

**A Guide for  
OLE Custom Application Generation  
with DURA Rhythm®**

**Windows95/98/Me  
WindowsNT4.0/2000/XP**

**NITTO DENKO CORPORATION**

**\* Important**

Be sure to read the packed license document. This software can be utilized only under a licensing agreement.

NITTO DENKO and the distributor shall have no liability for any trouble, damage or result of any kind the customer or the operator received caused by the custom application software generated with this software.

Buy one set of this software for one machine you use.

The names of the corporations and the products are trademarks and registered trademarks.

# Contents

<u>1. Introduction</u>	<u>1</u>
<u>2. Functions</u>	<u>2</u>
<u>2-1.General Functions</u>	<u>2</u>
<u>2-2.Properties</u>	<u>4</u>
<u>2-3.The Flow of the Program</u>	<u>23</u>
<u>2-4.Sample Programs</u>	<u>23</u>
<u>2-4-1.Visual Basic</u>	<u>23</u>
<u>2-4-2.ACCESS</u>	<u>24</u>
<u>2-4-3.EXCEL</u>	<u>25</u>
<u>2-5.Complement</u>	<u>26</u>
<u>3. The Properties Newly Added to Ver 3.35</u>	<u>27</u>
<u>3-1.Examples of the New Properties</u>	<u>27</u>
<u>3-2.Manual stacking</u>	<u>29</u>
<u>4. Note in Generating Applications</u>	<u>31</u>

## Modification history

### 12-17-1996

New create.

### 6-12-1997

- 1) In **DURA Rhythm for Windows** Ver 3.35 and later, you can utilize the following properties. The information about those new properties is described in Chapter 3.
  - **Message** Property
  - **Comment** Property
  - **LogoFile** Property
  - **LogoName** Property
  - **Visible** Property
- 2) The point to be attended in generating applications is described in Chapter 4.

### 5-26-1998

- 1) The following properties can be utilized. This modification is made in order to satisfy the requirements of **DURA Rhythm**.
  - **Backfeed1** Property
  - **Backfeed2** Property

### 8-25-1998

- 1) The following properties can be utilized. This modification is made in order to satisfy the requirements of **DURA Rhythm**.
  - **Backfeed3** Property
  - **Start2** Property

## 2-25-1998

1) The following properties can be utilized. This modification is made in order to satisfy the requirements of **DURA Rhythm**.

- **Flip** Property
- **CommPort** Property
- **CtrSave** Property

## 3-10-1999

1) The following properties can be utilized. This modification is made in order to satisfy the requirements of **DURA Rhythm**.

- **TTFontSize** Property
- **TTStringSpc** Property
- **TTStringData** Property
- **LSP5300Info** Property
- **LSP5300FeedReset** Property

## 8-10-1999

1) The following method can be utilized. This modification is made in order to satisfy the requirements of **DURA Rhythm**.

- **SetFunctionValue** Method
- **GetFunctionValue** Method

## 10-16-2000

1) The following properties can be utilized. This modification is made in order to satisfy the requirements of **DURA Rhythm**.

- **BathNum** Property
- **GetInfo** Property

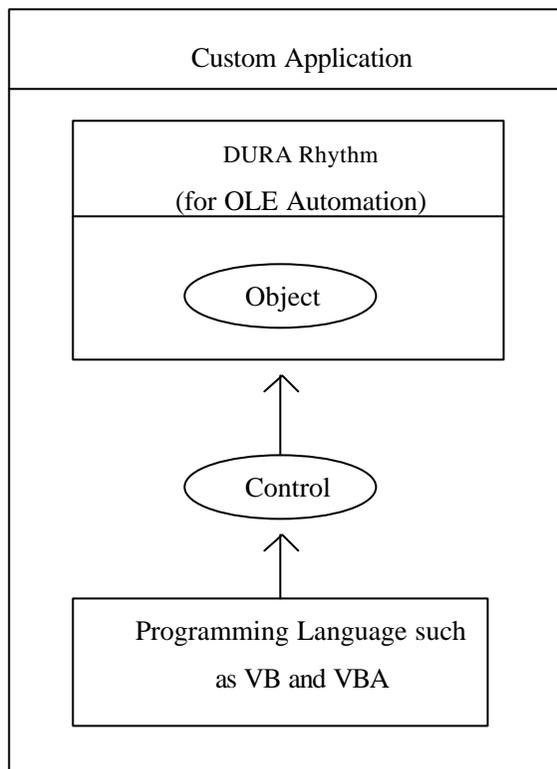
### 7-3-2001

1) The following method can be utilized. This modification is made in order to satisfy the requirements of **DURA Rhythm**.

- **GetPartsInfo** Method
- **GetBarType** Method
- **Position** Method
- **OnlyVariableSend** Method

# 1.Introduction

**DURA Rhythm (Ver.3.03** or later) supports **OLE (Object Linking and Embedding)** Automation. This document is intended for the programmer to create custom applications with **DURA Rhythm** as the **OLE** server. You can generate the custom application for printing labels with the programming language such as **VB (Visual BASIC)**, **ACCESS**, **VBA(Visual Basic for Applications)** and **VBScript(Internet Explorer)** utilizing **OLE** Automation.



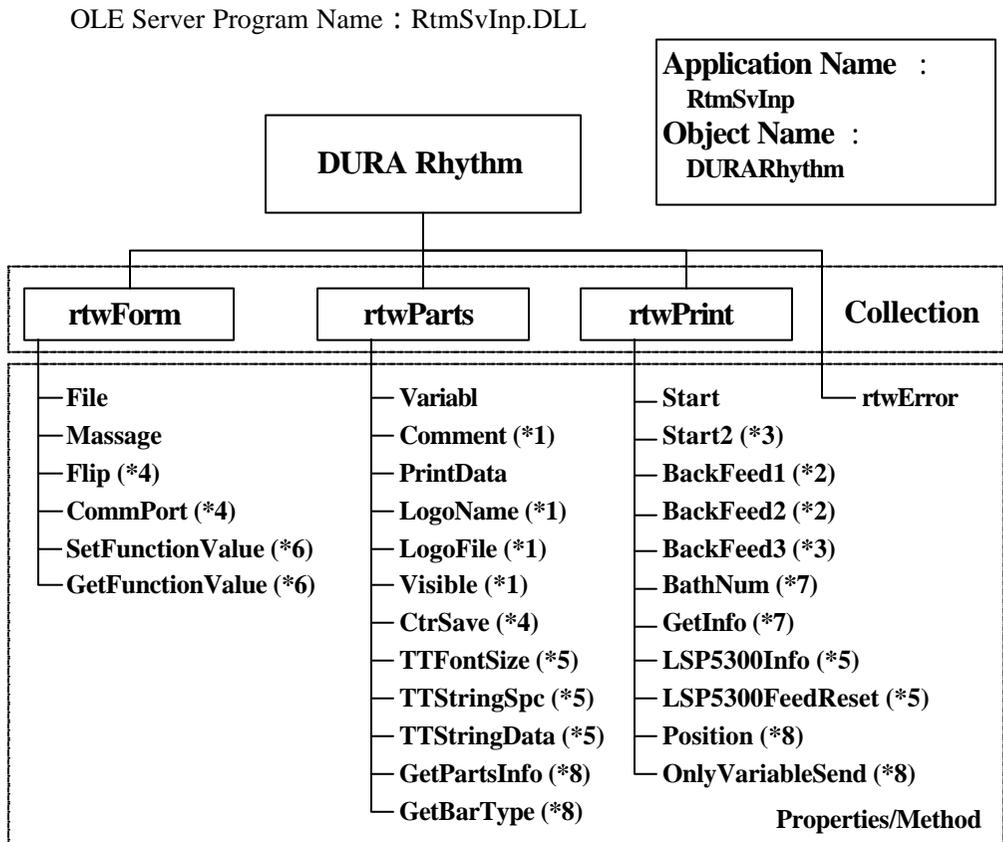
Generation of Custom Application utilizing **OLE** Automation for **DURA Rhythm**

