

## Event Notification Function

Document created on: October 17, 2002

### 1. Overview

This document describes the specification of event notification function of the following:

- Event notification from QSS to Client (supported models: QSS-29, 30, 31, 32, 33, 34) △2
- Event notification from QSS to QSS-Kids (supported models: QSS-32, 33, 34, 3102-2) △1, △2

### 2. Functions

- Notifies Client of the following events in real time.
  - 1) Order status notification: Notifies that the status of order has been updated.
  - 2) Error/attention notification: Notifies error/attention messages encountered on QSS.
  - 3) Setting change notification: Notifies QSS-Kids of the changed settings of QSS.  
(Supported models: QSS-32, 33, 34, 3102-2) △1 △2
- Client can select the types of events it receives.

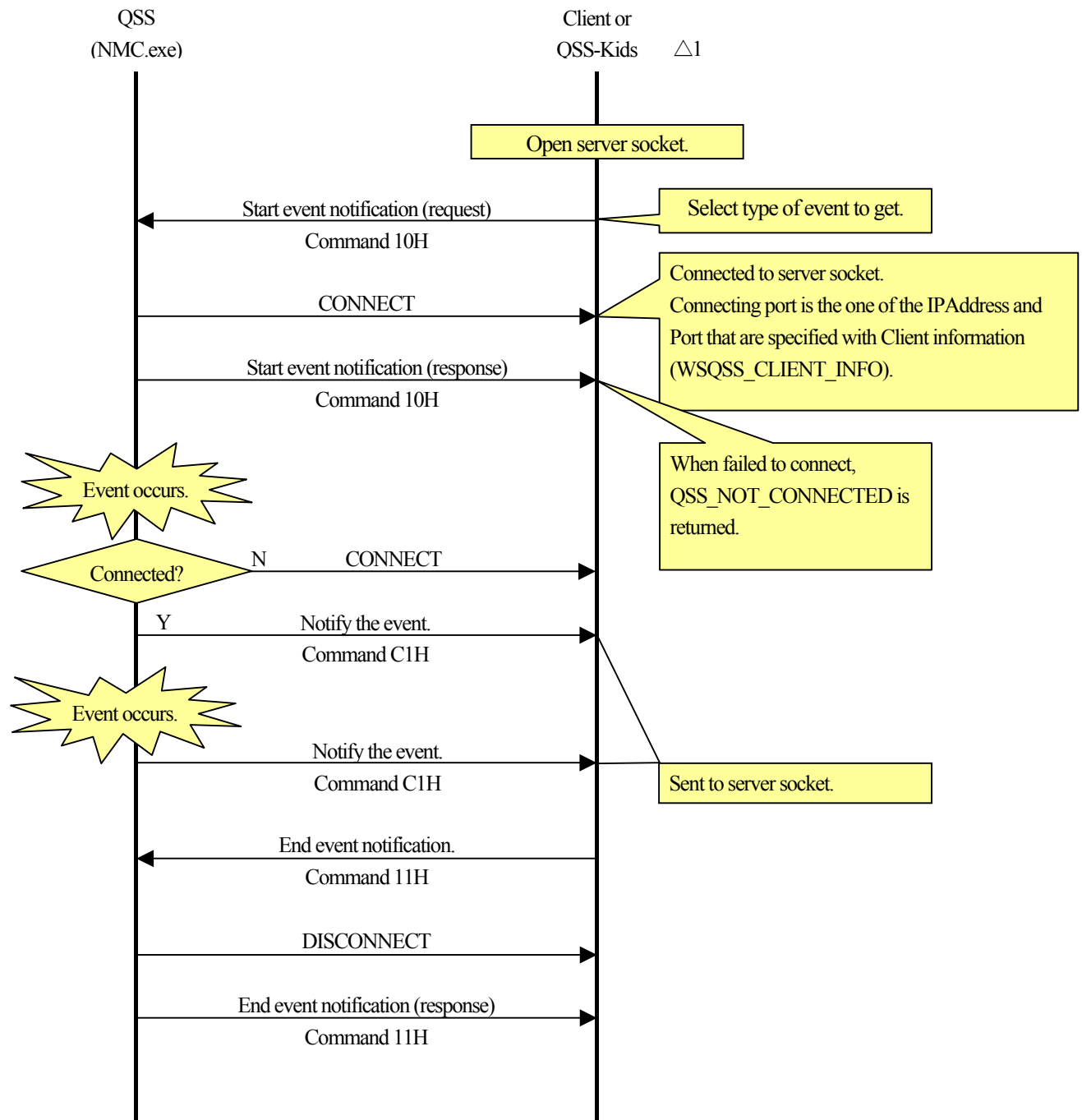
NOTE: It is not notified to Client that the error/attention messages once encountered are resolved. Whether it is resolved or not can be confirmed with QssGetErrorAPI.

