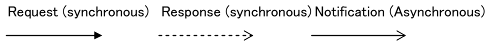
Last update 2008.05.02

1. Sequence

○ Explanation of arrow


Request (synchronous)
Response (synchronous)
Notification (Asynchronous)

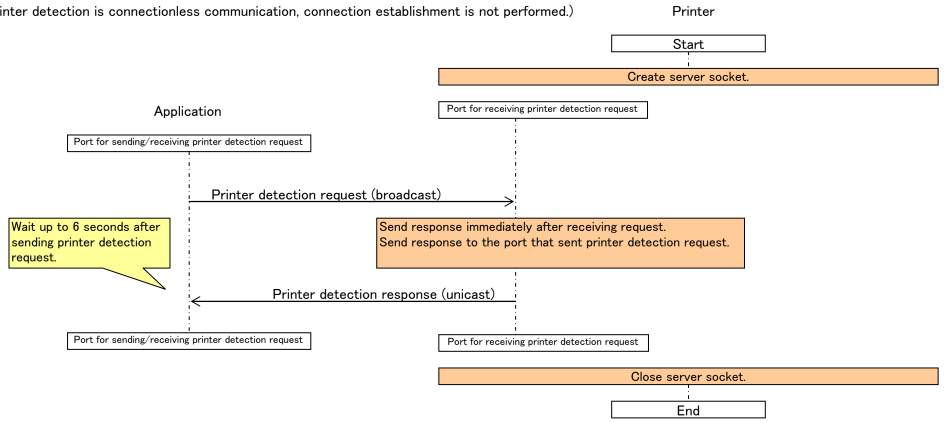
● Entire flow from application start to application end

△ Application sends request to printer at the arbitrary timing.

■ Sequence when application searches printers on the network

IMPORTANT This operation is performed when application selects the printer for printing, not every time application starts.
Once the printer is selected, this operation is not performed unless the printer selection is changed.

(As printer detection is connectionless communication, connection establishment is not performed.)

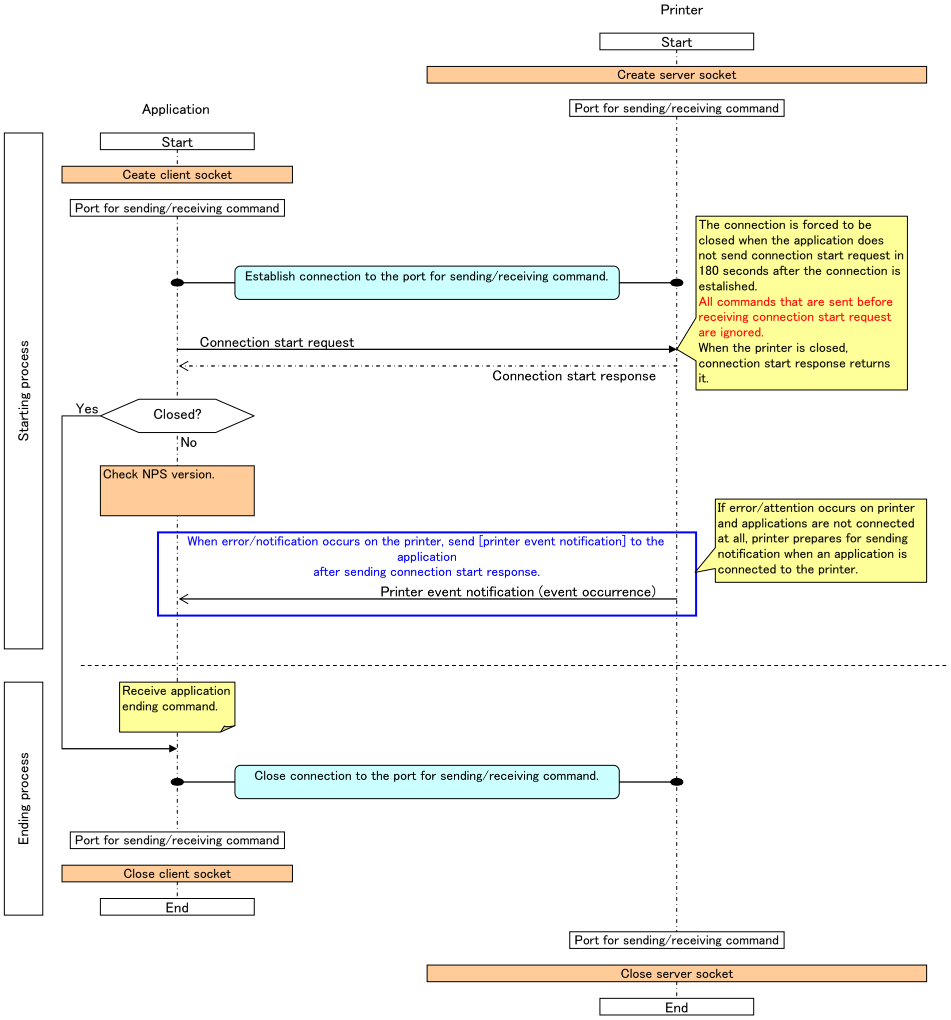

Printer
Start
Create server socket.
Application
Port for receiving printer detection request
Port for sending/receiving printer detection request
Printer detection request (broadcast)
Printer detection response (unicast)
Port for sending/receiving printer detection request
Port for receiving printer detection request
Close server socket.
End

Wait up to 6 seconds after sending printer detection request.

Send response immediately after receiving request.
Send response to the port that sent printer detection request.

■ Sequence when application starts/ends after the printer starts.

IMPORTANT When connection to the command sending/receiving port is cut off for any reason, application tries to reconnect to the printer.


Printer
Start
Create server socket
Application
Port for sending/receiving command
Start
Ceate client socket
Port for sending/receiving command
Starting process
Establish connection to the port for sending/receiving command.
Connection start request
Connection start response
Yes
Closed?
No
Check NPS version.
Printer event notification (event occurrence)
Ending process
Close connection to the port for sending/receiving command.
Port for sending/receiving command
Close client socket
End
Port for sending/receiving command
Close server socket
End

The connection is forced to be closed when the application does not send connection start request in 180 seconds after the connection is estalished.
All commands that are sent before receiving connection start request are ignored.
When the printer is closed, connection start response returns it.

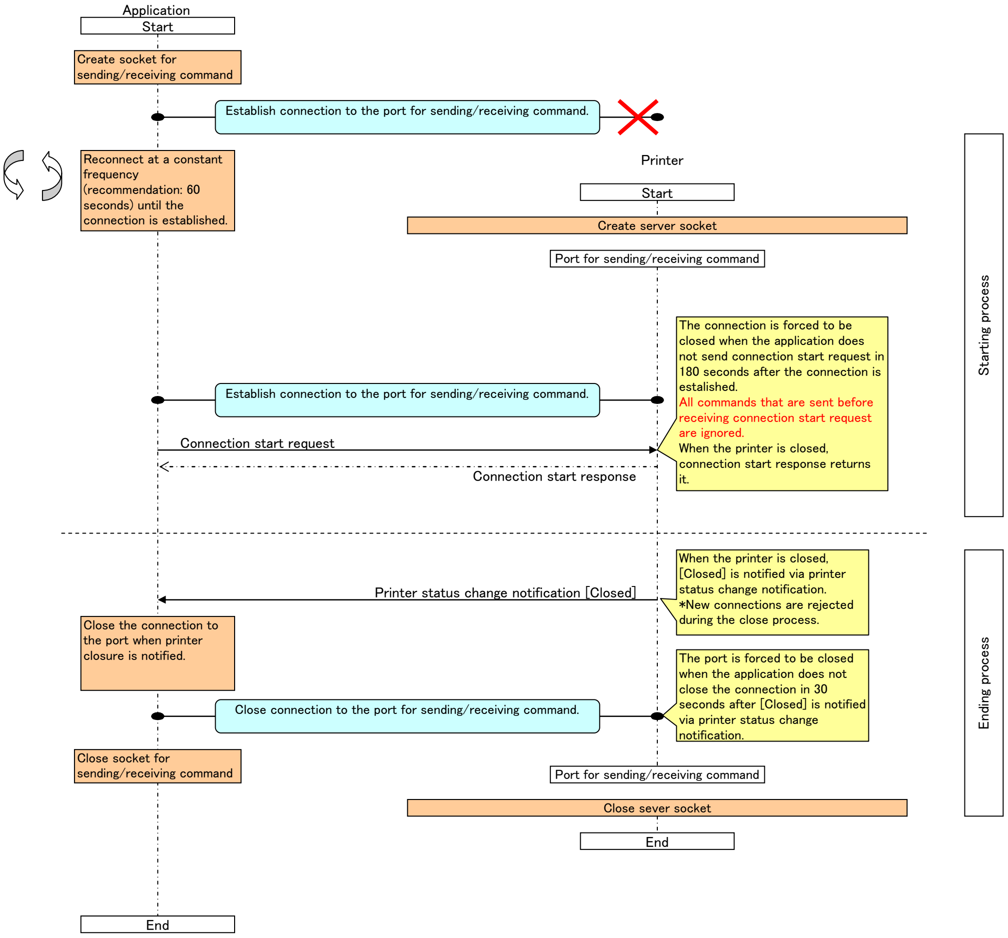
When error/notification occurs on the printer, send [printer event notification] to the application
after sending connection start response.

If error/attention occurs on printer and applications are not connected at all, printer prepares for sending notification when an application is connected to the printer.

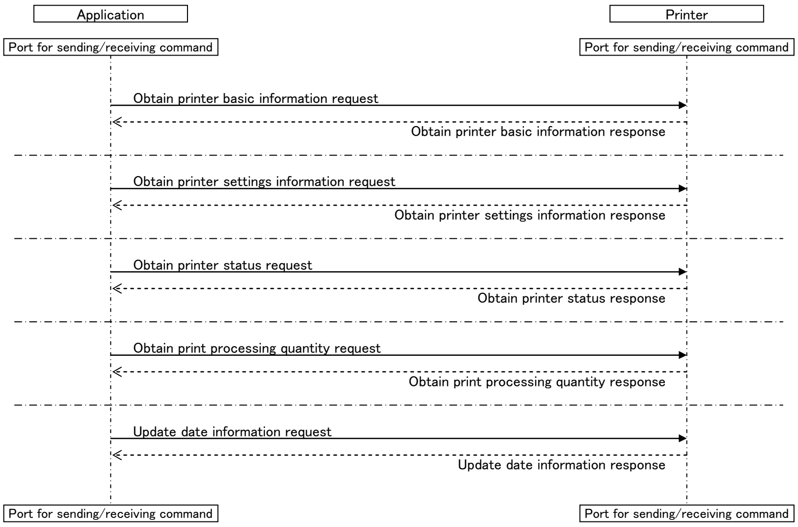
Receive application ending command.

■ Sequence when the printer starts/ends after the application starts.

IMPORTANT When connection to the command sending/receiving port is cut off for any reason, application tries to reconnect to the printer.


Application
Start
Create socket for sending/receiving command
Establish connection to the port for sending/receiving command.
Reconnect at a constant frequency (recommendation: 60 seconds) until the connection is established.
Printer
Start
Create server socket
Port for sending/receiving command
The connection is forced to be closed when the application does not send connection start request in 180 seconds after the connection is estalished.
All commands that are sent before receiving connection start request are ignored.
When the printer is closed, connection start response returns it.
Establish connection to the port for sending/receiving command.
Connection start request
Connection start response
Starting process
When the printer is closed, [Closed] is notified via printer status change notification.
*New connections are rejected during the close process.
Printer status change notification [Closed]
Close the connection to the port when printer closure is notified.
The port is forced to be closed when the application does not close the connection in 30 seconds after [Closed] is notified via printer status change notification.
Close connection to the port for sending/receiving command.
Ending process
Close socket for sending/receiving command
Port for sending/receiving command
Close sever socket
End
End

● Obtain and update printer information


Application
Printer
Port for sending/receiving command
Port for sending/receiving command
Obtain printer basic information request
Obtain printer basic information response
Obtain printer settings information request
Obtain printer settings information response
Obtain printer status request
Obtain printer status response
Obtain print processing quantity request
Obtain print processing quantity response
Update date information request
Update date information response
Port for sending/receiving command
Port for sending/receiving command

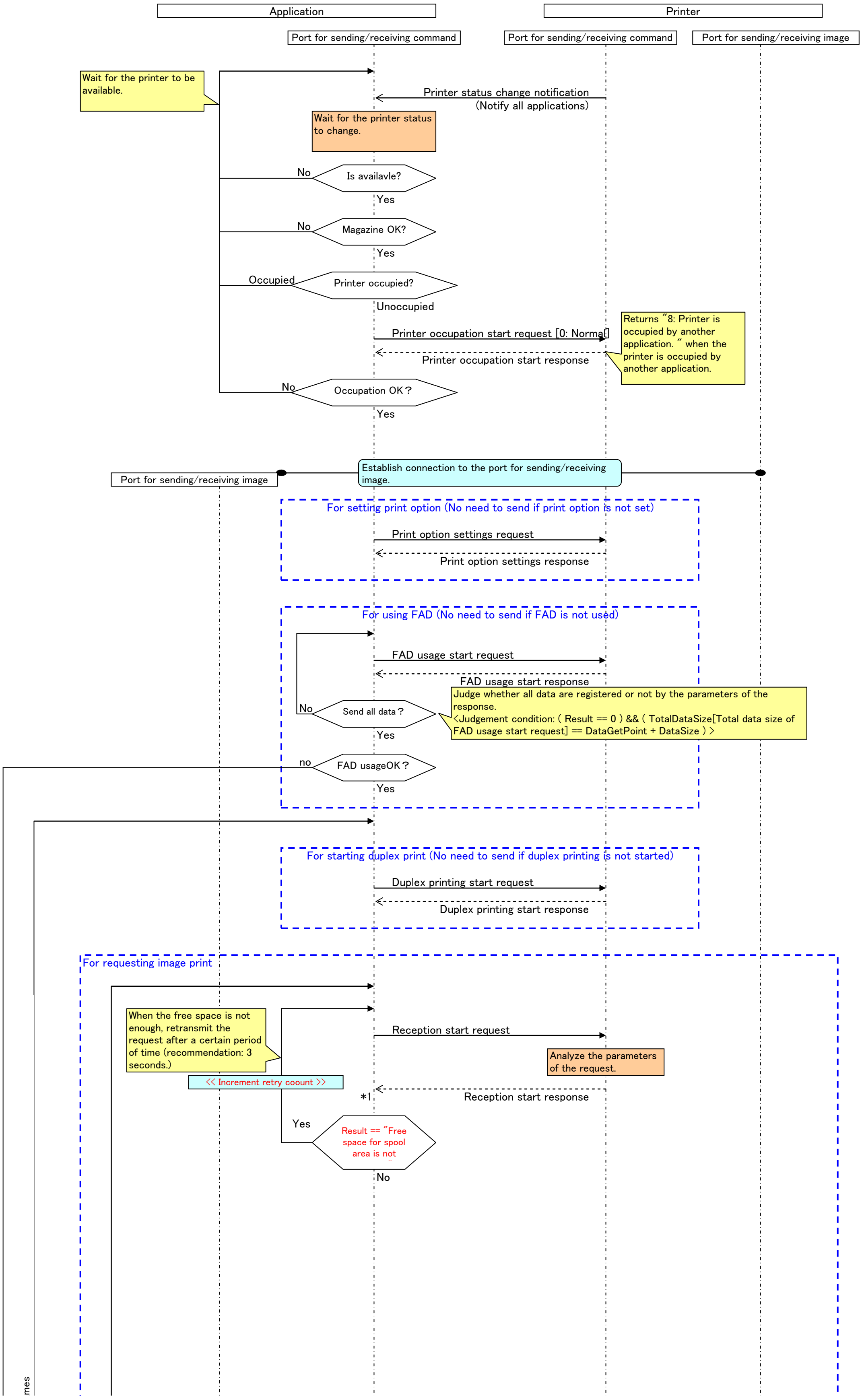
- ● Print request

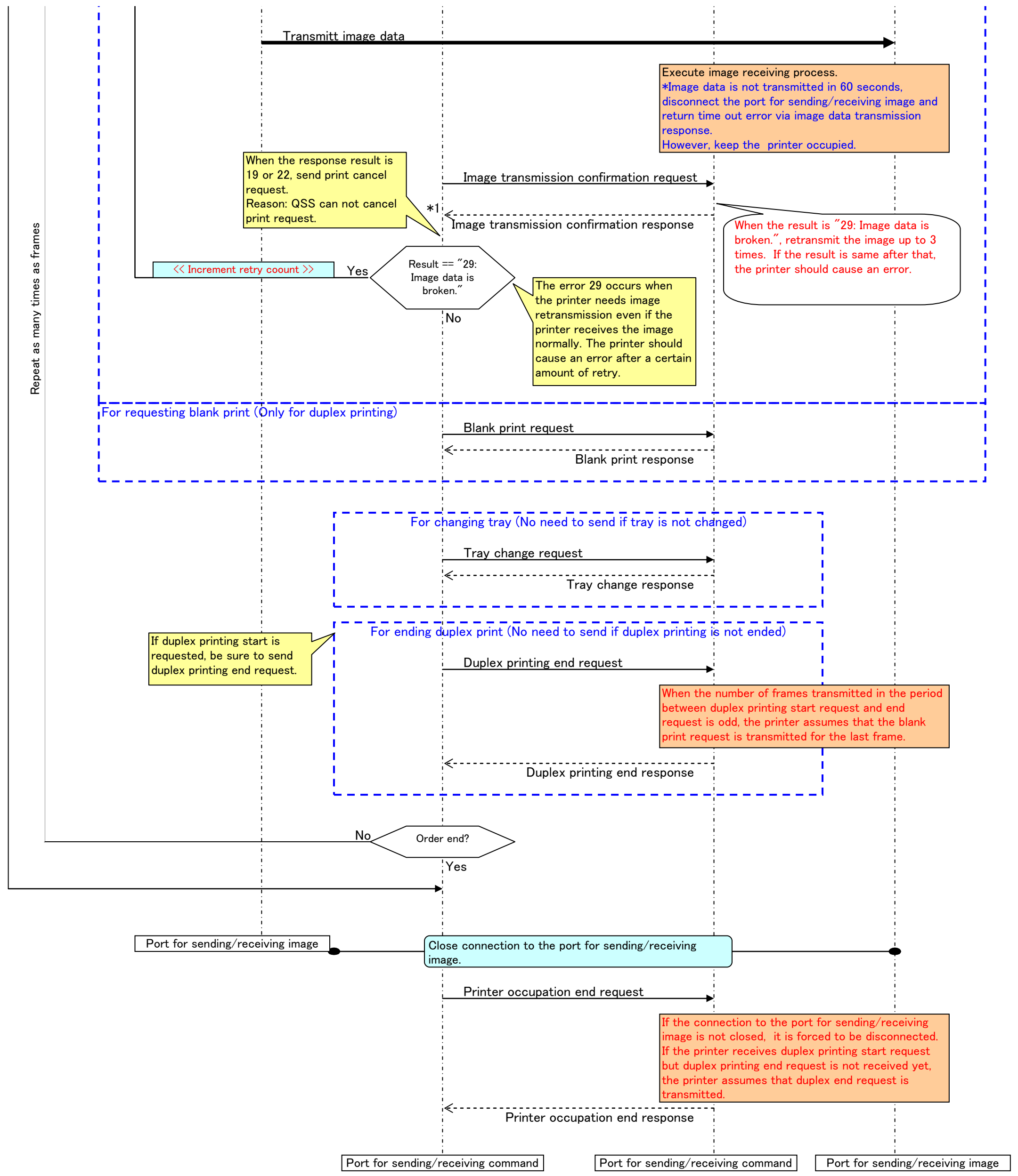
IMPORTANT　When the connection to the port for command is cut during printer occupation, all print requests that have been received by then are canceled and the printer is released.

Application post-processing:　Determine that the images that the printer does not notify [3: Print exit] via print status notification can not be printed.
Printer post-processing:　Discard all print-waiting frames that were transmitted from that application.

- ▲ Printer occupation means the period from the success of "printer occupation start request" to the order of "printer occupation end request."
- ▲ Only one application can occupy a printer.
- ▲ The following commands are available only if the printer supports duplex printing; Duplex printing start request, Duplex printing end request, and Blank print request.
  It can be checked whether the printer supports duplex printing or not by the value of SupportDoubleSided (Tag33) of "Obtain printer settings information response."
- ▲ Between duplex printing start request and duplex printing end request, odd frames are printed on the front side, and even frames are printed on the back side.
  However, if tray change is requested between duplex printing start request and duplex printing end request, the first frame after tray change request is printed on the front side
  as the printer assumes that the requests are sent in the following order; Duplex printing end request -> Tray change request -> Duplex printing start request
- ▲ About finished dimension of duplex printing, refer to the design record documents of RD-127.

Print request (normal)

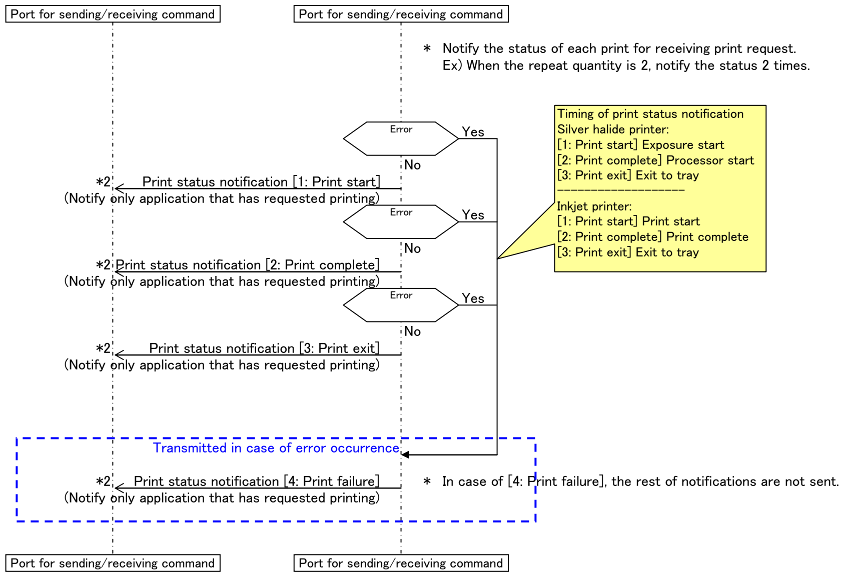

Application
Printer
Port for sending/receiving command
Port for sending/receiving command
Port for sending/receiving image
Wait for the printer to be available.
Printer status change notification
(Notify all applications)
Wait for the printer status to change.
No
Is availavle?
Yes
No
Magazine OK?
Yes
Occupied
Printer occupied?
Unoccupied
Printer occupation start request [0: Normal]
Printer occupation start response
Returns "8: Printer is occupied by another application. " when the printer is occupied by another application.
No
Occupation OK？
Yes
Port for sending/receiving image
Establish connection to the port for sending/receiving image.
For setting print option (No need to send if print option is not set)
Print option settings request
Print option settings response
For using FAD (No need to send if FAD is not used)
FAD usage start request
FAD usage start response
Judge whether all data are registered or not by the parameters of the response.
<Judgement condition: (Result == 0) && (TotalDataSize[Total data size of FAD usage start request] == DataGetPoint + DataSize) >
No
Send all data？
Yes
no
FAD usageOK？
Yes
For starting duplex print (No need to send if duplex printing is not started)
Duplex printing start request
Duplex printing start response
For requesting image print
When the free space is not enough, retransmit the request after a certain period of time (recommendation: 3 seconds.)
Reception start request
Analyze the parameters of the request.
<< Increment retry coount >>
*1
Reception start response
Yes
Result == "Free space for spool area is not
No
mes


Repeat as many times as frames
Transmitt image data
Execute image receiving process.
*Image data is not transmitted in 60 seconds, disconnect the port for sending/receiving image and return time out error via image data transmission response.
However, keep the printer occupied.
When the response result is 19 or 22, send print cancel request.
Reason: QSS can not cancel print request.
Image transmission confirmation request
*1
Image transmission confirmation response
When the result is "29: Image data is broken.", retransmit the image up to 3 times. If the result is same after that, the printer should cause an error.
<< Increment retry coount >>
Yes
Result == "29: Image data is broken."
No
The error 29 occurs when the printer needs image retransmission even if the printer receives the image normally. The printer should cause an error after a certain amount of retry.
For requesting blank print (Only for duplex printing)
Blank print request
Blank print response
For changing tray (No need to send if tray is not changed)
Tray change request
Tray change response
If duplex printing start is requested, be sure to send duplex printing end request.
For ending duplex print (No need to send if duplex printing is not ended)
Duplex printing end request
When the number of frames transmitted in the period between duplex printing start request and end request is odd, the printer assumes that the blank print request is transmitted for the last frame.
Duplex printing end response
No
Order end?
Yes
Port for sending/receiving image
Close connection to the port for sending/receiving image.
Printer occupation end request
If the connection to the port for sending/receiving image is not closed, it is forced to be disconnected.
If the printer receives duplex printing start request but duplex printing end request is not received yet, the printer assumes that duplex end request is transmitted.
Printer occupation end response
Port for sending/receiving command
Port for sending/receiving command
Port for sending/receiving image

*1 When failure is returned via each response, that print request is canceled.
In that case, the application should identify and address the causes of the failure, then the application should begin with reception start request again.