To understand this document, you are requested to have the basic knowledge of **OLE**, **VB**, **VBA**, and **VBScript** and the basic operation of **ACCESS**. As for these informations, refer to the reference guides for each.

## 2.Functions

### 2-1.General Functions

The structural architecture of the object/properties supported by **DURA Rhythm** is shown below. When **DURA Rhythm** is installed, **OLE** server object (RtmServr.EXE) is also installed at the same time. You can print out labels with the label format generated with **DURA Rhythm**, designating the properties shown below with the programming language such as **VB** and **VBA**.



The Structural Architecture of OLE Server for **DURA Rhythm**

(\*1) The wiggle line indicates the property newly added to **DURA Rhythm**

**Ver 3.35** and later.

(\*2) Properties marked with double underlines are those newly added to **DURA Rhythm**

**V4.03** and later.

- (\*3) Properties marked with double underlines are those newly added to **DURA Rhythm V4.30** and later.
- (\*4) Properties marked with double underlines are those newly added to **DURA Rhythm V4.53** and later.
- (\*5) Properties marked with double underlines are those newly added to **DURA Rhythm V4.58** and later.
- (\*6) Properties marked with double underlines are those newly added to **DURA Rhythm V4.6** and later.
- (\*7) Properties marked with double underlines are those newly added to **DURA Rhythm V5.0** and later.
- (\*8) Properties marked with double underlines are those newly added to **DURA Rhythm V5.1** and later.

\*The names of OLE server program, application and object are determined according to the version of **DURA Rhythm**.

**OLE Server Program Name**

DURA Rhythm Ver 3.0 ~ DURA Rhythm Ver 3.99	.....	RTMSERV.EXE
DURA Rhythm Ver 4.0 ~ DURA Rhythm Ver 4.01	.....	RTMSVR32.EXE
DURA Rhythm Ver 4.02 ~ .....		RTMSVINP.DLL

**Application Name**

DURA Rhythm Ver 3.0 ~ DURA Rhythm Ver 3.99	.....	RTMSERV
DURA Rhythm Ver 4.0 ~ DURA Rhythm Ver 4.01	.....	RTMSVR32
DURA Rhythm Ver 4.02 ~ .....		RTMSVINP

## 2-2.Properties

The explanations of properties are shown below.

Collection	Property	Remarks
rtwForm	File	The format file name generated with <b>DURA Rhythm</b> is designated.
	Message(*1)	Designate whether Message Dialog is to be displayed in <b>DURA Rhythm</b> or not.
	Flip(*4)	Selected Rotation.
	CommPort(*4)	Selected COM port.
rtwParts	Variable	The field name stored in the format file of <b>DURA Rhythm</b> is designated.
	Comment(*1)	Designate the Comment stored in the format file of <b>DURA Rhythm</b> and the Image with the Comment is selected.
	LogoName(*1)	The name of the Picture Image selected by <b>Comment</b> Property can be changed.
	LogoFile(*1)	The name of the Picture Image File selected by <b>Comment</b> Property can be changed.
	Visible(*1)	You can designate whether the Image selected by <b>Variable</b> or <b>Comment</b> Property should be printed or not.
	Print Data	The print data corresponding to the field name above are designated / referred to.
	CtrSave(*4)	You can designate whether the counter selected by <b>Variable</b> or <b>Comment</b> Property should be update or not.
	TTFontSize(*5)	The font size of the <b>True Type</b> Image selected by <b>Comment</b> Property can be changed.
	TTStringSpc(*5)	The character space of the <b>True Type</b> Image selected by <b>Comment</b> Property can be changed.
	TTStringData(*5)	The data of the <b>True Type</b> Image selected by <b>Comment</b> Property can be changed.

rtwPrint	Start	Print process is started. The number of copies are designaed.
	Start2(*3)	
	BackFeed1(*2)	Backfeed1 is executed in Mounter Mode.
	BackFeed2(*2)	Backfeed2 is executed in Mounter Mode.
	BackFeed3(*2)	Backfeed3 is executed in Mounter Mode.
	BathNum(*7)	Designate the number of labels cut at one time.
	GetInfo(*7)	You can obtain the <b>DURA</b> printer information
	LSP5300Info(*5)	You can obtain the <b>LSP5300</b> printer information
LSP5300FeedReset(*5)	You can obtain the <b>LSP5300</b> printer information	
	RtwError	The error codes are returned.

The explanations of Method are shown below.

Collection	Method	Remarks
rtwForm	SetFunctionValue(*6)	The values of the <b>DURA</b> printer function are changed.
	GetFunctionValue(*6)	The values of the <b>DURA</b> printer function (those designated in the format file generated with <b>DURA Rhythm</b> ) are obtained.
rtwParts	GetPartsInfo(*8)	The information of the variable-set Image is obtained.
	GetBarType(*8)	The barcode type is obtained from the variable name.
	ChkPrinterStatus(*9)	The state of a printer is acquired.
rtwPrint	Position(*8)	The start position is designated.
	OnlyVariableSend(*8)	In labeler mode, it is designated whether only variable data are sent and printed or all data are printed.