### 3. Procedures for Client to be notified of event

To initiate event notification, Client is to issue Command **10H** (TCP/IP).

To stop event notification, Client is to issue Command **11H** (TCP/IP).

Workflow:



NOTE:

- Client has to leave the server socket open continuously.; otherwise, it is unable to receive event notification.
- QSS disconnects the connection with Client when 30 seconds have elapsed since it sent the last even notification.
- In case QSS is restarted, it is required to re-issue Command 10H after the QSS is started.

## 4. Command Reference

### 4.1. Command ID: 10H (Start event notification)

**Purpose:**

Start event notification.

**Send/Receive ID: 00H** (Request)

Data division:

Client information	Event type
← 96 →	← 4 →

Client information:

Refer to WSQSS\_CLIENT\_INFO structure.

Event type:

(unsigned short)

Define the event type. You may define either or both of the following:

NOTIFY\_ORDER: Order status notification

NOTIFY\_ALERT: Error/attention notification

NOTIFY\_CHANGE\_SETUP: Setting change notification (Supported models: QSS-32, 33) △1

**Send/Receive ID: 10H** (Response)

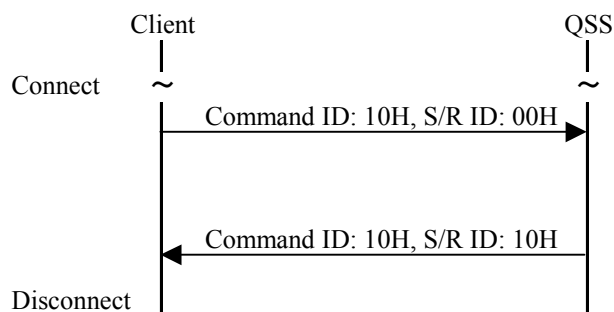
Data division:

Result
← 32 △2 →

Result:

Refer to WSQSS\_RESULT structure.

**Communication Sequence:**



### 4.2. Command ID: 11H (End event notification)

**Purpose:**

End event notification.

**Send/Receive ID: 00H** (Request)

Data division:

Client information
← 96 →

Client information:  
Refer to WSQSS\_CLIENT\_INFO structure.

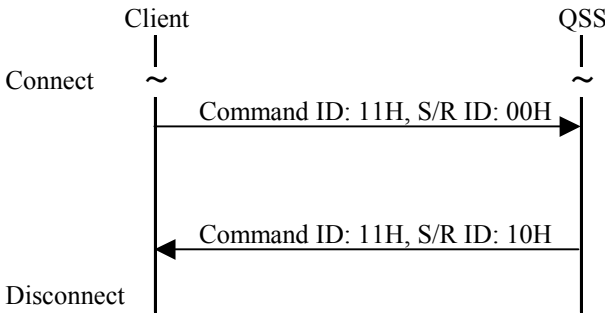
**Send/Receive ID: 10H** (Response)

Data division:

Result
← 32 $\Delta$ 2 →

Result:  
Refer to WSQSS\_RESULT structure.

