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BusinessLink Software Support

Strategi User's Guide



Version v1r8

This manual applies to Strategi version v1r8m0 and later, and was last revised in June, 2000.

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A Note to Readers of this Manual

Built on the premise that technological solutions are useless unless they provide real-world business benefits, Strategi has been architected to provide your organization a foundation to enable creative breakthrough e-business solutions. This manual has been designed to enhance your usability experience with Strategi as well.

The latest versions of this document and other Technical Support Bulletins can be downloaded from ADVANCED BusinessLink Corp.'s Support Website, <http://support.businesslink.com>.

You may print this in duplex format using Adobe's Acrobat Reader, which is available for download from <http://www.adobe.com/products/acrobat/readstep.html>. The latest version as of this writing is v4.05; earlier versions of Acrobat Reader may not support duplex printing.

With some installs of Adobe Acrobat, your printer may not resolve the characters correctly, and once printed, all characters will appear as a rectangles or as symbols. If this happens, you will need to select "Print as image" from the Acrobat print dialogue. This will cause the print to occur correctly.

If you have any questions, comments or suggestions, please feel free to contact either myself at the email address below, or the various local branches of the BusinessLink Technical Support Division at the phone numbers and email addresses in Appendix 1.

Sincerely,

BusinessLink Software Support

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Introduction

You have been given this Strategi User's Guide because you are (or will soon be) entering or using data on your employer's, vendor's, or customer's AS/400.

With "Strategi by ADVANCED BusinessLink", you will have AS/400 functionality, including 5250/3270 emulation, printing and file transfer.

This guide is intended to help you make full use of Strategi's features in your day-to-day work. If you find you have any questions about Strategi's AS/400 emulation which you feel this guide does not answer, and which your corporate Information Services/Systems staff cannot assist with, please email us at support_us@businesslink.com (note: the "blank space" in this email address is actually the underscore ("_") character). Your question will usually be answered the same business day, customarily within a few hours.

Strategi and Web Browsers

Your Internet Web Browser

A Web Browser is a piece of software that acts as an interface between you and the inner-workings of the Internet, specifically, the World Wide Web. We recommend using the following web browsers to ensure proper performance while using Strategi.

Netscape Navigator

The following versions of Netscape's Navigator and Communicator products have been tested and found to work properly with Strategi:

- Navigator 3.03 or above.
- Communicator 4.

Note: The 16-bit version of Navigator (Netscape Navigator 3 for Windows 3.x), which was designed to operate under Windows 3.1, will not support the features and functionality of Strategi. In order to use Strategi, you will need to use a computer with Windows '95 or better, and the 32-bit version of Navigator (or Netscape Communicator).

Microsoft Internet Explorer

Microsoft Internet Explorer 3.0+ and 4.0+ have been tested and found to work with Strategi. It is recommended, however, you select Internet Explorer 4.0 or above (we recommend you install the browser only, and do not install the "make changes to the desktop" option).

If you use Internet Explorer 3.x, you should note the F10/F22 keys will not work with Strategi; this problem has been fixed with the release of Internet Explorer 4.0. Also, please note that using **Alt+Shift+G** (or any other **Alt+key** combination) in Internet Explorer versions *below* 4.0 will not work, as those earlier versions do not support any use of the "Alt" key.

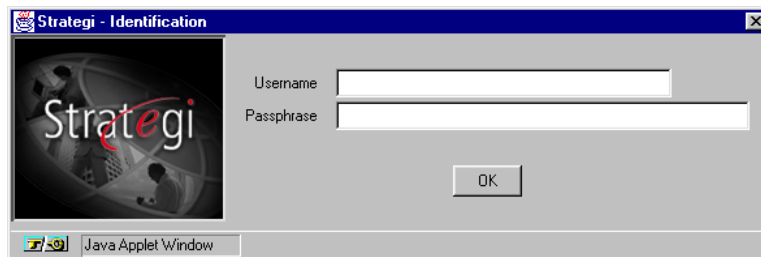
Starting Strategi

To work with and access the data on their AS/400, the company will provide you with an Internet address (also called a "URL" or Uniform Resource Locator). When you go to that URL on the Internet with a web browser, such as Netscape's Navigator or Communicator or Microsoft's Internet Explorer, you will see a web page similar to the one below (the web page may have been modified to reflect the company's information):



In the sample web page above, you would click on one of the 2 buttons at the right, selecting to start the application in Windows-like "GUI" mode or in the typical green-screen "Text" mode. The web browser will automatically download the Strategi AS/400 emulation interface to your PC, by means of a Java applet, and run it on your computer screen.

