

## Highlights

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- Refreshed Jiglu Radar, with more actions that you can carry out on contributions, more useful notifications about other people's interactions with you and less clutter.
- Improved daily newsletters that bring the enhancements in the Jiglu Radar into email.
- See the differences between blog post and knowledge entry versions, including how the text compares, what attachments were added or removed and what tags were changed.
- Enhanced content analytics, including new charts for popular related tags, source comparisons, outgoing link domains and related tags with segmentation by topic type, author, source and domain.
- Improvements to the Jiglu Dynamic Discovery tagging engine to give better quality tags and improved consistency between tags from external sources and tags from the tagging engine.
- Further security enhancements, including per-user system administration passwords, safer two-factor authentication set up, locking out brute-force password cracking attempts and a new alert when there have been failed attempts to log on to your account.
- New retention policy for discussion messages, letting you set on a per-space basis how long threads should be retained for.
- Better handling throughout the system when a user is a member of a large number of groups.
- Better accessibility, more consistent styling in the user interface and improved support for the latest generation of browsers and HTML 5 features.
- Lots of minor improvements across the product designed to make Jiglu easier to use.
- Lower memory overhead and improved performance in many areas.

## For end users

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### My radar

- By default, only the groups that you most recently visited are now shown in the *My stream* panel. To view all the groups of a particular type, select the plus icon on the right of the *Blogs*, *Monitors* or *Spaces* subheading. If new activities happen in a group that you haven't recently visited then the group will appear. In the list of groups, there is no longer a differentiation between those that you are an administrator of and those where you are just a member.
- The *My interactions* panel has been removed. This information duplicated what is available in the *Notifications* stream. That stream has had additional activity types added to it for when a user responds to a knowledge entry, discussion message or blog comment that you have written. Note that these will only occur for activities that take place following the upgrade. The wording used in this stream also makes clearer that these are interactions with your own contributions.
- The *New groups* panel has been removed. Details of new groups now appear in the *Everything* activity stream.
- Clicking on a user's name or icon or a group name in the stream or when viewing a contribution will change the stream to show activities by that user or within that group.
- If you are viewing the stream for a user or group, then there will be a new popup menu button on the right of the heading for the stream. Selecting this will open a menu where for groups you can go to the group and mute or unmute its activities in the 'Everything' stream and for users you can view their profile, follow or unfollow their status updates and mute or unmute their status updates in the 'Everything' stream.
- When someone directly responds to a knowledge entry then this will now appear as a new activity type referencing the entry, rather than telling you someone has started a new thread or responded to a thread. Note that this will only occur for activities that take place following the upgrade.
- The *New blog post*, *New discussion thread* and *New knowledge entry* dropdown menus of groups now have those you most recently visited at the top.
- If there were more than five people involved in an activity then previously only the first five would be shown. You will now see a count of how many others were also involved.
- Selecting a link in the radar to a contribution that is already being viewed will now move that contribution dialog to the top instead of opening a duplicate dialog.
- If you try and view a contribution or a discussion thread that has just been withdrawn then this is now shown more clearly. Withdrawn discussion threads are also no longer included in the stream for users who do not have permission to view them.
- Using the browser back or forward buttons within the radar will keep your current position in the stream and for most cases will not require the stream to be reloaded.
- When Jiglu is updated to a new version if you have the radar currently open in your browser then the page will automatically refresh to get the new version.
- URLs within the radar have been changed, so if you have any of these bookmarked then they will need to be updated.

### User daily newsletter

- The *My interactions* and *My mentions* sections in the newsletter have been replaced by a *My notifications* section that mirrors the Jiglu Radar, incorporating activities from both the earlier sections.
- The *New groups* section has been removed. Details of new groups now appear in the *Activities* section.
- The *My notifications* and *Activities* sections in the newsletter incorporate other improvements from the radar activity stream.
- The *Alerts with new matches* section has been replaced with a section for each alert that includes the first ten matches of the day.
- The subject of the newsletter has been changed to match other emails from the system and to remove the recipient's name.
- Issues with activities from blogs and monitors not appearing in the activities stream or using incorrect presentation have been resolved.

