



Zabbix Ansible Module

Patrik Uytterhoeven

Overview

- My name is : Patrik Uytterhoeven
- I Work for: Open-Future
 - We are an open source integrator
 - We provide Zabbix training's
 - We provide Zabbix installations & configuration
 - Puppet, Ansible, ...
 - Bacula, Zmanda, SEP, ...
 - Zarafa, Zimbra, ...
 - Redhat, Debian, Centos, Suse, ...

What is Ansible ?

- An open-source IT automation tool to deploy software and orchestrate more advanced IT task like:
 - Continuous deployments
 - Multi-node software deployment
 - Execution of ad-hoc task
 - Configuration management
 - Manages nodes over SSH

Why Ansible ?

- Why making use of Configuration Management tools
 - Consistency
 - Save time
- Why I used Ansible instead of Puppet, Chef,
 - Ansible is python based
 - Readable code + jinaja2 templates
 - Good online documentation
 - It's new and easy to start with
- Disadvantage
 - Ansible is new so no zabbix modules yet.

What is needed for my playbook?

- Ansible
- Redhat or Centos 6.5
- Ansible-playbook to install :
 - PostgreSQL or Mysql
 - Apache
- Why is Database and Web server not in playbook ?
 - Modular is better now our module is reusable

Where to get it ?

- Ansible from repo, source or python pip
- 2 Modules
 - 1 Module for zabbix server
 - 1 Module for zabbix agent
- Available from Github and Ansible-Galaxy
 - `ansible-galaxy install patrik.uytterhoeven.Zabbix-Agent`
 - `ansible-galaxy install patrik.uytterhoeven.Zabbix_Server`
 - <https://github.com/Open-Future-Belgium/>

How does it work ?

- Each role comes with a readme file
- Create a file `zabbix-client/server.yml` file
 - `# file: zabbix-server.yml`
 - `- hosts: (add host or hostgroup)`
 - `user: john (user that runs the deployment)`
 - `sudo: yes`
 - `sudo_user: root`
 - `roles:`
 - `- zabbix-server (the role to launch)`

Edit Settings

- In the zabbix Agent module edit the config
 - Defaults/main.yml
- In the zabbix Server module edit the config
 - Defaults/main.yml => general settings
 - Defaults/httpd.yml => apache settings
 - Defaults/zabbix.yml => zabbix settings for db, php, ...

Main.yml File

```
# Please adjust these parameters to your own needs
zbx_repo_enabled: 1 # Put 0 to use your own local repo
zbx_agent_Version: "2.2.4" # Desired version of the client
zbx_agent_HostName: # If not set hostname from machine will be taken.
zbx_server_Passive: "192.168.140.12" # Passive Server Checks
zbx_agent_ServerActive: "192.168.140.12" # Active Server Checks
zbx_agent_Group: "Discovered hosts" # Zabbix hostgroup where host has to be added
zbx_agent_Template: "Template OS Linux" # Zabbix template to link with the host

# API
api_host_ip: "192.168.140.12"
api_admin: "Admin"
api_password: "zabbix"

# Zabbix Repository & Epel repo
zbx_repo: "http://repo.zabbix.com/zabbix/2.2/rhel/6/x86_64/zabbix-release-2.2-1.el6.noarch.rpm"
epel_repo: "http://epel.mirror.nucleus.be/6/i386/epel-release-6-8.noarch.rpm"

# General Zabbix Agent Parameters

....
```

Agent playbook

- - name: Install Policy Coreutils package
- yum: name=policycoreutils state=present
-
- - name: Install Zabbix Repository
- yum: name={{zbx_repo}} state=present
- when: zbx_repo_enabled == 1
-
- - name: Install Epel Repository (needed for pyzabbix)
- yum: name={{epel_repo}} state=present
-
- - name: install zabbix agent packages
- yum: name={{ item }} state=present
- with_items:
- - zabbix-agent-{{ zbx_agent_Version }}
-
- - name: Install Zabbix Agent Config File
- template: src=zabbix_agentd.conf.j2 dest=/etc/zabbix/zabbix_agentd.conf owner=root group=root mode=0644 backup=yes

Agent playbook

- - name: Install Python Script to add Client to server
- template: src=zabbix_api_hostadd.j2 dest=/tmp/zabbix_api_hostadd.py
-
- - name: Ensure Zabbix Server is running
- service: name=zabbix-agent state=started enabled=yes
- notify:
- - restart zabbix-agent
-
- - include: iptables.yml
-
- - name: Configure SELinux Policy zabbix
- command: setsebool -P zabbix_can_network on
-
- - name: Install python and pip
- yum: name={{item}} state=present
- with_items:
- - python
- - python-pip
-
- - name: Install pyzabbix with pip
- command: pip install pyzabbix
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- - name: Add the host to the Zabbix Server
- command: python /tmp/zabbix_api_hostadd.py

Launch & Relax

- Launch the Ansible module and wait for the deployment to finish
 - Ex: `Ansible-playbook -i hostfile zabbix-server`
 - Ex: `Ansible-playbook -i hostfile zabbix-agent`

