

# Alibaba Summer of Code

Enjoy coding with global open source projects this summer!



## ASoC 2020 Final Report

Provide a separate tutorial for each Arthas command

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# Arthas

## **CATALOG**

- 1. Who am I
- 2. What did I do
- 3. My experience...





**Who am I ?**

▶ Self-introduction

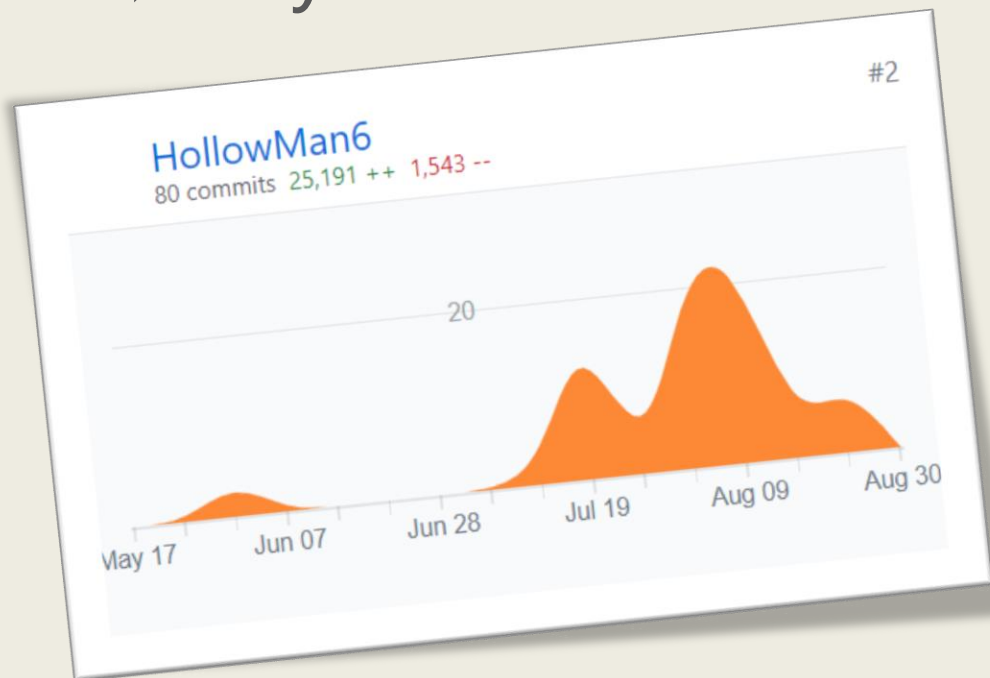
# SELF-INTRODUCTION

## Songlin Jiang

Lanzhou University  
2018 Undergraduate majoring in CS  
@HollowMan6

ASoC 2020 Arthas Community only successful Applicant

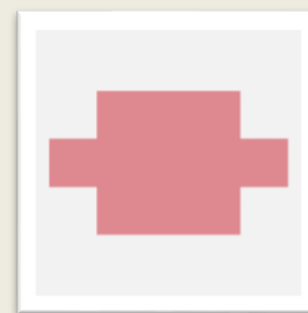
### ➤ My Contributions



### ➤ My Mentors



Chen Zhixuan  
@hengyunabc



Gong Dewei  
@kylis

Alibaba Cloud Engineers, Arthas Developers



## What did I do?

- ▶ Project Requirements
- ▶ Design Concepts
- ▶ Deliverables
- ▶ Additional Achievements
- ▶ Project Effect

- Move tutorial git Repository to Arthas itself
- Seperate the tutorial, provide a separate tutorial for each Arthas command
- Update the web page
- Add links to the online tutorials for the official documents