**Communication Sequence:**



**4.3. Command ID: C1H (Event notification)**

**Purpose:**  
Notify event.

**Send/Receive ID: 02H** (Notify)

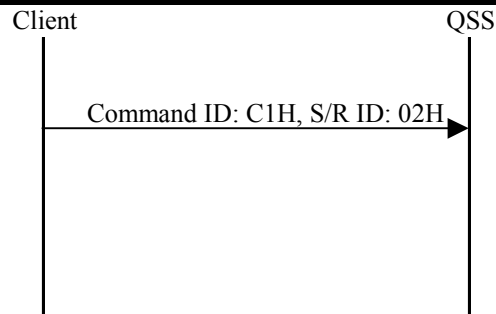
Data division:

Printer information	Event information
← 96 →	← 292 →

Printer information:  
Refer to WSQSS\_PRINTER\_INFO structure.

Event information:  
Refer to QSS\_EVENT structure.

**Communication Sequence:**



#### 4.4. WSQSS\_PRINTER\_INFO structure

```

typedef struct _WSQSS_PRINTER_INFO {
    char                Name[20];
    unsigned long       Version;
    unsigned char       IPAddress[4];
    unsigned short      SystemInfo;           △2
    unsigned char       Reserve[34];         △2
} WSQSS_PRINTER_INFO;
  
```

##### Member:

###### Name

Defines QSS model name.

The string should be NULL terminated.

###### Version

Defines version of NetOrder API.

Version number is described in hex.

e.g. When QSS network service is of version 1.2.3, 0x01020300 is set.

###### IPAddress

Define the IP address of QSS.

###### SystemInfo

Define the running status of QSS. △2

QSS\_SYSTEM\_INFO\_QSS(0): Running as QSS

QSS\_SYSTEM\_INFO\_DDP(2): Running as dDP

(Supported models: QSS-32, 33, 34, 3102-2)

###### Reserve

Unused

#### 4.5. WSQSS\_EVENT structure

```

typedef struct _WSQSS_EVENT {
    unsigned short      EventNo;
    DWORD               Param1;
    DWORD               Param2;
    wchar_t             Message[256];
    unsigned short      Reserve1;
    unsigned __int64    RefId;
    unsigned char       Reserve[16];
} WSQSS_EVENT;
  
```

##### Member:

###### EventNo

Defines event number.

Value	Description
QSS_EVENT_ORDER_PRINT (1)	Print start notification Notifies that the printing has started.
QSS_EVENT_ORDER_COMPLETE (2)	Print complete notification Notifies that the printing has been completed.
QSS_EVENT_ORDER_CANCEL (4)	Order cancel notification Notifies that the order has been deleted, or that the order has been canceled. △2
QSS_EVENT_ALERT (7)	Error/attention notification Notifies that error/attention has arisen on QSS.
QSS_EVENT_CHANGE_SETUP(8)	Notifies QSS-Kids that QSS settings have been changed. (Supported models: QSS-32, 33, 34, 3102-2) △1, △2
QSS_EVENT_ORDER_STOP(9)	Order suspend notification Notifies that the printing of the order has been suspended. (Supported models: QSS-32, 33, 34, 3102-2) △2

Param1 and Param2

Additional information is defined in Param1 and Param2. Content of Param1 and Param2 varies from event to event.

	<i>Param1</i>	<i>Param2</i>
Print start notification	Request number	Receipt number
Print complete notification	Request number	Receipt number
Order cancel notification	Request number	Receipt number
Error/attention notification	Error number	Error sub-number *1
Order suspend notification $\triangle 2$	Request number	Receipt number

\*1 Error sub-number: In the upper 16 bit of error sub-number stores display format of the sub-number, while in the lower 16 bit stores error sub-number. Display format is used when displaying error sub-number on the monitor.

For example, when the display format is QSS\_ALERT\_DISP\_HEX4, error sub-number is to be displayed in 4-digit hex.

Below is the list of display format types.

Value	Description
QSS_ALERT_DISP_NO (0)	No display of error sub-number.
QSS_ALERT_DISP_DEC (1)	Display error sub-number in decimal number.
QSS_ALERT_DISP_HEX2 (2)	Display error sub-number in 2-digit hex.
QSS_ALERT_DISP_HEX4 (3)	Display error sub-number in 4-digit hex.

