**Installation of Cassandra**

**Create script for making user ‘cassandra’**

**vi create\_user\_with\_sudo.sh**

#!/bin/bash

# Define the username

USERNAME="cassandra"

# Create the user

sudo adduser "$USERNAME"

# Set a password (manual input for security)

echo "Please set password for the user:"

sudo passwd "$USERNAME"

# Add the user to 'wheel' group (sudo group in RHEL/CentOS)

sudo usermod -aG wheel "$USERNAME"

# Ensure 'wheel' group has sudo privileges

sudo sed -i '/^# %wheel ALL=(ALL) ALL/s/^# //' /etc/sudoers

echo "✅ User '$USERNAME' created and granted sudo privileges."

chmod +x create\_user\_with\_sudo.sh

and RUN..

**For installation with user cassandra**

**vi install\_cassandra.sh**

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#!/bin/bash

# Define user and installation directory

USER="cassandra"

INSTALL\_DIR="/opt/cassandra"

# Create installation directory and set permissions

sudo mkdir -p "$INSTALL\_DIR"

sudo chown -R "$USER:$USER" "$INSTALL\_DIR"

# Navigate to the installation directory

cd "$INSTALL\_DIR"

# Update system packages

echo "Updating system packages..."

sudo dnf update -y

# Install Java 11 and wget

echo "Installing Java 11 and wget..."

sudo yum install -y java-11-openjdk wget

# Download and extract Cassandra

echo "Downloading and extracting Apache Cassandra..."

wget https://archive.apache.org/dist/cassandra/4.0.13/apache-cassandra-4.0.13-bin.tar.gz

tar -xzvf apache-cassandra-4.0.13-bin.tar.gz --strip-components=1 -C "$INSTALL\_DIR"

# Confirmation message

echo "✅ Apache Cassandra installed successfully in $INSTALL\_DIR. Please config your cluster or run… -SWAPNIL"

**Create a Cassandra systemd Service File**

sudo vi /etc/systemd/system/cassandra.service

[Unit]

Description=Apache Cassandra

After=network.target

[Service]

Type=forking

User=cassandra

Group=cassandra

Environment="CASSANDRA\_HOME=/opt/cassandra"

Environment="CASSANDRA\_CONF=/opt/cassandra/conf"

ExecStart=/opt/cassandra/bin/cassandra -R

ExecStop=/opt/cassandra/bin/nodetool drain && pkill -f CassandraDaemon

Restart=on-failure

LimitNOFILE=100000

[Install]

WantedBy=multi-user.target

sudo systemctl daemon-reload

sudo systemctl enable cassandra

**For single script**

#!/bin/bash

# Define user and installation directory

USER="cassandra"

INSTALL\_DIR="/opt/cassandra"

SERVICE\_FILE="/etc/systemd/system/cassandra.service"

# Create installation directory and set permissions

sudo mkdir -p "$INSTALL\_DIR"

sudo chown -R "$USER:$USER" "$INSTALL\_DIR"

# Navigate to the installation directory

cd "$INSTALL\_DIR"

# Update system packages

echo "Updating system packages..."

sudo dnf update -y

# Install Java 11 and wget

echo "Installing Java 11 and wget..."

sudo yum install -y java-11-openjdk wget

# Download and extract Cassandra

echo "Downloading and extracting Apache Cassandra..."

wget https://archive.apache.org/dist/cassandra/4.0.13/apache-cassandra-4.0.13-bin.tar.gz

tar -xzvf apache-cassandra-4.0.13-bin.tar.gz --strip-components=1 -C "$INSTALL\_DIR"

# Create systemd service file for Cassandra

echo "Creating systemd service file for Cassandra..."

sudo bash -c "cat > $SERVICE\_FILE <<EOF

[Unit]

Description=Apache Cassandra

After=network.target

[Service]

Type=forking

User=cassandra

Group=cassandra

Environment=\"CASSANDRA\_HOME=$INSTALL\_DIR\"

Environment=\"CASSANDRA\_CONF=$INSTALL\_DIR/conf\"

ExecStart=$INSTALL\_DIR/bin/cassandra -R

ExecStop=$INSTALL\_DIR/bin/nodetool drain && pkill -f CassandraDaemon

Restart=on-failure

LimitNOFILE=100000

[Install]

WantedBy=multi-user.target

EOF"

# Reload systemd to apply new service

echo "Reloading systemd..."

sudo systemctl daemon-reload

# Enable Cassandra service to start on boot

echo "Enabling Cassandra service to start on boot..."

sudo systemctl enable cassandra

# Start Cassandra service

echo "Starting Cassandra service..."

sudo systemctl start cassandra

# Confirmation message

echo "✅ Apache Cassandra has been installed and the systemd service has been set up."