



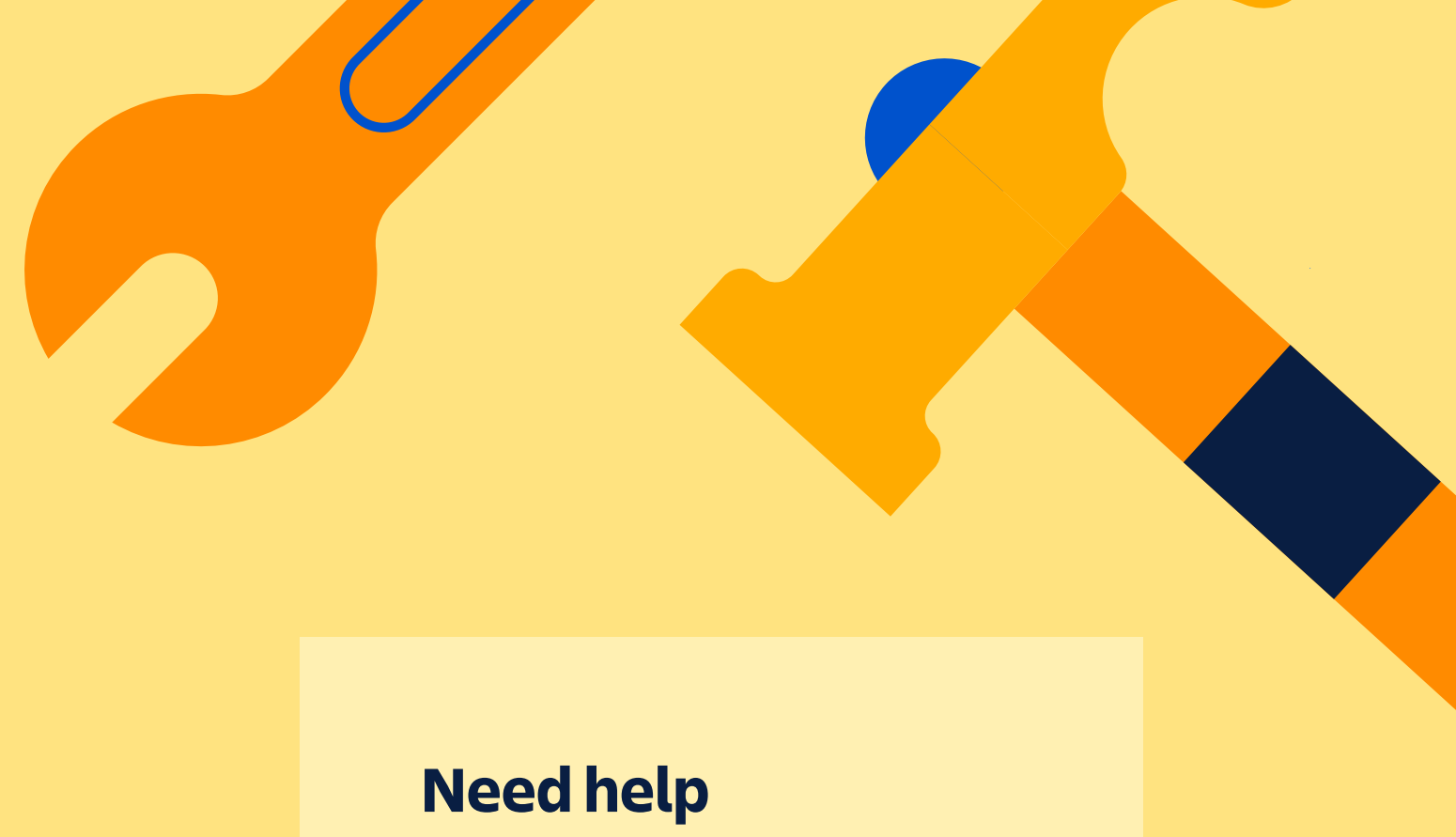
Faster, better, stronger.

Tips for optimizing performance of your Atlassian tools



Improving performance just got that much easier. Use the following tips and tricks to help you identify potential improvements or changes you can make to optimize the performance of your instance. Often, there is no silver bullet solution. Performance is impacted by a number of factors, which are constantly changing, so it's important to continually monitor and look for ways to stay ahead of performance degradation.

Tooling



Get ready for the future, today

Use software, like [Atlassian Data Center](#), that is built to support your scale.

Get the latest

Upgrade to the latest version or a [Long Term Support release](#) to ensure you are getting the newest features, latest bug fixes or are on the most stable release.