RefId

Defines reference number. Reference number is defined only for notifications of print start, print completed, order delete, and order suspend.  $\triangle 2$

Message

Defines content of error message. Language of error messages defined here is consistent with the language defined for messages shown on QSS. Message is defined only for notification of error/attention.

Reserve

Unused.

#### 4.6. WSQSS\_CLIENT\_INFO structure

```
typedef struct _WSQSS_CLIENT_INFO {
    char            User[20];
    char            Host[20];
    unsigned char   Address[6];
    unsigned char   IPAddress[4]; // Version 1.0.5
    unsigned short  Port;         // Version 1.0.5
    unsigned long   Version;      // Version 1.0.5
    unsigned short  Level;        // Version 1.0.5
    unsigned char   Reserve[38];
} WSQSS_CLIENT_INFO;
```

##### Member:

User

Define user name.

The string should be a maximum of 19 characters and NULL terminated.

Host

Define host name.

The string should be a maximum of 19 characters and NULL terminated.

Address

Define MAC address of Client host PC.

IPAddress

Define IP address of Client host PC.

Port

Define port number of the socket to receive event notification.

Version

Define version of NetOrder API to use.

Level

Define Client level.

Value	Description
QSS_CLIENT_LEVEL1	Status of orders that the Client has sent to QSS is received in order status notification from QSS.
QSS_CLIENT_LEVEL2	Status of all orders is received in order status notification from QSS.

Reserve

Unused

#### Remarks:

WSQSS\_CLIENT\_INFO structure is used for QSS to control Client.

#### 4.7. WSQSS\_RESULT structure

```
typedef struct _WSQSS_RESULT {
    unsigned long ReturnValue;
    unsigned char Reserve[28];
} WSQSS_RESULT;
```

△2

#### Member:

ReturnValue

Define the result of process requested as follows:

Value	Description
QSS_SUCCESS	Request process succeeded
QSS_FAIL	Request process failed
QSS_INVALID_ORDERNO	Request number is illegal.
QSS_INVALID_FRAMENO	Frame number is illegal.
QSS_NOT_SUPPORT_FORMAT	Image format is not supported.
QSS_INVALID_REPEATNUM	Repeat number is illegal.
QSS_DISKFULL_SPOOL	Insufficient free space in spool region.
QSS_INVALID_FRAMENUM	Number of frame is illegal.
QSS_INVALID_PAPER	Cannot use the paper specified.
QSS_INVALID_WBSIZE	White boarder width is illegal.
QSS_INVALID_INDEXSIZE	Index print size is illegal.
QSS_INVALID_PAPERFITTING	Paper fitting is illegal.
QSS_INVALID_ID_AUTHORITY	No authority to delete.
QSS_NO_SUCH_ORDER	Could not find an order.
QSS_NOT_CONNECTED_PU	PU is not installed.
QSS_REMAINING_DATA	There is unacquired data.
QSS_DISABLE_MODE	NetOrder mode is not enabled.
QSS_INVALID_PAPERLENGTH	Paper advance length is illegal.
QSS_RECEIVE_ABORT	Order receipt was denied. (e.g. The order was deleted on QSS while being received.)
QSS_NOTEXIST_PROFILE	Profile does not exist.
QSS_NOT_CONNECTED	Could not connect with Client

Reserve

Unused

## 5. Revision Record

<i>Date</i>	<i>Description</i>	<i>Editor</i>
Oct. 17, 2002	Newly created	S. Heya
Apr. 09, 2004	Descriptions for QSS-Kids were added.	Fujiwara
Jun. 08, 2005	QSS-34 was added as a supported model for event notification from QSS to Client. △2 QSS-34 and QSS-3102-2 were added as supported models for event notification from QSS to QSS-Kids. △2 SystemInfo was added to the WSQSS_PRINTER_INFO structure. △2 Description was added to QSS_EVENT_ORDER_CANCEL of EventNo of the WSQSS_EVENT structure. △2 QSS_EVENT_ORDER_STOP was added to EventNo of the WSQSS_EVENT structure. Some incorrect descriptions were corrected. △2	Yokoyama