

Merchant API Proxy for Java

Installation Guide to the paysafecard API Proxy

Java, API Proxy

Version 1.1

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1 Introduction

This is a guideline how to install the cash-ticket API Proxy.

2 Requirements for the cash-ticket API Proxy

The API-Server respectively the firewall must be able to make outgoing https connections (Port 443).

A digital certificate (YOUR_KEYRING_FILE.p12) which is required to establish secure (SSLv3) connections (with according password) has to be available. It will be delivered from cash-ticket separately.

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3 Installing the cash-ticket API Proxy

3.1 Windows

Move the directory contained in the file psc_API_proxy.zip to `c:\` and copy the private certificate `YOUR_KEYRING_FILE.p12` which you received from cash-ticket to the directory `/etc`. Now you should have the following directory structure in `"c:\ cash-ticket\"`:

```
c:\cash-ticket\lib\PSCAPI_JSSE.jar  
c:\cash-ticket\lib\PSCAPIProxy.jar  
c:\cash-ticket\etc\paysafecard-CA.p12  
c:\cash-ticket\etc\YOUR_KEYRING_FILE.p12  
c:\cash-ticket\etc\merchant.properties  
c:\cash-ticket\etc\proxy.properties  
c:\cash-ticket\bin\APIProxy.bat (script for manually starting API Proxy)
```

- Do this step if you are using a Http Proxy Server:

Edit `c:\cash-ticket\etc\proxy.properties` and change the following lines to match your http Proxy Server settings and remove, if existing, the leading `"#"` at the beginning of the lines:

```
c:\paysafecard\etc\proxy.properties
```

```
# proxy_host=YOUR_HTTP_PROXY  
# proxy_port=YOUR_HTTP_PROXY_PORT
```

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- Adjust the path to your personal certificate (path with slashes „/“) in `c:\cash-ticket\etc\proxy.properties` and set your password:

```
c:\paysafecard\etc\proxy.properties
```

```
keyringfile=c:/cash-ticket/etc/XXX_<YOUR_MERCHANT_ID>_YYY_ZZZZZZZ.p12  
keyringpw=<YOUR_PASSWORD>  
keyringtype=PKCS12  
  
cakeyringfile=c:/cash-ticket/etc/paysafecard-CA.jks  
cakeyringpw=paysafecard-CA  
cakeyringfile=JKS
```

- Open the file `c:\cash-ticket\bin\APIProxy.bat` with a text editor:
Check if the value `PSPATH=c:\cash-ticket\` matches your local conditions.
The preset path matches the standard path.

```
c:\paysafecard\bin\APIProxy.bat
```

```
REM cash-ticket directory (please verify/correct this) :  
set PSPATH=c:\cash-ticket
```

Check the path to the file `java.exe` and adjust it to fit your local conditions if necessary.

```
c:\paysafecard\bin\APIProxy.bat
```

```
REM path to java.exe (please verify/correct this) :  
set JAVAEXE=C:\Java\jre1.5.0\bin\java.exe
```

- Save and close `APIProxy.bat` and start it (test for API-Proxy).
If no error occurs, it shows a DOS window with a message: „proxy server started on ... on port ...“.

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3.2 Linux

Extract the directory contained in the file psc_API_proxy.zip and create following directory structure (recommended) with the given files:

```
.../cash-ticket/lib/PSCAPI_JSSE.jar  
.../cash-ticket/lib/PSCAPIProxy.jar  
.../cash-ticket/etc/paysafecard-CA.p12  
.../cash-ticket/etc/YOUR_KEYRING_FILE.p12  
.../cash-ticket/etc/merchant.properties  
.../cash-ticket/etc/proxy.properties  
.../cash-ticket/bin/api-proxy_start.sh (script for manually starting API Proxy)
```

- Do this step if you are using a Http Proxy Server:

Edit .../cash-ticket/proxy.properties and change the following lines to match your http Proxy Server settings and remove, if existing, the leading “#” at the beginning of the lines:

```
.../cash-ticket/etc/proxy.properties
```

```
# proxy_host=YOUR_HTTP_PROXY  
# proxy_port=YOUR_HTTP_PROXY_PORT
```

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- Adjust the path of your personal certificate (path with slashes „/“) in .../cash-ticket/proxy.properties and set your password:

```
.../paysafecard/etc/proxy.properties  
  
keyringfile=.../cash-ticket/etc/XXX_<YOUR MERCHANT ID>_YYY_ZZZZZZZZ.p12  
keyringpw=<YOUR PASSWORD>  
keyringtype=PKCS12  
  
cakeyringfile=.../cash-ticket/etc/paysafecard-CA.jks  
cakeyringpw=paysafecard-CA  
cakeyringfile=JKS
```

- Change access rights of the following files to [-r-----] for the user which is executing API-Proxy:

```
.../cash-ticket/etc/proxy.properties  
.../cash-ticket/etc/merchant.properties  
.../cash-ticket/etc/YOUR_KEYRING_FILE.p12  
.../cash-ticket/etc/paysafecard-CA.p12
```

- Open .../cash-ticket/bin/api-proxy_start.sh

Set the following paths to match your local conditions:

```
.../cash-ticket/bin/api-proxy_start.sh  
  
#!/bin/sh  
  
# which java  
JAVA_BIN=/usr/bin/java  
  
# pscpath  
PSC_HOME=/usr/local/cash-ticket  
  
# proxy.properties file  
PROXY_PROP=${PSC_HOME}/etc/proxy.properties  
  
# api-proxy logfile  
PROXY_LOG=${PSC_HOME}/var/log/apiproxy.log
```

