privileges will be able to take some or all the following actions with regard to an iSheet, depending on the user's access rights to the iSheet:



- Add a new item
- Delete one or more existing items
- Export the items currently in view
- Print the items currently in view in a printer-friendly format
- Search for items (and save the search)
- Run a saved search
- Mark an iSheet as a favorite
- Edit an existing item
- View an existing item
- Switch to a different view of the same iSheet
- Navigate through all of the items in the view, including sorting by columns and navigating from page to page

# **Entering Data**

#### **Adding New Items**

If permissions have not been enabled on an iSheet, then every user has the right to add new items to an iSheet and the "Add" button will appear at the top of the page. Otherwise, if permissions have been enabled, the user must be in a security group granted edit rights to the iSheet.

Clicking on the "Add" button will reveal the *Add item* page, like this (the columns will change depending on the particular iSheet):

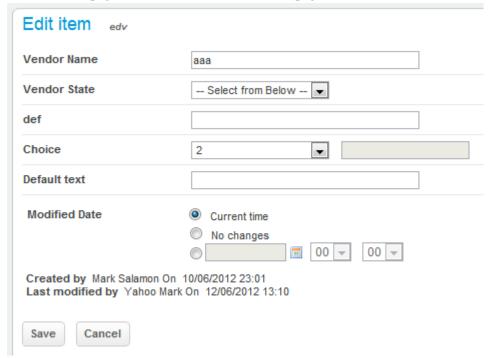




The user can input values in every field, subject to certain limitations. For example, if permission have been enabled for certain fields, the user may not be able to edit those fields or may not even see those fields. If there are conditional fields, they will not appear until the condition has been satisfied. The *Add item* page may be organized into sections, as described above.

## **Editing and Deleting Existing Items**

The *Edit item* page looks similar as the *Add item* page:

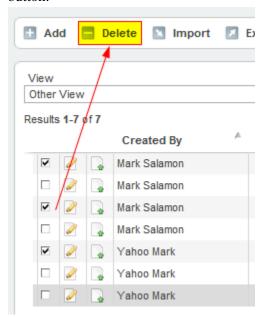


The only major difference, other than that fields may have data entered, is towards the bottom of the page: it shows who created and last modified the item and when.

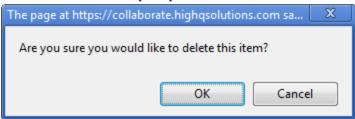
For editing and deleting, the question is whether the user has edit and delete rights to an item. (If a user can edit an item they can also delete an item. Those rights go hand in hand.) If permissions have not been enabled on an iSheet, then every user has those rights to every item. However, if the iSheet was configured with permissions enabled, the user's security group may have had its edit rights limited either



entirely or limited just to the right to edit items created by anyone in the same group or just the right to edit their own items. If a user has edit or delete rights, then the Edit button () will appear next to an item and a checkbox will appear next to the item. Only one item can be edited at a time. To delete an item, the user merely needs to check the box next to the item(s) to be deleted and click on the "Delete" button:



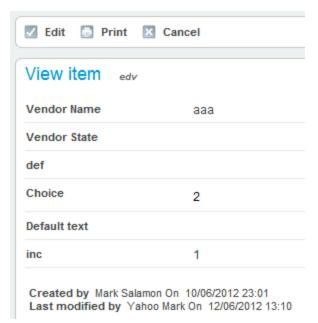
The user will receive a prompt to confirm the deletion:



# **Viewing Data**

If permissions have not been enabled on an iSheet, then every user has the right to view every item. Every item that is listed will include a View button ( ) and clicking on this button will open up the *View item* page, which looks like the *Add item* page but all of the fields are read only:





From that page the user can choose to edit the item (if the user has such rights) or print the item. Notice at the bottom of the page it lists who created and last modified the item and when.

If permissions have been enabled on an iSheet, limiting which items a user can view, then the item simply will not be listed at all when the iSheet is viewed.