(\*1) The wiggle line indicates the property newly added to **DURA Rhythm**

**Ver 3.35** and later.

(\*2) Properties marked with double underlines are those newly added to **DURA Rhythm**

**V4.03** and later.

(\*3) Properties marked with double underlines are those newly added to **DURA Rhythm**

**V4.30** and later.

- (\*4) Properties marked with double underlines are those newly added to **DURA Rhythm V4.53** and later.
- (\*5) Properties marked with double underlines are those newly added to **DURA Rhythm V4.58** and later.
- (\*6) Properties marked with double underlines are those newly added to **DURA Rhythm V4.6** and later.
- (\*7) Properties marked with double underlines are those newly added to **DURA Rhythm V5.0** and later.
- (\*8) Properties marked with double underlines are those newly added to **DURA Rhythm V5.1** and later.
- (\*9) Properties marked with double underlines are those newly added to **DURA Rhythm V5.1C** and later.

The format for designating each property in **VBA** is shown in the following example. Periods are put between “Object” and “Collection”, and “Collection” and “Property”.

Ex. : ***object.rtwForm.File*** = “C: \ Rtmwin \ Samples \ TEST.RTW”

#### (1) File

Format: ***object.rtwForm.File*** = File Name  
Set Value: Set “Directory Name” + “File Name”. “File Name” here is the format file name generated with **DURA Rhythm**.  
Remarks: Be sure to designate the value for this property first. The following processes, including the print process, is executed based on the label layout stored in the file designated here.  
Returned Value: If the process ends normally, “0” is set to **rtwError**. If an error occurs, the value other than “0” is set. See Error Code Table for the detailed information.

#### (2) Variable

Format: ***object.rtwForm.Variable*** = Variable Name  
Set Value: Set “Field Name. “Origin” of the concerning image generated with **DURA Rhythm** must be “Keyboard”.  
Remarks: Designating the field name here, you can designate or refer to the data of the image with the property PrintData. In designating Variable, note that the capital letter and the small letter are dealt with distinguishingly.  
Returned Value: If the process ends normally, “0” is set **rtwError**. If an error occurs, the value other than “0” is set. See Error Code Table for the detailed information.

#### (3)PrintData

Format: Set Up: ***object.rtwParts.PrintData*** = Print Data  
Reference:Character Variable = ***object.rtwParts.PrintData***  
Set Value: Designate the data in the form of the character string in Setting Up. Assign the property to the Character Variable in referring to the data.  
Remarks: The data for the selected Field can be designated or referred to.  
Returned Value: If the process ended normally, “0” is set to **rtwError**. If an error occurs, the value other than “0” is set. See Error Code Table for the detailed information.

#### (4) Start

Format: ***object.rtwPrint.Start*** = Number of Copies

Set Value: Designate the value for the number of copies.  
Remarks: The labels are printed out as many as the designated value.  
Returned Value: If the process ends normally, “0” is set to **rtwError**. If an error occurs, the value other than “0” is set. See Error Code Table for the detailed information.  
When the print error occurs, the error message is displayed in **DURA Rhythm** (if “**False**” is not set to **Message** Property).

#### (5) Start2

Format: *object.rtwPrint.Start* = Number of Copies  
Set Value: Designate the value for the number of copies.  
Remarks: The labels are printed out as many as the designated value.  
Returned Value: If the process ends normally, “0” is set to **rtwError**. If an error occurs, the value other than “0” is set. See Error Code Table for the detailed information.  
When the print error occurs, the error message is displayed in **DURA Rhythm** (if “**False**” is not set to **Message** Property).

#### (6) Message (Ver.3.35 and later)

Format: *object.rtwParts.Message* = Message Flag  
Set Value: Designate whether Message Dialog is to be displayed in **DURA Rhythm for Windows** or not.  
Remarks: Designate **False** when you do not want to display Message Dialog in **DURA Rhythm**, and **True** (the value other than **False**) when you want to display.  
When you do not designate the value, Message Dialog is not displayed with **Ver.4.02** and later, while it is displayed with the earlier.  
Returned Value: always normal (The value of the Property **rtwError** is constant.)

**(7) Flip** (Ver.4.53 and later)

Format ***object.rtwForm.Flip*** = Direction

Set Value Designate the Direction of the Image.

Remarks You can designate "0" or "180". Designate "0" when the Image is printed ordinarily. If you designate "180", the Image is printed upside down. Without this property, the Image is printed according to the direction designated by **DURA Rhythm**.

Returned Value If the process ends normally, "0" is set to **rtwError**. If an error occurs, the value other than "0" is set. See Error Code Table for the detailed information.

**(8) CommPort** (Ver.4.53 and later)

Format ***object.rtwForm.CommPort*** = Output Port No.

Set Value Designate the communication port number connected to the printer. Without this property, the output port is used designated by **DURA Rhythm**.

Remarks You can designate the values shown below.

Output Port Number	Communication Device		Output Port Number	Communication Device
0	<b>COM1</b>		10	<b>COM11</b>
1	<b>COM2</b>		11	<b>COM12</b>
2	<b>COM3</b>		12	<b>COM13</b>
3	<b>COM4</b>		13	<b>COM14</b>
4	<b>COM5</b>		14	<b>COM15</b>
5	<b>COM6</b>		15	<b>COM16</b>
6	<b>COM7</b>		16	<b>LPT1</b>
7	<b>COM8</b>		17	<b>LPT2</b>
8	<b>COM9</b>		18	<b>TCP/IP</b>
9	<b>COM10</b>			

Returned Value If the process ends normally, "0" is set to **rtwError**. If an error occurs, the value other than "0" is set. See Error Code Table for the detailed information.

**(9) Comment** (Ver.3.35 and later)

- Format: ***object.rtwParts.Comment*** = Comment
- Set Value: Designate the Comment inputed in the “Comment” column of the Image in generating the format with **DURA Rhythm**.
- Remarks: Designating the comment here, you can designate or refer to the data of the Image with the property **PrintData**. This Property basically has the same function as the **Variable** Property, and can be used with the Image whose “Origin” is other than “Keyboard” ,too. You can designate **LogoFile**, **LogoName** and **Visible** Properties for the Image you select with this Property. In designating Comment, note that the capital letter, the small letter, 2-byte-type and 1-byte-type character are dealt with distinguishingly.
- Returned Value: If the process ends normally, “0” is set to **rtwError**. If an error occurs, the value other than “0” is set. See Error Code Table for the detailed information.

**(10) LogoFile** (Ver.3.35 and later)

- Format: ***object.rtwParts.LogoFile*** = Picture Image File Name
- Set Value: Set to the Picture Image File Name the Bit Map File Name designated in generating the format and storing the Picture Image with **DURA Rhythm**.
- Remarks: Designating the Picture Image File Name here, you can change the bit map file name for the Picture Image. This Property can be utilized when the Image selected by **Comment** Property is a Picture Image and the used Picture Image File is stored in the disk. If you do not designate this Property, the Bit Map file name designated in the parameter setting screen for the Picture Image is utilized.
- Returned Value: If the process ends normally, “0” is set to **rtwError**. If an error occurs, the value other than “0” is set. See Error Code Table for the detailed information.

