

# Compare and Contrast Automation and Orchestration

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## Lab Overview

Software automation and software orchestration are related, but operate at different scales. To better understand them, you will be given a list of key concepts and asked to associate them with automation, orchestration, or both. You will back up your assertions with research.

In this lab, you will:

- Research automation and orchestration
- Discuss similarities and differences between automation and orchestration by categorizing a list of keywords and concepts

# Estimated Completion Time

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30 minutes

## Exercise 1: Research Automation/Orchestration

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The class will divide into an even number of groups. Half of the groups will research automation. The other half will research orchestration. Research your topic for 15 minutes. Look out for the following keywords and try to determine if they belong to automation (**A**), orchestration (**O**), or both (**B**), and why.

| Keyword                    | A                     | O                     | B                     | Reason |
|----------------------------|-----------------------|-----------------------|-----------------------|--------|
| Management                 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |        |
| Python Script              | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |        |
| Provisioning               | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |        |
| Code                       | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |        |
| Single task                | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |        |
| Process Coordination       | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |        |
| Infrastructure             | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |        |
| HCL Configuration Language | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |        |
| Eliminate repetition       | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |        |
| User-defined function      | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |        |
| Increase reliability       | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |        |
| Terraform                  | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |        |
| Version control            | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |        |
| Unit test                  | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |        |
| Decrease IT cost           | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |        |

|                               |                       |                       |                       |  |
|-------------------------------|-----------------------|-----------------------|-----------------------|--|
| Thread creation               | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |  |
| Decrease friction among teams | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |  |
| Increase productivity         | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |  |
| PyCharm                       | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |  |
| Workflow                      | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |  |

## Exercise 2: Compare and Contrast

The instructor will make three columns on the whiteboard. The first column will be labeled Automation. The second column will be labeled Both, and the third column will be labeled Orchestration. Based on your research from exercise 1, go through the list of keywords and concepts and put them in one of the columns. Be sure to give the reason you would place each keyword or concept in a particular column.

A large, empty rectangular box with a thin black border, intended for students to write their responses to the exercise question.

## STOP

You have successfully completed this lab.

## Additional Resources

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For more information about AWS Training and Certification, see <https://aws.amazon.com/training/> (<https://aws.amazon.com/training/>).

*Your feedback is welcome and appreciated.*

If you would like to share any suggestions or corrections, please provide the details in our AWS Training and Certification Contact Form (<https://support.aws.amazon.com/#/contacts/aws-training>).

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