



# UNDERSTANDING THE DEVELOPER JOURNEY WITH BITERGIA ANALYTICS





CHEF™

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Visit [bitergia.com](https://bitergia.com) for information about Bitergia's services or email [info@bitergia.com](mailto:info@bitergia.com) to schedule a demo.



Bitergia

# ABOUT CHEF®



Chef is the global leader in DevSecOps and the developer of Chef Enterprise Automation Stack™, automating infrastructure, compliance and application delivery for more than half of the Fortune 500. For more than 10 years, Chef has led the industry in DevOps innovation, uniting teams at organizations of all sizes and optimizing processes and outcomes to accelerate its customers' business growth.

Chef Software is developed as 100 percent open source under the Apache 2.0 license.

For more information, visit <https://chef.io> and follow @chef.

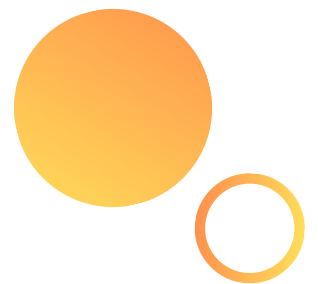


# TRANSITIONING FROM USER TO CONTRIBUTOR



Chef deals with both user communities and developer communities as it builds its open source code. Over the past several years, Chef has successfully worked on increasing the number of users: people that use their technology. Since last year, renewed attention was given to encouraging and growing the developer community.

Chef set a goal to increase the number of users who become contributors. To make that happen, Chef needed to identify the behavior of these transitioning people, encourage the actions that lead to such a transition, and help guide actions to empower their new contributors.



# TRANSITIONING FROM USER TO CONTRIBUTOR

To accomplish this goal, Chef needed to answer two key questions:

- How much support does Chef need to give to the different platforms the communities use?
- How much time should Chef's internal developers spend on these platforms?

## INSIGHTS FROM BITERGIA ANALYTICS

- ✓ Understand **community pathways**
- ✓ Execute a **strategy** to grow **developer community**
- ✓ Get **deep insights** to **community behavior**
- ✓ Make **data-informed decisions**

# SOLUTION: THE DEVREL DASHBOARD

Chef asked Bitergia for a customized dashboard for their specific needs.. The DevRel Dashboard was developed specifically for Chef and shows the activity in the user and developer communities across the different platforms used by both. The idea was to see how people who transitioned to the contributor community behaved before, when they were in the user community.

*"All of our internal developers interact with GitHub as well as our external developers, so everything is all in one place. GitHub is the collaboration tool and also the place where we will find people that aren't in Discourse or Slack. "If we never had GitHub[data], we would never have known about these people, we would never have been able to interact with them, and they would never have shown up on our radar."*

benny Vasquez  
Community Manager,  
Chef

# SOLUTION: THE DEVREL DASHBOARD

## User Community

Chef defines the user community as the people who show activity mainly on Slack and Discourse. These people can be filtered by active users, inactive users, top contributors, and organizations involved.

