MyCTC

User Guide

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Contact

Trading Certification

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Contents

Revision History

Date	Version	Description	Author
August 2020	1.0	First release of MyCTC User Guide	Trading Certification

1. MyCTC

MyCTC is the certification process automation tool for the EntryPoint and UMDF interfaces for the PUMA Trading System on both segments (Equities and Derivatives).

Through MyCTC, market participants and Independent Software Vendors (ISVs) will be able to test and certify their Order Entry and Market Data applications.

MyCTC has a series of advantages when compared to the manual process, such as:

- Independence for the company to run the certification scripts according to its own schedule, it is not mandatory pre-schedule a session with Tradingcertification;
- Automated log retrieve by MyCTC – it is no longer needed to send log files after the certification process;
- Certification process time reduction;
- Test simulator available to run preliminary tests before the certification process;
- Displays error tag on the screen for EntryPoint occurrences.

2. Certification Scripts available

The certification scripts are mede up with test scenarios of the functionalities available for the PUMA Trading System.

Available scripts:

- EntryPoint (Bovespa and BM&F segments)

3. Automated Certification Process

MyCTC aims to automate the FIX certification for the Order Entry and Market Data interfaces of the B3's trading system. The certification process comprises completing the certification scripts available at:

http://www.b3.com.br/en_us/solutions/platforms/puma-trading-system/for-developers-and-vendors/how-to-certify/certification-scripts/

3.1. Accesing the Tool

3.1.1. Toll Acces Prerequisites

Create a VPN - MyCTC is only available using a VPN with B3, then, prior to accessing the tool, the participant needs to send an e-mail to contratacao@b3.com.br and request the forms below:

1. Certification environment access request form;
2. Agreement form;
3. VPN request form, if needed;
4. Session request form;
5. VPN form printout.

After the participant sends these items, B3:

1. Validates the connection request form;
2. Creates the VPN access;
3. Creates access sessions to the certification environment;
4. Tradingcertification sends an e-mail to the participant with technical information to configure both the VPN and the sessions.

http://www.b3.com.br/en_us/solutions/platforms/puma-trading-system/for-developers-and-vendors/how-to-certify/automated-process-myctc/

Notes
- The deadline for setting up participant's environment does not lie with B3.
- If the participant already have a VPN and sessions, this step is not necessary.

3.1.2. Tool Access Request

Once the prior phase is completed, the participant should download the MyCTC Connection Request Form on B3's website. The form is described below:

1. In the item "PARTICIPANT'S INFORMATION" 1 the participant informs the company name and category;

2. In the item "SOFTWARE INFORMATION" the participant informs the software name, version and manufacturer;

PUMALINK SESSION			
NOME DA SESSÃO/ SESSION NAME		GATEWAY	
NOME DA SESSÃO/ SESSION NAME		GATEWAY	
NOME DA SESSÃO/ SESSION NAME		GATEWAY	
NOME DA SESSÃO/ SESSION NAME		GATEWAY	
NOME DA SESSÃO/ SESSION NAME		GATEWAY	

3. In the item "PUMALINK SESSION" the participant should describe the owned sessions expected to be available in MyCTC. It is important to stress that the tests should only be carried out in MyCTC with the sessions declared above. If there is any session change, a new form must be sent.

TIPO DE CERTIFICAÇÃO/ CERTIFICATION TYPE				
	SEGMENTO/ SEGMENT		INTERFACES DE NEGOCIAÇÃO/ TRADING INTERFACES	
	BOVESPA/ EQUITIES	BM&F/ DERIVATIVES	DMA	MESA/ DESK
ENTRYPOINT	☐	☐	☐	☐
UMDF PUMA 2.0	☐	☐	☐	☐
UMDF CONFLATED	☐	☐	☐	☐
DROPCOPY	☐	☐	☐	☐
SESSÃO SUPERVISORA/ ADMIN SESSION	☐	☐	☐	☐
API LINE 5.0	☐	☐	☐	☐

