Battling Jira Custom Field Bloat

by Jennifer Choban and Rachel Wright

Introduction

"I have over 3,000 custom fields and everyone says I need to talk to you."

That was one of the comments we heard at Atlassian Summit 2018. And it's true. **ProForma**, the app that lets you create forms that embed in Jira issues, is a great way to get all of the custom data you need without the custom fields.

However, talking to Jira Administrators made us realize that you don't just need keep a lid on creating new custom fields, you need a way to deal with the ones you already have. So we teamed up with author and Jira super-user, **Rachel Wright** to put together instructions for reducing custom field bloat.

ABOUT THINKTILT

ThinkTilt was founded to provide support tools that give teams like yours power over your processes.

Our premiere product, **ProForma**, makes it easy for non-tech teams to build and deploy user-friendly forms that embed in Jira issues/requests. Now teams can have all of the custom data they need, without the custom fields. Empower every team in your organization to take control of their processes and deliver first class request management. You get all the information you need, where you need it.

ProForma is available through the **Atlassian Marketplace**, both as an unlimited version and a fully featured free version (ProForma Lite).

ABOUT RACHEL WRIGHT

Rachel Wright is an entrepreneur, process engineer, and Atlassian Certified Jira Administrator.

She is the owner and founder of Industry Templates, LLC, which helps companies grow, get organized, and develop their processes.

Rachel also uses Atlassian tools in her personal life for accomplishing goals and tracking tasks. Her first book, the "**Jira Strategy Admin Workbook**," was written in Confluence and progress was tracked in Jira!

How to Audit Your Custom Fields

By Rachel Wright

How many custom fields do you have? For most of us the answer is, "Too many!"

The first step in any clean up process is an audit.

You need to understand what fields your application has and how much that differs from the default Jira set up. Use the free **Jira Clean Instance** worksheet to compare your application to a default installation. Use this to get a count of all your standard and custom fields.

There are a few ways to approach your audit. You can do a manual examination, use an app/plugin from the Atlassian Marketplace, or use a combination of both. For helpful apps/plugins, check out: **Cleaner for Jira**, **Custom Fields Usage for Jira** (Server only), and **Admin Tools for Jira** (Server only). Jira Data Center users can leverage the built-in **Custom Fields Optimizer.**

While these tools can help tremendously with your research, only a human can determine the value of a specific custom field for your organization.

Examination

Next, make a list of all field names and types for examination. Copy all of the fields on your Custom Fields admin page and paste them into Excel or Confluence. Use the free **Jira Custom Field Audit** worksheet to enter your data, collect your research findings, and total the fields to remove. Now that you have the list, start researching and classifying each field.

First, flag the fields **created by Jira**. These fields are likely needed, locked and can't be removed. Don't spend time researching these.

Second, flag the fields **created by an app or plugin**. When plugins are deactivated or uninstalled, their custom fields remain. You'll need to determine if data in those fields needs to be retained.

Finally, flag all the fields **created by admins**. These will require the most research.

How to Audit Your Custom Fields

Research

It's time to find out everything you can about each add-on or admin created custom field. Start by determining **which plugin** created which field and add this information to your spreadsheet. Look for clues in the following places:

- **Jira's application audit log**

- **The add-on audit log**

- **The field's description on the "Manage add-ons" admin page**

- **Login as an end user, use the add-on, and see which fields are displayed**

- **Check the plugin's documentation**

Next, research the remaining admin created fields. Are there duplicates, misspellings, or poor naming choices? Are any fields associated with unused projects? How is each field used today?

Determine the scope of each field's use by looking in the following places:

- **The Custom Fields admin page**

- **On screens**

- **In workflow behaviors (conditions, validators, and post functions)**

- **In user JQL queries**

For each field, do a JQL query and note how many issues were found, how many issues are in unused projects, and the business value of the data returned. Just because data is returned doesn't mean it's still useful!

Finally, check how many users have saved queries using the custom field. If you have Jira Server or Data Center, and read-only access to the Jira database, you can get this information from the "reqcontent" column in the "searchrequest" table.

Next Steps

Now that you've uncovered some unneeded fields, it's time to take action! We'll cover the clean up options and decision process in the next chapter.

Take Rachel Wright's Jira Custom Field & Clean Up Course!

Learn how custom fields work, how to determine when a new custom field is warranted, and how to clean up custom fields added by application admins and apps.

