Installing the Remote API

Requirements

Technical Requirements

The remote API is supported on Microsoft Windows and UNIX host environments. To install and use the remote API, your environment must include the following components:

Server:
- SAS Drug Development 3.4 or later
- The capability to deploy the remote API over the Web through the HTTPS protocol

Client:
- An operating system that runs Java 1.5.0 or later
- Java 2 Standard Edition Version 1.5 Software Development Kit (SDK) for the Java compiler

Required Documentation

Documentation that you need to install the remote API is included in the SASDrugDevRemoteAPI.zip file. Contact your internal SAS Drug Development project manager to get the location of this file.

As you learn about the remote API, the following additional resource might be helpful:
- the SAS Drug Development Remote API reference, which can be viewed with a Web browser
- example source files and sample programs

Before You Begin

Environment Hosted by SAS

If SAS hosts SAS Drug Development for your organization, confirm with your internal SAS Drug Development project manager that the server component of the remote API has been installed.

Environment Hosted by Customer

If your organization hosts SAS Drug Development, you must install the server component of the remote API before setting up the development environment. Perform these steps to install the server component:

1   Get the following information:
   ❑   the location of the file sas-sdd-p21.ear
   ❑   the URL to the WebLogic console application
   ❑   the WebLogic system administrator user name and password

2   Create a backup copy of the file sas-sdd-p21.ear.

   Note: Do not skip this step.

3   Download the SASDrugDevRemoteApiServer.tar file and copy it to the temporary location where SAS Drug Development is deployed on the Web server.

   To get the location of this downloadable file, contact your internal SAS Drug Development project manager.

4   Extract the SASDrugDevRemoteApiServer.tar file to a folder named `SASDrugDevRemoteApiServer`.

5   Change folders to `SASDrugDevRemoteApiServer`.

6   Submit the following command:

   `sh ./install.sh` *path_to_sas-sdd-p21*`.ear`

   The file path must include the sas-sdd-p21.ear file.

7   Modify the access permissions of the sas-sdd-p21.ear file to match the access permissions of the user ID and group that own the domain and that run the process as follows:

   `rwx rwx --- (770)`

8   Log on to the WebLogic console application.

For Customers Running SDD 3.4

9   From the left pane, select
   sdddomain ▶ Deployments ▶ Applications ▶ sas-sdd-p21.

10   From the right pane, click the **Deploy** tab.

11   From the bottom of the right pane, click **Redeploy Application**.

   A new Web application appears and is named **/sddremote**.

12   Select **sddremote** in the **Deployment Status for Web Application Modules** section.

   Note: If you are reinstalling the remote API over an existing installation, you can skip this step.

13 Click the **Targets** tab, select the check box for the server on which the sas-sdd-p21.ear file is deployed, and then click **Apply**.

Note: If you are reinstalling the remote API over an existing installation, you can skip this step.

14 Click the **Deploy** tab, and then click **Deploy** next to **sddremote**.

Note: If you are reinstalling the remote API over an existing installation, you can skip this step.

15 In the left panel, select `SDD domain > Servers > SDD managed server1`.

16 Select the `Monitoring` tab.

17 Select `Monitor all Active Queues...`

18 Select the `Configuration` tab.

19 Select `Configure a new Execute Queue…`

20 Enter the following information:

Name: `ApiExecuteQueue`

Thread Count: `25`

Select `Create`.

21 Logout of the WebLogic console.

22 Stop and restart the server.
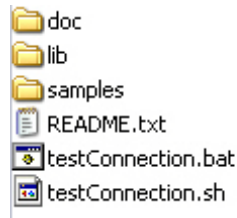
For Customers Running SDD 3.5

9 From the left pane, select **sdddomain ▶ Deployments**

10 Click the Lock & Edit button.

11 In the right pane, mark the checkbox next to sas-sdd-p21

12 In the right pane, click Update

13 In the right pane, click Finish

14 In the left pane, click Activate Changes (note: this will restart the webserver)

15 In the left pane, select **sdddomain ▶ Environment ▶ Servers**

16 In the right pane, select the server to add the API queue to (usually of the form sddserverXX where XX is the server number)

17 Select the Queues tab

18 Click Lock & Edit

19 Click New

20 Enter the following information:

Name: `ApiExecuteQueue`

Select `OK`

21 Click Activate Changes

Install the Remote API

1 Download and extract the SASDrugDevRemoteAPI.zip file.

To obtain the location of this file, contact your internal SAS Drug Development project manager.

Here is an illustration of the extracted files and folders:

```
📁 doc
📁 lib
📁 samples
📄 README.txt
📄 testConnection.bat
📄 testConnection.sh
```

2 At a command prompt, type the following command to verify that the Java compiler is in the executable path:

```
java -version
```

If the Java compiler is not in the executable path, submit one of the following commands:

Microsoft Windows:

```
set PATH=path-to-jdk\bin;%PATH%
```

UNIX:

```
PATH=path-to-jdk/bin:${PATH}
export PATH
```

3 Submit one of the following commands to verify that you have a connection to the SAS Drug Development server:

Microsoft Windows:

```
testConnection.bat
```

UNIX:

```
testConnection.sh
```

These test connection files are included in the files that you extracted from the SASDrugDevRemoteAPI.zip file.

4 When prompted for the SAS Drug Development server URL, your user name, and your password, use the URL https://*your_server*/sddremote, your SAS Drug Development user ID, and your password.

Note: If you are connecting to an instance of SAS Drug Development that is hosted by SAS, and you are connecting from within a firewall and behind proxy servers, you might need to address proxy requirements or restrictions. If HTTPS traffic is proxied, submit the following Java command to set the system properties that enable you to configure the Java run-time environment so that a specified proxy server and port is honored:

```
java -Dhttps.proxyHost=proxy_host_name
-Dhttps.proxyPort=proxy_port_number
```

If you receive a message stating that your connection was not successful, refer to Chapter 5, "Troubleshooting Connection Problems" in the User Reference documentation.