Red Hat Summit

Connect

De escritorios remotos a DevSpaces: el IDE que optimiza tus recursos, potencia tu clúster y acelera tu desarrollo.

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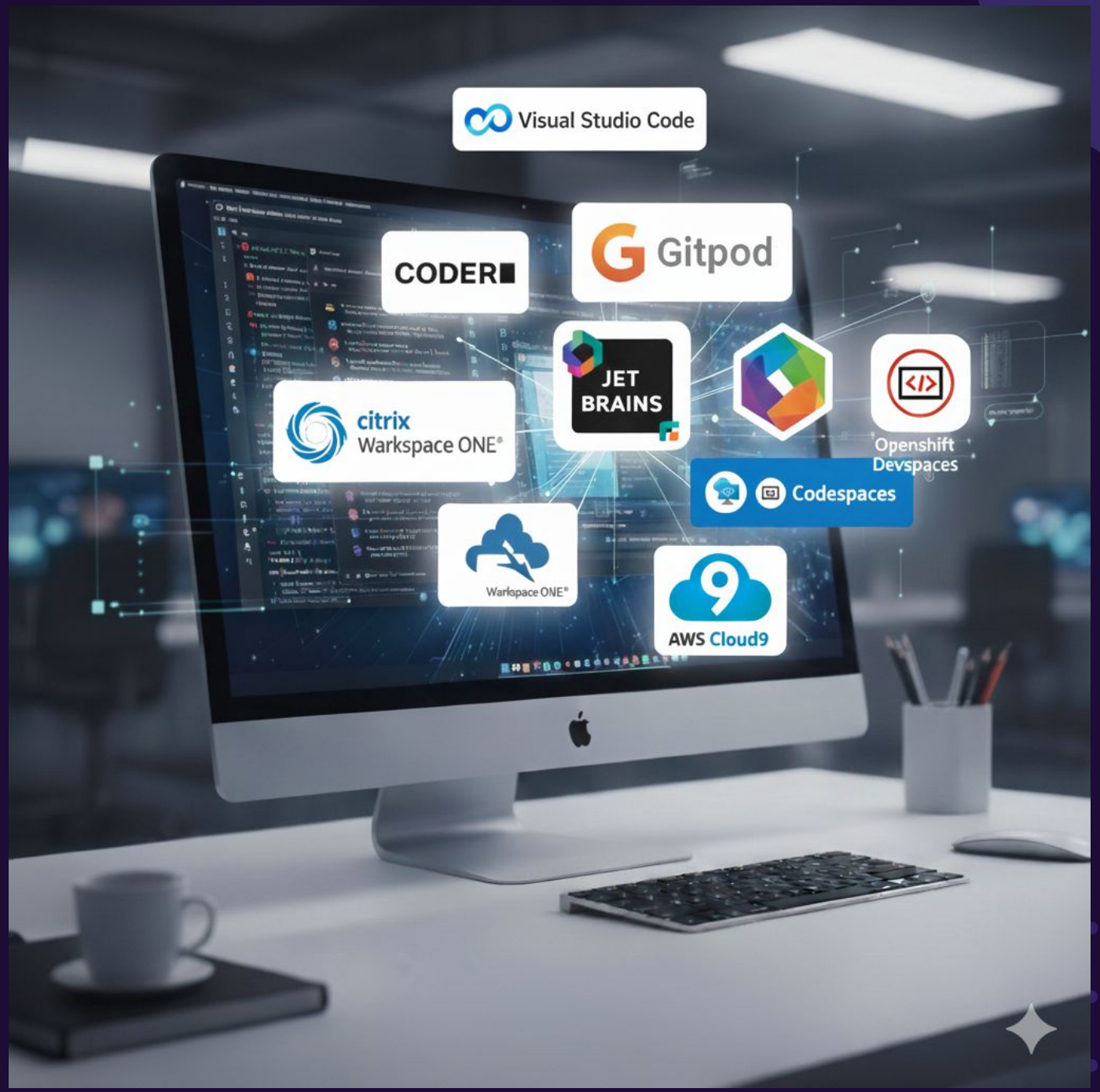
RedHat


