

# GitHub Roadmap

Galaxy 2024



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## working on tests

 jbjonesjr committed 2 minutes ago

06f688e  



 jbjonesjr committed 5 minutes ago

ea46673  

## for real, for real

 jbjonesjr committed 6 minutes ago

f3bea1f  

## ONE MORE TIME

 jbjonesjr committed 6 minutes ago

424f362  

## this is it, right?

 jbjonesjr committed 7 minutes ago

dee3511  

## let's try this ONE more time...

 jbjonesjr committed 7 minutes ago

14ecd5e  

## opps

 jbjonesjr committed 7 minutes ago

d830682  

## improving core translation logic

 jbjonesjr committed 7 minutes ago





**Move Fast Safely**



# Move Fast



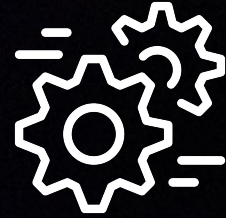
**Optimize  
Operational  
Efficiency**



**Accelerate  
Productivity**



**Reduce  
Technical Debt**



How can we deal with the  
**increasing complexity**  
of software projects?



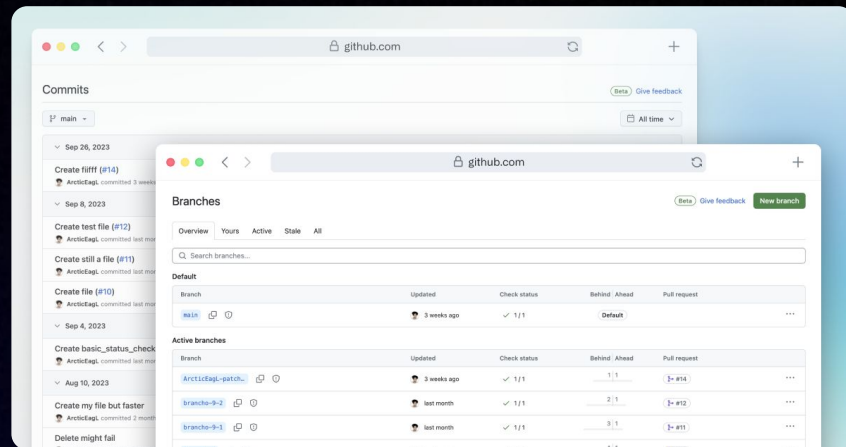


# Optimize Operational Efficiency

## Improved Repository Experience

The updated repository experience provides a tree view ensuring you don't lose previous context when clicking into a new folder.

Live in GHEC and coming to GHES 3.13



*New UI/UX*



# Optimize Operational Efficiency

## Improvements to workflows

Help implement workflows faster, by saving custom starter workflows to your private repositories and access them in a single place

YAML



```
name: learn-github-actions
run-name: ${ github.actor } is learning GitHub Actions
on: [push]
jobs:
  check-bats-version:
    runs-on: ubuntu-latest
    steps:
      - uses: actions/checkout@v4
      - uses: actions/setup-node@v4
        with:
          node-version: '20'
      - run: npm install -g bats
      - run: bats -v
```





**How can we enable developers  
to do their best work?**



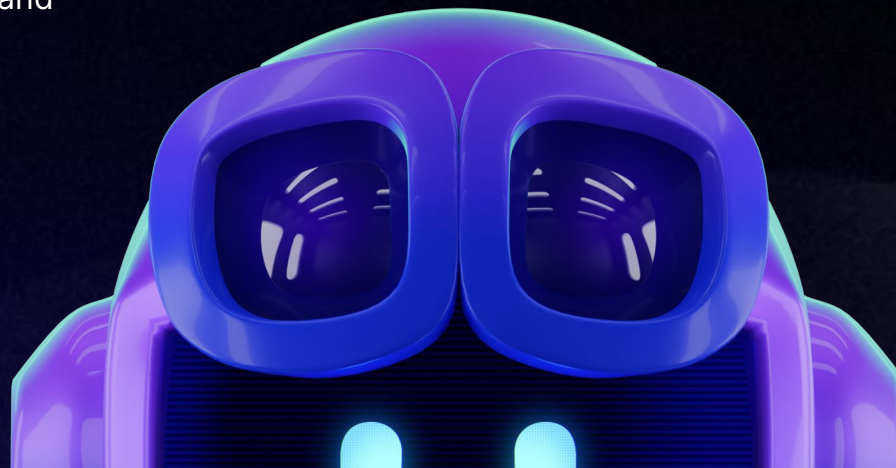


# Accelerate productivity

## Copilot enhancements for core GitHub features

GitHub Copilot will continually improve its utility for GitHub native features, such as pull requests, commits, Issues, Discussions, and more.