Stay ahead of the game

[Monitoring](#) is a vital part of ensuring the integrity and continued optimization of your Data Center application. Regularly monitor application to help identify infrastructure bottlenecks and prepare for reconfiguration or hardware upgrades.

Need help troubleshooting?

We've got a number of [tools](#):

- Thread dumps
- Garbage collection logs
- Access logs
- CPU profiling
- and much more!

LAYING THE FOUNDATION

Environment



Hardware matters

Use the right hardware setups for [your environment](#).

Find the right size

Find the [right number and size](#) of nodes needed to support your needs.

Update your protocols

Make sure you enable HTTP/2, which enhancing overall application performance.

Reduce latency

Co-locate the cluster nodes in the same physical place and on the same subnet.

Having multiple outages?

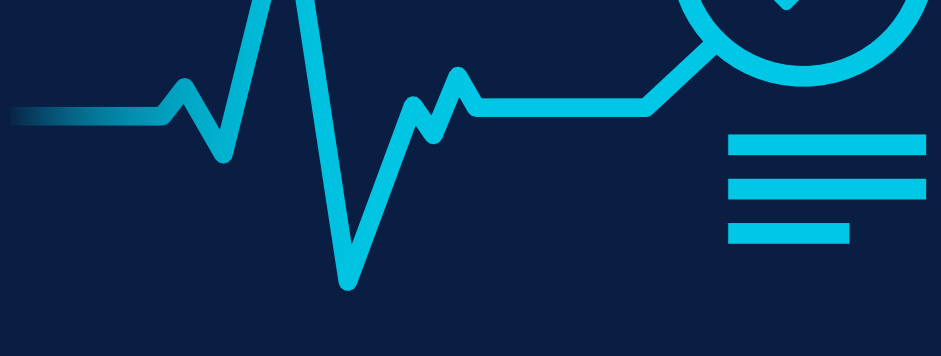
Try running database maintenance tasks regularly like scans for empty filters.

Do you experience performance degradation related to increased number of concurrent users?

It might be time to [increase your number of database connections](#).

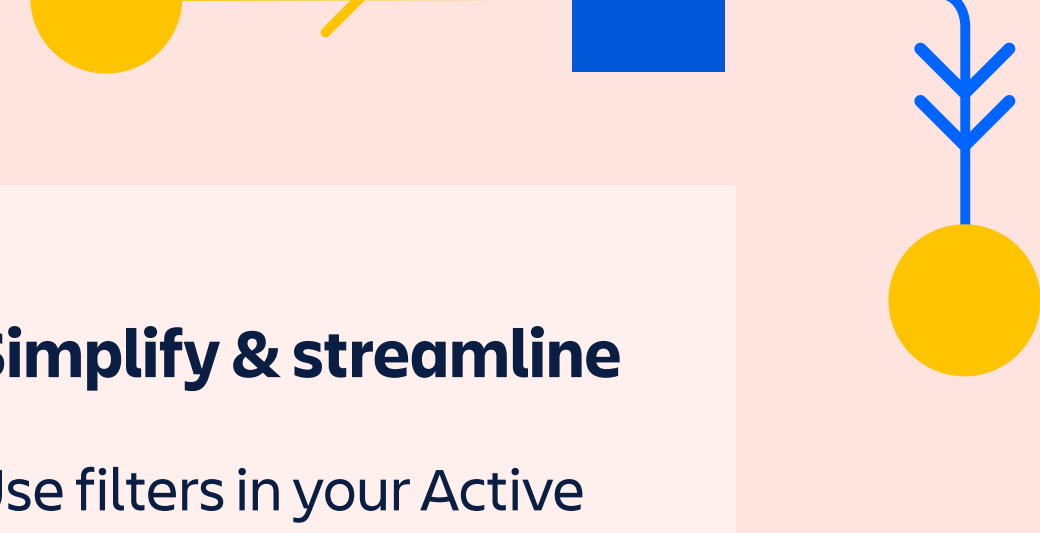
Want more recommendations?

[Turn on analytics](#) so that we can better understand your usage of the products. It will help us to build better products and provide you with stronger recommendations.