**(11) LogoName** (Ver.3.35 and later)

- Format: ***object.rtwParts.LogoName*** = Picture Image Name
- Set Value: Designate the Picture Image Name set in generating the format and storing the Picture Image with **DURA Rhythm**.
- Remarks: Utilizing this Property, you can change the Picture Image name. This Property can be utilized when the Image selected by **Comment** Property is a Picture Image and the used Picture Image File is stored in the Memory Card. If you do not designate this Property, the Picture Image name designated in the parameter setting screen for the Picture Image is utilized.
- Returned Value: If the process ends normally, "0" is set to **rtwError**. If an error occurs, the value other than "0" is set. See Error Code Table for the detailed information.

**(12) Visible** (Ver.3.35 and later)

- Format: ***object.rtwParts.Visible*** = Print Flag
- Set Value: Designate whether you want to print the selected Image or not.
- Remarks: Designate **False** if you do not want to print out the Image selected by **Variable** or **Comment** Property, and **True** if you want to print it out. When this Property is not designated, the selected Image is printed out.
- Returned Value: If the process ends normally, "0" is set to **rtwError**. If an error occurs, the value other than "0" is set. See Error Code Table for the detailed information.

**(13) CtrSave** (Ver.4.53 and later)

- Format ***object.rtwParts.CtrSave*** = Counter Flag
- Set Value Designate whether or not you want to update the counter data in the selected Image.

Remarks	Designate <b>False</b> if you do not want to update the counter data of the Image selected by <b>Variable</b> or <b>Comment</b> Property, and <b>True</b> if you want (The data are updated everytime they are printed.). When this Property is not designated, the counter data of the selected Image are updated.
Returned Value	If the process ends normally, “0” is set to <b>rtwError</b> . If an error occurs, the value other than “0” is set. See Error Code Table for the detailed information.

**(14) TTFontSize** (Ver.4.58 and later)

Format	<i>object.rtwParts.TTFontSize</i> = Font Size
Set Value	Designate the <b>True Type</b> font size by the unit of point.
Remarks	You can change the font size of the <b>True Type</b> Image selected by <b>Comment</b> Property. This property is available when the Image selected by <b>Comment</b> Property is a <b>True Type</b> Image and the utilized file exists in the disk.
Returned Value	If the process ends normally, “0” is set to <b>rtwError</b> . If an error occurs, the value other than “0” is set. See Error Code Table for the detailed information.

**(15) TTStringSpc** (Ver.4.58 and later)

Format	<i>object.rtwParts.TTStringSpc</i> = Character Space
Set Value	Designate the space between <b>True Type</b> fonts by the unit of dots.
Remarks	You can change the character space of the <b>True Type</b> Image selected by <b>Comment</b> Property. This property is available when the Image selected by <b>Comment</b> Property is a <b>True Type</b> Image and the utilized file exists in the disk.
Returned Value	If the process ends normally, “0” is set to <b>rtwError</b> . If an error occurs, the value other than “0” is set. See Error Code Table for the detailed information.

**(16) TTStringData** (Ver.4.58 and later)

Format	<i>object.rtwParts.TTStringData</i> = Print Data
Set Value	Designate the data of the <b>True Type</b> Image.
Remarks	You can change the data of the <b>True Type</b> Image selected by <b>Comment</b> Property. This property is available when the Image selected by <b>Comment</b> Property is a <b>True Type</b> Image and the utilized file exists in the disk.
Returned Value	If the process ends normally, "0" is set to <b>rtwError</b> . If an error occurs, the value other than "0" is set. See Error Code Table for the detailed information.

**(17) BackFeed1/BackFeed2** (Ver.4.03 and later)

Format	<i>object.rtwPrint.BackFeed1</i> = <b>True</b> <i>object.rtwPrint.BackFeed2</i> = <b>True</b>
Set Value	Designate " <b>True</b> "
Remarks	When the format file selected by <b>File</b> Property is stored in Mounter Mode, Backfeed is executed.  When you designate <b>BackFeed1</b> , the Backfeed command is sent to the printer and the control is transferred to the application after the Backfeed process completes.  When you designate <b>BackFeed2</b> , the control is transferred to the application immediately after the Backfeed command is sent to the printer.
Returned Value	If the process ends normally, "0" is set to <b>rtwError</b> . If an error occurs, the value other than "0" is set. See Error Code Table for the detailed information.

**(18) BackFeed3** (Ver.4.3 and later)

Format	<i>object.rtwPrint.BackFeed3</i> = <b>True</b>
Set Value	Designate " <b>True</b> "
Remarks	When the format file selected by <b>File</b> Property is stored in Mounter Mode, Backfeed is executed.  When you designate <b>BackFeed1</b> , the Backfeed command is sent to the printer and the control is transferred to the application after the

Backfeed process completes.

When you designate **BackFeed2**, the control is transferred to the application immediately after the **Backfeed** command is sent to the printer.

Returned Value      If the process ends normally, “0” is set to **rtwError**. If an error occurs, the value other than “0” is set. See Error Code Table for the detailed information.

**(19) BathNum** (Ver.5.0 and later)

Format                **object.rtwPrint.BathNum** = Number of Labels cut at a time

Set Value             Designate the number of labels cut at one time. Numeric only.

Remarks              This property is valid only when “Batch” is selected and stored as the cut mode in the format file selected by the **File** property. Designate this property immediately before the **Start** property.

Returned Value      If the process ends normally, “0” is set to **rtwError**. If an error occurs, the value other than “0” is set. See Error Code Table for the detailed information.

**(20) GetInfo** (Ver.5.0 and later)

Format                **object.rtwPrint.GetInfo** = Information File Name

Set Value             Designate the file name in full path form from which the information of **LSP5300 (5310) / LP5320 / SR / SRS** are obtained.

Remarks              You can obtain the information when one of **LSP5300 (5310) / LP5320 / SR / SRS** is designated in the format file selected by the **File** property. The printer information is stored in the form of the text file with the name designated by this property. The format of the information file is shown below.

                          • **LSP5300 (5310) / LP5320**  
                          the values set to **DIP SW 1 ~ 10** (10 lines)  
                          the values set to the function No. **1 ~ 16** (16 lines)  
                          ROM Version

Head Resistance Value (Average)  
 Head Resistance Value (Max.)  
 Head Resistance Value (Min.)  
 Odometer Value  
 Feed Length  
 Cut Count

• **SR / SRS**

the values set to **DIP SW 1 ~ 8** (8 lines)  
 the values set to the function No. **1 ~ 16** (16 lines)  
 ROM Version  
 Head Resistance Value (Average)  
 Head Resistance Value (Max.)  
 Head Resistance Value (Min.)  
 Odometer Value  
 Feed Length  
 Cut Count

Returned Value      If the process ends normally, “0” is set to **rtwError**. If an error occurs, the value other than “0” is set. See Error Code Table for the detailed information.

