

Top JIRA Administration Mistakes

by Rachel Wright, Certified JIRA Administrator and author of the JIRA Strategy Admin Workbook

Audience: This presentation is intended for JIRA Administrators and is based on the mistakes and examples in the JIRA Strategy Admin Workbook.

Resources: Help for JIRA Administrators is available at jirastrategy.com.



Listen to the story at: http://www.jirastrategy.com/link/intro (3 min)

There were once three companies. The first had a brand new JIRA instance that was smartly set up and implemented. Everything was carefully planned and executed. The projects, issue types, workflows, and other settings were standardized and built for needs of the users. All the configurations and processes were documented and the users were well-trained. The transition from an old issue tracking tool was simple and all the users were happy. The application was pruned and maintained like **a beautiful garden**. Its administrators were carefully selected process leaders who routinely cared for and meticulously shaped the garden's growth.

The second company had the complete opposite set up. Their JIRA instance was old and it had not matured and changed in tandem with the organization. There were no standards, no recognizable patterns, and no documentation. There was a free-for-all mentality that resulted in **an overgrown swamp of data**. Anyone that desired a project customization was instantly made an application administrator and made any change they wanted. Changes were made without a strategy and without regard for their impact on other projects or the application as a whole. The swamp became more and more unmanageable each day.

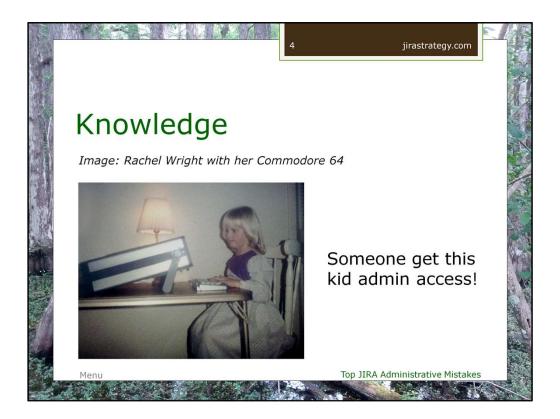
The third company wanted JIRA to look and act like all their other internal applications. They spent many months making visual and functional customizations. Eventually, so much had changed that they couldn't upgrade without wiping out all the custom elements. Their users weren't able to take advantage of all the new features and functions available in newer versions. One by one their add-ons became unsupported and their application reached the dreaded "**end of life**" support status.

The recommendations in the **JIRA Strategy Admin Workbook** are a result of working in these environments and digging them of the swamp. Included are best practices, dos and don'ts, and recommendations you can adapt to fit your company.

Would you rather have an organized, tidy, and trimmed garden or a foggy, contaminated, overgrown swamp?



Topic Menu



MISTAKE (1)

Book Page: 27

My first admin experience was on the day I was made an application administrator! I had a very good user-level knowledge of JIRA, but understanding how to use it verses how to configure and manage it are very different things! Without proper training, I started building a new project and brand new schemes to fit my use case. I followed the model from an existing project and was on my way. Months later, I realized the model I followed was all wrong. I had copied the mistakes of others. I had added to the overall mess. I should have understood more about the application before I started making additions to it.

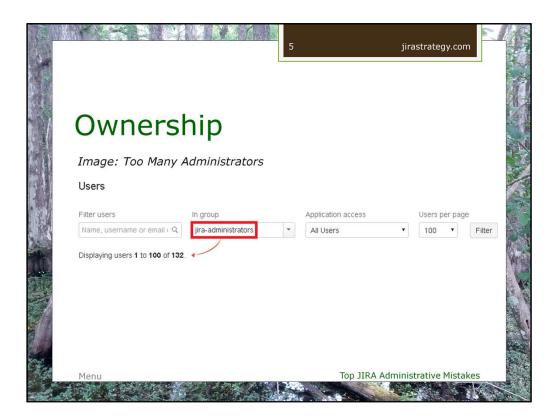
Select an Application Administration Team

Create a strong, 2-5 person, admin team. Who will be responsible for new project configuration, customization, user access, and daily application management?

TIPS & DOWNLOADS

- TIP: Have your admins prepare for and take the JIRA Certification exam. See the "Get Certified" and "How to Study" sections of the JIRA Strategy Admin Workbook.
- TIP: Need to train your team? Give your administrators their own copy of the JIRA Strategy Admin Workbook. Get the digital version at: <u>jirastrategy.com/link/digital-workbook</u> or the print version at: <u>amzn.to/2fww6zh</u>.
- See the "Define Admin Users" section of the JIRA Strategy Admin Workbook.