4. In the item "CERTIFICATION TYPE" the participant informs the certification's type, segment and interface;

DADOS DO USUÁRIO PRIVILEGIADO / PRIVILEGED USER INFORMATION	
APENAS PARA MyCTC/ ONLY FOR MyCTC	
NOME/ NAME	
TELEFONE/ PHONE NUMBER	
E-MAIL	

5. In the item "PRIVILEGED USER INFORMATION" the participant informs the privileged user information who will access the MyCTC;

Formulário de Solicitação de Certificação

Certification Request Form

ROTEIROS DE CERTIFICAÇÃO/ CERTIFICATION SCRIPTS			
ENTRYPOINT			
CENÁRIO/ SCENARIO	PASSO/ STEP	CERTIFICAR/ CERTIFY	OBRIGATÓRIO/ MANDATORY
Limit Orders/ Day	A1	☐	Sim/ Yes
Limit Orders/ GTC	A2	☐	Não/ No
Limit Orders/ IOC	A3	☐	Sim/ Yes
Limit Orders/GTD	A4	☐	Não/ No
Limit Orders/FOK	A5	☐	Não/ No
Market to Limit Orders/Day	B1	☐	Não/ No
Market to Limit Orders/GTC	B2	☐	Não/ No
Market to Limit Orders/IOC	B3	☐	Não/ No
Market to Limit Orders/GTD	B4	☐	Não/ No
Market to Limit Orders/FOK	B5	☐	Não/ No
STOP Limit / DAY	C1	☐	Não/ No
STOP Limit /GTC	C2	☐	Não/ No
STOP Limit / GTD	C3	☐	Não/ No
Cross Orders	D	☐	Não/ No
Minimum Quantity	E	☐	Não/ No
Disclosed Quantity	F	☐	Não/ No
Reserved Instrument	G	☐	Sim/ Yes
Market on Close	H	☐	Não/ No

6. In the item "CERTIFICATION SCRIPTS" the participant marks the scenarios that need to certify;

The participant should fill with their basic information as seen in the images above, and also with the privileged user's information. After filling the form send to tradingcertification@b3.com.br

3.1.3. Acces Confirmation

Once the steps described previously are finished, the user registered in MyCTC will receive a similar e-mail to the one below:
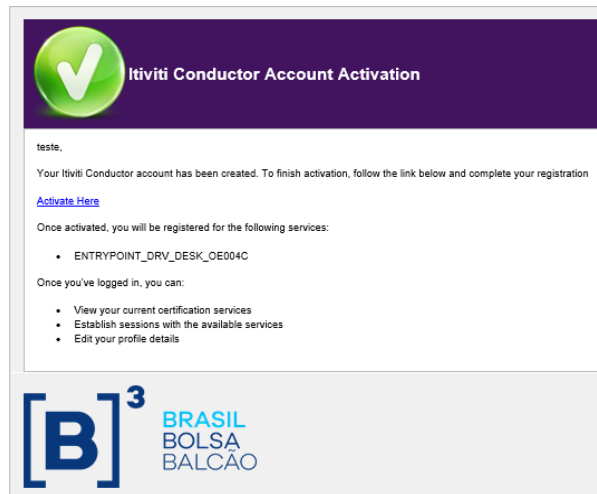
This e-mail contains a link to activate the user's account, services description available for the user, a link to add the MyCTC login page to your favorite browser and the tasks they will be able to perform.

3.1.4. Session Configuration

Sessions used for the automated certification process must connect to an specific IP address and port, different than the ones used on certification environment.

The port thats need to be used depends on the gateway which the session is allocated.

Example:

A session allocated at the Gateway OE004C needs to connect on IP 200.19.60.200 and port 61134.