Ex: assisting development teams with code reviews, from authoring to merge, with explanations, recommendations, and smart actions for pull requests.

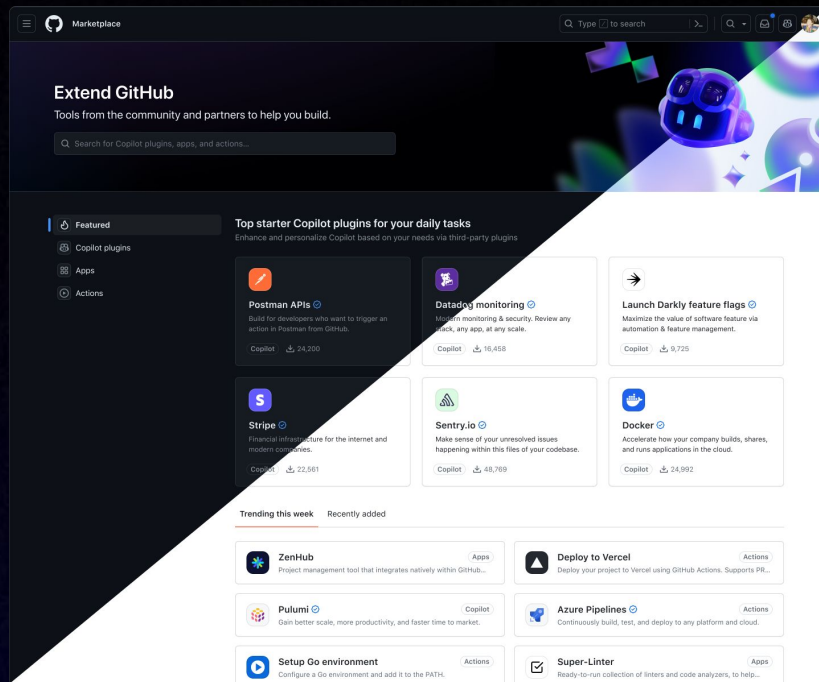




# Accelerate productivity

## Copilot extensions (limited public beta)

Add functionality from preferred first- and third-party developer tools and services, such as Azure, Docker, Sentry, and more, or build your own to customize your organization's GitHub Copilot experience.



Copilot Plugins Rendering





**How can we effectively identify, prioritize,  
and address technical debt?**



# Reduce Technical Debt

## Autofix Improvements

Expanding autofix's language support for C# and Go.

The ability to leverage autofix wherever you work, meaning integrating with the most popular IDE's like Visual Studio Code.





2. Import the `escape-html` library in the `src/test.js` file.
3. Use the `escape` function from the `escape-html` library to sanitize the `req.query.name` parameter before using it in the HTTP response.

Suggested fix generated by CodeQL and AI Beta

```
...   ...   @@ -1,4 +1,5 @@
1     1     const express = require('express');
2     2     + const escape = require('escape-html');
3     3
4     4     const app = express();
5     5     - app.get('/', (req, res) => res.send(`Hello , ${req.query.name}!`));
6     6     + app.get('/', (req, res) => res.send(`Hello , ${escape(req.query.name)}!`));
package.json  Outside changed files
...   ...   @@ -15,3 +15,4 @@
15    15    "react-scripts": "4.0.3",
16    16    - "express": "^4.17.1"
17    17    + "express": "^4.17.1",
18    18    + "escape-html": "^1.0.3"
19    19    },
```

Dismiss suggestion

Edit ▾

Commit fix ▾

This feature may produce inaccurate results. Double-check the suggested code change and make any necessary adjustments.





# Reduce Technical Debt

## Generic Secret Detection (Public Beta)

Better detect potential leaked secrets.

