

Relatório de Execução – LAB-03: Instalação e Configuração do Zabbix Proxy e Agente

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1. Equipe

| Nome do Integrante |

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2. Objetivo

O objetivo deste laboratório foi configurar um Zabbix Proxy e um Zabbix Agent para realizar o monitoramento distribuído, assegurando que a comunicação entre o servidor e os hosts remotos seja segura.

3. Execução das Etapas

3.1. Preparação do Ambiente

Foram criadas máquinas virtuais (VMs) para a execução do laboratório, incluindo uma VM para o Zabbix Proxy e outra para o agente de teste. O Zabbix Proxy foi configurado na VM com o seguinte endereço:

* VM para Zabbix Proxy:

* Endereço IP: 192.168.1.17

3.2. Instalação e Configuração do Zabbix Proxy

O Zabbix Proxy foi instalado e configurado na VM. A porta de comunicação foi alterada para 10051 para evitar conflito com o serviço do Zabbix Server rodando no mesmo host. A configuração no frontend foi realizada apontando para o IP 192.168.1.17 e a porta 10051.

3.3. Instalação e Configuração do Zabbix Agent

O Zabbix Agent foi instalado nos hosts de teste (Agente-Debian-Remoto e DM002). O arquivo de configuração do agente foi ajustado para apontar para o IP do Zabbix Proxy.

3.4. Configuração de Criptografia TLS

A comunicação foi protegida utilizando chaves pré-compartilhadas (PSK). A identidade PSK Proxy-Remoto-PSK e a chave foram configuradas no frontend do Zabbix para os hosts.

3.5. Registro no Frontend Zabbix

O proxy e os hosts remotos foram registrados na interface web do Zabbix. A coleta de métricas foi validada, embora um dos hosts tenha apresentado um erro de identificação TLS.

4. Relatório Final

4.1. Topologia do Ambiente

A topologia do ambiente implementado segue o fluxo de um monitoramento distribuído:

- * Host Remoto: O Agente Zabbix coleta as métricas locais.
- * Rede Remota: O Zabbix Proxy recebe os dados dos agentes.
- * Servidor Principal: O Proxy repassa os dados consolidados para o Servidor Zabbix, que armazena no banco de dados e exibe no frontend web.

4.2. Evidências de Comunicação

A comunicação entre os componentes foi verificada através dos logs do Zabbix Proxy e do status “Online” na interface web. O log (/var/log/zabbix/zabbix_proxy.log) exibiu requisições sendo recebidas do servidor e dados sendo enviados pelos agentes.

4.3. Scripts de Automação

Foi desenvolvido um script em bash para automatizar a instalação e configuração do Zabbix Agent.

```
#!/bin/bash
```

```
# Script para automatizar a instalação e configuração do Zabbix Agent
```

```
# Baseado no Lab-03 para Ubuntu 24.04 / Zabbix 7.0
```

```
# Aborta o script imediatamente se qualquer comando falhar
```

```
Set -e
```

--- 1. Verificação de Permissões ---

If [["\$EUID" -ne 0]]; then

Echo "ERRO: Este script precisa ser executado com permissões de root (sudo)."

Exit 1

Fi

--- 2. Coleta de Informações ---

Echo "--- Configuração da Automação do Zabbix Agent ---"

Read -p "Digite o IP do Servidor ou Proxy Zabbix para o qual este agente deve reportar: " ZABBIX_ENDPOINT_IP

Read -p "Digite um nome único para este agente (ex: Agente-Debian-Remoto): " AGENT_HOSTNAME

--- 3. Adicionar Repositório Zabbix ---

Echo "[INFO] Adicionando o repositório do Zabbix 7.0..."

Wget

https://repo.zabbix.com/zabbix/7.0/ubuntu/pool/main/z/zabbixrelease/zabbix-release_7.0-1+ubuntu24.04_all.deb -O /tmp/zabbix-release.deb

Dpkg -i /tmp/zabbix-release.deb

Apt update

--- 4. Instalar Pacote do Agente ---

Echo "[INFO] Instalando o pacote zabbix-agent..."