### Group home pages

- The *My interactions* section on the blog and space home pages has been replaced by *My notifications* and incorporates improvements from the radar notification stream.
- The *Activity stream* section on the space home page incorporates improvements from the radar activity stream.

### Versioning

- You can now view the differences between two versions of a blog post or knowledge entry. When viewing one of these contributions, select the *Version history* link and then the *Compare* button next to the version that you want to compare with. A dialog will appear on the page which will indicate changes in the subject, description, text, attachments and tags. For the text, you will see a comparison showing the paragraphs that changed and what was added or removed.
- If you select the *Revert* button while editing a blog post or knowledge entry, you can now see the differences between the version being edited and a version in the version history by selecting the *Compare* button next to the version that you want to compare with.
- When someone publishes a new version of a blog post or knowledge entry before you publish a version you have been working on it's necessary to merge the changes together. When this happens, you can now select the *Compare* button to see the differences between the two versions.

### Contributions

- If you respond to a discussion thread that has had its subject changed then the subject in your new message will now match the new thread subject unless the message that you're replying to has also changed subject.
- When you vote in a poll the current results will be immediately shown within the page after you vote.
- When viewing a discussion thread, you can now search for text within that thread.

- When viewing a blog comment, there is now a link back to the original post.
- When you add or edit a tag, the form will show if the name is used by another tag. Having more than one tag with the same name is allowed, for example to support the same name with different types, but this enhancement will make the situation clearer.
- When you transfer a contribution, the dropdown menu of groups now has the ones you most recently visited at the top.
- The ability to turn a search into a tag is now consistently available across all contribution indexes. This action will appear in the *Actions* panel in the sidebar rather than as a button at the bottom of the page.
- In your tasks it is now only possible to submit or delete a draft contribution by following the link to that contribution and selecting the *Delete draft* button. Previously you could select these options from the task index but this meant you could accidentally delete an important draft.

### **Contribution editor**

- The HTML editor used for writing contributions and text profile values has been upgraded to a new major version. The following changes have been made with this upgrade:
  - The toolbar for contributions has been reduced from three to two rows of buttons. Buttons for the clipboard have been removed as many browsers now only allow keyboard shortcuts for this. The dropdown menu of styles now incorporates block styles (such as headings) as well as the inline styles (such as sub/superscript) for which there aren't specific buttons.
  - The dialog used to paste embedded content, such as YouTube videos, has changed. You should now choose the appropriate tab on the left depending on whether you want to supply a URL or have the HTML to embed.
  - There is improved support for the current generation of browsers, initialisation is faster and some minor editing glitches in the old editor have been fixed.
- The interface for choosing manual tags when adding or editing a blog post or knowledge entry or editing a source item has been refreshed:
  - In look and operation, the interface is now clearer and closer to other systems.
  - There is a remove button on each tag instead of needing to click on the tag and then press the delete key when a tag isn't wanted.
  - Tag entry and changes are now fully accessible from a keyboard.
  - Choosing an existing tag from the autocomplete dropdown menu with the keyboard now takes you afterwards to the entry of a new tag rather than needing to click on the tag field again.
  - Intermittent timing issues causing tag entry to break have been resolved.
- When you edit a source item, if you select the *Pick tags* button then you can view a new tab showing the tags for the item that came from its site.

### Instant messages

- Instead of adding an obtrusive typing indicator to the stream of messages whenever someone starts to type, there is now a series of icons for recent participants underneath the box for entering a message. When someone starts typing, they will move to the front of this list and a pulsing indicator will appear underneath.
- Clicking on the icon for one of these participants will enter their name in the new message box allowing you to direct a message at them.

