Japannext **JNX**

Market Access Control User Manual

Version 2.4 Updated April 22, 2020

Japannext Co., Ltd. believes that the information in this publication is accurate as of its publication date.

This document may include typographical errors, omissions or technical inaccuracies. Japannext Co., Ltd. reserves the right to revise the document and to make changes without notice. Japannext Co., Ltd. acknowledges the proprietary rights in the trademarks and product names of other companies mentioned in this document.

Contents

1.	Intro	oduction3				
2.	Ove	rview3				
3.	Serv	ice C	onfiguration3			
4.	Web	o Base	ed Interface4			
4.	.1.	Grou	ups5			
	4.1.	1.	Activate/Suspend groups5			
4.	.2.	All s	essions6			
4.	.3.	Indiv	vidual sessions			
	4.3.	1.	Activate/Suspend session			
	4.3.2	2.	Cancel orders			
5.	Prog	gramr	mable API9			
5.	.1.	Sess	ion status9			
5.	.2.	Susp	pend all sessions9			
5.	.3.	Susp	pend individual session			
5.	.4.	Activ	vate individual session			
5.	.5.	Susp	pend group			
5.	.6.	Activ	vate group11			
5.	.7.	Cano	cel Orders			
Revi	ision	Histo	ry12			

1. Introduction

This document explains access to the Market Access Control (MAC) service of Japannext PTS. It describes the service's configuration and specifies the external programmable interface. For further information and inquiries regarding MAC service, please contact Japannext PTS Technical Support via email to ito@japannext.co.jp.

2. Overview

The purpose of MAC service is to allow users to suspend trading activity on their order entry ports in emergency situations. Upon suspension, all open orders will be automatically cancelled and the trading system will start to reject new orders. Access to the service is only available via Japannext PTS private network. Users can choose between a web-based interface or programmable API.

3. Service Configuration

On request, a specific instance of MAC will be created for each individual client of the service. The full list of order entry ports covered by the MAC instance must be specified in the request. Japannext PTS will provide a unique URL, which must be used to access the service.

4. Web Based Interface

The simplest way to use MAC is to access its web-based interface. To do so, please open the URL provided by Japannext PTS in your web browser.

Japannext Market Access Control			
PLEASE READ IMPORTANT	RISK WARNING BELOW		
You are going to use Market Access Co Upon trader account suspension all of i accepted until further account re-activa	ntrol service which allows you to mana; ts open orders will be automatically elin tion.	ge status of the trader accounts ninated by the exchange. No mor	belonging to your firm. re orders will be
Japannext assumes no obligation or res Please check the box below, for accepti	sponsibility whatsoever for any damage ing the terms and conditions.	es resulting from the use of Marke	et Access Control service.
I understand all the risks and accept	the terms and conditions stated above	2.	
Market Access Control for: Japanne	kt Co., Ltd. (11226)		
Groups:			
GROUP	STATUS		SET_STATE
JNXA	active		O Suspend
JNXB	active		O Suspend
JNXC	active		O Suspend
Suspend all displayed sessions: 🧕	Suspend All Sessions		
SESSION	STATUS	LOGON_STATE	SET_STATE
QJNXt1	active	loggedOffBySelf	Suspend O Cancel Orders
QJNXt2	active	loggedOffBySelf	Suspend O Cancel Orders
QJNXt3	active	loggedOffBySelf	Suspend O Cancel Orders
QJNXtA	active	loggedOffBySelf	Suspend Orders
QJNXtB	active	loggedOffBySelf	Suspend O Cancel Orders
QJNXtC	active	loggedOffBySelf	🕲 Suspend 🕲 Cancel Orders
QJNXtD	active	loggedOffBySelf	Suspend Ocancel Orders
QJNXtE	active	loggedOffBySelf	Suspend Orders
QJNXtM	active	loggedOffBySelf	Suspend Orders
QJNXtN	active	loggedOffBySelf	Suspend Orders
TD11226A	active	loggedOffBySelf	🕲 Suspend 🕲 Cancel Orders
TD11226E	active	loggedOffBySelf	Suspend O Cancel Orders
TD11226F	active	loggedOffBySelf	Suspend O Cancel Orders
TD11226G	active	loggedOffBySelf	Suspend Orders
© 2013-2020 Japannext Co., Ltd. All Rights Reserved.			