Apt install zabbix-agent -y

--- 5. Configurar o Arquivo zabbix_agentd.conf ---

Echo "[INFO] Editando o arquivo de configuração zabbix_agentd.conf..."

CONFIG_FILE="/etc/zabbix/zabbix_agentd.conf"

```
Sed -i "s/^Server=127.0.0.1/Server=${ZABBIX_ENDPOINT_IP}/" "$CONFIG_FILE"
Sed -i "s/^Hostname=Zabbix server/Hostname=${AGENT_HOSTNAME}/"
"$CONFIG_FILE"
```

--- 6. Iniciar o Serviço ---

Echo "[INFO] Reiniciando e habilitando o serviço do Zabbix Agent..."

Systemctl restart zabbix-agent

Systemctl enable zabbix-agent

Echo "---"

Echo "Instalação do Zabbix Agent automatizada com sucesso!"

Echo "Hostname configurado: \${AGENT_HOSTNAME}"

Echo "Apontando para o Servidor/Proxy: \${ZABBIX_ENDPOINT_IP}"

Echo "Verifique o status com: sudo systemctl status zabbix-agent"

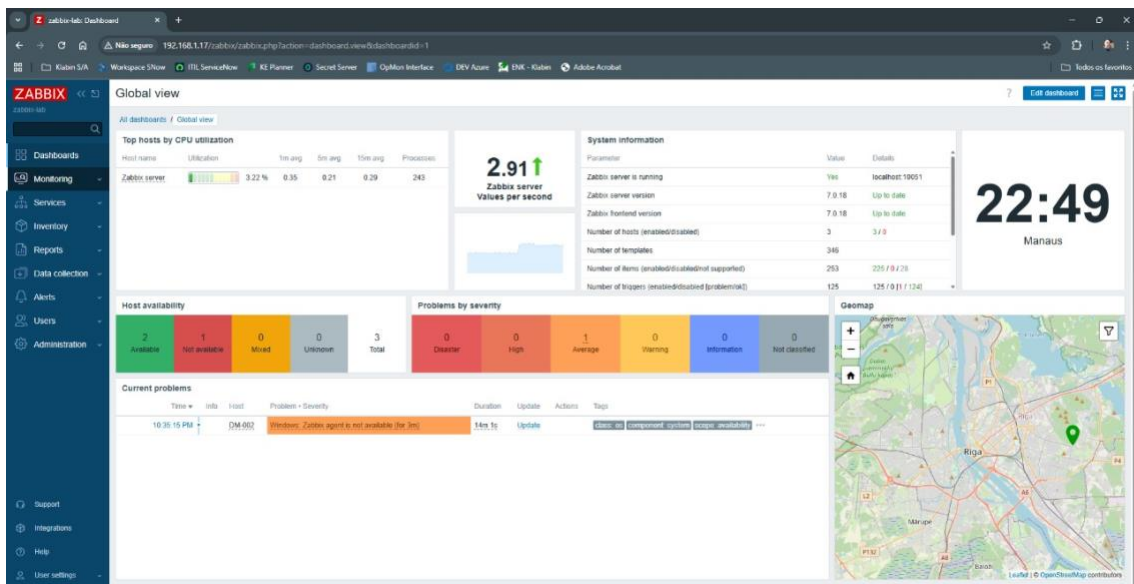
Echo "---"