(21) **LSP5300Info** (Ver.4.58 and later)

\* **GetInfo** property can be used with Ver.5.0 and later. Use **GetInfo** property if possible as the function of **GetInfo** is identical with that of **LSP5300Info**.

Format                *object.rtwPrint.LSP5300Info* = Informantion File Name  
 Set Value            Designate the file name in the full-path form from which the **LSP5300** printer information is obtained.  
 Remarks              You can obtain the printer information when the printer model is designated to be **LSP5300** in the format file selected by File Property. The printer information is stored in the text form with the information file name designated here. The format of the information file is shown below.

Set Value of **DIPSW 1~10** (10 lines)

Set Value of Function **1~16** 16 lines)

ROM Version

Head Resistance Value (Average)

Head Resistance Value (Max.)

Head Resistance Value (Min.)

Odometer Value

Feed Length

Cut Count

Returned Value If the process ends normally, “0” is set to **rtwError**. If an error occurs, the value other than “0” is set. See Error Code Table for the detailed information.

**(22) LSP5300FeedReset** (Ver.4.58 and later)

Format ***object.rtwPrint.FeedReset = True***

Set Value Designate **True**.

Remarks The Feed Length value stored in **LSP5300** is reset when the printer model is designated to be **LSP5300** in the format file selected by File Property.

Returned Value If the process ends normally, “0” is set to **rtwError**. If an error occurs, the value other than “0” is set. See Error Code Table for the detailed information.

**(23) OnlyVariableSend** (Ver.5.1 and later)

Format ***object.rtwPrint. OnlyVariableSend*** (iSendFlg As Integer)

Set Value 0=Send all print commands, 1=Send only variable data commands..

Remarks In labeler mode, designate whether only variable data are sent and printed or all data are printed.

Returned Value If the process ends normally, “0” is returned. If an error occurs, the value other than “0” is returned. See Error Code Table for the detailed information.

**(24) rtwError**

Format: Numeric Variable = ***object.rtwPrint.Start***

Remarks: The error information for each property is read. See the table below.

Property	Error Code	Meanings
File	0	Normal End
	-1	Can Not Open Format File
	-2	Format File Read Error
	-3	Not the File for <b>DURA Rhythm</b>
	-4	Can not Read the File of This Version
	-5	Insufficient Disk Space
Comment	0	Normal End
	-1	File Property Not Designated
	-2	The Image with the designated Comment does not exist
Variable	0	Normal End
	-1	File Property Not Designated
	-2	Variable Name Error
PrintData	0	Normal End
	-1	File Property Not Designated
	-2	Variable Property Not Designated
	-3	Print Data Error
LogoFile	0	Normal End
	-1	File Property Not Designated
	-2	Comment Property Not Designated
	-3	The Image is not a Picture Image
	-4	The utilized Picture Image is not stored in the disk
	-5	The bit map file can not be found
	-6	The bit map file can not be read
LogoName	0	Normal End
	-1	File Property Not Designated
	-2	Comment Property Not Designated
	-3	The Image is not a Picture Image
	-4	The utilized Picture Image is not stored in the memory card
Visible	0	Normal End
	-1	File Property Not Designated
	-2	Variable or Comment Property is not designated
Start	0	Normal End
	-1	File Property Not Designated
	-2	Wrong Number of Copies
	-3	Time Out in Transmission
	-4	Printer Status Error
	-5	Data are in the Printer-Buff. (Labeler)
	-6	Printing (Manual Sticking)
	-7	Peeling sensor detects label. (Manual Sticking)
	-8	Managing. (Manual Sticking)
	-14	After transmission Print-Data, status error. (Manual Sticking)
Start2	0	Normal End
	-1	File Property Not Designated
	-2	Wrong Number of Copies
	-3	Time Out in Transmission
	-4	Printer Status Error
	-5	Data are in the Printer-Buff.(Labeler)
	-6	Printing. (Manual Sticking)

	-7	Peeling sensor detects label. (Manual Sticking)
	-8	Managing. (Manual Sticking)
	-10	Print managing.
	-14	After transmission Print-Data, status error. (Manual Sticking)
BackFeed1/ BackFeed2	0	Normal End
	-1	File Property Not Designated
	-2	The designated file is not stored in Mounter Mode.
	-3	Time Out in Transmission
	-4	Printer Status Error
BackFeed3	0	Normal End
	-1	File Property Not Designated
	-2	The designated file is not stored in Mounter Mode.
	-3	Time Out in Transmission
	-4	Printer Status Error
	-10	BackFeed managing.
Flip	0	Normal End
	-1	File Property Not Designated
CommPort	0	Normal End
	-1	File Property Not 0Designated
	-2	No use target port.
	-3	The specified port is being used.
CtrSave	0	Normal End
	-1	File Property Not Designated
	-2	Variable Property Not Designated
	-3	This Image has no counter.
TTFontSize	0	Normal End
	-1	File Property Not Designated
	-2	Comment Property Not Designated
	-3	This is not a True Type Image
	-4	The utilized File is not stored in the disk
TTStringSpc	0	Normal End
	-1	File Property Not Designated
	-2	Comment Property Not Designated
	-3	This is not a True Type Image
	-4	The utilized File is not stored in the disk
TTStringData	0	Normal End
	-1	File Property Not Designated
	-2	Comment Property Not Designated
	-3	This is not a True Type Image
	-4	The utilized File is not stored in the disk
BathNum	0	Normal End
	-1	File Property Not Designated
	-2	Wrong Number of Copies
GetInfo	0	Normal End
	-1	File Property Not Designated
	-2	Con not receive printer information.
LSP5300Info	0	Normal End
	-1	File Property Not Designated

	-2	Con not receive printer information.
LSP5300Feed	0	Normal End
Reset	-1	File Property Not Designated
OnlyVariableSend	0	Normal End
	-1	File Property Not Designated
	-2	The mode is not the labeler mode.
	-3	The flag is not appropriate.

**(25)SetFunctionValue** (Ver.4.6 and later)

Format                    **iRet** = **object.rtwForm.SetFunctionValue** (Function No.,  
Function Value, Reset Flag)

Set Value                The Function values for **DURA** printer are changed.

Remarks                The function values in the format file selected by **File** Property are changed and all the values are sent to **DURA** printer. Each **DURA** printer model has its own function No. and the meanings of the function value. See "Reference Manual / System Introduction" for each model.

The function No. and the value set to the parameter are different from the value set to the printer. As for the function No. and the function value, see sample program module (**basDURA**).