Figure 1

Figure 1 shows the MAC web interface. The interface has two sections: Groups and Individual sessions. Every action requires doing the following steps:

- 1. Tick legal notice acceptance check box (Figure 2)
- 2. Click the desired action button
- 3. Confirm the action in the confirmation dialog box. "OK" to proceed with the action, "Cancel" to cancel the action

I understand all the risks and accept the terms and conditions stated above.

Figure 2

Upon a successful action, you will receive an "OK" confirmation message as shown in Figure 3



4.1. Groups

This section describes the actions available as a group (Figure 4)

Groups:			
GROUP	STATUS	SET_STATE	
JNXA	intermediate	🕘 Suspend	
JNXB	active	Suspend	
JNXC	suspended	O Activate	

Figure 4

There are three possible values in the **STATUS** column:

- Active: All sessions subscribed to this group are active
- Suspended: All sessions subscribed to this group are suspended
- Intermediate: Some sessions subscribed to this group are active, and some are suspended

4.1.1. Activate/Suspend groups

When clicking on the "Activate" or "Suspend" button in the groups section, **ALL the sessions subscribed to the respective group will change their status to the one on the selected button**. Refer to Figure 5 and Figure 6 for the before and after of test group JNXA as an example.

Market Access Control for: Japannext Co., Ltd. (11226)				
Groups:				
GROUP	STATUS		SET_STATE	
JNXA	active		O Suspend	
JNXB	active		O Suspend	
JNXC	active		O Suspend	
Suspend all displayed session	ns: 🝈 Suspend All Sessions			
SESSION	STATUS	LOGON_STATE	SET_STATE	
QJNXt1	active	loggedOffBySelf	O Suspend O Cancel Orders	
QJNXt2	active	loggedOffBySelf	O Suspend O Cancel Orders	
QJNXt3	active	loggedOffBySelf	O Suspend O Cancel Orders	
QJNXtA	active	loggedOffBySelf	(Suspend (Cancel Orders	
QJNXtB	active	loggedOffBySelf	🕘 Suspend 🕘 Cancel Orders	
QJNXtC	active	loggedOffBySelf	O Suspend O Cancel Orders	
QJNXtD	active	loggedOffBySelf	O Suspend O Cancel Orders	
QJNXtE	active	loggedOffBySelf	O Suspend O Cancel Orders	
QJNXtM	active	loggedOffBySelf	O Suspend O Cancel Orders	
QJNXtN	active	loggedOffBySelf	O Suspend O Cancel Orders	
TD11226A	active	loggedOffBySelf	🕘 Suspend 🕘 Cancel Orders	
TD11226E	active	loggedOffBySelf	O Suspend O Cancel Orders	
TD11226F	active	loggedOffBySelf	🕘 Suspend 🕘 Cancel Orders	
TD11226G	active	loggedOffBySelf	🕘 Suspend 🕘 Cancel Orders	

Figure 5

Groups.			
GROUP	STATUS		SET_STATE
JNXA	suspended		O Activate
JNXB	active		🕘 Suspend
JNXC	active		🕘 Suspend
Suspend all displayed session	ns: 🕑 Suspend All Sessions		
SESSION	STATUS	LOGON_STATE	SET_STATE
QJNXt1	suspended	loggedOffBySelf	📀 Activate 🔞 Cancel Orders
QJNXt2	suspended	loggedOffBySelf	📀 Activate 🔞 Cancel Orders
QJNXt3	suspended	loggedOffBySelf	📀 Activate 🔘 Cancel Orders
QJNXtA	active	loggedOffBySelf	🕘 Suspend 🕘 Cancel Orders
QJNXtB	active	loggedOffBySelf	O Suspend O Cancel Orders
QJNXtC	active	loggedOffBySelf	O Suspend O Cancel Orders
QJNXtD	active	loggedOffBySelf	O Suspend O Cancel Orders
QJNXtE	active	loggedOffBySelf	O Suspend O Cancel Orders
QJNXtM	active	loggedOffBySelf	🙆 Suspend 🕘 Cancel Orders
QJNXtN	active	loggedOffBySelf	🙆 Suspend 🕘 Cancel Orders
TD11226A	suspended	loggedOffBySelf	💿 Activate 🔞 Cancel Orders
TD11226E	active	loggedOffBySelf	🕲 Suspend 🕲 Cancel Orders
TD11226F	active	loggedOffBySelf	🙆 Suspend 🕘 Cancel Orders
TD11226G	active	loggedOffBySelf	🕘 Suspend 🕘 Cancel Orders