Download the "Worksheet: Application Administrator Responsibilities" at: jirastrategy.com/link/admin-responsibilities.



You should determine the number of administrators needed (minimum and maximum) to properly support the application. This range should be determined by user count, project count, frequency of user requests, and aggressiveness of the routine maintenance schedule. Having too few administrators leaves your application unsupported especially during holiday breaks, emergency events, or when other company priorities arise. Having too many administrators results in conflicting changes or modifications inconsistent with the overall application strategy.

EXAMPLE FROM THE SWAMP (3)

Book Page: 25

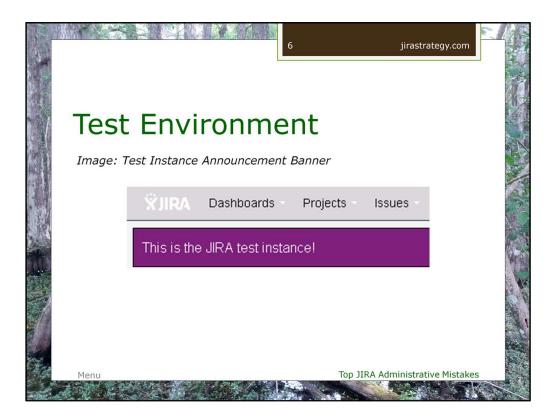
At one company, there were no procedures to determine who was eligible for application-level admin access. It didn't matter if you were a technical development team manager or a non-technical project manager. It didn't matter if you had years of experience supporting an application or had no experience at all. Anyone who asked for admin privileges got them. At a company of approximately 1,000 users with roughly 50 admins, there were 45 too many! The users made any changes they wanted. Changes weren't planned, logged, or communicated. Changes often had negative impacts on other projects or the application as a whole. Schemes were duplicated multiple times. Custom fields were misspelled. Add-ons were installed and never used or uninstalled. The stability and usability of the application degraded every day. A complex query or a re-index would bring the entire application down!

Decide who is responsible for the application. Who will make initial and ongoing configuration changes? Who will maintain the application? Who will perform upgrades? (Server Version Only)

Who will ensure application, server, database, and network stability? (Server Version Only)

TIPS & DOWNLOADS

1. TIP: Avoid the "one team manages ALL company apps" setup. If that team has many apps to maintain, will JIRA get the attention it deserves? Do the admins for "all the other apps" understand the specifics of JIRA administration? Instead, form a dedicated team of admins who actually LIKE and care about the app!



MISTAKE (2)

Book Page: 27

The JIRA software management and learning environment was all wrong. There was no company sandbox or text environment to learn in or try out changes. I should have set up a local Server instance or a Cloud free trial for my pre-production experimentation. I should have imported sample production data and configurations to my test area so I could see how changes worked with real scenarios. I should have requested read-only database access, rather than guessing at how the data was stored and structured. NOTE: Granting read only database access gives users access to protected data and may violate your company security policy.

RECOMMENDATION

Book Page: 27

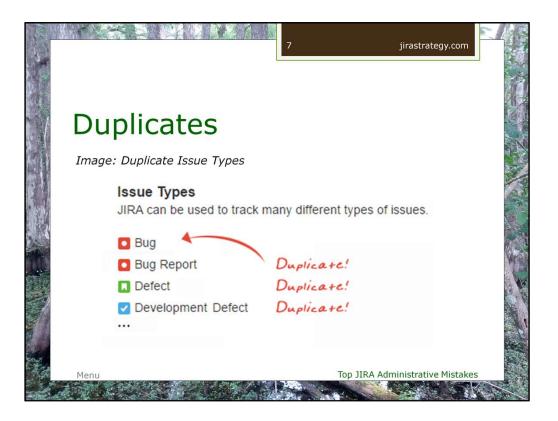
Give your application admin team read-only access to the JIRA database. Understanding how the data is structured will solve a lot of mysteries and make them better admins. They'll have the ability to access additional data that's not available in the admin UI.

