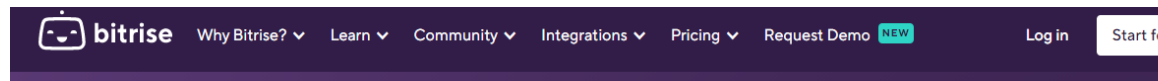


- Alternatives for Continuous Integration

- Bitrise

- Continuous integration model so that you can catch bugs sooner rather than automatically pushing things out 2 weeks in schedule.
    - Only pay for the hardware you actually use. Saves money.
    - Builds live on a virtual machine that cleans itself after each build finishes. Ensures confidentiality.
    - Customizable workflows, adaptable to what you want to use it for.
    - Fairly easy to get started
    - For the most part you can request a demo or sign up for free.



- Link to get started <https://www.bitrise.io/why/features/mobile-devops>

- History

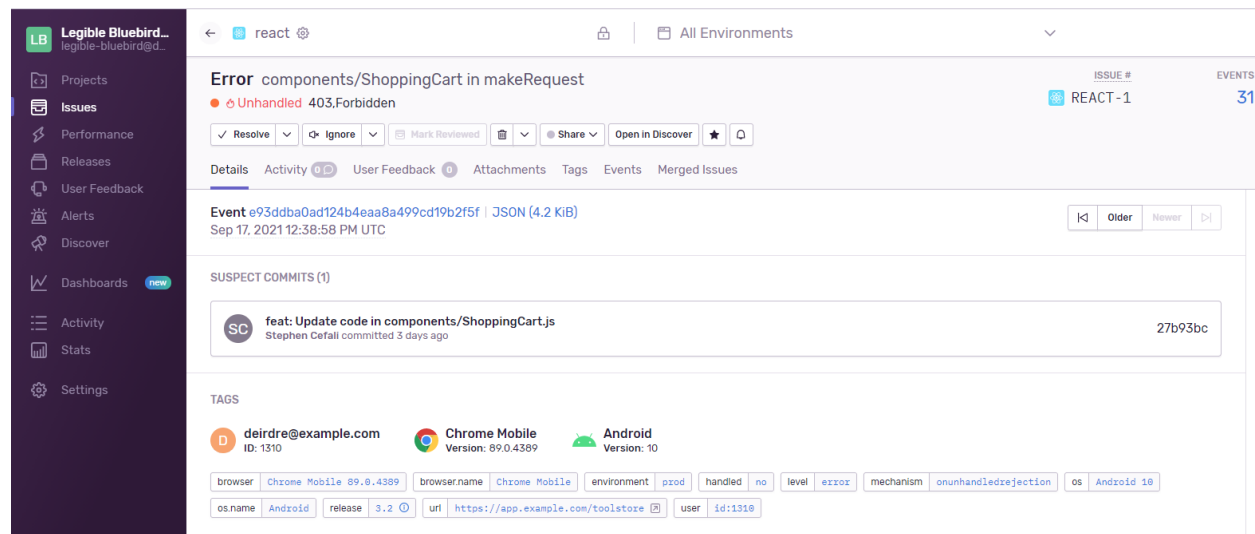
- Started off 5 years ago
    - 2% market share

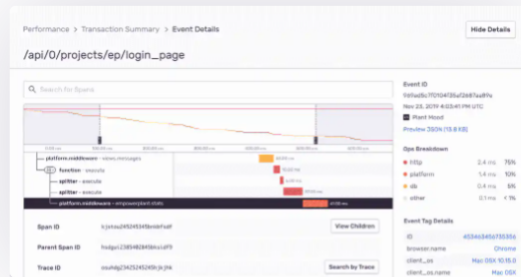
- Alternatives for real time error monitoring

- Sentry

- Distributed tracing
    - Performance monitoring
      - Tells you where potential bottlenecks are in your code so you can fix them.
      - Decreases your bottlenecks

- Well documented and a lot of sandboxes for you to discover and learn

The image is a screenshot of the Sentry web application interface. On the left is a dark sidebar with navigation links: 'LB Legible Bluebird...', 'Projects', 'Issues', 'Performance', 'Releases', 'User Feedback', 'Alerts', 'Discover', 'Dashboards' (with a 'new' badge), 'Activity', 'Stats', and 'Settings'. The main content area shows an error titled 'Error components/ShoppingCart in makeRequest' with a status of 'Unhandled 403.Forbidden'. Below the error title are buttons for 'Resolve', 'Ignore', 'Mark Reviewed', 'Share', 'Open in Discover', and a star icon. A section labeled 'Details' shows an event ID 'e93ddba0ad124b4aaa8a499cd19b2f5f' and a JSON file (4.2 KiB) from September 17, 2021. Below this is a 'SUSPECT COMMITS' section showing a commit titled 'feat: Update code in components/ShoppingCart.js' by Stephen Cefali. At the bottom, the 'TAGS' section lists the user 'deirdre@example.com', the browser 'Chrome Mobile' (version 89.0.4389), and the operating system 'Android' (version 10). A detailed tag list at the very bottom includes 'browser', 'Chrome Mobile 89.0.4389', 'browser.name', 'Chrome Mobile', 'environment', 'prod', 'handled', 'no', 'level', 'error', 'mechanism', 'onunhandledrejection', 'os', 'Android 10', 'os.name', 'Android', 'release', '3.2', 'url', 'https://app.example.com/toolstore', and 'user', 'id:1310'.



## See slow faster

Quickly identify performance issues before they become downtime. View the entire end-to-end distributed trace to see the exact, poor-performing API call and surface any related errors.

SEE A SAMPLE TRANSACTION

## Trail of events, discovered

Breadcrumbs make application development a little easier by showing you the trails of events that lead to the error(s).

CHECK OUT BREADCRUMBS

BREADCRUMBS				Filter By ^	Search breadcrumbs...	Switch to relative
TYPE	CATEGORY	DESCRIPTION	Type	LEVEL	TIME	
navigation	to: /sha from: /s	User Action	Navigation	info	10:01:22	
ui.click	input#fz1	HTTP request	HTTP request	info	10:01:24	
ui.click	button#k	Error	Error	error	10:01:28	
xhr	POST /api	Level	Level	info	10:01:30	
ui.click	input#ca			info	10:01:31	
ui.click	input#ca			info	10:01:34	
ui.click	input#subit			info	10:01:42	
exception	ReferenceError: getCardInfo is not defined			error	10:01:43	

- 
- There's a lot of examples and samples for a lot of their features.
- Link to get started <https://sentry.io/welcome/>
- Started in about 2016
- 94% market share
- Part 3
- .tinyArray
  - Results for the tinyArray
  - insert 70  $\mu$ s
  - append 97.2  $\mu$ s
- .smallArray
  - Results for the smallArray
  - insert 114.5  $\mu$ s
  - append 234.2  $\mu$ s
- .mediumArray
  - Results for the mediumArray
  - insert 241.6  $\mu$ s
  - append 179  $\mu$ s
- .largeArray
  - Results for the largeArray
  - insert 16.8333 ms
  - append 955.1  $\mu$ s
- .extraLargeArray
  - Results for the extraLargeArray
  - insert 1.4869059 s

- append 5.4235 ms
- It seems like it scales exponentially.