Take the 20 minute online course

How to Audit Your Custom Fields

Time to Decide:

What to do with all those Custom Fields

By Jennifer Choban

You've conducted an audit of your Jira custom fields. Now what? Explore the options for reducing custom fields while still maintaining all of the data you need.

Exploring the Options

In the previous chapter, **Rachel Wright** outlined a process for auditing Jira custom fields. If you've completed this process, you now have an idea of all of the custom fields in your Jira instance. Finding out what you have is an important first step. Next you need to decide what to do with them.

If you haven't already, log your information into a spreadsheet, a Confluence page or use the free **Jira Custom Field Audit** worksheet. At a minimum, you will want to collect the following information:

- **Name** – the name of the Jira custom field

- **Type** – knowing the field type can be useful in determining if the field can be merged

- **Description** – what the field is for?

- **Created by** – was the field created by Jira, by a person or by an app/plugin?

- **Used by** – who is or has used this field? Which Jira projects?

- **Currently in use** – is anyone using the field now?

What To Do With All Those Custom Fields

As you talk to business owners, users and project admins, it's important to be clear that your aim is not to take needed functionality from them. There are many ways to reduce custom fields without losing current functionality. After you've completed your research and your conversations with business owners, you can recommend one of the following options for each custom field:

1

Keep it: Don't change a thing. The field is necessary just as it is.

2

Delete it: Delete fields that are not being used and that do not contain any data that needs to be preserved. It's recommended that you not delete custom fields that were created by Jira (and in many cases Jira won't let you).

3

Hide it: You a can hide custom fields that were used in the past, but are no longer necessary. This allows you to preserve the data while decluttering your screens.

4

Merge it: Your Jira instance may have accumulated multiple custom fields that are essentially the same (for instance, multiple sets of start and end dates). These can be safely merged together into one field that has a generic name.

5

Substitute it: Many data points are needed for tracking or requests, but rarely queried or reported on. You can still collect specific, structured information without custom fields, by collecting the data on form.

Add a **Recommendation** column to your spreadsheet and log the selected option for each field. You now have a plan for each of your custom fields.

What To Do With All Those Custom Fields

Deleting, Hiding & Merging Jira Custom Fields

By Jennifer Choban

Let's take a closer look at three of your options: deleting, hiding and merging Jira custom fields.

Deleting Jira Custom Fields

When to Use:

Don't do this lightly. Deleting fields will also delete the data they hold and this action cannot be undone. Therefore, this method is best reserved for fields that were created, but never used (a scenario that occurs more often than you might think) or in cases where the data has been moved to another field.

Preparing the People:

Users will not react kindly to having something they feel they need removed. So check first to see if anyone is using the field. If they are, provided a substitute (we'll discuss how to do this in the next chapter) or a work-around before deleting the field. You're a hero when you give users functionality, but a devil when you take it away.

How to Do It:

1. Select **Jira Settings > Issues**.

2. Under **Fields**, select **Custom Fields**.

3. Find the custom field and click the more (three dots) button.

4. Click **Delete** to remove the custom field and any information entered in the field from all issues.

Hiding Jira Custom Fields

When to Use:

Although this method doesn't truly reduce the number of custom fields in your instance, it does allow you to declutter your screens. This is a good method to use for custom fields that were used in the past and contain data that you don't want to use, but are not (or rarely) used now.

> *You can also hide fields as an intermediary step before deleting them. Hide the field. Wait a week or two to see if users miss it, and if not, then delete the field.*

Preparing the People:

Most of the time when you use this method it will be for fields that were important in the past, but are no longer in use. Check with the Project Admins to confirm that this is the case.

Note that if you're told, "Oh no, we need that field!" but suspect otherwise, you can query for [custom field] NOT EMPTY and then sort by last updated date to see how frequently and how recently the field has been used.

How to Do It:

1. To hide a Jira custom field go to **Project > Project Settings > Fields**.

2. Find the custom field and click **Screens**.

3. Click **Remove**.

Deleting, Hiding & Merging Jira Custom Fields

Merging Jira Custom Fields

When to Use:

In the rush to create what we need, we often forget to check if it's already there. Your audit may reveal that multiple custom fields have been created which essentially do the same thing. In this case, you should select the one best option (correct field type and most generic name) and merge the other fields into it.

