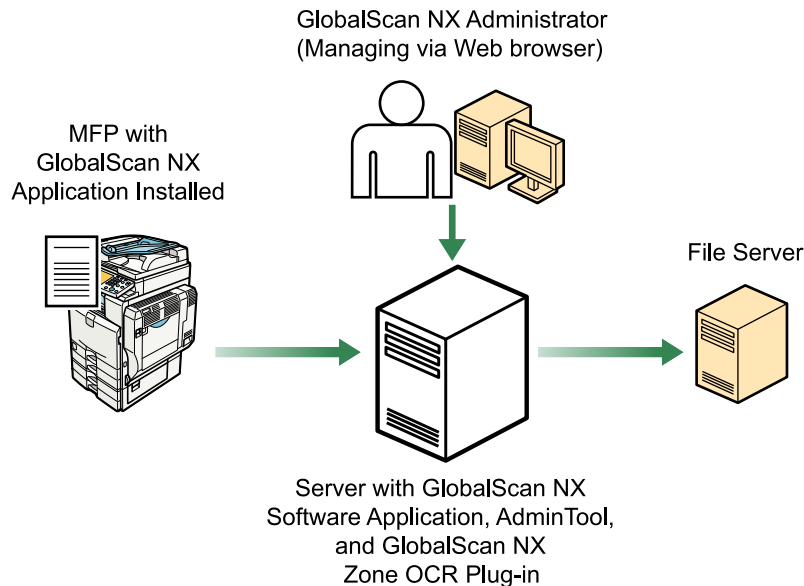# RICOH

GlobalScan NX Zone OCR Plug-in

Administrator's Guide

The GlobalScan NX Zone OCR Plug-in is a GlobalScan NX (GSNX) plug-in filter that enables documents scanned using a project to save data as a text information.

The OCR settings for the specified rectangular area are made using the Zone OCR Form Setting Tool.

If you use GlobalScan NX Zone OCR Plug-in on a server used with HotFolder Plug-in, be sure to activate GlobalScan NX Zone OCR Plug-in for HotFolder. If GlobalScan NX Zone OCR Plug-in for HotFolder is not activated, an error occurs when Zone OCR Plug-in is performed.

Fig. 1: GlobalScan NX Zone OCR Plug-in Workflow

> **Note**

- This manual explains the operation procedures for the Zone OCR Plug-in. For details about the operation procedures for other Services/Filters, see *GSNX Administrator's Guide*.

Introduction

This manual contains detailed instructions and notes on the operation and use of this product. For your safety and benefit, read this manual carefully before using the product. Keep this manual in a handy place for quick reference.

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Before You Begin

Abbreviations

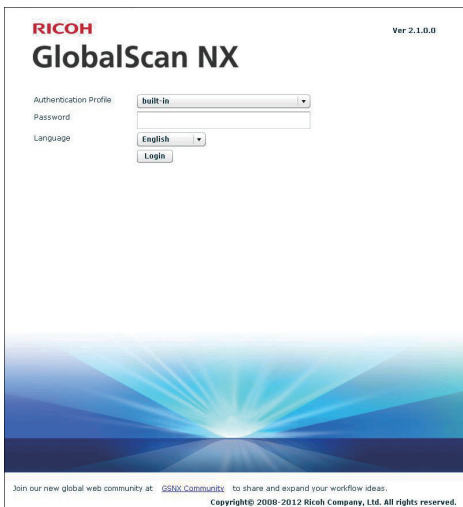The following abbreviations are used in this guide to shorten content.

Product / Name	Abbreviation
GlobalScan NX	GSNX

Installing Zone OCR Plug-in
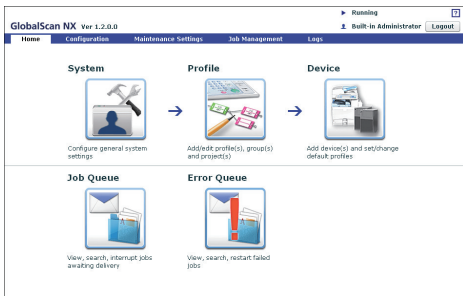
Step 1: Pre-Installation Procedure

To log in to AdminTool, you must use either a Built-in Administrator account (specified during the installation of AdminTool) or an Administrator account (specified beforehand using AdminTool).