### Status updates

- On the radar, users that you are following are no longer shown in the *My stream* panel.
- You can now view all the users that you are following by going to your profile and selecting the *Following* view. From this index you will be able to unfollow users and mute any that you do not wish to see status updates from in your radar 'Everything' stream.
- You can no longer invite users to follow you. They must now do this themselves.
- When you follow or unfollow someone you will no longer receive email notifications that this has taken place.
- There is no longer the option to follow or unfollow a user in the user tooltip. You should use the buttons on their full profile or on the radar stream popup menu instead.

### Discovery and tagging

- When viewing the tag index, you can now filter tags by whether they are used as types. This makes it easier to find ones that may no longer be required.
- When viewing a tag, you can now filter occurrences by the type of the occurrence. This makes it easier with cases such as when the author of a document features as a name in multiple documents but you only want to see the ones that they actually authored.
- Within a monitor you can filter tag occurrences by source.
- When viewing a tag, in the *Related* sidebar section there is a new *View related tags* option. This shows you the top tags that were found in occurrences of the chosen tag in a tree map visualisation. When the tree map is shown, you can select the tag type using the drop-down menu underneath. In a monitor this allows you to find, for example, the authors of documents that include that tag or in a monitor the authors of articles including that tag.
- When viewing a tag, there is now a button to show what other groups the tag can be found in, rather than being always loaded.
- There have been improvements to the Jiglu Dynamic Discovery automated tagging algorithm and the data that it uses. Previously some tag names were consolidated in the same tag despite being different concepts, which no longer happens. Capitalisation standardisation improvements have been made, notably for abbreviations, and cases have been resolved where a tag was previously given an incorrect type.
- As part of the above change, when searching for a tag you will now get more specific results for the text that you entered.
- Names of people that include diacritics are now better recognised as names.

- Tags used as types that are automatically created by the system are now correctly marked as automatic rather than manual.
- Unused tags used as types that were created automatically or were supplied by external sources are now removed when they are no longer used.
- Improvements have been made to getting metadata for web pages that are source items or for links that are referenced as links in contributions.
  - Support has been added for HTML 5 author and tag markup, schema.org authors and tags in multiple child elements and issues have been resolved where tags from source items would wrongly get turned into tag types.
  - For getting metadata for links in contributions, pages protected by multiple redirects with cookies are now better handled and their details extracted.
  - For getting metadata for links in contributions, support has been added for document formats at links such as PDFs and Microsoft Office documents. These links will have a thumbnail image identifying the document format.
- When viewing links, the URL that is used is now for the final page after any redirects have been followed. Tracking information will also have been removed where possible.
- In a monitor, you can now filter links by source and domain.

### User and member profiles

- The user dropdown menu on the top right of each page now contains a link to view your own profile.
- On user and member profiles, the activity stream now has the last 20 instead of the last 10 activities from the user and incorporates improvements from the radar activity streams.
- When you view your own user profile, you will now see a new *Group membership* view with an index of all the groups that you are a member of. From this index you will be able to mute any that you do not wish to see activities from in your radar 'Everything' stream.
- When you view a member profile, you will now see a new *Tags* view that shows you the most used tags in contributions that the member has authored. This will give you an idea of their interests.
- When viewing your own user or member profile pages there is now a button to edit your profile.
- If a member has been temporarily suspended from a group then this will now be shown to all users on their profile. The reason why is only shown to group administrators.

### Preferences

- The preferences index page has been reorganised:
  - The *Radar* section has been removed. To set which groups are shown in your radar 'Everything' stream you should now use the dropdown menu for the relevant stream in the radar or go to the membership section of your profile where you can change this for all your groups. To edit your alerts you will now need to go to *My alerts* and select the *Edit* button.

- There is a new *Status updates* section, where you will find the preferences page to edit access to your status updates and the option to delete all your status updates.
- Improvements have been made to the two-factor authentication and feed password preferences pages to make the actions available to you easier to understand. Going to these pages will also now show you the current state.
- When you set up two-factor authentication you will be required to enter a valid verification code from your authenticator app before it is enabled. Previously it would be enabled as soon as the QR code to scan was shown, which if there was a problem could lead to you getting locked out of your account.
- Changing your main password no longer revokes your feed password. If you change your main password and you have a feed password set up then you will be told and given a link to change that too.