Preparing the People:

The key in this case is communication. You simply need to let people know that the field they formerly used (XYZ Project Start Date) has now been renamed (Start Date). You can use an announcement banner (available on the System admin menu) to communicate with all of your users.

How to Do It:

1. Add the new (correct) field to all relevant issue type(s).

2. Run a query to return all of the Jira issues you wish to update (all issues which have data in the old/incorrect field).

3. Adjust the columns to show the summary, issue key, the old/incorrect custom field and the new/correct custom field.

4. Click **Export Excel CSV (current fields)**.

5. On your CSV file, remove any unnecessary columns, and everything but the header and data rows. (The export may add extra rows of footer/header content.) This is also a good opportunity to "clean up" your data - fix misspellings, etc.

6. Now go to the Jira Administration menu and select **Jira Settings > System.**

Deleting, Hiding & Merging Jira Custom Fields

7.   Select **External System Import** (under the Import and Export heading) in the left hand navigation bar.

8.   Select **CSV**.

9.   Click on the **Choose File** button and browse to your CSV file. Click **Next.**

10. Select your project. Note that you can also add an email suffix and adjust the date format on this screen. Click **Next.**

11. Map your fields including the issue key, summary and the relevant custom fields:

     a.   Issue Key (CSV field) > Issue Key (Jira field).

     b.   Summary (CSV field) > Summary (Jira field).

     c.   Old/incorrect custom field (CSV field) > New/correct (Jira field)

12. Click **Next**. Jira will make the update and indicate the result.

13. You can repeat your original search to see the data from the old/incorrect field is now populating the new/correct field.

14. Follow the previous instructions for deleting the old field.

Reducing Jira Custom Fields Through Substitution

By Jennifer Choban

You can substitute a ProForma form field for a Jira custom field – the perfect solution for times when teams need the data, but don't need to query or report on it.

Substituting Form Fields for Custom Fields

One of the principle advantages of using **ProForma** – the app that lets you create forms that embed in Jira issues – is that it allows teams to collect customized data without needing Jira custom fields.

When to Use:

This is the solution that provides the best of both worlds. You get to have the data without having the custom field. That being said, there are some limitations you need to consider before implementing this solution:

- **Limited Search Capability**

  Currently, fields on ProForma forms are not searchable in Jira. There are two ways you can work around this. For fields that are frequently queried and reported on, you can link a form field to a Jira field. This allows you to collect the data in one place and still have access via JQL queries and Jira reports. However, this doesn't help as far as reducing fields.

  The other option is to **download a spreadsheet of forms responses** and search there.

- **Conversion Process**

  The other thing to keep in mind is that the conversion process (described below) is not for wimps! We recognize that it's a bit labor intensive and we are working to develop an automated process. (For this reason, it's highly recommended that you triage incoming requests for new custom fields and use form fields in lieu of custom fields as much as possible.)

Preparing the People:

Reassure users that they will still have the data. If users are new to ProForma, you may want to show them how ProForma is used on another project in order to reduce their concerns. You'll encounter less resistance if users understand that they're not losing any data.

Secondly, knowing that the conversion is a bit time consuming, you should prepare your users to be patient. You will also want to work closely with Project Admins - letting them do some of the tasks (such as building the forms) – especially if you're substituting fields across multiple projects.