Figure 6

4.2. All sessions

The only action available to apply to all sessions is "Suspend All Sessions" (Figure 7). Note that there is no "Activate All Sessions" feature, suspended sessions can only be activated by group or on an individual session basis.

Suspend all displayed sessions: (0) Suspend All Sessions

Figure 7

Note that when you use this 'Suspend All Sessions" functionality, the system will try to suspend the sessions listed one-by-one. If there is a session that is already suspended, the message "Error: Transaction Failed" for that particular session will be displayed.

In the following example, Figure 8 shows the state before suspending all sessions. Figure 9 and Figure 10 show the action confirmation for session states, and the subsequent status screen after clicking the "Suspend All Sessions" button respectively.

Japannext **JNX**

Groups:			
GROUP	STATUS	SET_STATE	
JNXA	intermediate	(Suspend	
JNXB	active	(Suspend	
JNXC	active	Suspend	

Suspend all displayed sessions: O Suspend All Sessions

SESSION	STATUS	LOGON_STATE	SET_STATE
QJNXt1	active	loggedOffBySelf	(6) Suspend (6) Cancel Orders
QJNXt2	suspended	loggedOffBySelf	💿 Activate 🔞 Cancel Orders
QJNXt3	suspended	loggedOffBySelf	📀 Activate 🚳 Cancel Orders
QJNXtA	active	loggedOffBySelf	Suspend Orders
QJNXtB	active	loggedOffBySelf	Suspend Cancel Orders
QJNXtC	active	loggedOffBySelf	6 Suspend 6 Cancel Orders
QJNXtD	active	loggedOffBySelf	6 Suspend 6 Cancel Orders
QJNXtE	active	loggedOffBySelf	Suspend Orders
QJNXKM	active	loggedOffBySelf	Suspend Orders
QJNXtN	active	loggedOffBySelf	Suspend Cancel Orders
TD11226A	active	loggedOffBySelf	6 Suspend 6 Cancel Orders
TD11226E	active	loggedOffBySelf	Suspend Cancel Orders
TD11226F	active	loggedOffBySelf	Suspend Cancel Orders
TD11226G	active	loggedOffBySelf	Suspend Cancel Orders

Figure 8

Success: Transaction OK :: (firmId=11226,sessionId=TD11226A,status=S)
Success: Transaction OK :: (firmId=11226,sessionId=QJNXt1,status=S)
Error: Transaction failed :: (firmId=11226,sessionId=QJNXt2,status=S)
Error: Transaction failed :: (firmId=11226,sessionId=QJNXt3,status=S)
Success: Transaction OK :: (firmId=11226,sessionId=QJNXtA,status=S)
Success: Transaction OK :: (firmId=11226,sessionId=QJNXtB,status=S)
Success: Transaction OK :: (firmId=11226,sessionId=QJNXtC,status=S)
Success: Transaction OK :: (firmId=11226,sessionId=QJNXtD,status=S)
Success: Transaction OK :: (firmId=11226,sessionId=QJNXtE,status=S)
Success: Transaction OK :: (firmId=11226,sessionId=TD11226E,status=S)
Success: Transaction OK :: (firmId=11226,sessionId=TD11226F,status=S)
Success: Transaction OK :: (firmId=11226,sessionId=TD11226G,status=S)
Success: Transaction OK :: (firmId=11226,sessionId=QJNXtM,status=S)
Success: Transaction OK :: (firmId=11226,sessionId=QJNXtN,status=S)