1. Open your Web browser.

2. Enter the AdminTool URL.
   http://*IP address*:8080/gsnx/

3. Press [**ENTER**] or click [**Go**].
   The AdminTool Login Page appears

Fig. 2: AdminTool Login Page
   The image above is version 2.1.0.0.

4. Select an authentication profile and enter the corresponding password.

5. Select a language from the drop-down list.

6. Click [**Login**].
   The AdminTool Home Page appears.

7. Click [**Maintenance Settings**].

Fig. 3: AdminTool Home Page
   The image above is version 1.2.0.0.

8. Click [**System Control**].

9. Click [**Switch Delivery Service Status**] to switch the GSNX server status from [**Running**] to [**Suspended**].

🔽 Note
- To update the "Delivery Service Status", click [**Refresh**], next to "Delivery Service Status"

10. Click [**Yes**].

11. Click [**Logout**] to log out of AdminTool.

Step2: Installation

⚠️ **Caution**
- Administrator privileges are required to install the plug-in.
- The following are the requirements for the installation.
  - Server Edition (V. 2.1.0.0 or later)

1. Close all applications currently running on the GSNX server.

2. Double-click GSLaunch.exe.
   If the Security Warning dialog is displayed, click [**Run**].

3. Click [**Zone OCR Plug-in**] to start the installer.
   Setup menu is displayed.

4. Click [**Next >**]
   The License menu is displayed.

5. Select [**I accept the terms of the license agreement**], and then click [**Next >**].

🔽 Note
- The folder where GSNX is installed is automatically selected as the location for the plug-in's installation files.
- If the GSNX server status is [**Running**], click [**Switch Delivery Service Status**] to switch the GSNX server status from [**Running**] to [**Suspended**].

6. Click [**Next >**] .
   The Install menu is displayed.

7. Click [**Finish**].
   The installation is complete.

8. Activate the Zone OCR Plug-in.

🔽 Note
- To activate the plug-in, select its name under [License Name] in the GlobalScan NX Activation Tool. For details about activation, see GSNX Installation Guide.
- If the installation is not successful, check the following:
  - GlobalScan NX has been installed.
  - The language of GlobalScan NX installer is the same.
  - GlobalScan NX Windows service is running.
  - GlobalScan NX Server's distribution status is "Suspended".

⭐ **Important**

- Before uninstalling the plug-in, be sure to deactivate it. Note that deactivating the plug-in will also deactivate the licenses of GlobalScan NX, its optional software, and other plug-ins. For details about uninstalling and deactivation, see GSNX Installation Guide.

Creating Form using Editor

1. Prepare the image data that you want to perform OCR for the specified rectangular area.

2. Activate the Zone OCR plug-in from the [**Start**] menu.

3. Click [**Add**] to display the Specify the Form Image File screen.

   For details, see P.6 "Available settings in Zone OCR Form Setting Tool screen".

4. Select the image, and then click [**Open**].

   The Edit Form screen is displayed.

   For details, see P.7 "Available settings in Edit Form screen".

5. Specify the settings for the image area to be enlarged, reduced or rotated.

   To enlarge or reduce the image, specify from the [**Zoom(M)**] combo box.

   To rotate the image, click the [icon] or [icon] button.

6. Drag the mouse pointer from the one point to another point to specify the area.

   The Area Properties screen is displayed.

7. Specify the OCR area settings for the area.

   For details, see P.8 "Available settings in Area Properties screen".

8. Click [**Add Anchor (A)**] to set new anchor.

   If you set an anchor, the OCR character recognition ratio may be higher due to the position correction.

