

Background

package

READ IRIS OCR

yananár

real

text

Save Time, No More Retyping!

typed

IRIS

Druckqualität

trainable

OCR

paper

učici modul

matrix

óópaá

caractères accentués

omnifont

easy

recognition

fax

neue Symbole und Schriftar

IMAGE RECOGNITION
INTEGRATED
SYSTEMS

JUST READ IT!



Readiris is a trademark of I.R.I.S.
OCR technology by I.R.I.S.

PageSuit and PageWiz are trademarks of Microtek International Inc.

© 1996 I.R.I.S. All rights reserved

Readiris and the Microtek PageSuite software

This short manual discusses how to use the OCR package Readiris with the Microtek PageSuite scanning software. It contains all you need to know to get started with this I.R.I.S. product successfully using a Microtek PageWiz scanner.

This manual does not intend to replace the PageSuite or Readiris User's Guide. To make full use of the many advanced capabilities of these software packages, it is mandatory that you study their comprehensive user documentation closely.

INSTALLING READIRIS UNDER PAGESUITE

The Readiris software is installed using the **installation program** *setup.exe*.



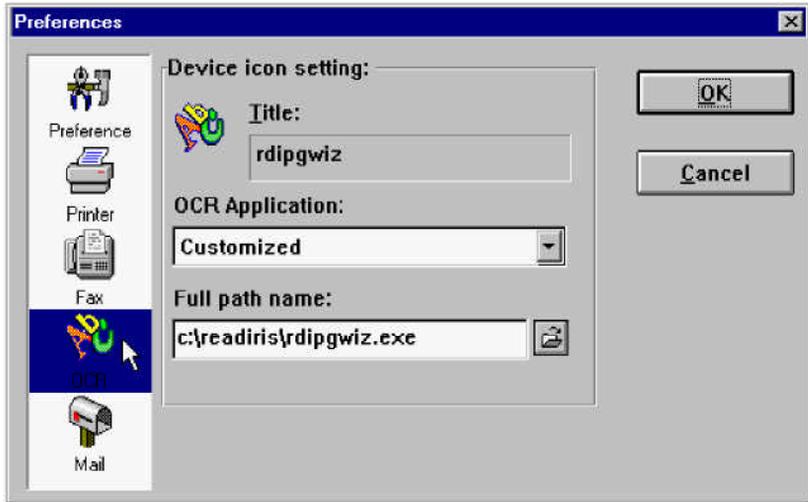
Further details concerning the installation can be found in the Readiris manual.

What additional steps are required to install Readiris under PageSuite? Start the PageSuite software and click the "Setup" button on the toolbar to select Readiris as your OCR tool. (You can also select the command "Setup Panel" under the "Edit" menu to do so.)



You are given access to the Preferences window. When Readiris is set up correctly, your Preferences window looks like this.

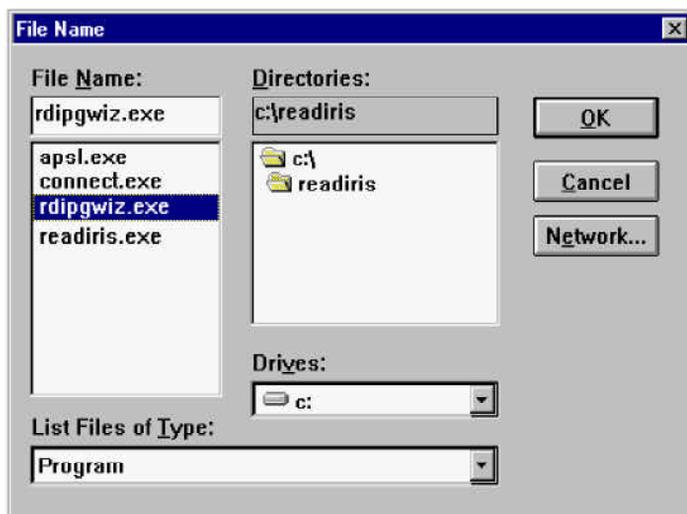
USING THE PAGESUITE LINK



Click the OCR button on the left and select the option "Customized" as your OCR application. Next, enter the full path name of Readiris' PageSuite link or click the browse button to select Readiris.



The PageSuite link is the file *rdipgwiz.exe* in your Readiris directory.



You can now click "OK" to quit this window. Readiris is set up as your OCR tool.