MAKING THE RIGHT OPTIMIZATIONS

Instance controls



Tidy up

- Archive unused data with [project or issue archiving for Jira Software Data Center](#) and Jira Service Desk Data Center
- Keep your permissions schemas clean and simple
- Reduce the number of custom fields and change configuration of custom fields to use local context with the [Custom Field Optimizer](#)
- Disable searchers for custom fields that don't need to be searchable nor used in reports

Reduce resource consumption

- Enable [rate limiting](#) to reduce REST API calls that can consume too much CPU
- Configure your [external process pool](#) to handle task that consume a lot of CPU, such as document conversion
- Automatically kill stale nodes with cluster monitoring

Simplify & streamline

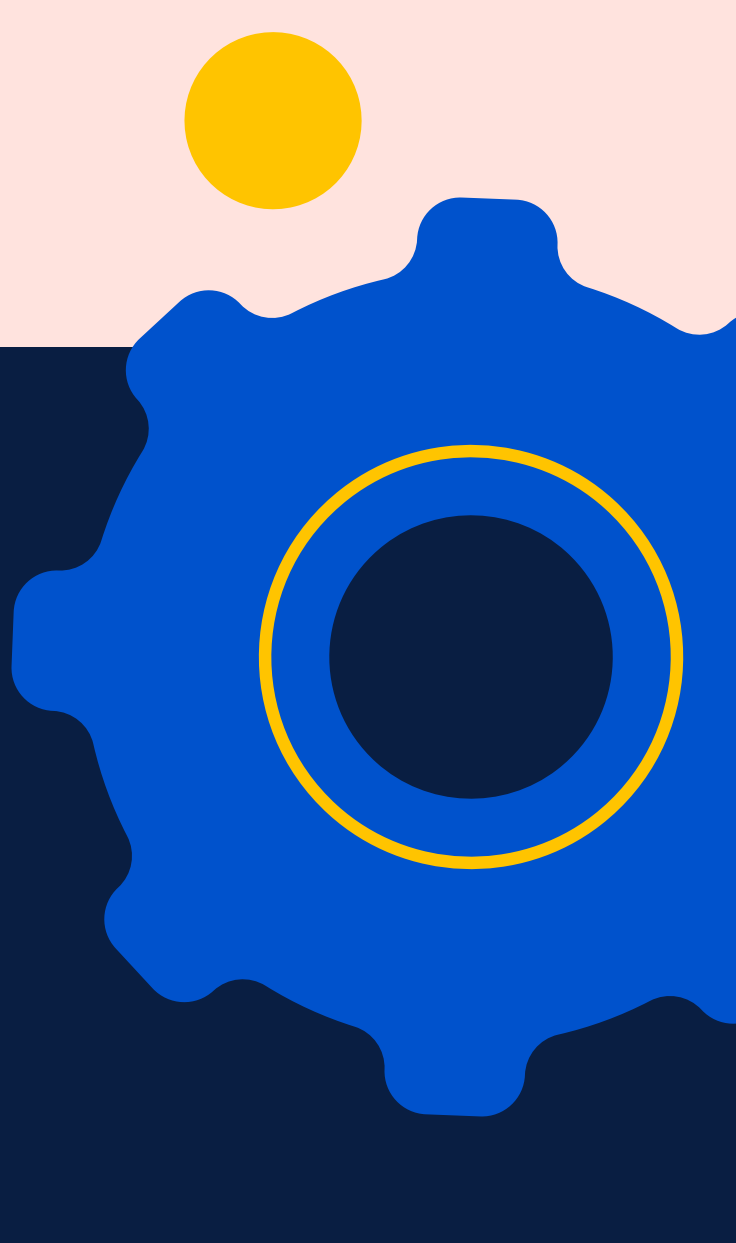
Use filters in your Active Directory configuration to limit the number of users and groups imported from your Active Directory into a product, to limit the amount of data imported.

Speed up your response time

Remove any unused custom fields from the index to reduce the amount of time it takes to indexing automatically.

CUSTOMIZE FOR YOUR SCALE AND PERFORMANCE NEEDS

Administrative controls



Availability

- Deploy [Data Center in a cluster](#) and add nodes to your instance to reduce the risk of outages or unexpected downtime
- Manage your [synchrony nodes](#) in a cluster to keep your collaborative editing always there for your teams
- [Re-index](#) your search index without any downtime for your teams

Scalability

- [Take screenshots](#) of your index, rather than re-building, in the event of a failure
- Get more repository space by [adding additional storage](#) in your shared home directory

How can you support geo-distributed teams?

- Configure a [content delivery network](#) to reduce load times for your teams
- Set up live mirrors that host copies of your repositories so your teams can [clone their repositories](#) from the other side of the world in minutes
- Create a cluster of smart mirrors in a specific region to reduce the load in a particular location
- Enable remote cache invalidation

Want to get more tips to help you manage your Atlassian products at scale?

Get The Ultimate Guide to Data Center to help you master Atlassian tools at enterprise scale.

[Download today](#)