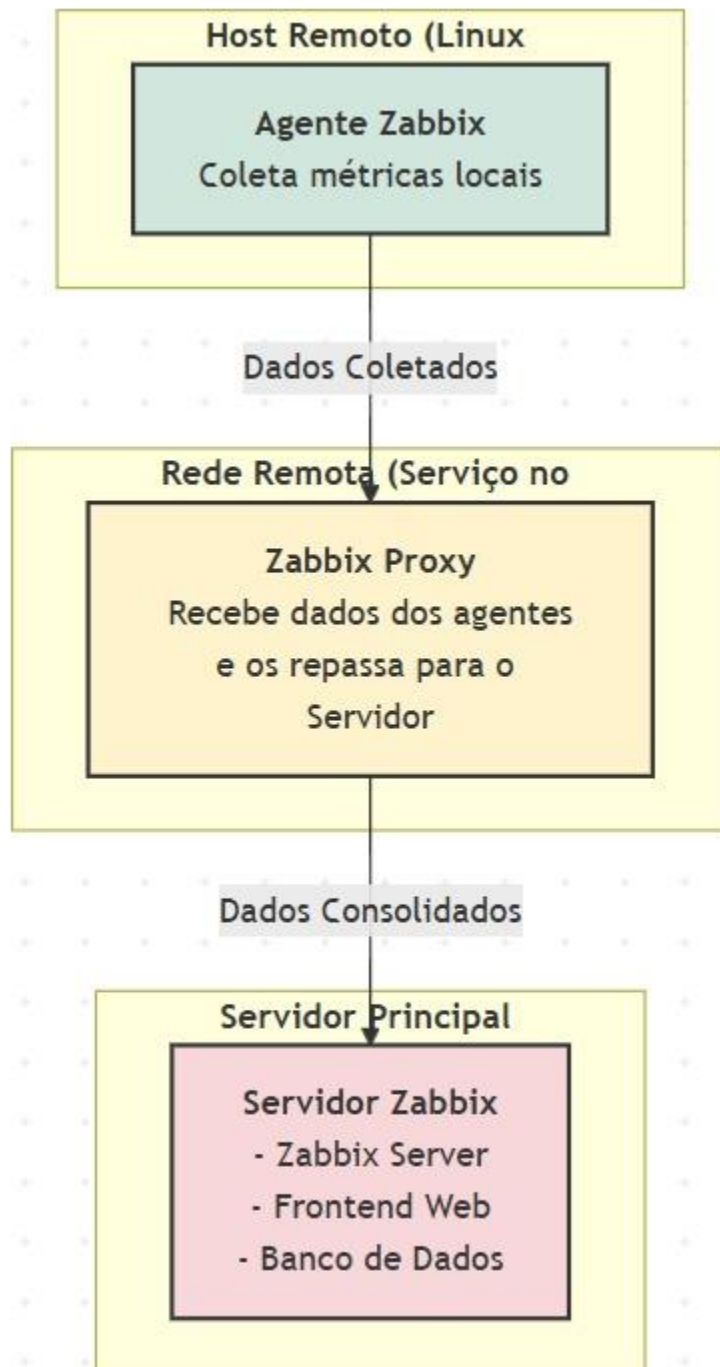
5. Conclusão

O laboratório foi concluído com a implementação bem-sucedida do Zabbix Proxy para monitoramento distribuído. A comunicação foi protegida com criptografia PSK e um script de automação para a instalação do agente foi desenvolvido.

Como desafios, foram observados erros de comunicação e um erro de identificação TLS para o host DM-002, indicando a necessidade de uma investigação mais aprofundada (troubleshooting) para estabilizar completamente o ambiente.