GATEWAY	SERVICE	IP	PORT
OE003C	ENTRYPOINT_DRV_DESK_OE003C/ENTRYPOINT_DRV_DMA_OE003C	200.19.60.200	61131
OE004C	ENTRYPOINT_DRV_DESK_OE004C/ENTRYPOINT_DRV_DMA_OE004C	200.19.60.200	61134
OE005C	ENTRYPOINT_DRV_DMA_OE005C/ENTRYPOINT_DRV_DESK_OE005C	200.19.60.200	61139
OE006C	ENTRYPOINT_DRV_DMA_OE006C/ENTRYPOINT_DRV_DESK_OE006C	200.19.60.200	61140
OE007C	ENTRYPOINT_DRV_DESK_OE007C/ENTRYPOINT_DRV_DMA_OE007C	200.19.60.200	61121
OE008C	ENTRYPOINT_DRV_DESK_OE008C /ENTRYPOINT_DRV_DMA_OE008C	200.19.60.200	61122
OE009C	ENTRYPOINT_DRV_DESK_OE009C/ENTRYPOINT_DRV_DMA_OE009C	200.19.60.200	61124
OE010C	ENTRYPOINT_DRV_DESK_OE010C/ENTRYPOINT_DRV_DMA_OE010C	200.19.60.200	61125
OE011C	ENTRYPOINT_DRV_DESK_OE011C/ENTRYPOINT_DRV_DMA_OE011C	200.19.60.200	61126
OE012C	ENTRYPOINT_DRV_DESK_OE012C/ENTRYPOINT_DRV_DMA_OE012C	200.19.60.200	61127
OE013C	ENTRYPOINT_DRV_DESK_OE013C/ENTRYPOINT_DRV_DMA_OE013C	200.19.60.200	61128
OE014C	ENTRYPOINT_DRV_DESK_OE014C/ENTRYPOINT_DRV_DMA_OE014C	200.19.60.200	61129
OE101C	ENTRYPOINT_EQT_DMA_OE101C/ENTRYPOINT_EQT_DESK_OE101C	200.19.60.200	61144
OE102C	ENTRYPOINT_EQT_DMA_OE102C/ENTRYPOINT_EQT_DESK_OE102C	200.19.60.200	61137
OE103C	ENTRYPOINT_EQT_DMA_OE103C/ENTRYPOINT_EQT_DESK_OE103C	200.19.60.200	61135
OE104C	ENTRYPOINT_EQT_DMA_OE104C/ENTRYPOINT_EQT_DESK_OE104C	200.19.60.200	61133
OE105C	ENTRYPOINT_EQT_DMA_OE105C/ENTRYPOINT_EQT_DESK_OE105C	200.19.60.200	61132
OE106C	ENTRYPOINT_EQT_DMA_OE106C/ENTRYPOINT_EQT_DESK_OE106C	200.19.60.200	61120
OE107C	ENTRYPOINT_EQT_DMA_OE107C/ENTRYPOINT_EQT_DESK_OE107C	200.19.60.200	61130
OE108C	ENTRYPOINT_EQT_DMA_OE108C /ENTRYPOINT_EQT_DESK_OE108C	200.19.60.200	61138
OE109C	ENTRYPOINT_EQT_DMA_OE109C/ENTRYPOINT_EQT_DESK_OE109C	200.19.60.200	61141
OE110C	ENTRYPOINT_EQT_DMA_OE110C/ENTRYPOINT_EQT_DESK_OE110C	200.19.60.200	61142
OE111C	ENTRYPOINT_EQT_DMA_OE111C/ENTRYPOINT_EQT_DESK_OE111C	200.19.60.200	61143

3.1.5. Tool Access

To access the application use the following URL:

https://myctc.trd.cert.bvmfnet.com.br/

3.2. Password Configuration

3.2.1. Change Password

To change a password:

1. On the client dashboard, under "*Profile and Questionnaire Progress'* tab, click on Edit;
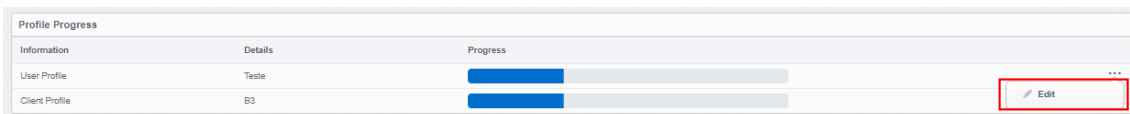
2. Scroll the screen till the end and click "*Change Password'*;
3. Enter the old password, the new one and confirm it;
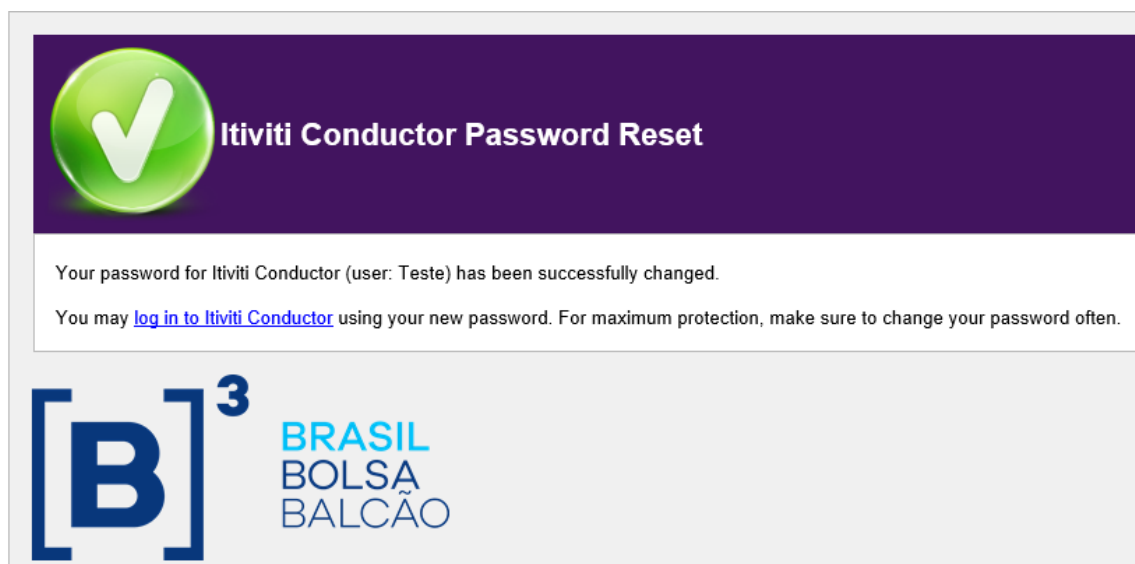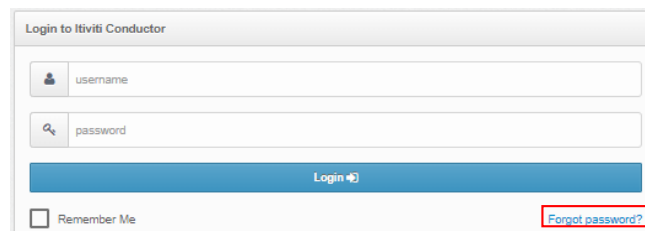
4. Click on "*Change Password'* to save the new password;
5. A notification will be sent to the user's account registered e-mail.

3.2.2. Reset Password

If a password is forgotten, it can be reseted and a new one can be sent to the registered user's account e-mail. To reset the password, follow the steps below:

1. On the login screen, click on "*Forgot Password*";
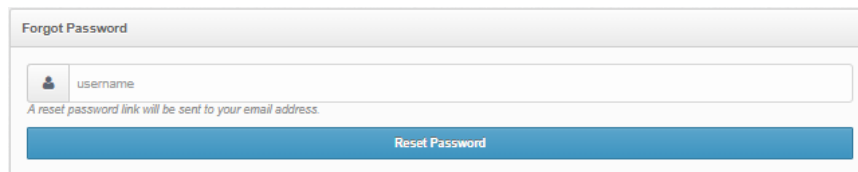
2. Enter the user's name and click on "*Reset Password*";

