

# **Environment Variables & System Options**

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# Preface

## About this manual

This manual lists all of the environment variables and system options available in Synergy/DE®.

## Manual conventions

Throughout this manual, we use the following conventions:

- ▶ In code syntax, text that you type is in *Courier* typeface. Variables that either represent or should be replaced with specific data are in *italic* type.
- ▶ Optional arguments are enclosed in */italic square brackets/*. If an argument is omitted and the comma is outside the brackets, a comma must be used as a placeholder, unless the omitted argument is the last argument in a subroutine. If the comma is inside the brackets and an argument is omitted, the comma may also be omitted.
- ▶ Arguments that can be repeated one or more times are followed by an ellipsis...
- ▶ A vertical bar (|) in syntax means to choose between the arguments on each side of the bar.
- ▶ Data types are **boldface**. The data type in parentheses at the end of an argument description (for example, **(n)**) documents how the argument will be treated within the routine. An **a** represents alpha, a **d** represents decimal or implied-decimal, an **i** represents integer, and an **n** represents numeric (which means the type can be **d** or **i**).
- ▶ This grid indicates on which platforms and in which environments a routine, statement, etc., is supported: in traditional Synergy on Windows (WT), in Synergy .NET on Windows (WN), on UNIX (U), or on OpenVMS (V). By “supported” we mean that the item performs a useful function on that platform or environment. For example, an unsupported routine may cause a compiler error or it may just not do anything.

WT	WN	U	V
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### WIN

- ▶ Items or discussions that pertain only to a specific operating system or environment are called out with the name of the operating system.
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## Other resources

- ▶ Synergy DBL release notes (**REL\_DBL.TXT**)
- ▶ *Synergy DBL Language Reference Manual*
- ▶ *Getting Started with Synergy/DE*
- ▶ *Professional Series Portability Guide*

## Product support information

If you cannot find the information you need in this manual or in the publications listed above, you can reach the Synergy/DE™ Developer Support department at the following numbers:

800.366.3472 (in the U.S. and Canada)

916.635.7300 (in all other locations)

To learn about your Developer Support options, contact your Synergy/DE account manager at one of the above phone numbers.

Before you contact us, make sure you have the following information:

- ▶ The version of the Synergy/DE product(s) you are running.
- ▶ The name and version of the operating system you are running.
- ▶ The hardware platform you are using.
- ▶ The error mnemonic and any associated error text (if you need help with a Synergy/DE error).
- ▶ The statement at which the error occurred.
- ▶ The exact steps that preceded the problem.
- ▶ What changed (for example, code, data, hardware) before this problem occurred.
- ▶ Whether the problem happens every time, and whether it is reproducible in a small test program.
- ▶ Whether your program terminates with a traceback, or whether you are trapping and interpreting the error.

## Reporting Synergy .NET issues

If you are having any of the following problems, please send us the complete set of source files to re-create the issue, and send us the information in the **BuildVersion.txt** files in the \MSBuild\Synergex\dbl and \Synergex\SynergyDE\dbl directories in “Program Files” or “Program Files (x86)”.

- ▶ Visual Studio lock up or crash
- ▶ Compiler crash
- ▶ Unusual MSIL Assembler (**ilasm.exe**) issues

- ▶ “Invalid program” errors
- ▶ “JIT Compiler has encountered an internal limitation” error at runtime

For Visual Studio issues, zip the entire project.

Note that for untrapped errors, you won’t get a traceback, as you would with traditional Synergy. Instead, you’ll get the Windows Dr. Watson box. And if you click Debug, you’ll go into the debugger. If the program was not built with debug information, and you instead click Cancel, you’ll get a traceback.

## Synergex Professional Services Group

If you would like assistance implementing new technology or would like to bring in additional experienced resources to complete a project or customize a solution, Synergex® Professional Services Group (PSG) can help. PSG provides comprehensive technical training and consulting services to help you take advantage of Synergex’s current and emerging technologies. For information and pricing, contact your Synergy/DE account manager at 800.366.3472 (in the U.S. and Canada) or 916.635.7300.

## Comments and suggestions

We welcome your comments and suggestions for improving this manual. Send your comments, suggestions, and queries, as well as any errors or omissions you’ve discovered, to [doc@synergex.com](mailto:doc@synergex.com).





# 1

## Environment Variables

### Setting Environment Variables and Initialization Settings 1-10

Briefly introduces environment variables and initialization settings and describes how to set them for your operating system.

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# Setting Environment Variables and Initialization Settings

To more easily migrate between Synergy DBL environments and to reduce the need for source-code modification, you can use environment variables and initialization settings to externally control program functionality.

You can set environment variables by

- ▶ entering the appropriate commands at the operating system prompt.
- ▶ placing the commands in your log-in file.
- ▶ using the SETLOG routine. (See [SETLOG](#) in the “System-Supplied Subroutines and Functions” chapter of the *Synergy DBL Language Reference Manual* for more information.)
- ▶ setting them as initialization settings in an initialization file on Windows. (See [“Synergy initialization files” on page 1-11.](#))

You can obtain the value of most environment variables using the GETLOG routine. (See [GETLOG](#) in the “System-Supplied Subroutines and Functions” chapter of the *Synergy DBL Language Reference Manual* for information.) For a list of exceptions on Windows, see [“Synergy initialization files” on page 1-11.](#)

We recommend that you place the environment variable commands in your log-in file, so that your development environment is set up automatically each time you log in. The log-in file you use and the commands you enter depend on what operating system you are running.

To set up the environment variables you need for your system, see the following:

- ▶ [“Settings on Windows” on page 1-10](#)
- ▶ [“Settings on UNIX” on page 1-15](#)
- ▶ [“Settings on OpenVMS” on page 1-16](#)

## Settings on Windows

You can set environment variables in one of three ways:

- ▶ At the command prompt using the **set** command. Environment variables set this way only affect executables run from the command prompt window that processed the **set** command.
- ▶ From the System Properties dialog, which can be accessed using the System icon from Control Panel (Control Panel > System > Advanced > Environment Variables button) or through My Computer (right-click My Computer > Properties). Environment variables set this way affect executables run from the menu or any command prompt started after the change. See your Windows documentation for more information. (This method sets the environment variable in the global environment.)

- Include them in a Synergy™ initialization file, as described in “[Synergy initialization files](#)” below. Environment variables set in Synergy initialization files affect the Synergy runtime, Synergy/DE development tools, and Synergy applications.



Any environment variables set for use by xfServer or xfServerPlus must be set in the Windows registry. You can set environment variables in the registry using the Synergy Configuration Program.

---



When setting environment variables marked “environment” for services such as **dbssvc**, xfServerPlus, xfServer, or the SQL Connection OpenNet server, the system environment must be updated and the system rebooted before the service is started.

---

## Synergy initialization files

**Synergy.ini** and **synuser.ini** are the initialization files that contain environment variables affecting the Synergy runtime, Synergy/DE development tools, and Synergy applications on Windows. The **synergy.ini** file contains system- or application-specific settings, for multiple users. The **synuser.ini** file contains user-specific settings (for example, personal preferences such as colors, fonts, the state of the application window, the position and size of the print preview window, and any overrides to system-specific settings).

When a system administrator or application provider changes a setting in the system initialization file (**synergy.ini**), all users get the new setting unless they have overridden the setting in their user file (**synuser.ini**). When a user modifies a setting in his or her **synuser.ini** file, the change only applies to that user. Changes to the **synuser.ini** file do not affect the general behavior of the application or the settings of any other user.

Variables in **synergy.ini** and **synuser.ini** can be set for individual Synergy/DE tools (**dbl**, **dbr**, **dblink**, **dblibr**) and can be changed at any time. With the exception of a few special startup parameters, the settings are in effect for the duration of the executable that loaded them, but after the executable has finished running, the original environment variable settings once again take effect. Variables in these files can also be set for individual Synergy programs (**.dbr**). However, they are only interpreted for the first **.dbr** program executed by **dbr.exe**, and then they stay in effect for all subsequent programs that are chained to. The initialization files are not reread for the chained-to programs.



Both Synergy .NET and the non-interactive runtimes (**db**s, **dbssvc**, and **dbspriv**) only look in the environment for environment variables, with two exceptions. If SFWINIPATH is set, it uses the **synergy.ini** file identified by the location specified. If SFWINIPATH is not set, it uses the default **synergy.ini** file. If SFWUSRINIPATH is set in the environment at startup, Synergy .NET and the non-interactive runtimes will read the **synuser.ini** file.

Environment variables such as DBLDIR and RPS should not be set in the system environment.

---

## Environment Variables

### Setting Environment Variables and Initialization Settings

Most Synergy environment variables can be set in a Synergy initialization file. Refer to the documentation for each environment variable to determine whether or not it can be set there. Note that on the individual environment variable pages, we only list **synergy.ini** (and not **synuser.ini**) as a setting location. This is because we do not recommend that you manually edit the **synuser.ini** file, but instead let it be created or updated by the Synergy/DE tools or programmatically by your Synergy application. However, any environment variable that can be set in **synergy.ini** can also be set in **synuser.ini**.

On Windows, all settings in the [synergy], [dbr], and [myprog] sections of **synergy.ini** and **synuser.ini** are put into the environment, with the exception of the following:

- ▶ APP\_HEIGHT
- ▶ APP\_WIDTH
- ▶ APP\_STATE
- ▶ APP\_X
- ▶ APP\_Y
- ▶ CWD
- ▶ DBG\_HEIGHT
- ▶ DBG\_WIDTH
- ▶ DBG\_X
- ▶ DBG\_Y

Settings in the [colors] or [fonts] section, or in any section that you add (with the exception of [myprog]), are *not* set in the environment.

Although you can set PATH in the **synergy.ini** file, this file is only recognized after the executables have started. PATH should be set with the System icon from Control Panel.

### Creating synergy.ini and synuser.ini

The installation program places a default **synergy.ini** file in the synergyde\dbl directory when you install Synergy/DE. If the environment variable SFWINIPATH is not set, or if the **synergy.ini** file referenced by SFWINIPATH cannot be accessed, the **synergy.ini** file in synergyde\dbl will be used. However, since this is just a default file that will be removed during an upgrade or uninstallation, we recommend that you copy this file elsewhere and specify the path to the copied file with SFWINIPATH. See [SFWINIPATH on page 1-201](#) for more information.

The **synuser.ini** file is created the first time an entry is written to it. Synergy/DE tools write to **synuser.ini** at runtime when they save your user settings. The **synuser.ini** file is created in the Synergex subdirectory of your local application data directory (Documents and Settings\username\Local Settings\Application Data).

To determine the exact location of the **synergy.ini** and **synuser.ini** files being used by Synergy, you can run the **synckini** utility in the dbl\bin directory. See “[The synckini Utility](#)” in the “General Utilities” chapter of *Synergy Tools*.

Organization of synergy.ini and synuser.ini

Initialization files are organized into one or more sections, with section headings enclosed in square brackets and beginning in the left-most column of the file. For example:

[synergy]

Settings in initialization files use the following format:

*ini\_variable=value*

For example, a **synergy.ini** file containing the DBLDIR, ISAMC\_REV, and SHELL initialization settings might look like this:

[synergy]  
DBLDIR=c:\synwin\db1  
ISAMC\_REV=3  
SHELL=c:\dos\command.com

Different initialization file sections affect different things:

Initialization File Sections	
Initialization settings in	Affect
[synergy] <sup>a</sup>	All Synergy/DE development tools and the runtime
[dbr]	Only the runtime
[myprog] (myprog is the name of any .dbr file)	Only the runtime when <b>myprog.dbr</b> is run
[dbl]	Only the compiler
[dblink]	Only the linker
[dblibr]	Only the librarian
[listdbo]	Only the <b>listdbo</b> utility
[listelb]	Only the <b>listelb</b> utility
[listdbr]	Only the <b>listdbr</b> utility
[fonts]	Fonts in Synergy/DE executables
[colors] <sup>a</sup>	Colors in Synergy/DE executables
[fconvert]	Only the <b>fconvert</b> utility
[isutl]	Only the <b>isutl</b> utility

a. [synergy] and [colors] are the only sections used by Synergy .NET.

# Environment Variables

## Setting Environment Variables and Initialization Settings

### Priority of synergy.ini and synuser.ini settings

On all Windows systems, initialization settings included in the Synergy initialization files override any previous settings (such as those set in the system environment at startup). For example, if you set DBLDIR and ISAMC\_REV in the environment, and your **synergy.ini** file contains a setting for DBLDIR but has no setting for ISAMC\_REV, Synergy/DE products will use the DBLDIR setting in **synergy.ini** and the ISAMC\_REV setting specified in the environment.

The two initialization files themselves are read according to the following hierarchy:

1. [synergy] section of **synergy.ini**
2. [synergy] section of **synuser.ini**
3. [dbr] section of **synergy.ini** (also [dbl], [dblink], and [dblibr])
4. [dbr] section of **synuser.ini** (also [dbl], [dblink], and [dblibr])
5. [myprog] section of **synergy.ini** (where *myprog* is any **.dbr** file)
6. [myprog] section of **synuser.ini** (where *myprog* is the same **.dbr** file)
7. Other sections of the initialization files, such as [fonts], [colors], etc., following the same precedence (**synergy.ini** is read first, followed by **synuser.ini**)

The last specification overrides the first in any conflict. For example, if the same font or color is defined in both files, the specification in the **synuser.ini** file prevails. If a font or color is defined in only one of the files, the definitions are additive.

