Installation Guide for welMPUTE

This guide walks you through the process of installing and deploying **welMPUTE** on your own server.

1. Install Using the Script (Quick Installation)

To quickly set up **welMPUTE**, you can use the provided installation script. This will automate most of the installation steps.

1. Download the Installation Script

Download the installation script from the following URL:

install welMPUTE.sh

(https://github.com/YOUTLab/welMPUTE/blob/main/install_welMPUTE.sh)

2. Run the Installation Script

After downloading the script, run the following commands in your terminal to make it executable and execute it:

```
chmod +x install_weIMPUTE.sh
sudo ./install_weIMPUTE.sh
```

The script will automatically:

- Configure the firewall (open necessary ports)
- Download and load the Docker image
- Start the Docker container
- Set up welMPUTE

This installation method may take a few minutes depending on your internet speed and system performance.

Then, your imputation server instance is ready and you can access it through the following address.

Front-end service server: http://IP:9083.

and

Back-end Management server: http://IP:9085.

IP refers to the IP address of your local computer where welMPUTE is installed.

2. Manual Installation (for Advanced Users)

If you prefer a manual installation or need more control over the deployment process, follow these steps:

Requirements

<u>Docker</u> must be installed on your local computer. Please choose the docker version that fits your operating system and install the **latest** version following the step-by-step <u>guide</u>.

Deployment

CentOS 7 operating system is recommended.

Download

After the successful installation of Docker, Download the Docker deployment package suanfa_v6.tar from

http://144.34.160.128:82/suanfa v6.tar

Deploy welMPUTE on CentOS

To get started with welMPUTE on CentOS, make sure your firewall allows ports **9083** and **9085** to be open.

You can follow these steps:

```
sudo firewall-cmd --permanent --add-port=9083/tcp
sudo firewall-cmd --permanent --add-port=9085/tcp
sudo firewall-cmd --reload
```

Now, ports 9083 and 9085 have been added to the CentOS firewall rules and are allowed through the firewall.

Next, Run the commands as follow:

```
sudo docker load -i suanfa_v6.tar
sudo docker run -d --privileged --net=host --restart=always suanfa:v6
```

It may take several minutes depending on your internet connection and computer resources. Then, your imputation server instance is ready and you can access it through the following address.

Front-end service server: http://IP:9083.

and

Back-end Management server: http://IP:9085.

IP refers to the IP address of your local computer where welMPUTE is installed.

Deploy welMPUTE on Ubuntu

To get started with welMPUTE on Ubuntu, make sure your firewall allows ports **9083** and **9085** to be open. You can follow these steps:

```
sudo ufw allow 9083/tcp
sudo ufw allow 9085/tcp
sudo ufw enable
```

Now, ports 9083 and 9085 have been added to the Ubuntu firewall rules and are allowed through the firewall.

```
sudo docker load -i suanfa_v6.tar
sudo docker run -d --privileged --net=host --restart=always suanfa:v6
```

Next, Run the **DeployonUbuntu.sh** command.

Save the file "DeployonUbuntu.sh" in the same folder as "suanfa.txt", then change the execute permission of "DeployonUbuntu.sh" using the command:

```
sudo chmod 774 DeployonUbuntu.sh
```

After that, execute it using the following command.

```
sudo sh DeployonUbuntu.sh
```

It may take several minutes depending on your internet connection and computer resources.

Then, your imputation server instance is ready and you can access it through the following address.

Front-end service server: http://IP:9083.

and

Back-end Management server: http://IP:9085.

IP refers to the IP address of your local computer where welMPUTE is installed.

Deploy welMPUTE on Windows

Ensure that Docker is installed correctly on Windows, and either disable the firewall or open ports 9083 and 9085.

Next, Run the commands as follow:

```
docker load -i suanfa_v6.tar
docker run -d --privileged -p 9083:9083 -p 9085:9085 --net=bridge suanfa:v6
```

It may take several minutes depending on your internet connection and computer resources.

Then, your imputation server instance is ready and you can access it through the following address.

Front-end service server: http://localhost:9083.

and

Back-end Management server: http://localhost:9085.

Example Website

If you deploy correctly, the local service should match the example website URL.

Front-end service server: http://144.34.160.128:9083

and

Back-end Management server: http://144.34.160.128:9085

Enter the verification code and login as admin with the default admin password:

Account: admin

Password: admin123