

# Huawei Cloud - DeepSeek & Ollama Setup (Easy Guide)

This guide will help to deploy **DeepSeek 1.5B** on a Huawei Cloud ECS using **Ollama**, a tool to run language models easily.

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## Step 1: Set Up Your ECS

### 1.1 Create an ECS

1. Log in to [Huawei Cloud Console].
  2. Go to **Elastic Cloud Server** and click **Buy ECS**.
  3. Choose **Custom Config**:
    - **Billing**: Pay-per-use
    - **Region**: AP-Singapore
    - **Architecture**: x86
    - **Flavor**: c6.xlarge.2 (4 vCPUs, 8 GB RAM)
    - **Image**: CentOS 8.2 (40 GB)
    - **EIP**: Auto assign, 100 Mbps
    - **ECS Name**: ecs-cent
    - **Password**: Huawei1234% (Don't forget it)
  4. Click **Submit**, then **Agree and Submit**.
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## Step 2: Log in to Your ECS

1. Use **CloudShell** from the web console.
  2. Enter the ECS password: Huawei1234%
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## Step 3: Install Ollama

Ollama lets to run large language models easily.

### Option 1: Install from GitHub

```
curl -fsSL https://ollama.com/install.sh | sh
ollama -v # Verify installation
```

If download fails, try again or use Option 2.

### Option 2: Install from OBS (Faster)

```
wget https://sandbox-experiment-files.obs.cn-north-4.myhuaweicloud.com/deepseek/ollama-linux-amd64.tgz
sudo tar -C /usr -xzf ollama-linux-amd64.tgz
sudo chmod +x /usr/bin/ollama
```

### Create a user and service

```
sudo useradd -r -s /bin/false -m -d /usr/share/ollama ollama
```

Create service file:

```
cat << EOF | sudo tee /etc/systemd/system/ollama.service
[Unit]
Description=Ollama Service
After=network-online.target

[Service]
Environment="OLLAMA_HOST=0.0.0.0:11434"
ExecStart=/usr/bin/ollama serve
User=ollama
Group=ollama
Restart=always
RestartSec=3

[Install]
WantedBy=default.target
EOF
```

Enable and start Ollama:

```
sudo systemctl daemon-reload
sudo systemctl enable ollama
sudo systemctl start ollama
ollama -v # Check it works
```

---

## Step 4: Install DeepSeek-R1 1.5B Model

### Option 1: Pull from Ollama Hub

```
ollama pull deepseek-r1:1.5b
ollama run deepseek-r1:1.5b
```

If download is slow, press Ctrl+C and retry.

### Option 2: Download from OBS (Faster)

```
wget https://sandbox-experiment-files.obs.cn-north-4.myhuaweicloud.com/deepseek/ollama_deepseek_r1_1.5b.tar.gz
sudo tar -C /usr/share/ollama/.ollama/models -xzf ollama_deepseek_r1_1.5b.tar.gz
cd /usr/share/ollama/.ollama/models
mv ./deepseek/sha256* ./blobs
mkdir -p ./manifests/registry.ollama.ai/library/deepseek-r1
mv ./deepseek/1.5b ./manifests/registry.ollama.ai/library/deepseek-r1
rm -rf deepseek/
```

### Run the Model

```
ollama list # Check model exists
ollama run deepseek-r1:1.5b
```

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## All Set!

now chat with DeepSeek right from ECS.

If responses are off, run /bye to stop and restart the model.

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Enjoy using DeepSeek with Huawei Cloud!

# Results:

Tutorials

Reports

Huawei Cloud Exercise Account

Log in using an exercise account

Account: Sandbox-Voyager11043

Username: Sandbox-user

Password:

View the model list.

ollama list

| NAME             | ID           | SIZE   | MODIFIED    |
|------------------|--------------|--------|-------------|
| deepseek-r1:1.5b | a42b25d8c18a | 1.1 GB | 6 hours ago |

Run DeepSeek-R1 1.5B.

ollama run deepseek-r1:1.5b

Now, you can talk with DeepSeek.

Note: If the answer provided by DeepSeek is inaccurate, you are advised to pass /bye to stop DeepSeek and run it again.

Installing and Deploying DeepSeek

Completed: 0 % 00:28:03 End Exercise

Console

My VPCs Console

Elastic Cloud Server - Cons

ecs-cent-deepseek

Send Remote Command

English

Connected (encrypted) to: 04b6dfe4-9963-4c2e-8065-b38fc7487adf. Log out before you leave.

Local Cursor

Send Ctrl+Alt+Del

Input Commands

```
> RestartSec=3
>
> [[Install]]
> WantedBy=default.target
> EOF
[root@ecs-cent-deepseek ~]# sudo systemctl daemon-reload
[root@ecs-cent-deepseek ~]# sudo systemctl start ollama
[root@ecs-cent-deepseek ~]# ollama -v
ollama version is 0.9.6
[root@ecs-cent-deepseek ~]# wget https://sandbox-experiment-files.obs.cn-north-4.myhuaweicloud.com/deepseek/ollama_deepseek_r1_1.5b.tar.gz
--2025-07-26 19:54:48-- https://sandbox-experiment-files.obs.cn-north-4.myhuaweicloud.com/deepseek/ollama_deepseek_r1_1.5b.tar.gz
Resolving sandbox-experiment-files.obs.cn-north-4.myhuaweicloud.com (sandbox-experiment-files.obs.cn-north-4.myhuaweicloud.com).
. 122.9.24.7, 122.9.24.4
Connecting to sandbox-experiment-files.obs.cn-north-4.myhuaweicloud.com (sandbox-experiment-files.obs.cn-north-4.myhuaweicloud.com):122.9.24.7:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 1808511046 (1.8G) [application/gzip]
Saving to: 'ollama_deepseek_r1_1.5b.tar.gz'

ollama_deepseek_r1_1.5b.tar.gz 1808511046 (1.8G) 12.6MB/s in 82s

2025-07-26 19:56:03 (12.6 MB/s) - 'ollama_deepseek_r1_1.5b.tar.gz' saved [1808511046/1808511046]

[root@ecs-cent-deepseek ~]# sudo tar -C /usr/share/ollama/ollama/models -xzf ollama_deepseek_r1_1.5b.tar.gz
[root@ecs-cent-deepseek ~]# cd /usr/share/ollama/ollama/models
[root@ecs-cent-deepseek models]# mv ./deepseek/sha256* ./blobs
[root@ecs-cent-deepseek models]# mkdir -p ./manifests/registry.ollama.ai/library/deepseek-r1
mv ./deepseek/1.5b ./manifests/registry.ollama.ai/library
[root@ecs-cent-deepseek models]# mv ./deepseek/1.5b ./manifests/registry.ollama.ai/library/deepseek-r1
[root@ecs-cent-deepseek models]# rm -rf deepseek/
[root@ecs-cent-deepseek models]# ollama list
NAME ID SIZE MODIFIED
deepseek-r1:1.5b a42b25d8c18a 1.1 GB 5 months ago
[root@ecs-cent-deepseek models]# ollama run deepseek-r1:1.5b
>>> Send a message (/? for help)
```

The End