Set "0" to Reset Flag in an ordinary case. When you want to change the printer mode, set "1" or "2" ; set "2" when you change the mode of **LSP5300** from labeler to another, and "1" in other cases.

Returned Value        0 = Normal  
-1 = Form File not loaded  
-2 = an irregular Function No.  
-3 = an irregular Function Data  
-4 = can not designate with this model  
-5 = Function transportatin error

**(26)GetFunctionValue** (Ver.4.6 and later)

Format                    **iRet** = **object.rtwForm.GetFunctionValue** (Function No.,  
Function Value)

Set Value	The Function Values of <b>DURA</b> printer (values in the format file) are obtained.
Remarks	<p>The function values in the format file are obtained (the value set on <b>DURA</b> printer can not be obtained.).</p> <p>Each <b>DURA</b> printer model has its own function No. and the meanings of the function value. See "Reference Manual / System Introduction" for each model.</p> <p>The function No. and the value set to the parameter are different from the value set to the printer. As for the function No. and the function value, see sample program module (<b>basDURA</b>).</p>
Returned Value	<p>0 = Normal</p> <p>-1 = Form File not loaded</p> <p>-2 = an irregular Function No.</p>

**(27)GetPartsInfo(Ver.5.1 and later)**

Format	<b><i>object.rtwParts. GetPartsInfo</i></b> (collection object)
Set Value	Set the collection object. When the process ends normally, the information of the Image is returned here.
Remarks	<p>Information of all Images that are stored in the format file and to which the variable name are designated is obtained. The three types of information are to be obtained: variable name, Image type, and comments. The Image type information is returned in the form of number. The meaning of each number is shown below.</p> <p>1 = character Image</p> <p>2 = barcode Image</p> <p>3 = 2-D code Image</p> <p>4 = Picture Image</p>
Returned Value	<p>0 = Normal</p> <p>-1 = Form File not loaded</p> <p>-2 = The Image to which the variable name is designated does not exist.</p>

**(28) GetBarType** (Ver.5.1 and later)

Format	<i>object.rtwParts</i> . <b>GetBarType</b> (variable name, barcode type)
Set Value	Set the variable name of the barcode Image. When the process ends normally, the information of the Image is returned to “barcode type”.
Remarks	<p>The type of the barcode Image that is stored in the format file and to which the variable name is designated is obtained. The meaning of each obtained number is shown below.</p> <ul style="list-style-type: none"><li>1 = Code 39</li><li>2 = ITF(I2of5)</li><li>3 = UPC-A</li><li>4 = UPC-E</li><li>5 = EAN(JAN)-13</li><li>6 = EAN(JAN)-8</li><li>7 = Codabar(NW7)</li><li>8 = Code 93</li><li>9 = Code 128(SubsetA)</li><li>10= Code 128(SubsetB)</li><li>11= Code 128(SubsetC)</li><li>12= Casocode 128</li><li>13= Code 128(SubsetA only)</li><li>14= Code 128(SubsetB only)</li><li>15= Code 128(SubsetC only)</li><li>16= <b>customer barcode</b></li><li>17= UPC-Awithout human readable characters</li><li>18= UPC-Ewithout human readable characters</li><li>19= EAN(JAN)-13 without human readable characters</li><li>20= EAN(JAN)-8 without human readable characters</li><li>21= EAN(JAN)-13 without check digit calculation</li><li>22= EAN(JAN)-8 without check digit calculation</li><li>23= EAN-128(SubsetA)</li><li>24= EAN-128(SubsetB)</li><li>25= EAN-128(SubsetC)</li><li>26= EAN-128(SubsetA only)</li><li>27= EAN-128(SubsetB only)</li><li>28= EAN-128(SubsetC only)</li><li>29=Code 128(AUTO)</li><li>30=EAN-128(AUTO)</li></ul>

Returned Value     0 = Normal  
                         -1 = Form File not loaded  
                         -2 = The variable can not be found or the designated  
                         Image is not a barcode.

**(29) Position** (Ver.5.1 and later)

Format                ***object.rtwPrint. Position*** (Start Position X, Start Position Y)  
Set Value             Set numbers in pixels to the Start Position X and Y. The value of  
                         X lies between -20 and 20, and that of Y between -7 and 7.  
Remarks              You can designate the print start position with this method.  
Returned Value     0 = Normal  
                         -1 = The value is not appropriate.

**(30) ChkPrinterStatus** (Ver.5.1C and later)

Format                ***object.rtwForm. ChkPrinterStatus ()***  
Set Value             None  
Remarks              The status of a printer can be checked if this method is performed.  
Returned Value     0 = It awaits and is a state.  
                         -1 = Under printer work..  
                         -2 = With no printer reaction.

## 2-3.The Flow of the Program

The basic flow of the program is shown below.

- (1)The object is generated (**CreateObject** Function).
- (2)The format file generated with **DURA Rhythm is** selected(**File** property).
- (3)When the Image whose “Origin” is “Keyboard” is included, the field name (**Variable** property) is designated and the print data for it (**PrintData** property) are inputed.
- (4)The number of copies are designated in **Start** property to print out labels.
- (5)The object is released (“**Nothing**” is set to the object variable.).

## 2-4.Sample Programs

Sample Programs with the following conditions are shown below.

Format File:           **A: \ RTMWIN\ SAMPLES \ SR\_TEST.RTW**

Variable Name 1:   Variable Name = **CODE39**   Number of Characters = 10

Variable Name 2:   Variable Name = **OCR-B**    Number of Characters = 10

Number of Copies: 5

### 2-4-1. Visual BASIC

- (1)Before generating the object, add the object variable to the declarative section.

**Public objRhythm As Object**

- (2)The object is generated. Normally, add the sentence shown below to the process executed in activating the program such as **Form\_Load** event. The parameter designated to **CreateObject** function is specific to the version of **DURA Rhythm** (See “Application Name” in “2-1 General Function.).

**Set objRhythm = CreateObject(“RtmSvInp.DURARhythm”)**

Application Name   \_\_\_\_\_

- (3)Select the format file.

**objRhythm.rtwForm.File = “A: \ Rtmwin \ Samples \ SR\_TEST.RTW”**

- (4)Designate the print data.

Select **CODE39** as Variable Name, and define the data as “**1234567890**”.

**objRhythm.rtwParts.Variable = “CODE39”**

**objRhythm.rtwParts.PrintData = “1234567890”**

Select **OCR-B** as Variable Name, and define the data as “**1234567890**”.

**objRhythm.rtwParts.Variable = “OCR-B”**

**objRhythm.rtwParts.PrintData = “1234567890”**

(5) Designate the number of copies and start printing.

**objRhythm.rtwPrint.Start = 5**

(6) Release the object at the end of the program (in **Form\_Unload** event, etc.).