Set Up a Test Environment (Server Version Only)

Always test major changes, large imports, upgrades, plugin installations, proof of concepts, and clean-up activities in a test environment first. Make sure the resources powering your test environment match your production environment as much as possible. Make sure the software version and configuration are an exact copy of production.

TIPS & DOWNLOADS

• TIP: Disable email in the test environment to avoid notifying end users with duplicate or test data.



MISTAKE (3)

Book Page: 69

When I made my first JIRA project, I created 4 new, duplicate, issue types. For example: I created "Project Name Task" when the generic "Task" type already existed.

EXAMPLE FROM THE SWAMP (6)

Book Page: 40

At one company, roles were utilized incorrectly. Instead of leveraging the default "Users" role (which is part of every project), additional (duplicate) user roles were created and named for specific projects. In addition to "Users," there were also "*Project 1* Users", "*Project 2* Users", "*Project 3* Users", etc. Since roles are used across all projects, all the other projects had these line items in their roles list too. Further, default users were added to all these custom, duplicate roles, meaning they were automatically added to other projects. When new projects were created, administrators would have to manually remove all those bogus users where they didn't apply. Instead of a tidy list of approximately 5 role types, each project had 20. Project-level admins were routinely confused by what these line items were for. The answer always was "Sorry, please ignore them. They don't apply to your project."

EXAMPLE FROM THE SWAMP (13)

Book Page: 67

Ideally you would have one Issue Type to indicate a software error. Instead, one company had 9! For example: Bug, Defect, Beta Defect, Bug Report, Development Defect, Production Defect,

etc. Additionally, there were 22 issue types with the word "Task" in them! All these items were mere duplicates, not useful distinguishers. The more issue types you have, the harder your application becomes to manage. A long issue type list means a longer process to move issues or associate them with a different workflow.



MISTAKE (4)

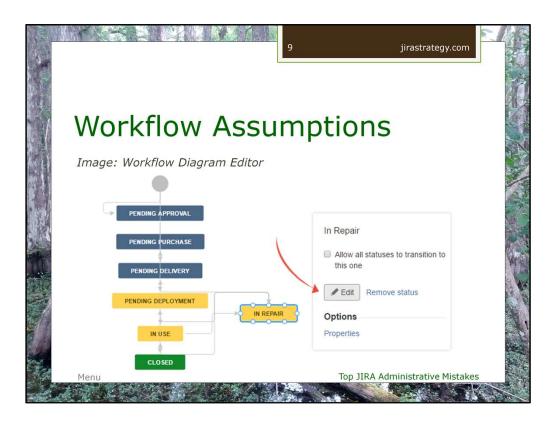
Book Page: 94

For quite some time, I didn't understand how "Resolved" and "Closed" were used to build workflows. When presented with both transition options, users didn't understand which to select either. This led to issues considered as "done" in either status! There was no way to report the total work "done" without manually adding counts from the two statuses together. Issues languished in "Resolved" status until I figured this out and globally fixed it.

RECOMMENDATION

Book Page: 94

There should only be one status where it's clear that no additional effort is required. The standard "Closed" status or the business project-friendly "Done" status is sufficient.



MISTAKE (7)

Book Page: 102

I once used the workflow "diagram" (visual) mode to change a status. I thought the change would only apply to that one workflow. Instead, I changed the name of the entire status in all of JIRA! Users alerted me to the problem when their workflows stopped working properly and their filters broke.

MISTAKE (5)

Book Page: 95

When I created my first custom workflow, I made two incorrect assumptions: (1) That JIRA treated transitions to the "Closed" status specially. I thought there was logic in the background making "Closed" the final step in a workflow. (2) A status change would trigger an "Issue Updated" line item.

This all made perfectly logical sense to me, except both assumptions are totally wrong!

JIRA has no special regard for the status named "Closed"; it is a status just like any other. When you create a new workflow transition, a default post function is automatically added. It reads "Fire a **Generic Event** event that can be processed by the listeners." Instead, update it to read "Fire an **Issue Closed** event that can be processed by the listeners." See the screenshot example in the "Standard and Custom Notifications" section.

The second	ulk Chan age: Default Link Type		jirastrategy.com
Nan	ne	Outward Description	Inward Description
Blo	cks	blocks	is blocked by
Clo	ners	clones	is cloned by
Dep	pends	depends on	is depended on by
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Pro	blem/Incident	causes	is caused by
Rela	ates	relates to	relates to
Mer	ıu	Top JIRA A	Administrative Mistakes

When you're wading through mucky JIRA projects, you never know what is lurking underneath. It's important to check how each bulk or clean-up activity impacts other areas of the application.