The following table illustrates the hierarchy of interpreting environment variables on Windows.

Global environment <sup>a</sup>	synergy.ini	synuser.ini	Final result
DBLDIR=c:\synergyde\dbl	DBLDIR=c:\mysynergy		DBLDIR=c:\mysynergy
	[fonts] DEFAULT=Fixedsys;9;A	[fonts] DEFAULT=Arial;10;A	[fonts] DEFAULT=Arial;10;A
ISAMC_REV=4			ISAMC_REV=4

a. Setting environment variables in the global environment means setting them from the System icon in Control Panel.

### Modifying the synergy.ini file

You can add additional initialization settings or change existing settings in your **synergy.ini** file by editing the file using any text editor.



If you use a word processing program or any other program that formats text, the formatting characters may make the **synergy.ini** file unreadable to Synergy/DE. Be sure to save the changed file as a text file, without formatting information.

Alternately, you can use the **synckini** utility which prompts you to edit the **synergy.ini** file in the registered editor for **.ini** files (Notepad by default). See “[The synckini Utility](#)” in the “General Utilities” chapter of *Synergy Tools*.

### Modifying the synuser.ini file

Although you can locate and manually edit your **synuser.ini** file, we do not recommend it. The **synuser.ini** file is updated programmatically by a few Synergy/DE tools and can be updated programmatically by your Synergy application. For example, Composer updates the [fonts] and [colors] sections of **synuser.ini**. The Synergy Windows printing API updates the **synuser.ini** file with the print preview environment variables (for example, PRINT\_PREVIEW\_ZOOM). A number of UI Toolkit routines give you the option of updating the **synuser.ini** file rather than **synergy.ini** (for example, U\_EDITREND, U\_SAVELOG, U\_SAVESETTINGS, and %U\_WNDFONT).

## Settings on UNIX

On UNIX systems, you can place environment variables in your log-in file. The log-in file for UNIX systems is **.profile** if you are using Bourne or Korn shell or **.login** if you are using C shell. After setting an environment variable on UNIX, you must export it unless you have the “auto-export” feature turned on in your shell. (Refer to your UNIX reference manual for details on auto-export. Not all UNIX systems offer this option.) For example:

```
DBLDIR=/usr/synergy/dbl ;export DBLDIR
```

If any file specifications in your programs or command files contain directory specifications, you should define these names as search list environment variables. These assignments are case sensitive, and spaces are significant. (See [DBLCASE on page 1-61](#).) For example:

Bourne shell:

```
SRC=/usr/mine/source,/usr/progs
OBJ=/usr/mine/object
export SRC OBJ
```

C shell:

```
setenv SRC /usr/mine/source,/usr/progs
setenv OBJ /usr/mine/object
```

You’ll find more information about search list environment variables in “[Synergy DBL Files](#)” in the “Welcome to Synergy DBL” chapter of the *Synergy DBL Language Reference Manual*.

## Settings on OpenVMS

OpenVMS doesn't use the term "environment variables." You should substitute a logical name anywhere the Synergy/DE manuals use the term "environment variables." On OpenVMS systems, you can place logicals in your log-in file, **login.com**, or the system-wide log-in file located in SYSS\$MANAGER.

If any file specifications in your programs or command files contain directory specifications, you should define logical names to reference those locations, and use the logical name in the program or command file.

The OpenVMS operating system has the concept of search list logicals. These are logical names that have multiple translation values. When you specify a search list logical in an OPEN statement, the operating system scans all the locations listed to find the named file.

Some of the environment variables described in the following pages require a list of comma-separated values. These are *not* search lists, they are just comma-delimited values used and parsed by the compiler and runtime. When we use the term "search list" in the following pages, it means a comma-delimited value. Use quotation marks to prevent commas from creating multiple translation values.

To define a search list logical, use the following format:

```
$ DEFINE DATA_LOCATION DKA100:[DATA],DKA200:[BACKUP_DATA]
```

To define a comma-delimited value, use the following format:

```
$ DEFINE DBLOPT "7,35,43"
```



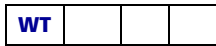
# The Environment Variables and Initialization Settings

Each environment variable and initialization setting specification page includes the Synergy products that are affected by that setting. “Runtime” specifies anything that requires the runtime to run, which includes UI Toolkit, Composer, Repository, ReportWriter, and so forth. “UI Toolkit” specifies anything that uses UI Toolkit, which includes Composer, Repository, ReportWriter, and so forth.

If the Setting location section for an environment variable or initialization setting lists the environment, you can use the GETLOG routine to obtain that variable’s value.

The procedure for setting an environment variable is provided in [“Settings on Windows” on page 1-10](#), [“Settings on UNIX” on page 1-15](#), and [“Settings on OpenVMS” on page 1-16](#).

## ACTIVEX\_LIST – Use ActiveX list control by default



The ACTIVEX\_LIST environment variable specifies which list, ActiveX or UI Toolkit, should be used by default for any lists that are processed.

### Value

One of the following flags:

- 0**      Use the Toolkit list. (default)
- 1**      Use the ActiveX list control.

### Discussion

If ACTIVEX\_LIST is set to 1, the global **g\_activex\_list** is set to true within U\_START. For any list class that does not specify which list (ActiveX or UI Toolkit) to use by specifying the ACTIVEX qualifier on the .LISTCLASS script command, **g\_activex\_list** is used to determine which list is used.

### Setting location

The environment or the [synergy], [dbr], or [myprog] section of **synergy.ini** (where *myprog* is any **.dbr** file).

### Used by

UI Toolkit.

### See also

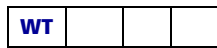
[.LISTCLASS](#) in the “Script” chapter of the *UI Toolkit Reference Manual* for more information on overloading the global list default on a per list basis.

### Examples

In the **synergy.ini** file,

```
[synergy]
ACTIVEX_LIST=1
```

## ALT\_FONT\_HEIGHT – Alternate font height



The ALT\_FONT\_HEIGHT environment variable sets the height of the alternate font (in conjunction with ALT\_TYPE\_FACE and ALT\_FONT\_WIDTH) if an alternate font is not otherwise specified.

### Value

The height, in logical units, of the font.

### Discussion

Synergy/DE on Windows uses the specified font height for application windows greater than or equal to 132 columns (if automatic font switching is enabled).

The font height can be specified in one of three ways:

- ▶ If the height is greater than 0, it is transformed into device units and matched against the cell height of the available fonts.
- ▶ If it is 0, a reasonable default size is used.
- ▶ If it is less than 0, it is transformed into device units, and the absolute value is matched against the character height of the available fonts.

If the current font is not available in the requested size, Synergy/DE on Windows substitutes the font that most closely resembles the specified font.

We recommend that you use the FONT\_ALTERNATE environment variable rather than ALT\_FONT\_HEIGHT.

### Setting location

The environment or the [synergy], [dbr], or [myprog] section of **synergy.ini** (where *myprog* is any **.dbr** file).

### Used by

Runtime.

### See also

- ▶ [“Using Fonts on Windows”](#) in the “Customizing UI Toolkit” chapter of the *UI Toolkit Reference Manual* for the hierarchy used to determine the alternate font.
- ▶ [%U\\_WNDFONT](#) in the “Utility Routines” chapter of the *UI Toolkit Reference Manual* for information on automatic font switching.
- ▶ [FONT\\_ALTERNATE](#) on [page 1-93](#).

## Environment Variables

ALT\_FONT\_HEIGHT

### Examples

In the **synergy.ini** file,

```
[synergy]  
ALT_FONT_HEIGHT=-18
```

## ALT\_FONT\_WIDTH – Alternate font width

WT			
----	--	--	--

The ALT\_FONT\_WIDTH environment variable sets the width of the alternate font (in conjunction with ALT\_TYPE\_FACE and ALT\_FONT\_HEIGHT) if an alternate font is not otherwise specified.

### Value

The average width, in logical units, of characters in the font.

### Discussion

Synergy/DE on Windows uses the specified font width for application windows greater than or equal to 132 columns (if automatic font switching is enabled).

If the width is 0, the aspect ratio of the device is matched against the digitization aspect ratio of the available fonts to find the closest match, determined by the absolute value of the difference.

If the current font is not available in the requested size, Synergy/DE on Windows substitutes the font that most closely resembles the specified font.

We recommend that you use the FONT\_ALTERNATE environment variable rather than ALT\_FONT\_WIDTH.

### Setting location

The environment or the [synergy], [dbr], or [myprog] section of **synergy.ini** (where *myprog* is any .dbr file).

### Used by

Runtime.

### See also

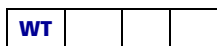
- ▶ “Using Fonts on Windows” in the “Customizing UI Toolkit” chapter of the *UI Toolkit Reference Manual* for the hierarchy used to determine the alternate font.
- ▶ %U\_WNDFONT in the “Utility Routines” chapter of the *UI Toolkit Reference Manual* for information on automatic font switching.
- ▶ FONT\_ALTERNATE on page 1-93.

### Examples

In the **synergy.ini** file,

```
[synergy]
ALT_FONT_WIDTH=0
```

## ALT\_TYPE\_FACE – Alternate font



The ALT\_TYPE\_FACE environment variable sets the typeface of the alternate font if an alternate font is not otherwise specified.

### Value

The name of the desired Windows font (or typeface).

### Discussion

Synergy/DE on Windows uses the specified typeface for application windows greater than or equal to 132 columns (if automatic font switching is enabled).

If you want to specify a new font using ALT\_TYPE\_FACE, it should be a font that comes in standard Windows packages.

You may want to use a fixed font, because the character columns will always have the same alignment from row to row (as they would on a VT-100 or other text terminal), and text positioning will remain consistently aligned. We recommend that you use a fixed font when doing non-Toolkit processing.

Another style consideration when choosing a typeface is whether you want a serif or a sans-serif font. Serifs are the little strokes (or “feet”) at the ends of a letter’s main strokes. A sans-serif style does not have these ending strokes. Serif typefaces are generally recommended for larger bodies of text because the serifs on each letter can help guide the eyes. Sans-serif typefaces work well for short phrases, headings, and small amounts of text.

To find a list of available typefaces, open the Character Map utility (in the Accessories group). The typeface names are case sensitive.

We recommend that you use the FONT\_ALTERNATE environment variable rather than ALT\_TYPE\_FACE.

### Setting location

The environment or the [synergy], [dbr], or [myprog] section of **synergy.ini** (where *myprog* is any .dbr file).

### Used by

Runtime.

## See also

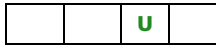
- ▶ [“Using Fonts on Windows”](#) in the “Customizing UI Toolkit” chapter of the *UI Toolkit Reference Manual* for the hierarchy used to determine the alternate font.
- ▶ [%U\\_WNDFONT](#) in the “Utility Routines” chapter of the *UI Toolkit Reference Manual* for information on automatic font switching.
- ▶ [FONT\\_ALTERNATE](#) on page 1-93.

## Examples

In the **synergy.ini** file,

```
[synergy]  
ALT_TYPE_FACE=Terminal
```

## ANSICOLOR – Use built-in runtime ANSI color sequences



The ANSICOLOR environment variable uses the ANSI color sequences built into the Synergy runtime to generate color.

### Value

Any value.

### Discussion

You can use ANSICOLOR to display color on devices that support ANSI color. (Synergy does not support color from **terminfo**; however, ANSICOLOR enables your application to use ANSI color regardless of the value of TERM.) You do not need to use ANSICOLOR if your terminal is a VT100-series terminal (VT100, VT220, etc.), if TERM is set to **ansi** or **xterm**, or if you’ve already added the Synergy color codes to the **termcap** database and intend to run the **termcap** runtime.

### Setting location

The environment.

### Used by

Runtime.

### See also

- ▶ [“Colors and the color palette”](#) in the “Synergy Windowing API” chapter of the *Synergy DBL Language Reference Manual*.
- ▶ [“Synergy DBL and the UNIX Terminal Database”](#) in the “UNIX Development” chapter of the *Professional Series Portability Guide*.
- ▶ [“Enabling color”](#) in the “UNIX Development” chapter of the *Professional Series Portability Guide*.

### Examples

```
ANSICOLOR=1      ;export ANSICOLOR
```



## APP\_HEIGHT – Initial application window height



The APP\_HEIGHT environment variable sets the initial height of your application window.

### Value

The initial height for the application’s container window, specified in character cells.

### Setting location

The [synergy], [dbr], or [myprog] section of **synergy.ini** (where *myprog* is any **.dbr** file).

### Used by

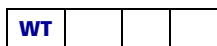
Runtime.

### Examples

In the **synergy.ini** file,

```
[synergy]
APP_HEIGHT=25
```

### APP\_SCALE – Initial scaling factor



APP\_SCALE controls the initial scaling factor for the application.

#### Value

The application scaling factor as a percentage. The value can be specified as either a whole number or with fractional precision (e.g., 176 or 50.95). The default is 100 (no scaling).

#### Discussion

APP\_SCALE affects the height and width of the application display screen, the windows for the application, and the characters in those windows. For example, an APP\_SCALE value of 200 increases the height and the width of these items by 200%. Note, however, that characters don't always scale evenly. Characters are sized as large as possible without exceeding the specified percentage in either direction. The maximum value for APP\_SCALE is the maximum value of double ( $1.7 \times 10^{308}$ ).