### **Browser support and accessibility**

- Forms have been updated to take advantage of newer features in HTML 5. Changes include:
  - Instead of using our own widget to select dates, the browser's native date picker is now used.
  - Numeric fields will now have increment and decrement buttons in most desktop browsers. In mobile browsers you will only be given the option to enter numbers in the on-screen keyboard. You will also be prevented from using a number outside the appropriate range for the field.
  - Form fields that are mandatory but empty, too short, contain invalid characters for their type or are outside the valid range of numbers will be highlighted in yellow and it will not be possible to submit the form until they are valid.
  - There is better support for password managers. Previously some password managers would enter your existing password when you were required to enter a new password or would populate a username field that was not referring to your own.
  - Autocomplete is now supported for user registration, filling in name, username and email address fields when the browser knows these.
- There is clearer styling of focussed elements, improving accessibility for users not using a mouse.
- There is more consistent use of colour, making it clearer which icons are decorators and which are buttons, with hover effects used throughout on all buttons. Buttons that have no text now just have a colour icon with no surrounding button shading.
- Navigation buttons for viewing next and previous pages has changed are now aligned with other elements.
- Other changes have been made to ensure the product uses current browser APIs throughout.
- With Internet Explorer soon reaching end of life, we are no longer doing full testing of the product with this browser. In the short term, functionality should continue to work as before but you may see some formatting differences compared to current browsers.

### Logging on

- If you make more than five attempts to log on with an invalid username or password then your IP address will be locked out from trying to log on again with that username for 30 minutes.
- When you log on you will be told if there were any failed attempts to log on since your last successful log on. By following a link on the alert, you will be able to view when the attempts took place and from which IP addresses.
- When the system could not automatically log you on you will now be told the reason why rather than just being shown the logon form.

### Other changes

- You can now filter searches of contributions within a group by the user who authored them.
- The group filter on the *Favourites* index now shows the groups that you most recently visited at the top.
- When viewing a chart in a monitor, after selecting the *Discuss* button the dropdown menu now shows the spaces you most recently visited at the top.
- There are new icons for a number of resource types and improved icons for others. Note that the bell icon previously used for alerts is now used for notifications, with a new alarm icon used for alerts instead.
- If you haven't uploaded a photo then the system instead uses an icon from the website matching the domain name of your email address. Before this would never subsequently be updated but now it will update if you change your user details or an administrator edits your user.
- When viewing source items, items now have URLs that are the URL that is used is now for the final page after following any redirects. Tracking information will also have been removed where possible.
- More form fields now have browser spellchecking enabled.

### Fixes

- On the radar it was possible to miss new tasks because the indicator was cleared each time the tasks were updated. The indicator now remains until tasks of that type are viewed.
- On the radar the appropriate heading for a stream will now always appear. Previously if you refreshed the page or reopened your browser then sometimes it would be missing.
- An issue has been resolved in activity streams where for blog post and knowledge entry updates only the last person who carried out an update was shown.
- An issue has been resolved in activity streams where updates to blog posts and the addition of new comments could get merged into the same activity.
- When showing available actions on contributions, some differences in permissions checking between the radar and on pages within a group have been resolved.

- An issue with tooltips in the radar that prevented old ones being removed from the page HTML, causing increased memory consumption over time, has been resolved.
- An issue with instant messages failing when a user did not have an icon has been resolved. Users without an icon will also now have a default icon appear to the left of the box for entering new messages.
- When viewing a discussion thread, if you chose a time span to limit what messages in the thread were shown then this would be ignored. This has been resolved.
- Performance issues when viewing a tag with source item occurrences have been resolved.
- If a source item contained a tag that had previously been the author of any source item then it would be marked as an author of that item too. This has now been resolved and only the actual authors will be shown.
- Thumbnails for source items and icons for sources are handled more efficiently and with better fallbacks when preferred images are not available.
- Issues have been resolved with processing emailed discussion messages with attachments in Apple's apple/appledouble format or when no creation date for an attachment could be determined.
- When someone publishes a new version of a blog post or knowledge entry before you publish a version you have been working on it's necessary to merge the changes together. When this happens an issue previously caused a spurious attachment to be added to the post or entry being edited. This has been resolved.
- Analytics now work in the time zone of the user, having previously only used GMT.
- A number of other minor issues have been fixed.