Secret scanning will leverage AI to detect generic or unstructured secrets to reduce false positives and the associated noise for users.



Secret scanning alerts / #5

### Password

[Open](#) GitHub detected a secret 21 days ago

#### Possibly active secret

```
Ji*54@@#0IOIhh8976876&^&%^F45
```

This secret was [detected by AI](#). False positive rates will improve over time.

[Beta](#) [Give feedback](#)

Detected in 1 location

```
src/database.py
5     def __init__(self):
6         self.config = {
7             "user": "beatbot_admin",
8             "password": "Ji*54@@#0IOIhh8976876&^&%^F45",
9             "host": "db.beatbot.ai/maindb",
10            "database": "main_users",
11        }
```

adding db module 2d7d0f3

GitHub opened this alert 21 days ago

*Generic Secret Detection*



# Move Safely



**Provide flexible  
governance**



**Enhance  
visibility**



**Deliver  
enterprise grade  
features**



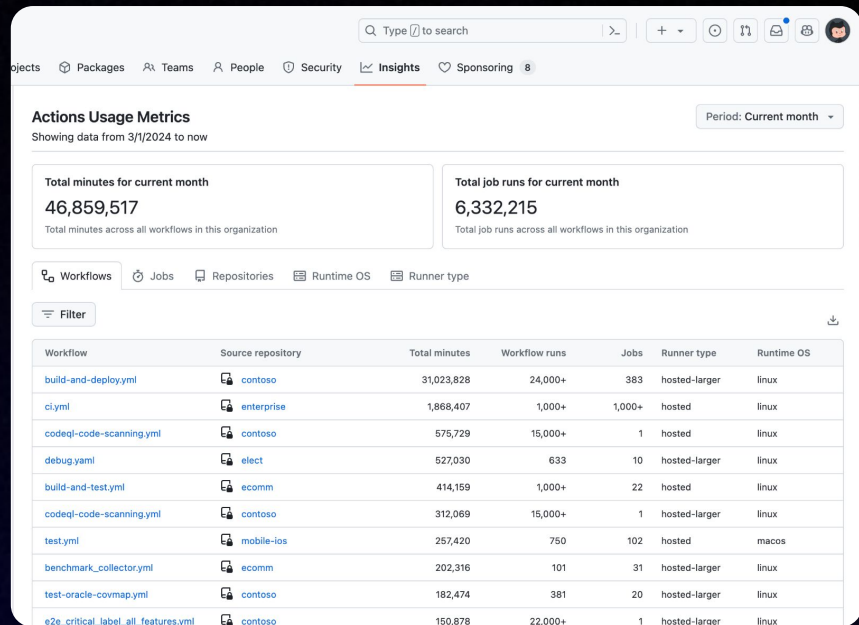
**How can we enhance monitoring  
and proactively address issues before  
they impact our operations?**



# Visibility

## Improvements to Actions Usage Metrics

Organization admins now have comprehensive, actionable data to optimize CI/CD workflows, control resources, and enhance productivity for developer teams.



Actions Usage Metrics Dashboard



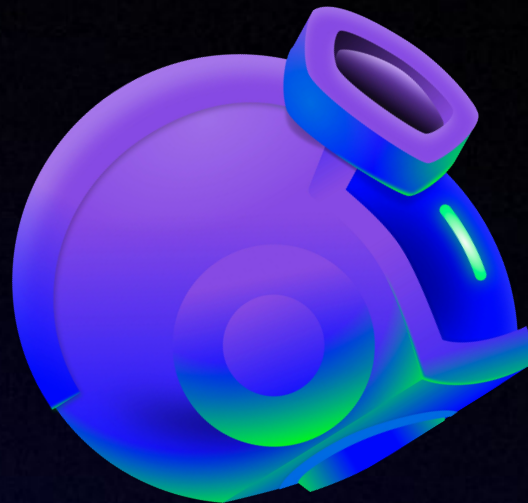


# Visibility

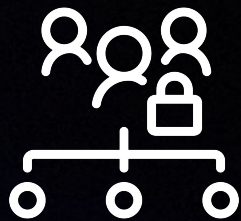
## Copilot Metrics API (public beta)

Gain valuable insights into your organization's GitHub Copilot usage. Highlights include:

- Number of suggestions generated and suggestions accepted
- Up to 28 days of metrics history available via a rolling window







**How can we ensure compliance and control  
without stifling innovation?**



# Flexible Governance

## Push Rules

Enforce policies on pushes across an organization, or targeted at specific repositories.

