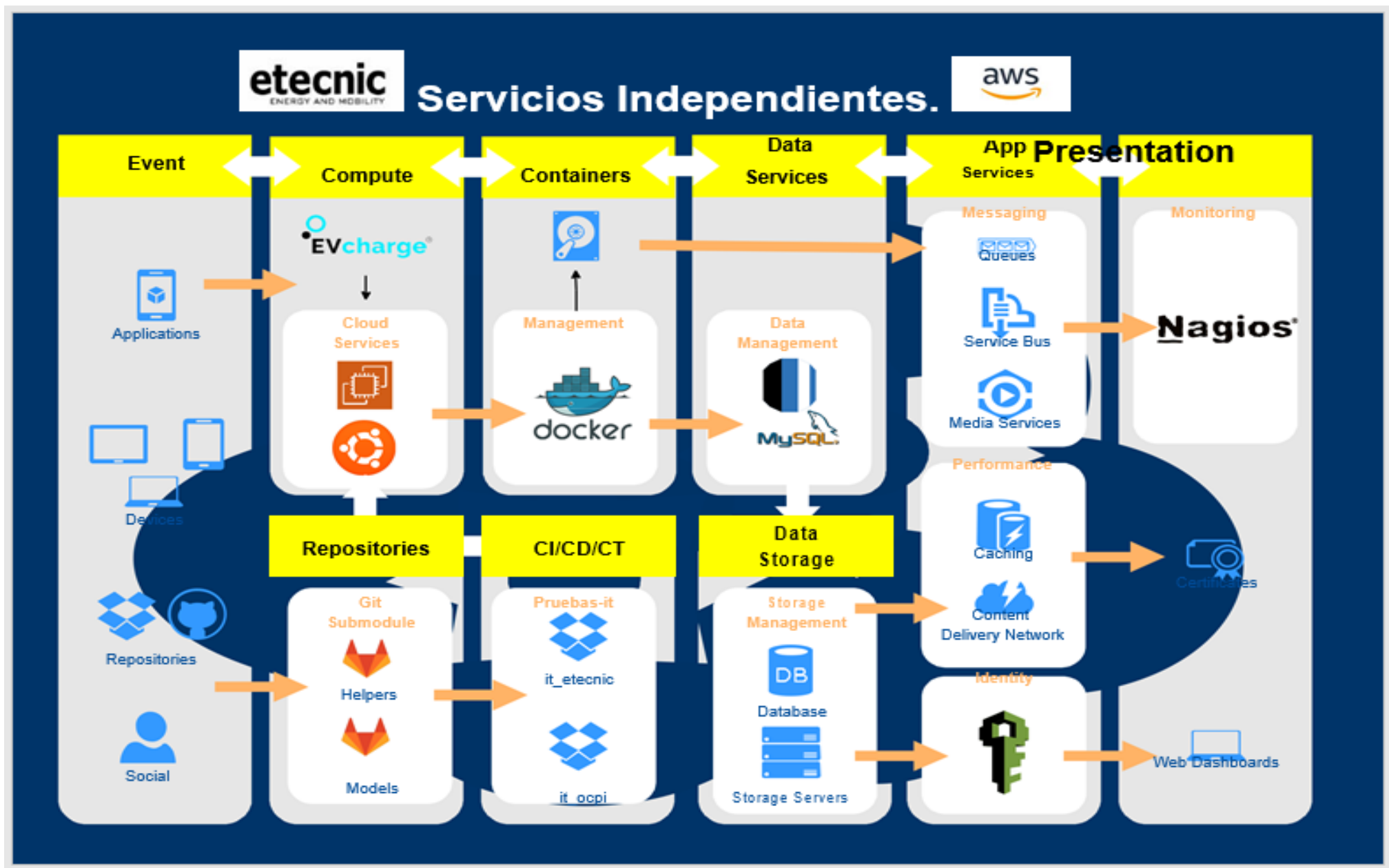




Monitoreo de servicios y conexiones.





Implementación de Docker.