The first thing you will see when Strategi starts is a login screen, similar to the one below:

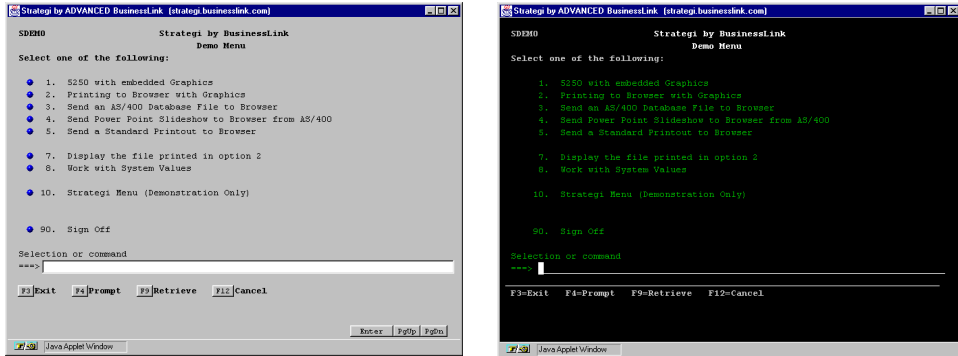


The company will have provided you a username and passphrase. The username and passphrase will probably be different than your usual AS/400 username and password; the passphrase may be up to 50 characters long, and may even take the form of a short sentence.

After you press the "OK" button, you will be taken to an AS/400-emulation screen; this may or may not be an AS/400 signon screen, depending on how the company has set up your

access. If you do receive an AS/400 signon screen, enter your usual AS/400 username and password and press Enter; you will then have access to screens and data on the AS/400.

The "type" of screen display you will see will depend on whether you selected the "GUI" mode or "Text" mode. For comparison, the two are displayed below:



Strategi Emulation Window, GUI and "Text" modes

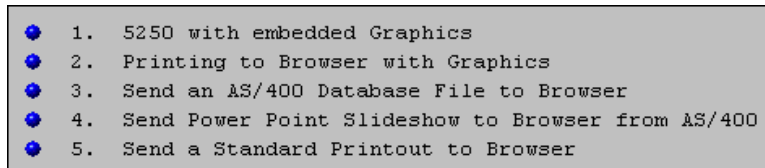
You can easily switch between GUI and Text Modes, without exiting and restarting your Strategi session, by simultaneously pressing **Alt+Shift+G** on your PC keyboard; however, you won't actually see the screen mode change until your next input. Pressing **Enter** also counts as input, so you can change modes while remaining on the same screen.

Strategi Features

In the following sections we will cover features (menu buttons, alternate keystrokes, etc.) which have been added, for your convenience, to standard AS/400 operation.

Menu Option Buttons

One of the first things you will notice in the AS/400 emulation window are the Menu Option Buttons, as in the example below:

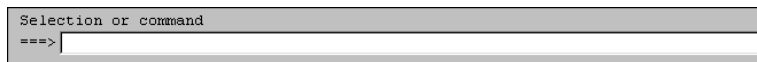


The Menu Option Buttons have been set up as a quick way to access the menu screens. Clicking on the button next to a menu item with your mouse will take you directly to that screen. You may also enter the Menu Option number on the AS/400 command line and press **Enter** to be taken to the selected screen, but if you're working on the screen with the mouse, the Menu Option buttons give you a quick way to access the menu options without taking your hand off the mouse and reaching for the keyboard.

In GUI mode, the buttons are blue; in Text mode, the color changes to gray.