### Discourse panel overview

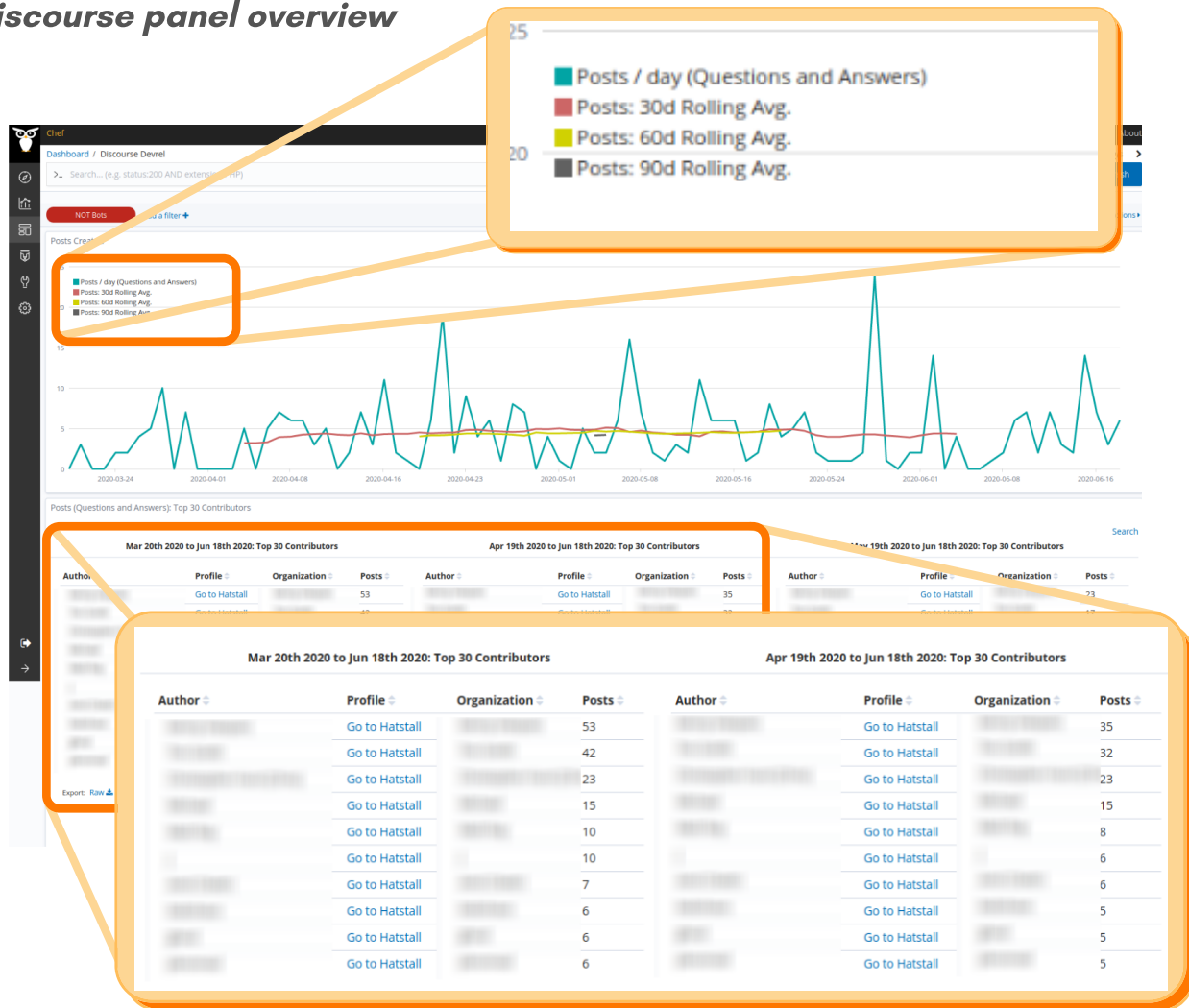


Figure 1: Top 30 contributors per month based on post activity (questions and answers), where you can also filter by organization.

