# ICT & Infra S3 Automation week 2

|  |  |
| --- | --- |
| Class: |  |
| Student number: |  |
| Student name: |  |

## Introduction

This week you will learn how to install Ansible, create/modify inventory file, execute simple Ad hoc commands and Playbooks. Before executing the assignments, start with installation of Ansible for your chosen OS. Beware, Windows is not supported for the control node.

**Installation Guide:** <https://docs.ansible.com/ansible/latest/installation_guide/index.html>

Additionally, you will need to create/modify inventory list to successfully execute Ansible commands in one or more clients. Therefore, after installation of Ansible, investigate the article “How to build your inventory” (<https://docs.ansible.com/ansible/latest/user_guide/intro_inventory.html>). Later, create a new group with several hosts (for example: another VM, the same control node, another computer/device in your house that supports SSH connectivity).

### Assignment 1. Create an Ad hoc command to execute in a selected group of hosts

### Difficulty: ★★☆☆☆.

Let’s execute few commands in Ansible using the simplest possible way. Think about few commands you can execute in host machines. Provide successful results after running these commands. **Tip**: use “command” or “shell” module to run shell commands in remote hosts.

More information about Ad hoc commands: <https://www.middlewareinventory.com/blog/ansible-ad-hoc-commands>

More information about Modules: <https://docs.ansible.com/ansible/2.9/modules/modules_by_category.html>

Afbeelding met tekst, schermopname, Lettertype

Door AI gegenereerde inhoud is mogelijk onjuist.

|  |
| --- |
| *Solution: I install ansible using pipx after install I had to create a file called inventory. Add my local host to the file for testing. Now I could use this file for my ansible commands so I ran a command that execuste a shell command that shows all the network connections of the local host=* |

### Assignment 2. Create your first Playbook

### Difficulty: ★★★☆☆.

Now, let’s create Playbooks for the same Ad hoc commands you created before. Create one Playbook per command. Provide screenshots of the configuration files and their results.

More information about Playbooks and their execution:

* <https://docs.ansible.com/ansible/latest/user_guide/playbooks_intro.html>
* <https://www.middlewareinventory.com/blog/ansible-playbook-example/>

Provide screenshots (evidence) for your solution. Always explain your evidence!

Afbeelding met tekst, schermopname, Lettertype

Door AI gegenereerde inhoud is mogelijk onjuist.

Afbeelding met tekst, schermopname, Lettertype

Door AI gegenereerde inhoud is mogelijk onjuist.Playbook for displaying disk space

Afbeelding met tekst, schermopname, Lettertype

Door AI gegenereerde inhoud is mogelijk onjuist.

playbook for displaying system information

Afbeelding met tekst, schermopname, Lettertype, violet

Door AI gegenereerde inhoud is mogelijk onjuist.

|  |
| --- |
| *Solution:*  *The first playbook shows a well orginazed display of the desk usage of my local machine*  *The second playbook show all system information of my pc* |

### Assignment 3. Create a Playbook with multiple commands

### Difficulty: ★★★★☆.

Now it’s time to make a list of commands to be executed in a Playbook. Create a Playbook of your choice, that uses at least 4 different Modules. As an evidence, explain your scenario (why did you execute the selected commands in given order) and provide the Playbook file and its result screenshots.

Provide screenshots (evidence) for your solution. Always explain your evidence!

Afbeelding met tekst, schermopname

Door AI gegenereerde inhoud is mogelijk onjuist.

Playbook

Afbeelding met tekst, schermopname, violet, ontwerp

Door AI gegenereerde inhoud is mogelijk onjuist.

Output

Afbeelding met tekst, software, Multimediasoftware, Computerpictogram

Door AI gegenereerde inhoud is mogelijk onjuist.

|  |
| --- |
| *Solution: in this playbook I use 5 different modules: apt, service, command, uri, debug the playbook deploys a containerized web application I can access the web server on my browser the errors you see are task its trying to perform like stopping/removing containers that don’t exist so its not a real error* |