3. A confirmation message will be displayed. Click on "*Continue*" to return to the user dashboard;
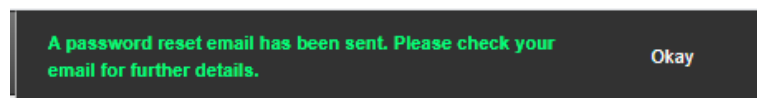
4. A message containing the new password will be sent to the registered user's account e-mail.
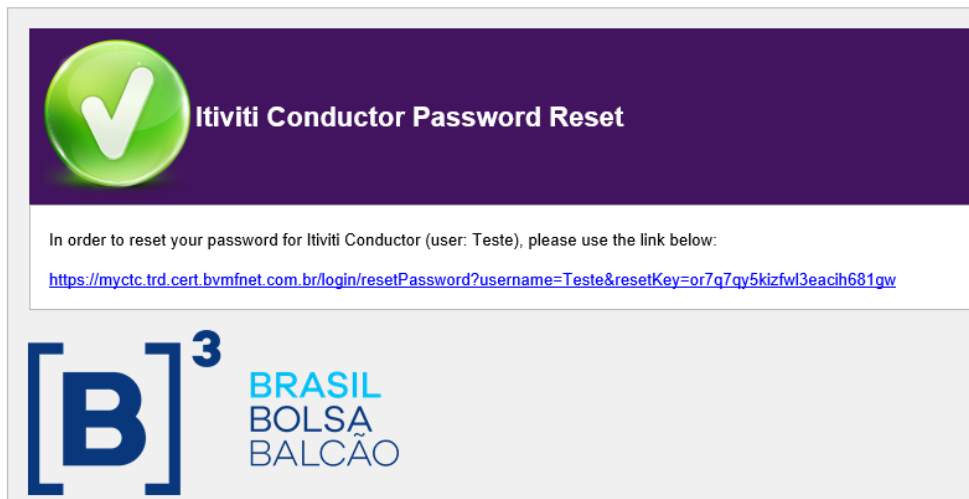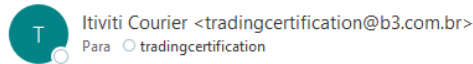
3.3.   Certification Run

To start the certification:

1. On the client dashboard click the "*Begin Certifying*" button next to a service.

2. Click on "*Enter Application Details*" button to inform the application name and version.

3. Click the "*Run Test*" button next to a test case.
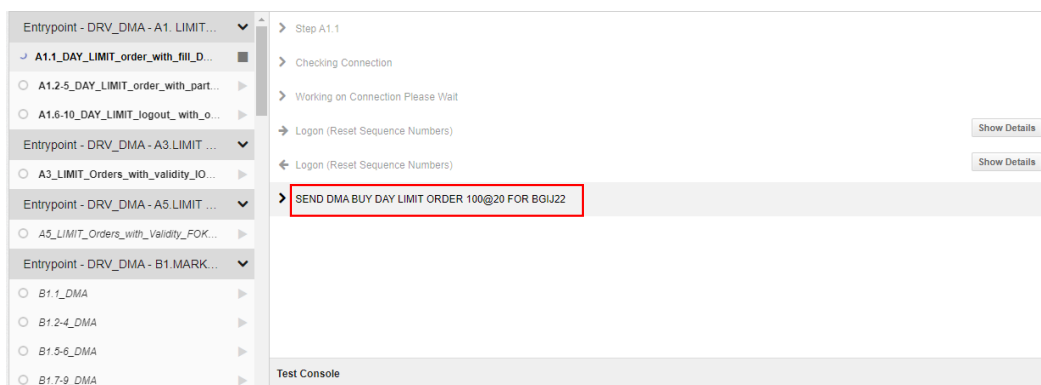
4. Click the *"play"* button next to scenario. The test will start and after the test completes, the test console will display whether the test passed or failed;

In the above instruction (scenario A1.1 of the EntryPoint certification) the system requests the order:

- Type: Limit Order
- TimeInForce: Day
- Side: Buy
- Quantity: 100
- Price: 20
- Symbol: BGIJ22

5. While the test runs, MyCTC will be updated according to the client's activity.

If the order is correct, the system goes to the next instruction or informs that scenario is completed.