MISTAKE (8)

Book Page: 172

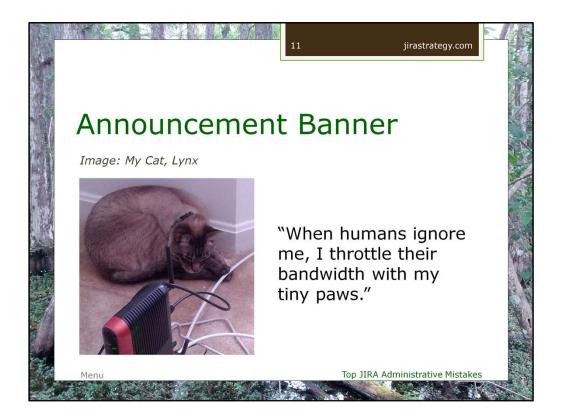
JIRA comes with six link types. (e.g. blocks, clones, duplicates, etc.) At one company the list of link types grew to 20 different options! To remedy this, I removed unused, outdated, and duplicate types. JIRA handled the migration, automatically updating any issues associated with those old types. Subsequently, this changed the "Updated Date" to today's date for a large amount of old issues. An internal app using the REST API was using the issue "Updated Date" field to limit the number of issues in its own application. My change caused an increase in the scope of their queries, the queries timed out, and their app stopped functioning! In this case, it's important to know exactly what any apps using the REST API are doing. That way you can consider them when making global changes.

Quick Clean-up Check-up

- □ After a clean-up action, manually verify the results
- □ Run the Integrity Checker
- □ Run system health tools
- \Box Review the application logs for errors
- □ Identify impacts on any apps or APIs
- □ Be ready to respond to any resulting user trouble reports

DO

• Always test the impact of any clean-up activities in a test environment first.



The easiest way to communicate with users is through the built-in "Announcement banner" functionality. Set a banner from the "System" admin menu. Here are some banner examples for common situations along with some code snippets (for use with the Server application type).

WARNING

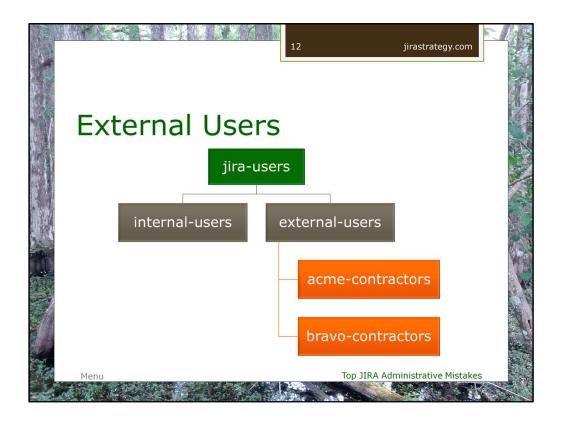
Always test your code outside of JIRA and be sure to close all markup tags. If pages render incorrectly due to code errors, remove the banner code from the database. See the instructions at:

jirastrategy.com/link/remove-banner.

MISTAKE (9)

Book Page: 185

One day while I was editing an announcement banner, my cat jumped onto my keyboard and submitted half written code! He's submitted or edited JIRA issues in the past but his careless paw placement this day really caused a problem. All the end user and admin pages failed to render content! I had to stop the application, remove announcement banner records in the database, and restart JIRA. Luckily, this happened in a development instance where I'm the only user and the only human inconvenienced. The cat and I have since had a chat about his work performance.



Now or in the future you will need to let an external user access your application. Maybe it's a temporary contractor you've hired to help on a project, an Atlassian technician troubleshooting a JIRA issue, or a consultant for an audit or compliance activity. Regardless of the scenario, you should prepare for it before you have the actual need.

DON'T

• Neglect to consider external users. Their access should be treated specially.