Fotos de evidências:





```
192.168.1.17
Terminal Sessions View X server Tools Games Settings Macros Help
Session Servers Tools Games Sessions View Split MUXExec Tuning Packages Settings Help

Quick connect...

# Script para automatizar a instalação e configuração do Zabbix Agent
# Baseado no LAB-03 para Ubuntu 24.04 / Zabbix 7.0

# Aborta o script imediatamente se qualquer comando falhar
set -e

# --- 1. Verificação de Permissões ---
if [ "$EUID" -ne 0 ]; then
    echo "ERRO: Este script precisa ser executado com permissões de root (sudo)."
    exit 1
fi

# --- 2. Coleta de Informações ---
echo "=== Configuração da Automação do Zabbix Agent ==="
read -p "Digite o IP do Servidor ou Proxy Zabbix para o qual este agente deve reportar: " ZABBIX_ENDPOINT_IP
read -p "Digite um nome único para este Agente (ex: Agente-Debian-Remoto): " AGENT_HOSTNAME

# --- 3. Adicionar Repositório Zabbix ---
echo "[INFO] Adicionando o repositório do Zabbix 7.0..."
wget https://repo.zabbix.com/zabbix/7.0/ubuntu/pool/main/z/zabbix-release/zabbix-release_7.0-1ubuntu24.04_all.deb -O /tmp/zabbix-release.deb
dpkg --get-selections | sed -i 's/^hold$/install/'
dpkg --configure --get zabbix-agent
dpkg --get-selections | sed -i 's/^hold$/install/'
dpkg --configure --get zabbix-agent

# --- 4. Instalar Pacote do Agente ---
echo "[INFO] Instalando o pacote zabbix-agent..."
apt install zabbix-agent -y

# --- 5. Configurar o Arquivo zabbix_agentd.conf ---
echo "[INFO] Editando o arquivo de configuração zabbix_agentd.conf..."
CONFIG_FILE="/etc/zabbix/zabbix_agentd.conf"
sed -i "s/^Server=127.0.0.1/Server=${ZABBIX_ENDPOINT_IP}/" "$CONFIG_FILE"
sed -i "s/^Host=127.0.0.1/Host=${AGENT_HOSTNAME}/" "$CONFIG_FILE"

# --- 6. Iniciar o Serviço ---
echo "[INFO] Reiniciando e habilitando o serviço do Zabbix Agent..."
systemctl restart zabbix-agent
systemctl enable zabbix-agent

echo "-----"
echo "Instalação do Zabbix Agent automatizada com sucesso!"
echo "Hostname configurado: ${AGENT_HOSTNAME}"
echo "Apontando para o Servidor/Proxy: ${ZABBIX_ENDPOINT_IP}"
echo "Verifique o status com: sudo systemctl status zabbix-agent"
echo "-----"
```

```
192.168.1.17
Terminal Sessions View X server Tools Games Settings Macros Help
Session Servers Tools Games Sessions View Split MUXExec Tuning Packages Settings Help

Quick connect...

denem@br-lab-4:~$ sudo tail -f /var/log/zabbix/zabbix_proxy.log
[sudo] password for denem:
4898:20250912:221454.145 Zabbix agent item "perf_counter{m[\"Processor Information\\total\\% Interrupt Time\"]}" on host "DM-002" failed: another network error, wait for 15 seconds
4899:20250912:221454.977 received configuration data from server at "127.0.0.1", datalen 25222
4900:20250912:221455.044 unknown request received from "192.168.1.17": [passive checks]
4901:20250912:221455.962 Zabbix agent item "system.cpu.switches" on host "Agente-Debian-Remoto" failed: another network error, wait for 15 seconds
4902:20250912:221456.964 unknown request received from "192.168.1.17": [passive checks]
4903:20250912:221456.964 Zabbix agent item "perf_counter{m[\"MemoryPool\\Hopped Bytes\"]}" on host "DM-002" failed: another network error, wait for 15 seconds
4904:20250912:221456.967 unknown request received from "192.168.1.17": [passive checks]
4905:20250912:221456.967 Zabbix agent item "system.cpu.util[\"softirq\"]" on host "Agente-Debian-Remoto" failed: another network error, wait for 15 seconds
4906:20250912:221456.967 unknown request received from "192.168.1.17": [passive checks]
4907:20250912:221456.967 temporarily disabling Zabbix agent checks on host "DM-002": interface unavailable
4908:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4909:20250912:221456.968 temporarily disabling Zabbix agent checks on host "Agente-Debian-Remoto": interface unavailable
4910:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4911:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4912:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4913:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4914:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4915:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4916:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4917:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4918:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4919:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4920:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4921:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4922:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4923:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4924:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4925:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4926:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4927:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4928:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4929:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4930:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4931:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4932:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4933:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4934:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4935:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4936:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4937:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4938:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4939:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4940:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4941:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4942:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4943:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4944:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4945:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4946:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4947:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4948:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4949:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4950:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4951:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4952:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4953:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4954:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4955:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4956:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4957:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4958:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4959:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4960:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4961:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4962:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4963:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4964:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4965:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4966:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4967:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4968:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4969:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4970:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4971:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4972:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4973:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4974:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4975:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4976:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4977:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4978:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4979:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4980:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4981:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4982:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4983:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4984:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4985:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4986:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4987:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4988:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4989:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4990:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4991:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4992:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4993:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4994:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4995:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4996:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4997:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4998:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
4999:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
5000:20250912:221456.968 unknown request received from "192.168.1.17": [passive checks]
```