Print status notification (normal)

IMPORTANT Printer should notify the status of the frame to the application via print status notification when the result of image transmission confirmation response for that frame is succe
IMPORTANT Concerning duplex printing, print complete is notified at the end of printing both front side and back side in no particular order.


Port for sending/receiving command
Port for sending/receiving command
* Notify the status of each print for receiving print request.
Ex) When the repeat quantity is 2, notify the status 2 times.
Error
Yes
No
Timing of print status notification
Silver halide printer:
[1: Print start] Exposure start
[2: Print complete] Processor start
[3: Print exit] Exit to tray
Inkjet printer:
[1: Print start] Print start
[2: Print complete] Print complete
[3: Print exit] Exit to tray
*2 Print status notification [1: Print start]
(Notify only application that has requested printing)
Error
Yes
No
*2 Print status notification [2: Print complete]
(Notify only application that has requested printing)
Error
Yes
No
*2 Print status notification [3: Print exit]
(Notify only application that has requested printing)
Transmitted in case of error occurrence
*2 Print status notification [4: Print failure]
(Notify only application that has requested printing)
* In case of [4: Print failure], the rest of notifications are not sent.
Port for sending/receiving command
Port for sending/receiving command

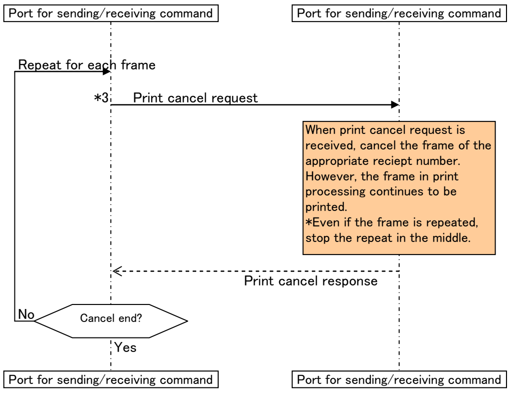
*2 Print status is notified if the printer occupation has already finished.

Print cancel (pattern 1)

IMPORTANT When print cancel request is received, the printer cancels printing even if it is in the middle of repeat printing.

IMPORTANT To cancel multipul frames, the method of pattern 2 that cancels print after stopping printer is recommended.
Printer starts processing the next receipt number right after print cancel (pattern 1).
If multipul frames are canceled in pattern 1, it is afraid that the prints can not be canceled because the printer starts them before the cancellation.

IMPORTANT When the order is duplex printing and the last frame is odd-numbered, send cancel request to the printer even if the printer already starts printing.
Because the printer can not cancel the blank print of the back side after finishing the front side print in manual duplex operation.


Port for sending/receiving command
Port for sending/receiving command
Repeat for each frame
*3
Print cancel request
Print cancel response
No
Cancel end?
Yes
Port for sending/receiving command
Port for sending/receiving command

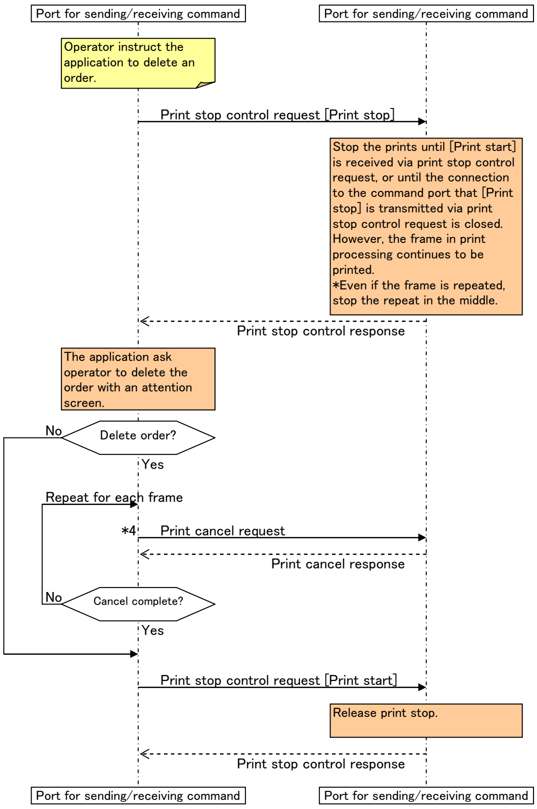
When print cancel request is received, cancel the frame of the appropriate reciept number. However, the frame in print processing continues to be printed.
*Even if the frame is repeated, stop the repeat in the middle.

*3 Applicatin can request cancel printing even if the printer occupation has already finished.
(However, it is depending on the printer whether the printing requests can be canceled or not.)

Print cancel (pattern 2) Recommended

IMPORTANT When [print stop] of print stop control request is received, the printer stops printing even if it is in the middle of repeat printing.

IMPORTANT When the order is duplex printing and the last frame is odd-numbered, send cancel request to the printer even if the printer already starts printing.
Because the printer can not cancel the blank print of the back side after finishing the front side print in manual duplex operation.


Port for sending/receiving command
Port for sending/receiving command
Print stop control request [Print stop]
Print stop control response
No
Delete order?
Yes
Repeat for each frame
*4
Print cancel request
Print cancel response
No
Cancel complete?
Yes
Print stop control request [Print start]
Release print stop.
Print stop control response
Port for sending/receiving command
Port for sending/receiving command

Operator instruct the application to delete an order.

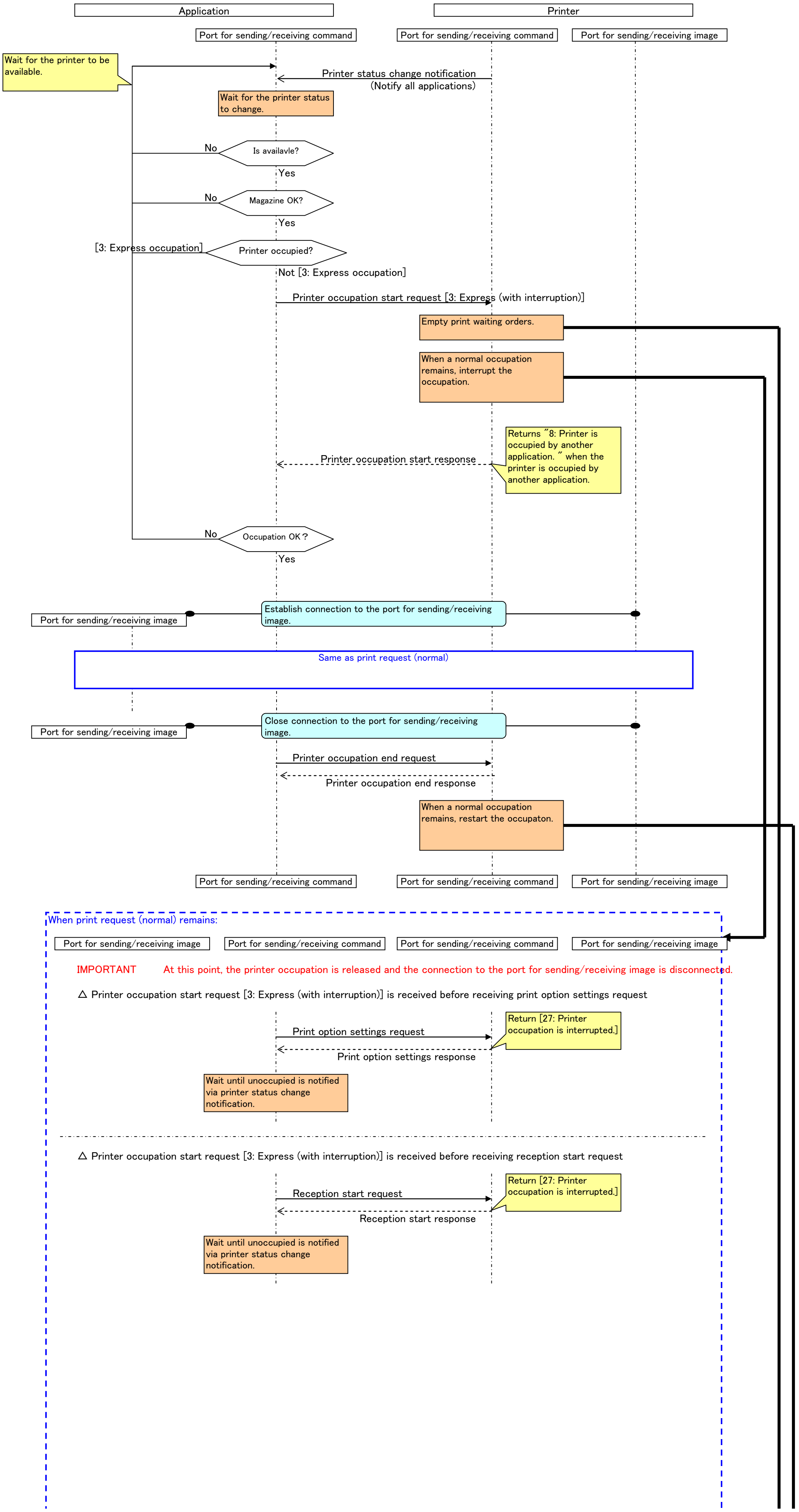
Stop the prints until [Print start] is received via print stop control request, or until the connection to the command port that [Print stop] is transmitted via print stop control request is closed. However, the frame in print processing continues to be printed.
*Even if the frame is repeated, stop the repeat in the middle.

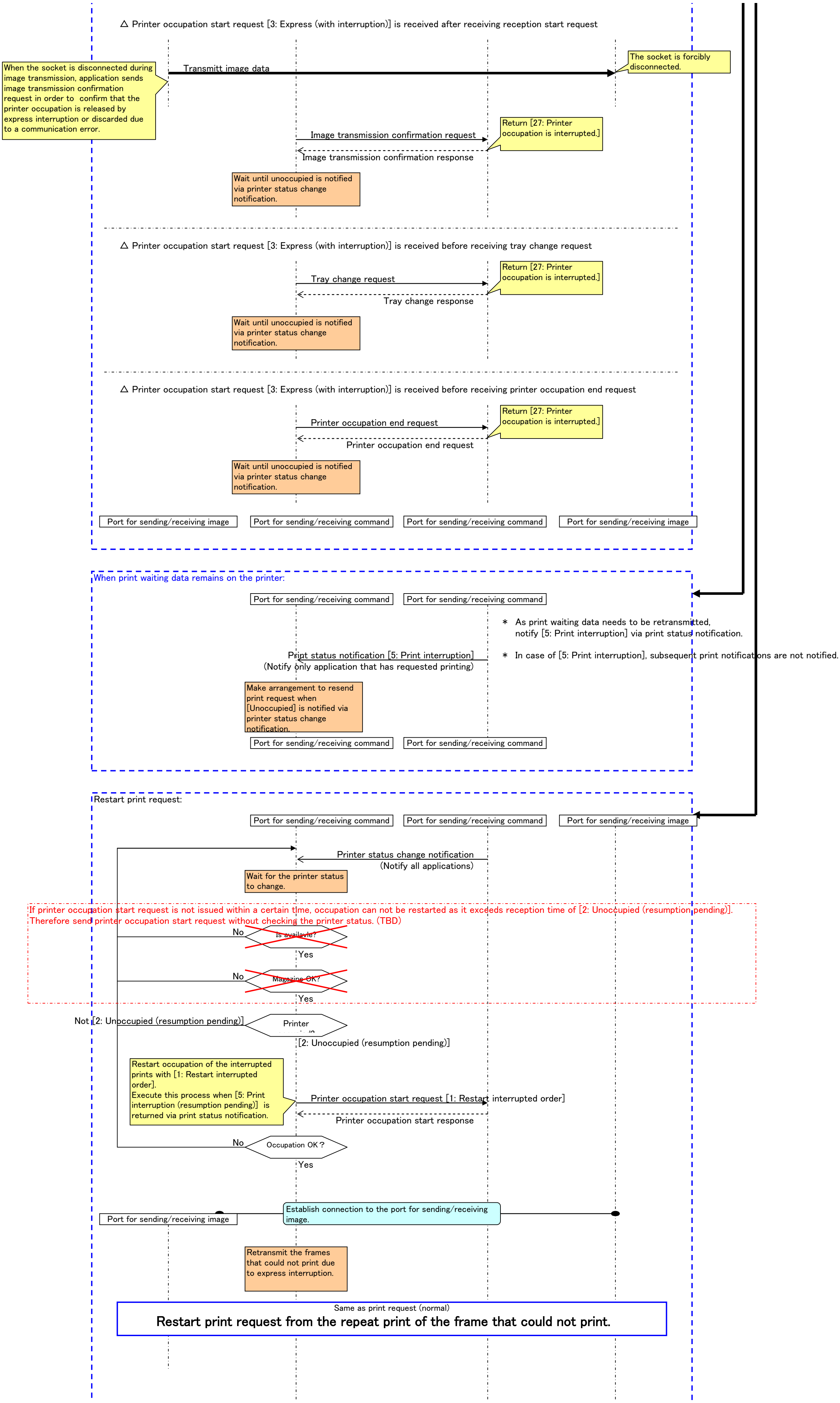
The application ask operator to delete the order with an attention screen.

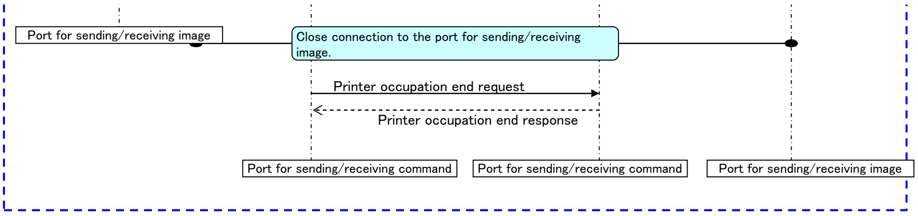
*4 Applicatin can request cancel printing even if the printer occupation has already finished.
(However, it is depending on the printer whether the printing requests can be canceled or not.)

Print request (express) * For details of occupation, refer to "Appendix 4. Interruption process."

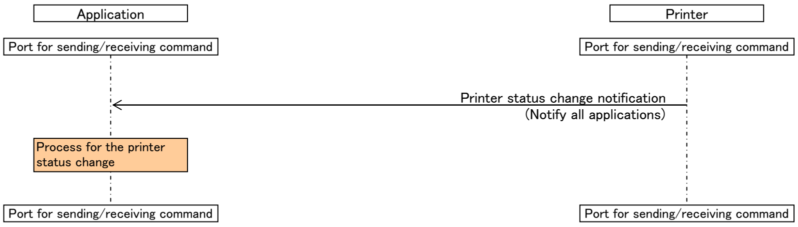
IMPORTANT Only 1 order of express occupation is acceptable.


Application
Printer
Port for sending/receiving command
Port for sending/receiving command
Port for sending/receiving image
Wait for the printer to be available.
Printer status change notification
(Notify all applications)
Wait for the printer status to change.
No
Is availavle?
Yes
No
Magazine OK?
Yes
[3: Express occupation]
Printer occupied?
Not [3: Express occupation]
Printer occupation start request [3: Express (with interruption)]
Empty print waiting orders.
When a normal occupation remains, interrupt the occupation.
Returns "8: Printer is occupied by another application." when the printer is occupied by another application.
Printer occupation start response
No
Occupation OK ?
Yes
Establish connection to the port for sending/receiving image.
Port for sending/receiving image
Same as print request (normal)
Close connection to the port for sending/receiving image.
Port for sending/receiving image
Printer occupation end request
Printer occupation end response
When a normal occupation remains, restart the occupaton.
Port for sending/receiving command
Port for sending/receiving command
Port for sending/receiving image
When print request (normal) remains:
Port for sending/receiving image
Port for sending/receiving command
Port for sending/receiving command
Port for sending/receiving image
IMPORTANT At this point, the printer occupation is released and the connection to the port for sending/receiving image is disconnected.
△ Printer occupation start request [3: Express (with interruption)] is received before receiving print option settings request
Print option settings request
Return [27: Printer occupation is interrupted.]
Print option settings response
Wait until unoccupied is notified via printer status change notification.
△ Printer occupation start request [3: Express (with interruption)] is received before receiving reception start request
Reception start request
Return [27: Printer occupation is interrupted.]
Reception start response
Wait until unoccupied is notified via printer status change notification.


△ Printer occupation start request [3: Express (with interruption)] is received after receiving reception start request
When the socket is disconnected during image transmission, application sends image transmission confirmation request in order to confirm that the printer occupation is released by express interruption or discarded due to a communication error.
Transmitt image data
The socket is forcibly disconnected.
Image transmission confirmation request
Return [27: Printer occupation is interrupted.]
Image transmission confirmation response
Wait until unoccupied is notified via printer status change notification.
△ Printer occupation start request [3: Express (with interruption)] is received before receiving tray change request
Tray change request
Return [27: Printer occupation is interrupted.]
Tray change response
Wait until unoccupied is notified via printer status change notification.
△ Printer occupation start request [3: Express (with interruption)] is received before receiving printer occupation end request
Printer occupation end request
Return [27: Printer occupation is interrupted.]
Printer occupation end request
Wait until unoccupied is notified via printer status change notification.
Port for sending/receiving image
Port for sending/receiving command
Port for sending/receiving command
Port for sending/receiving image
When print waiting data remains on the printer:
Port for sending/receiving command
Port for sending/receiving command
＊ As print waiting data needs to be retransmitted, notify [5: Print interruption] via print status notification.
Print status notification [5: Print interruption]
(Notify only application that has requested printing)
＊ In case of [5: Print interruption], subsequent print notifications are not notified.
Make arrangement to resend print request when [Unoccupied] is notified via printer status change notification.
Port for sending/receiving command
Port for sending/receiving command
Restart print request:
Port for sending/receiving command
Port for sending/receiving command
Port for sending/receiving image
Printer status change notification
(Notify all applications)
Wait for the printer status to change.
If printer occupation start request is not issued within a certain time, occupation can not be restarted as it exceeds reception time of [2: Unoccupied (resumption pending)].
Therefore send printer occupation start request without checking the printer status. (TBD)
No
~~Is availavle?~~
Yes
No
~~Magazine OK?~~
Yes
Not [2: Unoccupied (resumption pending)]
Printer
[2: Unoccupied (resumption pending)]
Restart occupation of the interrupted prints with [1: Restart interrupted order].
Execute this process when [5: Print interruption (resumption pending)] is returned via print status notification.
Printer occupation start request [1: Restart interrupted order]
Printer occupation start response
No
Occupation OK？
Yes
Port for sending/receiving image
Establish connection to the port for sending/receiving image.
Retransmit the frames that could not print due to express interruption.
Same as print request (normal)
Restart print request from the repeat print of the frame that could not print.

