



# Network eAcademy

Data Analysis

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Infoshare <https://events.geant.org/event/1849/>

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## Data Analysis Subtask

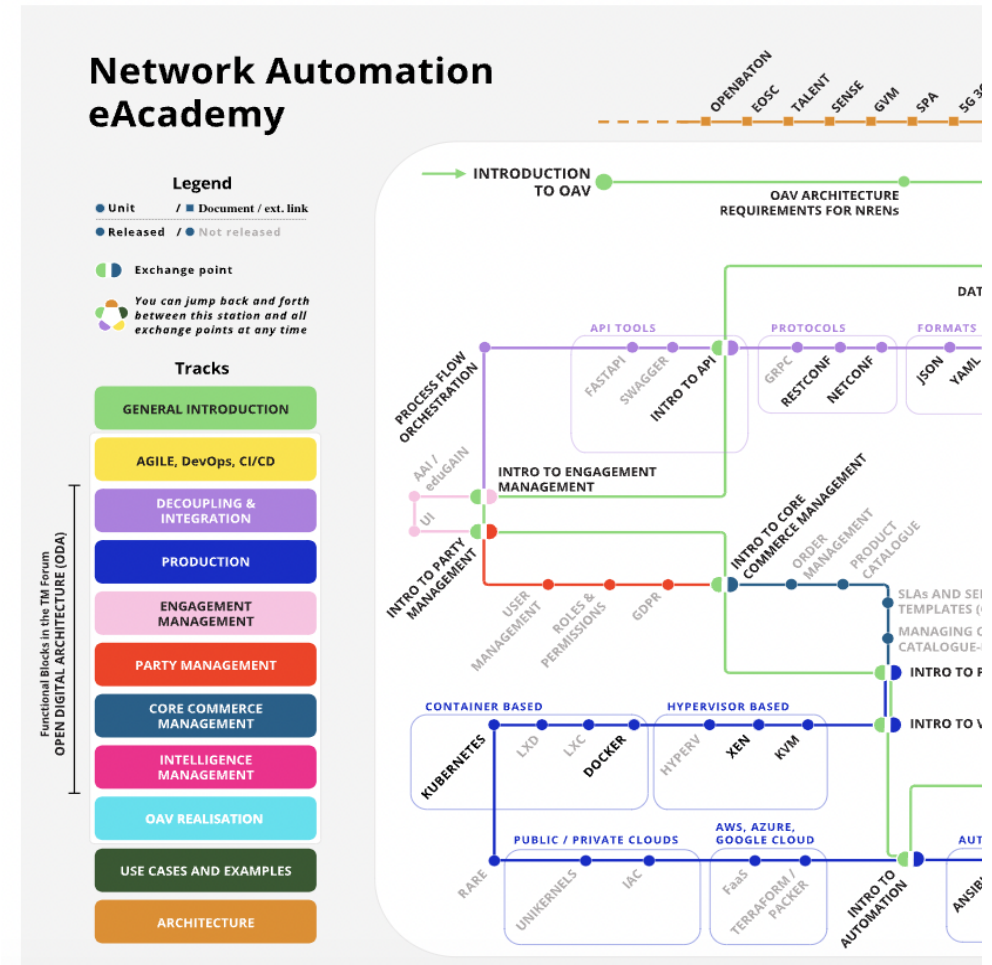
- Monitor course activity and engagement trends
- Extract meaningful information from the Moodle database
- Make evidence-based decisions

## Network Automation eAcademy

Orchestration, Automation and Virtualisation (OAV) are broad topics with many tools, platforms, and frameworks. It's easy to get lost.

### Follow the Metro map!

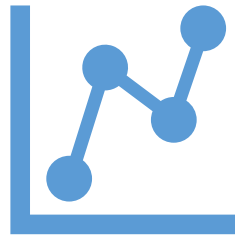
You can click on the chosen course on the map!