Consider the following use cases:

- 2 external users from one company need access to the X JIRA project
- 3 external users from another company need access to the X and Y JIRA projects
- 4 temporary contractors need access to the Z JIRA project

EXAMPLE FROM THE SWAMP (4)

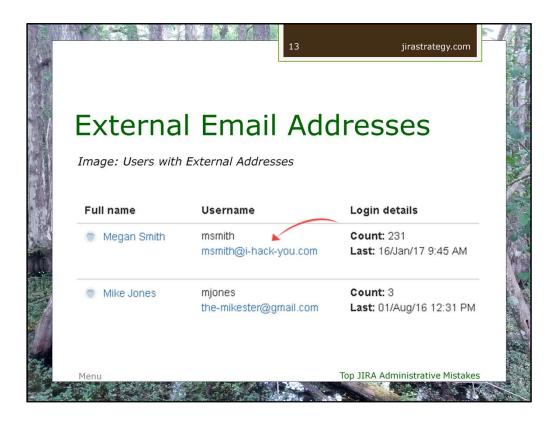
Book Page: 33

The above use cases are real examples from a company unprepared for the possibility of external users. As such, a user with access to one JIRA project, had access to all the others. Even worse, any new JIRA user was also made a Confluence user! This meant that any *temporary* employee had access to all internal company information, proprietary documentation, and plans for the future in both applications!

RECOMMENDATION

Book Page: 34

Make sure external users have a clear end date when their access should be removed. Create a new issue, at the time they are hired, to remind the team to perform the removal at a future date. See the "New User Request" worksheet to set this up.



All external users should be set up with a company provided email address. (This does not have to be the same domain internal employees use but it should be a domain managed by the company.) External email addresses allow sensitive and proprietary information to leave your company and be retrieved insecurely from external servers. Remember that email notification is widely used in JIRA. An email is triggered for any @mention or share action. Notifications are sent at any given point and display change records. Filter results are sent out as email subscriptions. Do you really want company JIRA data sent to @gmail.com email addresses? Of course not!

EXAMPLE FROM THE SWAMP (5)

Book Page: 34

A former employee contacted the company to complain about JIRA data being sent to his personal gmail.com email address. Upon further research, it was also discovered that data was being sent to hundreds of other past or present users with external addresses in the JIRA database.

TIPS & DOWNLOADS

• See the "Former Employee Clean Up Procedure" section, of the JIRA Strategy Admin Workbook, for ways to proactively avoid this scenario.

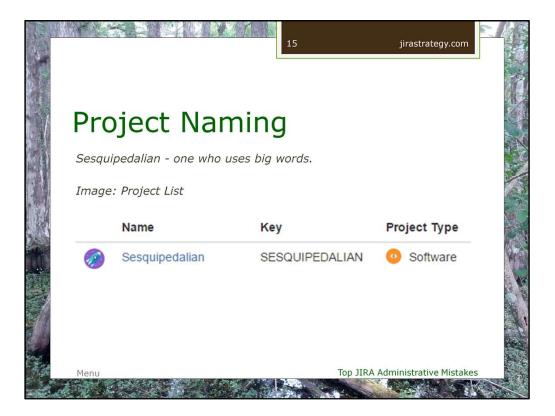


Do you use more than one Atlassian application? While it's tempting to give all users access to all applications, consider how applications may be used in the future and the impact of that decision on user counts and licensing.

EXAMPLE FROM THE SWAMP (7)

Book Page: 44

At one company, JIRA and Confluence both started out as IT-only tools. To save a step in account creation, any user that attempted a JIRA login was automatically given an account and placed in the "jira-users" general permission group. Confluence was setup with global permission which allowed anyone in the "jira-users" group to login. Subsequently, members of the jira-users group were haphazardly added to *some* global Confluence spaces. This worked for a while, but then non-IT teams started to use Confluence as well. There was now no way to separate JIRA users from Confluence users. Since all JIRA users automatically became Confluence users (whether they ever actually logged in to Confluence or not) license usage appeared equal for both applications. The effort to decouple access was a tedious and manual job. First, the "jira-users" group was removed from the global Confluence permissions. Next, the "jira-users" group was removed from individual Confluence-users" general permission group. As a result, the Confluence user count was only a quarter of the size of the JIRA user count.



Your project name and project key are critical attributes to help you identify your project. A best practice is to make the project's title similar to the project key. Users should be able to communicate using either project name.