Reducing Jira Custom Fields Through Substitution

We recognize that this is labor intensive and are working to develop an automated process. Please contact us if you would like to be notified when that functionality is released.
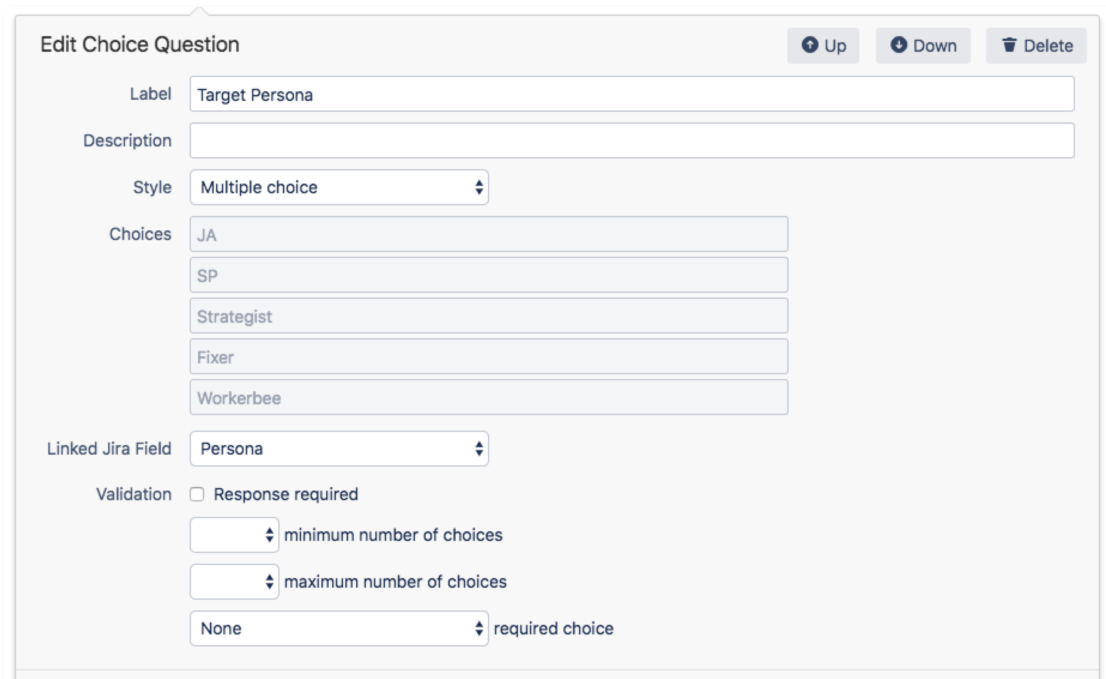
How to Do It:

1. Build a form that includes the target field(s).

The first step is to build a form that includes the fields that will receive the data that's currently in the custom fields. You may want to designate this task to Project Administrators. Remember that once the conversion is complete, the form will continue to serve as the method by which the team collects and views data on Jira issues. A few things to remember when creating the form:

- The form can include as many fields as needed (not just the fields that are being converted). Create forms that will be useful for the team after the conversion process is complete.

- You may be able to get a head start by modifying a form from the **ProForma template library**.

- Organize fields into logical sections. Add instructions. Use ProForma features such as validation, conditional logic and field-level hints/descriptions to make your forms as user-friendly and as useful as possible.

- Each field has the option of being linked to a Jira field. Be sure to create a field for each custom field that you wish to eliminate. For each of these fields, use the **Link Jira Field** option to link the form field to the existing Jira custom field. Note that you may want to link other fields as well. For instance, it's very useful to have a what's-the-problem field link to the Jira summary field.

Reducing Jira Custom Fields Through Substitution

2. Once the form has been built, you will need to add the form to all of the relevant issues.

Depending on your situation, this could be every issue in the project, or only those issues that have data in the custom fields you're converting. Currently, adding ProForma forms to issues has to be done manually.

3. Next you need to go through and open each form and check that the contents are correct.

The target form fields should contain the data from the custom fields. Save and Submit the form on each issue. Note that the data doesn't get locked into ProForma until the form has been submitted.

Reducing Jira Custom Fields Through Substitution

The data from the custom field is now present on both the custom field and the form. Be sure to click **Submit** to lock the data in the form.

Reducing Jira Custom Fields Through Substitution

4. Now return to the form builder and open the form.

Go to each of the form fields associated with a custom field you want to eliminate and unlink the Jira field. Remember to **Save.**

5. The populated form field is now independent of the Jira custom field.

To verify that you have completed the process, run a JQL query for [custom field] NOT EMPTY. Then download **a form response spreadsheet** and compare the results.

6. Confirmation

Once you've confirmed that the forms contain the custom field contents, you can delete the custom field following the directions as previously described.

Keeping It Clean:

Containing Jira Custom Field Growth

By Jennifer Choban

Now that you've got your Jira instance nice and clean, let's take a few steps to keep it that way.

The good news is that custom field clean-up isn't like laundry, where you never really get it all done. Once you've cleaned up your instance you can put some processes in place to keep it that way.

When to Create a New Jira Custom Field

There are times when creating new custom fields is justifiable, but you want to make sure it's really necessary before you create one. Here are a few things to consider:

- Is it needed? In tech, we're often tempted to do things just because we can. That's not a good enough reason to create a custom field. When users request a new field, ask them for the business case for collecting that piece of data.