   ⬇ **Note**

   - To set an anchor, check that the followings are met.
     - The image data specified for a form and the data to be used for scanning have common characters, and they are set as an anchor.
     - There is at least one character in the anchor area. If not, the position correction cannot be made.
     - The characters of an input image data which is set as an anchor and the characters of a scanned data which is located on the same position as the anchor are same.
     - The same characters do not exist in the area within 20 mm from the characters set as an anchor.
     - A page number or a document name of header is not set as an anchor area.
     - Only one area can be set as an anchor.

9. Drag the mouse pointer from the one point to another point to specify the anchor.

   The Area Properties screen is displayed.

10. Specify the OCR area settings for the anchor.

    For details, see P.8 "Available settings in Area Properties screen".

11. Enter a form name in [**Form Name(N)**].

12. Enter a description for a form in [**Description(D)**].

13. Click [**OK**] to save the settings.

14. From the [**Start**] menu, select [**All Programs**] (or [**Programs**]) and then [**GlobalScan NX**].

15. Configure the settings for Zone OCR on the Properties screen.

    For details about configuring the settings, see P.11 "Specifying forms, applied sections, and error processing methods using GSNX AdminTool Plug-in Screen".

⬇ **Note**

- Zone OCR Plug-in must be installed on a server installed with GlobalScan NX.
- Check that the data to which is applied a form meets the following.
  - The image data is created by GlobalScan NX delivery.
  - The file type is BMP, GIF, JPEG, TIFF (except for JBIG2), TIFF-F, PNG, PCX, or DCX.
  - The image data must be stored in a local folder.
- The maximum registerable form for this plug-in is 100.
- To display the Area Property screen, select the registered OCR area or anchor, and then right-click to select "Property".
- To delete the OCR area, select the registered OCR area or anchor, and then right-click to select "Delete". The deleted area cannot be restored.
- If you rest the mouse on the corners of the area and middle point of each side while the specified OCR area or anchor is selected, the cursor becomes an arrow shape and you can enlarge or reduce the area.
- Five areas can be registered per form.
- A resolution of 200 dpi or more is recommended. If you use the position correction function, a resolution of 400 dpi or more is recommended.
- A pixel between 200 x 350 and 7016 x 9921 is only supported for an image data to scan.

- The following shows the resolutions (100 to 600 dpi) of available image data supported for each paper size.

  "A": Available"
  "NA": Not Available"

Paper Size	Resolution				
	100dpi	200dpi	300dpi	400dpi	600dpi
B0 JIS	A	NA	NA	NA	NA
A0	A	A	NA	NA	NA
B1 JIS	A	A	NA	NA	NA
A1	A	A	A	NA	NA
B2 JIS	A	A	A	NA	NA
A2	A	A	A	A	NA
B3 JIS	A	A	A	A	NA
A3	A	A	A	A	A

  If a paper, whose paper size and resolution is described as "NA", is used, an error will occur.

- The image data specified on the Zone OCR Plug-in is automatically detected and the paper size, dpi and pixels of the image are displayed. You cannot specify them on the Zone OCR Form Setting Tool.
- Zone OCR Form Setting Tool supports the following languages according to destinations:
  - For mainly Europe and Asia and mainly North America, the languages of English, German, French, Italian, Spanish, Dutch, Danish, Portuguese, Norwegian, Russian, Simplified Chinese and, Traditional Chinese are supported.
- Zone OCR Form Setting Tool will be displayed in the Operating System language.
  - If the Operating System language setting is Traditional Chinese, Danish, Portuguese, Norwegian, or Russian, Zone OCR Form Setting Tool will be displayed in English.