You can also alter an application's scaling programmatically using the %U\_WNDFONT(D\_SETSCALE) function, or by user action if SYN\_RESIZE\_SCALE is set in the environment.

For best results when scaling, we recommend using only TrueType or OpenType fonts. Note that message boxes, menu bars and toolbars, buttons, ActiveX controls, and Windows common controls (e.g., Choose Color dialog, Choose Font dialog, Select Palette dialog, Open File dialog, Print Preview, etc.) will not scale.

#### Setting location

The [synergy], [dbr], or [myprog] section of **synergy.ini** or **synuser.ini** (where *myprog* is any **.dbr** file).

#### Used by

UI Toolkit, Synergy windowing API.

#### Examples

In the **synergy.ini** file,

```
[synergy]
APP_SCALE=70.5
```

## APP\_STATE – Initial application window state



The APP\_STATE environment variable sets the initial state of your application window.

### Value

The initial state of the application’s container window:

<b>NORMAL</b>	Window is normal.
<b>MAXIMIZED</b>	Window is maximized.
<b>MINIMIZED</b>	Window is minimized.
<b>HIDDEN</b>	Window is hidden.

### Discussion

If no initial state is specified, or if the state specified is not one of the above states, the normal state is assumed.

APP\_STATE has precedence over the XSHOW environment variable. Unlike XSHOW=1, the Toolkit U\_START subroutine does not override the initial state specified by APP\_STATE.

Setting APP\_STATE to HIDDEN has the same effect as setting the environment variable XSHOW to HIDE.

The behavior of APP\_STATE is dependent on setting location. If set in the environment, APP\_STATE affects the current program and any programs spawned by the current program. If set in **synergy.ini**, APP\_STATE affects only the current program.

### Setting location

The environment or the [synergy], [dbr], or [myprog] section of **synergy.ini** (where *myprog* is any **.dbr** file).

### Used by

Runtime.

### Examples

In the **synergy.ini** file,

```
[synergy]
APP_STATE=MAXIMIZED
```

## APP\_WIDTH – Initial application window width



The APP\_WIDTH environment variable sets the initial width of your application window.

### Value

The initial width of the application's container window, specified in character cells.

### Setting location

The [synergy], [dbr], or [myprog] section of **synergy.ini** (where *myprog* is any **.dbr** file).

### Used by

Runtime.

### Examples

In the **synergy.ini** file,

```
[synergy]  
APP_WIDTH=80
```

## APP\_X – Initial horizontal position of window

WT	WN		
----	----	--	--

The APP\_X environment variable sets the initial horizontal position of your application window.

### Value

The initial horizontal position of the upper-left corner of the application's container window, specified in pixels offset from the upper-left corner of the Windows desktop.

### Setting location

The [synergy], [dbr], or [myprog] section of **synergy.ini** (where *myprog* is any **.dbr** file).

### Used by

Runtime.

### Examples

In the **synergy.ini** file,

```
[synergy]
APP_X=100
```

## APP\_Y – Initial vertical position of window



The APP\_Y environment variable sets the initial vertical position of your application window.

### Value

The initial vertical position of the upper-left corner of the application's container window, specified in pixels offset from the upper-left corner of the Windows desktop.

### Setting location

The [synergy], [dbr], or [myprog] section of **synergy.ini** (where *myprog* is any **.dbr** file).

### Used by

Runtime.

### Examples

In the **synergy.ini** file,

```
[synergy]
APP_Y=100
```

## AXDEBUG – Enable debugging system for ActiveX API



AXDEBUG lets you analyze problems in programs that use the Synergy ActiveX API by enabling a debugging system.

### Value

One of the following values:

<b>YES</b>	Enable debugging system and log events to a window.
<b>FILE=<i>filename</i></b>	Enable debugging system and log events to the specified file.
<b>NO</b>	Disable debugging system. (default)
<b>EXTERNAL</b>	Enable debugging system and send debug information to an attached Windows debugger.

### Discussion

On 32-bit Windows, when AXDEBUG is set to YES, the creation of the first ActiveX container creates a debug display, which consists of a tree view of the Synergy DBL/ActiveX system and a log of the related operations. On 64-bit Windows, YES is equivalent to EXTERNAL.



The tree view of ActiveX objects (in the left pane of debug display system when the YES option is used) is not shown for either the FILE=*filename* or the EXTERNAL option. The FILE and EXTERNAL options only log debug events.

When AXDEBUG is set to FILE=*filename*, events are logged to a file instead of a window, where *filename* is the name of the file to which output is appended.

When AXDEBUG is set to EXTERNAL, all debug logging information goes to an attached Windows debugger instead of the debug display. On 64-bit Windows, we recommend using an external debugger.

See “[Debugging](#)” in the “Synergy ActiveX API” chapter of the *Synergy DBL Language Reference Manual* for more information about the debugging system.

### Setting location

The environment or the [synergy], [dbr], or [*myprog*] section of **synergy.ini** (where *myprog* is any .dbr file).

### Used by

Runtime.

## Environment Variables

AXDEBUG

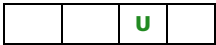
### Examples

If set at the command prompt,

```
set AXDEBUG=FILE=debug.log
```



## BADLOCKWAIT – Timeout for conventional lock



The BADLOCKWAIT environment variable sets the amount of time that Synergy waits for a conventional lock during an OPEN statement.

### Value

The maximum number of seconds to wait before signaling a DE\_BADLCK “Lock failure” error. The default value is 5.

### Setting location

The environment.

### Used by

Runtime, compiler, **fcompare**, **fconvert**, **isutl**.

### Examples

```
BADLOCKWAIT=7      ;export BADLOCKWAIT
```

## CACHE\_STAT – Enable ISAM cache statistics

WT	WN	U	
----	----	---	--

The CACHE\_STAT environment variable turns on the display of Synergy ISAM cache statistics.

### Value

Any value.

### Discussion

If set to any value, cache statistics are displayed when an ISAM file that was opened with cache enabled is closed. This is for ISAM file access only.

### Setting location

The environment. On Windows, if this environment variable is being used by the runtime, it can also be set in the [synergy] or [dbr] section of **synergy.ini**.

### Used by

Runtime, compiler, **fcompare**, **fconvert**, **isutl**.

### Examples

On Windows, if set at the command prompt,

```
set CACHE_STAT=1
```

## CMPBSIZ – Compiler output buffer size



The CMPBSIZ environment variable sets the size of output buffers for the Synergy compiler.

### Value

The size of the output buffer in bytes.

### Discussion

The default size is 8192 bytes.

The maximum output buffer size is limited by the memory available on your system. A larger output buffer size improves compiler speed, but requires more memory.

### Setting location

The environment. On Windows, this environment variable can also be set in the [synergy] or [dbl] section of **synergy.ini**.

### Used by

Compiler (**dbl8** only).

### Examples

On UNIX,

```
CMPBSIZ=16384 ;export CMPBSIZ
```

## COLORn – Possible colors



The COLOR0 through COLOR255 initialization settings can be used to override the default settings for the 256 user colors (color 0 through color 255).

### Value

COLORn is specified as follows:

COLORn=rgb

where *n* is a number from 0 to 255, representing one of 256 possible colors, and *rgb* is an RGB triplet that defines the color. This triplet must be separated by commas and can be in either hexadecimal or decimal notation. “0x” designates hexadecimal notation.

### Discussion

COLORn enables you to define a Synergy user color in **synergy.ini**. COLORn settings override default user colors that are loaded by the Synergy runtime when it starts. Note the following:

- ▶ COLORn must be in the [colors] section of **synergy.ini**. If no [colors] section exists, add “[colors]” on a separate line at the end of the file and then add COLORn settings on separate subsequent lines.
- ▶ Synergy/DE supports 512 colors, but COLORn settings can be used only for user colors (0 through 255). Specifying a number higher than 255 or lower than 0 will generate an error.

For more information on user colors, see “[Colors and the color palette](#)” in the “Synergy Windowing API” chapter of the *Synergy DBL Language Reference Manual*.

### Setting location

The [colors] section of **synergy.ini**.

### Used by

Runtime.

### See also

“[Customizing the Look of Your Application](#)” in the “Customizing UI Toolkit” chapter of the *UI Toolkit Reference Manual*.

### Examples

In the **synergy.ini** file,

```
[colors]
COLOR7=0xFF, 0xFF, 0xF
```

## COMBUF – Input buffer size for COM port



COMBUF enables you to change the input ring buffer size for serial port communication.

### Value

The size of the input buffer in bytes.

### Discussion

COMBUF defines the size of the input buffer when a COM PORT is opened. The default size is 4096 bytes.

### Setting location

The environment or the [synergy], [dbr], or [myprog] section of **synergy.ini** (where *myprog* is any **.dbr** file).

### Used by

Runtime.

### Examples

If set at the command prompt,

```
set COMBUF=8192
```

If set in the **synergy.ini** file,

```
[synergy]
COMBUF=8192
```

## COMSPEC – Shell program to run

WT	WN		
----	----	--	--

If the SHELL subroutine is called with the second argument set to zero, COMSPEC specifies the name of the shell program to run.

### Value

The name of the shell program to run.

### Discussion

The default is **cmd.exe**.

If the SHELL environment variable is set, it overrides COMSPEC.

### Setting location

The environment or the [synergy], [dbr], or [myprog] section of **synergy.ini** (where *myprog* is any **.dbr** file).

### Used by

Runtime.

### Examples

If set at the command prompt,

```
set COMSPEC=c:\dos\command /c
```

If set in the **synergy.ini** file,

```
[synergy]  
COMSPEC=c:\dos\command /c
```

## CONNECTDIR – synergyde\connect directory



The CONNECTDIR environment variable specifies the most recently installed synergyde\connect directory.

### Value

The connect subdirectory of the synergyde directory.

### Discussion

CONNECTDIR is set by the Connectivity Series installation on Windows, or it's set when you use **setsde** on UNIX or **SYSSMANAGER:SYNERGY\_STARTUP.COM** on OpenVMS. You should not change environment variables that are set by the system.

Use CONNECTDIR in a .INCLUDE statement to specify the location for SQL Connection programs, as follows:

```
.include "CONNECTDIR:ssql.def"
```

### Used by

xfODBC, SQL Connection.

### CWD – Working directory

WT	WN		
----	----	--	--

The CWD initialization setting sets the working directory for your application.

#### Value

The directory path, including device specification, that will become the current working drive and directory.

#### Discussion

CWD must be set in the **synergy.ini** file only; setting CWD in the environment has *no* effect. This initialization setting causes the runtime to set its current working directory to the specified path. If CWD is set in the *[myprog]* section of **synergy.ini** (where *myprog* is any **.dbr** file), it takes effect only after the **.dbr** program file is located. For this reason, you cannot use CWD to switch the execution directory of the application's main executable.

#### Setting location

The *[synergy]*, *[dbr]*, *[dbl]*, *[dblink]*, *[dblibr]*, or *[myprog]* section of **synergy.ini** (where *myprog* is any **.dbr** file).

#### Used by

Compiler, runtime, linker, librarian, **isutl**, **fcompare**.

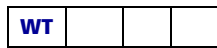
#### Examples

In the **synergy.ini** file,

```
[synergy]
CWD=c:\synergy\dbl\apps
```



## DBG\_BUFFER – Debugger window buffer



The DBG\_BUFFER environment variable specifies the number of lines of display text that the debugger window and the Toolkit debugger window will retain when scrolling.

### Value

The number of display lines of debugger window text to retain.

### Discussion

The debugger window and the Toolkit debugger window display 25 lines of text at a time (or the value of DBG\_HEIGHT), but you can scroll to view additional lines. By default, 300 lines are saved in the display buffer. You can set DBG\_BUFFER to override this setting.

### Setting location

The [synergy], [dbr], or [myprog] section of **synergy.ini** (where *myprog* is any **.dbr** file).

### Used by

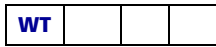
Debugger, UI Toolkit debugger.

### Examples

In the **synergy.ini** file,

```
[synergy]
DBG_BUFFER=400
```

## DBG\_HEIGHT – Initial debugger window height



The DBG\_HEIGHT environment variable sets the initial height of the Synergy debugger window.

### Value

The initial height of the Synergy debugger window, specified in character cells.

### Discussion

The default value is 25 lines of text.

### Setting location

The [synergy], [dbr], or [myprog] section of **synergy.ini** (where *myprog* is any **.dbr** file).

### Used by

Runtime.

### Examples

In the **synergy.ini** file,

```
[synergy]
DBG_HEIGHT=30
```

## DBG\_INIT – Debugger initialization file



The DBG\_INIT environment variable specifies a file containing Synergy debugger commands.

### Value

The debugger initialization file.

### Discussion

The debugger reads the file and executes the commands. The default extension for the initialization file is **.cmd**.

### Setting location

The environment. On Windows, this environment variable can also be set in the [synergy], [dbr], or [myprog] section of **synergy.ini** (where *myprog* is any **.dbr** file).

### Used by

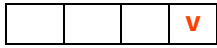
Runtime.

### Examples

On OpenVMS,

```
$ DEFINE DBG_INIT MY_INIT.CMD
```

## DBG\_RMT – Remote debugger startup information



The DBG\_RMT logical indicates that remote debugging is to occur and specifies the port number and optionally the timeout value.