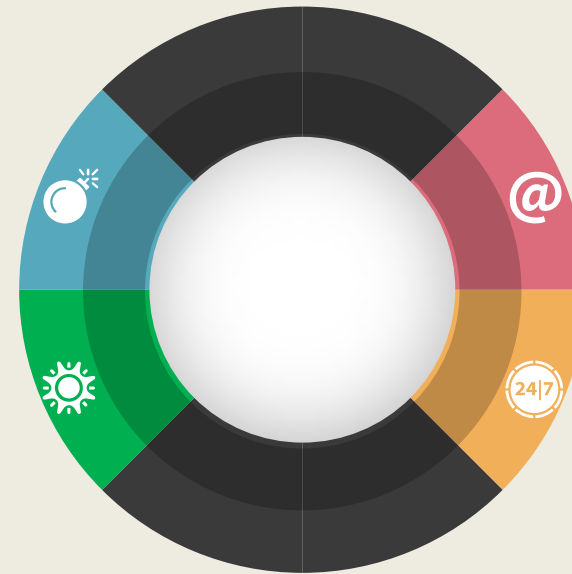
## ➤ Design Concepts Abstract

1. Use real-world environment to learn and test new technologies in the browser to help developers learn and master best practices.

2. Solve the user's trouble of too troublesome to set up own environment, not having supported environment to try Arthas and the poor operability of the documents and the difficulty of hands-on practice.

Convenient

Easy

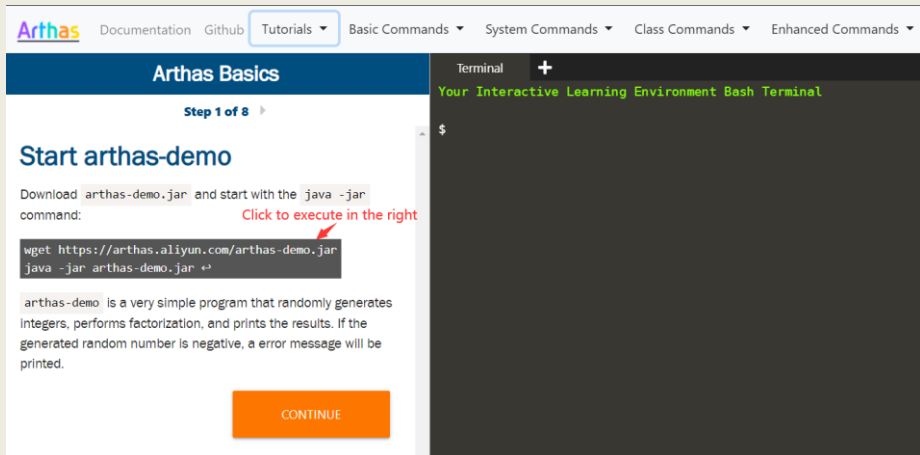
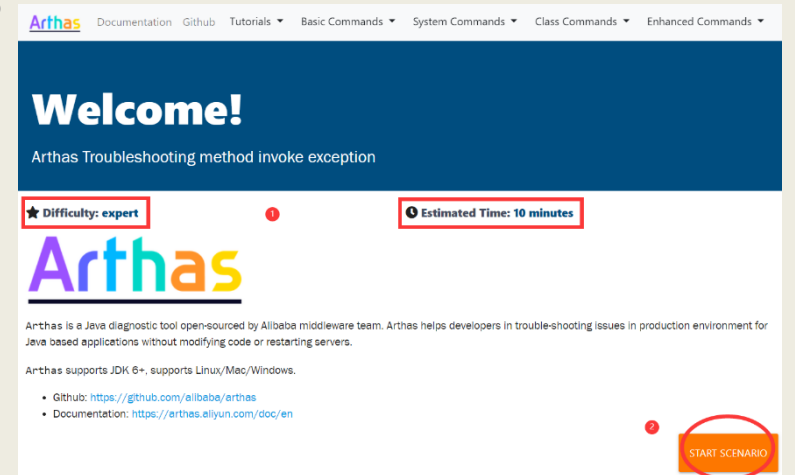
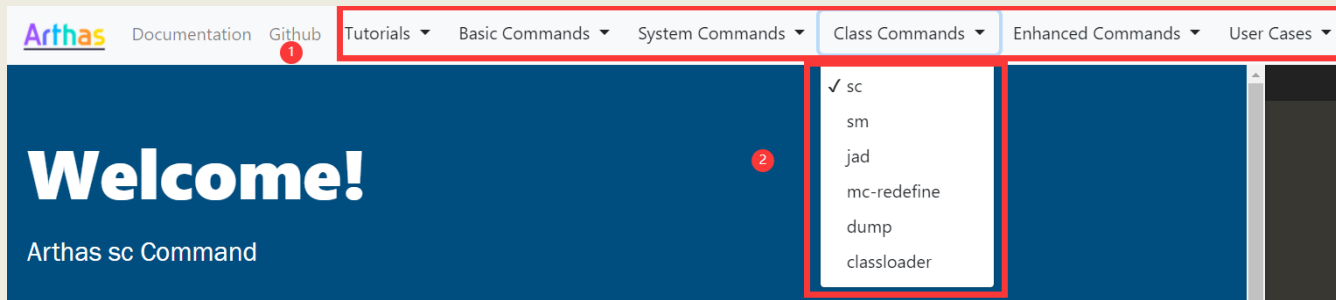