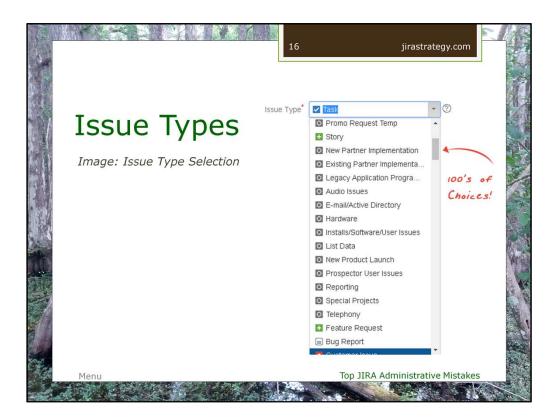
Your project name should be descriptive yet generic. Example: A project with the key "ACME" doesn't tell the user what kind of issues should be reported in that location.

The project key should be short in length.

EXAMPLE FROM THE SWAMP (9)

Book Page: 50

One project had a 13 character key! While a long key is allowed in JIRA, it makes little sense to make end users type something long.



When it comes to creating issue types, it's important to keep things organized.

EXAMPLE FROM THE SWAMP (14)

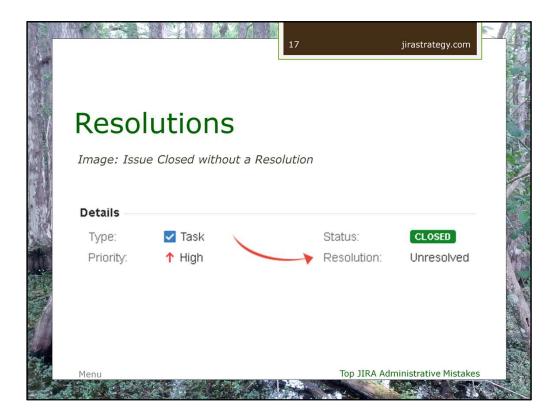
Book Page: 67

At one company, there were a few projects that used the default Issue Type Scheme, which contains every available issue type. Reporters in that project were overwhelmed when creating a new issue. Why? Because they had to wade through over 100 available selections! The choices weren't even listed alphabetically! Project leads couldn't easily report on or segment the issues their teams were addressing. Don't assign the default scheme.

EXAMPLE FROM THE SWAMP (15)

Book Page: 68

How many different combinations of issue types could a company possibly need? One company had 134! This was not because they were actually needed, but because new types and schemes were created for every new project.



EXAMPLE FROM THE SWAMP (17)

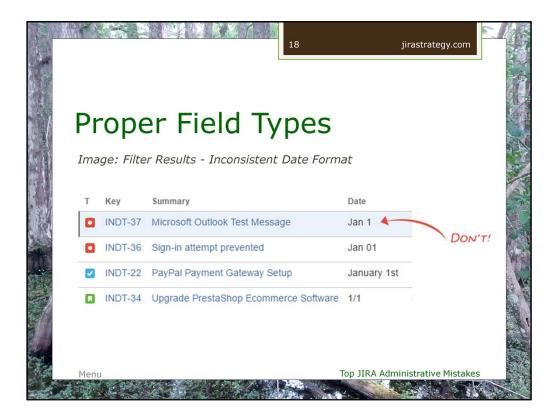
Book Page: 75

At one company, there were 34 resolution choices which included specific selections like "Rejected by Security Team" and "Rejected by Finance Team." Additionally, there were no selections for other departments that could reject a request. Many selections were duplicates of each other. Some selections were invalid. For example, how can an issue that is resolved also be "In Progress"?

EXAMPLE FROM THE SWAMP (18)

Book Page: 75

At one company, resolutions weren't set by workflows. As a result, users would see all issues, regardless of status, when viewing the "Assigned to Me" dashboard gadget. This is because the gadget query rightly assumes unresolved issues are not completed.

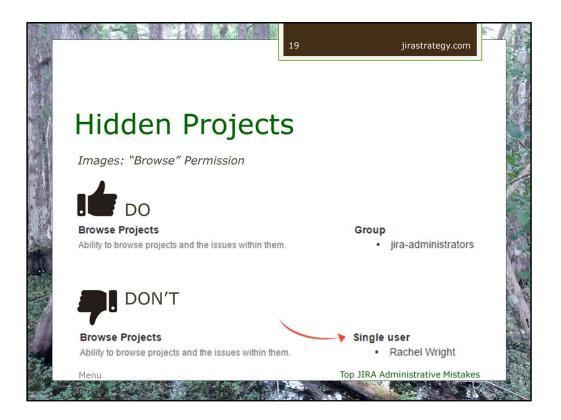


When creating a new field, be sure to select the best type for the use. Once a field type is chosen, it cannot be changed. To "change" a field type, you'll need to create a new custom field, migrate any stored data from the original field to the new field, remove the original field, then update screens to show the new field.