Figure 9

Japannext **JNX**

Groups:			
GROUP	STATUS		SET_STATE
JNXA	suspended		📀 Activate
JNXB	suspended		C Activate
JNXC	suspended		O Activate
Suspend all displayed sessions: 🕓 Sus	pend All Sessions		
SESSION	STATUS	LOGON_STATE	SET_STATE
QJNXt1	suspended	loggedOffBySelf	📀 Activate 🕘 Cancel Orders
QJNXt2	suspended	loggedOffBySelf	Cancel Orders
QJNXt3	suspended	loggedOffBySelf	Cancel Orders
QJNXtA	suspended	loggedOffBySelf	Activate Ocancel Orders
QJNXtB	suspended	loggedOffBySelf	Activate Ocancel Orders
QJNXtC	suspended	loggedOffBySelf	📀 Activate 🕘 Cancel Orders
QJNXtD	suspended	loggedOffBySelf	Activate Ocancel Orders
QJNXtE	suspended	loggedOffBySelf	Activate Ocancel Orders
QJNXtM	suspended	loggedOffBySelf	📀 Activate 🕘 Cancel Orders
QJNXtN	suspended	loggedOffBySelf	📀 Activate 🕘 Cancel Orders
TD11226A	suspended	loggedOffBySelf	Activate Ocancel Orders
TD11226E	suspended	loggedOffBySelf	Activate Ocancel Orders
TD11226F	suspended	loggedOffBySelf	Activate Ocancel Orders
TD11226G	suspended	loggedOffBySelf	📀 Activate 🕘 Cancel Orders

Figure 10

4.3. Individual sessions

Individual sessions have two different actions available:

- Set state (Activate/Suspend)
- Cancel orders

4.3.1. Activate/Suspend session

To set the state of an individual session, click the "Activate" or "Suspend" button. Upon a successful request, an "OK" message will be displayed, as shown in Figure 3.

4.3.2. Cancel orders

This action will cancel all open orders for the selected session without suspending the session. Note that if there are no open orders, a "Transaction Failed" message will be displayed (Figure 11). This action is only available for active sessions.



Figure 11

IMPORTANT NOTE

ONLY SESSIONS WITH "CANCEL ON DISCONNECT" FUNCTIONALITY ENABLED CAN TRIGGER THE MASS ORDER CANCELLATION WHEN THE SESSION IS SET TO "SUSPENDED'.

ORDERS ENTERED VIA SESSIONS WITHOUT "CANCEL ON DISCONNECT' FUNCTIONALITY ENABLED WILL NOT BE CANCELLED WHEN THE "SUSPEND ALL SESSIONS" FEATURE IS ACTIVATED

CONTACT JAPANNEXT PTS FOR SUPPORT RELATING TO THE "CANCEL ON DISCONNECT" FUNCTION.

5. Programmable API

The primary MAC functionality can also be used via API.

A HTTP/1.1 POST request is sent to the MAC service (e.g. via the curl command) with the variable "mode" set to "api" and other optional parameters.

The reply will be in JSON format. An empty value returned indicates that the MAC service is not currently available. Examples of use cases of the available commands are as follows:

5.1. Session status

To query the status of all configured sessions simply send an empty request to the service:

```
curl -X POST -k -d "mode=api" http://X.X.X.X/
```

Sample reply:

```
[{"session": "QJNXn1", "status": "active"},
{"session": "QJNXn2", "status": "active"},
{"session": "QJNXn3", "status": "active"},
{"session": "QJNXn4", "status": "active"},
{"session": "TN11226A", "status": "active"},
{"session": "TN11226B", "status": "active"},
{"group": "JNXA", "status": "active"},
{"group": "JNXB", "status": "active"},
{"group": "JNXB", "status": "active"}]
```

5.2. Suspend all sessions

\$ curl -X POST -k -d "suspend all=S&mode=api" http://X.X.X/

Sample reply:

```
[{"session": "QJNXn1", "status": "suspended"},
{"session": "QJNXn2", "status": "suspended"},
{"session": "QJNXn3", "status": "suspended"},
```

```
{"session": "QJNXn4", "status": "suspended"},
{"session": "TN11226A", "status": "suspended"},
{"session": "TN11226B", "status": "suspended"},
{"group": "JNXA", "status": "suspended"},
{"group": "JNXB", "status": "suspended"}]
```