If the order is incorrect, the system informs the test failed.

3.3.1. Test Messages Details

The button "*Show Details*" on each message can be activated at any time to display the details of a specific message.

→ New Order 20200729154401996: Buy 100 BGIJ22 @ 20   Show Details

3.3.2. Analyzing failure in the execution of scenarios

If an error occurs during the tests, it will be displayed in details when the showing details button is pressed.

It is possible to compare the sent value for a tag ("Actual" column) with the expected value ("Expected" column).

> Step A1.1		
> Checking Connection		
> Connection Ready		
> SEND DMA BUY DAY LIMIT ORDER 100@20 FOR BGIJ22		
→ Expected value of 'OrderQty' to be equal to '100' but '200' was provided		Showing Details

8=FIX.4.4□9=224□35=D□34=28□49=UATCERT004C□52=20200729-18:47:07.296□56=OE004C□1=999999□11=2...

Test Console

✖ The test failed

Message Expectations ✖

☐ Show All Message Fields

Field	Actual	Expected
BeginString (8)	FIX.4.4	FIX.4.4
BodyLength (9)	224	224
SenderCompID (49)	UATCERT004C	UATCERT004C
TargetCompID (56)	OE004C	OE004C
Account (1)	999999	999999
Symbol (55)	BGIJ22	BGIJ22
OrderQty (38)	200	100
OrdType (40)	2 - Limit	2 - Limit
Price (44)	20	20
Side (54)	1 - Buy	1 - Buy
TimeInForce (59)	0 - Day	0 - Day
CheckSum (10)	158	158

In this scenario the test failed because the system requested a buy order with quantity 100 and the quantity sent was 200.

3.3.3. Line Scenarios (M1 e M2)

For the Line 5.0 scenarios, it is necessary to have access to the LINE portal or an API to attribute limits that will be used on the tests.

*If you do not have acces to the LINE web portal or to the API to configure limits, you can ask an access to Trading Certification team, for more details above LINE system the guide are available at:

http://www.b3.com.br/en_us/solutions/platforms/risk-management/line-5/specification/
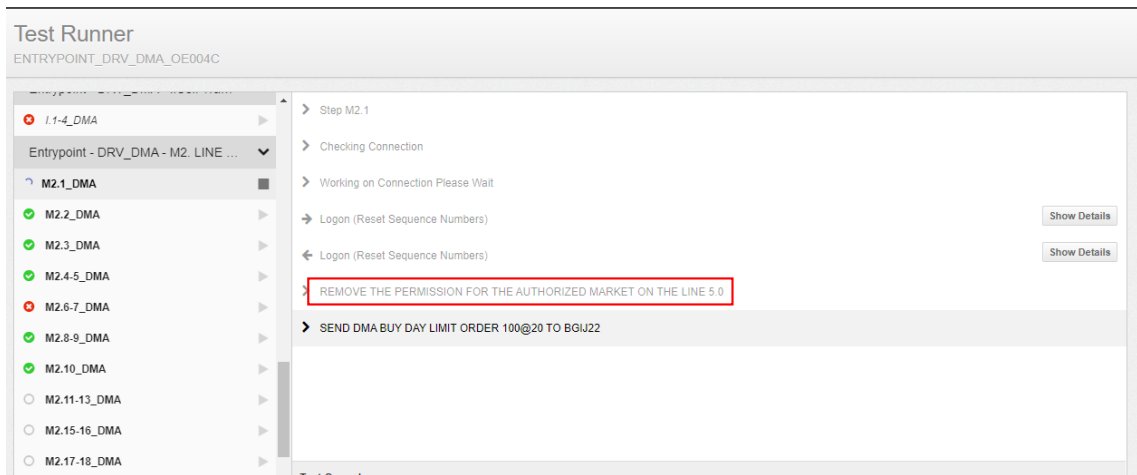
In this example the system requests the user to remove authorized market permissions.