#### **Views**

There is a section <u>above</u> that discusses in detail how to configure views for an iSheet. Each view lists the iSheet items in a table format:



Any views a user has access to will be listed in the "View" pull-down menu at the top of the page:



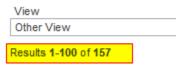
One of those views is shown by default and the rest are listed in the order determined by the person who configured the iSheet. Views govern which columns and which rows of data a user will see.



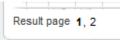
The most important aspect of a view is that it governs most of the actions a user can take. If views include a filter limiting which rows to return, then any search the user performs is limited to those rows. Printing and exporting are also limited to the rows in the currently selected view.

## **Navigating**

The number of items in the view is shown at the top of the table:



By default, each page in a view shows 100 items. A user can navigate from page to page using the navigation links at the bottom of the page:



with the currently selected page in bold.

## Sorting

Every column in the view can be sorted either in ascending or descending order based on the column type (dates are handled differently from text) by clicking on the column heading. On the first click the column will sort in ascending (here, sorting by state abbreviation):



then in descending order:



Only one column can be used for sorting at a time. Sorting sorts ALL of the items in the view across all pages, not just the 100 items in the current page.

## **Searching**

Searching is one of the most powerful features of iSheets. Indeed, searching is the best way to identify the relevant items in an iSheet, particularly document-related iSheets when the number of items or documents grows large.

## Every Search is Limited to a View

To initiate a search of any iSheet, simply navigate to the iSheets module, select the iSheet to be searched and click on the "Search" button:





At the top of the *Search item for* page is a list of views that are available to the user, one of which must be selected:

Search item for	Test
View	
Default	v

When the search is run, it will not necessarily be run against all of the rows in iSheet but instead only against the rows in the selected view. If the view contains a filter limiting the rows returned (e.g., only show commercial properties located in the United Kingdom), then the search will be limited to those same rows. Selecting a different view may result in different rows being searched. (The search may be further constrained if permissions have been applied to the iSheet overall and the searching user is limited to viewing only his/her own items or items created by others in the user's security group.)

However, the search will try to match data contained in *every* column in the iSheet that the user can access, even if that column is not in the selected view. For example, if the selected view is entitled "Attendee Names" and excludes the column "Country," a search for the word "Canada" against that view will still return any rows where Country equals "Canada". This also means that searching will respect all of the access rights applied to the given user, both in terms of rows of data that can be searched and columns of data.

Also, when the search results are returned, they will be displayed in the format of the selected view, displaying the subset of columns contained in the view.

## Running the Search

Beneath the view selector, every search form contains three principal parts. First, the full text search fields:

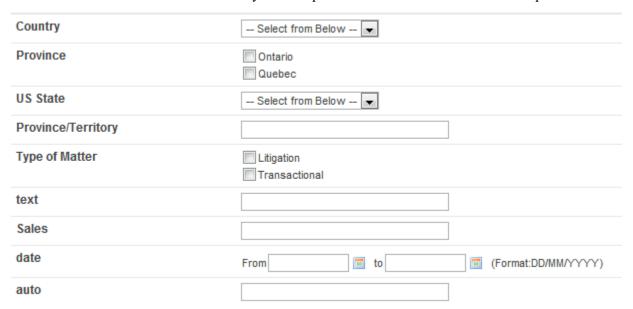
All of these words	
Any of these words	
Exclude these words	

These fields are straightforward and can be used in combination. For example, find all items that contain the word "Jaguar" but exclude items that contain the word "Car" or "Automobile". In addition to searching by word, phrases can be searched by putting multiple words in quotation marks. Also, all text searching is case insensitive. Further, every full text search will look for the text anywhere inside a word. If a field contains the word "Scatter," a search for "cat" will return that row.

The search will combine every search field together using the AND operator, so all search conditions must be matched. Also note that these full-text search fields will match text found in EVERY searchable column in the iSheet.



Second, for every searchable field in the iSheet, a unique search field will appear, unlike platforms like SharePoint which do not automatically create a parameterized search form. For example:



A search term entered in one of those search fields will only search against the corresponding column in the iSheet. The type of search field shown (pull-down menu, checkboxes, text, date range, etc.) is based on the type of column.