Straight-forward

Fast

# Deliverables

<https://arthas.aliyun.com/doc/arthas-tutorials.html?language=en>  
Chinese + English Arthas Online Tutorial + User Cases



## Interactive Katacoda Online Tutorials for Arthas

113 scenarios on Katacoda

中文说明/Chinese Documentation

### Online Tutorial Usages

1. First visit the online tutorial: <https://arthas.aliyun.com/doc/arthas-tutorials.html?language=en>, select the course you want to study from the menu:

### Contribution Guide

If you want to contribute to the Arthas online tutorials, you are welcome to submit pull requests for the Arthas online tutorials.

Visit <https://www.katacoda.com/docs> to learn more about creating Katacoda scenarios. You can also refer to the article of Alibaba cloud developer community here(In Chinese): <https://developer.aliyun.com/article/752183>

For examples of the scenarios folder, visit <https://github.com/katacoda/scenario-example>

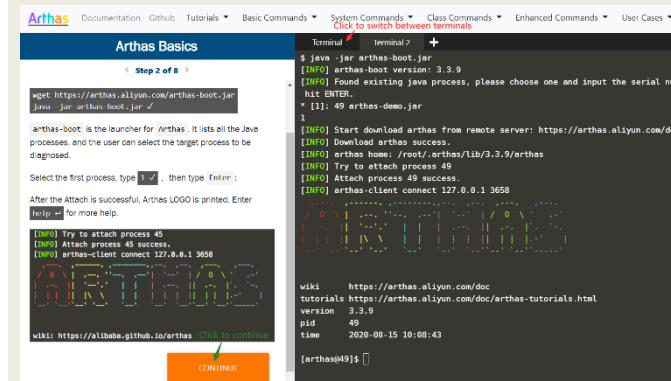
After that, if you have finished doing writing jobs, You just need to put your scenarios folder here in this folder, and add links in the related pages, that's all.

Menu page source code is at [https://github.com/alibaba/arthas/blob/master/site/src/site/sphinx/\\_include\\_html/arthas-tutorials.html](https://github.com/alibaba/arthas/blob/master/site/src/site/sphinx/_include_html/arthas-tutorials.html)

### About

This project is a part of Alibaba Summer of Code 2020 done by @HollowMan6, for more information please visit: <https://github.com/HollowMan6/My-Alibaba-Summer-of-Code>

Issue: #847





# ADDITIONAL ACHIEVEMENTS



- In addition to writing online tutorials for Arthas, I also actively improved the relevant commands, adding `--classLoaderClass` parameter to the `classloader`, `sc`, `sm`, `logger`, `dump`, `getstatic`, `jad`, `mc`, `redefine` commands, so that users can execute commands directly in the tutorial without manually entering the `ClassLoaderHash` value.