Command Line

In GUI mode, the AS/400 command line in Strategi looks like a regular Windows input box:



In Text mode, it appears as a regular AS/400 command line, as in the example below:



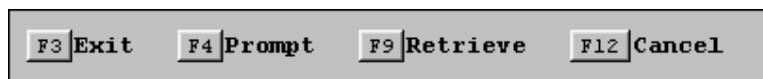
When typing commands in Text mode, a long text string will automatically wrap to the next line, just as it would on any AS/400 command line.

In GUI mode, though, things are a little different. As the command line has been converted to a Windows-style input box, typed-in text longer than the input box itself stays in the same input box, causing the text to the left of it to "disappear" as it shifts to the left. The text is still there, as you

will find if you use the keyboard left-arrow-key to scroll left to the beginning of the line. When you press **Enter**, the entire text of the command line will be sent to the AS/400.

F-key (Function) Buttons

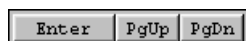
At the bottom of the screen, the usual AS/400 "F-key-commands" have been enhanced by adding mouse-clickable buttons, as in the example below:



The F-key functions will still work by pressing the F-key itself, but if you're working on the screen with the mouse, the F-key buttons give you a quick way to access the F-key button commands without taking your hand off the mouse and reaching for the keyboard.

Page Action Buttons

At the bottom right of the Strategi emulation screen, there are three buttons:



Clicking on the buttons will perform an **Enter**, **Page Up** or **Page Down**, as appropriate.

If you find the buttons hide any text at the right-hand end of the status line, which you need to see, the buttons can be "hidden" by doing a right-mouse-button-click anywhere on the line where the buttons are. They can be made to reappear on the current screen with another right-mouse-button-click on the same line, or they will automatically reappear on the next AS/400 screen displayed.

The Enter, Page UP and Page Down keys still work by pressing the key itself, but if you're working on the screen with the mouse, the Page Action buttons give you a quick way to access these functions without taking your hand off the mouse and reaching for the keyboard.

Enter Key

Please note that the right **Control** key on the PC keyboard, which is used as an **Enter** key in some AS/400 emulators (such as BusinessLink/REMOTE, another ADVANCED BusinessLink Corp. product), has been replaced with the regular PC **Enter** key.

Return to Previous Field

When the cursor is outside an input field, **Shift+Tab** causes the cursor to go back to the previous field.

Strategi Keyboard Mapping

The following keystroke combinations work in Strategi as alternate keyboard functions:

Keystroke	Action
Alt + Page Down	Attention
Alt + I	Insert (this is needed in "Text Mode" in Netscape, as it does not support the real "Insert" key)
Alt + S	System Request
Alt + P	Host Print key
Alt + F	Refresh and display Available Files List
Alt + H	Swaps Enter and Ctrl + Enter functions
Alt + T	Test Request
Alt + Shift + G	Swaps the GUI/Text input modes, starting with the next screen displayed; pressing Enter will effect the change and keep the user on the same screen
Alt + Shift + Enter	Swaps Enter and Ctrl + Enter functions
Alt + Ctrl + Enter	The old version of Alt + Shift + Enter
Gray "Plus"	The "+" key on the numeric keypad. This is the true "Field +" and "FieldExit" (wipes the remainder of the field)
Gray "Minus"	The "-" key on the numeric keypad. This is the true "Field -" (works in signed numeric fields only)
Shift + 6	Inserts a caret (" ^ ") character in Java, which is then converted to/from the "not" character on the AS/400
Shift + \	Solid bar in Java, used in C source code
Alt + \	Broken bar in Java (but displays as solid bar until you leave the field); used in AS/400 CLP sources (see notes below on Pipe Characters)

Notes:

- The main "FieldExit" (**Enter** or **Ctrl+Enter**, depending on the setup), acts as a "Tab" in GUI mode, but as a true "FieldExit" in Text mode.
- The cent ("¢") character (a measure of US currency) can be displayed, but cannot be keyed in.
- Please note that none of the **Alt+** key combinations work in Microsoft Internet Explorer 3.x, as those versions of Internet Explorer will not support any use of the "Alt" key. This was a known bug in Internet Explorer 3.x, which was fixed in Internet Explorer 4.0. The **F10** and **F22** keys also do not function in Internet Explorer 3.x.
- The Insert button only appears if the current display mode is "Text", as all GUI input boxes will normally have "insert on". Note: the keyboard "Insert" key does not function in Netscape v3 and v4 under Windows '95, although **Alt+I** does function properly.