Available settings in Zone OCR Form Setting Tool screen
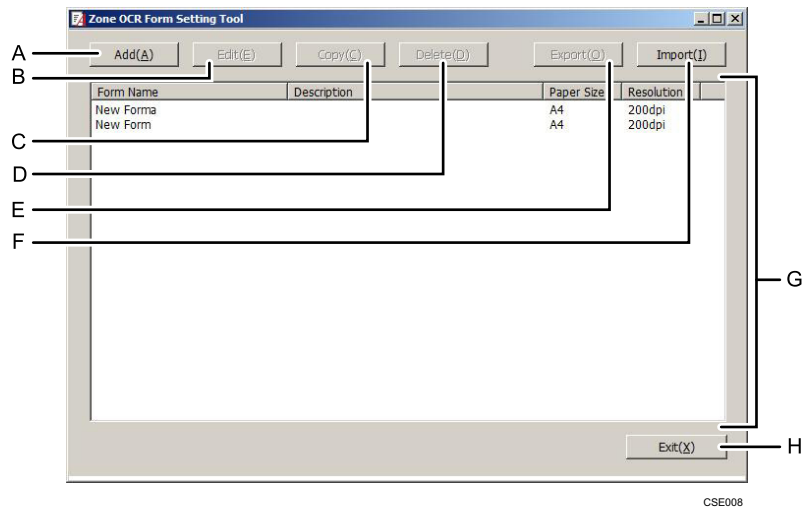

Fig. 2: Zone OCR Form Setting Tool Screen

A. Add(A)

- Create a new form.
- The [**Specify the Form Image File**] screen is displayed by clicking. You can specify an OCR area on the screen.
- If you select an image file, the [**Edit Form**] screen is displayed.

B. Edit(E)

- Edit a registered form.
- This button is available when a form is selected.

C. Copy(C)

- Copy a registered form.
- This button is available when a form is selected.
- The form name is the original form name with a suffix appended to the end of the name.

D. Delete(D)

- Delete the registered form.
- This button is available when more than one form is selected.
- Clicking this button displays a popup screen indicating confirmation of deletion. If you click [**OK**], the selected form is deleted from the list.

E. Export(O)

- Export a form.
- This button is available when more than one form is selected.
- Clicking this button displays the [**Specify the File Export Destination**] screen. Specify the export destination.

F. Import(I)

- Import a form list.
- Clicking this button displays the [**Specify the Import Source**] screen. Specify the import source.

G Form List

- A registered form name, paper size, resolution, and description are displayed in the list.
- A new form is added to the bottom of the list.
- Clicking [**Form Name**] label sorts the list by file name.

H. Exit(X)

- Save the [**Edit Form**] screen settings.
- Clicking this button closes the screen.
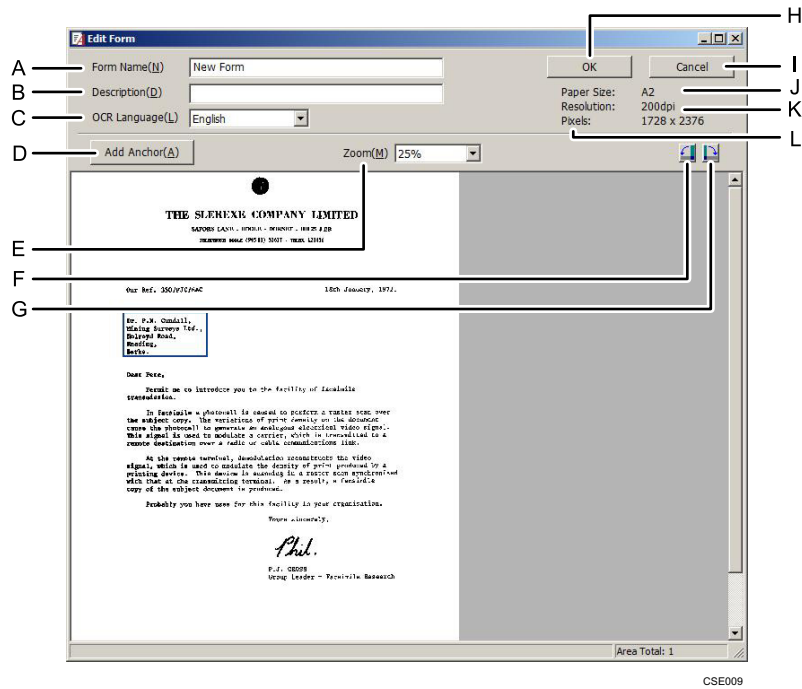
Available settings in Edit Form screen