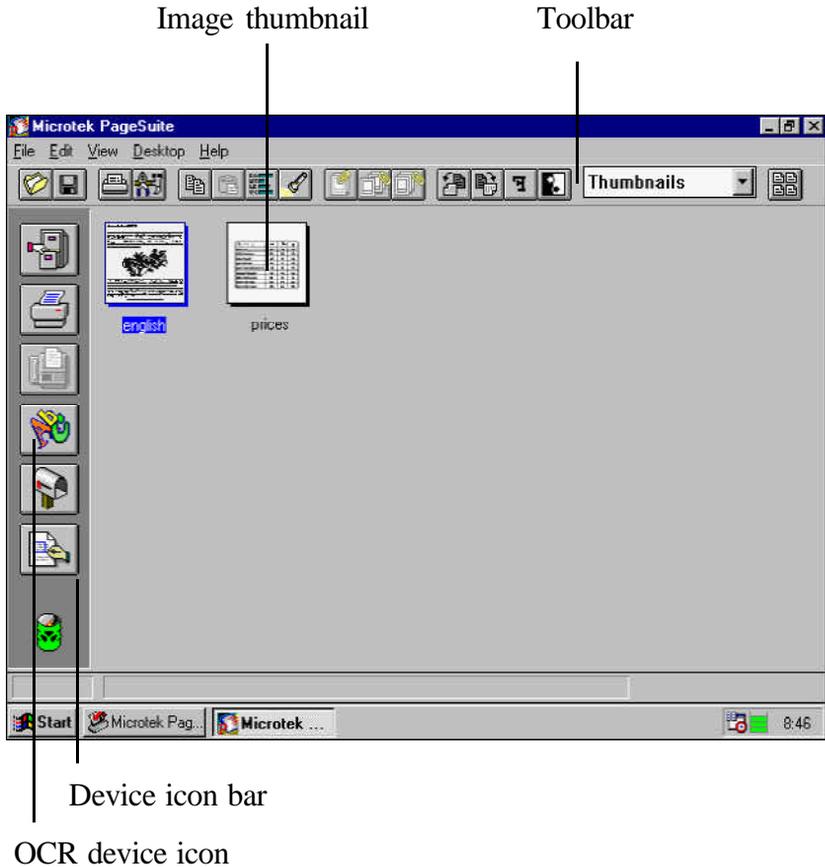
STARTING UP THE PAGESUITE SCANNING SOFTWARE

Start the PageSuite software by double-clicking the corresponding icon. There should now be two icons on the Windows taskbar: one for the PageSuite software and one for the PageWiz Controller. (The latter icon indicates if your PageWiz scanner is available or not.)



When the PageSuite desktop is displayed, you will notice that the OCR icon is included in the **device icons**.

USING THE PAGESUITE LINK



“**Drag and drop**” is how you do things with the scanned images: to OCR a document, it suffices to drag the image thumbnail onto the OCR device and the scanned document will be converted into editable text. (You can also select a document and just click on the OCR device icon or select a document and click the command "Send to OCR" under the "File" menu.)

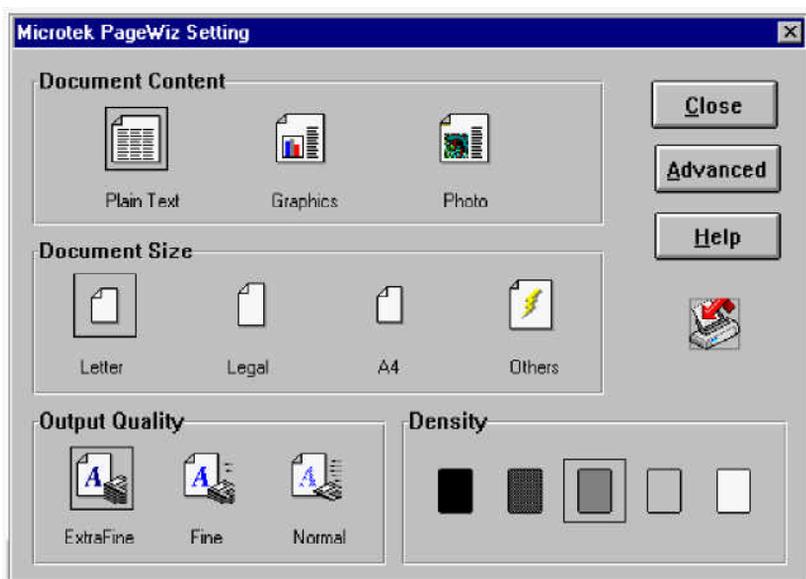


SETTING YOUR SCANNER FOR READIRIS

To get good OCR results, it is essential that you scan your documents with the correct settings. Click the "Settings" button on the toolbar or the command "Scanning Setting" under the "File" menu to verify this.



The scanning settings are displayed by default.