5.3. Suspend individual session

To suspend an individual session, add the "set_state=S" and "session_id=<session-name>" parameters to the request:

\$ curl -X POST -k -d "set state=S&session id=QJNXn1&mode=api" http://X.X.X.X/

Sample reply:

```
[{"session": "QJNXn1", "status": "suspended"},
{"session": "QJNXn2", "status": "active"},
{"session": "QJNXn3", "status": "active"},
{"session": "QJNXn4", "status": "active"},
{"session": "TN11226A", "status": "active"},
{"session": "TN11226B", "status": "active"},
{"group": "JNXA", "status": "intermediate"},
{"group": "JNXB", "status": "active"},
{"group": "JNXC", "status": "active"}]
```

5.4. Activate individual session

To activate an individual session, add the "set_state=A" and "session_id=<session-name>" parameters to the request:

\$ curl -X POST -k -d "set_state=A&session_id=QJNXn4&mode=api" http://X.X.X.X/

Sample reply:

```
[{"session": "QJNXn1", "status": "suspended"},
{"session": "QJNXn2", "status": "suspended"},
{"session": "QJNXn3", "status": "suspended"},
{"session": "QJNXn4", "status": "active"},
{"session": "TN11226A", "status": "suspended"},
{"session": "TN11226B", "status": "suspended"},
{"group": "JNXA", "status": "suspended"},
{"group": "JNXB", "status": "suspended"},
{"group": "JNXB", "status": "suspended"},
```

5.5. Suspend group

To suspend all sessions in a group, add the "set_groupstate=S" and "group=<group-name>" parameters to the request:

\$ curl -X POST -k -d "set_groupstate=S&group=JNXB&mode=api" http://X.X.X.X/

Sample reply:

```
[{"session": "QJNXn1", "status": "suspended"},
{"session": "QJNXn2", "status": "suspended"},
{"session": "QJNXn3", "status": "suspended"},
{"session": "QJNXn4", "status": "active"},
{"session": "TN11226A", "status": "suspended"},
{"session": "TN11226B", "status": "active"},
{"group": "JNXA", "status": "suspended"},
{"group": "JNXB", "status": "suspended"},
{"group": "JNXB", "status": "suspended"},
```

5.6. Activate group

To re-activate all sessions in a group, add the "set_groupstate=S" and "group=<group-name>" parameters to the request:

\$ curl -X POST -k -d "set groupstate=A&group=JNXC&mode=api" http://X.X.X.X/

Sample reply:

```
[{"session": "QJNXn1", "status": "suspended"},
{"session": "QJNXn2", "status": "suspended"},
{"session": "QJNXn3", "status": "suspended"},
{"session": "QJNXn4", "status": "active"},
{"session": "TN11226A", "status": "suspended"},
{"session": "TN11226B", "status": "active"},
{"group": "JNXA", "status": "suspended"},
{"group": "JNXB", "status": "suspended"},
{"group": "JNXE", "status": "suspended"},
```

5.7. Cancel Orders

All open orders for a session will be canceled. Note that "0" is returned when there are no orders available to cancel.

\$ curl -X POST -k -d "cxl_session_orders=X&session_id=QJNXn4&mode=api"
http://X.X.X.X

Sample reply (success):
[result: 1]

Sample reply (No open orders/fail): [result: 0]

Revision History

Date	Version	Description		
2013-02-15	1.0	Initial revision		
2013-02-25	1.1	Update purpose section		
		Added activate screen case		
2014-01-09	1.2	Added API mode section		
2014-08-11	2.0	Changed service name to Market Access Control		
2014-10-22	2.1	Added group suspend and activate feature to GUI and API		
2018-02-01	2.2	Added Cancel Orders options in GUI and API		
2020-04-01	2.3	Change company name		
2020-04-22	2.4	Add additional GUI screenshots		
		Add caption to all images		
		Re-organize GUI samples		