In this example the system requests the user to inform you position on SPCI metrics.

It is possible to take this information on the *"Ranking de consumo"* screen:

In this case the value for this metric is 500.
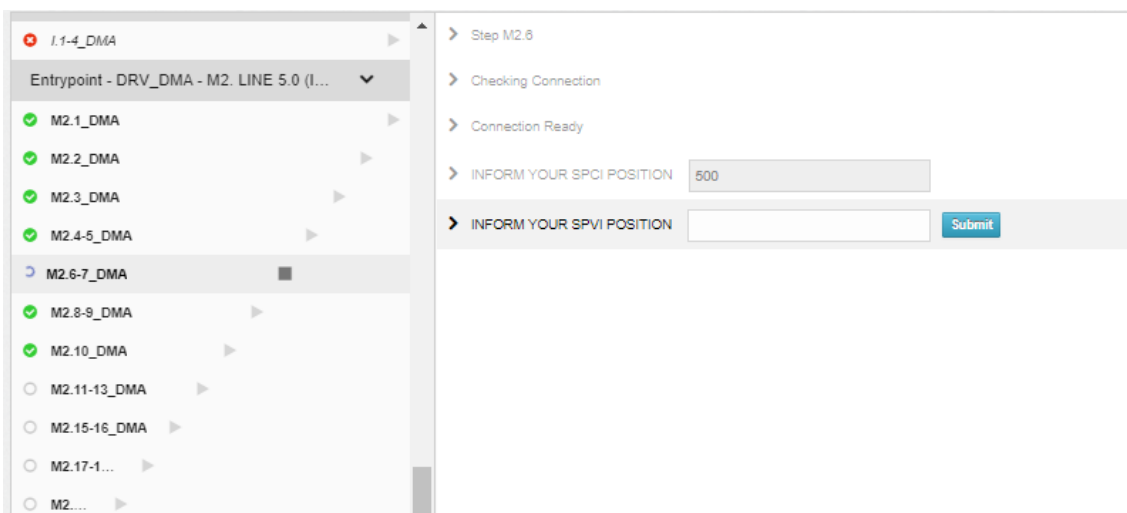
At this time, the system requests the SPVI position.

When the query returns blank, it means that the position is zero.

The system requests to change the SPCI metric limit to 501.
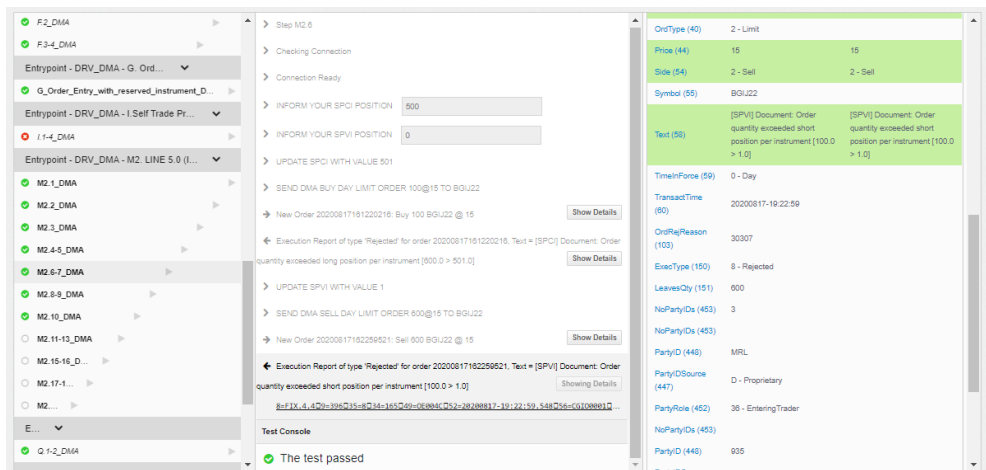
System requests a buy order who will be **rejected** for ultrapass the SPCI metric.