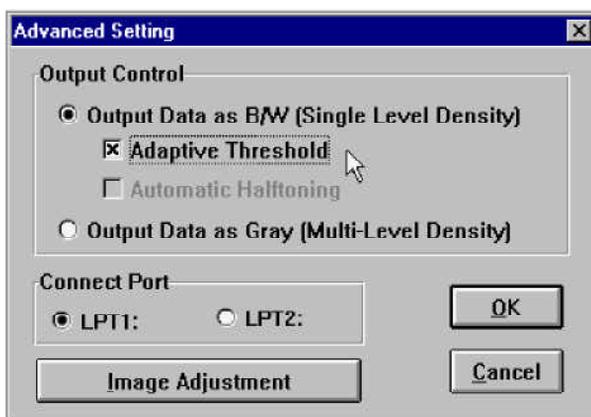


The correct scanning settings for OCR are displayed above. Select "Plain Text" as "Document Content" option to ensure that you generate

USING THE PAGESUITE LINK

black and white images (lineart or "single level" scanning). It is imperative to leave the bit depth on 1: Readiris only accepts black and white images.

You are given more information on **color modes** when you click the button "Advanced".



The user is recommended to enable the option "Adaptive Threshold": that image enhancement technology provides higher quality images by erasing colored backgrounds etc.

Secondly, select the output quality "ExtraFine". Doing so ensures that you scan the images at the maximal **resolution** of 300 dpi. You are *not* recommended to use the output quality modes "Fine" and "Normal", which use a lower resolution. Use these settings for "rough" black and white images which you want to archive, fax etc. Such images do not provide enough detail and quality to guarantee good OCR.

Which **page format** you select depends on the documents you want to scan. You can select the document size "Other" for all circumstances, as this setting applies **autocropping** to your documents: dark borders around the actual document will be erased automatically.



Don't forget to set the **brightness** correctly! As PageSuite generates the images which are then passed on to the target application, it is here that all scan settings must be adjusted for optimal results.

Finally, don't forget to **calibrate** your scanner before using it! You are prompted to do this when you first start up the PageSuite software, but you can always correct the calibration data from your desktop by clicking the button "Image Adjustment" in the advanced scan settings window.

READIRIS OFFERS FULL FLEXIBILITY!

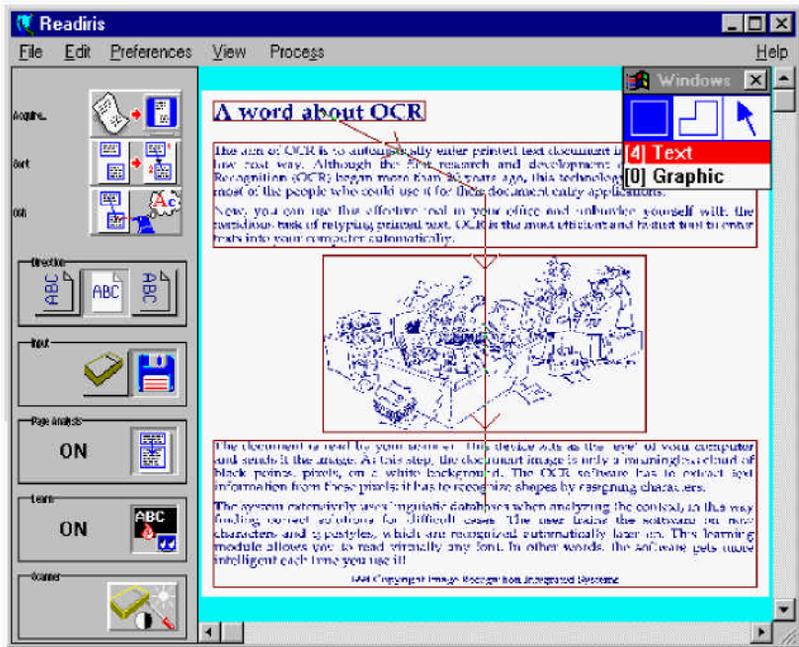
You are by no means limited to OCRing full pages as you scanned them. In fact, Readiris offers full control and high flexibility to the PageSuite user.

Thanks to Readiris **zoning** capabilities, you can limit the recognition to specific parts of a scanned page. You can e.g. scan columnized pages from a magazine and OCR a single column. And OCRing the first half of the left column, a single paragraph in the middle column and the lower half of the right column is accomplished with the same ease!

Furthermore, Readiris allows to you to indicate the document's **language** - no less than 26 languages are supported - and allows you to execute **font training** to increase the OCR accuracy even more.