A searchable field is defined as (a) a field in the iSheet that is configured to allow search (see the "Allow search" configuration field for columns) and (b) a field that the user has permission to view. (Note that some types of fields can never be searched, like images.) Therefore, users in two different security groups may see a different search form.

Finally, at the bottom of the search form are the "Search" and "Cancel" buttons:

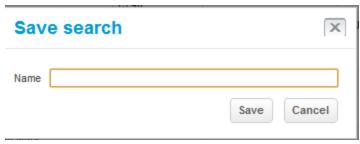


As noted above, the search results will conform to the format of the view that had been selected. The result looks like the view itself (containing any columns in the view that the user can see), with three additional choices:



The first choice is "Edit search," which allows the user to go back to the just-completed search form and modify the previous search terms. The second choice is "Save search," which brings up a form to provide a name for the saved search:





(The name of the saved search must be unique for this iSheet and for this user.) The third choice is "Clear search," which simply clears any search terms and displays all of the rows of the selected view that are available to the user.

## Searching Document- and Folder-Related iSheets

Search item for dox

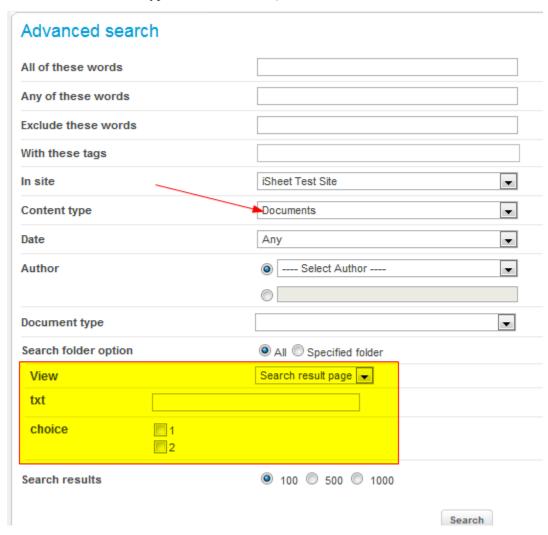
The document- and folder-related iSheet search forms work the same way as the regular iSheet search form. Indeed, when initiated from the iSheets module, only the iSheet fields can be searched on, not the actual documents themselves:

# 

However, if an Advanced Search is initiated from the Documents module and the documents have been enhanced with iSheets, the regular documents search form will include the iSheet fields (notice that the

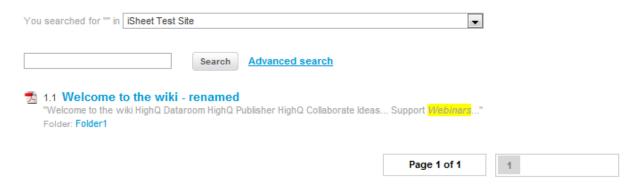


"Documents" Content Type has been selected):



Not only do the iSheet fields appear, but it is possible to select which view to show the results in. If no view is selected, the regular search results format is used:

## Search results





But if one of the iSheet views is selected:



then the results will be shown in the iSheet table format of that view:



## Searches Respect Security

If permissions have been enabled on the iSheet (or applied to the Documents module for document- and folder-related iSheets), a given security group may not have view access to certain rows of data. The search results will always respect those permission restrictions.

#### Miscellaneous

A few other items of note regarding searching:

- Joins and Inject Fields cannot be searched.
- Attachments and document links fields cannot be searched. If the iSheet contains attachments
  (this is separate from the documents in document-related iSheet), the name and text contained in
  that attachment will not be searched.
- The contents of a document that is linked to from an iSheet will not be searched.

#### Saved Searches

The section above explains how to run a search and save it. Saving a search can reduce the amount of time spent reconfiguring a commonly run search, especially one that is fairly complex. To access previously saved searches, click on the "Saved search" button at the top of every iSheet page:

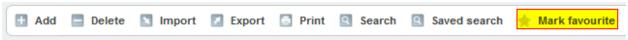


To rerun a search, simply click on the search name. Select a view from the pull-down menu to choose how the results will be presented, which is governed by that view. Click "Delete" to delete the search. (Saved searches cannot be renamed or modified directly.)