Visual Studio Code
CODER
Gitpod
JET BRAINS
citrix
Warkspace ONE®
Openshift Devspaces
Codespaces
Warkspace ONE®
AWS Cloud9

Onboarding de un desarrollador

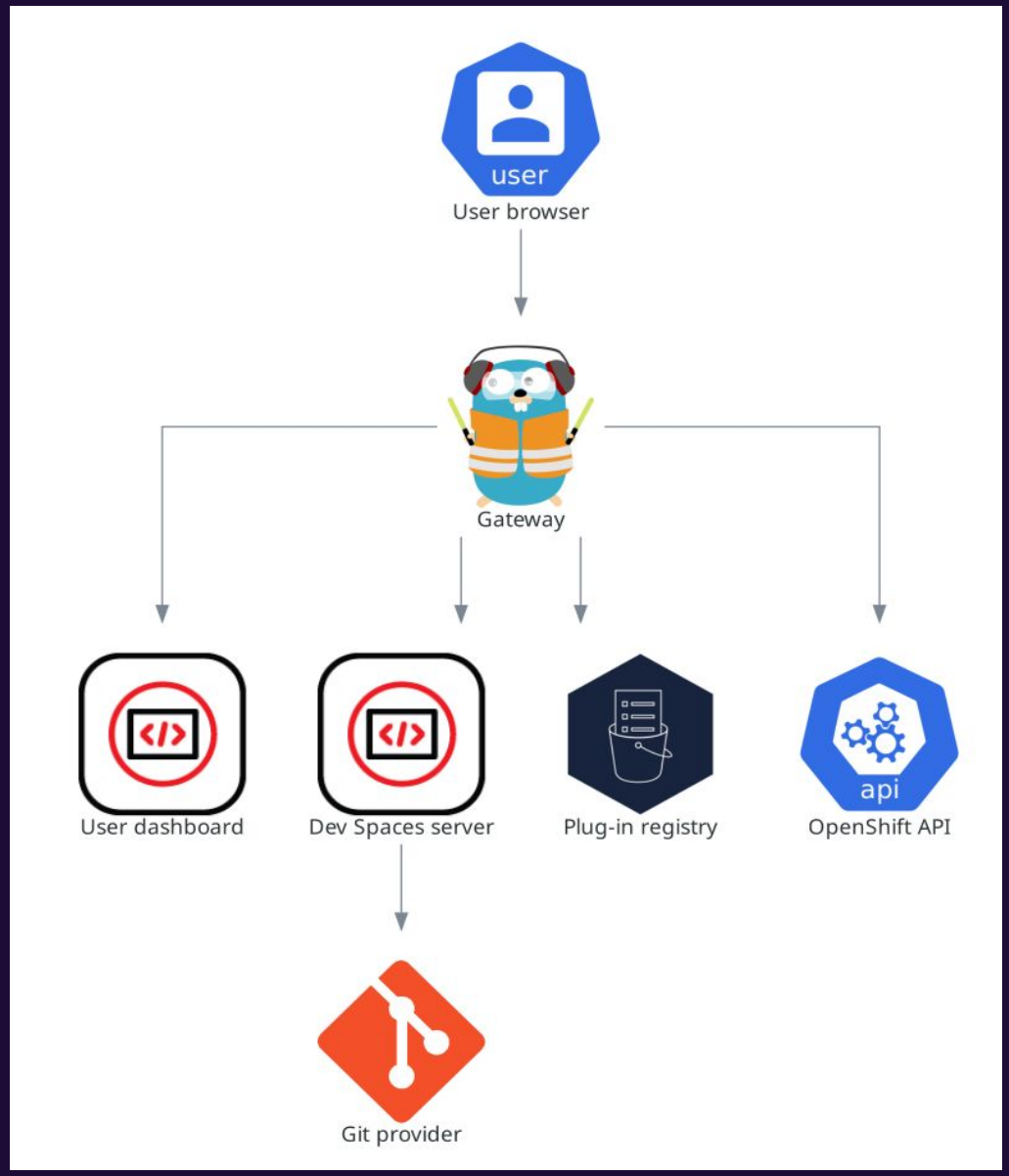
Recuperación de un proyecto para realizar una mejora