- Does the data need to be in its own Jira field? Will this data be queried or reported on later? If not, could you just as easily capture it as a ProForma form field? Or prompt users to include it in the Jira description field?

- Would the field be used by different teams across the organization? Jira assets should be shared whenever possible. Making usability across multiple teams one of your criteria for creating new custom fields will help contain custom field expansion.

- Is there a Jira system field that you can use? Make use of existing options. Teams can set their own protocols for what to include in a summary field versus a description field, or create a project-specific plan for how they will use the label field, etc. Encourage users to use what's there before asking for more.

Containing Jira Custom Field Growth

In order to answer those questions whenever a new field is requested, you can implement a process for requesting new custom fields. **ProForma** offers a **template** that users can use for requesting custom fields and Rachel Wright offers a **new custom field request worksheet**.
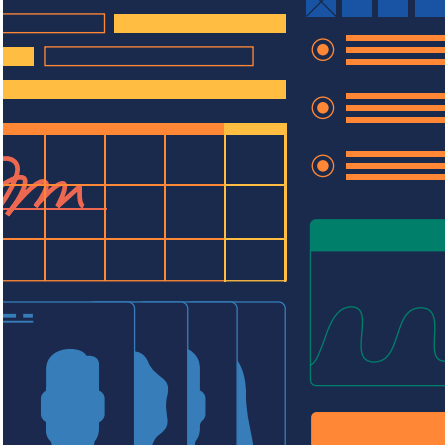
Recommendation

In the **Jira Strategy Admin Workbook**, Rachel also recommends publishing a list of currently available custom fields.

This encourages users to look and see what's already there before requesting something new.

Containing Jira Custom Field Growth

7 Custom Fields Every Jira Application Needs

By Rachel Wright

In the previous chapter, we recommended sharing custom fields with different teams across the organization. These 7 fields are intended to be used by many teams in many Jira projects.

As a Jira administrator you should choose your custom fields carefully. Too many fields are a headache to maintain. However, we'd like to share some custom fields we recommend that you *do* create. These seven fields can be used by multiple teams in many Jira projects.

1. Requested

Field type - Date Picker

Create a "Date Picker" type field and name it "Requested." Place this field on a project's "Create" screen and use it to answer the question *"When would you like this request completed by?"*
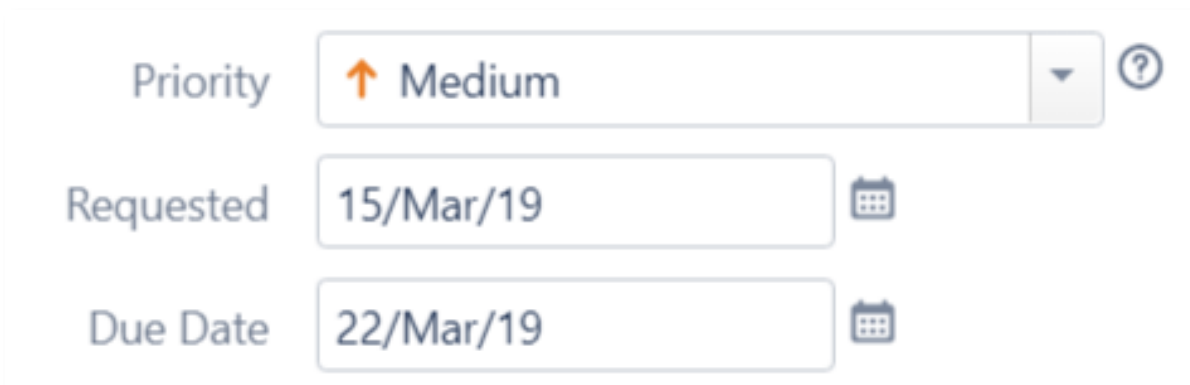
This field is different from the "Due Date" field, which signifies when the team can **actually accommodate** the request. The "Due Date" field should be populated after a request is reviewed for understanding and prioritized. In most cases, that field should not appear on the initial "Create" screen.

Requested Date vs Due Date Fields

Consider this scenario: The Legal team needs an update to the terms and conditions page on the company web site. They create an issue for the Development team with a requested date of March 15. The Development team receives and considers the request. Since it's of "Medium" priority, they slide the change into their next release, which is March 22. These two fields have easily helped convey urgency and communicate ability.