1. Acceso del usuario a los repositorios locales.

Requisitos:

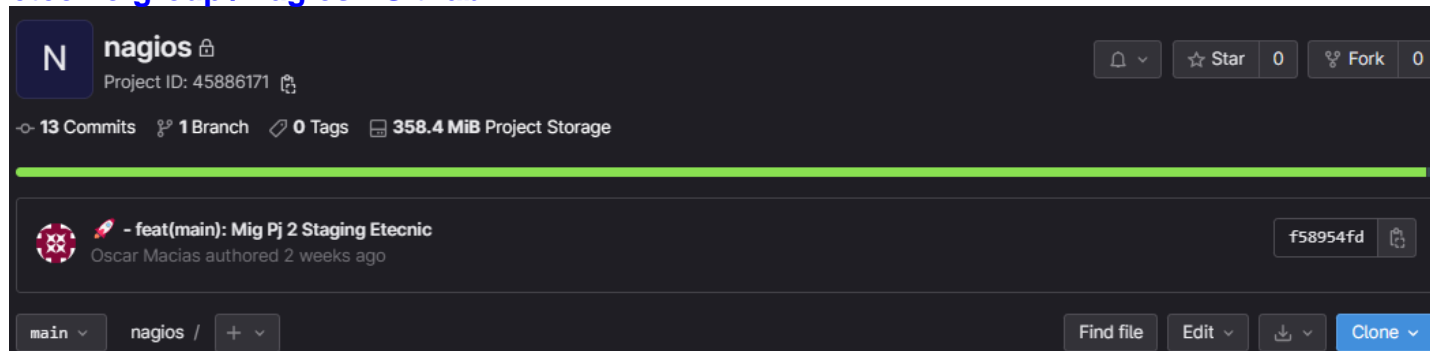
- Cuenta GitLab.
- Configuración de acceso SSH por Token.
- Acceso a lectura de repositorios por proyecto.

2. Lanzamientos de cambios sobre los repositorios git.

- Acceso de escritura sobre repositorios nuevos por proyecto.

3. Acceso al repositorio global:

[etecnic-group / nagios · GitLab](#)





4. Clonamos el proyecto que contiene el contenedor.

Requisitos:**- Instalar Docker en servidor Ubuntu.**

```
$ for pkg in docker.io docker-doc docker-compose podman-docker containerd runc; do sudo apt-get remove $pkg; done
$ sudo apt-get update
$ sudo apt-get install ca-certificates curl gnupg
$ sudo install -m 0755 -d /etc/apt/keyrings
$ curl -fsSL https://download.docker.com/linux/ubuntu/gpg | sudo gpg --dearmor -o /etc/apt/keyrings/docker.gpg
$ sudo chmod a+r /etc/apt/keyrings/docker.gpg

$ echo \
"deb [arch="$(dpkg --print-architecture)" signed-by=/etc/apt/keyrings/docker.gpg]
https://download.docker.com/linux/ubuntu \
"$(. /etc/os-release && echo "$VERSION_CODENAME")" stable" | \
sudo tee /etc/apt/sources.list.d/docker.list > /dev/null

$ sudo apt-get update
$ sudo apt-get install docker-ce docker-ce-cli containerd.io docker-buildx-plugin docker-compose-plugin
$ sudo docker run hello-world

$ git clone --recursive git@gitlab.com:etecnic-group/nagios.git
$ ll
```



5. Construimos el contenedor.

```
$ docker compose -f "./nagios/Docker/docker-compose.yml" up -d --build
```

docker-compose.yml

```
version: '3'

services:

  nagios:
    build:
      context: .
      dockerfile: ./dockerfile
    ports:
      - "8080:80"
    tty: true
```

dockerfile

```
FROM ubuntu:lunar-20230522

COPY . .

ENTRYPOINT bash ./install.sh && tail -f /dev/null
```

**install.sh**

```
#!/bin/sh
```

```
yes | apt update --fix-missing;
yes | apt upgrade;
yes | apt autoremove;
yes | apt install autoconf \
    bc \
    gawk \
    dc \
    build-essential \
    gcc \
    libc6 \
    make \
    unzip \
    libgd-dev \
    libmcrypt-dev \
    libssl-dev \
    snmp \
    libnet-snmp-perl \
    gettext \
    nano \
    nmap \
    traceroute \
    net-tools \
    apache2 \
    wget \
    sudo;

exit
```

6. Iniciamos el contenedor.

```
$ docker run --rm -it docker-nagios:latest
```

```
$ docker ps -a | grep nagios
```



- Instalar Nagios en Docker sobre el servidor Ubuntu.

