Cacti Installation & Configuration Guide (Rocky Linux 9.5)

Installation Steps

1. Update the system:

```
sudo dnf update -y
```

2. Enable EPEL & CRB repos:

```
sudo dnf install epel-release -y
sudo dnf config-manager --set-enabled crb
```

3. Install dependencies:

```
sudo dnf install httpd mariadb-server php php-mysqlnd php-snmp php-gd php-xml php-mbstring php-cli net-snmp net-snmp-utils rrdtool -y
```

4. Start services:

```
sudo systemctl enable --now httpd mariadb snmpd
```

5. Secure MariaDB:

```
sudo mysql_secure_installation
```

6. Create Cacti DB:

```
mysql -u root -p
CREATE DATABASE cacti;
CREATE USER 'cactiuser'@'localhost' IDENTIFIED BY 'yourpassword';
GRANT ALL PRIVILEGES ON cacti.* TO 'cactiuser'@'localhost';
FLUSH PRIVILEGES;
```

7. Install Cacti:

```
sudo dnf install cacti -y
mysql -u cactiuser -p cacti < /usr/share/doc/cacti/cacti.sql
```

8. Configure Cacti DB:

Edit /etc/cacti/db.php with correct DB credentials.

9. Set timezone in /etc/php.ini and restart Apache:

```
sudo systemctl restart httpd
```

10. Enable poller cron job:

Edit /etc/cron.d/cacti and uncomment the line.

11. Allow firewall:

```
sudo firewall-cmd --permanent --add-service=http
sudo firewall-cmd --reload
```

12. Access Cacti:

http://<server-ip>/cacti

Basic Monitoring Use Cases

1. Monitor local server CPU, Memory, Disk:

- Devices > localhost > Create Graphs

- Select SNMP-based templates like CPU Usage, Memory Usage

2. Add remote Linux host:

- Install SNMP on remote: dnf install net-snmp net-snmp-utils -y
- Edit /etc/snmp/snmpd.conf to allow your Cacti server
- Restart SNMP: systemctl restart snmpd
- In Cacti, add device and create graphs

3. Monitor network devices:

- Enable SNMP on router/switch
- Add device in Cacti with correct SNMP community string

4. Monitor ping & uptime:

- Use Ping Latency and Uptime graph templates

Automated Device Discovery

1. In Cacti, go to Console > Automation
2. Add a Discovery Rule:

- Define IP range (e.g., 192.168.1.1 - 192.168.1.254)
- Set SNMP profile, ping method

3. Add Automation Tree:

- Define how new devices are added to graph trees

4. Create Graph Templates to auto-link for new devices

5. Run discovery manually or schedule it via cron

6. Confirm discovered devices appear in Device list with graphs

Custom Graph Templates

1. Go to Console > Graph Templates > Add

2. Define Template Name, Data Sources (e.g., CPU usage)

3. Configure RRA settings and graph items

4. Save and apply to devices using "Create Graphs for Host"

5. Export/Import templates using Console > Import/Export

6. Use Data Queries for SNMP-based template automation

Templates allow you to standardize how different metrics are visualized.