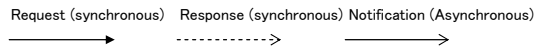


## 1. Sequence

○ Explanation of arrow



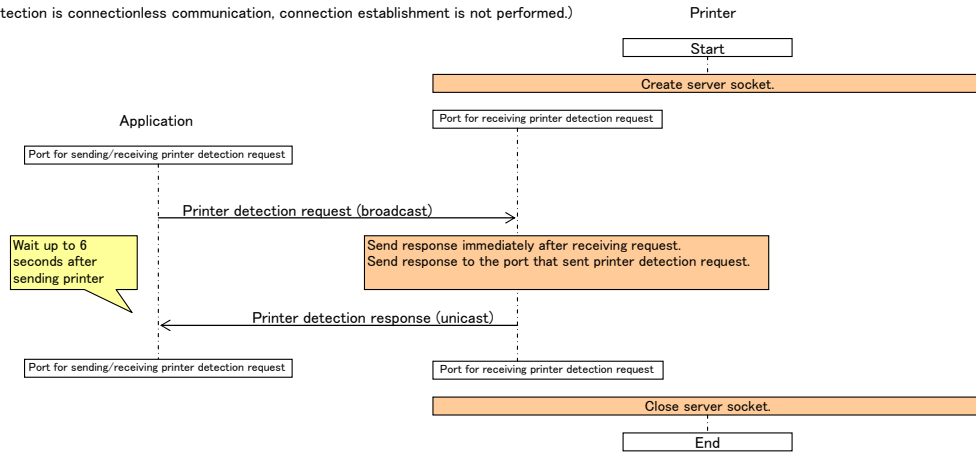
● Entire flow from application start to application end

△ Application sends request to printer at the arbitrary timing.

■ Sequence when application searches printers on the network

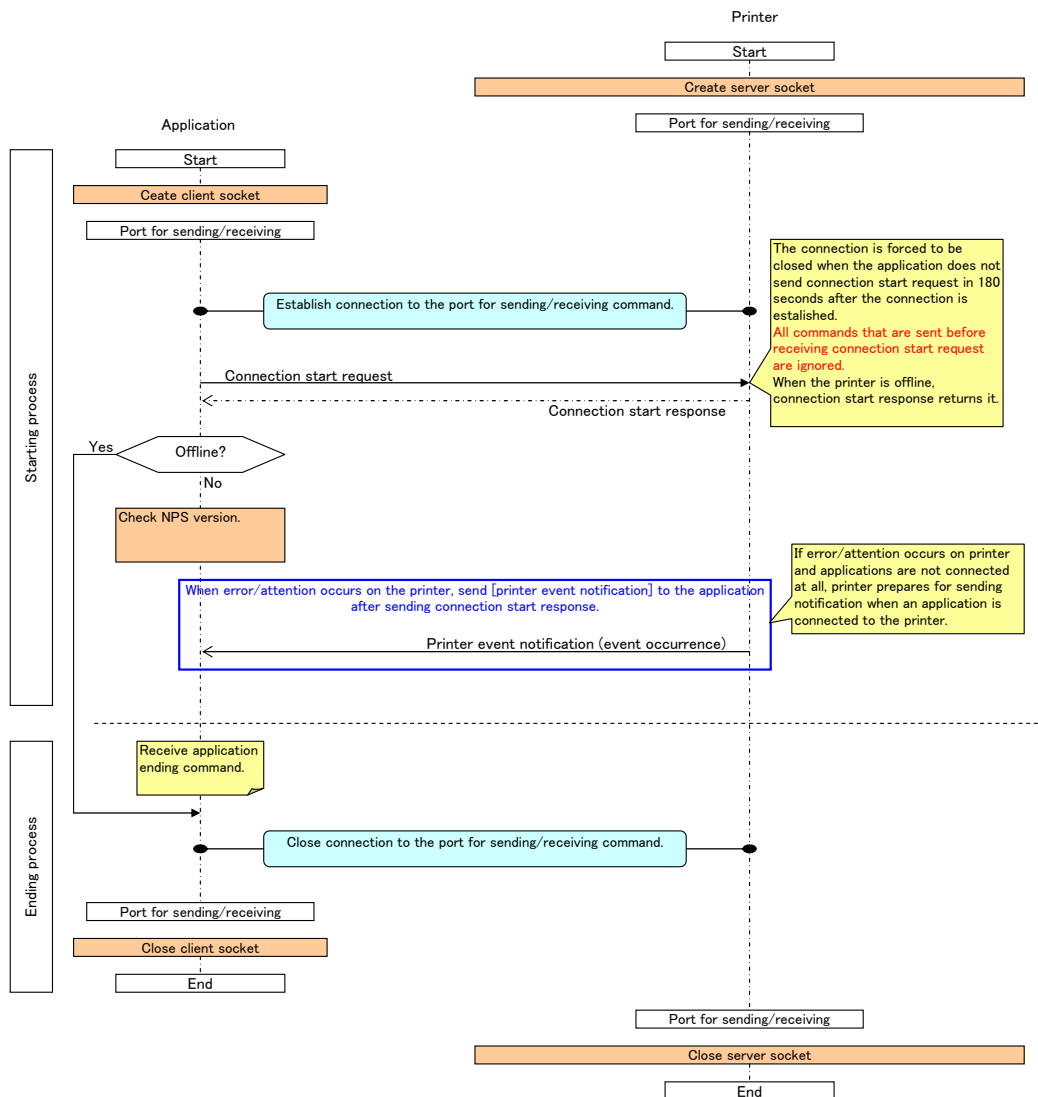
**IMPORTANT** This operation is performed when application selects the printer for printing, not every time application starts. Once the printer is selected, this operation is not performed unless the printer selection is changed.

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



■ 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.



## 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 value	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 value	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 value	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 value	NPS Version
1	UCHAR [6]	1	MacAddress	MAC address of RIP-PC			○	

### ● Obtain Printer basic information

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 value	NPS Version
1	USHORT	1	Result	Response result When value other than 0 is set to this item, rest of item is 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

● Printer occupation end

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

TAG	TYPE	REPEAT	Item name	Explanation	Remarks	Explanation of value	Mandatory/Defined value	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 value	NPS Version
1	USHORT	1	Result	Response result When value other than 0 is set to this item, rest of item is 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

● Image transmission confirmation

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

TAG	TYPE	REPEAT	Item name	Explanation	Remarks	Explanation of value	Mandatory/Defined value	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 value	NPS Version
1	USHORT	1	Result	Response result When value other than 0 is set to this item, rest of item is 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 value	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 value	NPS Version
1	USHORT	1	Result	Response result When value other than 0 is set to this item, rest of item is 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

● Update date information

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

TAG	TYPE	REPEAT	Item name	Explanation	Remarks	Explanation of value	Mandatory/Defined value	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	項目名	説明	備考	値の説明	必須/既存値	NPS Version
1	USHORT	1	Result	Response result When value other than 0 is set to this item, rest of item is not set.	For details, refer to "Appendix 2. Error code list."		○	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 value	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 value	NPS Version
1	USHORT	1	Result	Response result When value other than 0 is set to this item, rest of item is not set.	For details, refer to "Appendix 2. Error code list."		○	1.00

● 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 value	NPS Version
1	USHORT	1	InterfaceId	Interface ID Set Interface ID.			○	1.00
2	USHORT	1	CommandId	Command ID Set command ID.			○	1.00

● Print prepaion start

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

コマンド属性はありません。

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

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