

# Breaking Down Ansible Components

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# Module Overview



# Ansible Inventory



**Recap on the  
inventory**




**Types of inventories**



**Dynamic inventory**





A person with purple hair is sitting at a white desk, working on a laptop. Above them is a large orange thought bubble containing the text 'AWS EC2 External Inventory Script'. Three small orange circles lead from the person's head to the bubble.

**AWS EC2  
External  
Inventory Script**



Two people are standing and talking. The person on the left has a beard and glasses, wearing a purple sweater and teal pants. The person on the right is wearing a teal sweater and black pants. A large orange speech bubble points from the person on the right, containing the text 'AWS autoscaling'.

**AWS autoscaling**



# Introducing Variable Data in the Inventory



**Variable best practice**

**Dynamic play content**

**Discover data**

- Host-specific data
- Group-specific data
- Behavioral parameters



# Inventory Grouping

**Inventory best  
practice**

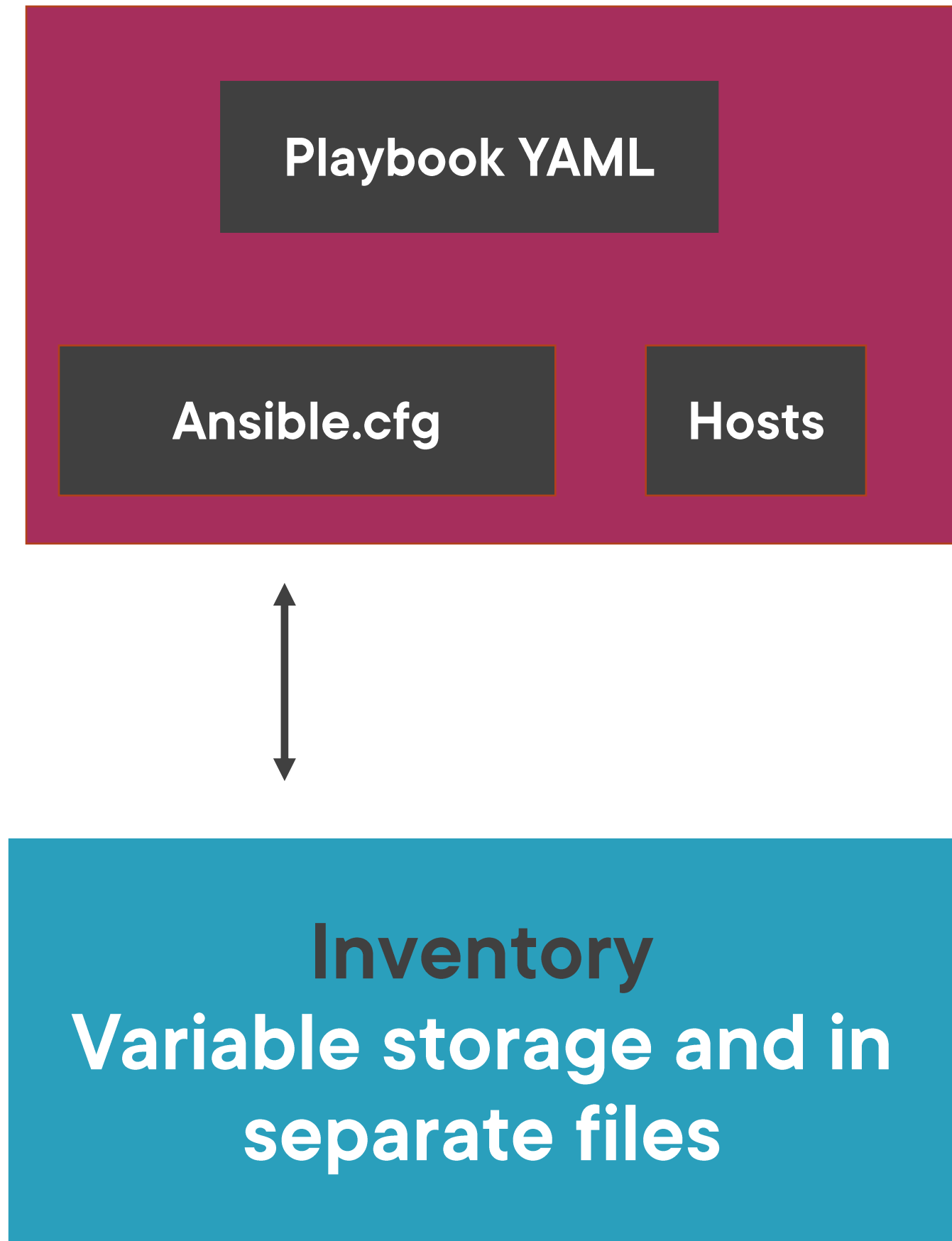
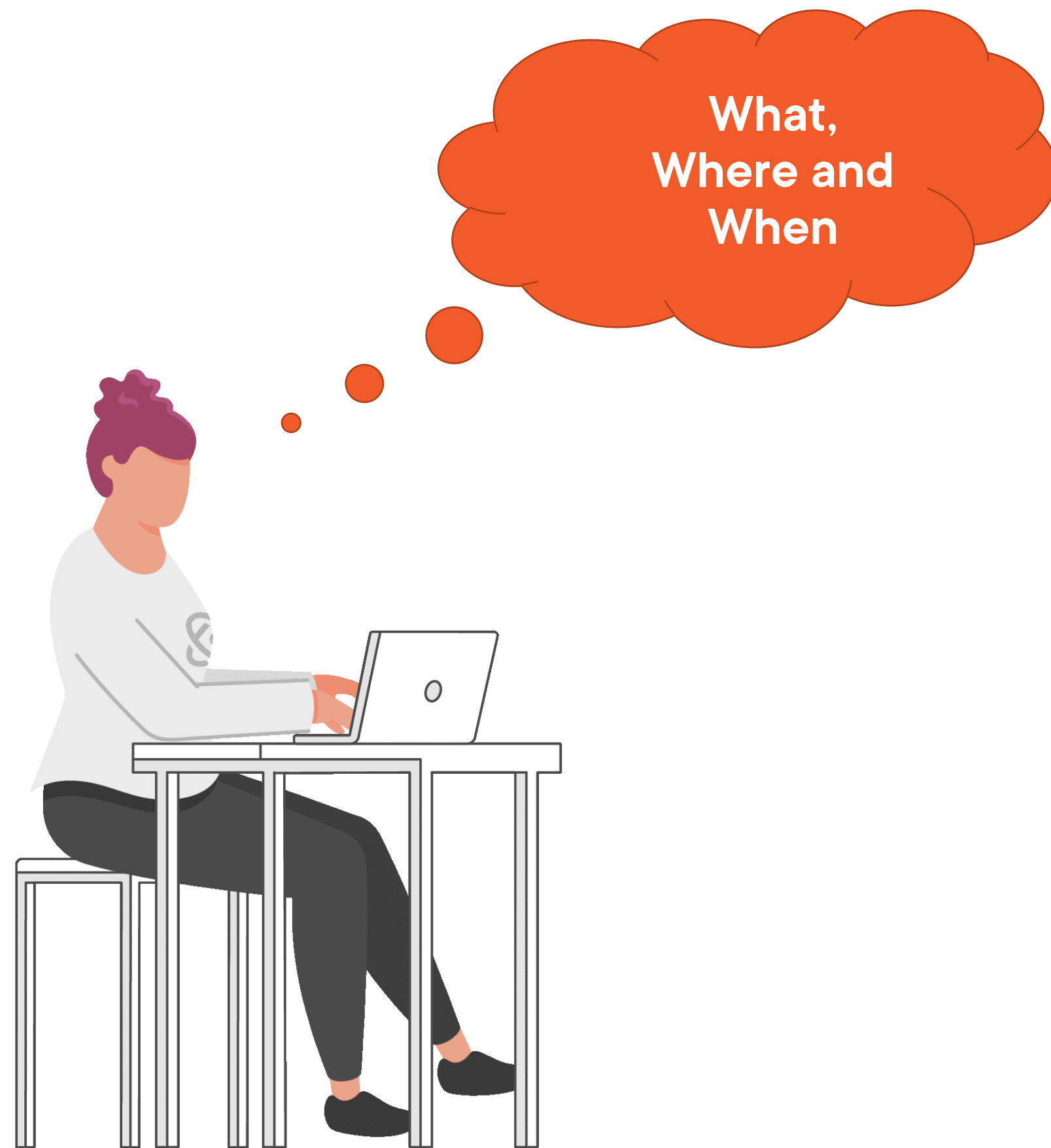
**Group by sections**