Fig. 3: Edit Form Screen

A. Form Name(N)

- Enter a form name using up to 64 characters.
- If you open a registered form, the form name is displayed.
- Check the followings when entering a form name.
  - "/:?*"<>|" cannot be used.
  - The same name cannot be used.
  - Capital letters/small letters cannot be distinguished from small letters/capital letters.

🔽Note

- The setting which a rectangular area for the OCR is specified on an image data is called form.

B. Description(D)

- Enter a description for a form using up to 100 characters.
- The description of form is displayed on the Zone OCR Form Setting Tool screen. This helps to recognize each form.

C. OCR Language(L)

- Specify a language to be performed OCR operation. Languages are different for each destination and the supported languages are the same as those of GlobalScan NX. For details about the supported languages, see "Note" of p.5.

D. Add Anchor(A)

- Add a new anchor.
- The mouse cursor becomes a cross hair when set to ON by clicking this button. Set an anchor by dragging the mouse pointer from one point to another point.
- Re-clicking this button sets to OFF.
- The OCR area can be set by dragging the mouse pointer when set to OFF.
- If an anchor has been already set, this button is not available.

E. Zoom(M)

- An enlarged/reduced size of an image area is displayed on a list between 25% and 200% in increments of 25%. Sizes are selectable.

F. ![counterclockwise rotate icon]

  • Rotate an image by 90 degrees counterclockwise.

G. ![clockwise rotate icon]

  • Rotate an image by 90 degrees clockwise.

H. OK

  • Save settings edited on this screen and exit.
  • If a form name is blank, you cannot save settings. Be sure to enter a form name and save settings.

 I. Cancel

  • Do not save settings and exit.

 J. Paper Size:

  • Recognize pixel and resolution values of a scanned image data automatically, and then display the paper size.
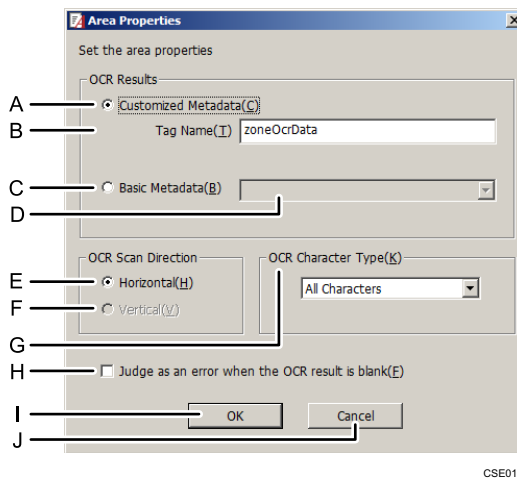
K. Resolution:

  • A resolution value of a scanned image data is displayed.

L. Pixels:

  • A pixel value of a scanned image data is displayed.

Available settings in Area Properties screen

Fig. 4: Area Properties Screen

A. Customized Metadata(C)

  • Set a new customized metadata information.
  • This button is not available when adding an anchor.
    For details about customized metadata, see "*GlobalScan NX Administrator's Guide*"

B. Tag Name(T)

  • Enter a tag name for customized metadata information.
  • This can be entered only when "Customized Metadata" is selected.
  • The items included in "Basic Metadata" cannot be specified for "Tag Name(T)".