After this order, the system requests to change the SPVI metric to 1 and requests a sell order which will be rejected by SPVI metric.

3.4. Completing the Certification

Once the mandatory scenarios are completed, the option "complete certification" will be enabled.
To complete the certification, click on *"Complete Certification"* button, If you also want to execute the non mandatory scenarios during this process, click on *"Continue Certifying"* button.

3.4.1. Finish the Certification

- The client will no longer be able to run tests; their certification will be blocked.
- A message is sent by e-mail to the administrator (Trading Certification) and to the client, reporting that the client has completed the certification successfully.


Once the certification process is completed, it is possible to download the report.
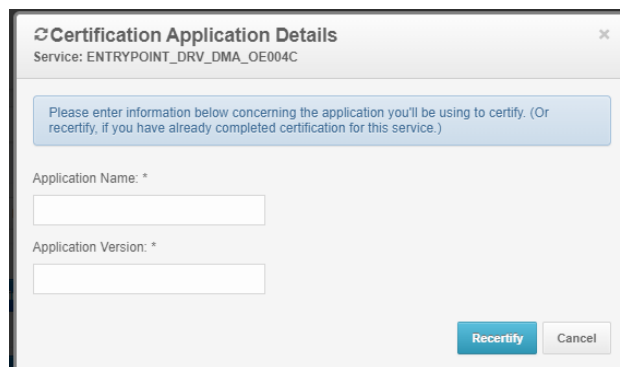
3.5. Recertification

If a client wants to do new optional tests after to complete the certification process, they will need to go throught the recertification process. The same process should be executed to certify a new application.

*NOTE.: by recertifying, the progress of all the tests will be reseted to 0%, including the required ones.

On the client dashboard, after a certification is completed, a Recertify button option will be presented. The progress of existing certifications **will be deleted** allowing the user to start a certification from the beginning.
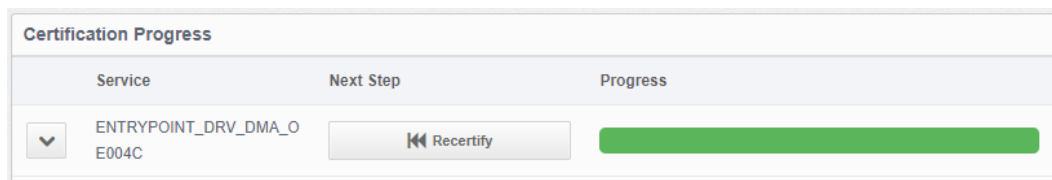
When a client choose to recertify, the user needs to inform again the application name and version:

It is possible to see a certification history by clicking on the button just in the left of the service name, as shown in the picture below.
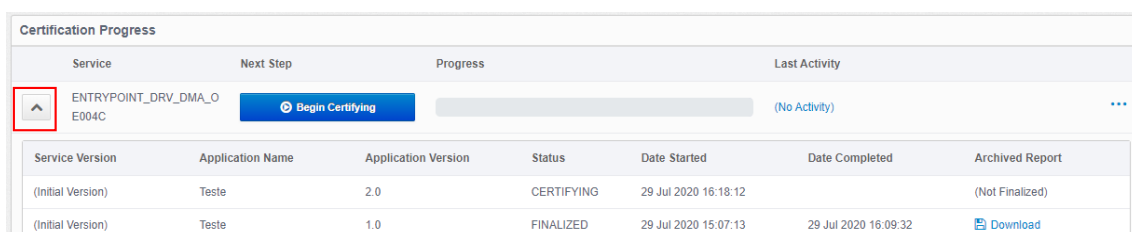
3.6. Sandbox Mode

Any certification test can be run in "Sandbox Mode" starting from the user's page. By running certification tests in this mode, neither failed nor successful tests are registered. **Sandbox mode allows the clients to run the tests without changing their existing certification progresses**. That is helpful in cases where the client has finished the routines or systems which are expected to be tested but whose versions are not ready for production yet. (So, on this mode all tests will not be treated for the certification process).