Equipos de desarrollo en diferentes franjas horarias

Aprovechamiento del clúster

Desarrollo directo en el Clúster

Time	Example 1 - different location	Example 2 - Same location	Example 3 - Mix locations	Example 4 - eventual use	example 4 - eventual use
0:00	x	a	a	a	a
1:00	x	a	a	x	x+a
2:00	x	a	a	x	x
3:00	x	a	a	a	a
4:00	x	a	a	x	x+a
5:00	x	a	a	x	x
6:00	x	a	a	a	a
7:00	x	a	a	a	a
8:00	y	x	y	y	y+a
9:00	y	x	y	a	a
10:00	y	x	y	y	y
11:00	y	x	y	y	y+a
12:00	y	x	y	y	y
13:00	y	x	y	a	a
14:00	y	x	y	y	y
15:00	y	x	y	y	y+a
16:00	z	a	z	z	z
17:00	z	a	z	z	z+a
18:00	z	a	z	a	a
19:00	z	a	z	z	z
20:00	z	a	z	a	a
21:00	z	a	z	a	a
22:00	z	a	z	z	z+a
23:00	z	a	z	a	a

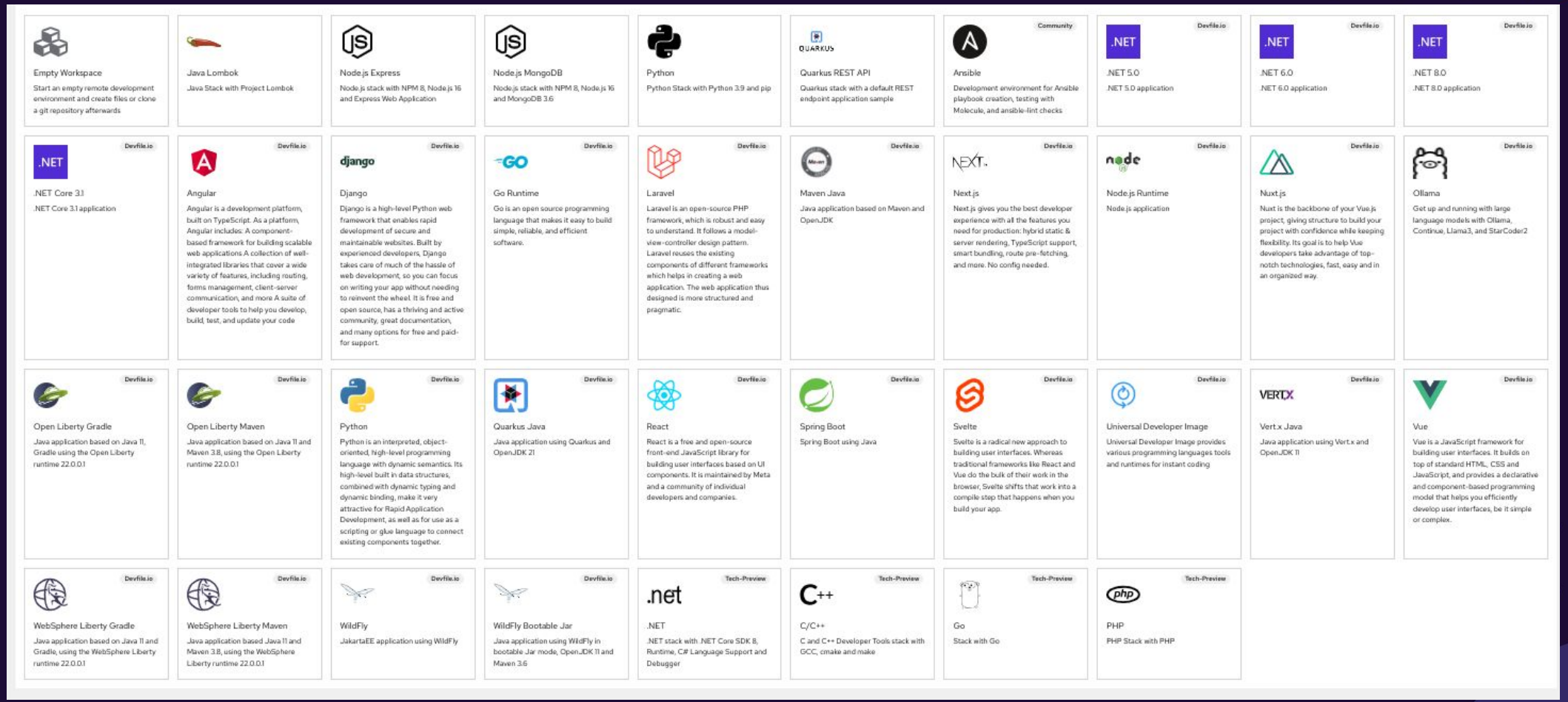

user
User browser
Gateway
User dashboard
Dev Spaces server
Plug-in registry
api
OpenShift API
Git provider

Example Sizing Devfile Quarkus

```
schemaVersion: 2.2.0
metadata:
  name: java-quarkus
  namespace: adelahoz-dev
  displayName: Quarkus Java
  description: Java application using Quarkus and OpenJDK 21
  icon:
https://design.jboss.org/quarkus/logo/final/SVG/quarkus_icon_rgb
_default.svg
  tags:
    - Java
    - Quarkus
  projectType: Quarkus
  language: Java
  version: 1.5.0
  website: https://quarkus.io
components:
  - name: tools
    container:
      image:
registry.access.redhat.com/ubi8/openjdk-21:1.20-3.1721207868
      args:
        - tail
        - '-f'
        - /dev/null
      memoryLimit: 1024Mi
      cpuLimit: 1
      mountSources: true
      volumeMounts:
        - name: m2
          path: /home/user/.m2
      endpoints:
        - name: https-quarkus
          targetPort: 8080
          protocol: https
        - exposure: none
          name: debug
          targetPort: 5858
      env:
        - name: DEBUG_PORT
          value: '5858'
    - name: m2
      volume:
        size: 3Gi
commands:
  - id: init-compile
    exec:
      component: tools
      commandLine: ./mvnw
-Dmaven.repo.local=/home/user/.m2/repository compile
      workingDir: ${PROJECT_SOURCE}

...
```

Create Templates



Example Sizing Average Application

Assumptions:

20 developers
5 GB of storage for Git, .m2, etc.
4 GB of RAM and 2 cores for compilation, execution, etc.
384 MB of RAM and 1 core for the IDE
Possible densification by a factor of 2
One workspace per developer

Calculation:

Memory: 16 + 20 x 1 x (4096 + 384) / 2 = 43.7 GB of RAM
CPU: 10 + 20 x 1 x (2 + 1) / 2 = 35 cores
Storage: 20 x 5 = 100 GB

Configure CheCluster to Guarantee Capacity

maxNumberOfRunningWorkspacesPerUser	The maximum number of running workspaces per user. The value, -1, allows users to run an unlimited number of workspaces.
startTimeoutSeconds	StartTimeoutSeconds determines the maximum duration (in seconds) that a workspace can take to start before it is automatically failed. If not specified, the default value of 300 seconds (5 minutes) is used.
maxNumberOfWorkspacesPerUser	Total number of workspaces, both stopped and running, that a user can keep. The value, -1, allows users to keep an unlimited number of workspaces.
secondsOfInactivityBeforeIdling	Idle timeout for workspaces in seconds. This timeout is the duration after which a workspace will be idled if there is no activity. To disable workspace idling due to inactivity, set this value to -1.
pvcStrategy	Persistent volume claim strategy for the Che server. The supported strategies are: `per-user` (all workspaces PVCs in one volume), `per-workspace` (each workspace is given its own individual PVC) and `ephemeral` (non-persistent storage where local changes will be lost when the workspace is stopped.)

More ...