## **Favorites**

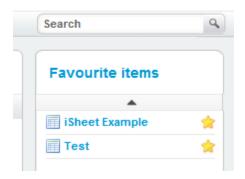
Like other types of content in Collaborate, an iSheet can be added to a user's list of Favorites. Simply click on the "Mark favourite" button at the top of the page:



(After that has been clicked, the button is renamed as "Remove favourite": Remove favourite .) Note that the *entire* iSheet is being marked as a favorite, not a particular view, search or item of that iSheet.

Any iSheet favorites will appear on the Favorite items column on the right side of the Dashboard:





## **Exporting an iSheet**

Each view of an iSheet includes an "Export" button. (If view permissions have been applied, the user may be granted export rights.) It is possible to export all of the data found in an iSheet into one of three formats:

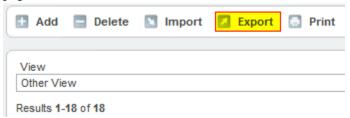
- Excel (2003 version; .xls)
- CSV
- XML

Even document- and folder-related iSheets can be exported.

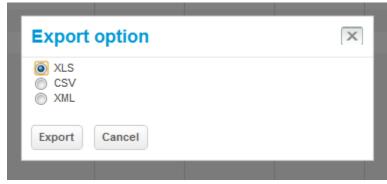
Exporting is useful for many reasons. First, if there is a need to share this information with people who do not have access to the site, exporting makes that easy. Second, using Excel the information can be formatted and presented in a more attractive way. Third, using XML format, the data in the iSheet can be consumed by other systems in your organization.



Exporting is very easy. On every view of an iSheet, there is an "Export" button at the top of the page:



Click on this button to receive a prompt asking what format to export the data in:

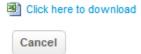


After making a choice and clicking on "Export" a new page will be displayed showing, at first:

# Creating file to export...



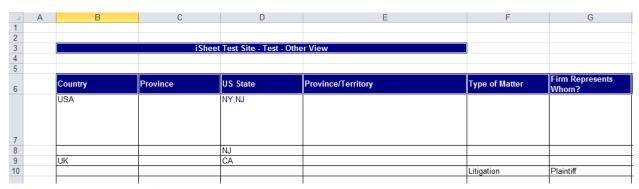
When the file is ready, the display will change to this:



Click on the link to download the file locally, then click "Cancel" to return to the prior page. The CSV and XML export formats will attempt to save the file directly to your computer, depending on which browser you are using. The file is always called "ItemData," with an appropriate file suffix.

The data that is exported is determined by the current view of the iSheet. If a search has been run, the export will only include the rows in the search result. And the export will only include the data that the exporting user can see: the columns included in the view definition (subject to any further restrictions on individual columns that apply to that user) and the rows of data that are restricted by any filters in the view (subject to further restrictions on rows of data that apply to that user). All rows of data the user has access to will be included. In Excel, the export file includes full column headings:





If a search had been run first, the export will be based on the rows in the search result.

Note that certain types of columns cannot be fully exported

- Attachments: only the name of the attachment is shown
- Images: only the name or path to the image file is shown
- Multiline, rich text: no formatting is included in the Export
- Hyperlinks: only the display name of the link is included
- Document Links and Folder Links: only the name of the document or folder is shown
- Injection and Joins: Only the display name is shown
- Calculations: If there is no data to make the calculation, it may be shown as "NaN"
- Document and Folder fields in document- and folder-related iSheets: Only the document or folder names are shown

If there are multiple values in a multi-select choice field, they will be separated by commas in the Excel export.

## **Printing iSheets**

Each view of an iSheet includes a "Print" button. (If view permissions have been applied, the user may be granted print rights.) This feature displays all of the rows of the view in a printer-friendly format:



# iSheet Test Site States

Default

State Name	State Abbreviation	State Capital	
New York	NY	Albany	
New Jersey	NJ	Trenton	
Texas	TX	Austin	

The printer-friendly format shows the site name, iSheet name and view name, along with the rows and columns of data. The printer-friendly format is based on the rows in the currently selected view. If a search had been run first, clicking "Print" will print only the rows in the search results.