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```
# cash-ticket jar files
APIDIR=${PSC_HOME}/lib

# API-proxy
APICLASS=com.psc.merchantapi.APIProxy

nohup \
${JAVA_BIN} -cp ${APIDIR}/PSCAPI_JSSE.JAR:${APIDIR}/PSCAPIPROXY.JAR
-Dcom.psc.merchantapi.LogFile=${PROXY_LOG}
-Dcom.psc.merchantapi.LogLevel=3 ${APICLASS} ${PROXY_PROP}
```

- Call the script `.../cash-ticket/bin/api-proxy_start.sh` (test for API-Proxy).

If no error occurs, it shows a message: „proxy server started on ... on port ...“.

3.3 Changing between Merchant Test System and Productive System

To change from cash-ticket Merchant Test System to cash-ticket Productive System you have to execute the following steps:

- Open the file `“proxy.properties”` and comment all lines with references to the cash-ticket Merchant Test System by inserting the character `„#“` at the beginning of each line and remove this character in those lines with references to the cash-ticket Productive System.
- Restart your API-Proxy.

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Note:

Please keep in mind that the redirects to the payment panel of the cash-ticket system has to be changed too.

Merchant Test System:

<https://customer.test.at.cash-ticket.com/ctcustomer/GetCustomerPanelServlet?mid=...>

Productive System:

<https://customer.cc.at.cash-ticket.com/ctcustomer/GetCustomerPanelServlet?mid=...>

It might also be necessary to change the Reporting Criteria.

3.4 Testing the API-Proxy

Open the HTML-file `probe_enhanced_index.html` on your API-Server in a browser to test the functionality of the API-Proxy

ATTENTION: The file `probe_enhanced_localhost.html` contains path entries to your `merchant.properties` file in the text field “config”.

To test the functionality of the API-Proxy do following Steps:

- Check your Merchant ID (MID) and enter (an unused) Merchant Transaction ID (MTID).
- Create a new disposition with the button `create_disposition(...)` and check the answer of API-Proxy (in the lower part of your browser window):

If everything was successful you get the result „0 0“. Otherwise please check the log file of your API Proxy for further details.

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3.5 API-Proxy Log File

All actions of API-Proxy will be logged.

You can set a logfile with the JAVA runtime switch `-D` and set the value of `com.psc.merchantapi.LogFile` to the path of your logfile. – If no logfile is set all messages are written to `stdout`.

You can adjust the amount of messages shown with the parameter `com.psc.merchantapi.LogLevel`. Loglevel 3 logs the most, Loglevel 1 the least messages.

If you are using Windows please modify `APIProxy.bat`:

```
c:\paysafecard\bin\APIProxy.bat

REM start JRE / API-Proxy :
%JAVAEXE% -cp %PSCPATH%\lib\PSCAPI_JSSE.jar;%PSCPATH%\lib\PSCAPIProxy.jar
-Dcom.psc.merchantapi.LogFile=c:\cash-ticket\log\psc_log.txt
-Dcom.psc.merchantapi.LogLevel=3 com.psc.merchantapi.APIProxy
%PSCPATH%\etc\proxy.properties
```

In case you are using LINUX please change `.../cash-ticket/bin/api-proxy_start.sh`:

```
.../paysafecard/bin/api-proxy_start.sh

...
# api-proxy logfile
PROXY_LOG=${PSC_HOME}/var/log/apiproxy.log
...
nohup \
${JAVA_BIN} -cp ${APIDIR}/PSCAPI_JSSE.JAR:${APIDIR}/PSCAPIPROXY.JAR
-Dcom.psc.merchantapi.LogFile=${PROXY_LOG}
-Dcom.psc.merchantapi.LogLevel=3 ${APICLASS} ${PROXY_PROP}
```

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4 Using the API Proxy with multiple Merchants

It is possible to use the API Proxy for handling transactions for several merchants. This can easily be done by configuring each merchant's certificate settings in the file `proxy.properties` by inserting the Merchant ID (MID) and a "." before the keywords "keyringfile", "keyringpw" and "keyringtype".

Here is a demonstration what the structure would look like for two merchants:

```
/etc/proxy.properties  
<MERCHANT ID 1>.keyringfile=c:/cash-ticket/etc/< FOR 1st MERCHANT'S CERTIFICATE >.p12  
<MERCHANT ID 1>.keyringpw=<PASSWORD FOR 1st MERCHANT'S CERTIFICATE>  
<MERCHANT ID 1>.keyringtype=PKCS12  
  
<MERCHANT ID 2>.keyringfile=c:/cash-ticket/etc/<FOR 2nd MERCHANT'S CERTIFICATE>.p12  
<MERCHANT ID 2>.keyringpw=<PASSWORD FOR 2nd MERCHANT'S CERTIFICATE>  
<MERCHANT ID 2>.keyringtype=PKCS12
```

The API Proxy will decide which certificate to use according to the MID being sent for each transaction.

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5 Troubleshooting

Problem: The example displays the error: can not connect to server, but it should be able to connect to the server.

Solution: Please verify that no firewall interferes with the communication and that all paths are correct.

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