C. Basic Metadata(B)

  • Set a registered metadata information.
  • This button is not available when an anchor is set to OFF.
    For details about basic metadata, see "*GlobalScan NX Administrator's Guide*"

D. Item List

- Select an item from the registered metadata. The following can be selected:
  - Document Name
  - User Name
  - Document Page(s)
  - Document Creation Date (UTC)
  - Document Creation Date (Local Time)
  - Document Size
  - Day of the Week
  - First Page Size
  - 2-Sided/1-Sided
  - Port No.
  - TSI
  - Application
  - Host Address
  - Host Name
- This combo box is selectable only when "Basic Metadata" is selected.

E. Horizontal(H)

- Perform OCR operation for horizontal writing.

F. Vertical(V)

- Perform OCR operation for vertical writing.
- This is not available when a language other than Japanese and Chinese is selected.

G. OCR Character Type(K)

- Select a character type for OCR operation. The following can be selected:
  - All Characters
    - All the characters which can be acquired as OCR result
  - Numbers and Symbols
    - "0123456789"
    - "()+,-./:="
    - Space, tab, and linefeed
  - Numbers
    - "0123456789"
    - Space, tab, and linefeed

H. Judge as an error when the OCR result is blank(F)

- Specify whether OCR must detect characters in the specified area.
- If OCR detects no characters in the specified area:
  - (A) An error occurs when this setting is selected.
  - (B) An error does not occur when this setting is not selected.
  - {Example}
- Select this check box for required items on a questionnaire. Clear this check box for optional items on a questionnaire.
- Select this check box for values in a specified area in a required document information.
- If an error occurs when using this plug-in, regardless of the setting for "Error Processing", the following document information will be added:
  - Document information name: "LastResult_ZoneOCR"
  - Value: "error"

  You can set a flow for when an error occurs using the document information above.

  {Example of creating a flow to avoid an error}

  If you add Flow Redirect Filter after this plug-in filter, when the value indicates "error", a job will be transferred to another project.

I. OK

- Save settings and exit.
- If metadata settings are not specified, a warning dialog is displayed and you cannot exit.
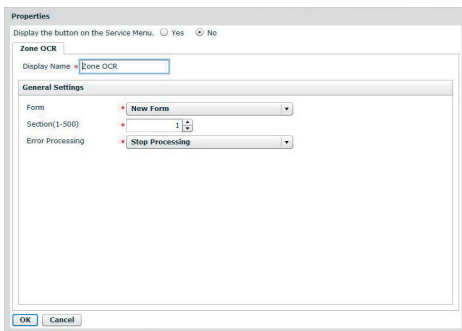
J. Cancel

- Exits without saving settings.

Specifying forms, applied sections, and error processing methods using GSNX AdminTool Plug-in Screen

1. Log in to GSNX AdminTool.

2. Click [**Profile**], and then select a profile.

3. Double-click the project button.

   The Project Configuration screen appears.

4. Under "New Filter(s)", drag "Zone OCR" to the Delivery Flow Editor screen.

   ⬇ Note

   - To automatically align Service(s) and Filter(s), click the ⬅ button (below the 🗑 button).
   - For details about creating a delivery flow, see *GSNX Administrator's Guide*.

5. Double-click the lower half of the "Zone OCR" icon added to the Delivery Flow.

   The Properties screen appears.

6. Select the registered form from "Form".

7. Specify the section for OCR operation from "Section (1–500)".

   Only one section can be specified. OCR is performed for only the first page if a job has multiple sections.

   ⬇ Note

   - If you use the Section Splitter plug-in, you can split a job with multiple sections into single section.

8. Select the error processing method from "Error Processing".

   [**Stop Processing**] or [**Skip Errored Process**] can be selected for an error.

   To stop the processing, click [**Stop Processing**].

   To ignore the error and continue the processing, click [**Skip Errored Process**].

   If [**Skip Errored Process**] is selected when "Judge as an error when the OCR result is blank(F)" is selected on Area Properties screen, a job is proceeded and an error log is added to a job log and a system log.

9. Click [**OK**] to save the settings.

   If you do not want to save the settings, click [**Cancel**].

⬇ Note

- If the data may not have scanned properly, perform the auto orientation function in advance using image correction filter as necessary.