**Different inventory  
files**

**Numeric patterns**

**Alphabetic  
characters**





# Inventory Grouping

**Inventory best  
practice**

**Group by sections**

**Different inventory  
files**

**Numeric patterns**

**Alphabetic  
characters**

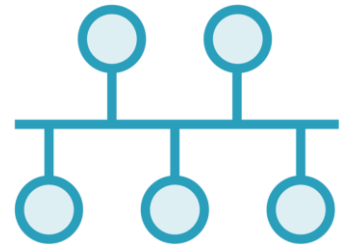




# Variables in the Inventory



**Host and group variables**



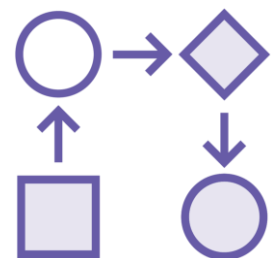
**Host\_var and group\_var**



**Behavioural: ansible\_host, ansible\_port, and ansible\_user**



**Inventory scalability**



**Regular and dynamic inventory**



# Review



# Demo



**Organize your inventory**

**Host and group variables files**

**Inventory grouping**



# Ansible Variables



**Separating site-specific  
code**



**Manage differences**

# Defining Variables

**Several places**

**Vars: section**

**Playbook scope**

**Set\_fact module**

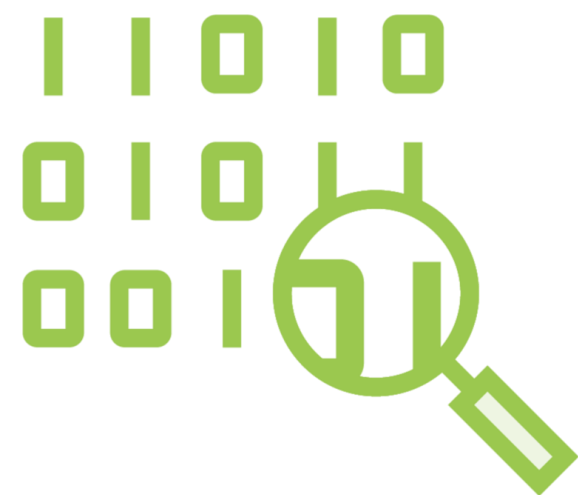
**Vars\_files**



Playbook



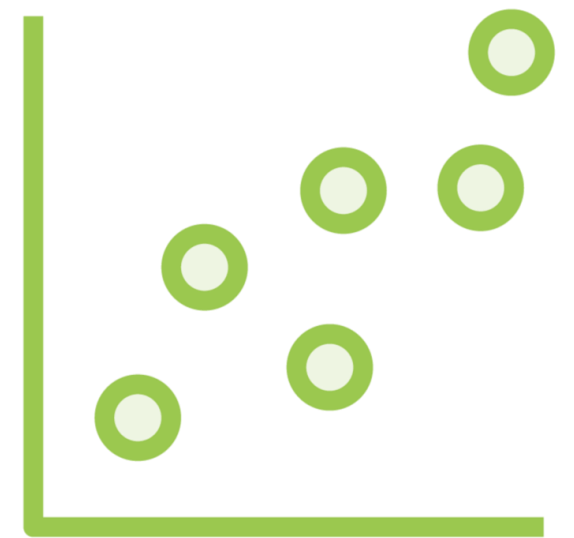
Inventory



Roles



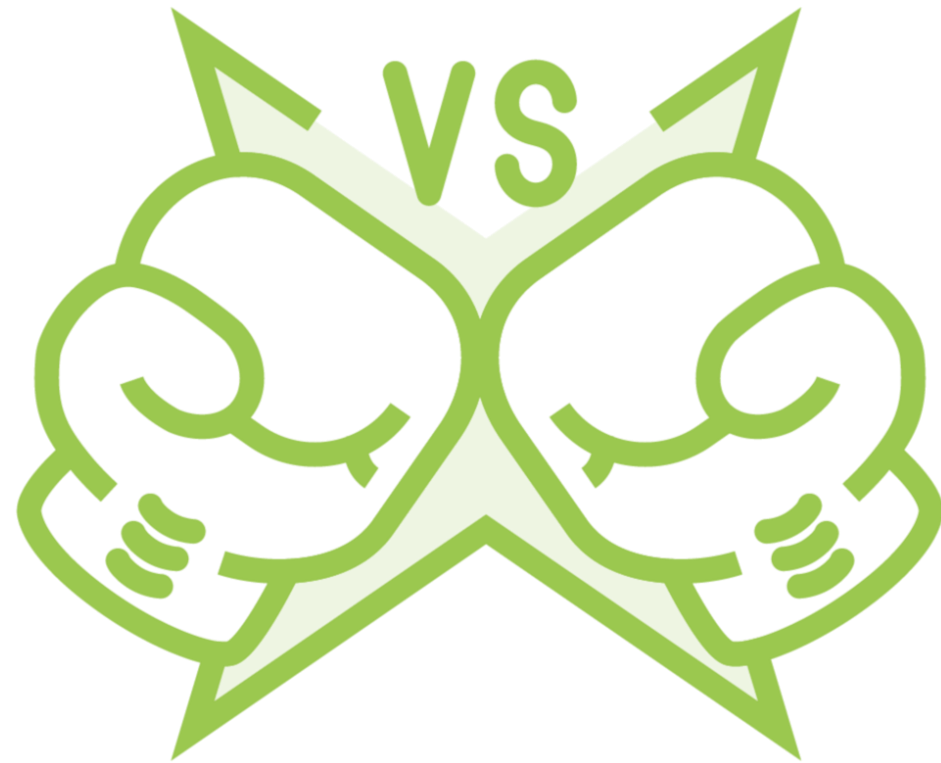
Command line



Variables



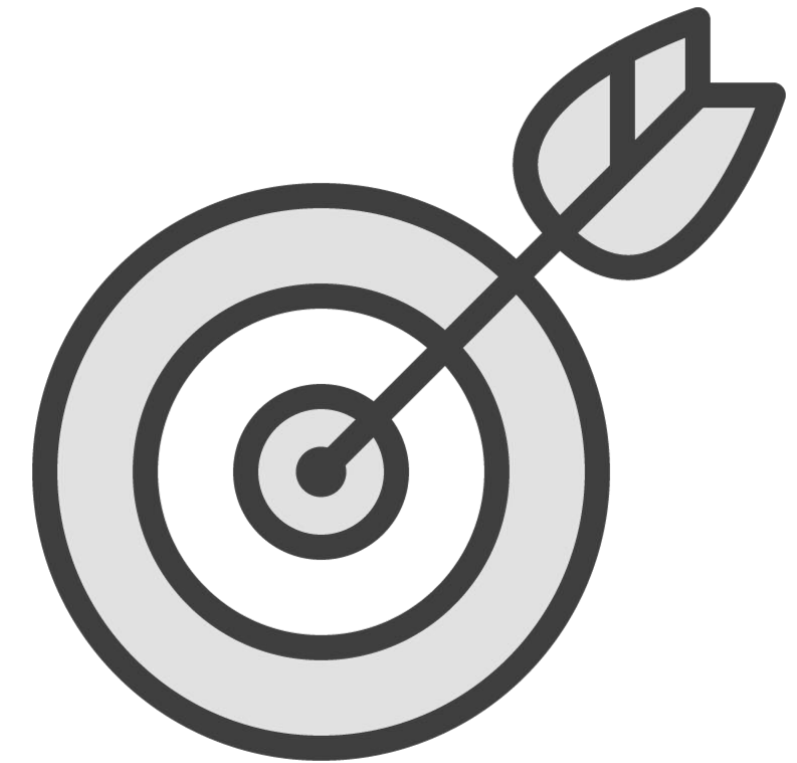