Developer's can quickly confirm their code meet's your organization's standards, on every push - so they can move fast, but stay compliant.



### Push protections

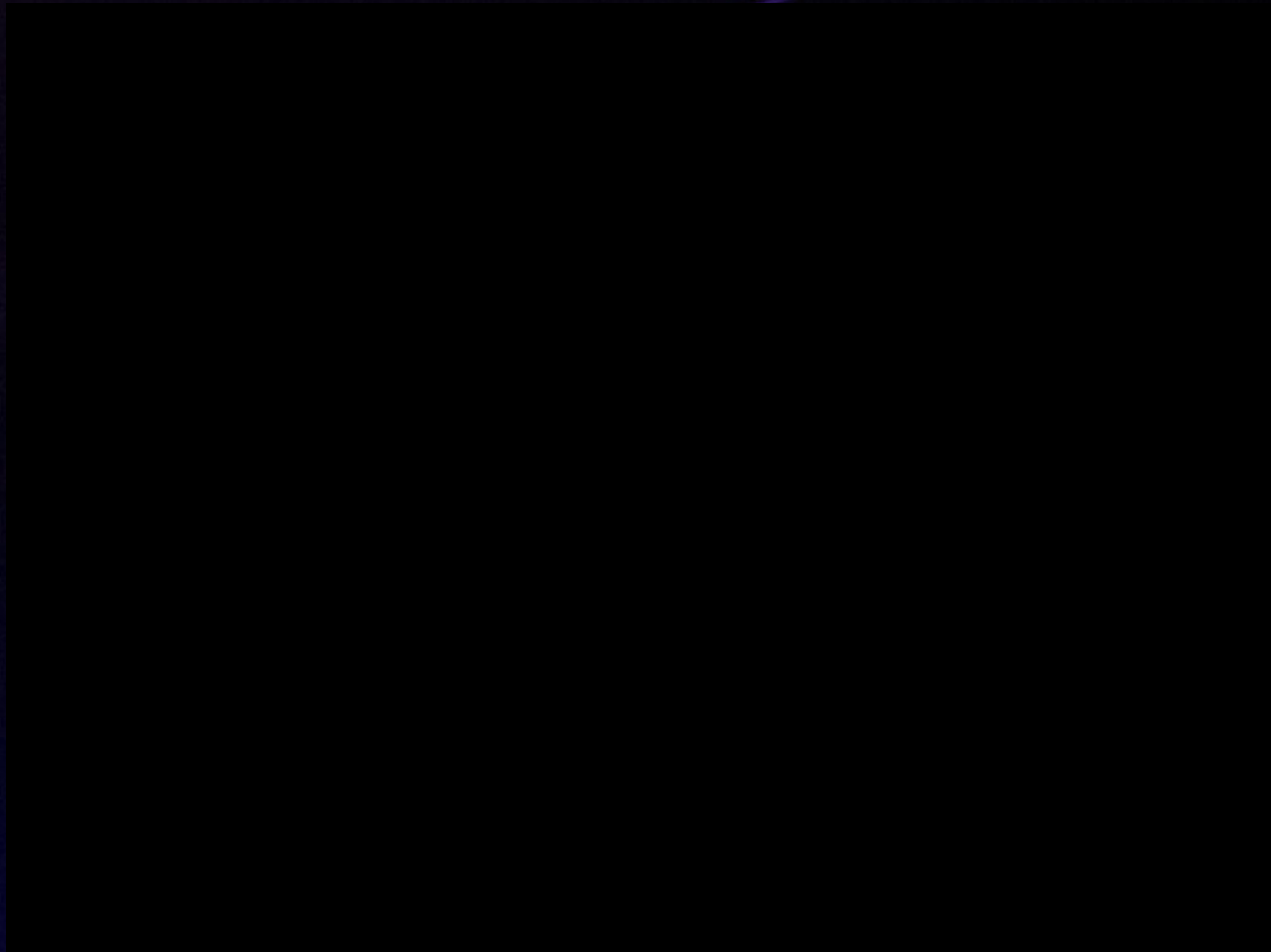
- Restrict file paths**  
Prevent commits that include changes in specified file paths from being pushed to the commit graph.  