### Value

`"-rd port[:timeout]"`

where *port* is the port number on which the debug server will listen as a Telnet server for the debug client (1024 to 65535, inclusive) and *timeout* is the number of seconds the debug server will wait for a connection from the debug client (the default is 100). Note that the quotation marks are required.

### Setting location

If you specify *timeout*, make sure it is lower than your client connection timeout value.

### Used by

Runtime.

### See also

The OpenVMS section of “[Debugging remotely](#)” in the “Debugging Synergy Programs” chapter of *Synergy Tools*.

### Examples

```
$ DEFINE DBG_RMT "-rd 1024:80"
```

## DBG\_SELECT – Enable Select debugging



The DBG\_SELECT environment variable turns on debugging for the Select class.

### Value

One of the following:

- 1 Log optimization details.
- 2 Log optimization details and add display of the Select opcode stream to the log.

### Discussion

When it's enabled, two events cause Select debugging to output information: the creation of a Select object and the destruction of the AlphaEnumerator created from a Select object.

### Setting location

The environment. DBG\_SELECT can be reset by the SETLOG routine, and the runtime interprets the new setting.

### Used by

Runtime.

### See also

[DBG\\_SELECT\\_FILE](#) on page 1-48.

### Examples

On Windows,

```
set DBG_SELECT=1
```

The logged content might look something like this:

```
[Select debugging at MAIN$APMAIN:93]
Where (D(7:5) .EQ.23)
Optimized key: 2
Head key length: 5
Key range: 7:5
Tail exit condition: (7:5)EQ

[Select debugging at MAIN$APMAIN:120]
Where (Keynum(1) .AND.A(1:2) .EQ."90" .AND.A(3:4) .EQ."0097" .AND.D(15:1) .EQ.0 .
AND.D(21:1) .EQ.1)
Optimized key: 1
```

```
Head key length: 6
  Key segment ranges: (1:2) (3:4)
Tail exit conditions: (1:2)EQ (3:4)EQ

[Select debugging at MAIN$APMAIN:120]
Optimization effectiveness: 98%
Total rows fetched: 13871 out of 487055

[Select debugging at MAIN$APMAIN:93]
Optimization effectiveness: 100%
Total rows fetched: 1 out of 11049
```

The first part of the output (the first two sections) shows each Select that was executed, the module and line number of that Select, the query string, whether the Select is optimized, which key will be used for optimization, the key length to be used plus the key range (which can be matched back to fields in the query string) when Head optimization is used, and the exit conditions when Tail optimization is used. (The exit condition reflects the field(s) and comparison operator(s) being used to continue enumerating. When the comparison result is false, the exit condition has been met, thus terminating any further I/O.)

In the example,

- ▶ “Where(D(7:5).EQ.23)” shows what the Select knows about the query string specified at line 93 in APMAIN. The specified field is decimal, starts at position 7 in the specified record and is 5 bytes long, and is being compared for equality against the value of 23. Field designations such as 7:5, when used below to describe optimization, can be further qualified by referring back here to the query string.
- ▶ “Optimized key: 2” shows that the key that will be used for optimization is #2. If no key could be used for optimization, you’d see something like “Non-optimized key: 0”.
- ▶ “Head key length: 5” shows the Select will perform head optimization. Rather than starting from the beginning of the file, the Select will use the first 5 bytes of key 2 to position directly to the first match using the target value “00023”.
- ▶ “Key range: 7:5” refers to the field position and length of the optimized key.
- ▶ The second Select at line 120 found a segmented key for optimization.
- ▶ “Key segment ranges: (1:2) (3:4)” refers to the field positions and lengths of the optimized key segments. In this case, the Select will use the first 6 bytes (2+4) of the optimized key to position directly to the first match using the target value “900097”. Follow key segments (1:2) and (3:4) back to the query string to find the target type and value. If head optimization cannot be used, these entries will not be displayed.
- ▶ “Tail exit condition: (7:5) EQ” shows the Select will perform tail optimization. Rather than unconditionally checking every record until End of File, the Select has constructed a condition past which no further I/O is necessary. When the field (7:5) retrieved from the file and compared using the EQ operator against the target value 23 is no longer true, exit the selection loop. Notice the second select at line 120 shows “Tail exit condition: (1:2)EQ (3:4)EQ”. This time 2 fields (1:2) and (3:4) will both be compared using the EQ operator against the target

value “900097”, and then exit on a false condition. In both cases, you can find the target type and value by matching against the field designations in the query string. If tail optimization cannot be used, these entries will not be displayed.

The second part of the output (the last two sections) shows the result any optimization may have had on the file itself, post operation. Optimization effectiveness shows a percentage of rows/records checked vs. the total number of rows/records in the file. The higher the percentage, the better the optimization. Optimization effectiveness is not supported on OpenVMS or to an OpenVMS server. The “Total rows fetched” (supported on all systems) shows the total number of rows/records that were read. OpenVMS users can figure out the effectiveness of the optimization using this number and the number of records in their file. Note that if an AlphaEnumerator wasn’t created or was never used, this information will be suppressed.

## DBG\_SELECT\_FILE – Specify location of Select debugging log



The DBG\_SELECT\_FILE environment variable tells where the Select debugging log will be written.

### Value

Either the name of the file to which output will be written or TT:. If DBG\_SELECT\_FILE is not set, TT: is the default.

### Discussion

On Windows, when using **dbs** (or from Synergy .NET), the output goes to the same console window where the program was started. When using **dbr**, a new DBG window is created, and output goes to this window. (As with the Synergy debugger, you can use the DBG\_BUFFER environment variable to alter the size of this window if necessary.) On UNIX and OpenVMS, output goes directly to the terminal window (as it does with TT:) unless a filename is specified.

### Setting location

The environment. DBG\_SELECT\_FILE can be reset by the SETLOG routine, and the runtime interprets the new setting.

### Used by

Runtime.

### See also

[DBG\\_SELECT on page 1-45.](#)

### Examples

On Windows,

```
set DBG_SELECT_FILE=LOG:select1.log
```



## DBG\_WIDTH – Initial debugger window width



The DBG\_WIDTH environment variable sets the initial width of the Synergy debugger window.

### Value

The initial width of the Synergy debugger window, specified in character cells.

### Setting location

The [synergy], [dbr], or [myprog] section of **synergy.ini** (where *myprog* is any **.dbr** file).

### Used by

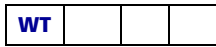
Runtime.

### Examples

In the **synergy.ini** file,

```
[synergy]
DBG_WIDTH=80
```

## DBG\_X – Initial horizontal position of debugger window



The `DBG_X` environment variable sets the initial horizontal position of the Synergy debugger window.

### Value

The initial horizontal position of the upper-left corner of the Synergy debugger window, specified in pixels offset from the upper-left corner of the Windows desktop.

### Setting location

The `[synergy]`, `[dbr]`, or `[myprog]` section of **synergy.ini** (where *myprog* is any **.dbr** file).

### Used by

Runtime.

### Examples

In the **synergy.ini** file,

```
[synergy]
DBG_X=100
```

## DBG\_Y – Initial vertical position of debugger window



The `DBG_Y` environment variable sets the initial vertical position of the Synergy debugger window.

### Value

The initial vertical position of the upper-left corner of the Synergy debugger window, specified in pixels offset from the upper-left corner of the Windows desktop.

### Setting location

The `[synergy]`, `[dbr]`, or `[myprog]` section of **synergy.ini** (where *myprog* is any **.dbr** file).

### Used by

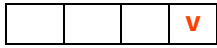
Runtime.

### Examples

In the **synergy.ini** file,

```
[synergy]
DBG_Y=100
```

## DBG\$INPUT – Source of debugger input



DBG\$INPUT is the source of debug commands during program execution.

### Value

A terminal input device name.

### Discussion

The environment variable DBG\$INPUT enables Synergy debugger commands to come from a terminal other than the one on which the debugged program is running.

### Setting location

The environment.

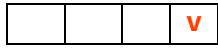
### Used by

Runtime.

### Examples

```
$ DEFINE DBG$INPUT TTA0 :
```

## DBG\$OUTPUT – Destination of debugger output



DBG\$OUTPUT is the destination of debug output during program execution.

### Value

A terminal device name.

### Discussion

The environment variable DBG\$OUTPUT enables Synergy debugger output to be directed to a device other than the one on which the debugged program is running.

### Setting location

The environment.

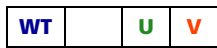
### Used by

Runtime.

### Examples

```
$ DEFINE DBG$OUTPUT TTA0:
```

## DBGSRC – Debugger source files



The DBGSRC environment variable sets the default search path for debugger source file lookup.

### Value

The directory path, including the device, in which the debugger will find the appropriate source files.

### Discussion

You can set DBGSRC either in the environment, before beginning the debugging session, or you can set it during the debugging session using the debugger SET command.

DBGSRC is used only if the debugger can't find the path (including version on OpenVMS) for the file as specified to the compiler.

### Setting location

The environment. On Windows, this environment variable can also be set in the [synergy], [dbr], or [myprog] section of **synergy.ini** (where *myprog* is any **.dbr** file).

### Used by

Runtime.

### Examples

On UNIX,

```
DBGSRC=/usr/dblv5/source      ;export DBGSRC
```

## DBL\_CHRSET – User character set



The DBL\_CHRSET environment variable is used by VT-style terminals to specify character sets other than USASCII for the Synergy windowing API.

### Value

The escape sequence that designates the character set that should be used for all screen displays:

- (B USASCII
- (A British
- (4 Dutch
- (Q French Canadian
- (R French
- (K German
- (Y Italian
- (Z Spanish
- (= Swiss

### Discussion

The escape character is not part of the environment variable’s definition. It is supplied by the runtime.

Refer to your terminal’s programming manual for more details and additional sequences.

### Setting location

The environment.

### Used by

Runtime.

### Examples

On OpenVMS,

```
$ DEFINE DBL_CHRSET "(K"
```

## DBL\$FATAL\_IMAGE – Image to chain to when FATAL has been called



DBL\$FATAL\_IMAGE (or DBL\_FATAL\_IMAGE on UNIX) defines the default image to chain to when the FATAL subroutine has been called.

### Value

The path of a Synergy program.

### Discussion

The DBL\$FATAL\_IMAGE (or DBL\_FATAL\_IMAGE) environment variable contains the name of a program to be chained to when a fatal error occurs.

### Setting location

The environment. On Windows, this environment variable can also be set in the [synergy], [dbr], or [myprog] section of **synergy.ini** (where *myprog* is any **.dbr** file).

### Used by

Runtime.

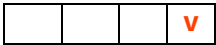
### Examples

On OpenVMS,

```
$ DEFINE DBL$FATAL_IMAGE DKA0:[USER]TOTAL.EXE
```



## DBL\$RUNJB\_OUTPUT – Output destination for RUNJB



DBL\$RUNJB\_OUTPUT defines the output file from the RUNJB subroutine.

### Value

The device or filename to which the RUNJB output should be generated.

### Discussion

This logical defines the output file for the RUNJB subroutine when called with *io\_flag* set to zero.

### Setting location

The environment.

### Used by

Runtime.

### Examples

```
$ DEFINE DBL$RUNJB_OUTPUT OUTPUT.ERR
```

## DBL2XML\_RPS – Alternate repository for dbl2xml



The DBL2XML\_RPS environment variable specifies full alternate filename paths for repository files for the **dbl2xml** utility.

### Value

The full filename paths of the alternate repository main and text files, separated by a comma.

### Discussion

DBL2XML\_RPS points to an alternate repository for the **dbl2xml** utility, enabling it to override RPSMFIL and RPSTFIL settings.

### Setting location

The environment. On Windows, this environment variable can also be set in the [synergy] section of **synergy.ini**.

### Used by

**Dbl2xml.**

### Examples

On Windows, if set at the command prompt,

```
set DBL2XML_RPS=C:\my_data\rpsmain.ism,C:\my_data\rpstext.ism
```

## DBLBINDIR – dbl\bin directory



The DBLBINDIR environment variable specifies the most recently installed dbl\bin directory.

### Value

The dbl\bin subdirectory beneath the Synergy/DE directory.

### Discussion

DBLBINDIR is set and added to PATH by the 32-bit Core Components installation on 32-bit systems and is for internal use only.

### Setting location

Global environment. (See [“Settings on Windows” on page 1-10.](#))

### Used by

Workbench, Synergy Configuration Program.

## DBLBS – ASCII value of the BACKSPACE character

		u	
--	--	---	--

DBLBS enables you to change the ASCII value of the BACKSPACE character.

### Value

A valid ASCII character.

### Discussion

The default value is 8.

### Setting location

The environment.

### Used by

Runtime.

### Examples

```
DBLBS=a      ;export DBLBS
```

## DBLCASE – Case translation

WT	WN	U	
----	----	---	--

The DBLCASE environment variable determines what type of case translation occurs on file specifications in statements such as OPEN, STOP, .INCLUDE, and so forth in the execution of Synergy programs and other Synergy/DE development tools.

### Value

One of the following codes:

- u** Translate logicals and filenames to uppercase.
- l** Translate logicals and filenames to lowercase.
- u:l** Translate logicals to uppercase; translate filenames to lowercase.
- l:u** Translate logicals to lowercase; translate filenames to uppercase.

### Discussion

If DBLCASE is not specified, the case remains as it is written; no translation occurs.