**Set objRhythm = Nothing**

See the accompanying sample program for the more detailed information.

The sample program is stored in **SAMPLES \ VB \**, the subdirectory of the install directory.

#### 2-4-2.ACCESS

(1) Before generating the object, add the object variable to the declarative section.

**Dim objRhythm As Object**

(2) The object is generated. Normally, add the sentence shown below to the process executed in activating the program such as **Form\_Load** event. The character string shown below is the fixed parameter (**RtmSvr. DURARhythm**) to be designated to **CreateObject** function.

**Set objRhythm = CreateObject("RtmSvInp.DURARhythm")**

Application Name \_\_\_\_\_

(3) Select the format file.

**objRhythm.rtwForm.File = "A: \ Rtmwin \ Samples \ SR\_TEST.RTW"**

(4) Designate the print data.

Select **CODE39** as Variable Name, and define the data as **"1234567890"**.

**objRhythm.rtwParts.Variable = "CODE39"**

**objRhythm.rtwParts.PrintData = "1234567890"**

Select **OCR-B** as Variable Name, and define the data as **"1234567890"**.

**objRhythm.rtwParts.Variable = "OCR-B"**

**objRhythm.rtwParts.PrintData = "1234567890"**

(5) Designate the number of copies and start printing.

**objRhythm.rtwPrint.Start = 5**

(6) Release the object at the end of the program (in **Form\_Unload** event, etc.).

**Set objRhythm = Nothing**

See the accompanying sample program for the more detailed information.

The sample program is stored in **SAMPLES \ ACCESS \**, the subdirectory of the install directory.

### 2-4-3.EXCEL

- (1) Before generating the object, add the object variable to the declarative section.

#### **Global objRhythm As Object**

- (2) Execute the object-generation process. Normally, add the sentence shown below to the process executed in starting the program such as **Auto\_Open MACRO**. The parameter (**RtmSvInp.DURARhythm**) designated to **CreateObject** function varies with versions of DURA Rhythm (See “Application Name” in “2-1 General Function.”).

**Set objRhythm = CreateObject(“RtmSvInp.DURARhythm”)**

Application Name \_\_\_\_\_

- (3) Select the format file.

**objRhythm.rtwForm.File = “A:\ Rtmwin \ Samples \ SR\_TEST.RTW”**

- (4) Designate the print data.

Select **CODE39** as Variable Name, and define the data as “1234567890”.

**objRhythm.rtwParts.Variable = “CODE39”**

**objRhythm.rtwParts.PrintData = “1234567890”**

Select **OCR-B** as Variable Name, and define the data as “1234567890”.

**objRhythm.rtwParts.Variable = “OCR-B”**

**objRhythm.rtwParts.PrintData = “1234567890”**

- (5) Designate the number of copies and start printing.

**objRhythm.rtwPrint.Start = 5**

- (6) Release the object at the end of the program (in **Form\_Unload** event, etc.).

**Set objRhythm = Nothing**

The sample programs included in this software are generated with the applications shown below.

- **Internet Explorer**
- **Microsoft Visual Basic V6.0**
- **Microsoft Access 97 & 2000**
- **Microsoft Excel 97 & 2000**

## 2.5.Complement

- (1)When Counter Track is designated to the format file generated with **DURA Rhythm**, you can refer to the updated value of Counter with **PrintData** property after the print process. The format file is updated at the same time.
- (2)When an error occurred during the print process, though the detailed error code is not returned to the application, the detailed error message is displayed by **DURA Rhythm** (only when RS232C port is utilized). The error messages are shown below.

- Printer Connected Incorrectly
- Transmission Error
- Supply Trouble (Label / Ribbon)
- Printer Cover Open
- Printer Hardware Trouble
- Printer Not Ready

When the centronics port is utilized, the detailed error messages are not displayed, and the data transmission is considered to be ended normally if the printer is set at “off”. Use RS232C port if possible to connect **DURA PRINTER SR** with the personal computer.

### 3. The Newly Added Properties to Ver 3.35

#### 3-1 Examples of the New Properties

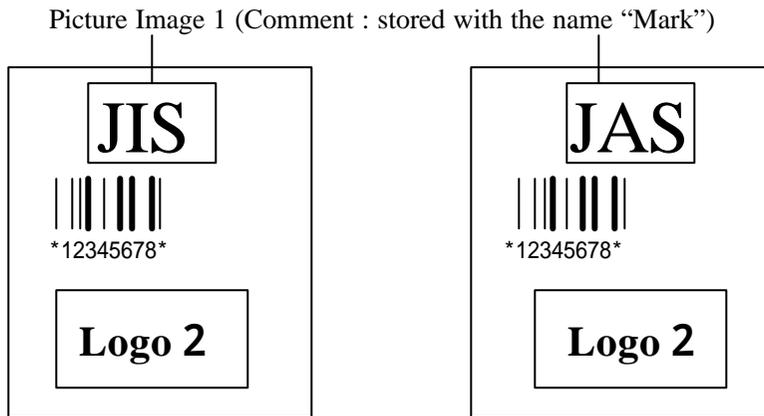


Fig. 3-1

Ex.1) Designate the parameters as described below for Picture Image 1, and then you can print out the 2 labels with the same format and with the different data for Picture Image 1, as is shown in the figure above.

- Select "Disk" for the "File Location" of Picture Image 1.
- Designate "C:\RTMWIN\JIS.BMP" as the Bit Map file name for Picture Image 1.
- Set the Comment for Picture Image 1 to "Mark".

Store the Bit Map file for the JIS mark in "C:\RTMWIN\JIS.BMP".

Store the Bit Map file for the JAS mark in "C:\RTMWIN\JAS.BMP".

#### Print out the Label with JIS Mark

Select the Comment "Mark" and define the bit map file name as "C:\RTMWIN\JIS.BMP".

```
objRhythm.rtwPartsComment="Mark"
```

```
objRhythm.rtwParts.LogoFile="C:\RTMWIN\JIS.BMP"
```

#### Print out the Label with JAS Mark

Select the Comment "Mark" and define the bit map file name as "C:\RTMWIN\JAS.BMP".

```
objRhythm.rtwPartsComment="Mark"
```

**objRhythm.rtwParts.LogoFile="C:\RTMWIN\JAS.BMP"**

Ex.2) Designate the parameters as described below for Picture Image 2, and then you can print out the 2 labels, one of which has Picture Image 2 on it and another does not have, with the format shown in Figure 3-1 above.

- Set the Comment for Picture Image 2 to "Picture Image 2".

Print out the Label with Picture Image 2

Select the Comment "Picture Image 2" and set **True** to **Visible** (or set nothing to **Visible**).