## **Customizations**

There are several customizations available for the iSheet module. Most of these customizations will be applied to all of the iSheets across a firm's entire Collaborate instance. To take advantage of these customizations, please contact HighQ directly.

## **Document Automation**

Document automation was added as of Version 3.3 of Collaborate. This feature must be specifically enabled by HighQ. Note that there is separate documentation that that explains how to build document automation templates.

## **Associating Document Templates with iSheets**

Once you have created a document template, how do you associate it with an iSheet so that it can be tested and then used to generate documents. There are two principal types of document templates. Below we demonstrate how to associate the different types of templates with iSheets. Note that only a Site Admin (or System Admin) can actually add a document template to a site.

## **Adding Document Templates**

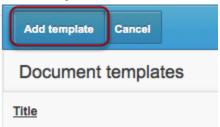
## Site-Wide/Multi-iSheet Document Template

To add a template that is site-wide in scope, a Site Admin should access the iSheets Admin page of that site. At the top of the page, the Site Admin would click on "Manage doc templates":

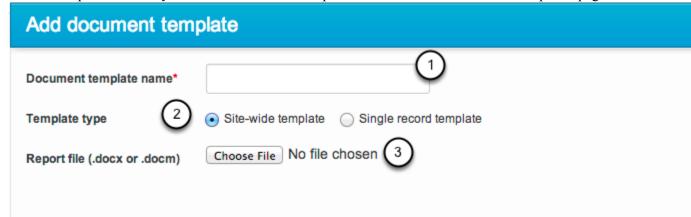




which will present a screen with an "Add template" button:



with no templates currently listed. Click on "Add template" to see the "Add document template" page:



There are four steps involved in adding a template:

- 1. Enter a meaningful name for the template. This is the name that will be displayed to end users. Ideally, the name should be unique, but different templates with the same name can be entered in the same site
- 2. Determine the type of template. For a site-wide/multi-iSheet template, select "Site-wide template".
- 3. Browse to find the .docx or .docm document template file on your computer.
- 4. Hit "Add".

After clicking "Add," the "Document templates" page will refresh and list the template that was just added:



That new template can now be accessed by a Site Admin from any iSheet in that site.

#### Single-Record iSheets

Adding a single-record iSheet is done in the same way, with one difference. Select the template type of "Single record template", and in that case another field will appear, listing all of the iSheets in the site:





Select one of those iSheets to associate the template with it.

## **Managing Existing Document Templates**

Currently, the only options for managing existing document templates are:

- View a list of all templates associated with a site
- Download an individual template, by clicking on its name
- Delete a templates by clicking on the "Delete" button opposite its name.

This can be done by a Site Admin from the "Document templates" page:



# Generating Documents from iSheet Records and a Template

Each type of document template can be accessed in a different way in order to generate documents from iSheet data.

#### **Site-Wide Templates**

For site-wide document templates, at the top of every iSheet in a given site, there will be a pull-down menu (likely called "Document Automation") listing all of the site-wide document templates (the name of this pull-down menu can be changed from instance to instance by using the <a href="System Vocabulary feature in Collaborate">System Vocabulary feature in Collaborate</a>, but it will be the same in every site):



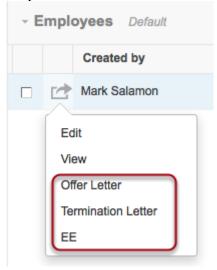


By default, *every record* in every iSheet in the site will be accessible to the template. However, if you check the box next to selected records (currently, these checkboxes are only available for regular iSheets, not document- or file-metadata iSheets), then only those selected records in the currently selected iSheet will be accessible to the template.

Note that the name of this pull-down menu can be changed at the instance level. Only Site Admins (and, likely in the future, Content Admins) can access this menu.

## **Single-Record Templates**

For single-record document templates, any user with Edit rights to a record (in the future, users with View-only rights) will see extra actions on the menu item for that record, listing each single-record template accessible from that iSheet:



Once a document has been generated, it will be downloaded to the user's computer automatically as a .docx file.