We do not recommend setting DBLCASE unless there is a need to do so for your particular system. We also do not recommend using this variable with xfODBC. See [“Starting and stopping SQL OpenNet for xfODBC”](#) in the UNIX section of the “Configuring Connectivity Series” chapter of the *Installation Configuration Guide* for information.

### Setting location

The environment. On Windows, this environment variable can also be set in the [dbr], [dbl], [dblink], or [dblibr] section of **synergy.ini**.

DBLCASE can be reset by the SETLOG subroutine, and the runtime interprets the new setting.

### Used by

Runtime, compiler, linker, librarian, **fcompare**, **fconvert**, **isutl**.

### Examples

```
DBLCASE=u:l ;export DBLCASE
```

Using the example above, the filename specified in the following OPEN statement:

```
open(11, U:I, "MYDIR:MYFILE")
```

is translated as

```
MYDIR:myfile.ism
```

## DBLDICTIONARY – Repository files



The DBLDICTIONARY environment variable specifies the full path names of the Repository main and text files.

### Value

The file specifications for the Repository main and text files, separated by a comma.

### Discussion

The following lists the hierarchy of Repository logicals tested by the compiler:

- ▶ If a logical is specified, use it. If it is specified and *not* set, a DDBADLOG error is generated.
- ▶ Next, the compiler looks for the DBLDICTIONARY logical and uses it if it's set.
- ▶ If the DBLDICTIONARY logical is *not* set, the compiler looks to see if you have specified the RPSMFIL/RPSTFIL logicals. If you have set only the RPSMFIL logical, a DDBADLOG error is generated. If you have set both of these logicals and it is not a version 6, 7, or 10 format repository, a DDNOLOG error is generated.
- ▶ If the DBLDICTIONARY and RPSMFIL logicals are *not* set, the compiler looks for the ICSMFIL/ICSTFIL logicals. If you have set only the ICSMFIL logical, a DDBADLOG error is generated. If you have set both of these logicals and it is not a version 3 dictionary, a DDNOLOG error is generated.
- ▶ If none of the above conditions apply, a DDNOLOG error is generated.

### Setting location

The environment. On Windows, this environment variable can also be set in the [synergy] or [dbl] section of **synergy.ini**.

### Used by

Compiler.

### See also

[RPSMFIL on page 1-156](#) and [RPSTFIL on page 1-157](#).

### Examples

On Windows, if set at the command prompt,

```
set DBLDICTIONARY=RPSDAT:rpsmain.ism,RPSDAT:rpstext.ism
```

On UNIX,

```
DBLDICTIONARY=RPSDAT:rpsmain.ism,RPSDAT:rpstext.ism  
export DBLDICTIONARY
```

On OpenVMS,

```
$ DEFINE DBLDICTIONARY "RPSDAT:RPSMAIN.ISM,RPSDAT:RPSTEXT.ISM"
```

## DBLDIR – Synergy DBL directory



The DBLDIR environment variable tells Synergy which directory contains your Synergy/DE distribution. It is required for normal operation of Synergy/DE tools and programs.

### Value

The path, including the device, for the directory that contains the Synergy/DE distribution files. The path should be the full path specification without any logicals. You can terminate the path with a backslash (\), but it is not necessary.

As of version 10, Synergy/DE is always installed to the default Program Files\Synergex location.

### Discussion

On OpenVMS, **SY\$COMMON:[SYSMGR]SYNERGY\_STARTUP.COM** defines the directory variable.

### Setting location

- ▶ On Windows, the [synergy] section of the distributed **synergy.ini** file installed with Synergy/DE.
- ▶ On UNIX, in the environment by the **setsde** script, which you should have sourced after installing Synergy/DE.
- ▶ On OpenVMS, the **SYNERGY\_STARTUP.COM** file when Synergy/DE is installed (or **ACTIVATE\_SDE.COM** for alternate installations).

DBLDIR is set to the correct location based on the current Synergy installation's SYNERGYDE32 and SYNERGYDE64 environment variables for all runtimes and utilities.

### Used by

Runtime, **isutl**, xfServer, xfServerPlus.

### Examples

On Windows, if set in the **synergy.ini** file,

```
[synergy]
DBLDIR=c:\synergyde\dbl\
```

On UNIX,

```
DBLDIR=/usr/synergyde/dbl      ;export DBLDIR
```

On OpenVMS,

```
$ DEFINE/SYSTEM/EXEC DBLDIR SYNERGYDE$ROOT: [DBL]
```



## DBLEOF – ASCII value of the EOF character

		u	
--	--	---	--

DBLEOF defines the ASCII value of the EOF character.

### Value

A valid ASCII character.

### Discussion

The default value is 4 (CTRL+D).

### Setting location

The environment.

### Used by

Runtime, compiler, **fcompare**, **fconvert**, **isutl**.

### Examples

```
DBLEOF=d      ;export DBLEOF
```

## DBLHIGH64POS – 64-bit file offset for locking



Like DBLHIGHPOS (see [DBLHIGHPOS on page 1-67](#)), the DBLHIGH64POS environment variable specifies the maximum file offset for locking, except that you can specify a 64-bit position.

### Value

The maximum file offset or the following:

<b>WARN</b>	Warn when the lock attempt is rejected.
-------------	---

### Discussion

DBLHIGH64POS sets the maximum file offset for locking when system option #33 is not set (conventional locking). By convention, Synergy ISAM files use the highest addressable file offset to lock during OPEN processing for enforcement of exclusive file locking. This value is normally set to 0x7FFFFFFFFFFFFFFFE on 64-bit machines.

At runtime, a lock attempt is made at the default position. If the lock attempt is rejected at that position, it adjusts down until it succeeds. To be warned of this, set DBLHIGH64POS to “WARN.” If you get a fatal “Record locking problem” error, you can either set system option #33 or use DBLHIGH64POS. We recommend using DBLHIGH64POS so that exclusive file sharing is not disabled.



This environment variable should be set only in extreme circumstances; all users accessing the same data files must also have the same setting, including Synergy/DE xfServer.

### Setting location

The environment.

### Used by

Runtime, **fcompare**, **fconvert**, **isutl**.

### Examples

```
DBLHIGH64POS=WARN      ;export DBLHIGH64POS
DBLHIGH64POS=0x7FFFFFFFFFFFFFFFE
```

## DBLHIGHPOS – File offset for locking



The DBLHIGHPOS environment variable specifies the maximum file offset for locking.

### Value

The maximum file offset or the following:

<b>WARN</b>	Warn when the lock attempt is rejected.
-------------	---

### Discussion

DBLHIGHPOS sets the maximum file offset for locking when system option #33 is not set (conventional locking). By convention, Synergy ISAM files use the highest addressable file offset to lock during OPEN processing for enforcement of exclusive file locking. This value is normally set to 0x7FFFFFFF on 32-bit machines.

At runtime, a lock attempt is made at the default position. If the lock attempt is rejected at that position, it adjusts down until it succeeds. To be warned of this, set DBLHIGHPOS to “WARN.” If you get a fatal “Record locking problem” error, you can either set system option #33 or use DBLHIGHPOS. We recommend using DBLHIGHPOS so that exclusive file sharing is not disabled.



This environment variable should be set only in extreme circumstances; all users accessing the same data files must also have the same setting, including Synergy/DE xfServer.

### Setting location

The environment.

### Used by

Runtime, **fcompare**, **fconvert**, **isutl**.

### Examples

```
DBLHIGHPOS=WARN      ;export DBLHIGHPOS
DBLHIGHPOS=0x7FFFFFFE
```

## DBLLIBRARY – Library files



The DBLLIBRARY environment variable indicates the search list that specifies the directories where the compiler will search for files specified in `.INCLUDE` statements that use the `LIBRARY` option.

### Value

The search list logical that specifies one or more directory paths in which to search for the files. See [“Search list logicals”](#) in the “Welcome to Synergy DBL” chapter of the *Synergy DBL Language Reference Manual* for more information about search lists.

### Setting location

The environment. On Windows, this environment variable can also be set in the `[synergy]` or `[dbl]` section of **synergy.ini**.

### Used by

Compiler.

### Examples

On Windows, if set at the command prompt,

```
set DBLLIBRARY=c:\synergy\dbl\libfiles,c:\usr\mylib
```

## DBLMAXERR – Maximum number of errors



The DBLMAXERR environment variable specifies the maximum number of errors that the Synergy compiler will generate before abandoning the compilation with a “Too many errors” error (ERRCNT).

### Value

The maximum number of errors the compiler will generate before aborting.

### Discussion

The default is 20 errors in traditional Synergy and 500 errors in Synergy .NET. This environment variable has no maximum limit although the maximum number of errors displayed ultimately may be limited by available system memory.

If you are compiling with the **-W4** option, you will probably want to set DBLMAXERR to a value higher than the default.

### Setting location

The environment. On Windows, this environment variable can also be set in the [synergy] or [dbl] section of **synergy.ini**.

### Used by

Compiler, Synergy Prototype utility.

### Examples

On UNIX,

```
DBLMAXERR=50      ;export DBLMAXERR
```

## DBLNET2XML\_RPS – Alternate repository for SDI interop



The DBLNET2XML\_RPS environment variable specifies full paths and filenames for repository files for Synergy interop projects.

### Value

The full paths and filenames of the alternate repository main and text files, separated by a comma.

### Discussion

DBLNET2XML\_RPS points to an alternate repository for Visual Studio interop projects. Overrides RPSMFIL and RPSTFIL settings.

### Setting location



The environment or the Environment Variables page of Visual Studio Project Designer.

### Used by

**Dblnet2xml** (an internal utility used by interop projects in SDI).

### Examples

In Visual Studio Project Designer,

	Name	Value
	DBLNET2XML_RPS	C:\my_data\rpsmain.ism,C:\my_data\rpstext.ism
		

## DBLOPT – Synergy DBL system options



The DBLOPT environment variable sets Synergy DBL system options.

### Value

A string that contains one or more Synergy DBL system option numbers, separated by commas. Synergy DBL ignores any option numbers that it doesn't recognize or that aren't applicable to the current environment.

### Discussion

See [chapter 2, “System Options,”](#) for a complete list of system options.

On OpenVMS, when you define multiple runtime options with DBLOPT, make sure to enclose them in quotation marks. If you don't use, DCL interprets the logical as a search list, and the runtime only processes the first option specified. For example:

```
$ DEFINE DBLOPT "1,7,16,35"
```

### Setting location

The environment. On Windows, if this environment variable is being used by the runtime, it can also be set in the [synergy], [dbl], or [dbr] section of **synergy.ini**.

DBLOPT can be reset by the SETLOG subroutine, and the runtime interprets the new setting.

### Used by

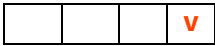
Runtime, compiler, linker, librarian, **fcompare**, **fconvert**, **isutl**.

### Examples

On Windows, if set at the command prompt,

```
set DBLOPT=11,23,43
```

## DBLSTARLET – System services directory



The DBLSTARLET environment variable specifies the directory of the system include files for use with system services. The default is [SYNERGY.DBL.DBLSTARLET].

### Value

The directory that contains the system services include files.

### Setting location

The **SYNERGY\_STARTUP.COM** file found in SYSS\$MANAGER (or **ACTIVATE\_SDE.COM** for alternate installations).

### Used by

Compiler.

### Examples

```
$ DEFINE/SYS/EXEC DBLSTARLET SYSS$SYSDEVICE:[SYNERGY.DBL.DBLSTARLET]
```



## DBLTEXT – External subroutine directory



The DBLTEXT environment variable specifies the directory of the include files that are for use with Synergy DBL external subroutines. The default path is [SYNERGY.DBL.DBLSTARLET].

### Value

The directory that contains the Synergy DBL external subroutines.

### Setting location

The **SYNERGY\_STARTUP.COM** file found in SYSS\$MANAGER when Synergy/DE is installed (or **ACTIVATE\_SDE.COM** for alternate installations).

### Used by

Compiler.

### Examples

```
$ DEFINE/SYS/EXEC DBLTEXT SYS$SYSDEVICE:[SYNERGY.DBL.DBLSTARLET]
```

## DTK\_BEEP – Set initial value of `g_beep`



The `DTK_BEEP` environment variable determines how `U_START` will initialize the `g_beep` field (a global value defined in `tkctl.def`), which turns the terminal bell (all platforms) and `MessageBeep` (Windows) on or off.

### Value

One of the following:

<b>0</b> or <b>false</b>	Initializes <b>g_beep</b> to false (0).
Any other value	Initializes <b>g_beep</b> to true (1). (default)

### Discussion

If `DTK_BEEP` is set to a value of **0** or **false** (case-insensitive), `U_START` initializes `g_beep` to false. If `g_beep` is set to false, calls to `U_BEEP` have no effect, and runtime routines that are private to UI Toolkit suppress the terminal bell and `MessageBeep`. For more information, see “[Customizing Configuration Fields](#)” in the “Customizing UI Toolkit” chapter of the *UI Toolkit Reference Manual*.

### Setting location

The environment or the `[synergy]`, `[dbr]`, or `[myprog]` section of `synergy.ini` or `synuser.ini` (where `myprog` is any `.dbr` file).

### Used by

UI Toolkit

### Examples

```
set DTK_BEEP=false
```

## DTK\_BOUNDS – Enable UI Toolkit bounds checking



The DTK\_BOUNDS environment variable enables bounds checking in UI Toolkit.

### Value

One of the following values:

- 0 Turn off bounds checking.
- 1 Generate a fatal error for a level 1 error.
- 2 Generate a fatal error for a level 1 error and prompt for level 2 errors (or log them if DTK\_BOUNDS\_LOG is set).