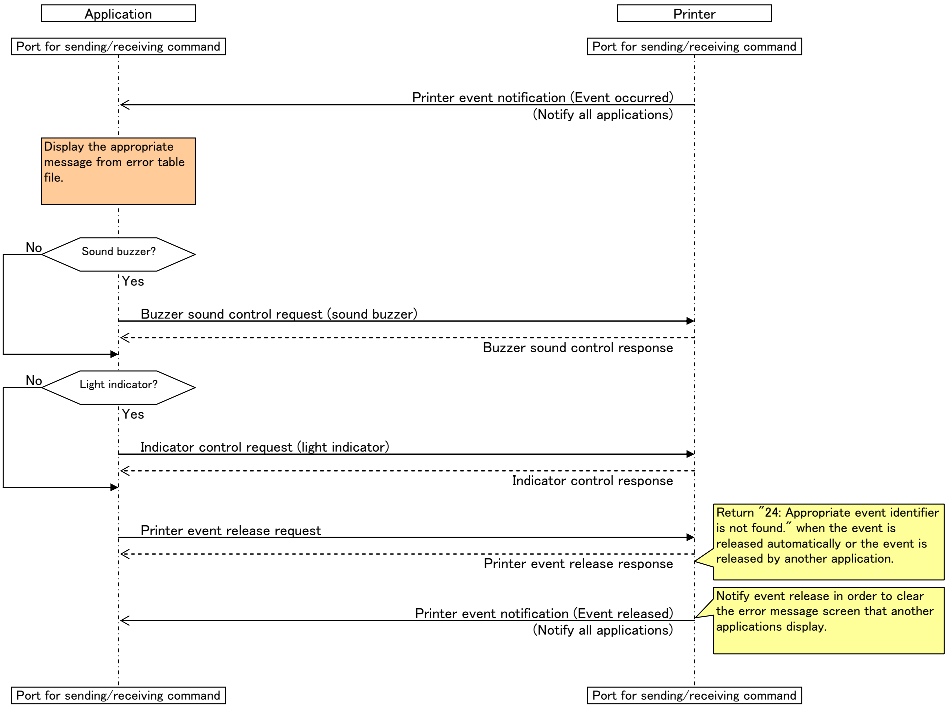

Port for sending/receiving image
Close connection to the port for sending/receiving image.
Printer occupation end request
Printer occupation end response
Port for sending/receiving command
Port for sending/receiving command
Port for sending/receiving image

● Printer status change


Application
Printer
Port for sending/receiving command
Port for sending/receiving command
Printer status change notification
(Notify all applications)
Process for the printer status change
Port for sending/receiving command
Port for sending/receiving command

● Error/attention

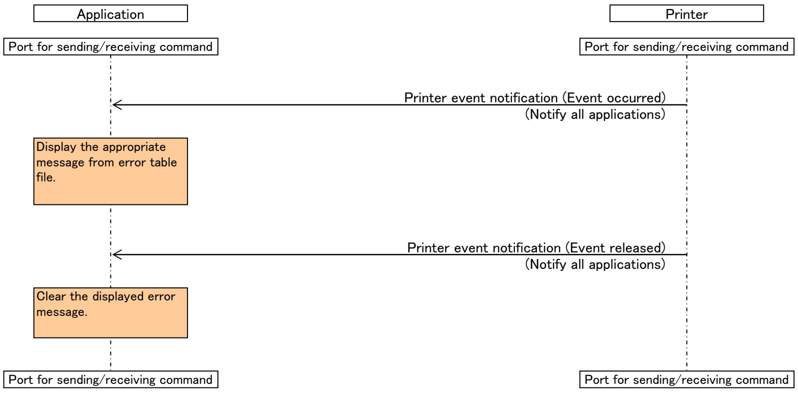
△ Event occurrence/release


Application
Printer
Port for sending/receiving command
Port for sending/receiving command
Printer event notification (Event occurred)
(Notify all applications)
Display the appropriate message from error table file.
No
Sound buzzer?
Yes
Buzzer sound control request (sound buzzer)
Buzzer sound control response
No
Light indicator?
Yes
Indicator control request (light indicator)
Indicator control response
Printer event release request
Printer event release response
Printer event notification (Event released)
(Notify all applications)
Port for sending/receiving command
Port for sending/receiving command

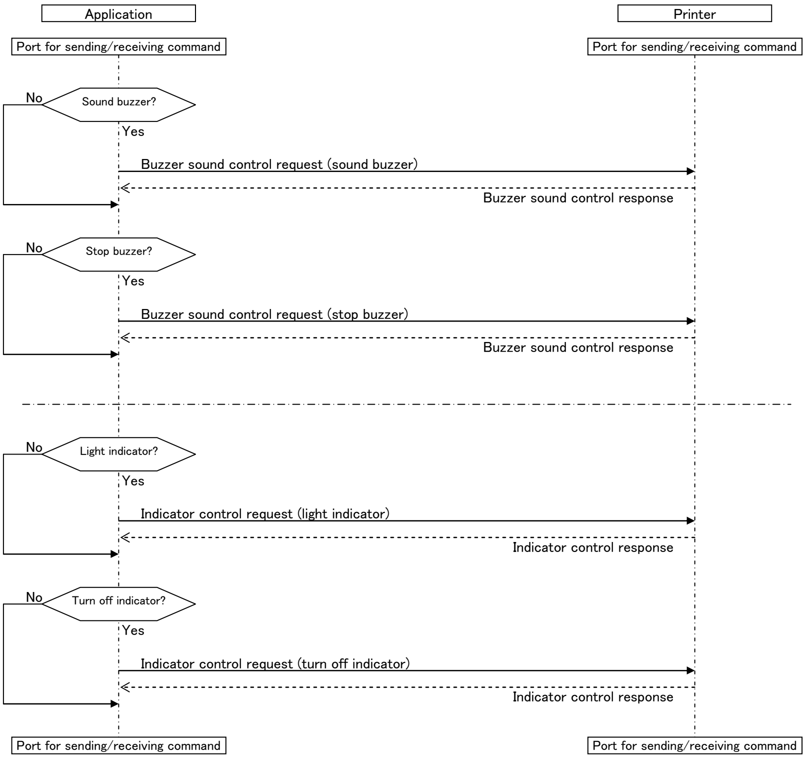
Return "24: Appropriate event identifier is not found." when the event is released automatically or the event is released by another application.

Notify event release in order to clear the error message screen that another applications display.

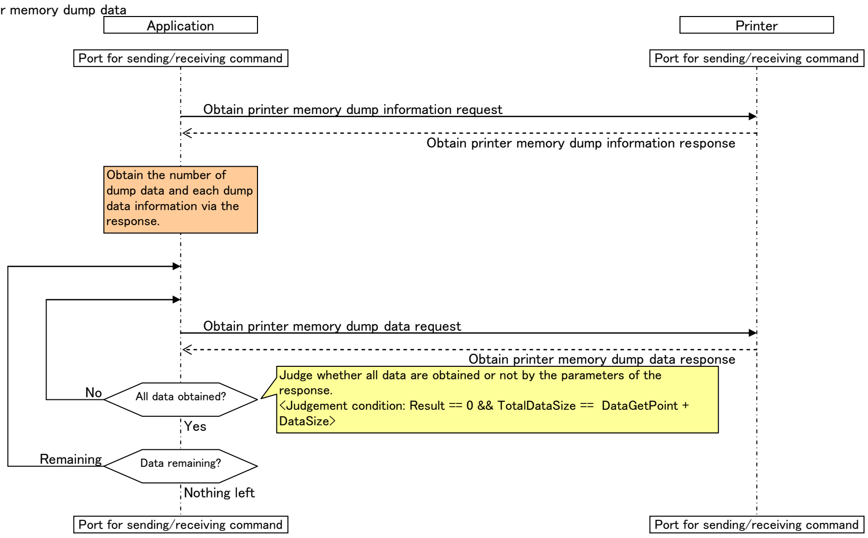
△ Event occurrence/auto release


Application
Printer
Port for sending/receiving command
Port for sending/receiving command
Printer event notification (Event occurred)
(Notify all applications)
Display the appropriate message from error table file.
Printer event notification (Event released)
(Notify all applications)
Clear the displayed error message.
Port for sending/receiving command
Port for sending/receiving command

- Buzzer sound/Indicator


Application
Printer
Port for sending/receiving command
Port for sending/receiving command
No
Sound buzzer?
Yes
Buzzer sound control request (sound buzzer)
Buzzer sound control response
No
Stop buzzer?
Yes
Buzzer sound control request (stop buzzer)
Buzzer sound control response
No
Light indicator?
Yes
Indicator control request (light indicator)
Indicator control response
No
Turn off indicator?
Yes
Indicator control request (turn off indicator)
Indicator control response
Port for sending/receiving command
Port for sending/receiving command

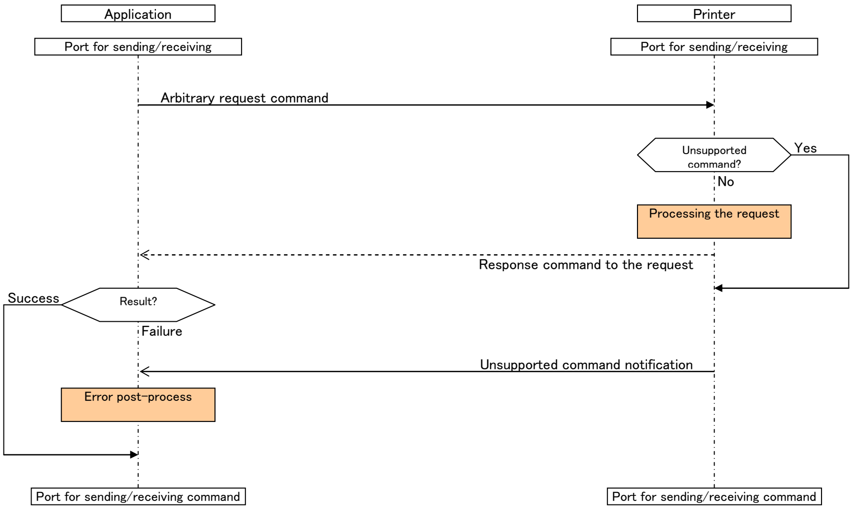
- Obtain printer memory dump data
- Obtain simple printer memory dump data


Application
Printer
Port for sending/receiving command
Port for sending/receiving command
Obtain printer memory dump information request
Obtain printer memory dump information response
Obtain the number of dump data and each dump data information via the response.
Obtain printer memory dump data request
Obtain printer memory dump data response
No
All data obtained?
Yes
Remaining
Data remaining?
Nothing left
Port for sending/receiving command
Port for sending/receiving command

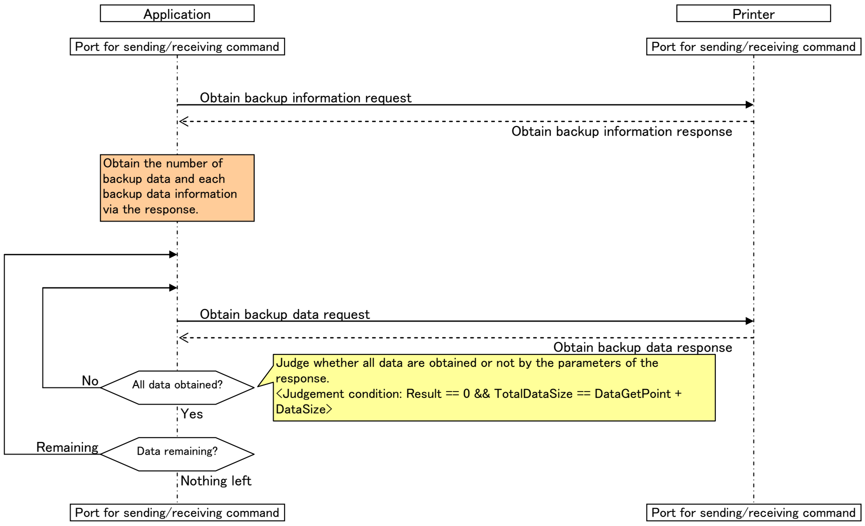
Judge whether all data are obtained or not by the parameters of the response.
<Judgement condition: Result == 0 && TotalDataSize == DataGetPoint + DataSize>

- Unsupported command notification

△ When application request the unsupported command, the printer send unsupported command notification.


Application
Printer
Port for sending/receiving
Port for sending/receiving
Arbitrary request command
Unsupported command?
Yes
No
Processing the request
Response command to the request
Success
Result?
Failure
Unsupported command notification
Error post-process
Port for sending/receiving command
Port for sending/receiving command

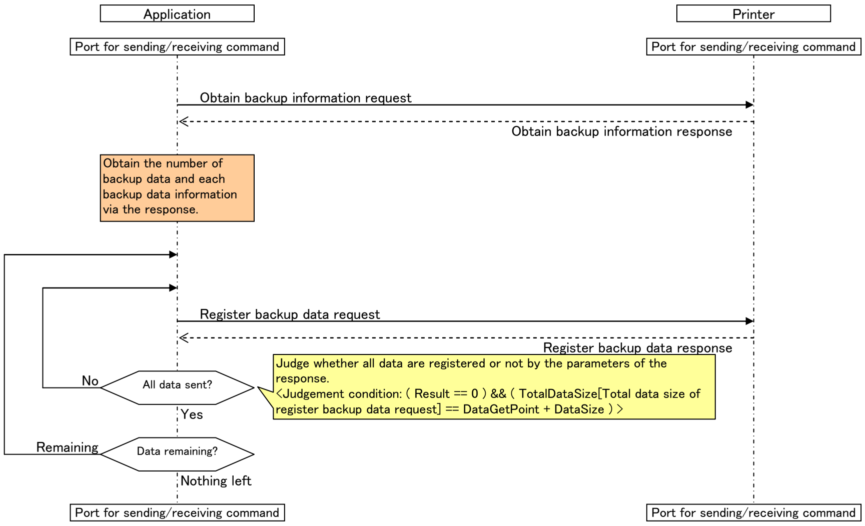
● Obtain backup data


Application
Printer
Port for sending/receiving command
Port for sending/receiving command
Obtain backup information request
Obtain backup information response
Obtain backup data request
Obtain backup data response
No
All data obtained?
Yes
Remaining
Data remaining?
Nothing left
Port for sending/receiving command
Port for sending/receiving command

Obtain the number of backup data and each backup data information via the response.

Judge whether all data are obtained or not by the parameters of the response.
<Judgement condition: Result == 0 && TotalDataSize == DataGetPoint + DataSize>

● Register backup data

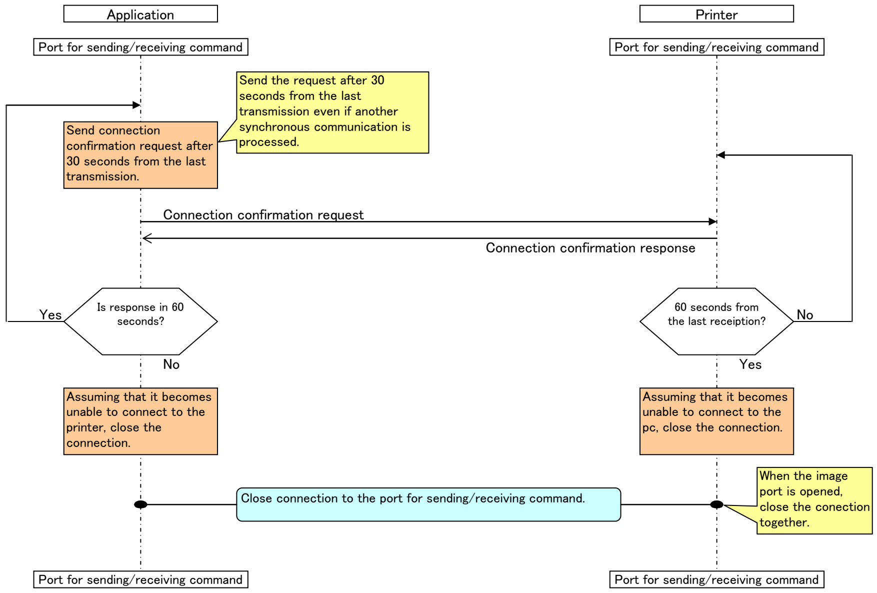

Application
Printer
Port for sending/receiving command
Port for sending/receiving command
Obtain backup information request
Obtain backup information response
Register backup data request
Register backup data response
No
All data sent?
Yes
Remaining
Data remaining?
Nothing left
Port for sending/receiving command
Port for sending/receiving command

Obtain the number of backup data and each backup data information via the response.

Judge whether all data are registered or not by the parameters of the response.
<Judgement condition: (Result == 0) && (TotalDataSize[Total data size of register backup data request] == DataGetPoint + DataSize) >

● Connection confirmation notification

△ When 2 hubs are plugged between the pc and the printer, it is not possible to check if the cable between the 2 hubs is unplugged without any communication.
So that the application intentionally communicates with the printer in order to check the connection.
This is a measure against the problem that the occupation can not be released if the cable between the pc and the printer is unplugged.
The communication load becomes high if the interval is too short. If the interval is too long, it takes time to detect the connection. Therefore it is set to 60 seconds as a reasonable period.


Application
Printer
Port for sending/receiving command
Port for sending/receiving command
Connection confirmation request
Connection confirmation response
Yes
Is response in 60 seconds?
No
60 seconds from the last receiption?
No
Yes
Port for sending/receiving command
Port for sending/receiving command

Send connection confirmation request after 30 seconds from the last transmission.

Send the request after 30 seconds from the last transmission even if another synchronous communication is processed.

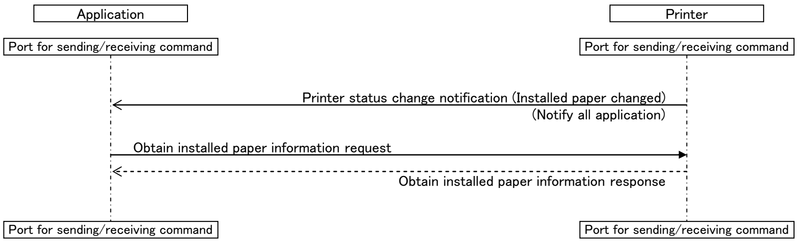
Assuming that it becomes unable to connect to the printer, close the connection.

Assuming that it becomes unable to connect to the pc, close the connection.

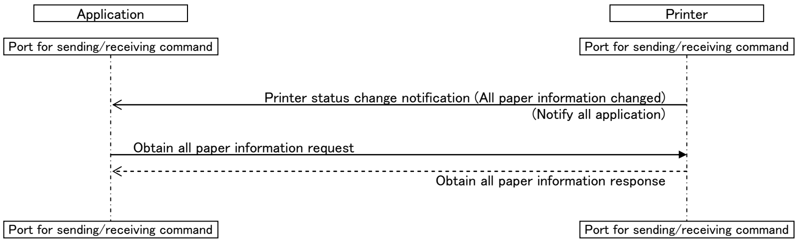
Close connection to the port for sending/receiving command.

When the image port is opened, close the conection together.

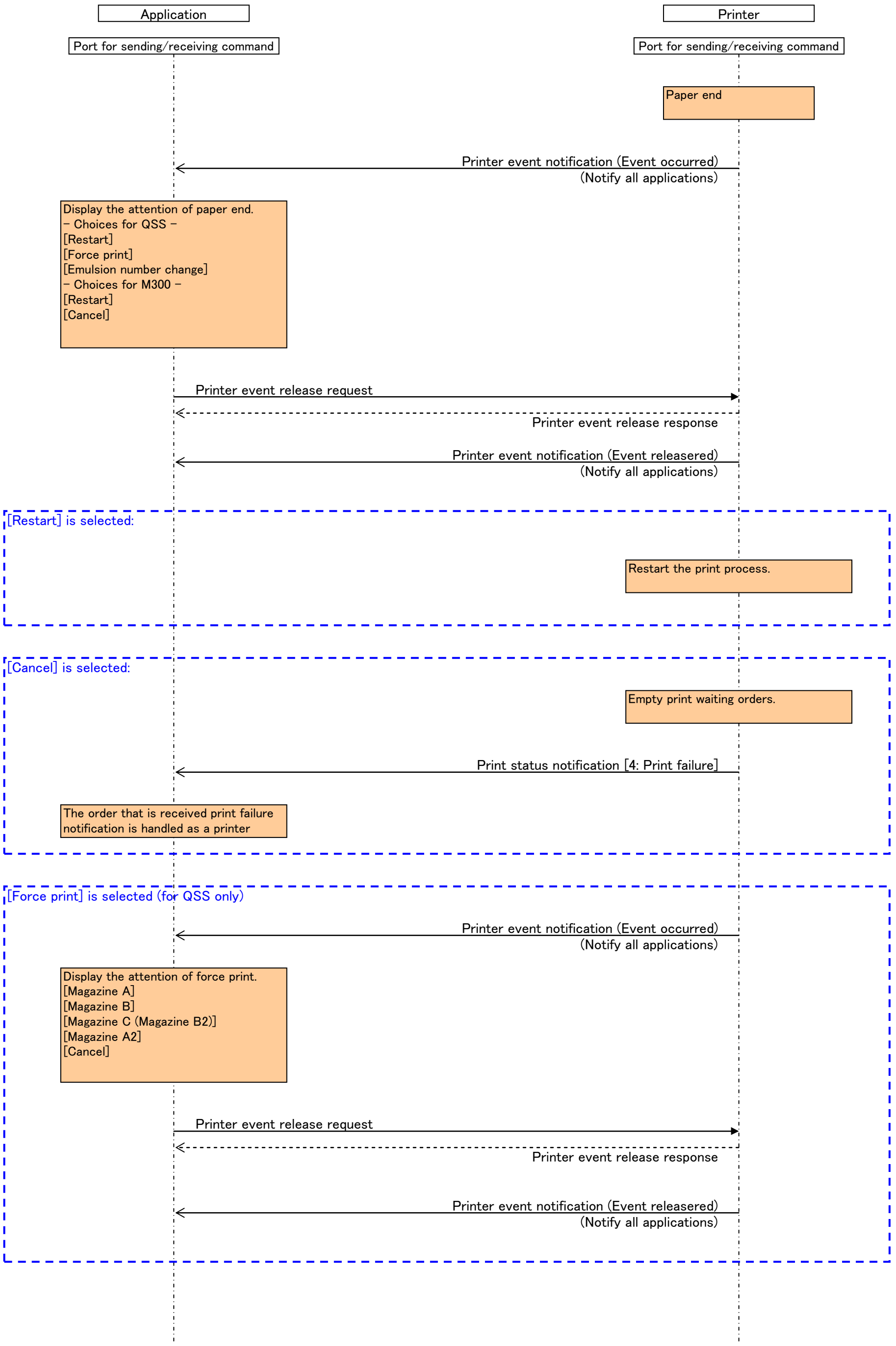
● Obtain installed paper information

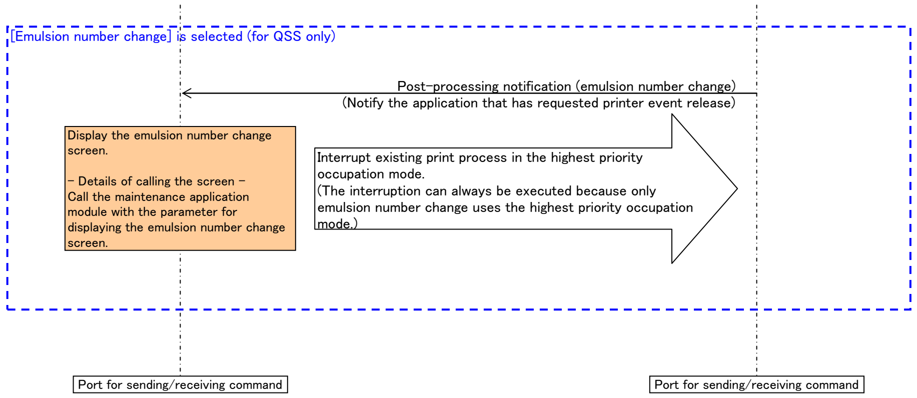

Application
Printer
Port for sending/receiving command
Port for sending/receiving command
Printer status change notification (Installed paper changed)
(Notify all application)
Obtain installed paper information request
Obtain installed paper information response
Port for sending/receiving command
Port for sending/receiving command

● Obtain all paper information


Application
Printer
Port for sending/receiving command
Port for sending/receiving command
Printer status change notification (All paper information changed)
(Notify all application)
Obtain all paper information request
Obtain all paper information response
Port for sending/receiving command
Port for sending/receiving command

● Paper end


Application
Printer
Port for sending/receiving command
Port for sending/receiving command
Paper end
Printer event notification (Event occurred)
(Notify all applications)
Display the attention of paper end.
– Choices for QSS –
[Restart]
[Force print]
[Emulsion number change]
– Choices for M300 –
[Restart]
[Cancel]
Printer event release request
Printer event release response
Printer event notification (Event releasered)
(Notify all applications)
[Restart] is selected:
Restart the print process.
[Cancel] is selected:
Empty print waiting orders.
Print status notification [4: Print failure]
The order that is received print failure notification is handled as a printer
[Force print] is selected (for QSS only)
Printer event notification (Event occurred)
(Notify all applications)
Display the attention of force print.
[Magazine A]
[Magazine B]
[Magazine C (Magazine B2)]
[Magazine A2]
[Cancel]
Printer event release request
Printer event release response
Printer event notification (Event releasered)
(Notify all applications)

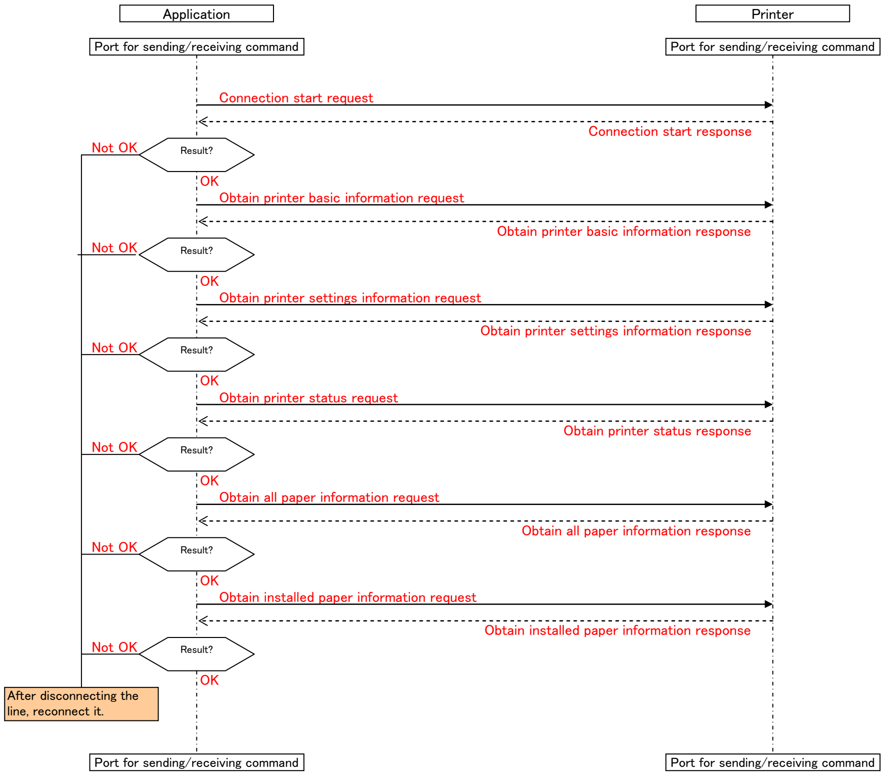

[Emulsion number change] is selected (for QSS only)
Post-processing notification (emulsion number change)
(Notify the application that has requested printer event release)
Port for sending/receiving command
Port for sending/receiving command

Display the emulsion number change screen.