## For group administrators

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### My radar and contribution pages

- In order to accommodate additional actions on contributions without needing lots of additional buttons underneath, all administrative actions are now under a new *Actions* button. Selecting this will open up a pop-up menu with the actions that can be taken on the contribution.
- You can now carry out additional administrative actions from the radar. These are:
  - opening and closing blog posts to new comments;
  - withdrawing and republishing blog post versions;
  - deleting earlier versions of a blog post;
  - opening and closing discussion threads to new messages;
  - withdrawing and republishing discussion threads;
  - editing discussion threads and, when in use, changing their discussion area;
  - withdrawing and republishing knowledge entry versions;
  - deleting earlier versions of a knowledge entry.
- On the contribution pages within a blog or space, the above actions will now be carried out within the current page rather than taking you to a separate page with the result.
- You can now suspend or unsuspend the author of a contribution or delete them as a member of a group from the *Actions* menu under a contribution.
- Withdrawing or republishing contributions and opening or closing discussion threads and blog posts will now always update buttons and other elements on the page to match what was done.
- When deleting earlier versions of a blog post or knowledge entry only those before the version currently being viewed will be deleted. Previously all except the latest published version would be deleted.

### Member index and profile pages

- On the group member index, the *Address*, *Name* and *Username* filters have been combined in a single *Name or address* filter that will search all of these. Improvements have also been made so only compatible filters are enabled and some combinations of filter that were not previously possible now are.
- On the group member index, the *Suspended* search filter has been renamed to *Member type* and now allows you to search for activated, suspended and not activated members.
- On the member profile page, selecting the *Actions* button will now show a pop-up menu of all the available actions for an administrator, rather than there being one button for each. Being able to use longer names in the menu also makes the actions more understandable.

### Insight analytics

- In blogs and spaces, the Insight section is now only available by default to group moderators and administrators. If you want ordinary members to be able to view this section then you will need to give permission to the new Insight resource type.
- In the Insight section, the tag analytics in all groups have changed:
  - *Top tags occurrences* shows you a bar chart with how many occurrences there are for the top twenty tags.
  - *New tags* shows you a tree map visualisation of the tags that are new and had activity within the timespan chosen. There is also a *New tags occurrences* option with a bar chart with how many occurrences there are for the top twenty new tags and a *New tags activity* option with an activity chart showing how many occurrences there are each day for the top five tags.
  - *Trending tags* now shows you a tree map visualisation of the tags that are currently trending. There is also a *Trending tags occurrences* option with a bar chart showing how many occurrences there are for the top twenty trending tags.
- In blogs and spaces, the Insight section has one new chart available:
  - *Content authors* shows you a bar chart with how many contributions there are for each of the top twenty authors.
- In monitors, the Insight section has three new charts available:
  - *Content sources* shows you a pie chart with how many source items there are for each source.
  - *Content domains* shows you a bar chart with how many source items there are for each of the top twenty domains that content came from.
  - *Outgoing link domains* shows you a bar chart with the top twenty domains for links that were found in these items.
- The filters for the charts have been extended:
  - All the charts can be filtered by timespan.
  - The *Activity*, *Top tags*, *New tags* and *Trending tags* charts can be filtered by tag type.
  - In a blog or space, you can filter the *Activity*, *Top tags* and *New tags* charts by the user that authored them.
  - In a blog or space, you can filter the *Activity* and *Content authors* charts by contribution type.
  - In a monitor you can filter all except the *Content sources* chart by source.
- On contribution index pages the *Activity* and *Sentiment* sidebar sections have been removed as this functionality is now available within the Insight section.
- On tag view pages, the *Activity* and *Sentiment* sidebar sections have been consolidated in a new *Insight* section. The mini charts are no longer shown so the page can load faster with new links to view the charts.