Pipe Characters

Note: this section is primarily for programmers.

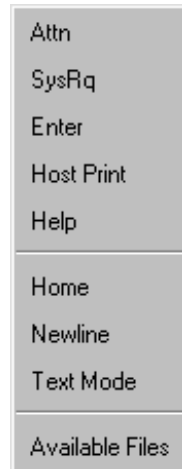
The primary pipe character, as used in C program sources on the AS/400, is entered normally, using **Shift+**, displaying a solid bar (as it does in other Windows programs).

The secondary pipe character, needed for CL programs, is not accepted by Java text boxes (not even as an Alt + 0nnn entry). Stragegi displays it as a broken bar on output, and use **Alt+** for keying. For Netscape, the secondary pipe character displays as a solid bar when keyed, then all solid bars are changed to broken bars on "Field Exit" or "Enter". For Internet Explorer 4, **Alt+** must be keyed at least once when in the field to flag usage, then **Shift+** must be used to enter the characters, changing on "Field Exit" (as it does for Netscape. MSIE 3.x does not allow this to be keyed).

Both bars cannot be keyed into the same field, only one or the other. Conversion from solid to broken bars on the Field Exit applies to all bars (if any of them have been keyed in with **Alt+**).

Strategi Functions

Clicking the right mouse button brings up the Strategi Function Window, displayed below:



This will remain on the screen until you click on one of the selections. If you click elsewhere on the 5250 emulation window, these selections will disappear until the next time you right-click the mouse button.

An explanation of the buttons follows:

Attn

This button functions the same as pressing the "Attention" key on a regular AS/400 keyboard.

SysRq

This button functions to issue a System Request to the AS/400.

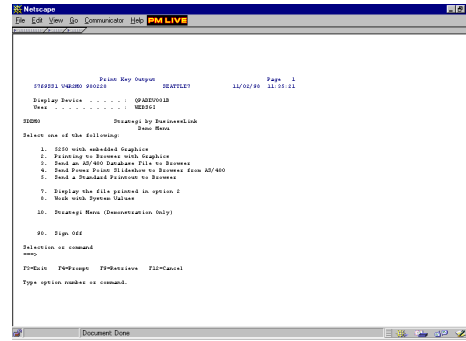
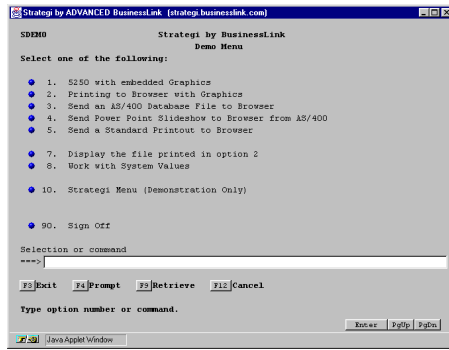
Enter

The Enter button is a quick way, if you're working on the screen with the mouse, to do the same thing as pressing the keyboard **Enter** key without taking your hand off the mouse and reaching for the keyboard.

Host Print

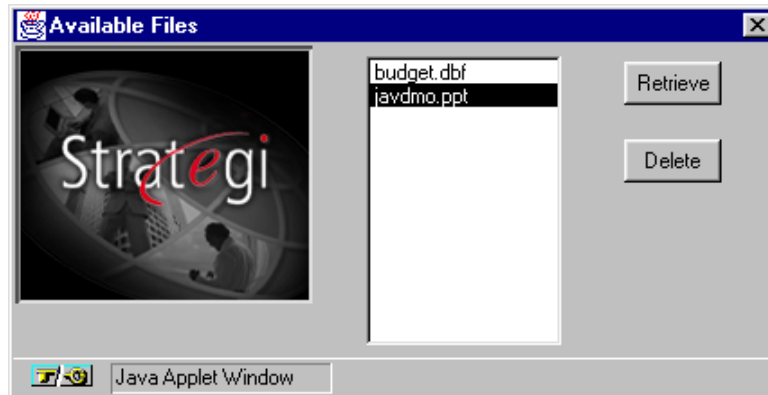
Pressing this button takes a text-only "snapshot" of the screen, automatically opens a new instance of the browser on your PC and display the "snapshot" in the new browser window. You can then print the screen by pressing the browser's "Print" button.