**objRhythm.rtwParts.Comment="Picture Image 2"**

**objRhythm.rtwParts.Visible=True**

Print out the Label without Picture Image 2

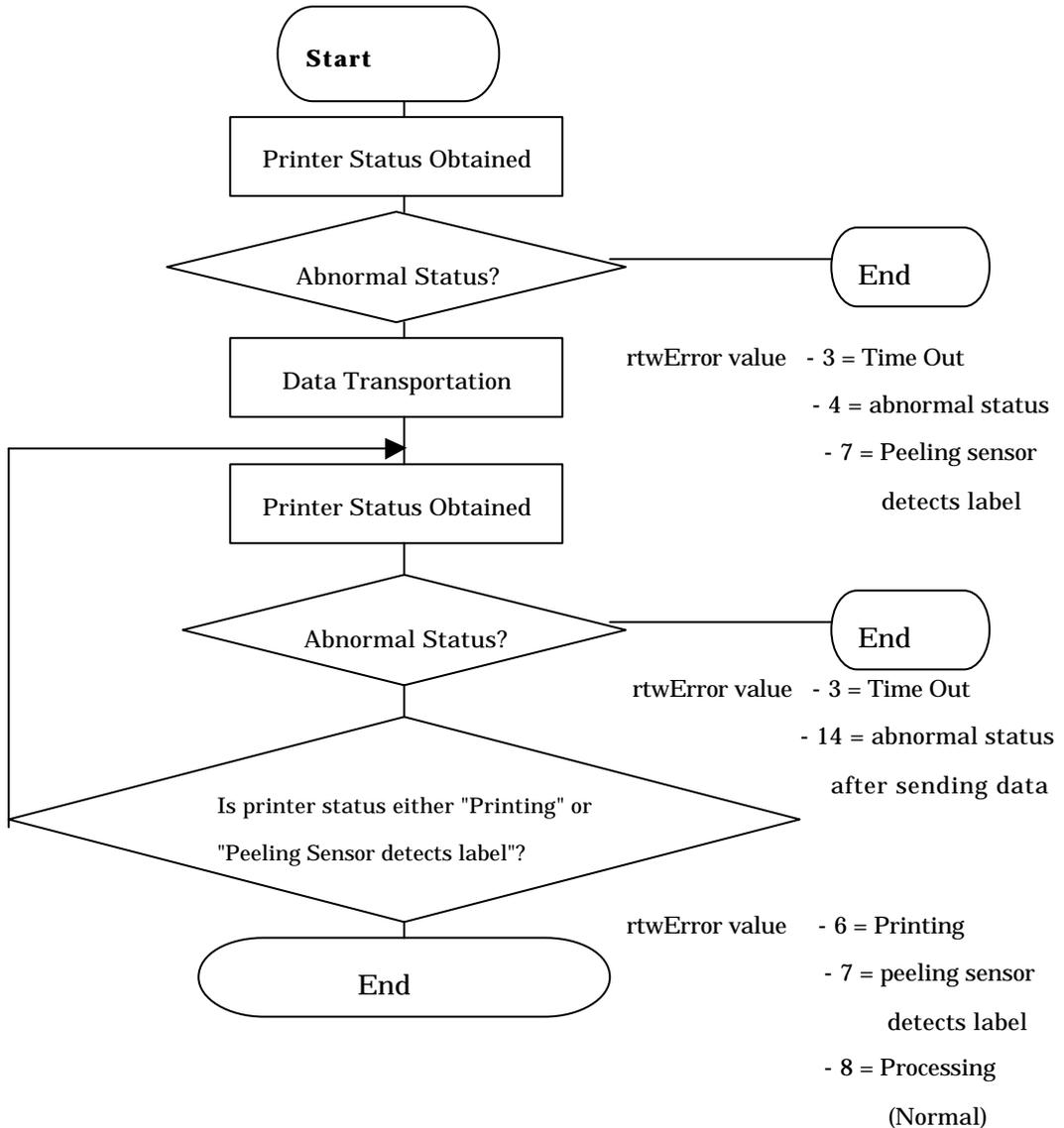
Select the Comment "Picture Image 2" and set **False** to **Visible**.

**objRhythm.rtwParts.Comment="Picture Image 2"**

**objRhythm.rtwParts.Visible=False**

### 3-2 Manual Stacking

The print process with **OLE** by **DURA Rhythm** is executed (when **Start** is utilized) is executed following the flow chart shown below.



To get to End and in the flow above means that the process has ended abnormally.

To reach End (the value of **rtwError** immediately after **Start** is "-8") shows that the print process has executed normally. You must wait till the value of **rtwError** becomes "0", that is, till the label is peeled off from the peeling sensor position. This waiting process must be designated in the application

Based on the flow shown in the previous page, you must designate in the

application the processes shown below.

- (1) Indicate to start printing with **Start** Property.
- (2) When the value of **rtwError** (the value obtained at the first check) is "-7", you must retry the start process (re-execution of **Start** Property), as the label printed in former time is on the peeling position. When the value of **rtwError** is "-3" or "-4", execute the Error process.
- (3) When the value of **rtwError** is "-14", you must consider carefully how to deal with this situation. It means that an error occurred after the data had been already sent to the printer normally. A hardware trouble, supply error, paper jam, etc. may be the cause of the error. The label may be printed or not printed, depending on the operator's action (whether the operator restarts printing after turning off the power and on again, or without turning off the power). It is necessary to designate to display "Error" in the application. It is also necessary to indicate clearly how to operate the machine in such a case.
- (4) When the value of **rtwError** is "-6", "-7", or "-8", you must wait till it becomes "0", "-3" or "-4". This waiting process must be designated in the application.

## 4. Note in Generating Applications

### (1) Creation of the Object

Be sure to call **CreateObject** Function only once when you start the application. The **OLE** server for **DURA Rhythm** does not support the double activation.

In quitting the application, do not forget to set “**Nothing**” to the object variable.

### (2) When OLE server can not be set by reference

When the error message such as “can not be set by reference” is displayed in the generation of the application, execute the setting-by-reference process again.

#### **Visual Basic**

Select “Setting by Reference” in the “Project” menu.

Select “**DURA Rhythm Inprocess Server**” from the reference list of the objects, put the check mark in its check box, and then press “OK”.

When “Reference Impossible” is displayed on the object described above, press “OK” after erasing the check mark and re-open the “Setting by Reference” screen to put the check mark in the check box you want.

#### **ACCESS97**

Select “**ActiveX** control” in the “Tool” menu.

Press “Entry”.

The dialog box for the file selection is displayed. Select the appropriate “**OLE** Server Program Name”, referring to the list on page 3.

The **OLE** server program is stored in the **SYSTEM** Directory under **Windows** Directory (in **SYSTEM32** Directory with **Windows NT**).