- In a monitor when viewing a tag there are new charts for content sources and content domains. You can filter the data used by these the charts by source and date range.
- Trending tags on the Insight pages, group home page and Radar use a new algorithm, giving better and faster results.
- Charts are now in SVG format and will look better on high-DPI displays.

### Settings

- You can now set a retention policy for discussion messages. On the *Limits and quotas* group settings category is the new *Maximum age for a discussion thread* setting with after how many days since it was last added to that a thread should be deleted.
- You can now change whether or not the *Flag* button appears under contributions. There is a new *Allow contribution flagging* setting in the renamed *Privacy and flagging* group setting category.
- You can now specify a list of URLs that you don't want to be used for links. In the *Tagging* category is the new *Ignored URL stems* setting to block links starting with these URLs.
- All the member workflow settings and notifications available to blogs and spaces are now available in monitors too.

### Other changes

- You can now import tags from an existing list. On the *Tags* index page, choose the *Import tags from a list* option and paste the list of tags that you want into the form. You can also optionally select a type for the tags.
- Any group home page sections with the name 'My interactions' have been renamed to 'My notifications'.
- When you delete a group, as an additional safety measure instead of selecting a checkbox to indicate your confirmation of the deletion, you now need to enter the word 'delete' in a text field.
- Group administrators can now delete instant message threads. When you are viewing the root message of a thread there is a new *Delete thread* menu option. Messages in the thread will be deleted in all browsers currently viewing that space's talk section.
- When instant messages are withdrawn or republished this is now reflected in all browsers currently viewing that space's talk section.
- When you add or edit a source, additional information is now given when checking a URL results in a failure. This includes errors downloading content, SSL certificate issues and the address being on the system's block list.

### Fixes

- If a user was invited to join a group, registered under a different email address then changed their address to the address of the invitation then if they were invited again an error would occur. Invitation details would also not always be updated if an existing user changed one of their alternative email addresses after being invited but before joining. These issues have been resolved.

- If a user was invited to join a group but didn't do so in the necessary time then when an administrator tried to add them later an error could occur. This has been resolved.
- The recent invitations page now always shows the email address that was used in the invitation rather than changing it to the regular email address of a user if the address matched one of their alternative email addresses.
- Group settings pages were not disabling settings on the form when they had been locked by a system administrator. Locking is used to prevent settings from being changed at a group level. This issue resulted in a system error when selecting *Save* on a page containing a locked setting. This has been resolved.
- Issues relating to auto-naming on the source add and edit pages have been resolved.

## For system administrators

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### System administrator passwords

- Some actions, such as changing system settings, are protected by a secondary system administration password. Previously the same password was shared by all users with the *System administrator* role. To improve security, each system administrator now has their own unique system administration password.

Following the upgrade, the password for each user will be set to the previous shared password. It can be changed by going to *My preferences* and choosing the *Change system administrator password* option. To change this for another user go to the user's profile page, select the *Actions* button and choose the *Change system administrator password* option.

When you edit a user and give them the *System administrator* role you will be given a link to set their system administration password. When you revoke the role their system administrator password will be removed. Should they be given the role again a new password will need to be used.

Note that a user cannot use the same password for their regular password and system administrator password. They also cannot use a password that they have recently used for either their regular or system administrator password.

### User index and profiles

- On the user index, the *Address*, *Name* and *Username* filters have been combined in a single *Name or address* filter that will search all of these. Improvements have also been made so only compatible filters are enabled and some combinations of filter that were not previously possible now are.
- On the user index, more actions that an administrator can carry out on a user, such as changing their password or sending a password link email, are now available in the drop-down menu next to their name.
- On the user profile page, selecting the *Actions* button will now show a pop-up menu of all the available actions for an administrator, rather than there being one button for each. Being able to use longer names in the menu also makes the actions more understandable.
- The list of groups that a user is a member of is now shown in a separate view rather than on their main profile page.