- Details of calling the screen -
Call the maintenance application module with the parameter for displaying the emulsion number change screen.

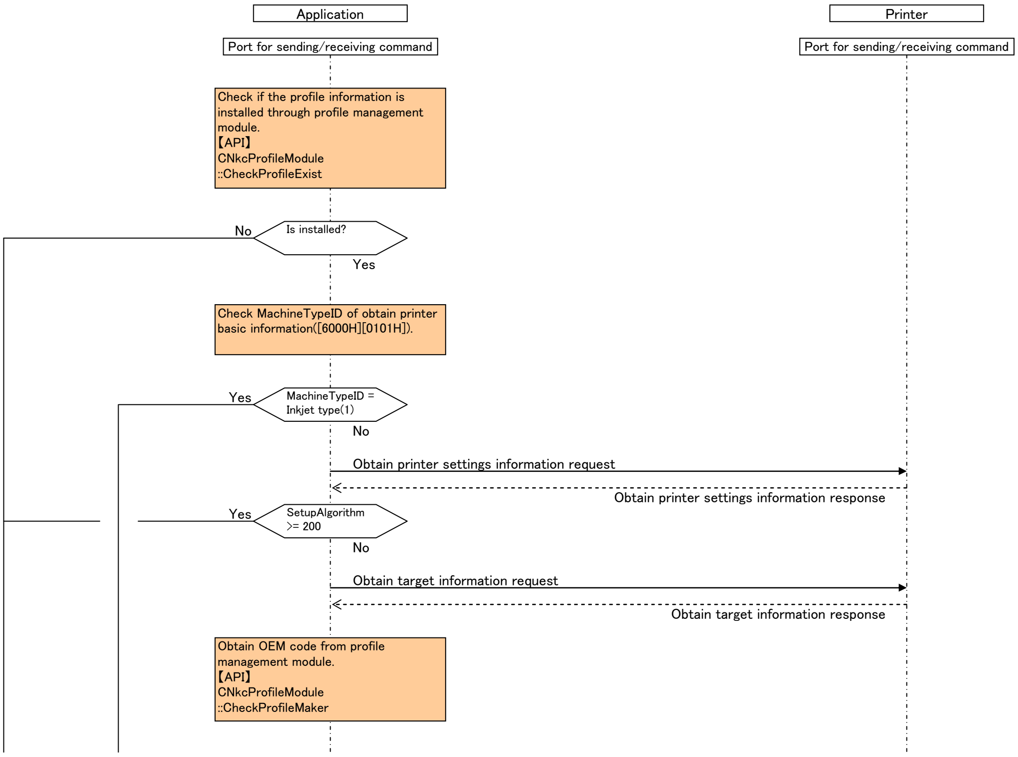
Interrupt existing print process in the highest priority occupation mode.
(The interruption can always be executed because only emulsion number change uses the highest priority occupation mode.)

● Start sequence 1 (obtain printer information)


Application
Printer
Port for sending/receiving command
Port for sending/receiving command
Connection start request
Connection start response
Not OK
Result?
OK
Obtain printer basic information request
Obtain printer basic information response
Not OK
Result?
OK
Obtain printer settings information request
Obtain printer settings information response
Not OK
Result?
OK
Obtain printer status request
Obtain printer status response
Not OK
Result?
OK
Obtain all paper information request
Obtain all paper information response
Not OK
Result?
OK
Obtain installed paper information request
Obtain installed paper information response
Not OK
Result?
OK
After disconnecting the line, reconnect it.
Port for sending/receiving command
Port for sending/receiving command

● Start sequence 2 (profile version check)

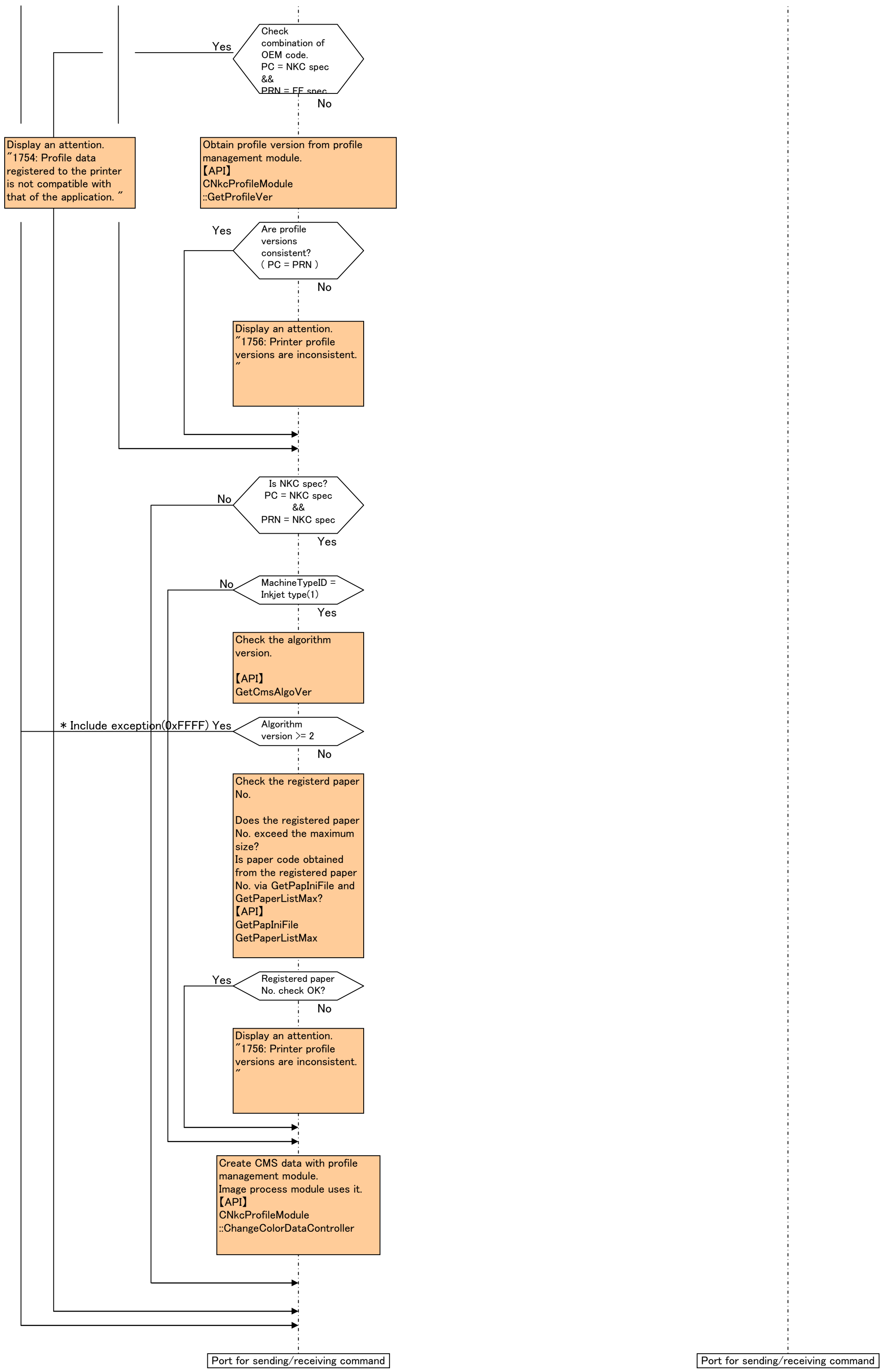
△ Execute this process after finishing start sequence 1.


Application
Printer
Port for sending/receiving command
Port for sending/receiving command
No
Is installed?
Yes
Yes
MachineTypeID = Inkjet type(1)
No
Obtain printer settings information request
Obtain printer settings information response
Yes
SetupAlgorithm >= 200
No
Obtain target information request
Obtain target information response

Check if the profile information is installed through profile management module.
【API】
CNkcProfileModule
::CheckProfileExist

Check MachineTypeID of obtain printer basic information([6000H][0101H]).

Obtain OEM code from profile management module.
【API】
CNkcProfileModule
::CheckProfileMaker


Check combination of OEM code. PC = NKC spec && PRN = FF spec
Yes
No
Display an attention. "1754: Profile data registered to the printer is not compatible with that of the application. "
Obtain profile version from profile management module.
【API】
CNkcProfileModule ::GetProfileVer
Are profile versions consistent? (PC = PRN)
Yes
No
Display an attention. "1756: Printer profile versions are inconsistent. "
Is NKC spec? PC = NKC spec && PRN = NKC spec
No
Yes
MachineTypeID = Inkjet type(1)
No
Yes
Check the algorithm version.
【API】
GetCmsAlgoVer
＊Include exception(0xFFFF) Yes
Algorithm version >= 2
No
Check the registerd paper No.
Does the registered paper No. exceed the maximum size?
Is paper code obtained from the registered paper No. via GetPapIniFile and GetPaperListMax?
【API】
GetPapIniFile
GetPaperListMax
Registered paper No. check OK?
Yes
No
Display an attention. "1756: Printer profile versions are inconsistent. "
Create CMS data with profile management module.
Image process module uses it.
【API】
CNkcProfileModule ::ChangeColorDataController
Port for sending/receiving command
Port for sending/receiving command

2. Command Property List

● Common definition among parameters

☐ Printers have upward compatibility for NPS I/F version.
☐ Local time is used for date parameter.
☐ Byte order is big-endian of network standard.
☐ Type notation

Notation	Length	Data type in C language	Explanation
CHAR	1 Byte	char	Signed 1 Byte integer
UCHAR	1 Byte	unsigned char	Unsigned 1 Byte integer
SHORT	2 Byte	short	Signed 2 Bytes integer
USHORT	2 Byte	unsigned short	Unsigned 2 Bytes integer
LONG	4 Byte	long	Signed 4 Bytes integer
ULONG	4 Byte	unsigned long	Unsigned 4 Bytes integer

● Printer detection request

Request I/F ID【 000FH 】 CMD ID【 0100H 】

No command property exists.

● Printer detection response

Response I/F ID【 000FH 】 CMD ID【 0101H 】

TAG	TYPE	REPEAT	Item name	Explanation	Remarks	Explanation of value	Mandatory/Defined valu	NPS Version
1	CHAR [1～20]	1	MachineTypeName	Model name Set printer model name string.	Set NULL to the end of string.		○	1.00
2	CHAR [1～20]	1	SerialNumber	Serial number Set printer serial number string.	Set NULL to the end of string.		○	1.00
3	USHORT [8]	1	SupportResolutions	Resolutions (unit: 0.1 dpi) Set resolutions supported by printer. When printer supports 2 or more resolutions, they are set in order from lowest to highest.		Specified range: 1 ～ 65535	○	1.00
4	USHORT	1	NpsVersion	NPS I/F version Set NPS I/F version. Upper order 1 byte: major number Low order 1 byte: minor number	Refer to "Appendix 3. NPS version compatibility" about purpose of version.		○	1.00
5	UCHAR [6]	1	MacAddress	MAC Address Set MAC address of printer NIC.			○	1.00
6	UCHAR [1-20]	1	SoftName	Software information Set software name.	Set NULL to the end of string.		○	1.00

● Printer detection request 2

Request I/F ID【 000FH 】 CMD ID【 0200H 】

No command property exists.

● Printer detection response 2

Response I/F ID【 000FH 】 CMD ID【 0201H 】

TAG	TYPE	REPEAT	Item Name	Explanation	Remarks	Explanation of value	Mandatory/Defined valu	NPS Version
1	USHORT	1	PrinterNum	Number of discovered printer information The following fields are repeatedly set as times as number of information.			○	
2	CHAR [4][1～20]	0～4	MachineTypeName	Model name Set printer model name string.	Set NULL to the end of string.			
3	CHAR [4][1～20]	0～4	SerialNumber	Serial number Set printer serial number string.	Set NULL to the end of string.			
4	USHORT [8]	0～4	SupportResolutions	Resolutions (unit: 0.1 dpi) Set resolutions supported by printer. When printer supports 2 or more resolutions, they are set in order from lowest to highest.		Specified range: 1 ～ 65535		
5	USHORT	0～4	NpsVersion	NPS I/F version Set NPS I/F version. Upper order 1 byte: major number Low order 1 byte: minor number	Refer to "Appendix 3. NPS version compatibility" about purpose of version.			
6	UCHAR [6]	0～4	MacAddress	MAC Address Set MAC address of printer NIC.				
7	UCHAR [1-20]	0～4	SoftName	Software information Set software name.	Set NULL to the end of string.			
8	USHORT	0～4	NpsPortNo	Port number for NPS				
9	USHORT	0～4	ImgPortNo	Port number for NPS (image data transmission)				

● IP address obtaining request

Request I/F ID【 000FH 】 CMD ID【 0300H 】

TAG	TYPE	REPEAT	Item name	Explanation	Remarks	Explanation of value	Mandatory/Defined valu	NPS Version
1	UCHAR [6]	1	MacAddress	MAC address of RIP-PC			○	

● IP address obtaining response

Response I/F ID【 000FH 】 CMD ID【 0301H 】

TAG	TYPE	REPEAT	Item name	Explanation	Remarks	Explanation of value	Mandatory/Defined valu	NPS Version
1	UCHAR [6]	1	MacAddress	MAC address of RIP-PC			○	

● Obtain Printer basic informaton

Request I/F ID【 6000H 】 CMD ID【 0100H 】

No command property exists.

Response I/F ID【 6000H 】 CMD ID【 0101H 】

TAG	TYPE	REPEAT	Item name	Explanation	Remarks	Explanation of value	Mandatory/Defined valu	NPS Version
1	USHORT	1	Result	Response result When value other than 0 is set to this item, rest of items are not set.	For details, refer to "Appendix 2. Error code list."		○	1.00
2	CHAR [1～20] variable	1	MachineTypeName	Model name Set printer model name string.	Set NULL to the end of string.		○	1.00
3	CHAR [1～20] variable	1	SerialNumber	Serial number Set printer serial number string.	Set NULL to the end of string.		○	1.00
4	USHORT [8]	1	SupportResolutions	Resolutions (unit: 0.1 dpi) Set resolutions supported by printer. When printer supports 2 or more resolutions, they are set in order from lowest to highest.			○	1.00
5	USHORT	1	MachineTypeID	Model classification Set printer engine type.		Parameter: 0: Silver halide exposure (Laser) type 1: Inkjet type 2: Silver halide exposure (iBeam) type	○	1.00
6	UCHAR [1-20]	1	SoftName	Software information Set software name.	Set NULL to the end of string.		○	1.00

● Obtain printer settings information

Request I/F ID【 6000H 】 CMD ID【 0200H 】

No command property exists.

Response I/F ID【 6000H 】 CMD ID【 0201H 】

TAG	TYPE	REPEAT	Item name	Explanation	Remarks	Explanation of value	Mandatory/Defined valu	NPS Version
1	USHORT	1	Result	Response result When value other than 0 is set to this item, rest of items are not set.	For details, refer to ″Appendix 2. Error code list.″		○	1.00
2	ULONG	1	TotalMemory	Total memory size of printer (unit: Byte)			○	1.00
3	ULONG	1	ImageSizeMinWidth	Minimum size of image width (unit: pixel) Set minimum size of acceptable image width.			○	1.00
4	ULONG	1	ImageSizeMinHeight	Minimum size of image height (unit: pixel) Set minimum size of acceptable image height.			○	1.00
5	ULONG	1	ImageSizeMaxWidth	Maximum size of image width (unit: pixel) Set maximum size of acceptable image width.			○	1.00
6	ULONG	1	ImageSizeMaxHeight	Maximum size of image height (unit: pixel) Set maximum size of acceptable image height.			○	1.00
7	USHOT	1	NumberOfMagazine	Number of magazines that can be installed	Returns number of physical magazines. It not necessarily be the same as Tag:2 of Obtain installed paper information	Specified range: 1 ～ 5	○	1.00
8	USHORT [8]	1	PrinterTime	Printer date Set date information of printer. Array[0] year Array[1] month Array[2] day Array[3] hour Array[4] minute Array[5] second Array[6] millisecond Array[7] day of the week		Specified range: Array[0] 1980～2079 Array[1] 1～12 Array[2] 1～31 Array[3] 0～23 Array[4] 0～59 Array[5] 0～59 Array[6] 0～999 Array[7] 0～6 (0: Sunday)	○	1.00
9	ULONG	1	RepeatCountMax	Maximum repeat quantity Set maximum number for repeat quantity.	Models that support NPS return more than 9999 in principle.		○	1.00
10	UCHAR [32]	1	SupportImageFormat	Supported image Set acceptable supported image. Array[0] JPEG Array[1] Bitmap Array[2] RGB 24 bit color dot sequential Array[3] RGB 48 bit color dot sequential (high 12 bits available, LSB) Array[4] RGB 48 bit color dot sequential (low 12 bits available, LSB) Array[5] BGR 48 bit color dot sequential (high 12 bits available, LSB) Array[6] BGR 48 bit color dot sequential (low 12 bits available, LSB) Array[7] RGB 48 bit color dot sequential (high 12 bits available, MSB) Array[8] RGB 48 bit color dot sequential (low 12 bits available, MSB) Array[9] BGR 48 bit color dot sequential (high 12 bits available, MSB) Array[10] BGR 48 bit color dot sequential (low 12 bits available, MSB) Array[11-13] Used in NoritsuPrinter.dll Array[14] Bitmap (passed by file path) Array[15-31] Not in use *Refer to ″Appendix 5. Image format″ about image format.	- JPEG - ・Grayscale, 24bpp RGB, 32bpp CMYK, Exif Ver.2.1 - BMP - ・24bit	00H: Not acceptable 01H: Acceptable	○	1.00
11	UCHAR	1	LaminatorUnitAttach	Laminator unit is attached or not		0: Not attached 1: Attached	0: Not attached	1.00
13	USHORT [3]	1	InstallationDate	Installation date Set printer installation date. Array[0] year Array[1] month Array[2] day		Specified range: Array[0] 0, 1980～2079 Array[1] 0, 1～12 Array[2] 0, 1～31	Array[0] = 0 Array[1] = 0 Array[2] = 0	1.00
14	USHORT [3]	1	OperationStartDate	Operation start date Set printer operation start date. Array[0] year Array[1] month Array[2] day		Specified range: Array[0] 0, 1980～2079 Array[1] 0, 1～12 Array[2] 0, 1～31	Array[0] = 0 Array[1] = 0 Array[2] = 0	1.00
15	USHORT	1	ProcessorType	Image development processor type		0: None 1: LPP800(iBEAM800) 2: LPP900(Laser900) 3: LPP1200(Laser1200) 4: LP1700(900) 5: LP1700(1300) 6: LP1700(1700) 7: LP2500(2300) 8: LP2500(2500) 9: D701(DL400) 10: D701-1(DL410) 11: D502(DL42SD) 12: D703(DL430) 13: SD-5 14: LPP750G2(QSS-3900) 15: LPP1500(QSS-3901HD)	0: None	1.00
16	USHORT	1	EmulsionNumber	Replenishment processing type		0: None 1～: Replenishment processing type	0: None	1.00
17	CHAR [1～13]	1	PrinterNickname	User-defined printer name Set user-defined printer name string.	Set NULL to the end of string.		″″	1.00
18	USHORT	1	SupportAngle	Rotation support Set whether rotation (1: 90-degree rotation, 2: 180-degree rotation, 3: 270-degree rotation) of reception start request is supported or not.		0: Unsupported 1: Supported	0: Unsupported	1.00
19	USHORT	1	SupportIntoPrinter	Occupation interruption support Set whether printer supports occupation interruption or not.		0: Unsupported 1: Supported	0: Unsupported	1.00
20	USHORT	1	SupportLongPaper	Long length print support Set whether long length print is supported or not.		0: Unsupported 1: Supported	0: Unsupported	1.00
21	UCHAR	1	SorterStatus	Number of sorter trays Set number of trays.		0: Not attached 1～: N-sorter is attached. (N represents number of trays)	0: Not attached	1.00
23	UCHAR	1	CvpStatus	Number of CVP line Set number of lines of back print.		0: Unset 1: 1 line printable 2: 2 lines printable	0: Unset	1.00

24	USHORT	1	SupportPaperFitting	Paper fitting support Set whether paper fitting (1: Cut, 2: Overall) of reception start request command is supported or not.		0: Unsupported 1: Supported	0: Unsupported	1.00
25	USHORT	1	SupportEdgeEnhancement	Edge enhancement support Set whether edge enhancement (1: ON) of reception start request command is supported or not.		0: Unsupported 1: Supported	0: Unsupported	1.00
26	USHORT	1	SupportCMS	CMS support Set whether CMS (1: ON) of reception start request command is supported or not		0: Unsupported 1: Supported	0: Unsupported	1.00
27	USHORT	1	SupportWithBorder	Border support Set whether border size (top/bottom/left/right) and border color of reception start request command are supportde or not.		0: Unsupported 1: Supported	0: Unsupported	1.00
28	USHORT	1	MachinTypeForProfile	Model code for profile Set model code for profile.	Determine model and engine type by model code for profile		○	1.00
29	UCHAR [1〜~~6~~7]	1	MachinProfileVersion	Profile version Set profile version registered to printer.	Set NULL to the end of string.		””	1.00
30	USHORT	6	PaperTypeCode	Paper type code Set paper type code. Array[0] Paper type code for paper type 1 Array[1] Paper type code for paper type 2 Array[2] Paper type code for paper type 3 Array[3] Paper type code for paper type 4 Array[4] Paper type code for paper type 5 Array[5] Paper type code for paper type 6	Silver halide printer: The code registered on paper specifications registration Inkjet printer: The code registered on paper setings *The value is common code among models (Not distinguished by model)		○	1.00
31	UCHAR	1	OemCode	OEM code Set OEM code.		0: NKC specifications 1: FF specifications	0: NKC specifications	1.00
32	USHORT	1	SetupAlgorithm	Setup Algorithm Set setup algorithm type of silver halide printer.		0: Unsupported 100: Type 1 200: Type 2	0: Unsupported	1.00
33	USHORT	1	SupportDoubleSided	Duplex printing support Set whether printer supports duplex printing.	This shows information whether duplex printing is supported or not regardless of whether manual operation or automatic operation. NPS printers handle the difference between manual duplex printing and automatic duplex printing.	0: Unsupported (single-sided printing only) 1: Supported	0: Unsupported (single-sided printing only)	1.00
34	ULONG	1	FadAttachNo	FAD attachment number Set the terminal number of FAD (an abbreviation for Full Auto Dispenser.) 0 is set when option registration of FAD is disabled. Even if option registration of FAD is enabled, 0 is set when FAD is not attached.	NPS I/F specifications do not define values except for 0 so that printers and applications can assign values freely.	0: Without FAD 1〜: Attached FAD number 0xFFFFFFFF: Not attached	0: Without FAD	1.00
35	USHORT	1	SupportInterrupt	Interruption Set whether printer supports interruption or not.		0: Unsupported 1: Support D703 type interruption 2: Support RD151 type interruption	0: Unsupported	1.00

- Obtain printer status

Request I/F ID【 6000H 】 CMD ID【 0300H 】

No command property exists.

