



Lead time for changes

Tags: [Flow](#)

Lead time for changes is a DORA metric that shows the time it takes for committed code to enter production. Use Lead time for changes to identify growth opportunities in your delivery lifecycle, including your development policies, processes, and tooling.

Who can use this?

Core

Plus



Lead time for changes gives a high level understanding of what happens between when code is committed and when it is deployed. If Lead time for changes is high, use the following collaborative metrics to identify review-based bottlenecks and improve your Lead time for changes:

- [Impact](#)
- [Time to merge](#)
- [Time to first comment](#)
- [Unreviewed PRs](#)
- [Reaction time](#)

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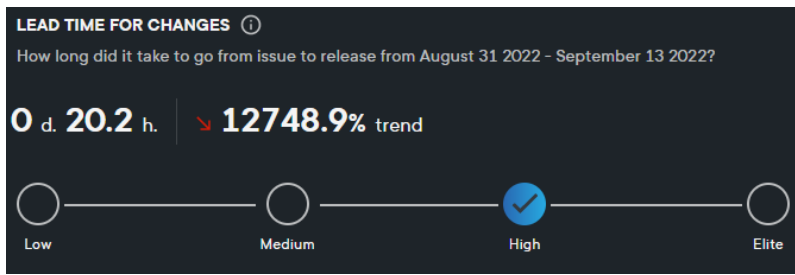
[Lead time for changes benchmarks](#)

Which reports use Lead time for changes?

Lead time for changes is available in Home, Retrospective, and Team health insights.

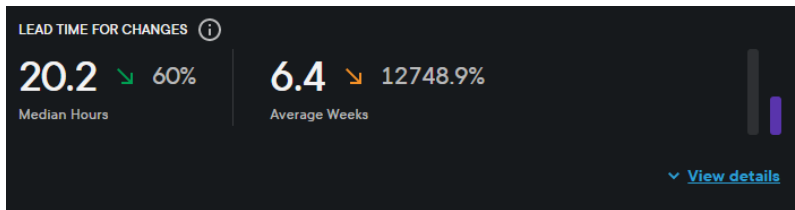
Home

Include Lead time for changes in Home by customizing your selected metrics. Use this report as a high-level summary of your team's median lead time in. Learn more about [Home](#).

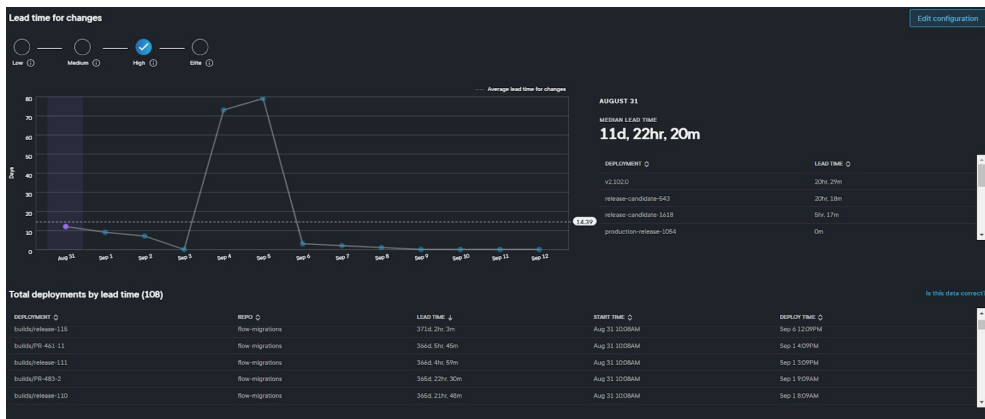


Retrospective report

Managers can use this report to see lead times by individual deployments. The retrospective report shows the median lead time for deployments. This helps teams focus their conversation on the deployments with higher than expected lead times to talk about opportunities for improvements.

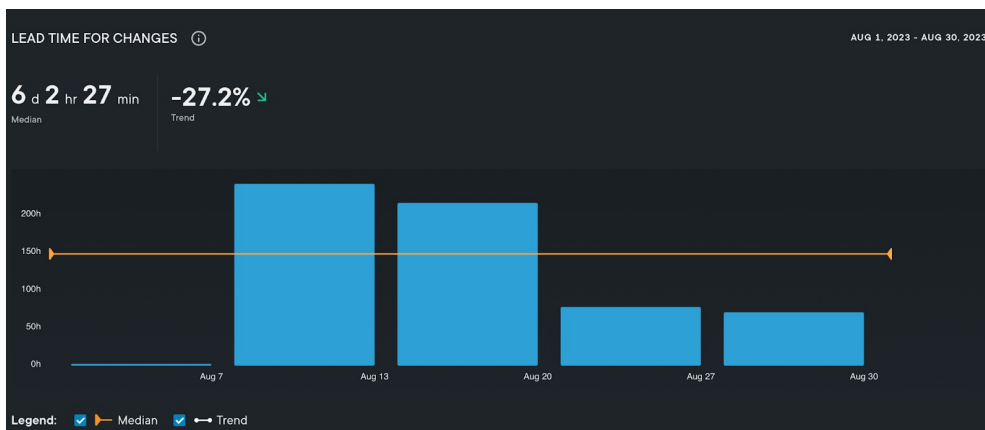


Click **View details** to see lead times for individual days and commits. Learn more about the [Retrospective report](#)



Team health insights

Team health insights provides a team-level view of Lead time for changes. See how long it takes your teams and nested teams' commits to make it to a production deployment within a certain time period or repository.



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How is Lead time to change calculated?

Lead time for changes = Date and time of deployment - Date and time of author commit

Lead time for changes for a commit is the difference in hours between the date and time of the author's commit and the date and time of the deployment containing that commit. Learn more about [configuring deployments](#).

Flow first calculates the lead time for each code commit, then uses the median of those calculations to calculate the median Lead time for changes for a deployment.

To find the median Lead time for changes for a given date range, Flow finds all deployments within the dates and filters selected. Flow calculates Lead time for changes for each commit in the selected deployments, then finds the median Lead time for changes across those commits.

Flow can calculate Lead time for changes differently based on:

- Including or excluding a repo or integration for deployments
- Manually marking a deployment as not a deployment
- Configuration on regular expressions

Lead time for changes benchmarks

Flow uses four benchmarks to categorize the status of Lead time for changes. An Elite benchmark indicates a healthy Lead time for changes, while a Low benchmark indicates there are areas you can improve in your team processes. The benchmarks displayed for this DORA metric are partially based on the [2021 State of DevOps Report \(PDF, opens in new tab\)](#), and customized for Flow. Flow compares the value of the metric against these benchmarks.

Not all processes and organizations allow for meeting the elite rating. Use the time as a signal to indicate where your team can focus their efforts in removing friction. The goal is continuous improvement rather than meeting a benchmark.

If you need help, please contact [Pluralsight Support](#).