Let's see how all this works. When you drop an image thumbnail on the OCR device icon on the device icon bar, Readiris is started up automatically and displays the scanned image. Page Analysis is used to detect the various text blocks.

USING THE PAGESUITE LINK



As the system now stops, you can use all controls that Readiris offers to fine-tune the operation of the OCR software. Where the Page Analysis has detected four blocks, you can select only some for recognition with the "Sort" button. Or even erase all blocks and start from scratch by drawing windows around the text blocks of interest yourself.

You can create user dictionaries to train the system on a specific font, complete and activate existing font dictionaries to make good use of previous learning, define the document's language or limit recognition to numeric symbols when reading tables of figures, indicate you want to

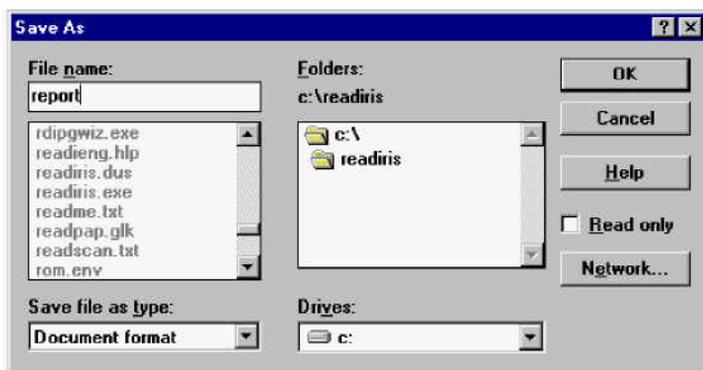


read dot matrix printing, have the paragraphs and indentation detected and recreated etc.

Please refer to the Readiris manual to discover how fully featured and user controllable the Readiris software actually is!

There's one element the user *has* to take care of: defining where he'll take the output. You can create text files in all common text formats and copy the recognized text to the Windows clipboard. Refer to the Readiris User's Guide to learn how you are given full control over the output results.

When you click the "OCR" button, the recognition is executed - with or without learning; when the recognition is completed, you are prompted to save the results.



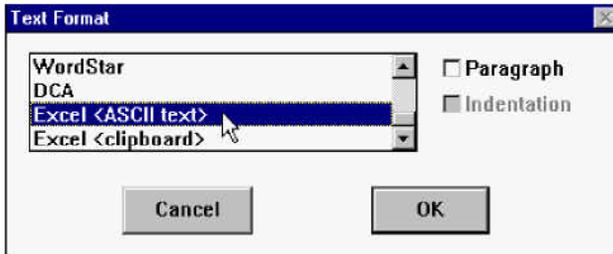
You are recommended not to specify a file extension for the text file, it will be added automatically. Which file extension will be used depends on the text format you selected for the output text with the command "Text Format" under Readiris' "Preferences" menu.

When you click "OK", you return to the PageSuite desktop automatically.

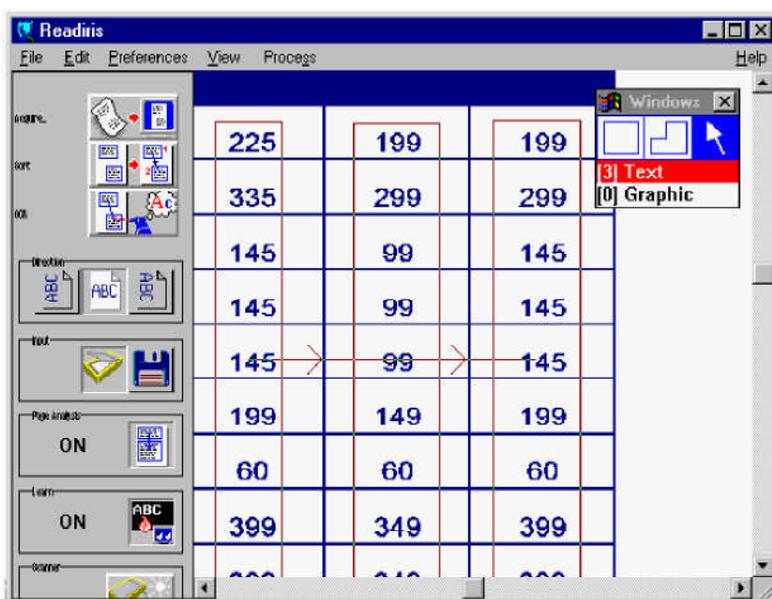
RECOGNIZING TABLES

Readiris not only allows you to recognize texts but also tables of figures. Drop the scanned table onto the OCR device icon to execute recognition.