Response I/F ID【 6000H 】 CMD ID【 0301H 】

TAG	TYPE	REPEAT	Item name	Explanation	Remarks	Explanation of value	Mandatory/Defined valu	NPS Version
1	USHORT	1	Result	Response result When value other than 0 is set to this item, rest of items are not set.	For details, refer to ″Appendix 2. Error code list.″		○	1.00
2	UCHAR	1	PrinterStatus	Printer general status	Definition of printing: Printing means the period when the printer puts restrictions on the behavior. In case of silver halide printer, it means the period from paper sending start to transportation to the processor.	1: In maintenance mode 2: Idling 3: Printing 4: Closed 5: In program timer mode 6: Installation in progress	○	1.00
3	UCHAR	1	AcceptStatus	Reception status Set print reception status.		1: Not possible 2: Possible	○	1.00
4	UCHAR		PrinterPossession	Printer occupation status		1: Unoccupied 2: Normal occupation 3: Unoccupied (normal resumption pending) 4: Express [level 1] occupation 5: Unoccupied (express [level 1] resumption pending) 6: Express [level 2] occupation 7: Unoccupied (express [level 2] resumption pending) 8: Express [level 3] occupation 9: Unoccupied (express [level 3] resumption pending) 10: Express [level 4] occupation 11: Unoccupied (express [level 4] resumption pending) 12: Express [level 5] occupation 13: Unoccupied (express [level 5] resumption pending)	○	1.00
5	UCHAR	1	AdvanceStatus	Paper addvance section status		0: Impossible to obtain status 1: Next request can not be recieved 2: Next request can be received 3: In operation	0: Impossible to obtain status	1.00
6	UCHAR	1	LaserStatus	Optical engine section status (laser, iBeam and so on)		0: Impossible to obtain status 1: Uninitialized 2: Temp control started (not completed) 3: Temp control completed	0: Impossible to obtain status	1.00

7	UCHAR	1	DevelopmentStatus	Development section status		0: Impossible to obtain status 1: Next request can not be received 2: Next request can be received 3: In operation	0: Impossible to obtain status	1.00
8	UCHAR	1	ProcessorStatus	Processor tank status		0: Impossible to obtain status 1: No temperature control 2: Solution being heated up 3: Developer temp controlled 4: Temp control impossible	0: Impossible to obtain status	1.00
9	UCHAR	1	ReplenisherStatus	Replenishment section status		0: Impossible to obtain status 1: Normal operation 2: Compensating for the evaporation 3: Quiet process in progress 4: Preparing the new replenishment solution	0: Impossible to obtain status	1.00
10	UCHAR	1	ReplaceCartridgeStatus	Whether the replenishment cartridge can be replaced or not		0: Impossible to obtain status 1: Replacement is possible 2: Waiting for replenishment 3: Opening	0: Impossible to obtain status	1.00
11	UCHAR	1	StartUpChecksStatus	Startup check status	[1: Not performed] means that the startup check is not performed after turning on the printer. [2: Performed] means that the startup check is performed after turning on the printer.	0: Impossible to obtain status 1: Not performed 2: Performed	0: Impossible to obtain status	1.00
12	UCHAR	1	RefillWaterStatus	Water refilling status during auto setup		0: Impossible to obtain status 1: Not performed 2: Performed	0: Impossible to obtain status	1.00
13	UCHAR	1	DailySetupStatus	Daily setup status during auto setup		0: Impossible to obtain status 1: Not performed 2: Performed	0: Impossible to obtain status	1.00
14	UCHAR	1	ControlStripStatus	Control strip processing status during auto setup		0: Impossible to obtain status 1: Not performed 2: Performed 3: Unset the unit	0: Impossible to obtain status	1.00
15	UCHAR	1	InMaintenance	In maintenance Set whether printer is occupied by maintenance application or not.		0: Impossible to obtain status 1: Not occupied by maintenanse application 2: Occupied by maintenance application	0: Impossible to obtain status	1.00
16	UCHAR	1	FadStatus	FAD status Set the following FAD status. Offline: Can not communicate with FAD application (unacceptable) Out of service: FAD application is finished normaly (unacceptable) Warning: Specific error/attention occurs (unacceptable) In maintenance mode: Mechanical adjustent application is started (unacceptable) Idling: Acceptable (Even if the FAD status is acceptable, the print is not always executed as it is depending on whether trays are full or not.)		0: Impossible to obtain status 1: Offline 2: Out of service 3: Idling 4: Warning 5: In maintenance mode	0: Impossible to obtain status	1.00
17	UCHAR	1	InterruptStatus	Express interruption prohibition status Set whether express interruption is prohibited or not. The condition for prohibiting express interruption is as follows: When D1005 performs duplex printing *Express interruption is possible during back side printing completion and front side printing start		0: Impossible to obtain status 1: Express interruption is permitted 2: Express interruption is prohibited	0: Impossible to obtain status	1.00

● Obtain installed paper information

Request I/F ID【 6000H 】 CMD ID【 0400H 】

No command property exists.

Response I/F ID【 6000H 】 CMD ID【 0401H 】

TAG	TYPE	REPEAT	Item name	Explanation	Remarks	Explanation of value	Mandatory/Defined valu	NPS Version
1	USHORT	1	Result	Response result When value other than 0 is set to this item, rest of items are not set.	For details, refer to ″Appendix 2. Error code list.″		○	1.00
2	USHORT	1	NumberOfPaper	Number of installed paper information	Returns the number of installed paper information. When the paper can not be used due to lack of option, it is not counted even if it is installed. When multi specifications are registered on RD-151, all of them are counted. It is not always same value as Tag: 7 of obtaining printer settings information (6000H/0201H.)		○	1.00
3	USHORT	0～64	PaperWidth	Paper width (unit: 0.1mm) Set paper width. Number of repetitions: Repeated as many times as the value of NumberOfPaper.			○	1.00
6	USHORT	0～64	PaperId	Paper ID (surface) range: 1～4 Set unique value for each paper type. Number of repetitions: Repeated as many times as the value of NumberOfPaper.	*Paper ID relates to LUT designation.		○	1.00
12	ULONG	0～64	PaperRemaind	Remaining paper (unit: 0.1mm) Set remaining paper. Number of repetitions: Repeated as many times as the value of NumberOfPaper.			0	1.00

13	UCHAR	0～64	PaperFeed	Paper feed Set paper feed. Number of repetitions: Repeated as many times as the value of NumberOfPaper.		0: Roll paper 1: Sheet paper	0: Roll paper	1.00
14	UCHAR	0～64	PaperPresence	Paper installation status Set whether paper is installed to the printer or not. Number of repetitions: Repeated as many times as the value of NumberOfPaper.		0: Uninstalled 1～: Installation location (A～)	0: Uninstalled	1.00
20	CHAR「1～32]	0～64	PaperName	Paper name Set paper name specified when paper feed is sheet paper.	Set NULL to the end of string.		″″	1.00

● Printer occupation start

Request I/F ID【 6000H 】 CMD ID【 0500H 】

TAG	TYPE	REPEAT	Item name	Explanation	Remarks	Explanation of value	Mandatory/Defined valu	NPS Version
1	USHORT	1	Port	Port number for sending/receiving image Set port number of the application for connecting to the image sending/receiving port.			○	1.00
2	USHORT	1	PossessionMode	Occupation mode Set occupation mode.	Priority goes up depending on the express level.	0: Normal 1: Restart interrupted order (normal) 2: Express [level 1] 3: Restart interrupted order (express [level 1]) 4: Express [level 2] 5: Restart interrupted order (express [level 2]) 6: Express [level 3] 7: Restart interrupted order (express [level 3]) 8: Express [level 4] 9: Restart interrupted order (express [level 4]) 10: Express [level 5] 11: Restart interrupted order (express [level 5])	0: Normal	1.00
3	USHORT	1	InterruptMode	Interruption mode Set interruption mode.		0: Not interrupt 1: Interrupt	0: Not interrupt	1.00
4	UCHAR	1	InMaintenance	In maintenance Set whether printer is occupied by maintenance application or not.		0: Not occupied by maintenance application 1: Occupied by maintenance application	0: Not occupied by maintenance application	1.00
5	USHORT	1	PossessionNo	Occupation number	Set 0 when PossessionMode is even number. When PossessionMode is odd number, set PossessionNo of the order before interruption.			1.00
6	ULONG	1	ExOptions	Extended option	Set the bit corresponding to enabled option. 1bit: Single row printing (by order) This tag is invalid (ignored) when the printer does not support extended option. This tag is invalid (ignored) when the printer does not support specified option.	Ex: 0x00000000: Not specified 0x00000001: Single row printing (target model: D1005HR and QSS GREEN)	―/0x00000000	1.00

Response I/F ID【 6000H 】 CMD ID【 0501H 】

TAG	TYPE	REPEAT	Item name	Explanation	Remarks	Explanation of value	Mandatory/Defined valu	NPS Version
1	USHORT	1	Result	Response result When value other than 0 is set to this item, rest of items are not set.	For details, refer to ″Appendix 2. Error code list.″		○	1.00
2	USHORT	1	PossessionNo	Occupation number Set unique number managed by printer.	When occupation is restarted, the occupation number of request command is set.		○	1.00

● Printer occupation end

Request I/F ID【 6000H 】 CMD ID【 0600H 】

TAG	TYPE	REPEAT	Item name	Explanation	Remarks	Explanation of value	Mandatory/Defined valu	NPS Version
1	USHORT	1	PossessionNo	Occupation number Set occupation number specified by printer occupation start response.			○	1.00

Response I/F ID【 6000H 】 CMD ID【 0601H 】

TAG	TYPE	REPEAT	Item name	Explanation	Remarks	Explanation of value	Mandatory/Defined valu	NPS Version
1	USHORT	1	Result	Response result When value other than 0 is set to this item, rest of items are not set.	For details, refer to ″Appendix 2. Error code list.″		○	1.00
2	USHORT	1	PossessionNo	Occupation number Set occupation number of request command.			○	1.00

● Reception start

Request I/F ID【 6000H 】 CMD ID【 0700H 】

Refer to "Obtain all paper information" about how to specify the paper.

TAG	TYPE	REPEAT	Item name	Explanation	Remarks	Explanation of value	Mandatory/Defined valu	NPS Version
1	USHORT	1	PossessionNo	Occupation number Set occupation number specified by printer occupation start response.			○	1.00
2	ULONG	1	ImageCapacity	Image size (unit: Byte) Set size of sending image data.			○	1.00
3	UCHAR	1	ImageFormat	Image format Set format of sending image.		0: JPEG 1: Bitmap 2: RGB 24 bit color dot sequential 3: RGB 48 bit color dot sequential (high 12 bits available, LSB) 4: RGB 48 bit color dot sequential (low 12 bits available, LSB) 5: BGR 48 bit color dot sequential (high 12 bits available, LSB) 6: BGR 48 bit color dot sequential (low 12 bits available, LSB) 7: RGB 48 bit color dot sequential (high 12 bits available, MSB) 8: RGB 48 bit color dot sequential (low 12 bits available, MSB) 9: BGR 48 bit color dot sequential (high 12 bits available, MSB) 10: BGR 48 bit color dot sequential (low 12 bits available, MSB) 11-13: Used in NoritsuPrinter.dll 14: Bitmap (passed by file path) 100: Image for measuring communication speed 101: Image for network self-diagnostic (for CRC check) *Refer to "Appendix 5. Image format" about image format.	○	1.00
4	USHORT	1	ImageWidth	Image width (unit: pixel) Set image width.			○	1.00
5	USHORT	1	ImageHeight	Image height (unit: pixel) Set image height.			○	1.00
6	USHORT	1	PaperResolution	Input resolution (unit: 0.1dpi) Set the input resolution of the image to be printed on the paper.			○	1.00
7	USHORT	1	PaperWidth	Paper width (unit: 0.1mm) Set paper width.			○	1.00
8	USHORT	1	PaperLength	Paper length (unit: 0.1mm) Set paper length.			○	1.00
9	USHORT	1	PaperID	Paper ID Set paper ID.			○	1.00
10	USHORT	1	Repeat	Repeat quantity Set repeat quantity. Set any value between 1 and the maximum repeat count obtained via printer setting information request.		The maximum to be specified can be obtained via printer setting information request.	1	1.00
11	USHORT	1	PaperFeed	Paper feed Set paper feed.		0: Roll paper 1: Sheet paper	0: Roll paper	1.00
12	USHORT	1	Laminator	Lamination Set whether paper is laminated or not.		0: Not laminated 1: Laminated	0: Not laminated	1.00
13	USHORT	1	CvpInitialValue1	Initial value for the serial number to be printed in the 1st line of CVP Set the initial value for the serial number to be printed in the 1st line of CVP.	The serial number is incremented with each repeating. The range is 1 to 9999. When the serial number exceeds 9999, it goes back to 0.	Specified range: 1 ～ 9999	1	1.00
14	USHORT	1	CvpPoint1	Position where the serial number is inserted in the 1st line of CVP Set the position in the 1st line of CVP where the serial number is inserted.		Specified range: 0 ～ (Number of characters in the 1st line of CVP - CvpInitialWidth1)	0	1.00
15	USHORT	1	CvpInitialWidth1	Digit of serial number to be printed in the 1st line of CVP Set the digit of the serial number to be printed in the 1st line of CVP. Set the serial number of the specified digit in CvpLine1. Serial number, as specified in CvpInitialValue1, will be printed starting from the position specified by CvpPoint1 in the digit specified by CvpInitialWidth1. Serial number will be printed right-justified. When the serial number is less than the digit specified by CvpInitialWidth1, it will be padded by space. Serial number will not be printed when CvpLine1 is not specified. Serial number will not be printed, either, when the sum of CvpPoint1 and CvpInitialWidth1 exceeds the data length specified by CvpLine1.		Specified range: 0: No serial number is printed 1～4: Number of digits to be printed	0: No serial number is printed	1.00
16	USHORT	1	CvpInitialValue2	Initial value for the serial number to be printed in the 2nd line of CVP Set the initial value for the serial number to be printed in the 2nd line of CVP.	The serial number is incremented with each repeating. The range is 1 to 9999. When the serial number exceeds 9999, it goes back to 0.	Specified range: 1 ～ 9999	1	1.00
17	USHORT	1	CvpPoint2	Position where the serial number is inserted in the 2nd line of CVP Set the position in the 2nd line of CVP where the serial number is inserted.		Specified range: 0 ～ (Number of characters in the 2nd line of CVP - CvpInitialWidth2)	1	1.00

18	USHORT	1	CvpInitialWidth2	Digit of serial number to be printed in the 2nd line of CVP Set the digit of the serial number to be printed in the 2nd line of CVP. Set the serial number of the specified digit in CvpLine2. Serial number, as specified in CvpInitialValue2, will be printed starting from the position specified by CvpPoint2 in the digit specified by CvpInitialWidth2. Serial number will be printed right-justified. When the serial number is less than the digit specified by CvpInitialWidth2, it will be padded by space. Serial number will not be printed when CvpLine2 is not specified. Serial number will not be printed, either, when the sum of CvpPoint2 and CvpInitialWidth2 exceeds the data length specified by CvpLine2.		Specified range: 0: No serial number is printed 1～4: Number of digits to be printed	0: No serial number is printed	1.00
19	UCHAR [1～256]	1	CvpLine1	1st line of CVP Set the data to be printed on the 1st line of CVP. Refer to ″Appendix 1. Noritsu character code table″ about the characters to be printed and how to specify the characters.	Set NULL to the end of string.		″″	1.00
20	UCHAR [1～256]	1	CvpLine2	2nd line of CVP Set the data to be printed on the 2nd line of CVP. Refer to ″Appendix 1. Noritsu character code table″ about the characters to be printed and how to specify the characters.	Set NULL to the end of string.		″″	1.00
21	USHORT	1	Angle	Angle of rotation Set angle of rotation.	[1: 90-degree rotation], [2: 180-degree rotation], and [3: 270-degree rotation] can be specified only if SupportAngle of obtaining printer setting information is ″1: Supported″. Image is rotated in clockwise direction.	0: No rotation 1: 90-degree rotation 2: 180-degree rotation 3: 270-degree rotation	0: No rotation	1.00
22	UCHAR	1	PaperPresence	Installation position of the paper Set the installation position of the paper magazine on the printer. When the same paper magazines are set to both magazines A and B, specify which magazine to use.		0: Automatic judgment 1～: Installed magazine (A～)	0: Automatic judgment	1.00
23	SHORT	1	Espc	Expoure start position correction (unit: 0.1mm) Set the correction value of exposure start position.		Specified range: -99 ～ +99	0	
24	SHORT	1	Retry	Number of retransmissions Set the number of image retransmissions.	Set 0 normally. When retransmit the image after receiving ″Image data is incorrect.″ via image transmission confirmation response, increment this number and send the request.		○	
25	ULONG	1	OrderId	Order ID Set order ID.	This tag is used for judging whether the order is separated by express processing or not.		○	1.00
26	USHORT	1	PaperFitting	Paper fitting Set how to fit the input image to the paper size after taking spill over and border into account.	[1: Cut] and [2: Overall] can be specified only if SupportPaperFitting of obtaining printer setting information is ″1: Supported″.	0: Real 1: Cut 2: Overall	0: Real	1.00
27	USHORT	1	EdgeEnhancement	Edge enhancement Set ON/OFF of edge enhancement.	[1: ON] can be specified only if SupportEdgeEnhancement of obtaining printer setting information is ″1: Supported″. When [1: ON] is set, the following edge enhancements are enabled: Close the gap of edge enhancement due to the difference of print engine. Edge enhancement that is needed when the input image is enlarged/reduced to fit the paper.	0: OFF 1: ON	0: OFF	1.00
28	USHORT	1	CMS	CMS Set ON/OFF of CMS.	[1: ON] can be specified only if SupportCMS of obtaining printer setting information is ″1: Supported″.	0: OFF 1: ON	0: OFF	1.00
29	USHORT	1	WithBorderTop	Border size (top) (unit: 0.1mm) Set border size of top edge of the image.	[1～] can be specified only if SupportWithBorder of obtaining printer setting information is ″1: Supported″. Border size includes spill over area.	0: Borderless (top) 1～	0: Borderless (top)	1.00
30	USHORT	1	WithBorderBottom	Border size (bottom) (unit: 0.1mm) Set border size of bottom edge of the image.	[1～] can be specified only if SupportWithBorder of obtaining printer setting information is ″1: Supported″. Border size includes spill over area.	0: Borderless (bottom) 1～	0: Borderless (bottom)	1.00
31	USHORT	1	WithBorderLeft	Border size (left) (unit: 0.1mm) Set border size of left edge of the image.	[1～] can be specified only if SupportWithBorder of obtaining printer setting information is ″1: Supported″. Border size includes spill over area.	0: Borderless (left) 1～	0: Borderless (left)	1.00
32	USHORT	1	WithBorderRight	Border size (right) (unit: 0.1mm) Set border size of right edge of the image.	[1～] can be specified only if SupportWithBorder of obtaining printer setting information is ″1: Supported″. Border size includes spill over area.	0: Borderless (right) 1～	0: Borderless (right)	1.00
33	UCHAR [3]	1	WithBorderColor	Border color Set color to fill the border (top/bottom/left/right.) Array[0] Red Array[1] Green Array[2] Blue	Border color can be specified only if SupportWithBorder of obtaining printer setting information is ″1: Supported″.	Specified range: Array[0] 0 ～ 255 Array[1] 0 ～ 255 Array[2] 0 ～ 255	Array[0] = 255 Array[1] = 255 Array[2] = 255	1.00
34	CHAR 「1～32]	1	PaperName	Paper name Set paper name. Set the paper name obtained by response to installed paper information request or response to all paper information request.	Set NULL to the end of string. Set paper name when paper feeding is sheet paper.		″″	1.00
35	SHORT	1	PrintCenterOffset	Offset value of print center position in main scanning direction (unit: 0.1mm) Set offset value of print center position in main scanning direction.	The followings show the shift direction of print center position by the setting value. When the value is 0: Set paper center position as print center position. (Image is centered to the paper.) When the value is negative: Shift print center position to the left (exposure near side) from paper center position. When the value is positive: Shift print center position to the right (exposure far side) from paper center position.		0	1.00

36	USHORT	1	CvpPrintSize	CVP character size Set size of back print character.	The 1st line and the 2nd line of CVP are printed with this font size. When [0: Normal] is specified, and when it is impossible to print all of characters judging from the paper length and the number of characters, the printer automatically switches the font size to small one.	0: Normal 1: Small 2: Large	0: Normal	1.00
37	USHORT	1	PrintQuality	Printing methd Specify printing method.	When the printer is M300: [1: Standard] = 1440dpi (2 pass) [2: Give priority to image quality] = 1440dpi (4 pass)	0: Give priority to printer setting 1: Standard 2: Give priority to image quality	0: Give priority to printer setting	1.00
38	UCHAR	1	ImageEnLargeType	Image enlarging algorithm Specify image enlarging algorithm.		0: Bilinear 1: Nearest neighbor	0: Bilinear	1.00
39	USHORT	1	LoadingCount	Loading start quantity Set loading start quantity in retransmitting.	This is not cleared if the cancel notification is received.	In retransmitting a duplex print, set the counts of receiving the print status notification (10: loading start) between 0 and the repeat count.	0	
40	USHORT	1	PrintedCount	Prints exit completion quantity Set prints exit completion quantity in retransmitting.		In retransmitting a duplex print, set the counts of receiving the print status notification (3: prints exit completion) between 0 and the repeat count.	0	
41	ULONG	1	EventId	Event identifier Set event identifier in retransmitting.		In retransmitting a duplex print, set the event identifier informed by the event status notification.	0	
42	USHORT	1	EventCodeMain	Event code (main number) Set event code (main number) in retransmitting.		In retransmitting a duplex print, set the main number of the error/attention code informed by the event status notification.	0	

Response I/F ID【 6000H 】 CMD ID【 0701H 】

TAG	TYPE	REPEAT	Item name	Explanation	Remarks	Explanation of value	Mandatory/Defined valu	NPS Version
1	USHORT	1	Result	Response result When value other than 0 is set to this item, rest of items are not set.	For details, refer to ″Appendix 2. Error code list.″		○	1.00
2	USHORT	1	PossessionNo	Occupation number Set occupation number of request command.			○	1.00
3	ULONG	1	ReceiptNumber	Receipt number Set unique number managed by printer.	Set value higher than 1 to the receipt number as 0 is reserved for a special purpose.		○	1.00

● Image transmission confirmation

Request I/F ID【 6000H 】 CMD ID【 0800H 】

TAG	TYPE	REPEAT	Item name	Explanation	Remarks	Explanation of value	Mandatory/Defined valu	NPS Version
1	USHORT	1	PossessionNo	Occupation number Set occupation number specified by printer occupation start response.			○	1.00
2	ULONG	1	ReceiptNumber	Receipt number Set receipt number specified by reception start response.			○	1.00

Response I/F ID【 6000H 】 CMD ID【 0801H 】

TAG	TYPE	REPEAT	Item name	Explanation	Remarks	Explanation of value	Mandatory/Defined valu	NPS Version
1	USHORT	1	Result	Response result When value other than 0 is set to this item, rest of items are not set.	For details, refer to ″Appendix 2. Error code list.″		○	1.00
2	USHORT	1	PossessionNo	Occupation number Set occupation number of request command.			○	1.00
3	ULONG	1	ReceiptNumber	Receipt number Set receipt number of request command.			○	1.00

● Tray change

Request I/F ID【 6000H 】 CMD ID【 0B00H 】

TAG	TYPE	REPEAT	Item name	Explanation	Remarks	Explanation of value	Mandatory/Defined valu	NPS Version
1	USHORT	1	PossessionNo	Occupation number Set occupation number specified by printer occupation start response.			○	1.00

Response I/F ID【 6000H 】 CMD ID【 0B01H 】

TAG	TYPE	REPEAT	Item name	Explanation	Remarks	Explanation of value	Mandatory/Defined valu	NPS Version
1	USHORT	1	Result	Response result When value other than 0 is set to this item, rest of items are not set.	For details, refer to ″Appendix 2. Error code list.″		○	1.00
2	USHORT	1	PossessionNo	Occupation number Set occupation number of request command.			○	1.00

● Print cancel

Request I/F ID【 6000H 】 CMD ID【 0900H 】

TAG	TYPE	REPEAT	Item name	Explanation	Remarks	Explanation of value	Mandatory/Defined valu	NPS Version
1	ULONG	1	ReceiptNumber	Receipt number Set receipt number to cancel print. When 0 is set, all frames that the printer receives are canceled except the frames that have already been processed.		0: All cancel 1〜: Cancel by frame	○	1.00

Response I/F ID【 6000H 】 CMD ID【 0901H 】

TAG	TYPE	REPEAT	Item name	Explanation	Remarks	Explanation of value	Mandatory/Defined valu	NPS Version
1	USHORT	1	Result	Response result	For details, refer to ″Appendix 2. Error code list.″		○	1.00
2	ULONG	1	ReceiptNumber	Receipt number Set receipt number of request command.	Always set receipt number even if response result is not 0.		○	1.00

＊When the order is duplex printing and the last frame is odd-numbered, send cancel request to the printer even if the printer already starts printing.
Because the printer can not cancel the blank print of the back side after finishing the front side print in manual duplex operation.

