TWCloud advanced configuration

On this page:

The configuration settings described in this section are optional. You only need to configure them if the default setting is not suitable for your environment. The Teamwork Cloud (TWCloud) system will load the configuration file every time it starts. Therefore, changes made to the configuration file will be applied once you restart it.

Setting a TWCloud password for authentication with the Authentication Server

TWCloud Admin uses an Authentication Server to authenticate users. TWCloud Admin needs a password to access /token endpoint of the Authentication Server. You need to specify the same password that is entered in the authentication server's configuration file **authserver.properties** (in the parameter **authentication.client.secret**). The default value is **CHANGE_ME**.

authserver.properties

```
esi.console {
....
#
 # The console client password parameter.
 client {
 pswd = "CHANGE_ME"
 }
...
}
```

Changing a log file location

You can configure the logging system of TWCloud by using **logback.xml**. This file is located in the folder *configuration* of the TWCloud. You can change the name or location of the file by editing the following line in the file **logback.xml.**

- In TWCloud, look for the following line:

  logback.xml

  ```
  <file>${user.home}/.twcloud/2021x/server.log</file>
  ```

When changing the log file name and location, you need to be sure that the user account to your Operating System (OS) that you will use to start TWCloud has the write permission in the new configured location. To learn more about logback configuration, see http://logback.qos.ch/manual/configuration.html.

Setting a server port

The default port number of TWCloud for the client to connect to is **3579**. However, the port number is changeable. If you would like to change the default port number, for example, to 3580, you can configure this in the TWCloud configuration file, **application.conf**. Search for the content shown below, and edit as follows:

application.conf

```
net
        {
                connectors = [
                        {
                                # The ip address to bind to (for client connection).
                                # The default value is bind to all IPs.
                                host = "0.0.0.0"

                                # Port for client application to connect to. The default value is 3579.
                                # This is corresponding to the port specified when connecting from client such
as MagicDraw.
                                port = 3580
```

The configuration file, **application.conf**, is located in the directory *configuration* under the TWCloud program folder. For example, */opt/TeamworkCloud /TWCloud/configuration/application.conf.* The configuration file is in HOCON format ("Human-Optimized Config Object Notation"). For more information about HOCON file format, visit the following link https://github.com/typesafehub/config/blob/master/HOCON.md#syntax.

Please note that MagicDraw is considered as a client of TWCloud. Consequently, if you change this setting, you will have to specify the port number while connecting from MagicDraw.

Setting a public IP

If TWCloud is deployed in the environment where the client will connect to the server via a public IP (NATed to a private IP), set the parameter **server-broadcast-host** to the public IP address and **host** to the private IP. Search for the content in **application.conf** and edit as follows:

```
net
        {
                connectors = [
                        {
                                # The ip address to bind to (for client connection).
                                # The default value is bind to all IPs.
                                host = "0.0.0.0"

                                # Port for client application to connect to. The default value is 3579.
                                # This is corresponding to the port specified when connecting from client such
as MagicDraw.
                                port = 3579

                                protocol = "raw"
                        }
                ]

                # To support deploying TWCloud in private network, but client connects from public network,
                # Specify IP address that will be used by client to connect to this TWCloud from public network.
                # This value will be default to esi.net.host if it is empty.
                # server-broadcast-host is not recommended to use.
                server-broadcast-host = "PUBLIC_IP_ADDRESS"
        }
```

Setting Cassandra authentication

If you configure Cassandra authentication via username/password, you need to configure TWCloud server and Authentication server as follows:

Go to *<TWCloud installation folder>/configuration/application.conf*

In the **application.conf** file search for the following section. Set authentication-enabled to true and set username and password.

application.conf

```
 # Enable this section to enable the cassandra authentication.
authentication-enabled = false
username = cassandra
password = cassandra
```

Go to *<TWCloud installation folder>/AuthServer/conf/authserver.properties*

In the **authserver.properties** file Search for the following lines and remove # and specify the username and password.

authserver.properties

```
#cassandra.username=cassandra
#cassandra.password=cassandra
```

Configuring secure SSL communication between TWCloud and Cassandra

You can set up secure communication between TWCloud and Cassandra. For this, you need to configure **application.conf** (Teamwork Cloud side) and **cassandra.yaml** (Cassandra side) files.

Configuring application.conf

1. Locate and open the **application.conf** file.
2. Search for the following section:

```
# Secure connection with SSL between Cassandra and TWCloud
esi.security {
    cassandra {
        enabled = true
            keystorePath = "<TWCloud installation folder>/configuration/keystore.p12"
            keystoreType = "<keystore_type>"
            keystorePassword = "<keystore_password>"
            truststorePath = "<TWCloud installation folder>/configuration/keystore.p12"
        truststoreType = "<truststore_type>"
        truststorePassword = "<truststore_password>"
    }
}
```

3. Configure the properties, as shown in the example above:
    - **enabled** = *true*
    - **keystorePath** = *<TWCloud installation folder>/configuration/keystore.p12*
    - **keystoreType** = *<keystore_type>*
    - **keystorePassword** = *<keystore_password>*
    - **truststorePath** = *<TWCloud installation folder>/configuration/keystore.p12*
    - **truststoreType** = *<truststore_type>*
    - **truststorePassword** = *<truststore_password>*
4. Save the changes.

Configuring cassandra.yaml

- Locate and open the **cassandra.yaml** file.
- Configure the following properties:
  client_encryption_options:
    - enabled: *true*
    - optional: *false*

      ⚠ If *enabled* and *optional* are set to true, encrypted and unencrypted connections are handled.

    - **keystore**: *<TWCloud installation folder>/configuration/keystore.p12*
    - **keystore_password**: *<keystore_password>*
    - **require_client_auth**: *true*
- If **require_client_auth** is set to *true*, set *truststore* and **truststore_password**:

    - **truststore**: <*TWCloud installation folder*>/configuration/keystore.p12
    - **truststore_password**: <*truststore_password*>
- Use these advanced defaults:
    - **protocol**: *TLS*
    - **algorithm**: *SunX509*
    - **store_type**: *PKCS12*

Related pages

- Configuring TWCloud Admin