7. Iniciamos el contenedor.

```
$ docker exec -it 1d0ck3rc0n741n3r sh
```

8. Instalación del paquete del servicio.

nagios.sh

```
#!/bin/bash/usr env

yes | apt upgrade;
yes | apt update;
yes | apt autoremove;
yes | apt install php \
    libapache2-mod-php;

wget https://github.com/NagiosEnterprises/nagioscore/archive/nagios-4.4.6.tar.gz;
tar -xf nagios-4.4.6.tar.gz;
cd nagioscore-nagios-4.4.6/ || exit;
./configure --with-httpd-conf=/etc/apache2/sites-enabled;
make all;
make install-groups-users;
usermod -a -G nagios www-data;
make install;
make install-daemoninit;
make install-commandmode;
make install-config;
make install-webconf;
a2enmod rewrite cgi;
service apache2 restart;
htpasswd -c /usr/local/nagios/etc/htpasswd.users nagiosadmin;
```



- Configurar Nagios en Docker sobre el servidor Ubuntu.

9. Instalación de los plugins del servicio.

nagios.sh

```
yes | apt install monitoring-plugins nagios-nrpe-plugin;
```

10. Configuración del servicio nagios.

nagios.sh

```
mkdir -p /usr/local/nagios/etc/servers;  
nano /usr/local/nagios/etc/nagios.cfg  
cfg_file=/usr/local/nagios/etc/objects/linux.cfg  
cfg_dir=/usr/local/nagios/etc/servers
```

11. Configuración de la ruta de los plugins de Nagios.

nagios.sh

```
nano /usr/local/nagios/etc/resource.cfg  
$USER1$=/usr/lib/nagios/plugins
```

12. Configuración de contacto de reportes en Nagios.

nagios.sh

```
nano /usr/local/nagios/etc/objects/contacts.cfg  
email                software@etecnic.es; <<***** CHANGE THIS TO YOUR EMAIL ADDRESS *****>>
```



13. Configuración de comandos para monitoreo de umbrales en Nagios.

nagios.sh

```
# Commands.
nano /usr/local/nagios/etc/objects/commands.cfg
define command{
    command_name check_nrpe
    command_line $USER1$/check_nrpe -H $HOSTADDRESS$ -c $ARG1$
}

define command {
    command_name    check_traceroute
    command_line    /usr/sbin/traceroute -n -T -p $ARG2$ $HOSTADDRESS$
}
```

14. Configuración de tiempo de chequeo para cada Template según servidores en Nagios.

nagios.sh

```
# Templates.
nano /usr/local/nagios/etc/objects/templates.cfg
    check_interval 1
```




15. Configuración de umbrales para monitoreo según servidores y puertos en Nagios.

nagios.sh

```
# Host Services.  
nano /usr/local/nagios/etc/objects/linux.cfg
```

linux.cfg

```
define host {  
    use                linux-server  
    host_name          Cargador_Etenic  
    alias              Cliente  
    address             DIRECCION.IP.PUBLICA.CARGADOR  
}  
  
define service {  
    use                generic-service  
    host_name          Cargador_Etenic  
    service_description Puerto_Direccion_IP_Publica_Cargador_Cliente  
    check_command       check_tcp!PUERTO  
}
```



16. Administración del servicio de Nagios dentro de Docker.

nagios.sh

```
nano /root/.bashrc
alias nagioscheck='/usr/local/nagios/bin/nagios -v /usr/local/nagios/etc/nagios.cfg'
alias nagiosreload='service nagios restart'

su
source /root/.bashrc
nagioscheck
exit

service nagios start
service apache2 restart

su
nagiosreload
exit

exit
```



Uso de Nagios.