● Order cancel

Request I/F ID【 6000H 】 CMD ID【 1900H 】

TAG	TYPE	REPEAT	Item name	Explanation	Remarks	Explanation of value	landatory/Defined valu	NPS Version
1	USHORT	1	PossessionNo	Occupation number Set occupation number to cancel print.	Cancel all of cancelable frames in the order.		○	1.00

Response I/F ID【 6000H 】 CMD ID【 1901H 】

TAG	TYPE	REPEAT	Item name	Explanation	Remarks	Explanation of value	landatory/Defined valu	NPS Version
1	USHORT	1	Result	Response result	For details, refer to "Appendix 2. Error code list."		○	1.00
2	USHORT	1	PossessionNo	Occupation number Set occupation number of request command.	Always set receipt number even if response result is not 0.		○	1.00

● Update date information

Request I/F ID【 6001H 】 CMD ID【 0100H 】

TAG	TYPE	REPEAT	Item name	Explanation	Remarks	Explanation of value	landatory/Defined valu	NPS Version
1	USHORT [8]	1	PrinterTime	Date information Set date information for printer. Array[0] year Array[1] month Array[2] day Array[3] hour Array[4] minute Array[5] second Array[6] millisecond Array[7] day of the week		Specified range: Array[0] 1980～2079 Array[1] 1～12 Array[2] 1～31 Array[3] 0～23 Array[4] 0～59 Array[5] 0～59 Array[6] 0～999 Array[7] 0～6 (0: Sunday)	○	1.00

Response I/F ID【 6001H 】 CMD ID【 0101H 】

TAG	TYPE	REPEAT	Item name	Explanation	Remarks	Explanation of value	landatory/Defined valu	NPS Version
1	USHORT	1	Result	Response result When value other than 0 is set to this item, rest of items are not set.	For details, refer to "Appendix 2. Error code list."		○	1.00

● Printer status change notification

Notification I/F ID【 6000H 】 CMD ID【 F102H 】

TAG	TYPE	REPEAT	Item name	Explanation	Remarks	Explanation of value	landatory/Defined valu	NPS Version
1	UCHAR	1	PrinterStatus	Printer general status Set printer general status.		0: No status change 1: In maintenance mode 2: Idling 3: Printing 4: Closed 5: In program timer mode	0: No status change	1.00
2	UCHAR	1	AcceptStatus	Reception status Set print reception status.		0: No status change 1: Not possible 2: Possible	0: No status change	1.00
3	UCHAR	1	PrinterPossession	Printer occupation status		0: No status change 1: Unoccupied 2: Normal occupation 3: Unoccupied (normal resumption pending) 4: Express [level 1] occupation 5: Unoccupied (express [level 1] resumption pending) 6: Express [level 2] occupation 7: Unoccupied (express [level 2] resumption pending) 8: Express [level 3] occupation 9: Unoccupied (express [level 3] resumption pending) 10: Express [level 4] occupation 11: Unoccupied (express [level 4] resumption pending) 12: Express [level 5] occupation 13: Unoccupied (express [level 5] resumption pending)	0: No status change	1.00
4	UCHAR	1	MagagineChange	Installed paper magazine information status		0: No status change 1: Information obtainable via obtain installed magazine information response is changed	0: No status change	1.00
5	UCHAR	1	AdvanceStatus	Paper addvance section status		0: No status change 1: Next request can not be recieved 2: Next request can be received 3: In operation	0: No status change	1.00
6	UCHAR	1	LaserStatus	Optical engine section status (laser, iBeam and so on)		0: No status change 1: Uninitialized 2: Temp control started (not completed) 3: Temp control completed	0: No status change	1.00
7	UCHAR	1	DevelopmentStatus	Development section status		0: No status change 1: Next request can not be received 2: Next request can be received 3: In operation	0: No status change	1.00
8	UCHAR	1	ProcessorStatus	Processor tank status		0: No status change 1: No temperature control 2: Solution being heated up 3: Developer temp controlled 4: Temp control impossible	0: No status change	1.00

9	UCHAR	1	ReplenisherStatus	Replenishment section status		0: No status change 1: Normal operation 2: Compensating for the evaporation 3: Quiet process in progress 4: Preparing the new replenishment solution	0: No status change	1.00
10	UCHAR	1	ReplaceCartridgeStatus	Whether the replenishment cartridge can be replaced or not		0: No status change 1: Replacement is possible 2: Waiting for replenishment 3: Opening	0: No status change	1.00
11	UCHAR	1	PaperInfoChange	All paper information status		0: No status change Not 0: Information that can be obtained via response to obtaining all paper information was updated.	0: No status change	1.00
12	UCHAR	1	StartUpChecksStatus	Startup check status	[1: Not performed] means that the startup check is not performed after turning on the printer. [2: Performed] means that the startup check is performed after turning on the printer.	0: No status change 1: Not performed 2: Performed	0: No status change	1.00
13	UCHAR	1	RefillWaterStatus	Water refilling status during auto setup		0: No status change 1: Not performed 2: Performed	0: No status change	1.00
14	UCHAR	1	DailySetupStatus	Daily setup status during auto setup		0: No status change 1: Not performed 2: Performed	0: No status change	1.00
15	UCHAR	1	ControlStripStatus	Control strip processing status during auto setup		0: No status change 1: Not performed 2: Performed 3: Unset the unit	0: No status change	1.00
16	UCHAR	1	InMaintenance	In maintenance Set whether printer is occupied by maintenance application or not.		0: No status change 1: Not occupied by maintenanse application 2: Occupied by maintenance application	0: No status change	1.00
17	UCHAR	1	FadStatus	FAD status Set the following FAD status. Offline: Can not communicate with FAD application (unacceptable) Out of service: FAD application is finished normaly (unacceptable) Warning: Specific error/attention occurs (unacceptable) In maintenance mode: Mechanical adjustent application is started (unacceptable) Idling: Acceptable (Even if the FAD status is acceptable, the print is not always executed as it is depending on whether trays are full or not.)		0: No status change 1: Offline 2: Out of service 3: Idling 4: Warning 5: In maintenance mode	0: No status change	1.00
18	UCHAR	1	InterruptStatus	Express interruption prohibition status Set whether express interruption is prohibited or not. The condition for prohibiting express interruption is as follows: When D1005 performs duplex printing *Express interruption is possible during back side printing completion and front side printing start		0: No status change 1: Express interruption is permitted 2: Express interruption is prohibited	0: No status change	1.00

● Printer event notification

Notification I/F ID【 6000H 】 CMD ID【 F202H 】

TAG	TYPE	REPEAT	Item name	Explanation	Remarks	Explanation of value	Mandatory/Defined valu	NPS Version
1	ULONG	1	EventCodeMain	Event code (main number) Set main number of event code of error/notification.			○	1.00
2	UCHAR	1	EventStatus	Event status Set occurrence/release of event.		0: Event occurred 1: Event released	○	1.00
3	USHORT [8]	1	OccurredTime	Occurrence date Set date when event occurred on printer. Array[0] year Array[1] month Array[2] day Array[3] hour Array[4] minute Array[5] second Array[6] millisecond Array[7] day of the week		Specified range: Array[0] 1980～2079 Array[1] 1～12 Array[2] 1～31 Array[3] 0～23 Array[4] 0～59 Array[5] 0～59 Array[6] 0～999 Array[7] 0～6 (0: Sunday)	○	1.00
4	LONG [4]	1	EventParam	Event parameter (numerical value) Set the value to replace specific string contained within the error message in the error table file. 2 or more values are set if the error message has several embedded strings. Array[0] Event code (sub number) Array[1] Value to be put into the embedded string of the error table Array[2] Value to be put into the embedded string of the error table Array[3] Value to be put into the embedded string of the error table				1.00
5	ULONG	1	EventId	Event release identifier Set identifier to release event by printer event release request. Event release identifier should be unique number to manage and release event on printer.		0: No need to release event 1～: Identifier to release event	0	1.00
6	CHAR [1-32]	4	EventString	Event parameter (string) Set the value to replace specific string contained within the error message in the error table file.	Set NULL to the end of string.		“”	1.00

● Printer event release

Request I/F ID【 6000H 】 CMD ID【 0A00H 】

TAG	TYPE	REPEAT	Item name	Explanation	Remarks	Explanation of value	Mandatory/Defined valu	NPS Version
1	ULONG	1	EventId	Event release identifier Set event release identifier notified by printer event notification.			○	1.00
2	UCHAR	1	ActionId	Action after event occurred Set action for notified event.		0: [YES] key was pressed 1:[NO/STOP] key was pressed 2:[PASS] key was pressed 3:[N] key was pressed 4:[+1] key was pressed 5:[-1] key was pressed 6:[Y] key was pressed 7:[M] key was pressed 8:[C] key was pressed 9:[D] key was pressed	○	1.00

Response I/F ID【 6000H 】 CMD ID【 0A01H 】

TAG	TYPE	REPEAT	Item name	Explanation	Remarks	Explanation of value	Mandatory/Defined valu	NPS Version
1	USHORT	1	Result	Response result When value other than 0 is set to this item, rest of items are not set.	For details, refer to "Appendix 2. Error code list."		○	1.00

● Obtain print processing quantity

Request I/F ID【 6000H 】 CMD ID【 0C00H 】

No cpmmand property exists.

Response I/F ID【 6000H 】 CMD ID【 0C01H 】

TAG	TYPE	REPEAT	Item name	Explanation	Remarks	Explanation of value	Mandatory/Defined valu	NPS Version
1	USHORT	1	Result	Response result When value other than 0 is set to this item, rest of items are not set.	For details, refer to "Appendix 2. Error code list."		○	1.00
2	USHORT	1	ReserverCount	Number of waiting prints Set the number of prints waiting to be printed on the printer.			○	1.00
3	USHORT	1	PrinterCount	Number of prints in priner section Set the number of prints processed in the printer section.	When the printer is silver halide printer, loss papers such as front edge feeding or splice paper are also counted.		○	1.00
4	USHORT	1	ProcessorCount	Number of prints in processor section Set the number of prints processed in the processor section.	When the printer is silver halide printer, loss papers such as front edge feeding or splice paper are also counted.		○	1.00
5	ULONG	1	UsedMemory	Memory usage (unit: Byte) Set usage of the spool memory.			○	1.00

● Print stop control (print stop/start)

Request I/F ID【 6000H 】 CMD ID【 0D00H 】

TAG	TYPE	REPEAT	Item name	Explanation	Remarks	Explanation of value	Mandatory/Defined valu	NPS Version
1	USHORT	1	PrintStopStart	Print stop/start Set whether printer stops printing or starts printing.		0: Print stop 1: Print start	○	1.00

Response I/F ID【 6000H 】 CMD ID【 0D01H 】

TAG	TYPE	REPEAT	Item name	Explanation	Remarks	Explanation of value	Mandatory/Defined valu	NPS Version
1	USHORT	1	Result	Response result When value other than 0 is set to this item, rest of items are not set.	For details, refer to "Appendix 2. Error code list."		○	1.00

● Connection start

Request I/F ID【 6000H 】 CMD ID【 0E00H 】

TAG	TYPE	REPEAT	Item name	Explanation	Remarks	Explanation of value	Mandatory/Defined valu	NPS Version
1	ULONG	1	OemCode	OEM code Set OEM code.		0: NKC specifications 1: FF specifications 267242400: Special mode (NKC) 267242401: Special mode(FF)	0: NKC specifications	1.00

Response I/F ID【 6000H 】 CMD ID【 0E01H 】

TAG	TYPE	REPEAT	Item name	Explanation	Remarks	Explanation of value	Mandatory/Defined valu	NPS Version
1	USHORT	1	Result	Response result When value other than 0 is set to this item, rest of items are not set.	For details, refer to "Appendix 2. Error code list."		○	1.00
2	USHORT	1	NpsVersion	NPS I/F version Set NPS I/F version. Upper order 1 byte: major number Low order 1 byte: minor number	Refer to "Appendix 3. NPS version compatibility" about purpose of version.		○	1.00

● Buzzer sound control

Request I/F ID【 6000H 】 CMD ID【 0F00H 】

TAG	TYPE	REPEAT	Item name	Explanation	Remarks	Explanation of value	Mandatory/Defined valu	NPS Version
1	ULONG	1	WorkingNumber	Operation number Set how many times buzzer sounds.	When [16: Continuous sound start] is set, the buzzer repeats on-off period specified by OnTime and OffTime till [17: Continuous sound stop] is sent.	1: 1 time 2: 2 times : 9: 9 times 16: Continuous sound start 17: Continuous sound stop	○	1.00
2	ULONG	1	OnTime	Buzzer on period (unit: 10ms) Set the period of buzzer on.	When 0 is set, both intermittent operation and continuous operation are invalid.		○	1.00
3	ULONG	1	OffTime	Buzzer off period (unit: 10ms) Set the period of buzzer off.	When 0 is set, buzzer sounds continuously.		○	1.00
4	ULONG	1	Volume	Volume Set buzzer volume.		0: Use seting value 1: Minimum sound 2: Small sound 3: Normal sound 4: Large sound 5: Maximum sound	0: Use seting value	1.00

Response　　　　I/F ID【 6000H 】　　CMD ID【 0F01H 】

TAG	TYPE	REPEAT	Item name	Explanation	Remarks	Explanation of value	Mandatory/Defined valu	NPS Version
1	USHORT	1	Result	Response result When value other than 0 is set to this item, rest of items are not set.	For details, refer to ″Appendix 2. Error code list.″		○	1.00

● Indicator control

Request　　　　I/F ID【 6000H 】　　CMD ID【 1000H 】

TAG	TYPE	REPEAT	Item name	Explanation	Remarks	Explanation of value	Mandatory/Defined valu	NPS Version
1	ULONG	1	WorkingNumber	Operation number Set indicator operating direction.	When [16: Light start] is set, the indicator blinks at intervals specified by OnTime and OffTime till [17: Light stop] is sent.	16: Light start 17: Light stop	○	1.00
2	ULONG	1	OnTime	Indicator on period (unit:10ms) Set the period of indicator on.	When 0 is set, the indicator is not lit.		○	1.00
3	ULONG	1	OffTime	Indicator off period (unit: 10ms) Set the period of indicator off.	When 0 is set, the indicator does not blink but is lit		○	1.00

Response　　　　I/F ID【 6000H 】　　CMD ID【 1001H 】

TAG	TYPE	REPEAT	Item name	Explanation	Remarks	Explanation of value	Mandatory/Defined valu	NPS Version
1	USHORT	1	Result	Response result When value other than 0 is set to this item, rest of items are not set.	For details, refer to ″Appendix 2. Error code list.″		○	1.00

● Obtain printer memory dump information

Request　　　　I/F ID【 6001H 】　　CMD ID【 0200H 】

No cpmmand property exists.

Response　　　　I/F ID【 6001H 】　　CMD ID【 0201H 】

TAG	TYPE	REPEAT	Item name	Explanation	Remarks	Explanation of value	Mandatory/Defined valu	NPS Version
1	USHORT	1	Result	Response result When value other than 0 is set to this item, rest of items are not set.	For details, refer to ″Appendix 2. Error code list.″		○	1.00
2	USHORT	1	NumberOfData	Number of printer memory dump data			○	1.00
3	USHORT	0～10	DumpId	Printer memory dump data ID			○	1.00
4	UCHAR [1～32]	0～10	DumpName	Priter memory dump data name This is used for the filename when the printer memory dump data is saved in a file.	Set NULL to the end of string.		○	1.00

● Obtain simple printer memory dump information

Request　　　　I/F ID【 6001H 】　　CMD ID【 0202H 】

No cpmmand property exists.

Response　　　　I/F ID【 6001H 】　　CMD ID【 0203H 】

TAG	TYPE	REPEAT	Item name	Explanation	Remarks	Explanation of value	Mandatory/Defined valu	NPS Version
1	USHORT	1	Result	Response result When value other than 0 is set to this item, rest of items are not set.	For details, refer to ″Appendix 2. Error code list.″		○	1.00
2	USHORT	1	NumberOfData	Number of printer memory dump data			○	1.00
3	USHORT	0～10	DumpId	Printer memory dump data ID			○	1.00
4	UCHAR [1～32]	0～10	DumpName	Priter memory dump data name This is used for the filename when the printer memory dump data is saved in a file.	Set NULL to the end of string.		○	1.00

● Obtain printer memory dump date

Request　　　　I/F ID【 6001H 】　　CMD ID【 0300H 】

TAG	TYPE	REPEAT	Item name	Explanation	Remarks	Explanation of value	Mandatory/Defined valu	NPS Version
1	USHORT	1	DumpId	Printer memory dump data ID Set ID of the printer memory dump data to be obtained.	Specify the printer memory dump data ID obtained via response to obtaining printer memory dump information.		○	1.00
2	ULONG	1	DataGetPoint	Data obtaining start position (unit: Byte) Set the position to start obtaining the printer memory dump data. Set 0 at the first time. Then change the start position depending on the total size of obtained data.			○	1.00
3	USHORT	1	DataSizeMax	Maximum data size (unit: Byte) Set the data size obtained at one time. *Obtain all memory data of the printer		Specified range: 1～65535 Specified value never exceeds the maximum length of the command property (65535 Byte.)	○	1.00

Response　　　　I/F ID【 6001H 】　　CMD ID【 0301H 】

TAG	TYPE	REPEAT	Item name	Explanation	Remarks	Explanation of value	Mandatory/Defined valu	NPS Version
1	USHORT	1	Result	Response result When value other than 0 is set to this item, rest of items are not set.	For details, refer to ″Appendix 2. Error code list.″		○	1.00
2	USHORT	1	DumpId	Printer memory dump data ID Set printer memory dump data ID of request command.			○	1.00
3	ULONG	1	TotalDataSize	Total data size (unit: Byte) Set data size of specified printer memory dump data.			○	1.00
4	ULONG	1	DataGetPoint	Data obtaining start position (unit: Byte) Set data obtaining start position of request command.			○	1.00
5	USHORT	1	DataSize	Obtained data size (unit: Byte) Set obtained data size.			○	1.00
6	UCHAR [0～]	1	DumpData	Printer memory dump data Set printer memory dump data.			○	1.00

● Obtain simple printer memory dump data

Request　　I/F ID【 6001H 】　　CMD ID【 0302H 】

TAG	TYPE	REPEAT	Item name	Explanation	Remarks	Explanation of value	Mandatory/Defined valu	NPS Version
1	USHORT	1	DumpId	Printer memory dump data ID Set ID of the printer memory dump data to be obtained.	Specify the printer memory dump data ID obtained via response to obtaining printer memory dump information.		○	1.00
2	ULONG	1	DataGetPoint	Data obtaining start position (unit: Byte) Set the position to start obtaining the printer memory dump data. Set 0 at the first time. Then change the start position depending on the total size of obtained data.			○	1.00
3	USHORT	1	DataSizeMax	Maximum data size (unit: Byte) Set the data size obtained at one time. *Obtain one day's data of RIP		Specified range: 1～65535 Specified value never exceeds the maximum length of the command property (65535 Byte.)	○	1.00

Response　　I/F ID【 6001H 】　　CMD ID【 0303H 】

TAG	TYPE	REPEAT	Item name	Explanation	Remarks	Explanation of value	Mandatory/Defined valu	NPS Version
1	USHORT	1	Result	Response result When value other than 0 is set to this item, rest of items are not set.	For details, refer to ″Appendix 2. Error code list.″		○	1.00
2	USHORT	1	DumpId	Printer memory dump data ID Set printer memory dump data ID of request command.			○	1.00
3	ULONG	1	TotalDataSize	Total data size (unit: Byte) Set data size of specified printer memory dump data.			○	1.00
4	ULONG	1	DataGetPoint	Data obtaining start position (unit: Byte) Set data obtaining start position of request command.			○	1.00
5	USHORT	1	DataSize	Obtained data size (unit: Byte) Set obtained data size.			○	1.00
6	UCHAR [0～]	1	DumpData	Printer memory dump data Set printer memory dump data.			○	1.00

● Print status notification

Notification　　I/F ID【 6000H 】　　CMD ID【 F302 】

＊IMPORTANT The target of F302 is limited to the recept number that receives normal via image transmission confirmation response (6000H-0801).