EXAMPLE FROM THE SWAMP (24)

Book Page: 125

One company used text fields to collect date values. This meant dates were entered in multiple formats. (Example: Jan 1, Jan 01, January 1st, 1/1, etc.) Without the standard format built into the date field type, this information was impossible to query for or sort by, making it less useful.



EXAMPLE FROM THE SWAMP (25)

Book Page: 136

One application administrator "archived" projects by setting the "browse" permission only to their username. When this user left the company, so did knowledge that other projects even existed. These additional projects were coincidentally discovered during a database examination.

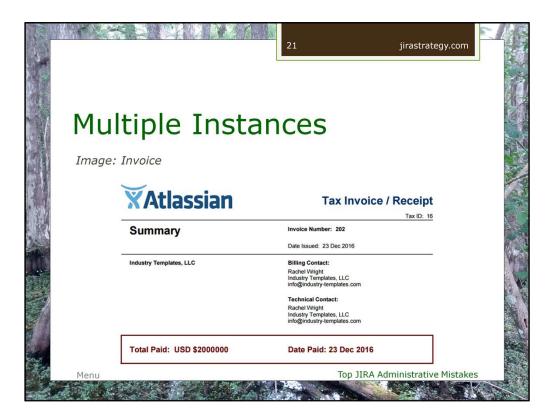


Few of us are lucky enough to start out with a fresh and clean JIRA installation. Fewer of us will make no configuration mistakes along the way. If your application is already a mess, there are steps you can take to clean it up.

EXAMPLE FROM THE SWAMP (27)

Book Page: 163

At one company, no clean-up efforts had ever taken place. The application grew organically and muddier by the day. New customizations were added but none were ever removed. This created a swampy mess of schemes and settings. To clean up this swamp, the first step is to survey the schemes and settings and get rid of old and unused items. Delete any inactive workflows, unused custom fields, or disassociated schemes. Next, examine all projects to determine which are still active and which have no recent activity. Post examination revealed 30% of projects could be "archived." Custom notification and permission schemes for these projects were not needed. The last step was to remove the defunct incoming mail server settings. Just by removing unused resources, there was a 20% reduction in scheme count and a 30% reduction in database record count.



You may find yourself in a situation where multiple JIRA applications should merge into one, data from an existing instance should move to a brand new one, or you need to start over from scratch.

EXAMPLE FROM THE SWAMP (31)

Book Page: 178

At one company, the Finance department noticed they were paying for two separate JIRA licenses. One team was using a Cloud instance and another team had a Server instance running on an old machine under someone's desk. The teams had to decide which application type would be retained and how to merge the data.

Application Comparison

Book Page: 178

To determine the best course of action you need to compare the strengths and weaknesses of each set up. It's also helpful to gauge just how different your set up is to the JIRA default.

RECOMMENDATION

Book Page: 182

Decide which application is better on a line item basis. At first glance, you may be tempted to retain the instance with the best hardware or the best database. It's only the "best" if it's stable, well maintained, and likely to remain in inventory for the long term.

RECOMMENDATION

Book Page: 182

Carefully consider the big differences between installations. (Example: Cloud vs Server, local vs delegated authentication, differing versions, etc.) Consider features and connections that must be retained. Don't retain or migrate old data and configurations you don't need.

RECOMMENDATION

Book Page: 183

Consider who is best equipped to make and execute merge and migration decisions. Keep emotion or loyalty to one system out of the decision process. The end goal should be to create

the best overall environment and experience for your users.