For example, here's a sample screen and the "snapshot" sent to the browser window:



Available Files

Displays the Available Files window. Whenever files are sent to you from the AS/400 (whether the files were requested by you, or are being sent to you by the System Administrator or regular report runs), they will appear in the Available Files window, as displayed below:



As a safety precaution, any files sent to you while you're working on the AS/400 (for example, requesting a ".dbf" file) will not only open that file on your PC ("dbf" files are normally opened in Microsoft Excel), but the files will also appear in this window. This happens because, if you lose your Internet connection while the .dbf file is being sent to you, you can still retrieve it on your next Strategi connection without having to request the file again, or asking the System Administrator to re-send the file to you.

Once the Available Files window is displayed, it will stay on the screen (and will pop up from a minimized state when new files arrive) until you close the window.

Help

Pressing this button displays the help file for that screen. This is a quick way, if you're working on the screen with the mouse, to do the same thing as pressing the keyboard **F1** key without taking your hand off the mouse and reaching for the keyboard.

Home

The Home key moves the cursor to its initial position on the screen, or, if it is already there, submits a Record Backspace request to the AS/400.

Newline

The keyboard **End** key is mapped to the AS/400 Newline key, which moves the cursor to the first input field on the following line, or moves to the first field on the screen, if there are no input fields below the cursor's position.

GUI/Text mode

Toggles between GUI and Text modes, as described above. This is a quick way, if you're working on the screen with the mouse, to do the same thing as pressing **Alt+Shift+G** without taking your hand off the mouse and reaching for the keyboard.

Additional Strategi Features

Strategi Printing

Strategi can print reports from the AS/400 to your PC by sending the report to your PC in several different formats, each of which can cause a different thing to happen on your PC:

- HTML
- RTF
- HPT (Host Print Transform)
- Binary printing

HTML

Reports sent to your PC in HTML format will open up in a window in your Internet browser, just like a web page. If you need a hard copy printout of this report, all you have to do is press the browser's "Print" button.

RTF

Reports in an RTF format will be opened by a program on your PC (such as Wordpad, Corel WordPerfect or Microsoft Word) which can read Rich Text Format files. If you need a hard copy printout of this report, all you have to do is select the program's "Print" feature.

HPT (Host Print Transform)

Reports in HPT format uses standard OS/400 Host Print Transform API's to convert a standard AS/400 spool file into one your PC's printer can understand. If you are using the enhanced version of the Strategi emulation Java applet, these prints will be able to be sent directly to the printer without user intervention. To find out more about using the enhanced version, see the "Enhanced 5250 Client Applet" section of this manual.

Binary Printing

Reports sent to your PC in a "binary printing" format will cause your printer to begin printing automatically as soon as the file is received, without any intervention on your part. Binary printing will occur if the spool file data delivered to your AS/400 output queue is already in a format your PC's printer can understand.

Strategi File Transfer

Strategi allows you to receive various kinds of AS/400 files through the Java applet. When files are sent to your PC, what happens will depend on what your browser and operating system are configured to do with that sort of file. Your administrator could send you a Microsoft Word document, for example, which most PCs would open in Microsoft Word.

Strategi also allows you to receive AS/400 database files which have been converted to PC file formats. The most common formats used are:

- DBF
- XML

DBF

Strategi has the ability to send an AS/400 database file from the As/400 to your PC in a .dbf file format. The file will be loaded and displayed in Microsoft Excel or another spreadsheet program, such as Lotus 1-2-3, as spreadsheet programs can properly display the data in columnar format.