TAG	TYPE	REPEAT	Item name	Explanation	Remarks	Explanation of value	Mandatory/Defined valu	NPS Version
1	ULONG	1	ReceiptNumber	Receipt number Set receipt number specified by reception start response.			○	1.00
2	UCHAR	1	PrintStatus	Print status Set print status.	[1: Print start], [2: Print complete (exposure complete)], [3: Print exit], [10: Loading start], and [11: Print exit for retransmission] are notified as many times as print quantity. If [4: Print failure], [5: Print interruption (resumption pending)], [6: Print interruption (resumption pending)], or [9: Frame memory clear] are notified, status of subsequent prints is not notified as the status does not change after that. (*In case of duplex printing, it is same except for the prints that have received print exit.) When the printer is QSS, the printer notifies [8: Invalid print] at the occurrence of paper end or spliced paper even after [1: Print start] notification. Then the printer executes the post-process and goes back to the cueing status. [1: Print start] is notified again at print restart. When the printer receives [0: All cancel] via print cancel request, [9: Frame memory clear] is notified. [11: Print exit for retransmission] is notified at the completion of print exit and it is counted separately from the counting value of [3: Print exit]. The count is decreased if [8: Invarid print] is notified.	1: Print start 2: Print complete (exposure complete) 3: Print exit 4: Print failure 5: Print interruption (resumption pending) => Restart occupation with [2: Unoccupied (resumption pending)] of ″Printer occupation status″of printer status change notification 6: Print interruption (resumption pending) => Restart occupation with [1: Unoccupied] of ″Printer occupation status″ of printer status change notification 7: Print cancel 8: Invalid print 9: Frame memory clear 10: Loading start 11: Print exit for retransmission ＊When the printer is RD151, [5: Print interruption] and [6: Print interruption] are not notified.	○	1.00
3	USHORT	1	RepeatCount	Repeat quantity Set repeat quantity.			○	1.00
4	ULONG	1	IPAddress	IP address of PC requesting print.			0x00000000	1.00

● Print option settings

Request　　I/F ID【 6000H 】　　CMD ID【 1200 】

TAG	TYPE	REPEAT	Item name	Explanation	Remarks	Explanation of value	Mandatory/Defined valu	NPS Version
1	USHORT	1	PossessionNo	Occupation number Set occupation number specified by printer occupation start response.			○	1.00
2	USHORT	1	SorterNum	Number of prints Set the number of prints to be collected to a sorter tray.		0: Use settings of printer 1～: Number of prints to be collected to a sorter tray	0: Use settings of printe	1.00

Response　　I/F ID【 6000H 】　　CMD ID【 1201 】

TAG	TYPE	REPEAT	Item name	Explanation	Remarks	Explanation of value	Mandatory/Defined valu	NPS Version
1	USHORT	1	Result	Response result When value other than 0 is set to this item, rest of items are not set.	For details, refer to ″Appendix 2. Error code list.″		○	1.00
2	USHORT	1	PossessionNo	Occupation number Set occupation number of request command.			○	1.00

● Obtain all paper information

How to specify the paper

The keys to specifying the paper are the following paper information; Paper feed, paper width, paaper ID, and paper name.
When paper feed is roll paper: Specify the paper with paper width and paper ID (NULL is set to paper name.)
When paper feed is sheet paper: Specify the paper with paper name (Appropriate information is set to paper width and paper ID.)

*Reception start request needs input resolution information besides the keys to specifying paper.
*Image creation for printing needs input resolution information and paper allocation information besides the keys to specifying paper.

Hierarchy diagram of repetition part of paper information

Item	Key to specifying paper	Roll paper (QSS/Inkjet)	Sheet paper (QSS/Inkjet)
＋PaperWidth [Tag3]	○	○ / ○	－ / ○
＋PaperId [Tag6]	○	○ / ○	－ / ○
＋SetupStatus [Tag12]		○/○	－ / ○
＋PaperFeed [Tag13]	○	○ / ○	－ / ○
＋PaperTypeCode [Tag14]		○ / －	－ / －
＋PaperKind [Tag15]		○ / －	－ / －
＋MagazineID [Tag16]		○ / －	－ / －
＋WBAdjustLeft [Tag17]		○ / －	－ / －
＋WBAdjustRight [Tag18]		○ / －	－ / －
＋PaperName [Tag19]	○	－ / －	－ / ○
＋PaperResolution [Tag7]		○ / ○	－ / ○
＋PaperLengthMin [Tag4]		○ / ○	－ / ○
＋PaperLengthMax [Tag5]		○ / ○	－ / ○
＋ PaperAllocationTop [Tag8]		○ / ○	－ / ○
＋ PaperAllocationBottom [Tag9]		○ / ○	－ / ○
＋ PaperAllocationLeft [Tag10]		○ / ○	－ / ○
＋ PaperAllocationRight [Tag11]		○ / ○	－ / ○

Request I/F ID【 6000H 】 CMD ID【 1300 】

No cpmmand property exists.

Response I/F ID【 6000H 】 CMD ID【 1301 】

TAG	TYPE	REPEAT	Item name	Explanation	Remarks	Explanation of value	Mandatory/Defined valu	NPS Version
1	USHORT	1	Result	Response result When value other than 0 is set to this item, rest of items are not set.	For details, refer to ″Appendix 2. Error code list.″		○	1.00
2	USHORT	1	NumberOfPaper	Number of paper detail information			○	1.00
3	USHORT	0～1024	PaperWidth	Paper width (unit: 0.1mm) Set paper width. Number of repetitions: Repeated as many times as the value of NumberOfPaper.			○	1.00
4	USHORT	0～1024	PaperLengthMin	Minimum paper length (unit: 0.1mm) Set the minimum value that is available as paper length. Number of repetitions: Repeated as many times as the value of NumberOfPaper.			○	1.00
5	USHORT	0～1024	PaperLengthMax	Maximum paper length (unit: 0.1mm) Set the maximum value that is available as paper length. Number of repetitions: Repeated as many times as the value of NumberOfPaper.			○	1.00
6	USHORT	0～1024	PaperId	Paper ID (surface) range: 1～4 Set unique value for each paper type. Number of repetitions: Repeated as many times as the value of NumberOfPaper.	*Paper ID relates to LUT designation.		○	1.00
7	USHORT [8]	0～1024	PaperResolution	Input resolution (unit: 0.1dpi) Set the input resolution of the image to be printed on the paper. When multiple resolutions are used, they are listed in ascending order. Number of repetitions: Repeated as many times as the value of NumberOfPaper.			○	1.00
8	SHORT	0～1024	PaperAllocationTop	Paper allocation (top) (unit: 0.1mm) When the value is positive, it means the top spill over. When the value is negative, it means the top margin. Number of repetitions: Repeated as many times as the value of NumberOfPaper.			○	1.00
9	SHORT	0～1024	PaperAllocationBottom	Paper allocation (bottom) (unit: 0.1mm) When the value is positive, it means the bottom spill over. When the value is negative, it means the bottom margin. Number of repetitions: Repeated as many times as the value of NumberOfPaper.			○	1.00
10	SHORT	0～1024	PaperAllocationLeft	Paper allocation (left) (unit: 0.1mm) When the value is positive, it means the left spill over. When the value is negative, it means the left margin. Number of repetitions: Repeated as many times as the value of NumberOfPaper.			○	1.00
11	SHORT	0～1024	PaperAllocationRight	Paper allocation (right) (unit: 0.1mm) When the value is positive, it means the right spill over. When the value is negative, it means the right margin. Number of repetitions: Repeated as many times as the value of NumberOfPaper.			○	1.00
12	USHORT	0～1024	SetupStatus	Setup status Set paper setup status. Number of repetitions: Repeated as many times as the value of NumberOfPaper.		0: Not completed 1: Completed	0	1.00
13	UCHAR	0～1024	PaperFeed	Paper feed Set paper feed. Number of repetitions: Repeated as many times as the value of NumberOfPaper.		0: Roll paper 1: Sheet paper	0: Roll paper	1.00
14	USHORT	0～1024	PaperTypeCode	Paper type code Set paper type code. Number of repetitions: Repeated as many times as the value of NumberOfPaper.	Silver halide printer: The code registered on paper specifications registration Inkjet printer: The code registered on paper setings *The value is common code among models (Not distinguished by model)		○	1.00

15	UCHAR	0〜1024	PaperKind	Paper finishing type Set paper finishing type. Number of repetitions: Repeated as many times as the value of NumberOfPaper.		0: None specified or invalid value 1: Glossy 2: Lustre 3: Matte 4: Silk 5: SupremeG 6: SupremeL 7: Thin 8: Other1 9: Other2 10: Other3 11: Other4	0: None specified or invalid value	1.00
16	UCHAR	0〜1024	MagazineID	Magazine ID Set Magazine ID of the paper Number of repetitions: Repeated as many times as the value of NumberOfPaper.		0: None specified or invalid value 4〜127: Refer to EAK-360049-001-000	0: None specified or invalid value	1.00
17	SHORT	0〜1024	WBAdjustLeft	Border correction value (left) (unit: 0.1mm) Set border correction value (left) of the paper. Number of repetitions: Repeated as many times as the value of NumberOfPaper.		Specified range: -50 〜 +50	0	1.00
18	SHORT	0〜1024	WBAdjustRight	Border correction value (right) (unit: 0.1mm) Set border correction value (right) of the paper. Number of repetitions: Repeated as many times as the value of NumberOfPaper.		Specified range: -50 〜 +50	0	1.00
19	CHAR 「1〜32]	0〜1024	PaperName	Paper name Set paper name specified when paper feed is sheet paper. Number of repetitions: Repeated as many times as the value of NumberOfPaper.	Set NULL to the end of string.		″″	1.00
20	UCHAR	0〜1024	PaperType	Paper type (emulsion type) Set paper type. Number of repetitions: Repeated as many times as the value of NumberOfPaper.		0: Invalid value 1: Paper type 1 2: Paper type 2 3: Paper type 3 4: Paper type 4 5: Paper type 5 6: Paper type 6	0: Invalid value	1.00
21	UCHAR	0〜1024	Direction	Direction Number of repetitions: Repeated as many times as the value of NumberOfPaper.		0: Invalid value 1: Uni-D 2: Bi-D	0: Invalid value	1.00
22	UCHAR	0〜1024	PrintQuality	Print quality Set print quality. Number of repetitions: Repeated as many times as the value of NumberOfPaper.		0: Invalid value 100: 1440dpi (2 pass) 101: 2880dpi (2 pass) 102: 5760dpi (2 pass) 110: 1440dpi (4 pass) 111: 2880dpi (4 pass) 112: 5760dpi (4 pass)	0: Invalid value	1.00
23	USHORT	1	DoubleSidedPaper	Double side paper Set whether the paper supports duplex printing or not. Number of repetitions: Repeated as many times as the value of NumberOfPaper.		0: Single side paper 1: Double side paper	0: Single side paper	1.00
24	USHORT	1	PaperInfo	Paper kind Set paper kind. Number of repetitions: Repeated as many times as the value of NumberOfPaper.	This is used to notify the paper kind of the inkjet printer to the application.	0: None specified or invalid value 1〜: Paper kind (refer to the specifications of each model)	0: None specified or invalid value	1.00
25	UCHAR	0〜1024	PaperTypeValid	Paper type valid/invalid Set paper type valid/invalid. Number of repetitions: Repeated as many times as the value of NumberOfPaper.	It is fixed to [1: Valid] when the printer is QSS-3900/QSS-3901HD or later.	0: Invalid 1: Valid	0: Invalid	1.11.0.5

● Connection confirmation

Request I/F ID【 6000H 】 CMD ID【 1500H 】

No cpmmand property exists.

Response I/F ID【 6000H 】 CMD ID【 1501H 】

No cpmmand property exists.

● Unsupported command notification

Notification I/F ID【 6000H 】 CMD ID【 FFFF 】

TAG	TYPE	REPEAT	Item name	Explanation	Remarks	Explanation of value	Mandatory/Defined valu	NPS Version
1	USHORT	1	InterfaceId	Interface ID Set Interface ID.			○	1.00
2	USHORT	1	CommandId	Command ID Set command ID.			○	1.00

● Obtain backup information

Request I/F ID【 6001H 】 CMD ID【 0400H 】

No cpmmand property exists.

Response I/F ID【 6001H 】 CMD ID【 0401H 】

TAG	TYPE	REPEAT	Item name	Explanation	Remarks	Explanation of value	Mandatory/Defined valu	NPS Version
1	USHORT	1	Result	Response result When value other than 0 is set to this item, rest of items are not set.	For details, refer to ″Appendix 2. Error code list.″		○	1.00
2	USHORT	1	NumberOfData	Number of backup data			○	1.00
3	USHORT	0〜10	BackupDataId	Backup data ID			○	1.00
4	UCHAR [1〜32]	0〜10	BackupDataName	Backup data name This is used for the filename when the backup data is saved in a file.	Set NULL to the end of string.		○	1.00
5	ULONG	1	IPAddress	IP address of PC obtaining backup data			0x00000000	1.00

- Obtain backup data

Request I/F ID【 6001H 】 CMD ID【 0500H 】

TAG	TYPE	REPEAT	Item name	Explanation	Remarks	Explanation of value	Mandatory/Defined valu	NPS Version
1	USHORT	1	BackupDataId	Backup data ID Set backup data ID to be obtained.	Specify the backup data ID obtained via response to obtaining backup information.		○	1.00
2	ULONG	1	DataGetPoint	Data obtaining start position (unit: Byte) Set the position to start obtaining the backup data. Set 0 at the first time. Then change the start position depending on the total size of obtained data.			○	1.00
3	USHORT	1	DataSizeMax	Maximum data size (unit: Byte) Set the data size obtained at one time.		Specified range: 1～65535 Specified value never exceeds the maximum length of the command property (65535 Byte.)	○	1.00

Response I/F ID【 6001H 】 CMD ID【 0501H 】

TAG	TYPE	REPEAT	Item name	Explanation	Remarks	Explanation of value	Mandatory/Defined valu	NPS Version
1	USHORT	1	Result	Response result When value other than 0 is set to this item, rest of items are not set.	For details, refer to "Appendix 2. Error code list."		○	1.00
2	USHORT	1	DumpId	Backup data ID Set backup data ID of request command.			○	1.00
3	ULONG	1	TotalDataSize	Total data size (unit: Byte) Set data size of specified backup data.			○	1.00
4	ULONG	1	DataGetPoint	Data obtaining start position (unit: Byte) Set data obtaining start position of request			○	1.00
5	USHORT	1	DataSize	Obtained data size (unit: Byte) Set obtained data size.			○	1.00
6	UCHAR [0～]	1	BackupData	Backup data Set printer backup data.			○	1.00

- Register backup data

Request I/F ID【 6001H 】 CMD ID【 0600H 】

TAG	TYPE	REPEAT	Item name	Explanation	Remarks	Explanation of value	Mandatory/Defined valu	NPS Version
1	USHORT	1	BackupDataId	Backup data ID Set backup data ID to be transmitted.	Specify the backup data ID obtained via response to obtaining backup information.		○	1.00
2	ULONG	1	TotalDataSize	Total data size (unit: Byte) Set the total size of the backup data to be transmitted.			○	1.00
3	ULONG	1	DataGetPoint	Data sending start position (unit: Byte) Set the position to start sending the backup data. Set 0 at the first time. Then change the start position depending on the total size of transmitted data.			○	1.00
4	USHORT	1	DataSize	Sending data size (unit: Byte) Set sending data size at one time.		Specified range: 1～65535 Specified value never exceeds the maximum length of the command property (65535 Byte.)	○	1.00
5	UCHAR [0～]	1	BackupData	Backup data Send printer backup data. Send data of the size specified by DataSize.			○	1.00

Response I/F ID【 6001H 】 CMD ID【 0601H 】

TAG	TYPE	REPEAT	Item name	Explanation	Remarks	Explanation of value	Mandatory/Defined valu	NPS Version
1	USHORT	1	Result	Response result When value other than 0 is set to this item, rest of items are not set.	For details, refer to "Appendix 2. Error code list."		○	1.00
2	USHORT	1	DumpId	Backup data ID Set backup data ID of request command.			○	1.00
3	ULONG	1	DataGetPoint	Data sending start position (unit: Byte) Set data sending start position of request			○	1.00
4	USHORT	1	DataSize	Transmitted data size (unit: Byte) Set sending data size of request command.	Printer should receive the data transmitted via register backup data request at one time.		○	1.00

- Post-processing notification

Notification I/F ID【 6000H 】 CMD ID【 F502H 】

TAG	TYPE	REPEAT	Item name	Explanation	Remarks	Explanation of value	Mandatory/Defined valu	NPS Version
1	USHORT	1	FunctionCode	Function code Set the type of post-processing .		0: No post-processing 1: Startup check 2: Close check 3: Maintenance 4: Printer information (status display) 5: Register output printer 6: Emulsion number change 7: Paper settings 98: Daily setup 99: Version upgrade	0: No post-processing	1.00
2	LONG	1	Parameter1	General-purpose parameter 1 Set necessary parameter depending on FunctionCode. When FunctionCode is [6: Emulsion number change], magazine ID (refer to EAK-360049-001) is set to Parameter1.			0	1.00

● Obtain target information

Request I/F ID【 6001H 】 CMD ID【 0700H 】

No cpmmand property exists.

Response I/F ID【 6001H 】 CMD ID【 0701H 】

TAG	TYPE	REPEAT	Item name	Explanation	Remarks	Explanation of value	Mandatory/Defined valu	NPS Version
1	USHORT	1	Result	Response result When value other than 0 is set to this item, rest of items are not set.	For details, refer to "Appendix 2. Error code list."			1.00
2	UCHAR	1	RegionCode	Region code	0: Japan 1: Standard 2: North America 3: Europe			1.00
3	USHORT	1	NumberOfTarget	Number of obtained target				1.00
4	FLOAT [192]	6	MeasureColor	Printer profile correction (measured value) Array[0] ～ [63] L value Array[64] ～ [127] A value Array[128] ～ [191] B value Number of repetition: Repeated as many times as the value of NumberOfTarget.				1.00
5	UCHAR	6	PaperType	Paper type (emulsion type) Set paper type. Number of repetition: Repeated as many times as the value of NumberOfTarget.		1: Paper type 1 2: Paper type 2 3: Paper type 3 4: Paper type 4 5: Paper type 5 6: Paper type 6		1.00
6	USHORT	6	PaperTypeCode	Target data (paper type code) Number of repetition: Repeated as many times as the value of NumberOfTarget.	Silver halide printer: The code registered on paper specifications registration Inkjet printer: Not target *The value is common code among models (Not distinguished by model)			1.00
7	FLOAT [60]	6	TargetValue	Target data (target value) Array[0] ～ [19] Red value Array[20] ～ [39] Green value Array[40] ～ [59] Blue value Repeated as many times as the value of NumberOfTarget.				1.00
8	FLOAT [3]	6	DMaxControl	Target data (control value) Array[0] Red value Array[1] Green value Array[2] Blue value Repeated as many times as the value of NumberOfTarget.				1.00
9	CHAR [1～26]	6	TypeName	Photosensitive material name Repeated as many times as the value of NumberOfTarget.	Set NULL to the end of string.			1.00
10	FLOAT [3][21]	6	high_den_dm	High density simulation data (density) Repeated as many times as the value of NumberOfTarget.				1.00
11	FLOAT [3][21]	6	high_den_katamuki	High density simulation data (slope) Repeated as many times as the value of NumberOfTarget.				1.00
12	FLOAT [3]	6	center_tn	Center light intensity value Repeated as many times as the value of NumberOfTarget.				1.00
13	FLOAT [3][21]	6	print_log	Print tone Repeated as many times as the value of NumberOfTarget.				1.00
14	FLOAT [3][3][4]	6	coefficient	Rise/decay correction [0]: Undershoot [1]: Rise [2]: Decay Repeated as many times as the value of NumberOfTarget.				1.00

● Update target data

Request I/F ID【 6001H 】 CMD ID【 0800H 】

TAG	TYPE	REPEAT	Item name	Explanation	Remarks	Explanation of value	Mandatory/Defined valu	NPS Version
1	UCHAR	1	PaperType	Paper type (emulsion type) Set Paper type.		1: Paper type 1 2: Paper type 2 3: Paper type 3 4: Paper type 4 5: Paper type 5 6: Paper type 6		1.00
2	USHORT	1	PeparTypeCode	Paper type code	Silver halide printer: The code registered on paper specifications registration Inkjet printer: Not target *The value is common code among models (Not distinguished by model)			1.00
3	FLOAT [60]	1	TargetValue	Target data (target value) Array[0] ～ [19] Red value Array[20] ～ [39] Green value Array[40] ～ [59] Blue value				1.00
4	FLOAT [3]	1	DMaxControl	Target data (control value) Array[0] Red value Array[1] Green value Array[2] Blue value				1.00
5	CHAR [1～26]	1	TypeName	Photosensitive material name	Set NULL to the end of string.			1.00
6	FLOAT [3][21]	1	high_den_dm	High density simulation data (density)				1.00
7	FLOAT [3][21]	1	high_den_katamuki	High density simulation data (slope)				1.00
8	FLOAT [3]	1	center_tn	Center light intensity value				1.00
9	FLOAT [3][21]	1	print_log	Print tone				1.00
10	FLOAT [3][3][4]	1	coefficient	Rise/decay correction [0]: Undershoot [1]: Rise [2]: Decay				1.00

Response I/F ID【 6001H 】 CMD ID【 0801H 】

TAG	TYPE	REPEAT	Item name	Explanation	Remarks	Explanation of value	Mandatory/Defined valu	NPS Version
1	USHORT	1	Result	Response result When value other than 0 is set to this item, rest of items are not set.	For details, refer to "Appendix 2. Error code list."		○	1.00

● Update profile version

Request I/F ID【 6001H 】 CMD ID【 0900H 】

TAG	TYPE	REPEAT	Item name	Explanation	Remarks	Explanation of value	Mandatory/Defined valu	NPS Version
1	UCHAR [1～7]	1	MachinProfileVersion	Profile version Set profile version registered to the printer.	Set NULL to the end of string.		””	1.00

Response I/F ID【 6001H 】 CMD ID【 0901H 】

TAG	TYPE	REPEAT	Item name	Explanation	Remarks	Explanation of value	Mandatory/Defined valu	NPS Version
1	USHORT	1	Result	Response result When value other than 0 is set to this item, rest of items are not set.	For details, refer to ″Appendix 2. Error code list.″		○	1.00

● Duplex printing start

Request I/F ID【 6000H 】 CMD ID【 1600H 】

TAG	TYPE	REPEAT	Item name	Explanation	Remarks	Explanation of value	Mandatory/Defined valu	NPS Version
1	USHORT	1	PossessionNo	Occupation number Set occupation number specified by printer occupation start response.			○	1.00

Response I/F ID【 6000H 】 CMD ID【 1601H 】

TAG	TYPE	REPEAT	Item name	Explanation	Remarks	Explanation of value	Mandatory/Defined valu	NPS Version
1	USHORT	1	Result	Response result When value other than 0 is set to this item, rest of items are not set.	For details, refer to ″Appendix 2. Error code list.″		○	1.00
2	USHORT	1	PossessionNo	Occupation number Set occupation number of request command.			○	1.00

● Duplex printing end

Request I/F ID【 6000H 】 CMD ID【 1700H 】

TAG	TYPE	REPEAT	Item name	Explanation	Remarks	Explanation of value	Mandatory/Defined valu	NPS Version
1	USHORT	1	PossessionNo	Occupation number Set occupation number specified by printer occupation start response.			○	1.00

Response I/F ID【 6000H 】 CMD ID【 1701H 】

TAG	TYPE	REPEAT	Item name	Explanation	Remarks	Explanation of value	Mandatory/Defined valu	NPS Version
1	USHORT	1	Result	Response result When value other than 0 is set to this item, rest of items are not set.	For details, refer to ″Appendix 2. Error code list.″		○	1.00
2	USHORT	1	PossessionNo	Occupation number Set occupation number of request command.			○	1.00