### Discussion

Setting DTK\_BOUNDS catches catastrophic failures whereby a reference exceeds the calling routine’s data space, including such failures as data being overwritten and segmentation violations.



On Windows with traditional Synergy, bounds checking is built into both the default Toolkit library, which is built with **-qstrict**, and **tklib\_qcheck.elb**, which is built with **-qcheck**. The Synergy .NET compiler automatically includes bounds checking. However, you may still want to use DTK\_BOUNDS, as it has the additional W\_PROC check mentioned below, and unlike other bounds checking options, it tells you explicitly when a data area passed to a routine is too small, rather than issuing a generic range error. See “[Bounds checking](#)” in the “Welcome to UI Toolkit” chapter of the *UI Toolkit Reference Manual* for more information.

DTK\_BOUNDS can be set at any point before calling U\_START to turn on bounds checking in UI Toolkit. To control the bounds-checking behavior after U\_START is called, modify the value of **g\_dtktbounds** in **WND:tkctl.def**. See “**tkctl.def**” in the “Customizing UI Toolkit” chapter of the *UI Toolkit Reference Manual*.

If DTK\_BOUNDS is set to 1 or 2 (or anything greater than 0), Toolkit generates a fatal Toolkit error if it encounters a level 1 error, which occur under the following conditions:

- ▶ A record is not large enough for a referenced field for one of the following: I\_DISPLAY, I\_GETFLD, I\_INIT, I\_INPFLD, I\_INPUT, I\_PUTFLD, L\_INPFLD, or L\_INPUT.
- ▶ W\_PROC(WP\_RESIZE) is used on Windows to resize one of Toolkit’s reserved windows (header, footer, or information line) or an input window for a list. If DTK\_BOUNDS is set to 1 or 2, Toolkit reports this along with the window ID and the old and new sizes.

## Environment Variables

### DTK\_BOUNDS

If DTK\_BOUNDS is set to a value of 2 or greater, a message box opens, enabling you to continue or stop the program for level 2 errors, which occur under the following conditions:

- ▶ IB\_FIELD creates a text field that's too large for the window.
- ▶ A record for an argument for one of the following is not exactly the size of the referenced data: I\_USER, I\_DSPFLD, I\_GETFLD, I\_INPFLD, or I\_PUTFLD. If DTK\_BOUNDS is set to 2, you can set the DTK\_BOUNDS\_LOG environment variable to log level 2 errors to a file. See [DTK\\_BOUNDS\\_LOG on page 1-77](#).
- ▶ An integer value is passed for a non-integer field, or vice versa, for I\_DSPFLD or I\_PUTFLD. Note, however, that no error is generated for user-defined data types.

### Setting location

The environment. On Windows, this environment variable can also be set in the [synergy], [dbr], or [myprog] section of **synergy.ini** (where *myprog* is any **.dbr** file).

### Used by

UI Toolkit.

### See also

- ▶ [DTKDBG on page 1-80](#) to enable the UI Toolkit debugger.
- ▶ [WINDBG](#) in the “Debugging Synergy Programs” chapter of *Synergy Tools* to invoke the UI Toolkit debugger from the Synergy debugger prompt.
- ▶ [U\\_DEBUG](#) in the “Utility Routines” chapter of the *UI Toolkit Reference Manual* for instructions on invoking the Toolkit debugger programmatically.

### Examples

On Windows,

```
set DTK_BOUNDS=1
```

## DTK\_BOUNDS\_LOG – Log DTK\_BOUNDS level 2 errors to a file



The DTK\_BOUNDS\_LOG environment variable writes nonfatal bounds checking errors to a file.

### Value

The path and filename for the bounds-checking error file.

### Discussion

Nonfatal errors found by setting DTK\_BOUNDS=2 (i.e., level 2 errors) are either displayed in a message box (the default behavior) or written to a log file. If DTK\_BOUNDS\_LOG is set to a path and filename, each level 2 error encountered, along with a traceback indicating where the error occurred, is appended to the specified file, and the program goes on without prompting you to continue. If DTK\_BOUNDS\_LOG is not set (or if it's set to blanks), each level 2 error is displayed in a message box that prompts you to continue or stop the program.

### Setting location

The environment. On Windows, this environment variable can also be set in the [synergy], [dbr], or [myprog] section of **synergy.ini** (where *myprog* is any **.dbr** file).

### Used by

UI Toolkit.

### See also

- ▶ [DTK\\_BOUNDS](#) on page 1-75.
- ▶ “[Bounds checking](#)” in the “Welcome to UI Toolkit” chapter of the *UI Toolkit Reference Manual*.

### Examples

On Windows,

```
set DTK_BOUNDS_LOG=d:\test\BoundsChecking.log
```

## DTK\_MENU\_UP – Disable automatic pull-down menus



The DTK\_MENU\_UP environment variable disables the automatic pull-down of menus.

### Value

Contains any value if the menu should not be pulled down automatically when UI Toolkit's M\_PROCESS subroutine is called.

### Discussion

Setting DTK\_MENU\_UP to any value disables automatic pull-down of menus. The default is *not* set, which means automatic pull-downs are enabled. Calling the UI Toolkit menu subroutine M\_DEFCOL(0) has the same effect as setting DTK\_MENU\_UP.

### Setting location

The environment or the [synergy], [dbr], or [myprog] section of **synergy.ini** (where *myprog* is any **.dbr** file).

### Used by

UI Toolkit.

### See also

[M\\_DEFCOL](#) in the “Menu Routines” chapter of the *UI Toolkit Reference Manual* for instructions on setting a default pull-down menu column or entry.

### Examples

If set at the command prompt,

```
set DTK_MENU_UP=1
```

## DTK\_THROW\_ABORT – Set initial value of `g_throwabort`

WT		U	V
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The `DTK_THROW_ABORT` environment variable is used by the UI Toolkit `U_START` routine to determine the initial value of `g_throwabort` (a global defined in `tkctl.def`).

### Value

One of the following:

**1** `g_throwabort` is set to true (1).

Any other value `g_throwabort` is set to false (0).

### Discussion

`DTK_THROW_ABORT` sets the initial value of `g_throwabort`, which determines the behavior of the `U_ABORT` subroutine. If `g_throwabort` is set to 0 (the default), `U_ABORT` performs a `STOP` and displays a fatal error message when invoked. The `STOP` has an exit status of `D_EXIT_FAILURE`, and `U_ABORT` does not return to the calling routine. If `g_throwabort` is set to a nonzero value, `U_ABORT` calls `U_FINISH` to shut down the Toolkit environment and then calls `EXITE` to throw a trappable error. For more information, see [U\\_ABORT](#) in the “Utility Routines” chapter of the *UI Toolkit Reference Manual*.

If `DTK_THROW_ABORT` is not defined, `g_throwabort` is set to false (0).

### Setting location

The environment or the `[synergy]`, `[dbr]`, or `[myprog]` section of `synergy.ini` (where *myprog* is any `.dbr` file).

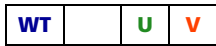
### Used by

UI Toolkit

### Examples

```
set DTK_THROW_ABORT=1
```

## DTKDBG – Enable the UI Toolkit debugger



The DTKDBG environment variable enables UI Toolkit debugging.

### Value

Any value.

### Discussion

If DTKDBG is set and Toolkit generates a fatal error, a window displays asking if you want to examine the window system. Answer **y** to start the Toolkit debugger. While a Toolkit program is running, you can enter debug mode by pressing CTRL+R while performing any Toolkit input.

When DTKDBG is set, the debugger does the following:

- ▶ Checks for any %M\_SIGNAL call that supersedes a pending menu entry and, if one is encountered, displays a message box indicating which menu entry the call is signaling and which entry is being superseded. At the prompt, select Yes to continue the operation. If you select No, the debugger calls U\_ABORT, which generates a fatal Toolkit error.
- ▶ Displays a message box if a USTART\_METHOD cannot be invoked, asking if you want to continue. If you select Yes, the program proceeds with non-DTKDBG behavior: it ignores the method. If you click No, the debugger calls U\_ABORT, which generates a fatal Toolkit error.

### Setting location

The environment. On Windows, this environment variable can also be set in the [synergy], [dbr], or [myprog] section of **synergy.ini** (where *myprog* is any **.dbr** file).

### Used by

UI Toolkit.

### See also

- ▶ [WINDBG](#) in the “Debugging Synergy Programs” chapter of *Synergy Tools* for information on invoking the UI Toolkit debugger from the Synergy debugger prompt.
- ▶ [U\\_DEBUG](#) in the “Utility Routines” chapter of the *UI Toolkit Reference Manual* for instructions on invoking the Toolkit debugger programmatically.
- ▶ [DTK\\_BOUNDS](#) on [page 1-75](#) to enable bounds checking in UI Toolkit.

### Examples

On Windows,

```
set DTKDBG=1
```



## DTKFSWINSIZ – Size of file-stack memory cache



The environment variable DTKFSWINSIZ defines the size of the memory cache used by the UI Toolkit file-stack routines.

### Value

Any multiple of 16,384 bytes, up to a maximum of 122,880.

### Discussion

The default size is 16,384.

### Setting location

The environment. On Windows, this environment variable can also be set in the [synergy], [dbr], or [myprog] section of **synergy.ini** (where *myprog* is any **.dbr** file).

### Used by

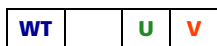
UI Toolkit.

### Examples

On OpenVMS,

```
$ DEFINE DTKFSWINSIZ 32768
```

## DTKKEYCTLFIL – Key mapping script file for UI Toolkit



The DTKKEYCTLFIL environment variable defines the full path and filename of the UI Toolkit key mapping script file.

### Value

The full path and filename, including extension, of the UI Toolkit key mapping script file. This must be a valid path and filename for the OPEN command. (See [OPEN](#) in the “Synergy DBL Statements” chapter of the *Synergy DBL Language Reference Manual* for more information.)

### Discussion

The DTKKEYCTLFIL environment variable enables you to name the key mapping script file and put it in a directory of your choosing. If this environment variable is not set, UI Toolkit looks for a key mapping script file named **keymap.ctl** in the working directory. If Toolkit doesn’t find **keymap.ctl** there, Toolkit looks for this file in the directory specified by WND. If Toolkit can’t find a key mapping script file, the only shortcuts supported by scripts are F1 through F63.

### Setting location

The environment. On Windows, this environment variable can also be set in the [synergy], [dbr], or [myprog] section of **synergy.ini** or **synuser.ini** (where *myprog* is the **.dbr** file used to compile the script).

### Used by

UI Toolkit.

### See also

“[Files and environment variables used for key mapping](#)” in the “Customizing UI Toolkit” chapter of the *UI Toolkit Reference Manual* for information on the key mapping script file.

### Examples

On UNIX,

```
DTKKEYCTLFIL=/usr/custom/kmsf1.ctl ;export DTKKEYCTLFIL
```

## DTKMAP – Directory for UI Toolkit key mapping file



The DTKMAP environment variable defines the directory path containing the UI Toolkit key mapping file, **dtkmap.ism**.

### Value

The path, including the device, for the directory that contains the UI Toolkit key mapping file.

### Discussion

If the environment variable DTKMAPFIL is not set, UI Toolkit looks for the **dtkmap.ism** file in the path specified by DTKMAP.

If DTKMAP is not set, UI Toolkit looks for the **dtkmap.ism** file in the path specified by the WND environment variable.

### Setting location

The environment. On Windows, this environment variable can also be set in the [synergy], [dbr], or [myprog] section of **synergy.ini** (where *myprog* is any **.dbr** file).

### Used by

UI Toolkit.

### Examples

On UNIX,

```
DTKMAP=/usr/custom      ;export DTKMAP
```

## DTKMAPFIL – UI Toolkit key mapping file



The DTKMAPFIL environment variable defines the full path and filename of the UI Toolkit key mapping file.

### Value

The full path and filename of the UI Toolkit key mapping file.

### Discussion

If the environment variable DTKMAPFIL is not set, UI Toolkit looks for the key mapping file, **dtkmap.ism**, in the path specified by DTKMAP.

### Setting location

The environment. On Windows, this environment variable can also be set in the [synergy], [dbr], or [myprog] section of **synergy.ini** (where *myprog* is any **.dbr** file).

### Used by

UI Toolkit.

### Examples

On Windows, if set in the **synergy.ini** file,

```
[synergy]
DTKMAPFIL=c:\home\mykeymap.ism
```

## DTKRND – Directory for UI Toolkit rendition file



The DTKRND environment variable defines the directory path containing the UI Toolkit rendition file, **dtkrnd.ism**.

### Value

The path, including the device, for the directory that contains the UI Toolkit rendition file.

### Discussion

If the environment variable DTKRNDFIL is not set, UI Toolkit looks for the **dtkrnd.ism** file in the path specified by DTKRND.

If DTKRND is not set, UI Toolkit looks for the **dtkrnd.ism** file in the current directory.

### Setting location

The environment. On Windows, this environment variable can also be set in the [synergy], [dbr], or [myprog] section of **synergy.ini** (where *myprog* is any **.dbr** file).

### Used by

UI Toolkit.

### Examples

On OpenVMS,

```
$ DEFINE DTKRND=DKA0:[TOOLKIT]
```

## DTKRNDFIL – UI Toolkit rendition file



The DTKRNDFIL environment variable defines the full path and filename of the UI Toolkit rendition file.