## Data Sources & Tools



# SQL Queries



## User activity patterns:

Analyse actions (e.g., "viewed," "downloaded," "submitted") to identify peak engagement times by hour, day, and month

Determine the most active courses and specific periods of user interaction



## Engagement duration metrics:

Measure time spent actively on courses, focusing on active users

Average engagement times calculated, excluding trainers

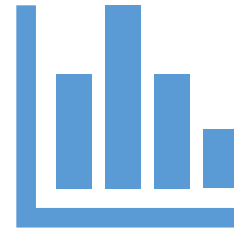
# SQL Queries



## Cross-category activity trends:

Identify users accessing courses in Networking and other categories

Provide insights into the popularity of Networking courses among multi-category learners



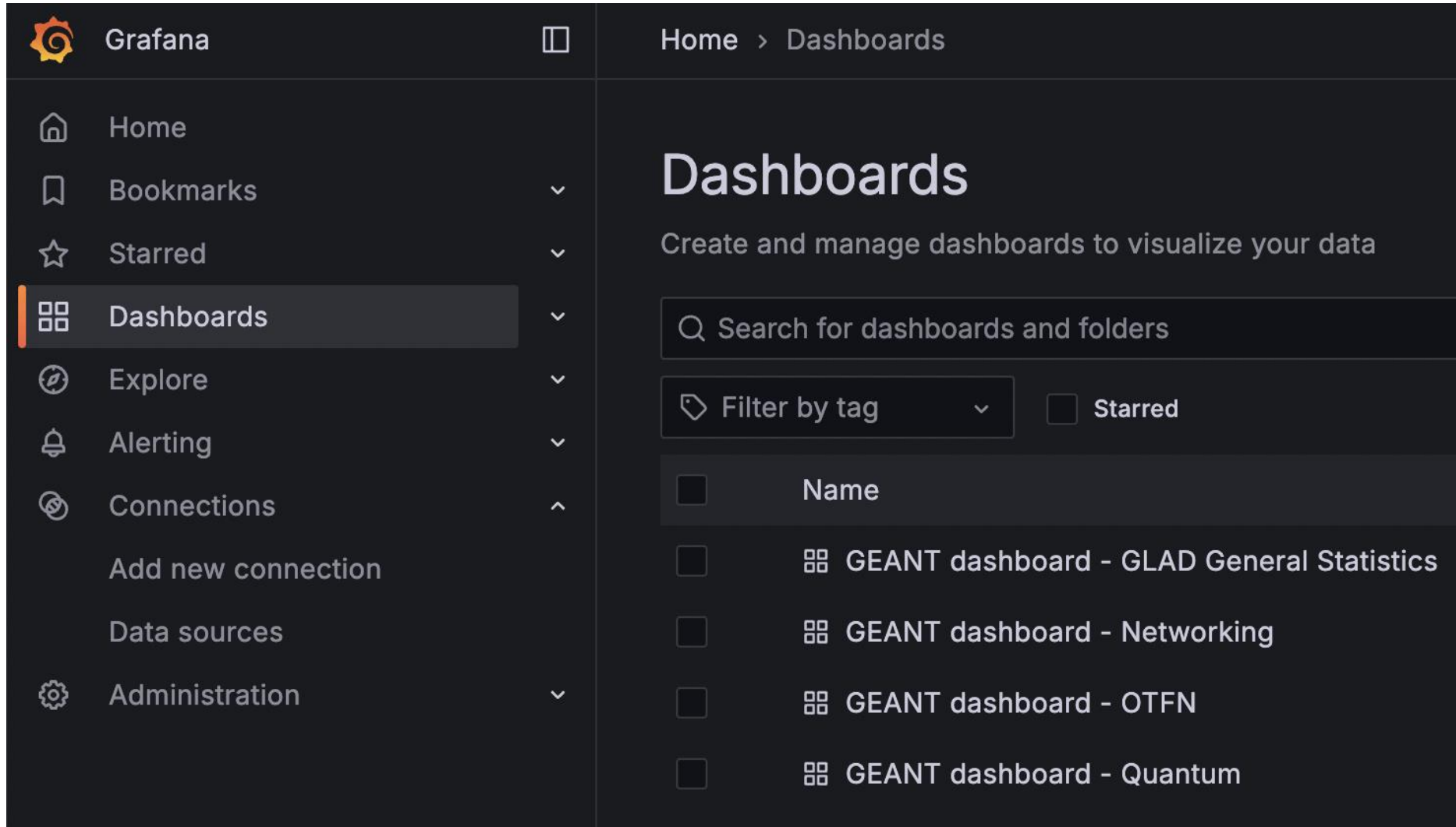
## Feedback insights:

Develop detailed feedback statistics, including:

- Number of feedback form submissions and users engaged
- Comparison of feedback participation rates with course access data



# Grafana Dashboards



The screenshot shows the Grafana web interface. On the left is a dark sidebar menu with the following items: Grafana (with logo and a square icon), Home, Bookmarks, Starred, Dashboards (highlighted with an orange bar and a grid icon), Explore, Alerting, Connections, Add new connection, Data sources, and Administration. The main content area is titled 'Home > Dashboards' and features a large 'Dashboards' heading. Below the heading is the text 'Create and manage dashboards to visualize your data'. There is a search bar with the placeholder 'Search for dashboards and folders'. Below the search bar are two filter controls: 'Filter by tag' (with a dropdown arrow) and 'Starred' (with a checkbox). A list of dashboards follows, each with a checkbox and a grid icon: 'Name', 'GEANT dashboard - GLAD General Statistics', 'GEANT dashboard - Networking', 'GEANT dashboard - OTFN', and 'GEANT dashboard - Quantum'.

Grafana

Home > Dashboards

## Dashboards

Create and manage dashboards to visualize your data

Search for dashboards and folders

Filter by tag  Starred

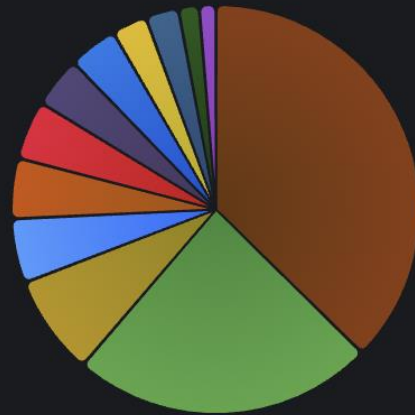
<input type="checkbox"/>	Name
<input type="checkbox"/>	☰ GEANT dashboard - GLAD General Statistics
<input type="checkbox"/>	☰ GEANT dashboard - Networking
<input type="checkbox"/>	☰ GEANT dashboard - OTFN
<input type="checkbox"/>	☰ GEANT dashboard - Quantum