Recommendation
Always place the "Priority" field before a requested date field on a screen. Collecting the importance before a date is entered may help set realistic expectations.

2. Category

Field type - Select List (multiple choices)

The built-in "Components" field is a great way to categorize (and automatically assign) work. But what if you need a second categorization method? Create a "Select List (multiple choices)" field and name it "Category". This generic name is important and ensures that the field can be used to cover many scenarios.

Custom Field Context

Next, use Jira's "Contexts" feature to display different selection values in different projects. For example, the Legal team categorizes their work with selection values like: Contract, Service Agreement, Litigation, etc. The Security team categorizes their work with options like: Denial of Service, Information Disclosure, and Injection. Using a custom field context allows you to use one field to support many scenarios.

Recommendation

Always add an "Other" selection to cover all potential non-listed responses.

7 Custom Fields Every Jira Application Needs

3. Department

Field type - Select List (single choice)

Which department generates the most requests for your team? That's useful information for reporting! Unfortunately, Jira doesn't know information like a user's department name, team name, manager's name, or phone number. While it is possible to store these additional details in a **user property**, there's no easy way to leverage that data without custom development.
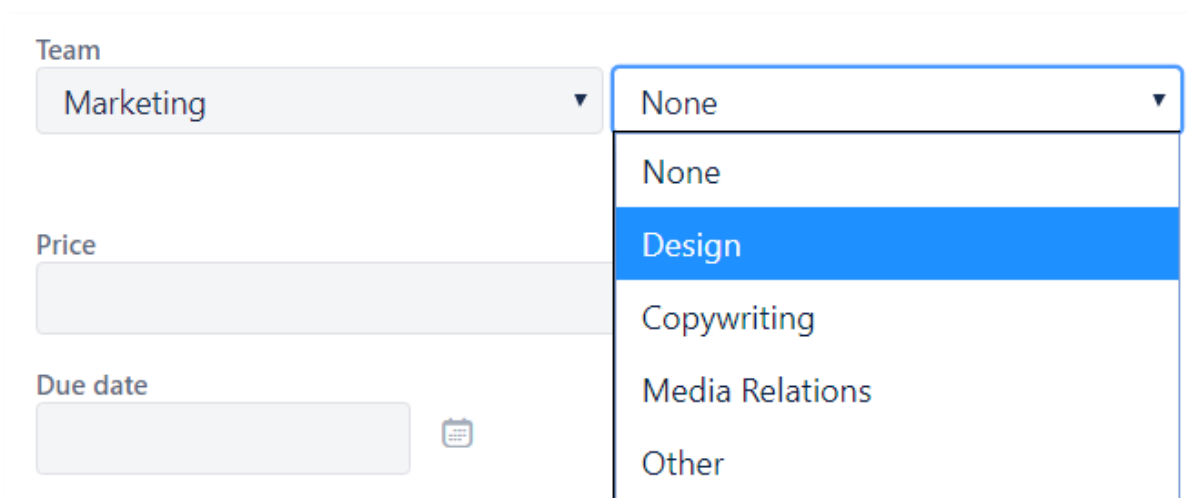
Instead, create a "Select List (single choice)" field and name it "Department." Create one selection value for each department in the company and ask the reporter to choose the appropriate one on the "Create" screen. Easy!

4. Team

Field type - Select List (single choice)

Same as above. Create a "Select List (single choice)" field and name it "Team." You could also couple the concept of "Department" and "Team" in one field by using the "Select List (cascading)" type. First the user chooses a department and they choose their team from a sub-set of selections. Now you have an easy way to query who the work is for.

Select List (cascading) Field

5. URLs

Field type - Text Field (multi-line) with Links

It's common that Jira issues are related to data from other websites and applications within and outside the company. For example, the Development team may need links to vendor documentation for their integration project. The Facilities team may need a link to the purchasing policy Google Doc for large equipment orders. The HR team may need to link to an employee's record in a third-party employee resource application. When external applications are integrated with Jira, linking is easy. But what do you do for all those other applications that aren't connected?
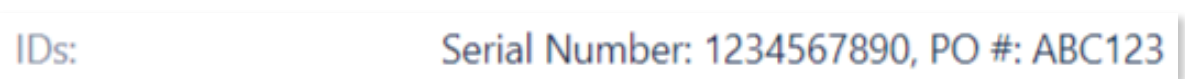
Create a "Text Field (multi-line)" field and name it "URLs." Users can enter an unlimited number of links to other online areas without the need for one custom field per URL. Jira will even make the URLs clickable on an issue's "View" screen, as shown in the screenshot.