17. Accedemos al portal de Nagios establecido para Staging Etecnic, con su respectivo puerto publicado.
<http://168.119.156.192:8080>

Nagios®

General
Home
Documentation

Current Status
Tactical Overview
Map (Legacy)
Hosts
Services
Host Groups
Summary
Grid
Service Groups
Summary
Grid
Problems
Services (Unhandled)
Hosts (Unhandled)
Network Outages

Quick Search:

Reports
Availability
Trends (Legacy)
Alerts
History
Summary
Histogram (Legacy)
Notifications
Event Log

System
Comments
Downtime
Process Info
Performance Info

Current Network Status
Last Updated: Mon Jun 5 11:14:07 UTC 2023
Updated every 90 seconds
Nagios® Core™ 4.4.6 - www.nagios.org
Logged in as nagiosadmin

View History For all hosts
View Notifications For All Hosts
View Host Status Detail For All Hosts

Host Status Totals

Up	Down	Unreachable	Pending
2	2	0	0

All Problems: 2
All Types: 4

Service Status Totals

Ok	Warning	Unknown	Critical	Pending
10	2	0	5	0

All Problems: 7
All Types: 17

Service Status Details For All Hosts

Limit Results: 100

Host	Service	Status	Last Check	Duration	Attempt	Status Information
dns2	DNS	OK	06-05-2023 11:10:30	0d 0h 23m 37s	1/3	TCP OK - 0.021 second response time on 8.8.8.8 port 53
	Puerto	OK	06-05-2023 11:12:16	0d 0h 21m 49s	1/3	TCP OK - 0.004 second response time on 8.8.8.8 port 443
localhost	Current Load	OK	06-05-2023 11:13:43	0d 0h 20m 24s	1/4	LOAD OK - total load average: 0.06, 0.14, 0.67
	Current Users	OK	06-05-2023 11:13:43	0d 0h 20m 24s	1/4	USERS OK - 0 users currently logged in
	HTTP	OK	06-05-2023 11:13:43	0d 0h 20m 24s	1/4	HTTP OK: HTTP/1.1 200 OK - 10945 bytes in 0.002 second response time
	PING	OK	06-05-2023 11:10:57	0d 0h 23m 10s	1/4	PING OK - Packet loss = 0%, RTA = 0.12 ms
	Root Partition	OK	06-05-2023 11:12:45	0d 0h 21m 22s	1/4	DISK OK - free space: / 963994MiB (98% inode=99%)
	SSH	CRITICAL	06-05-2023 11:11:43	0d 0h 17m 24s	4/4	connect to address 127.0.0.1 and port 22: Connection refused
	Swap Usage	OK	06-05-2023 11:13:43	0d 0h 20m 24s	1/4	SWAP OK - 96% free (1954MB out of 2048MB)
Total Processes	OK	06-05-2023 11:13:43	0d 0h 20m 24s	1/4	PROCS OK: 0 processes with STATE = RSZDT	
ubuntu	Apache2	OK	06-05-2023 11:11:24	0d 0h 22m 43s	1/3	TCP OK - 0.005 second response time on 10.0.0.11 port 80
	Hard_Disk	CRITICAL	06-05-2023 11:13:12	0d 0h 20m 55s	1/3	CHECK_NRPE STATE CRITICAL: Socket timeout after 10 seconds.
	Ping	CRITICAL	06-05-2023 11:05:00	0d 0h 19m 7s	1/3	PING CRITICAL - Packet loss = 100%
	Puerto	CRITICAL	06-05-2023 11:08:48	0d 0h 17m 19s	1/3	CRITICAL - Socket timeout after 10 seconds
tracertoute	WARNING	06-05-2023 11:08:36	0d 0h 15m 31s	1/3	(No output on stdout) stderr: You do not have enough privileges to use this tracertoute method.	
ubuntu2	Puerto	CRITICAL	06-05-2023 11:11:51	0d 0h 22m 16s	1/3	CRITICAL - Socket timeout after 10 seconds
	tracertoute	WARNING	06-05-2023 11:13:39	0d 0h 20m 28s	1/3	(No output on stdout) stderr: You do not have enough privileges to use this tracertoute method.

Results 1 - 17 of 17 Matching Services

Page Tour