## User course engagement



## Monthly activity trends

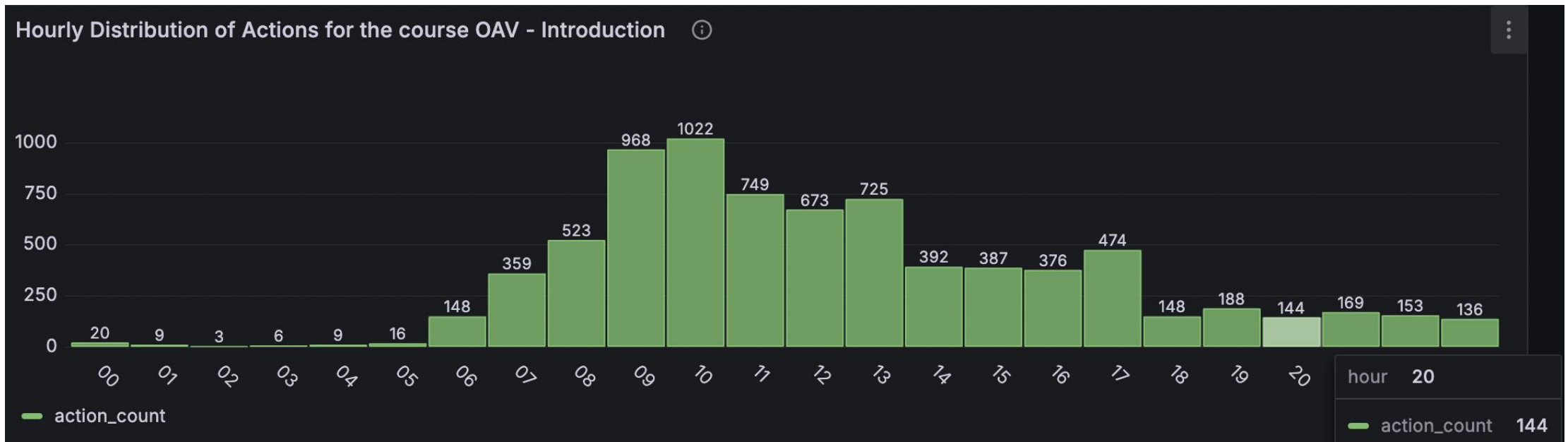
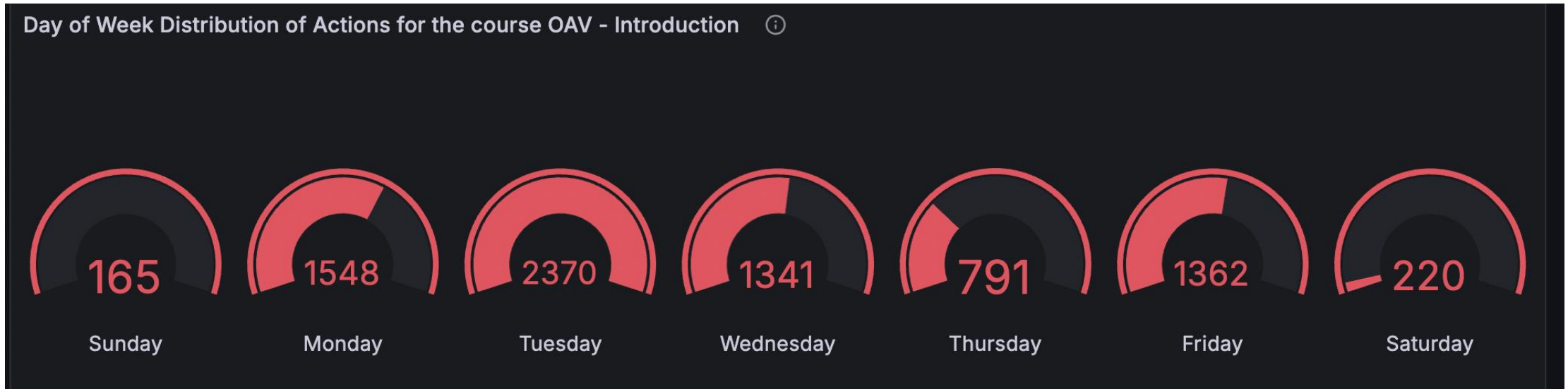
Monthly Activity Trends for course OAV - Introduction ⓘ



December January February March April May August June October November September July