# SOLUTION: THE DEVREL DASHBOARD

## Slack panel overview

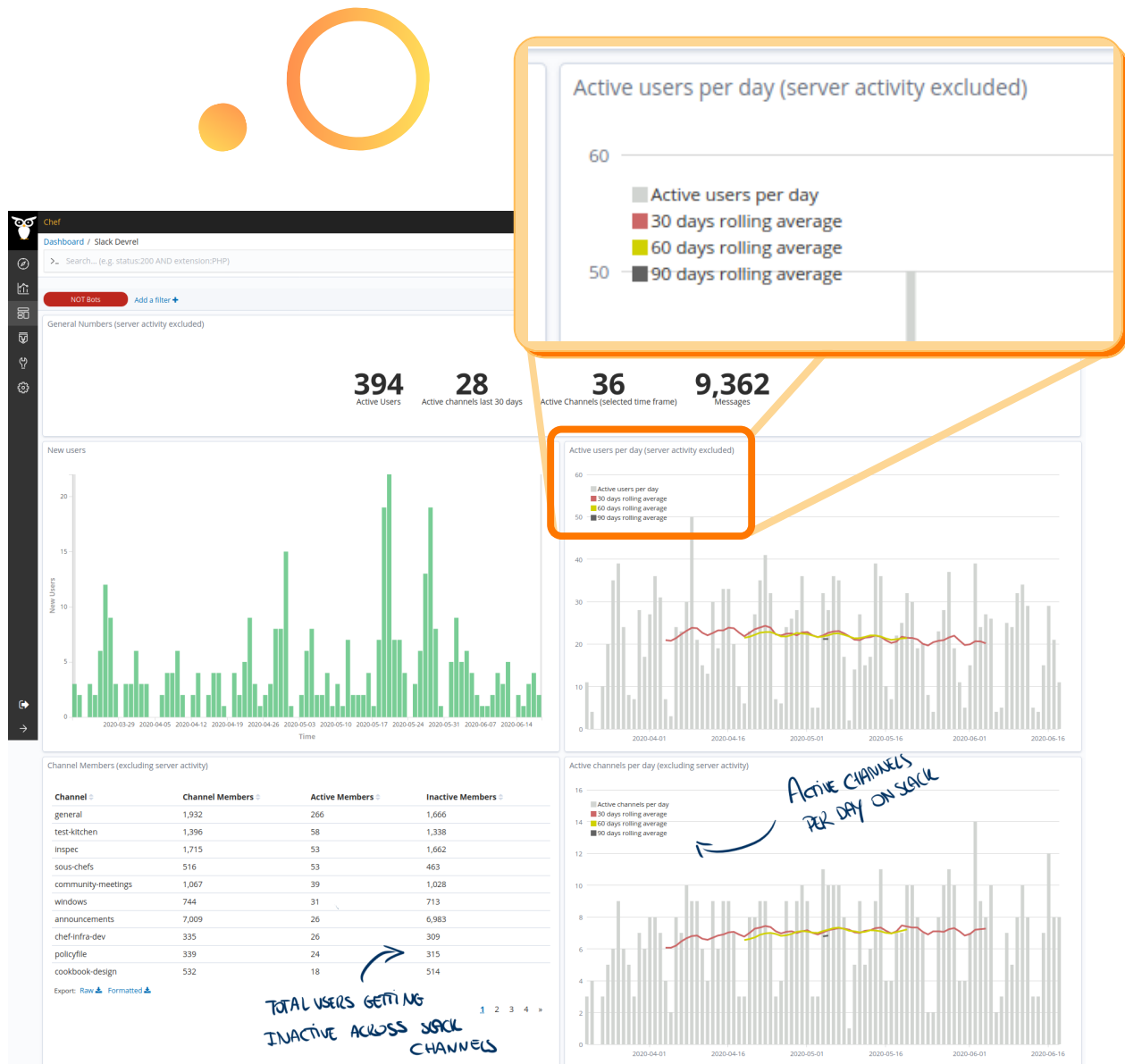


Figure 2: Active/Inactive users and channels from last 90 days on slack. You can also see how many users are getting inactive across slack channels.





# SOLUTION: THE DEVREL DASHBOARD

## Contributor Community

Chef defines the contributor community as the people who show activity mainly on GitHub, divided by commits and pull requests. These people can be filtered by organizations.