Optimize Resources

Custom Metrics Autoscaler

2.7.1 provided by Red Hat

Event Driven Ansible


Red Hat
Services

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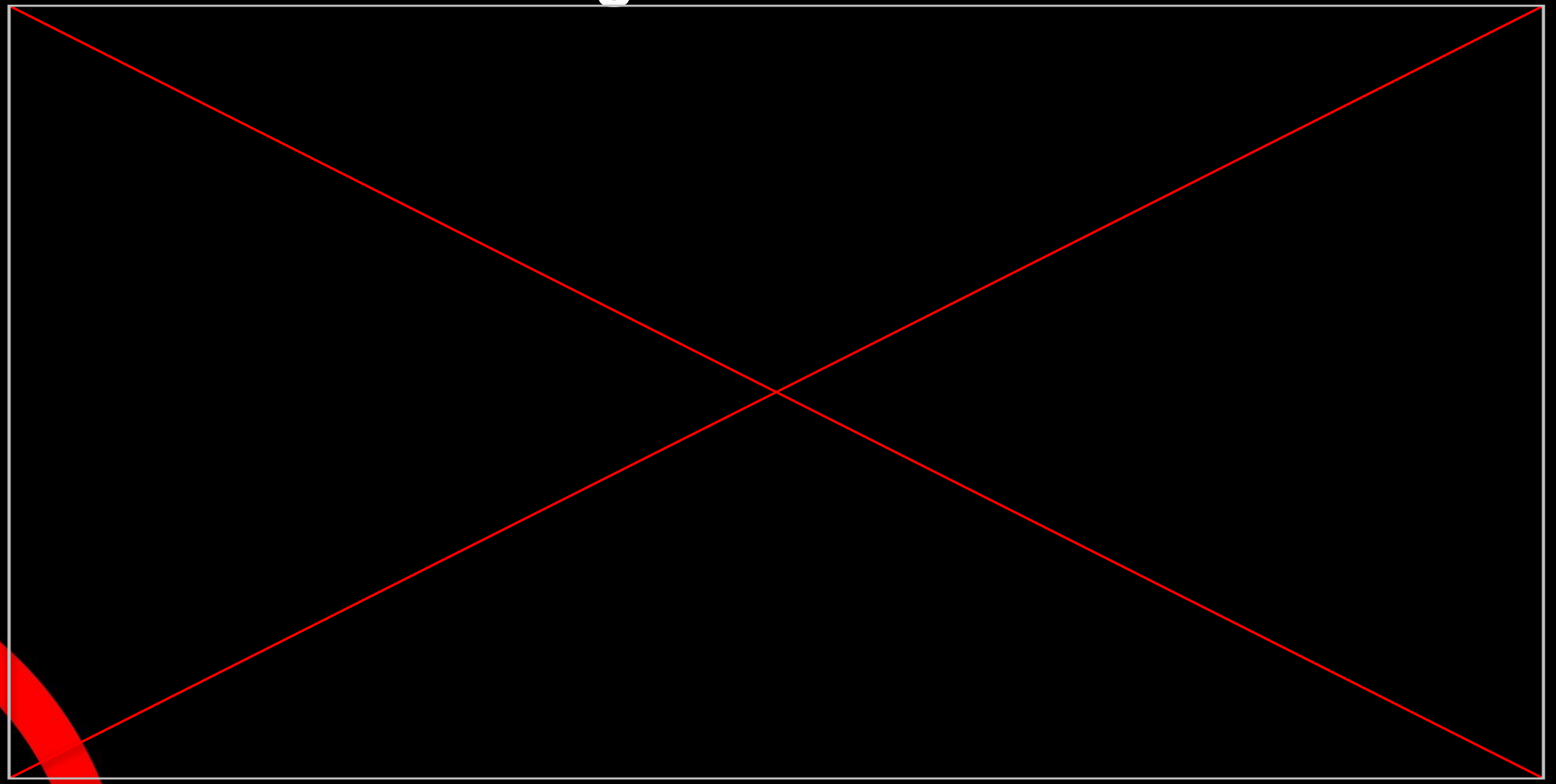
NDA partner use only, no further distribution

Monitoring with Prometheus



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