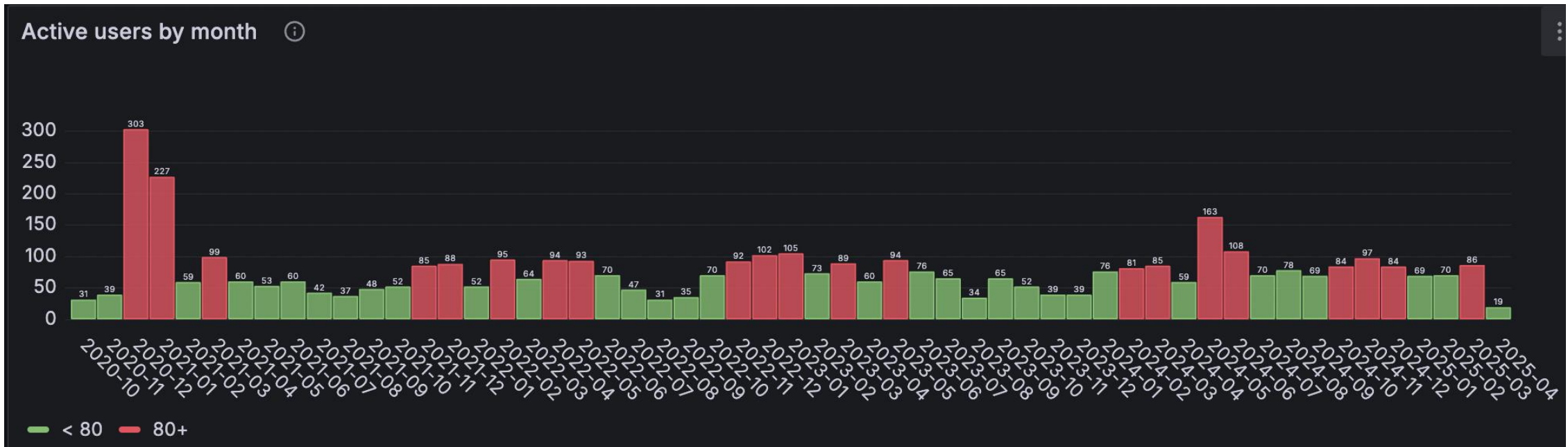
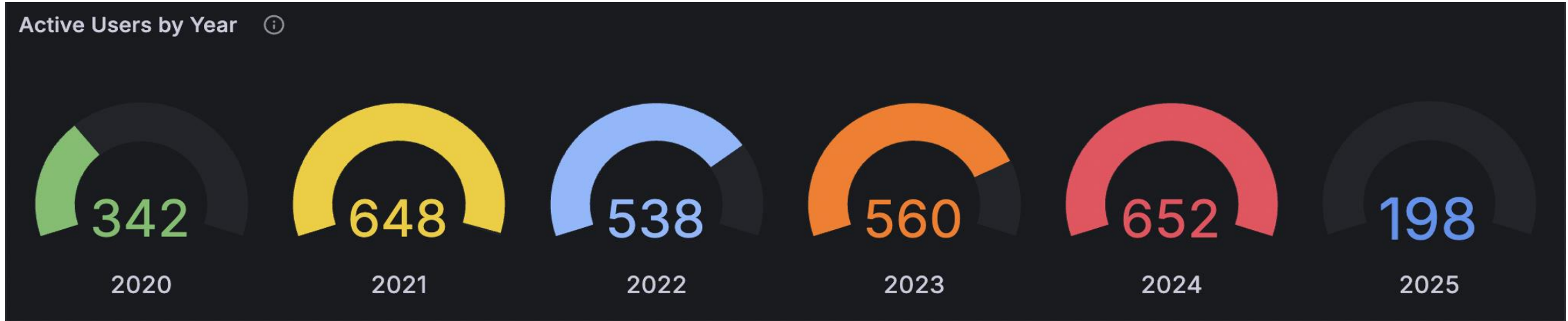
## Daily and Hourly Distributions of Actions