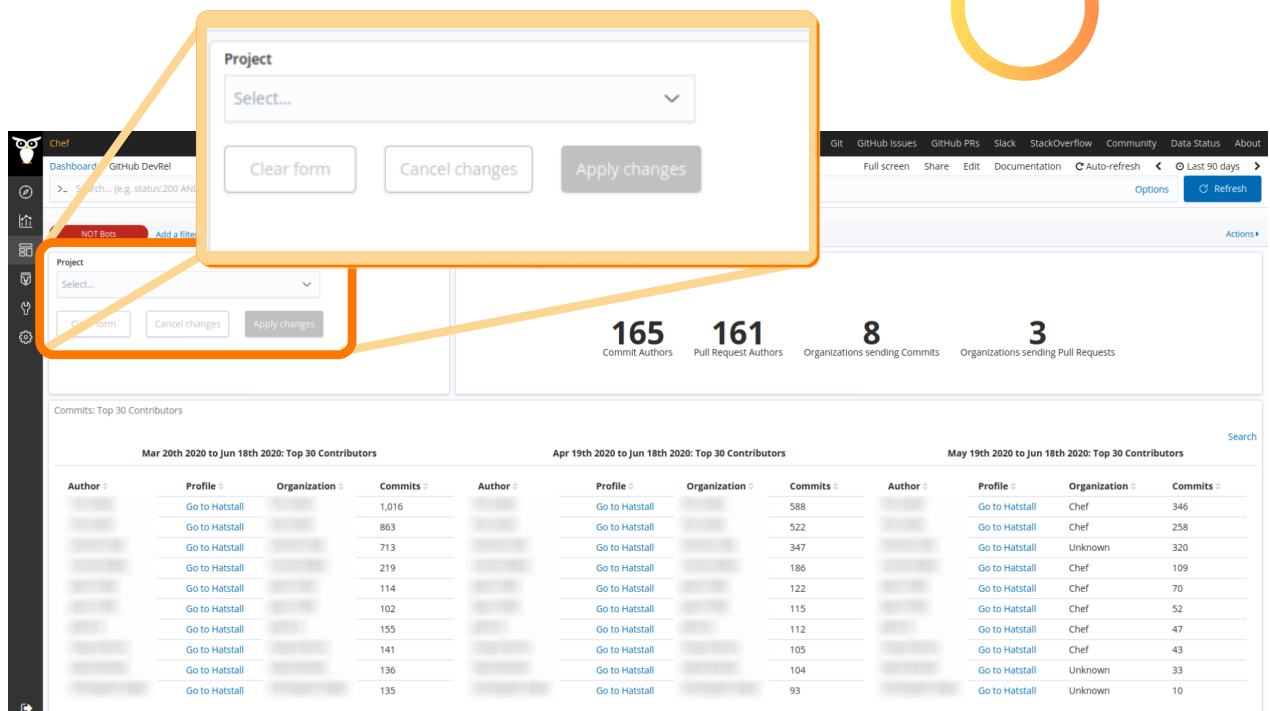


Figure 3: Top 30 contributors per month based on Commit and Pull request activity, as well as number of organizations involved sending commits and pull requests

benny understands the importance of knowing where Chef community members interact. Knowing what different channels they use and identifying key segments (user community and contributor community) helps Chef understand developer behavior and discover the journey that transitions users to contributors.

# SOLUTION: THE DEVREL DASHBOARD

*"Everyone come to Chef in a different way. Using Bitergia Analytics, we can know where users and contributors interact with us first, and the path most people are taking when making contributions."*

benny Vasquez  
Community Manager,  
Chef

Thanks to the solution and insights provided by Bitergia Analytics, Chef has been able to understand the community pathways and execute a strategy to grow their developer community. Over time, the numbers provided by Bitergia will show whether Chef's strategy is successful or whether a change in strategy will be needed.

# SOLUTION: IDENTITY MANAGEMENT

A prerequisite for the DevRel Dashboard to provide value to Chef is Bitergia Analytics' ability to know exactly what different contributors are doing across various platforms. Because contributors use different usernames, email addresses, and names across platforms, Bitergia Analytics includes a tool called SortingHat and its user interface Hatstall.