RECOMMENDATION

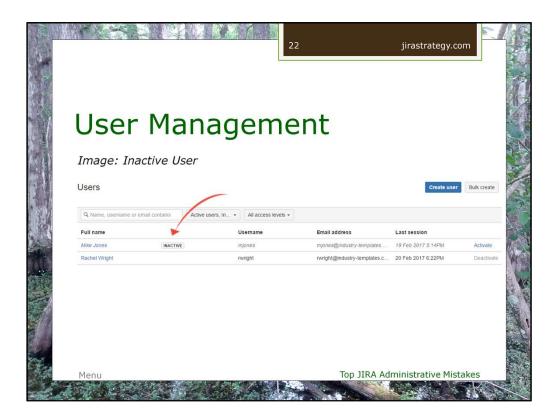
Book Page: 183

Consider how merging data from another system might clutter the cleaner system. Are there clean up actions to perform on both applications before the merge? Are there changes to make

for an easier migration? (Example: Syncing application versions, or making the list of Statuses match.)

TIPS & DOWNLOADS

 Download a version-specific default set up reference at: jirastrategy.com/link/cleaninstance.



EXAMPLE FROM THE SWAMP (34)

Book Page: n/a

At one company, there were 1,000 active JIRA users, but only 700 employees. Users were not made inactive when the left the company. No pre or post departure user clean-up was attempted.

Create a User Management Strategy

User management is more than just "adding new users" as they join the company. Your user list needs regular attention to remain accurate. You have to establish procedures on how to support new users as well as departing users. How will you handle and receive access requests and removals? How will you handle permissions related requests?

Determine Access and Credentials

How do users will access the application. What credentials are needed for login? How does a new user securely receive credentials? Is access be local to the application or managed by Active Directory, Google Apps, Crowd (an Atlassian application), or another service?

RECOMMENDATION

Book Page: 43

When the application grows to over 50 users, it's time to consider a central user directory.

De-Activate User Accounts

Book Page: 42

The easiest way to manage a departing JIRA user's account is to have them assist with "clean up" activities BEFORE they leave. Establish a procedure that notifies the JIRA Support team when an employee is leaving the company including their termination date. Also collect their supervisor's name, which is helpful for the "clean up" activities listed below.

TIPS & DOWNLOADS

- See the "User Access Strategies", "User Management" and Single Sign-On sections of the JIRA Strategy Admin Workbook.
- Download the "Worksheet: New User Request" at: <u>jirastrategy.com/link/new-user-</u> request.
- Download the "New User Communication and Checklist" at: jirastrategy.com/link/new-user.

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Establish Standards

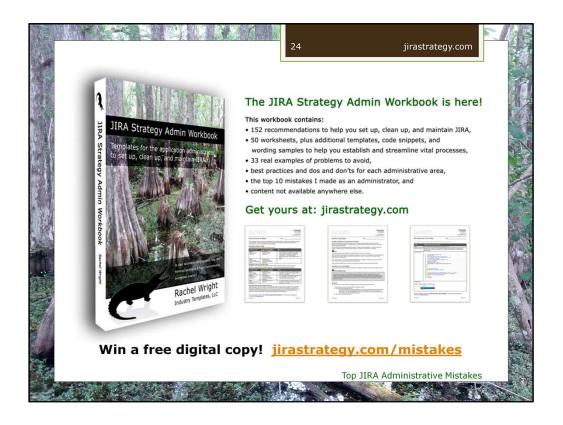
Book Page: 8

JIRA comes loaded with default schemes to get you started. For example, a default workflow, permissions scheme, notification scheme, etc. Before you start building new custom schemes, the board should decide how many of each you will be offered and for what purpose. Setting standards will help keep your application uncluttered and easy to maintain.

Make all configurations as simple and as generic as you can, so they can be easily shared between multiple projects and multiple teams. Then Project Leads can choose from the available standard schemes.

TIPS & DOWNLOADS

• See the "Establish Standards" section and the best practices in "Part 2: Project Configuration" in the JIRA Strategy Admin Workbook.



The JIRA Strategy Admin Workbook will save you time, money and frustration.

This book is different – **it's not documentation**. It's recommendations from years of cleaning up horrible JIRA configurations! It's about what you should do, what you shouldn't do, and why.

This book is for JIRA admins who have a willingness to think before you click in the JIRA Administration area! The book's worksheets, templates, code snippets, and wording samples will help you with all the pre-click planning.

Get the **JIRA Strategy Admin Workbook** and additional materials at <u>jirastrategy.com</u>.

Share your feedback on this presentation at <u>jirastrategy.com/mistakes</u> and be entered to win a digital copy of the JIRA Strategy Admin Workbook!