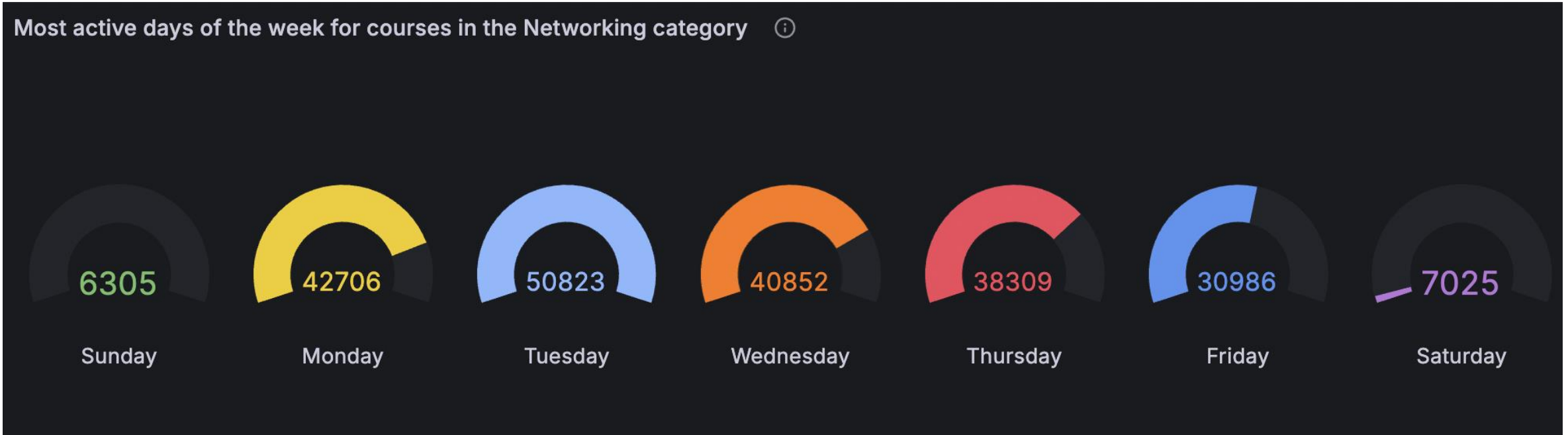
## Number of Users



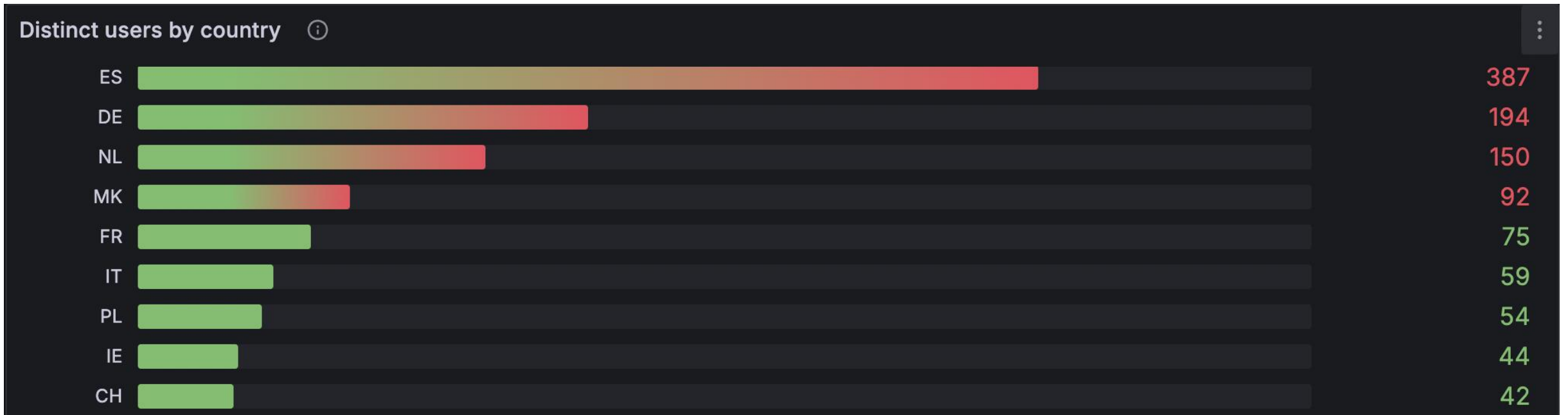
# Active Users by Year and Month



## Most Active Days of the Week



## Distinct Users by Country



## Results & Insights



High engagement in  
courses



Users from many  
different countries  
and institutions



Feedback form  
completion varies  
between courses



Certain resources  
underutilised  
despite availability



# Thank You

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