# Defining Variables



**Vars\_prompt**

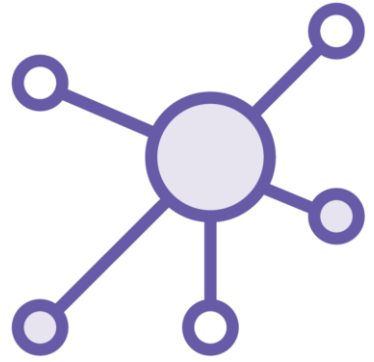


**Runtime**



**Task variables**

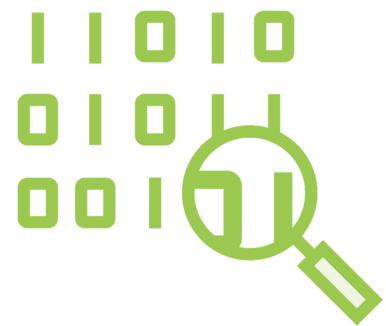
# Ansible Facts



**System variables**



**Facts storage: Ansible\_facts**



**Fact gathering**





# Summary of Defining Variables

**Play header using the vars: section**

**Play header using the vars\_files**

**Using the set\_fact modules**

**At the command line**

**Inventory variables**

**Var\_prompts**

**Discovered variables**



# Demo



**Develop flexible code**

**Variable definition**

**Separate files**

**Ansible facts**



# Introducing Ansible Conditionals



**Highlighting  
conditionals**



**Conditionals  
and when  
clause**



**Conditionals  
and facts**



**Conditionals  
and variables**





Handlers and the when clause

Handlers for conditional task execution

Handlers in pre and post tasks

Using blocks

Loops



# Managing Failures

**The fail module**

**Force\_handlers**

**Failed\_when**

**Ignore errors**



# Demo



**Conditional task execution**

**The use of handlers**

**Skip a particular tasks**

**The use of blocks**

**Look at loops**



# Module Summary