● Blank print

Request I/F ID【 6000H 】 CMD ID【 1800H 】

TAG	TYPE	REPEAT	Item name	Explanation	Remarks	Explanation of value	Mandatory/Defined valu	NPS Version
1	USHORT	1	PossessionNo	Occupation number Set occupation number specified by printer occupation start response.			○	1.00
6	USHORT	1	PaperResolution	Input resolution (unit: 0.1dpi) Set the input resolution of the image to be printed on the paper.			○	1.00
7	USHORT	1	PaperWidth	Paper width (unit: 0.1mm) Set paper width.			○	1.00
8	USHORT	1	PaperLength	Paper length (unit: 0.1mm) Set paper length.			○	1.00
9	USHORT	1	PaperID	Paper ID Set paper ID.			○	1.00
10	USHORT	1	Repeat	Repeat quantity Set repeat quantity. Set any value between 1 and the maximum repeat count obtained via printer setting information request.		The maximum to be specified can be obtained via printer setting information request.	1	1.00
11	USHORT	1	PaperFeed	Paper feed Set paper feed.		0: Roll paper 1: Sheet paper	0: Roll paper	1.00
12	USHORT	1	Laminator	Lamination Set whether paper is laminated or not.		0: Not laminated 1: Laminated	0: Not laminated	1.00
22	UCHAR	1	PaperPresence	Installation position of the paper Set the installation position of the paper magazine on the printer. When the same paper magazines are set to both magazines A and B, specify which magazine to use.		0: Automatic judgment 1～: Installed magazine (A～)	0: Automatic judgment	1.00
25	ULONG	1	OrderId	Order ID Set order ID.	This tag is used for judging whether the order is separated by express processing or not.		○	1.00
34	CHAR 「1～32]	1	PaperName	Paper name Set paper name. Set the paper name obtained by response to installed paper information request or response to all paper information request.	Set NULL to the end of string. Set paper name when paper feeding is sheet paper.		″″	1.00
37	USHORT	1	PrintQuality	Printing methd Specify printing method.	When the printer is M300: [1: Standard] = 1440dpi (2 pass) [2: Give priority to image quality] = 1440dpi (4 pass)	0: Give priority to printer setting 1: Standard 2: Give priority to image quality	0: Give priority to printer setting	1.00
50	USHORT	1	ClearInk	Clear ink Set whether clear ink is sprayed or not.	When the printer does not suppot clear ink, clear ink is not sprayed even if ″1: Spray″ is set.	0: Not spray 1: Spray	0: Not spray	1.00
39	USHORT	1	LoadingCount	Loading start quantity Set loading start quantity in retransmitting.	This is not cleared if the cancel notification is received.	In retransmitting a duplex print, set the counts of receiving the print status notification (10: loading start) between 0 and the repeat count.	0	
40	USHORT	1	PrintedCount	Prints exit completion quantity Set prints exit completion quantity in retransmitting.	This is not cleared if the cancel notification is received.	In retransmitting a duplex print, set the counts of receiving the print status notification (3: prints exit completion) between 0 and the repeat count.	0	
41	ULONG	1	EventId	Event identifier Set event identifier in retransmitting.		In retransmitting a duplex print, set the event identifier informed by the event status notification.	0	

42	USHORT	1	EventCodeMain	Event code (main number) Set event code (main number) in retransmitting.		In retransmitting a duplex print, set the main number of the error/attention code informed by the event status notification.	0	

Response I/F ID【 6000H 】 CMD ID【 1801H 】

TAG	TYPE	REPEAT	Item name	Explanation	Remarks	Explanation of value	Mandatory/Defined valu	NPS Version
1	USHORT	1	Result	Response result When value other than 0 is set to this item, rest of items are not set.	For details, refer to ″Appendix 2. Error code list.″		○	1.00
2	USHORT	1	PossessionNo	Occupation number Set occupation number of request command.			○	1.00
3	ULONG	1	ReceiptNumber	Receipt number Set unique number managed by printer.	Set value higher than 1 to the receipt number as 0 is reserved for a special purpose.		○	1.00

● FAD usage start

Request I/F ID【 6001H 】 CMD ID【 0A00H 】

TAG	TYPE	REPEAT	Item name	Explanation	Remarks	Explanation of value	Mandatory/Defined valu	NPS Version
1	USHORT	1	PossessionNo	Occupation number Set occupation number specified by printer occupation start response.			○	1.00
2	CHAR [1〜128]	1	OrderKey	Order identifier Set name that identifies the order.	Set NULL to the end of string.		○	1.00
3	USHORT	1	PrintOut	Print destination Set where to discharge the prints.	When [0: Discharge to normal tray] is set, 0 is set to TotalDataSize.	0: Discharge to normal tray (sheet advance exit) 1: Discharge to FAD (FAD determines whether the prints are discharged to the slot or to the large-capacity stocker) 2: Discharge to waste	○	1.00
4	ULONG	1	TotalDataSize	Total data size (unit: Byte) Set the total size of the FAD data to be transmitted.			0	1.00
5	ULONG	1	DataGetPoint	Data sending start position (unit: Byte) Set the position to start sending the FAD data. Set 0 at the first time. Then change the start position depending on the total size of transmitted data.			0	1.00
6	USHORT	1	DataSize	Sending data size (unit: Byte) Set sending data size at one time.		Specified range: 1〜65535 Specified value never exceeds the maximum length of the command property (65535 Byte.)	0	1.00
7	UCHAR [0〜]	1	FadData	FAD data Send FAD data. Send data of the size specified by DataSize.			″″ Without data	1.00

Response I/F ID【 6001H 】 CMD ID【 0A01H 】

TAG	TYPE	REPEAT	Item name	Explanation	Remarks	Explanation of value	Mandatory/Defined valu	NPS Version
1	USHORT	1	Result	Response result When value other than 0 is set to this item, rest of items are not set.	For details, refer to ″Appendix 2. Error code list.″		○	1.00
2	ULONG	1	FadResult	FAD response result When Result is 43, this shows the error code that FAD returns. However 99 is set if no reply is received from FAD. When Result is not 43, this is not in use.			○	1.00
3	USHORT	1	PossessionNo	Occupation number Set occupation number of request command.			○	1.00
4	ULONG	1	DataGetPoint	Data sending start position (unit: Byte) Set data sending start position of request command.			○	1.00
5	USHORT	1	DataSize	Transmitted data size (unit: Byte) Set sending data size of request command.	Printer should receive the data transmitted via FAD usage start request at one time.		○	1.00

● Print prepation start

Request I/F ID【 6001H 】 CMD ID【 0B00H 】

No cpmmand property exists.

Response I/F ID【 6001H 】 CMD ID【 0B01H 】

TAG	TYPE	REPEAT	Item name	Explanation	Remarks	Explanation of value	Mandatory/Defined valu	NPS Version
1	USHORT	1	Result	Response result When value other than 0 is set to this item, rest of items are not set.	For details, refer to ″Appendix 2. Error code list.″		○	1.00

Appendix 1. Noritsu character code table

The following control codes will be used to switch SI and SO codes.
For example, to print the copyright symbol of SO code, set 0x0e, 0xC1, and 0x0f in the data to print in that order.

Control code	Description
0x0F	Switch to SI code.
0x0E	Switch to SO code.
0x0D	Switch to SI code. (double-size character)
0x0C	Switch to SO code. (double-size character)

Table 1-1: Noritsu character code table (SI code)

Upper		0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1
		0	0	0	0	1	1	1	1	0	0	0	0	1	1	1	1
		0	0	1	1	0	0	1	1	0	0	1	1	0	0	1	1
Lower		0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1
		0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0 0 0 0	0			SP	0	@	P	`	p				ｰ	ﾀ	ﾐ		
0 0 0 1	1			!	1	A	Q	a	q			｡	ｱ	ﾁ	ﾑ		
0 0 1 0	2			"	2	B	R	b	r			｢	ｲ	ﾂ	ﾒ		
0 0 1 1	3			#	3	C	S	c	s			｣	ｳ	ﾃ	ﾓ		
0 1 0 0	4			$	4	D	T	d	t			､	ｴ	ﾄ	ﾔ		
0 1 0 1	5			%	5	E	U	e	u			･	ｵ	ﾅ	ﾕ		
0 1 1 0	6			&	6	F	V	f	v			ｦ	ｶ	ﾆ	ﾖ		
0 1 1 1	7			'	7	G	W	g	w			ｧ	ｷ	ﾇ	ﾗ		
1 0 0 0	8			(	8	H	X	h	x			ｨ	ｸ	ﾈ	ﾘ		
1 0 0 1	9			)	9	I	Y	i	y			ｩ	ｹ	ﾉ	ﾙ		
1 0 1 0	A			*	:	J	Z	j	z			ｪ	ｺ	ﾊ	ﾚ		
1 0 1 1	B			+	;	K	[	k	{			ｫ	ｻ	ﾋ	ﾛ		
1 1 0 0	C			,	<	L	\	l	|			ｬ	ｼ	ﾌ	ﾜ		
1 1 0 1	D			-	=	M	]	m	}			ｭ	ｽ	ﾍ	ﾝ		
1 1 1 0	E			.	>	N	^	n	‾			ｮ	ｾ	ﾎ	ﾞ		
1 1 1 1	F			/	?	O	_	o				ｯ	ｿ	ﾏ	ﾟ		

Table 1-2: Noritsu character code table (SO code)

Upper		0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1
		0	0	0	0	1	1	1	1	0	0	0	0	1	1	1	1
		0	0	1	1	0	0	1	1	0	0	1	1	0	0	1	1
Lower		0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1
		0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0 0 0 0	0			SP	À	à	Ï	ï									
0 0 0 1	1			¡	Ä	ä	Í	í						©			
0 0 1 0	2			¿	Å	å	Î	î							SP		
0 0 1 1	3			˜	Ã	ã	Ñ	ñ							–		
0 1 0 0	4			£	Á	á	Ò	ò									
0 1 0 1	5			–	Â	â	Ö	ö									
0 1 1 0	6			—	Æ	æ	Õ	õ									
0 1 1 1	7			¨		ß	Ó	ó									
1 0 0 0	8			·	Ç	ç	Ô	ô									
1 0 0 1	9			＼	Œ	œ	Ø	ø									
1 0 1 0	A			«	Ð	ð	Þ	þ									
1 0 1 1	B			»	È	è	Ù	ù									
1 1 0 0	C			§	Ë	ë	Ü	ü									
1 1 0 1	D			¤	É	é	Ú	ú									
1 1 1 0	E				Ê	ê	Û	û									
1 1 1 1	F				Ì	ì	µ	€									

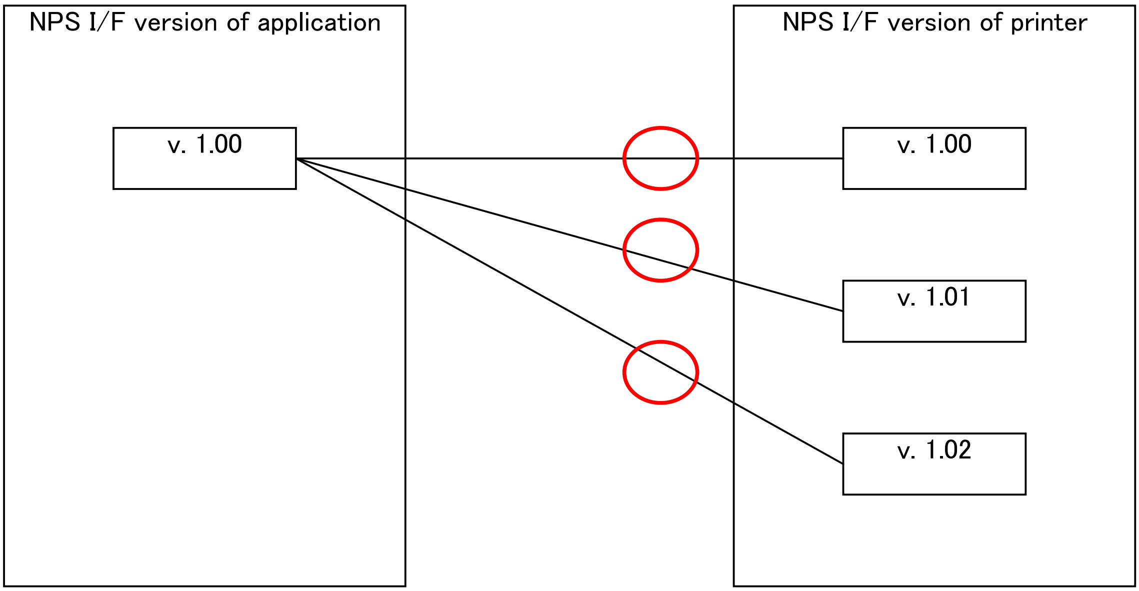
Remarks: Refer to the design record document EAK-29509-01 about Noritsu character code table for RD-108/RD-112.

Appendix 2. Error code list

See ˝Appendix 2. Error Code List˝ of NPS Command List.pdf.

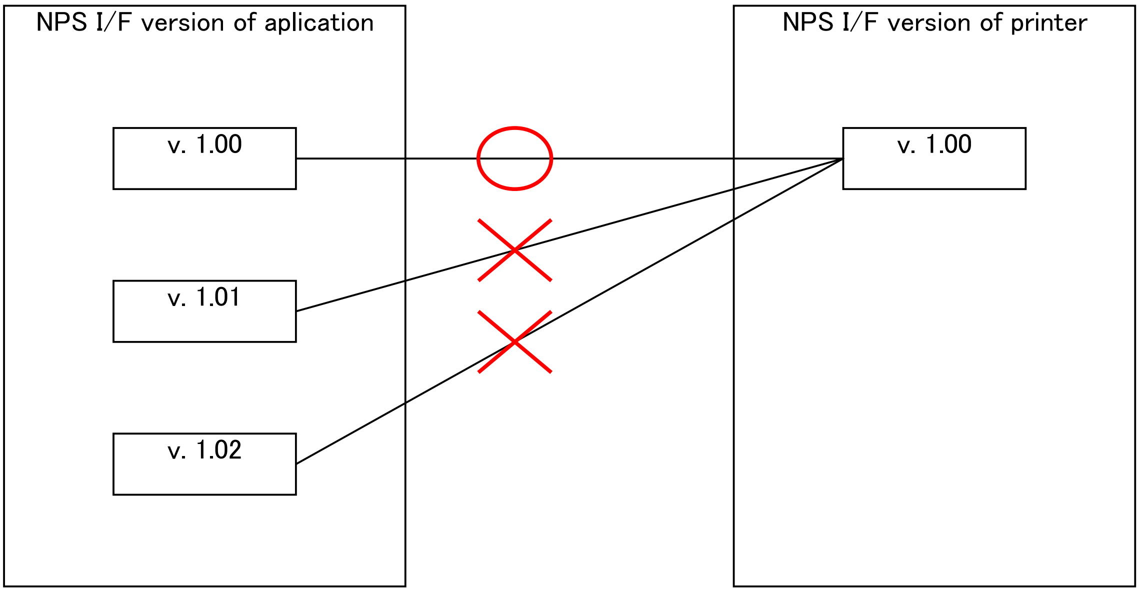
● Appendix 3. NPS version compatibility

○ Printer supports backward compatibility of NPS I/F.


NPS I/F version of application
v. 1.00
NPS I/F version of printer
v. 1.00
v. 1.01
v. 1.02

○ means compatible.

○ Printer does not support upward compatibility of NPS I/F.
Printer should run correctly when a command not listed in the specification is received.
Application should communicate with the printer using NPS I/F version of the pritner.


NPS I/F version of aplication
v. 1.00
v. 1.01
v. 1.02
NPS I/F version of printer
v. 1.00

○ means compatible.
× means incompatible.

● Appendix 4. Interruption process

■ Occupation mode correspondence table

Request Present status	0: Normal	1: Restart interrupted order	2: Express (without interruption)	3: Express (with interruption)
Unoccupied	Success	Success	Success	Success
Occupied (0: Normal)	Failure	Failure	Failure	Success
Occupied (1: Restart interrupted order)	Failure	Failure	Failure	Success
Occupied (2: Express [without interruption])	Failure	Failure	Failure	Failure
Occupied (3: Express [with interruption])	Failure	Failure	Failure	Failure

■ Explanation of print data location between pc and printer at interruption

△ STEP-01 Interruption occurs on printer

PC1
SDK

Order	Frame	Recept No.
001	1	1
	2	2
	3	3
002	1	10
	2	11
	3	12

PC2
SDK

Order	Frame	Recept No.
011	1	4
	2	5
	3	6
012	1	13
	2	14
	3	Unregistered

PC3
SDK

Order	Frame	Recept No.
021	1	7
	2	8
	3	9
022	1	Unregistered
	2	Unregistered
	3	Unregistered

Printer

Recept No.	PC	Order	Frame	Print status
1	PC1	001	1	Advancing (processor)
2	PC1	001	2	Advancing (processor)
3	PC1	001	3	Advancing (printer)
4	PC2	011	1	Exposuring
5	PC2	011	2	Cueing
6	PC2	011	3	Cueing
7	PC3	021	1	Cueing
8	PC3	021	2	Cueing
9	PC3	021	3	Cueing
10	PC1	002	1	Cueing
11	PC1	002	2	Cueing
12	PC1	002	3	Cueing
13	PC2	012	1	Cueing
14	PC2	012	2	Cueing

=> Send print status notification once to PC2.
Recept No. [5], Print status [5], Repeat quantity[1]

=> Send print status notification once to PC3.
Recept No. [7], Print status [6], Repeat quantity[1]

=> Send print status notification once to PC1.
Recept No. [10], Print status [6], Repeat quantity[1]

△ STEP-02 Printer returns the management of cueing order to PC side and processes the interruption.

PC1
SDK

Order	Frame	Recept No.
001	1	1
	2	2
	3	3
002	1	Unregistered
	2	Unregistered
	3	Unregistered

PC2
SDK

Order	Frame	Recept No.
011	1	4
	2	Resumption pending
	3	Resumption pending
012	1	Unregistered
	2	Unregistered
	3	Unregistered

PC3
SDK

Order	Frame	Recept No.
021	1	Unregistered
	2	Unregistered
	3	Unregistered
022	1	Unregistered
	2	Unregistered
	3	Unregistered

Printer

Recept No.	PC	Order	Frame	Print status
1	PC1	001	1	Advancing (processor)
2	PC1	001	2	Advancing (processor)
3	PC1	001	3	Advancing (processor)
4	PC2	011	1	Advancing (printer)
15	PCX	XXX	1	Exposuring
16	PCX	XXX	2	Cueing
17	PCX	XXX	3	Cueing

△ STEP-03 After interruption process, restrat interrupted prints.

PC1
SDK

Order	Frame	Recept No.
001	1	1
	2	2
	3	3
002	1	Unregistered
	2	Unregistered
	3	Unregistered

PC2
SDK

Order	Frame	Recept No.
011	1	4
	2	18
	3	19
012	1	Unregistered
	2	Unregistered
	3	Unregistered

PC3
SDK

Order	Frame	Recept No.
021	1	Unregistered
	2	Unregistered
	3	Unregistered
022	1	Unregistered
	2	Unregistered
	3	Unregistered

=>

Printer

Recept No.	PC	Order	Frame	Print status
1	PC1	001	1	Advancing (processor)
2	PC1	001	2	Advancing (processor)
3	PC1	001	3	Advancing (processor)
4	PC2	011	1	Advancing (processor)
15	PCX	XXX	1	Advancing (processor)
16	PCX	XXX	2	Advancing (processor)
17	PCX	XXX	3	Advancing (printer)
18	PC2	011	2	Exposuring
19	PC2	011	3	Cueing

Send [1: Restart interrupted order] at printer occupation start.
Only [1: Restart interrupted order] or [2: Express] can be received for a certain time.

△ STEP-04 After registration of resumption pending orders, accept normal occupation orders.

PC1
SDK

Order	Frame	Recept No.
001	1	1
	2	2
	3	3
002	1	20
	2	21
	3	22

PC2
SDK

Order	Frame	Recept No.
011	1	4
	2	18
	3	19
012	1	23
	2	24
	3	Unregistered

PC3
SDK

Order	Frame	Recept No.
021	1	Unregistered
	2	Unregistered
	3	Unregistered
022	1	Unregistered
	2	Unregistered
	3	Unregistered

Printer

Recept No.	PC	Order	Frame	Print status
1	PC1	001	1	Exit completion
2	PC1	001	2	Exit completion
3	PC1	001	3	Advancing (processor)
4	PC2	011	1	Advancing (processor)
15	PCX	XXX	1	Advancing (processor)
16	PCX	XXX	2	Advancing (processor)
17	PCX	XXX	3	Advancing (processor)
18	PC2	011	2	Advancing (processor)
19	PC2	011	3	Advancing (printer)
20	PC1	002	1	Cueing
21	PC1	002	2	Cueing
22	PC1	002	3	Cueing
23	PC2	012	1	Cueing
24	PC2	013	2	Cueing

Sometimes the order is different from that before interruption.
This is a restriction for use.

● Appendix 5. Image format

Command property using image format
- Obtain printer settings information response (6000-0201)
- Reception start request (6000-0700)

<table>
<tr><th>ID</th><th>Format</th><th>Description</th></tr>
<tr><td>0</td><td>JPEG</td><td>JPEG File Interchange Format
Basic DCT format</td></tr>
<tr><td>1</td><td>Bitmap</td><td>24bit color DIB (Device Independent Bitmap)</td></tr>
<tr><td>2</td><td>RGB 24 bit color dot sequential</td><td>RGB 24 bit color dot sequential
No header information exists.
Order of data is, from top left, horizontal, and then vertical.</td></tr>
<tr><td>3</td><td>RGB 48 bit color dot sequential
(high 12 bits available, LSB)</td><td rowspan="8">【RGB48】
RGB 48 bit color dot sequential
No header information exists.
Order of data is, from top left, horizontal, and then vertical.
There are the following types of data sequence in 16 bit:
- high 12 bits available: low 4 bits are not in use
- low 12 bits available: high 4 bits are not in use
There are the following types of endian:
-LSB: Little endian
-MSB: Big endian

【BGR48】
BGR 48 bit color dot sequential
No header information exists.
Order of data is, from top left, horizontal, and then vertical.
There are the following types of data sequence in 16 bit:
- high 12 bits available: low 4 bits are not in use
- low 12 bits available: high 4 bits are not in use
There are the following types of endian:
- LSB: Little endian
- MSB: Big endian</td></tr>
<tr><td>4</td><td>RGB 48 bit color dot sequential
(low 12 bits available, LSB)</td></tr>
<tr><td>5</td><td>BGR 48 bit color dot sequential
(high 12 bits available, LSB)</td></tr>
<tr><td>6</td><td>BGR 48 bit color dot sequential
(low 12 bits available, LSB)</td></tr>
<tr><td>7</td><td>RGB 48 bit color dot sequential
(high 12 bits available, MSB)</td></tr>
<tr><td>8</td><td>RGB 48 bit color dot sequential
(low 12 bits available, MSB)</td></tr>
<tr><td>9</td><td>BGR 48 bit color dot sequential
(high 12 bits available, MSB)</td></tr>
<tr><td>10</td><td>BGR 48 bit color dot sequential
(low 12 bits available, MSB)</td></tr>
<tr><td>14</td><td>Bitmap (passed by file path)</td><td>Microsoft Windows ini file format
<table>
<tr><th>Section</th><th>Key</th><th>Value</th></tr>
<tr><td>IMGFMT_BMP_PATH</td><td>FilePath</td><td>Specify the full path in the 24bit color DIB
(Device Independent Bitmap) format.</td></tr>
<tr><td></td><td>DeleteFile</td><td>Specify who will delete the file specified in FilePath.
0: I will delete. (default)
1: Printer will delete. (Not available yet)</td></tr>
</table>
* By using this format, file information will be sent to the printer, instead of the image files.
In order to use this format, NPS client and NPS server must be installed to the same pc.</td></tr>
<tr><td>100</td><td>Image for measuring communication speed</td><td>Image data for measuring communication speed</td></tr>
<tr><td>101</td><td>Image for network self-diagnostic
(for CRC check)</td><td>Image data with CRC check</td></tr>
</table>