*"There is a giant mix between users and contributors! In GitHub, for instance, we can track contributors that are employees and non-employees (external contributors) and we can only do that thanks to Bitergia."*

benny Vasquez  
Community Manager,  
Chef

# SOLUTION: IDENTITY MANAGEMENT

SortingHat and Hatstall allow managing and merging of identities that contributors have to a single profile per contributor. The tool also allows managing affiliations to analyze community behavior based on which organizations contributors come from. This is critically important for Chef to know which contributions are employees of the company and which contributors are external.



# SOLUTION: IDENTITY MANAGEMENT

The screenshot shows the HatStall profile page for a contributor named Georg Link. The profile information includes Name (Georg Link), e-mail (None), Bot? (checkbox), and Country (None). Below this is the 'Enrollments' section, which is a table with columns for Organization and Dates. The table lists two organizations: Bitergia (2019-05-28 to 2100-01-01) and University of Nebraska Omaha (1900-01-01 to 2019-05-27). Each row has 'Update' and 'un-enroll' buttons. Below the enrollments is the 'Profile Identities' section, which is a table with columns for Name, email, Username, and Source. It lists ten different identities, each with an 'unmerge' button. Handwritten annotations in blue and green highlight the 'Add' button in the Enrollments section and the 'unmerge' buttons in the Profile Identities section. A green arrow points from the 'Add' button to the text 'DECLARIZ ORGANIZATIONAL AFFILIATION'. A blue bracket groups the 'unmerge' buttons with the text 'CORRECT ATTRIBUTION OF CONTRIBUTIONS THANKS TO HISTORY OF ORGANIZATIONAL AFFILIATIONS'. Another blue bracket groups the 'unmerge' buttons with the text 'KNOW YOUR CONTRIBUTORS' and 'RESOLVE DIFFERENT EMAIL ADDRESSES OR USER NAMES THAT BELONG TO THE SAME CONTRIBUTOR'.

DECLARIZ ORGANIZATIONAL AFFILIATION

CORRECT ATTRIBUTION OF CONTRIBUTIONS THANKS TO HISTORY OF ORGANIZATIONAL AFFILIATIONS

KNOW YOUR CONTRIBUTORS

RESOLVE DIFFERENT EMAIL ADDRESSES OR USER NAMES THAT BELONG TO THE SAME CONTRIBUTOR

Figure 4: Screenshot of HatStall showing the profile of a contributor, information about their organizational affiliation, and various identities that are all mapped to the same contributor profile. This example screenshot does not show an actual Chef contributor.

Thanks to the solution and insights provided by Bitergia Analytics, Chef has been able to get the deep insights to community behavior and make data-informed decisions about specific actions that helped grow their developer community.



# ABOUT BITERGIA ANALYTICS PLATFORM

Bitergia Analytics is specialized in analyzing software development projects and its core platform is 100% open source. It collects data from 30+ different data sources related to collaborative and social software development and allows you to identify contributors and organizations for more detailed reporting and improve decision making

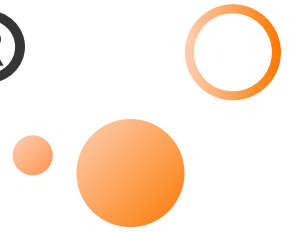
- Track growth, performance, and progress
- Discover influencers & analyze trends in your project
- Understand code review processes, ticketing, and issues
- Cross, combine, and visualize data
- Easily analyze comments, forums, and chats

# ABOUT BITERGIA®

Bitergia® helps companies improve the ROI of their software development projects by providing tools and knowledge to improve decision making. It specializes in analyzing software development projects and its core platform is 100% open source.



# ABOUT BITERGIA®



Bitergia® is a company with 15+ years experience in research focused on collaborative software development methodologies and software development quality models. Our specialized team has been working with a wide variety of companies and organizations that had a need for actionable insights and better understanding of software development community and processes.