Be sure to select the correct text format within Readiris with the command "Text Format" under the "Preferences" menu.



The Readiris User's Guide tells you how to window tables correctly and how to limit the recognition to numeric symbols.



IMPORTING PRESCANNED IMAGES AND FAXES

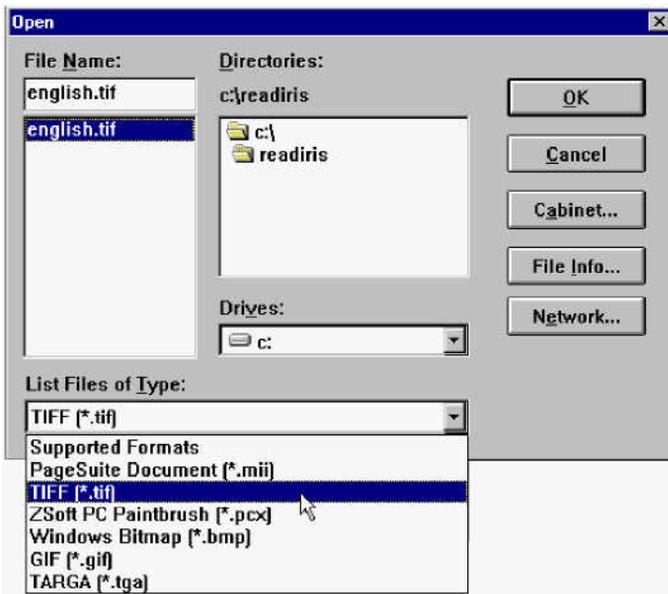
There's another way to OCR documents: importing prescanned images onto your PageSuite desktop.

The "Open" button on the toolbar and the command "Open" from the "File" menu allows to import **prescanned images** in various formats.



USING THE PAGESUITE LINK

The original format has no relevance as the import converts them into PageSuite files anyway. The color mode on the other hand is relevant: don't forget that Readiris only accepts black and white images.



Another possibility to import documents is dragging an image file onto the PageSuite icon.

The major application is undoubtedly importing **faxes!** OCRing them with Readiris is certainly an option.

WHAT ABOUT STACKS OF PAGES?

Let's turn to some specific questions now. Can we OCR stacked pages? We can: Readiris will process the pages one after the other and write the



recognized text to a single output file. You are only asked to specify the filename for the text output at the *end* of the OCR batch!

WHAT ABOUT ANNOTATIONS?

PageSuite documents can be annotated: highlighting is applied, pen strokes, text notes and arrows are added etc., all this is part of PageSuite's capabilities. What happens when you try to recognize an annotated page?

These annotations do not prevent recognition, but are not taken into account by Readiris. If a text was annotated, Readiris will recognize the original image *without* the annotations.

CLOSING YOUR APPLICATIONS

PageSuite starts up your applications when needed, but doesn't close them again! Don't forget to close the applications which are no longer used.

To quickly access applications, you can always click on the button representing them on the taskbar (Windows 95) or minimize one application and restore another (Windows 3.1).



A much better way of proceeding is this: use the key combination Alt+Tab to browse through your open applications. This will allow you to close them one after the other quickly.

USING THE PAGESUITE LINK



ERASING SUPERFLUOUS IMAGES

When you scan documents with the objective to OCR them, the scanned images are no more than a temporary “vehicle”; they can be discarded from the PageSuite desktop.

Don't forget that all scanned images remain on the PageSuite desktop until the user decides to erase them. Unless you have good reasons to archive the images with PageSuite, you should delete superfluous images from your desktop to save disk space. Drop them onto the trashcan icon in the device icon bar or select the command "Delete" from the "Edit" menu.



MAKING OPTIMAL USE OF PAGESUITE

This concludes our overview of the Readiris link for the PageSuite software.

Some additional information is given below on PageSuite functions which can be useful to the operation of Readiris. I.R.I.S. recommends you to make use of them given the right circumstances.

Buttons are available on the toolbar to access these commands quickly.



Rotate Left, Rotate Right and Flip

The "Rotate Left", "Rotate Right" and "Flip" buttons and the corresponding commands from the "Desktop" menu allow to modify the original orientation of the scanned documents.

Readiris is also equipped with rotation functions.

Invert

The "Invert" button from the "Desktop" menu and the corresponding command from the "Desktop" menu inverts the image: black "pixels" become white, white "pixels" become black. As a result, white text on a black background becomes legible.

SOME FILE MANAGEMENT

Let's end with the boring stuff: file management! The following file specifically concerns the PageSuite link.

Readiris Folder

RDIPGWIZ.EXE

PageSuite link