### Value

The full path and filename of the UI Toolkit rendition file.

### Discussion

If the environment variable DTKRNDFIL is not set, UI Toolkit looks for the **dtkrnd.ism** file in the path specified by DTKRND.

### Setting location

The environment. On Windows, this environment variable can also be set in the [synergy], [dbr], or [myprog] section of **synergy.ini** (where *myprog* is any **.dbr** file).

### Used by

UI Toolkit.

### Examples

On UNIX,

```
DTKRNDFIL=/usr/custom/rndfil.ism      ;export DTKRNDFIL
```

# DTKTERM – Key map for UI Toolkit



The DTKTERM environment variable defines the key map’s terminal type, identifying the key map to use.

## Value

The type of terminal you are using. This can be a user-defined name for a key map that you’ve created or one of the following distributed key maps:

ANSI	UNIX console
GENERIC	Unknown terminal type
HFT	IBM high-function terminal
IBMPCL	PC
MSWINDOWS	Windows
VT100	VTxxx terminal
WY60	Wyse-60 and compatibles
XTERM	X-Windows terminals

## Discussion

A key map file contains key maps for one or more terminal types. When you install Synergy/DE, you assign your default terminal type to the DTKTERM environment variable. Then, when the U\_START subroutine initializes the window system, it opens the key map file and loads the key map for the terminal type defined in DTKTERM.

If DTKTERM is not set, the value of TERM is used instead.

## Setting location

The environment. On Windows, this environment variable can also be set in the [synergy], [dbr], or [myprog] section of **synergy.ini** (where *myprog* is any **.dbr** file).

## Used by

UI Toolkit, Repository, ReportWriter.

## See also

[“Customizing Key Mapping for Menu Shortcuts”](#) in the “Customizing UI Toolkit” chapter of the *UI Toolkit Reference Manual* for more information about terminal types.

## Examples

On UNIX,

```
DTKTERM=ansi ;export DTKTERM
```

## DTKTMP – Directory for UI Toolkit temporary files



The DTKTMP environment variable defines the location where UI Toolkit will create temporary files.

### Value

The path, including the device, for the directory that will contain UI Toolkit temporary files.

### Discussion

If DTKTMP is not set, the default directory for temporary files is the current directory on UNIX and OpenVMS and TEMP (if it is set) on Windows. If TEMP is not set, UI Toolkit creates temporary files in the current directory.

### Setting location

The environment. On Windows, this environment variable can also be set in the [synergy], [dbr], or [myprog] section of **synergy.ini** (where *myprog* is any **.dbr** file).

### Used by

UI Toolkit.

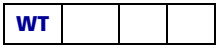
### Examples

On Windows, if set at the command prompt,

```
set DTKTMP=d:\temp
```



## EDIT\_SYSMENU – Include “Edit” entry on system menu



The EDIT\_SYSMENU environment variable determines whether the “Edit” menu entry is placed on the application window’s system menu.

### Value

One of the following flags:

- 0 Do not include the “Edit” menu entry.
- 1 Include the “Edit” menu entry. (default)

### Discussion

The “Edit” menu entry is actually a submenu containing the entries “Mark,” “Copy,” and “Paste.” As an alternative to using the “Edit” system menu entry, the “Mark,” “Cut,” “Copy,” “Paste,” and “Clear” edit menu entries are available in UI Toolkit to be placed on a designated menu column. See [Appendix B:Reserved Menu Entries](#) in the *UI Toolkit Reference Manual* for a list of the reserved edit menu entries and their functions.

### Setting location

The environment or the [synergy], [dbr], or [myprog] section of **synergy.ini** (where *myprog* is any **.dbr** file).

### Used by

Runtime.

### Examples

If set in the **synergy.ini** file,

```
[synergy]
EDIT_SYSMENU=0
```

### FONT – Palette entry definition

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One or more *FONT* initialization settings define an application’s initial font palette. Each *FONT* setting defines a font palette entry.

#### Value

*FONT* is specified as follows:

*palette\_name=face\_name;point\_size[:sizing\_char]*

where the arguments are defined as follows:

*palette\_name*

The name of the font palette entry. **(a)**

*face\_name*

The name of the Windows typeface. **(a)**

*point\_size*

The size of the Windows font. **(n)**

*sizing\_char*

(optional) The sizing character. **(a)**

#### Discussion

Font palette entry names may be referenced within Repository, UI Toolkit window scripts, Composer, and at runtime.

*Palette\_name* is a name of up to 60 characters (a-z, 0-9, \_, and \$), which begins with a letter, and is case insensitive. *Palette\_name* should be unique within the [fonts] section of **synergy.ini**. If there is a non-unique *palette\_name*, the last *palette\_name* defined takes precedence.

*Face\_name* indicates the font’s typeface and is case sensitive. For example, Arial is the name of a typeface.

*Point\_size* is the numeric point size of the font. Strictly defined, a point is 1/72 of an inch in terms of height.

*Sizing\_char* is a single character used to determine the cell size within an object for the purposes of positioning. For example, specifying a sizing character of “W” causes an object to be significantly wider than with a sizing character of “i”. *Sizing\_char* is case sensitive. The default sizing character is a capital “A”.

Four palette entry names are reserved: `DEFAULT`, `ALTERNATE`, `DEBUGGER`, and `STATUS`. Use the first three to specify the global, alternate, and debugger font characteristics, respectively. These are used if `FONT_GLOBAL`, `FONT_ALTERNATE`, or `FONT_DEBUG` is undefined. (`DEFAULT` is used to define the debugger font if the debugger font is not otherwise specified.) Use `STATUS` to specify the font for the application window's header, footer, and information line. It is used if `FONT_HEADER`, `FONT_FOOTER`, or `FONT_INFO` is undefined.

The *FONT* initialization settings enable you to define multiple fonts. However, specifying a large number of different fonts uses additional memory, which may increase the program's start-up time.

## Setting location

The `[fonts]` section of **synergy.ini**.

## Used by

Runtime.

## See also

[“Using Fonts on Windows”](#) in the “Customizing UI Toolkit” chapter of the *UI Toolkit Reference Manual* for general font information and details on the hierarchy used to determine the global, alternate, and debugger fonts.

## Examples

In the **synergy.ini** file,

```
[fonts]
Default=Fixedsys;9;A
Alternate=MS Sans Serif;10;W
my_input_font=Times New Roman;12
```

## FONT\_ALPHAFLD – Alphanumeric field font



The FONT\_ALPHAFLD environment variable sets the default font for all alphanumeric input fields that do not have their own font specification.

### Value

The name of a font palette entry. (**a**)

### Discussion

FONT\_ALPHAFLD can be used to more easily migrate your application to proportional fonts.

When you use any of the FONT\_ initialization settings and use the I\_FLDMOD subroutine to change the type of a field (for example, from alpha to numeric), be aware that the corresponding font isn't automatically applied. To update the font, use the D\_FLD\_FONT option for I\_FLDMOD.

### Setting location

The environment or the [synergy], [dbr], or [myprog] section of **synergy.ini** (where *myprog* is any **.dbr** file).

### Used by

UI Toolkit.

### See also

- ▶ [FONT on page 1-90](#) for defining font palette entries.
- ▶ [“Using Fonts on Windows”](#) in the “Customizing UI Toolkit” chapter of the *UI Toolkit Reference Manual* for information on the font defaulting hierarchy.

### Examples

In the **synergy.ini** file,

```
[myapp]
FONT_ALPHAFLD=my_alpha_font
```

## FONT\_ALTERNATE – Alternate global font



The FONT\_ALTERNATE environment variable sets the alternate global font.

### Value

The name of a font palette entry. **(a)**

### Discussion

Synergy/DE on Windows uses the alternate global font for application windows greater than or equal to 132 columns and for any object that does not have its own specification, but only when automatic font switching is enabled.

We recommend that you use a fixed font as the alternate global font when doing non-Toolkit processing.

When you use any of the FONT\_ initialization settings and use the I\_FLDMOD subroutine to change the type of a field (for example, from alpha to numeric), be aware that the corresponding font isn't automatically applied. To update the font, use the D\_FLD\_FONT option for I\_FLDMOD.

### Setting location

The environment or the [synergy], [dbr], or [myprog] section of **synergy.ini** (where *myprog* is any **.dbr** file).

### Used by

Runtime.

### See also

- ▶ [FONT](#) on page 1-90 for defining font palette entries.
- ▶ “Using Fonts on Windows” in the “Customizing UI Toolkit” chapter of the *UI Toolkit Reference Manual* for the hierarchy used to determine the alternate font.
- ▶ [%U\\_WNDFONT](#) in the “Utility Routines” chapter of the *UI Toolkit Reference Manual* for information on automatic font switching.

### Examples

In the **synergy.ini** file,

```
[myapp]
FONT_ALTERNATE=my_alt_font
```

## FONT\_DEBUG – Debugger font



The FONT\_DEBUG environment variable sets the font for the Synergy debugger window.

### Value

The name of a font palette entry. **(a)**

### Discussion

For readability, we recommend that the debugger font be a fixed font, not a proportional font.

When you use any of the FONT\_ initialization settings and use the I\_FLDMOD subroutine to change the type of a field (for example, from alpha to numeric), be aware that the corresponding font isn't automatically applied. To update the font, use the D\_FLD\_FONT option for I\_FLDMOD.

### Setting location

The environment or the [synergy], [dbr], or [myprog] section of **synergy.ini** (where *myprog* is any **.dbr** file).

### Used by

Runtime.

### See also

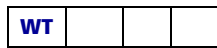
- ▶ [FONT on page 1-90](#) for defining font palette entries.
- ▶ “Using Fonts on Windows” in the “Customizing UI Toolkit” chapter of the *UI Toolkit Reference Manual* for the hierarchy used to determine the debugger font.

### Examples

In the **synergy.ini** file,

```
[synergy]
FONT_DEBUG=my_fixed_font
```

## FONT\_FOOTER – Initial footer section font



The FONT\_FOOTER environment variable sets the default font for the application window’s footer section.

### Value

The name of a font palette entry. (**a**)

### Discussion

The sizing character specified in the definition of the font palette entry has no effect on the size of the footer section.

### Setting location

The environment or the [synergy], [dbr], or [myprog] section of **synergy.ini** (where *myprog* is any **.dbr** file).

### Used by

UI Toolkit.

### See also

- ▶ [FONT](#) on page 1-90 for defining font palette entries.
- ▶ “Using Fonts on Windows” in the “Customizing UI Toolkit” chapter of the *UI Toolkit Reference Manual* for information on the font defaulting hierarchy.
- ▶ [%E\\_FONT](#) in the “Environment Routines” chapter of the *UI Toolkit Reference Manual* for setting the footer font at runtime.

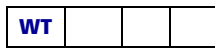
### Examples

In the **synergy.ini** file,

```
[myapp]
FONT_FOOTER=footer_font

[Fonts]
footer_font=MS Sans Serif;10
```

## FONT\_GLOBAL – Global font



The FONT\_GLOBAL environment variable sets the global font.

### Value

The name of a font palette entry. (**a**)

### Discussion

Synergy/DE on Windows uses the global font for the following: application windows less than 132 columns, application windows greater than or equal to 132 columns (if automatic font switching is disabled), and any object that does not have its own font specification.

We recommend that you use a fixed font as the global font when doing non-Toolkit processing.

When you use any of the FONT\_ initialization settings and use the I\_FLDMOD subroutine to change the type of a field (for example, from alpha to numeric), be aware that the corresponding font isn't automatically applied. To update the font, use the D\_FLD\_FONT option for I\_FLDMOD.

### Setting location

The environment or the [synergy], [dbr], or [myprog] section of **synergy.ini** (where *myprog* is any **.dbr** file).

### Used by

Runtime.

### See also

- ▶ [FONT](#) on page 1-90 for defining font palette entries.
- ▶ [“Using Fonts on Windows”](#) in the “Customizing UI Toolkit” chapter of the *UI Toolkit Reference Manual* for the hierarchy used to determine the global font.
- ▶ [%U\\_WNDFONT](#) in the “Utility Routines” chapter of the *UI Toolkit Reference Manual* for information on automatic font switching.

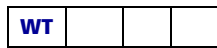
### Examples

In the **synergy.ini** file,

```
[rps]
FONT_GLOBAL=my_app_font
```



## FONT\_HEADER – Initial header section font



The FONT\_HEADER environment variable sets the default font for the application window's header section.

### Value

The name of a font palette entry. (**a**)

### Discussion

The sizing character specified in the definition of the font palette entry has no effect on the size of the header section.

### Setting location

The environment or the [synergy], [dbr], or [myprog] section of **synergy.ini** (where *myprog* is any **.dbr** file).

### Used by

UI Toolkit.

### See also

- ▶ [FONT](#) on page 1-90 for defining font palette entries.
- ▶ “Using Fonts on Windows” in the “Customizing UI Toolkit” chapter of the *UI Toolkit Reference Manual* for information on the font defaulting hierarchy.
- ▶ [%E\\_FONT](#) in the “Environment Routines” chapter of the *UI Toolkit Reference Manual* for setting the header font at runtime.

### Examples

In the **synergy.ini** file,

```
[myapp]
FONT_HEADER=header_font

[Fonts]
header_font=Times New Roman;12
```

## FONT\_HEIGHT – Font height



In traditional Synergy, the FONT\_HEIGHT environment variable sets the height of the global font (in conjunction with TYPE\_FACE and FONT\_WIDTH) if a global font is not otherwise specified. In Synergy .NET, it specifies the point size.