If you find you're having difficulty in getting the database to display in Excel, please ensure your computer is properly set up to receive the data, as per the following instructions:

Start Windows Explorer (not Internet Explorer), then select "View", "Options", "File Types"; then set the following:

Description	Setting
Description of Type	dBase file [this is not critical; you may name it as desired]
Content Type	application/other-x-dbf
Default Extension	.dbf
Action Open	Application used: "C:\MSOffice\Office\Excel.exe". Note: Set your own Excel's path to EXCEL.EXE; be sure it is not set to Excel.lnk; also, the quotes are needed.
Use DDE	Must not be checked
Quick View	Check if desired

You would use the same procedure to set up your PC if you had Lotus 1-2-3, substituting the program filename for "Excel.exe".

XML

Files sent in XML format will generally be opened by your browser, depending on your browser and OS setup.

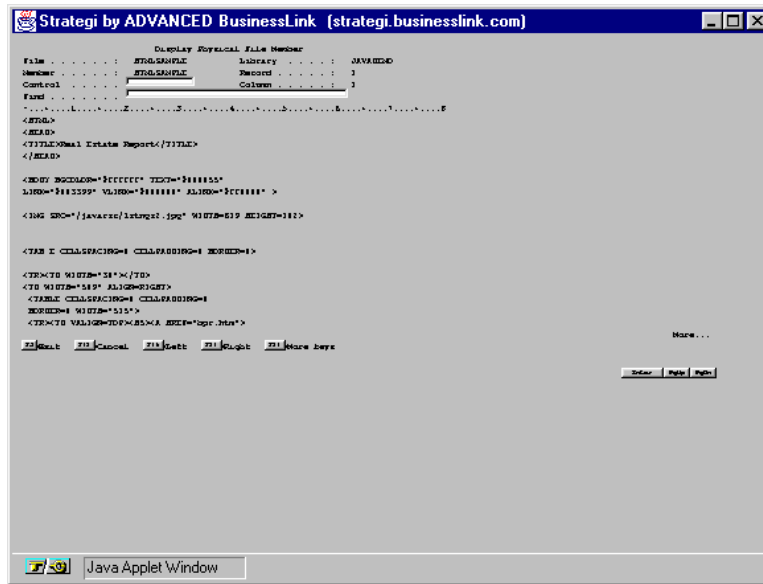
132-Column Mode

Strategi is also capable of displaying and working in 132-column mode. To make this work, you actually have to sign on to the AS/400 using a different URL than the regular one which you might be given (the underlying HTML needs to have different settings to make 132-column work properly). This URL will be provided to you by the System Administrator.

Strategi will only display in 132-column mode when working in a "Display Objects" screen; otherwise, all AS/400 emulation screens will appear in regular 80-column GUI or Text mode. 132-column mode can also be displayed in both GUI and Text mode by using the **Alt+Shift+G** toggle.

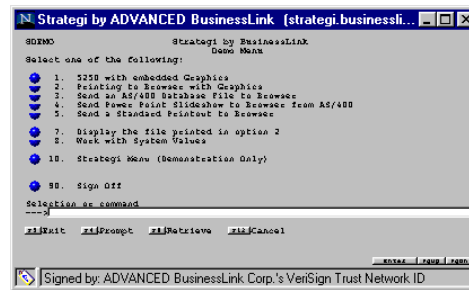
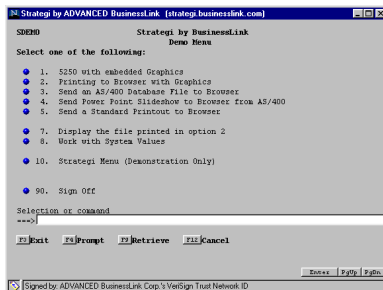
For readability's sake, we recommend a 17" or larger monitor when using 132-column mode.

Here's an example of a 132-column screen:



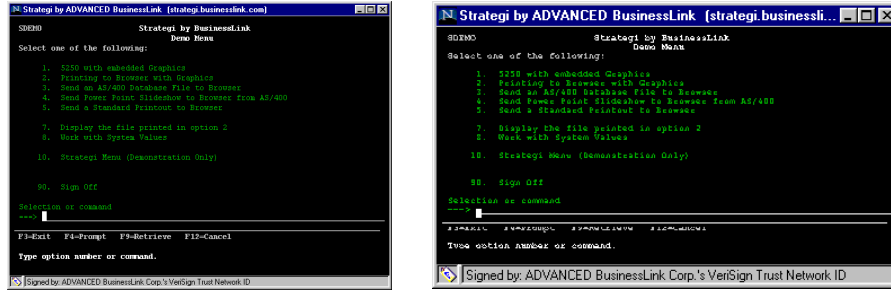
Dynamic Window Resizing

As with any Windows application, you may resize the emulation window by using the mouse to drag a corner or side of the window in any direction. Strategi will resize the window text as well, dynamically selecting the “best-fit” font:



Dynamic Window Resizing, GUI mode

This functions in Text mode as well:



Dynamic Window Resizing, Text mode

Mouse Selection

Strategist supports mouse selection of typical AS/400 lists, where there may be selections such as:

1=Select 4=Delete 8=Work with job

at the top, and a number of rows, each with a single input field, for entering the option number. Clicking one of the options causes it to be highlighted, and an information message appears at the bottom of the emulation window, saying something like:

"Click on line for 8=Work, DoubleClick to Enter".

Clicking anywhere on one of the lines in the list will then cause that option number to be placed in the input box for that line; "double-clicking" will not only enter the option # but will also press **Enter**. Clicking anywhere else on the screen will un-highlight the option; pressing **PageUp** or **PageDown** will also un-highlight the option.

If there is a "1=Select option", it is automatically highlighted as the screen is displayed (including after a "PageUp/PageDown", even if a different option may have been highlighted *before* the "PageUp/PageDown"). This is only available in GUI mode, not in Text mode.

Errorline Messages

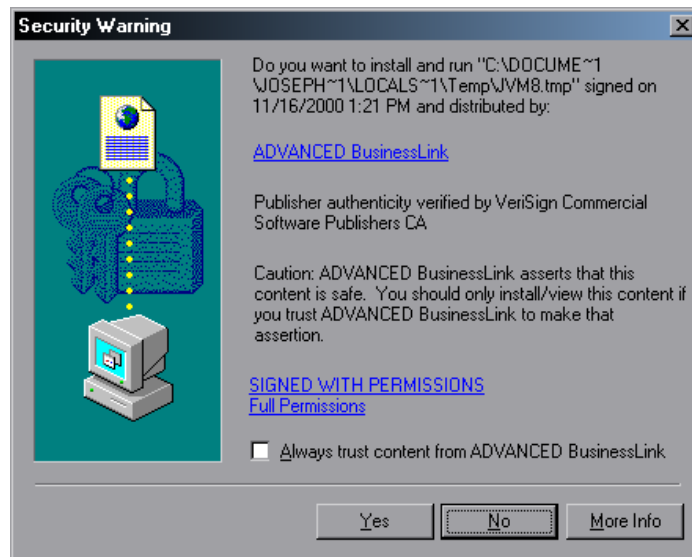
If there is an AS/400 errorline message (for example, confirming that a "Print" key has been processed), it is normally overwritten by local feedback (for example, saying that GUI/Text mode will change on next screen). You can switch between the two messages by left-mouse-button clicking on the message itself.

Enhanced 5250 Client Applet

Strategi provides an enhanced version of the 5250 Client Java Applet. Your system administrator can provide you with the URL from which to load the enhanced version of the Applet. This version allows several additional features:

- Direct-to-printer printing
- The ability to copy areas of 5250 screens to your PC clipboard
- Macros

These additional abilities are not possible for most Java Applets. Browser's Java Virtual Machines (the environment in which applets are run) do not allow just any Java Applet to do things like put files on your harddrive or manipulate the clipboard contents. This is a good thing because, for example, you would not want to go to a webpage and find that a malicious Java Applet on that webpage had placed large files on your PC, thereby crashing it. To allow for these enhanced functions to occur, Java Applets can be "signed". ADVANCED BusinessLink has signed the enhanced Applet, which means when you load the enhanced Applet for the first time, you will see a window which looks like this:

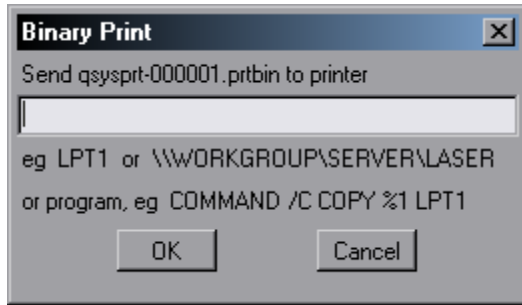


This dialogue is allowing you to see who the Applet was signed by and what level of access to your system it is requesting. You can decide whether you trust the signer enough to allow the Applet a higher level of access to your system. In order to run the enhanced Applet, you can click "Yes" if your dialogue is identical to what is above. Generally most browsers will not prompt you about this again once you have trusted the Applet once.

