Installing Magic Collaboration Studio services

This chapter explains how to install Teamwork Cloud services by using the *install_twc<version_number>_<os_version>.sh* installation script.

To install Teamwork Cloud services

1. Install OpenJDK 11 (used with Teamwork Cloud) by executing the following command:

```
yum -y install java-11-openjdk
```

2. Download the *twcloud_<version_number>_installer_linux64.bin* file and place it in the same location as the *install_twc<version_number>_<os_version>.sh* script.
3. Install Teamwork Cloud by executing the *install_twc<version_number>_<os_version>.sh* script.

   Example

   ```
   sudo ./install_twc2022x_centos7.sh
   ```

   a. When executing the installation script, press **ENTER** until you are asked to configure the machine IP.
   b. Configure the machine IP by entering the local IP address or the host name of the machine (i.e. 192.168.130.10).
   c. Configure the cluster seed node IP by entering the local IP address or the host name of the machine (i.e. 19.168.130.10).
   d. Configure the Teamwork Cloud service owner by entering **twcloud**.
   e. Configure JAVA_HOME by entering **/etc/alternatives/jre_11**.
   f. Press **Enter** to choose the default /opt/local/TeamworkCloud installation folder or type another installation folder address.

4. When the Teamwork Cloud pre-installation summary is displayed, follow the instructions on the screen. The summary should look like this:

   ```
   ==============================================================================
   Pre-Installation Summary
   -----------------------
   Please Review the Following Before Continuing:

   Product Name:
       Teamwork Cloud

   Install Folder:
       /opt/local/TeamworkCloud

   Machine ip:
       "192.168.130.10"

   Seed node ip:
       "192.168.130.10"

   JAVA_HOME:
       "/etc/alternatives/jre_11"

   Disk Space Information (for Installation Target):
       Required:   395,614,661 Bytes
       Available: 31,608,475,648 Bytes
   ```

   ⚠ In the pre-installation summary, you should see the local IP address of your machine instead of "192.168.130.10" displayed in the example above.

5. Start the twcloud, zookeeper, and webapp services (in this particular order) by executing the following commands:

   ```
   sudo systemctl start twcloud
   sudo systemctl start zookeeper
   sudo systemctl start webapp
   ```

6. To ensure Teamwork Cloud services start after the reboot, execute the following commands:

```
sudo systemctl enable twcloud
sudo systemctl enable zookeeper
sudo systemctl enable webapp
```

7. Make sure that Teamwork Cloud is operational by going to *https://<server_address>:8443/webapp.* You should see the Teamwork Cloud login screen.

When you complete the steps above, the preliminary Teamwork Cloud configuration is created. This means that your system is functional and you can login to Teamwork Cloud. After making sure that Teamwork Cloud is operational, you can optionally perform the post-installation configuration described in the section below.

Post-installation Teamwork Cloud Configuration

For security reasons, it is recommended to make the following changes to the Teamwork Cloud configuration.

> ⚠️ The post-installation configuration is an optional step and should only be performed after making sure that Teamwork Cloud is operational.

To perform the post-installation Teamwork Cloud configuration

1. Edit the */opt/local/TeamworkCloud/configuration/application.conf* configuration file and make the following changes:
   - Change the value of the **contact-points** property to point to the **listen_address** you set in the *cassandra.yaml* file (i.e., contact-points = ["192.168.130.10:9042"]). This points Teamwork Cloud to the Cassandra database.
   - Change the value of the **secret** property with a password of your choosing (the initial value is **CHANGE_ME**). This is the password used for communication with the authorization server.
   - Use this parameter only if you need to deploy TWCloud in private network but client connect from public network. Change the value of the **server-broadcast-host** property to the public IP address instead of the local IP address. This way upon the initial connection the client application will know the external IP address to which it must connect (if Teamwork Cloud is installed behind a proxy or firewall with NAT).
2. Edit the */opt/local/TeamworkCloud/WebAppPlatform/shared/conf/authserver.properties* configuration file and make the following changes:

   - Change the value of the **cassandra.contactPoints** property to the local IP address.
   - If you are accessing the server by FQDN, change the value of the **authentication.redirect.uri.whitelist** property by adding an the FQDN entry to the whitelist (e.g., **authentication.redirect.uri.whitelist=https://FQDN:8443,https://FQDN:8111/webapp/, https://md_redirect**). Make sure to add the public IP and/or FQDN for ports 8443 and 8111 to the whitelist.
3. Edit the */opt/local/TeamworkCloud/WebAppPlatform/shared/conf/webappplatform.properties* configuration file and make the following changes:
   - Change the value of the **twc.admin.username** property to the username of a local account with Administrator privileges (the default value is Administrator).
   - Change the value of the **twc.admin.password** property to the password corresponding to the Administrator user (the default value is Administrator).
   - If you changed the **secret** property in the *application.conf* file, change the value of the **authentication.client.secret** property with the same value that you used for the **secret** property in the *application.conf* file.
4. Restart the affected Teamwork Cloud services.