URLs:
- http://www.sample-url-1.com
- http://www.sample-url-2.com
- http://www.sample-url-3.com
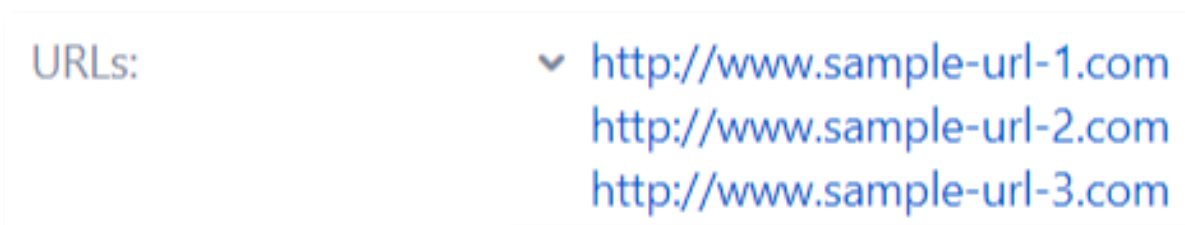
6. IDs

Field type - Text Field (single line) with Identification Numbers

Sometimes you need to associate Jira issues with records in other offline or inaccessible applications. For example, a purchase order number from desktop accounting software, an ID in a vendor's system, or a serial number on a piece of equipment. Just like the URLs field above, individual custom fields are often overkill. Instead, create a "Text Field (single line)" field and name it "IDs." Users can enter ID numbers as comma separated values.

IDs: Serial Number: 1234567890, PO #: ABC123

7. Notes

Field type - Text Field (multi-line)

Finally, sometimes users need to enter more information that doesn't belong in the standard "Description" field. Create a "Text Field (multi-line)" field and name it "Notes." This generally named field can be used in different ways in different projects. Use a Field Configuration scheme if you need to provide a project or issue-specific field description.

Now there's no need for an "Information" custom text field, an "Instructions" field, or a "Business Justification" field. All those lovely details can go in a single field.

Recommendation
If you're not planning to query for or report on a piece of information, don't devote a custom field to it.

Conclusion

Carefully planning your custom fields makes Jira administration easier. Creating generic fields for use by multiple teams is an easy way to support the needs of your users and limit the custom field count at the same time.

For more resources and information, visit:

ProForma

Strategy for Jira®
Worksheets, Templates & Materials for Jira

Simplify Jira with ProForma's custom forms and checklists

Expand the power of your Jira Instance with ProForma.

ProForma, ThinkTilt's premiere product, allows your teams to take control of their processes, without endless customizations, screen schemes and complex configurations. Add the fields you need to a form embedded in a Jira issue.

ProForma's powerful form builder allows you to easily create fields that capture the information you need.

For more information, visit:

thinktilt.com/proforma

The Jira Strategy Admin Workbook will save you loads of time and frustration. Atlassian Certified Jira Administrator, Rachel Wright, shares the lessons she's learned from years of cleaning up messy Jira configurations.

Showing you how to set-up a well-planned implementation that will simplify Jira administration, the workbook contains:

- **152 recommendations for setting up, cleaning up and maintaining Jira**
- **50 companion worksheets**
- **33 real examples of problems to avoid**
- **Templates, code snippets, wording samples and content not available anywhere else.**

Get more information at:

jirastrategy.com/store

Resources and Information

What are people saying about ProForma?

"Its forms done right: A simple way to capture and get data into Jira and keep a lid on custom fields."

Art Mack, TETRA Technologies, Inc.

"I am really happy with how easy it is to create forms using ProForma. We have certain processes such as new hire onboarding, off boarding, workstations setup tasks, etc., that we will be able to track more effectively using ProForma forms in Jira Service Desk."

Judge Wood, Red River Mutual

"ProForma has become a vital solution in our organization and eliminates the need of creating custom fields to house information that doesn't need to be stored. The support team is incredible and responds quickly to any bugs or issues that are found. Can't ask for more!"

Jimmy Nguyen, UnitedLex