After trusting the applet, you will be presented with an ordinary Strategi signon window just as with the normal Java Applet. From here, you will have all the features of the ordinary Applet, as well as these enhancements:

Direct-to-Printer Printing

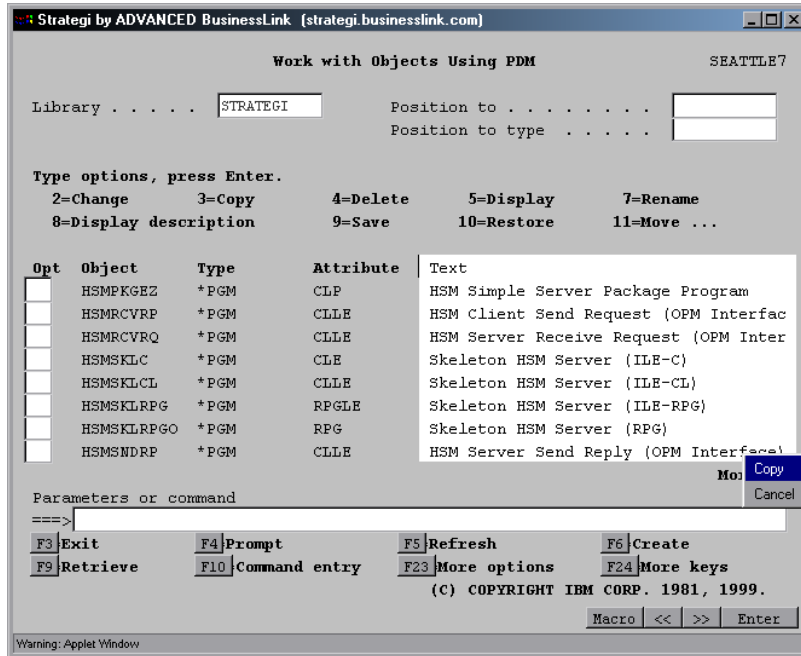
If the Java Applet receives a print file which is intended to be delivered directly to the printer (signalled by the fact it has an extension "prtbin"), the Applet will send that print directly to the printer. The very first time this occurs, the Applet will need to know where the printer is. You will be prompted with a window similar to this:



Here you will need to type the path to your printer. If it is a local printer attached to an LPT port, you will type something like “LPT1” or “LPT2”. If it is a network printer you will need to type in the path to that printer, for example: “\\NTServer\HPLJ4PLUS”. For details on what the exact path should be, contact your PC or Network administrative or support staff. Once you have entered the appropriate path, click OK. At this point the print will be sent to the printer. From now on you should not have to enter the path again.

Copy Capability

With the enhanced Applet you can copy areas of your 5250 screen to your clipboard, so that you can paste them into other programs. This is done by simply clicking the right mouse button and dragging your mouse over text you want to copy, just as you would in any other PC program. Once you have selected some text, and let go of the right mouse button, a menu will appear letting you either “Copy” the text the clipboard, or “Cancel”:



Macros

The enhanced Applet allows you to record sequences of keys which can later be played back. Such a recording is a "macro". To record a macro, simply click the "Macro" button at the lower right corner of the enhanced Applet, after which a popup menu will appear from which you will select "Record". The button will then change to say "Stop Recording". At this point, you can type into the Applet out whatever it is you would like to record. Then you can click on "Stop Recording". A save dialogue will appear, allowing you to save the macro under a name you specify.

From now on, you will be able to run this macro simply by clicking "Macro", at which point all of your saved macros will appear on the popup menu, from which you will select the macro to run.

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