### System settings

- The settings related to passwords in the *User security* system settings category have been split into a separate *User passwords* category.
- The *User security* system settings category has new settings controlling IP address lockouts:
  - After how many failed attempts to log on an IP address should be locked out from trying again for that username;
  - After how many requests for a password change email an IP address should be locked out from trying again for that username;

- How long these lockouts should be.
- The *User security* system settings category has two new settings for the role that a user requires to be able to access feeds and the Atom Publishing Protocol interface. This allows you to limit feed access to only users that have been given a particular role. By default, this will be set to the *Registered user* role allowing use by everyone.
- Custom themes have been simplified with the faded colours removed as they are now handled differently. There is a new colour for icons that are not part of buttons or links.
- The *External lookup* system settings category has been renamed to *External content*.

### **Other changes**

- If you send an invitation to join the system to someone and mandatory two-factor authentication is enabled, then once they have registered or – if necessary – confirmed their email address then they will now be taken to the page to set up two-factor authentication. Previously they would be taken to the log on form and after logging on would then be told that they needed to set up two-factor authentication first.
- Previously if you created a space with the simple name 'support' then a section would appear on the My Radar page telling users about it. With other options for customising this page now available, the support panel has been removed. Instead, on help pages the Support panel will include a link to this space if it exists, is activated and is viewable by the user.
- The administrator newsletter now includes details of IP addresses that were blocked because of repeated log on failures, users having the system administrator role added or removed and a summary of how many events were logged for each resource type and event type combination.

## For operations engineers

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### Upgrade

- Because of the fix to the content analysis system, all content will need to be retagged. See <https://support.jiglu.com/spaces/installation/knowledge/retagging-content> for instructions on how to do this if you host your own system. Note that retagging will now redownload any source items in monitors or spaces and older items from feeds will be deleted during the process.
- Because of an upgrade to the search system, search indexes will need to be rebuilt. See <https://support.jiglu.com/spaces/installation/knowledge/rebuilding-search-indexes> for instructions on how to do this if you host your own system.

### Legacy feature removal

- The ability to import and export group templates to the file system has been removed. This feature has never been used by any customers and required a third-party component that has had repeated security issues so it was decided that removing this functionality would be best.
- It is no longer possible to configure Jiglu to have blogs and spaces using a subdomain of the main domain (e.g. <https://aspace.example.com>) rather than on the main domain (e.g. <https://example.com/spaces/aspace/>). This legacy feature has never been used by any customers and added unnecessary complexity.

### Other changes

- Using Multitool you can now examine current thread pool usage and change the sizes of the different pools without needing to restart the system.
- Checkpoints are now written to the system log every 10 minutes with details of current work queues and the number of users and sessions.
- Memory usage in the Jiglu server has been reduced. There are performance improvements throughout, notably for processing new contributions, viewing threaded contributions, viewing activity streams and checking multiple permissions.
- Some unnecessary service agent work has been eliminated and workers in thread pools have been made more resilient to failures.
- Newsletter sending, discussion message digest sending and group housekeeping now utilise the service agent pool more effectively. This will improve performance when there are large numbers of groups. Their work is now better interwoven with other agent work taking place, so it won't delay new contributions being published.
- Unnecessary updating of a source's icon each time a feed was read has been eliminated.
- A search system upgrade has reduced the amount of disc storage that the search indexes use.
- Third-party libraries have all been updated to their latest recommended versions.

### **Security**

- In order to allow initial system administrator accounts to be created, the system ships with a 'superuser' account. For additional protection in systems with mandatory two-factor authentication, this account may now only have its two-factor authentication set up when logged on as that user, not as part of the log on process.
- When editing a source in a monitor, if you specified a very large number for the maximum age of a source item then it could cause a source worker agent to fail and eventually exhaust all the thread pool so no further sources could be ingested. A maximum age of 20 years is now enforced, preventing this from happening.