The screenshot shows the Arthas documentation website. The top navigation bar includes the Arthas logo and links to Documentation, Github, Tutorials, Basic Commands, System Commands, and Class Commands. The main heading is "Arthas classloader Command". Below this, it indicates "Step 3 of 3". The text explains that if using the `-c` flag, the user must manually provide a hashcode. An example command is shown: `$ classloader -c 65361d9a`. It then states that for a single instance, the `--classLoaderClass` flag can be used with a class name, which is more convenient. Another example is provided: `$ classloader --classLoaderClass org.apache.jasper.servlet.JasperLoader`. The text further explains that the value of `--classloaderclass` must be a unique classloader instance name to facilitate general commands, while `-c <hashcode>` is dynamic. A section titled "List all classes loaded in ClassLoader" follows, with the instruction to list all classes loaded by `org.apache.jasper.servlet.JasperLoader`. The final command shown is `classloader -a --classLoaderClass org.apache.jasper.servlet.JasperLoader ↵`. On the right side of the page, there is a terminal window titled "Terminal" and "Web Port 80" with a plus icon. It displays the text "Your Interactive Learning Environment Bash" and a prompt `$` followed by a cursor.

## PROJECT EFFECT

- Before July 31, more than half of commands and user tutorials had merged into the upstream. Since August 14, all command tutorials were completed and tested online.
- During the test, the number of visits to the tutorial increased dramatically, and was well received by many users!

The visits and engagement in last 60 days is:

Timeline  
Last 60 days

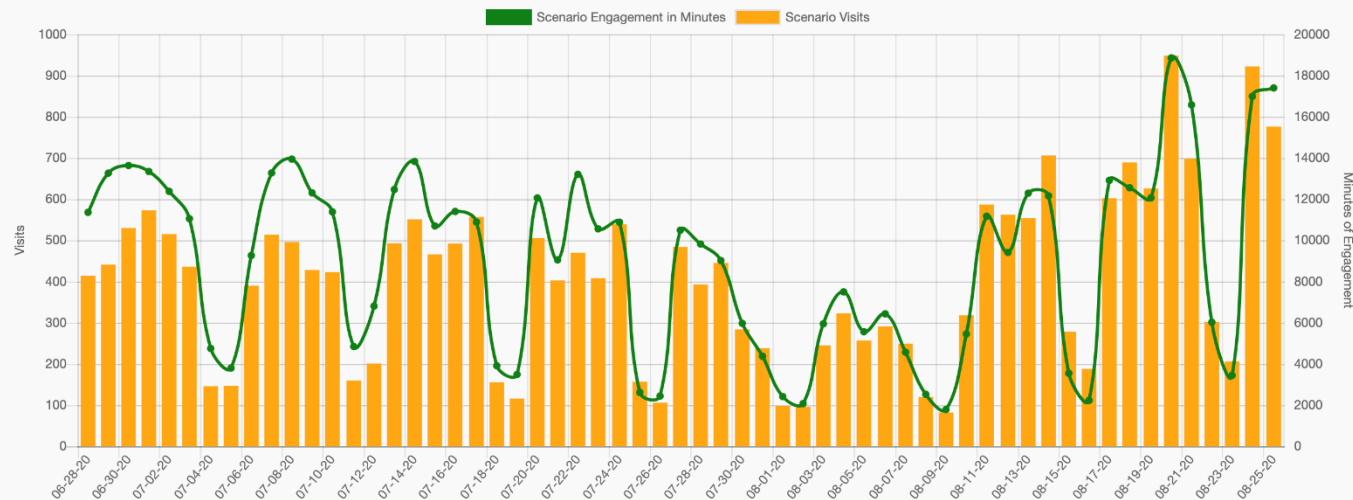
23,799

Total Visits

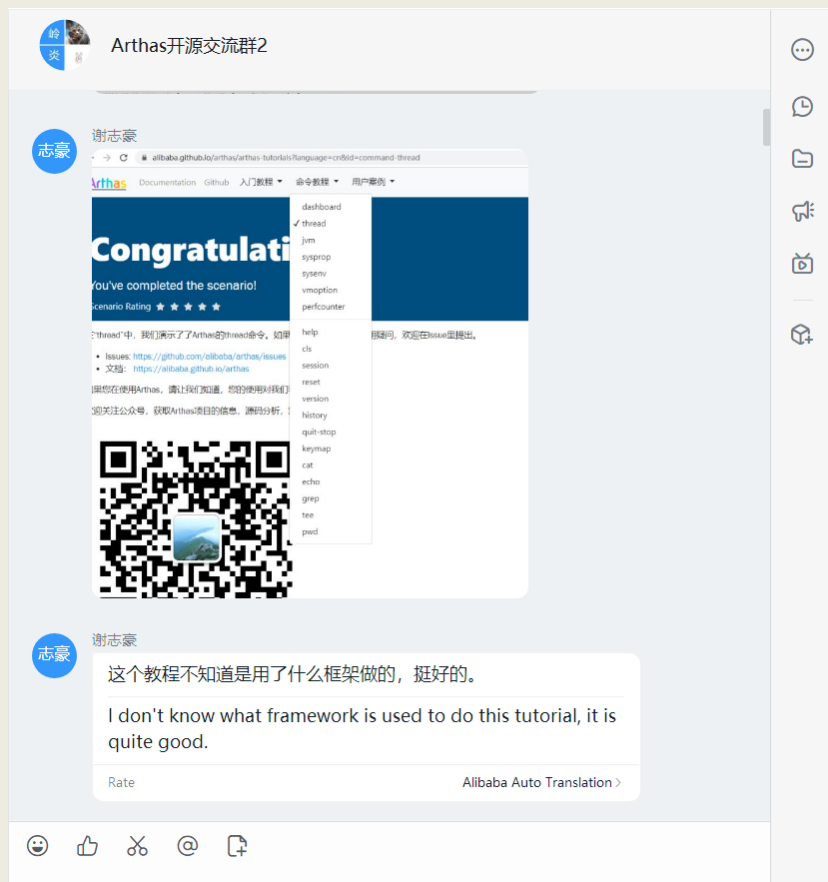
8908 hours 22 minutes 19 seconds

Total Engagement

Click a day for more details



Statistics of the visit and engagement duration of the tutorials. It can be seen that after the new version of the tutorial test was launched on August 14, users and engagement duration have increased significantly.



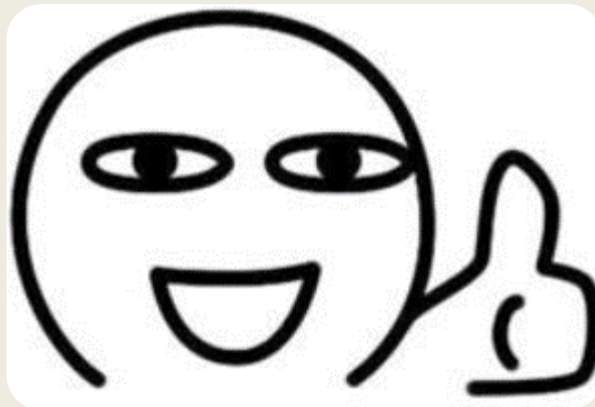
Well received by users



## My experience...

▶ Feelings

- Alibaba Summer of Code 2020 has greatly trained my team cooperation and communication skills, broadened my vision, and I gained a lot.
- The two mentors also gave me a lot of guiding opinions.
- if you have enough enthusiasm for open source, you are
- recommended to participate in the future Alibaba Summer of Code activities!



THANKS!