**Restricted file paths** + Add file path  
.
- Restrict file path length**  
Prevent commits that include file paths that exceed a specified character limit from being pushed to the commit graph.  

**Maximum file path length**  
255
- Restrict file extensions**  
Prevent commits that include files with specified file extensions from being pushed to the commit graph.  

**Restricted file extensions** + Add file extension  
\*.env  
\*.bin
- Restrict file size**  
Prevent commits that exceed a specified file size limit from being pushed to the commit.  

**Maximum file size (MB)**  
10  
This limit does not apply to Git Large File Storage (Git LFS).





# Flexible Governance

## Truly enterprise-first access & authz control

Scale granular access & permission management across a large enterprise, efficiently – through enterprise-level user & app management, including:

- Assign organization-wide roles (ex repo “read”)
- Create enterprise-level teams
- Install apps once across an enterprise
- Add enterprise collaborators from your IdP



[← Back to enterprise teams](#)

### Create new enterprise team

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**Owner \*** **Team name \***

united-groundhogs / all-united-designers

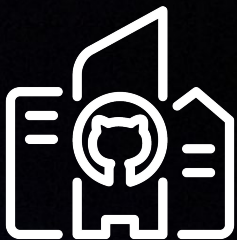
You'll use this name to mention this team.

**Identity Provider Group**  
Manage team members using your identity provider group.

utdhogs-design

You can manage this team's members externally

[Create team](#)



**How can we incorporate features that  
empower enterprises?**





# Enterprise Grade Features

## Copilot custom models (limited public beta)

Train a bespoke copilot that is personalized and private to your organization.

- Coding suggestions based on your repositories
- Enhanced gains on productivity, efficiency, and code quality



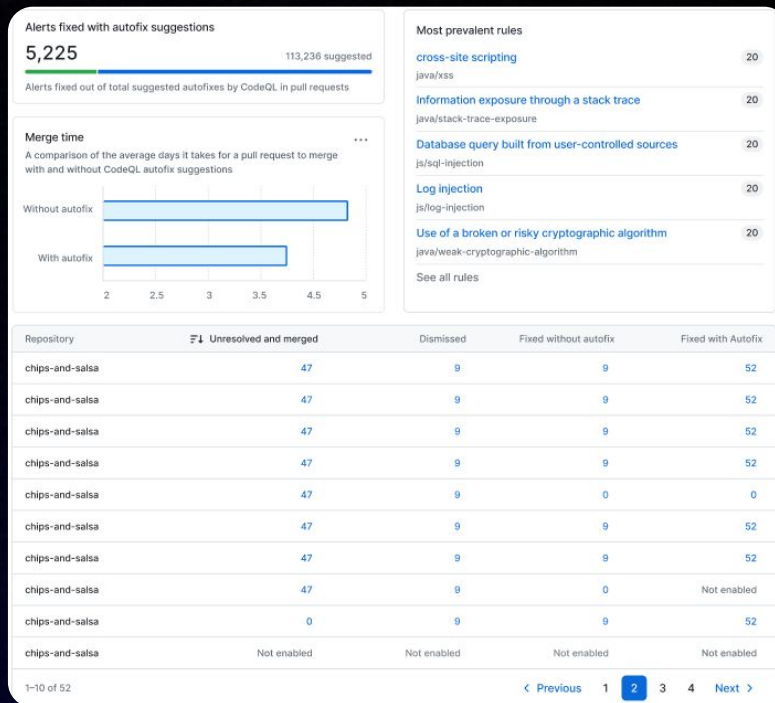


# Enterprise Grade Features

## Streamlined Reporting Capabilities

New and improved reporting, policy and compliance workflows to manage application security risk across your organization.

Generate new reports like compliance or executive reports, which help adhere to security and compliance standards.



*New capabilities include an autofix dashboard*



Thank you