### Value

The height in logical units (traditional Synergy) or the point size (Synergy .NET) of the font. The default point size is 10. (n)

### Discussion

Traditional Synergy uses the specified font height for application windows of less than 132 columns and for the debugger window. The font height can be specified in one of three ways:

- ▶ If the height is greater than 0, it is transformed into device units and matched against the cell height of the available fonts.
- ▶ If it is 0, a reasonable default size is used.
- ▶ If it is less than 0, it is transformed into device units, and the absolute value is matched against the character height of the available fonts.

If the current font is not available in the requested size, Synergy substitutes the font that most closely resembles the font that was specified.

In traditional Synergy, we recommend that you use the FONT\_GLOBAL environment variable rather than FONT\_HEIGHT.

When you use any of the FONT\_ initialization settings and use the I\_FLDMOD subroutine to change the type of a field (for example, from alpha to numeric), be aware that the corresponding font isn't automatically applied. To update the font, use the D\_FLD\_FONT option for I\_FLDMOD.

### Setting location

The environment or the [synergy], [dbr], or [myprog] section of **synergy.ini** (where *myprog* is any .dbr file).

### Used by

Runtime, debugger.

## See also

- ▶ [“Using Fonts on Windows”](#) in the “Customizing UI Toolkit” chapter of the *UI Toolkit Reference Manual* for the hierarchy used to determine the global font.
- ▶ [FONT\\_GLOBAL](#) on page 1-96.

## Examples

In the **synergy.ini** file,

```
[synergy]  
FONT_HEIGHT=-17
```

## FONT\_INFO – Initial information line font



The FONT\_INFO environment variable sets the default font for the application window's information line.

### Value

The name of a font palette entry. (**a**)

### Discussion

The sizing character specified in the definition of the font palette entry has no effect on the size of the information line.

### Setting location

The environment or the [synergy], [dbr], or [myprog] section of **synergy.ini** (where *myprog* is any **.dbr** file).

### Used by

UI Toolkit.

### See also

- ▶ [FONT](#) on page 1-90 for defining font palette entries.
- ▶ “[Using Fonts on Windows](#)” in the “Customizing UI Toolkit” chapter of the *UI Toolkit Reference Manual* for information on the font defaulting hierarchy.
- ▶ [%E\\_FONT](#) in the “Environment Routines” chapter of the *UI Toolkit Reference Manual* for setting the information line font at runtime.

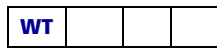
### Examples

In the **synergy.ini** file,

```
[myapp]
FONT_INFO=info_font

[Fonts]
info_font=Courier;10
```

## FONT\_LIST – List font



The FONT\_LIST environment variable sets the default font for any list that does not have its own font specification. (The font for a list is controlled by the font assigned to the input window associated with the list.)

### Value

The name of a font palette entry. (**a**)

### Discussion

FONT\_LIST can be used to more easily migrate your application to proportional fonts.

When you use any of the FONT\_ initialization settings and use the I\_FLDMOD subroutine to change the type of a field (for example, from alpha to numeric), be aware that the corresponding font isn't automatically applied. To update the font, use the D\_FLD\_FONT option for I\_FLDMOD.

### Setting location

The environment or the [synergy], [dbr], or [myprog] section of **synergy.ini** (where *myprog* is any **.dbr** file).

### Used by

UI Toolkit.

### See also

- ▶ [FONT on page 1-90](#) for defining font palette entries.
- ▶ “Using Fonts on Windows” in the “Customizing UI Toolkit” chapter of the *UI Toolkit Reference Manual* for information on the font defaulting hierarchy.

### Examples

In the **synergy.ini** file,

```
[myapp]
FONT_LIST=my_list_font
```

## FONT\_NUMFLD – Numeric field font



The FONT\_NUMFLD environment variable sets the default font for all numeric input fields that do not have their own font specification.

### Value

The name of a font palette entry. (**a**)

### Discussion

FONT\_NUMFLD can be used to more easily migrate your application to proportional fonts.

When you use any of the FONT\_ initialization settings and use the I\_FLDMOD subroutine to change the type of a field (for example, from alpha to numeric), be aware that the corresponding font isn't automatically applied. To update the font, use the D\_FLD\_FONT option for I\_FLDMOD.

### Setting location

The environment or the [synergy], [dbr], or [myprog] section of **synergy.ini** (where *myprog* is any **.dbr** file).

### Used by

UI Toolkit.

### See also

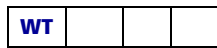
- ▶ [FONT on page 1-90](#) for defining font palette entries.
- ▶ [“Using Fonts on Windows”](#) in the “Customizing UI Toolkit” chapter of the *UI Toolkit Reference Manual* for information on the font defaulting hierarchy.

### Examples

In the **synergy.ini** file,

```
[myapp]
FONT_NUMFLD=my_numeric_font
```

## FONT\_PROMPT – Prompt font



The FONT\_PROMPT environment variable sets the default font for all input field prompts that do not have their own font specification.

### Value

The name of a font palette entry. **(a)**

### Discussion

FONT\_PROMPT can be used to more easily migrate your application to proportional fonts.

When you use any of the FONT\_ initialization settings and use the I\_FLDMOD subroutine to change the type of a field (for example, from alpha to numeric), be aware that the corresponding font isn't automatically applied. To update the font, use the D\_FLD\_FONT option for I\_FLDMOD.

### Setting location

The environment or the [synergy], [dbr], or [myprog] section of **synergy.ini** (where *myprog* is any **.dbr** file).

### Used by

UI Toolkit.

### See also

- ▶ [FONT on page 1-90](#) for defining font palette entries.
- ▶ [“Using Fonts on Windows”](#) in the “Customizing UI Toolkit” chapter of the *UI Toolkit Reference Manual* for information on the font defaulting hierarchy.

### Examples

In the **synergy.ini** file,

```
[myapp]
FONT_PROMPT=my_prompt_font
```

## FONT\_TEXT – Text font



The FONT\_TEXT environment variable sets the default font for the text in any window that does not have its own font specification.

### Value

The name of a font palette entry. (a)

### Discussion

FONT\_TEXT can be used to more easily migrate your application to proportional fonts.

When you use any of the FONT\_ initialization settings and use the I\_FLDMOD subroutine to change the type of a field (for example, from alpha to numeric), be aware that the corresponding font isn't automatically applied. To update the font, use the D\_FLD\_FONT option for I\_FLDMOD.

### Setting location

The environment or the [synergy], [dbr], or [myprog] section of **synergy.ini** (where *myprog* is any **.dbr** file).

### Used by

UI Toolkit.

### See also

- ▶ [FONT on page 1-90](#) for defining font palette entries.
- ▶ “[Using Fonts on Windows](#)” in the “Customizing UI Toolkit” chapter of the *UI Toolkit Reference Manual* for information on the font defaulting hierarchy.

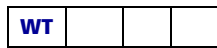
### Examples

In the **synergy.ini** file,

```
[myapp]  
FONT_TEXT=my_text_font
```



## FONT\_WIDTH – Font width



The FONT\_WIDTH environment variable sets the width of the global font (in conjunction with TYPE\_FACE and FONT\_HEIGHT) if a global font is not otherwise specified.

### Value

The average width, in logical units, of characters in the font.

### Discussion

Synergy/DE on Windows uses the specified font width for application windows less than 132 columns. It is also used by Synergy DBL and the debugger. We recommend that you use the FONT\_GLOBAL environment variable rather than FONT\_WIDTH.

If the width is 0, the aspect ratio of the device is matched against the digitization aspect ratio of the available fonts to find the closest match, determined by the absolute value of the difference.

If the current font is not available in the requested size, Synergy/DE on Windows substitutes the font that most closely resembles the font that was specified.

When you use any of the FONT\_ initialization settings and use the I\_FLDMOD subroutine to change the type of a field (for example, from alpha to numeric), be aware that the corresponding font isn't automatically applied. To update the font, use the D\_FLD\_FONT option for I\_FLDMOD.

### Setting location

The environment or the [synergy], [dbr], or [myprog] section of **synergy.ini** (where *myprog* is any .dbr file).

### Used by

Runtime.

### See also

- ▶ [“Using Fonts on Windows”](#) in the “Customizing UI Toolkit” chapter of the *UI Toolkit Reference Manual* for the hierarchy used to determine the global font.
- ▶ [FONT\\_GLOBAL on page 1-96.](#)

### Examples

In the **synergy.ini** file,

```
[synergy]
FONT_WIDTH=0
```

## GENESIS\_HOME – Connect file



The GENESIS\_HOME environment variable specifies the xfODBC connect file directory.

### Value

The directory that contains the connect file(s) specifying the location of the system catalog.

### Discussion

The GENESIS\_HOME environment variable is required and is automatically set when you install xfODBC. You can change this setting if necessary.

GENESIS\_HOME is used by the xfODBC driver, DBA, and **dbcreate**. It is used when you generate system catalogs, when you modify system catalogs, and when you connect to the database.

### Setting location

- ▶ For stand-alone configurations on Windows and UNIX, GENESIS\_HOME must be set in the environment.
- ▶ On UNIX, you can change this setting either manually or by sourcing the **setsde** script file (located in the synergyde directory).
- ▶ For stand-alone configurations on OpenVMS, GENESIS\_HOME must be set in **CONNECT\_STARTUP.COM**.
- ▶ In client/server configurations, GENESIS\_HOME must be set in the environment on the server, and it must be set before starting the OpenNet server. (Note that the SQL OpenNet server doesn't use settings in **synergy.ini**, and it uses only settings made before it's started.) GENESIS\_HOME must also be set in the environment on the client unless you set GENESIS\_MSG\_FILE.
- ▶ GENESIS\_HOME cannot be set in **synergy.ini**.

### Used by

xfODBC.

### See also

[“Setting Options and File Locations”](#) in the “Preliminary Steps” chapter of the *xfODBC User's Guide*.

### Examples

On Windows,

```
set GENESIS_HOME=c:\synergyde\connect\synodbc
```

## GENESIS\_INITSQL – SQL options file



The GENESIS\_INITSQL environment variable specifies the SQL options file.

### Value

The path and filename of your SQL options file.

### Discussion

The GENESIS\_INITSQL environment variable enables you to specify a file that contains predefined SQL statements. This includes all options that can be set with the SET OPTION command. The SQL statements in this file are executed each time a connection is made to the driver.

### Setting location

The environment. For client/server configurations, GENESIS\_INITSQL must be set on the server. On Windows, GENESIS\_INITSQL must be set in **opennet.srv**.

### Used by

xfODBC.

### See also

- ▶ [“Creating a file for query processing options”](#) in the “Configuring Data Access” chapter of the *xfODBC User’s Guide*.
- ▶ [Appendix B: SQL Support](#) in the *xfODBC User’s Guide* for information on SET OPTION.

### Examples

On Windows,

```
set GENESIS_INITSQL=c:\synergyde\connect\synodbc\options.sql
```

## GENESIS\_MSG\_FILE – Error message file



The GENESIS\_MSG\_FILE environment variable specifies the xfODBC error message file.

### Value

The path and name of the xfODBC error message file. The default error message file is **sql.msg**.

### Discussion

The GENESIS\_MSG\_FILE environment variable is automatically set when you install xfODBC.

To generate a system catalog, the **dbcreate** utility must be able to locate the error message file. If GENESIS\_MSG\_FILE is set, **dbcreate** uses this setting to locate the file. If this variable is *not* set, **dbcreate** attempts to locate the file **sql.msg** in the GENESIS\_HOME\lib directory.

### Setting location

The environment. For client/server configurations, GENESIS\_MSG\_FILE must be set on the client and the server. For services such as web servers that use the xfODBC driver, you can use the Env. variables field in the xfODBC Setup window to set this environment variable on the client.

### Used by

xfODBC.

### See also

- ▶ [GENESIS\\_HOME](#) on page 1-106.
- ▶ “Specifying the name and location of the error message file” in the “Preliminary Steps” chapter of the *xfODBC User’s Guide*.

### Examples

On Windows,

```
set GENESIS_MSG_FILE=c:\synergyde\connect\synodbc\lib\sql.msg
```

## HTTP\_NOESCAPE – Disable HTTP escaping and unescaping of URIs



Setting HTTP\_NOESCAPE turns off automatic escaping and unescaping of URIs by the Synergy HTTP document transport API.

### Value

Any value.

### Discussion

In version 8.3, we added automatic escaping of certain unescaped characters in a URI by %HTTP\_CLIENT\_GET and %HTTP\_CLIENT\_POST, and automatic unescaping of any escape codes in a URI by %HTTP\_SERVER\_RECEIVE. If you had already implemented your own escape mechanisms prior to this feature being added, you may want to set HTTP\_NOESCAPE to avoid breaking your existing code.



If you set HTTP\_NOESCAPE, you will need to translate characters such as spaces manually. For instance, in order to pass a URI that contains spaces, you must first convert each space to the characters "%20" in the URI. To get **my big file.html** from **myserver**, for example, you would pass the following URI to %HTTP\_CLIENT\_GET:

```
"http://myserver/my%20big%20file.html"
```

### Setting location

The environment.

### Used by

Synergy HTTP document transport API.

### See also

- ▶ [%SYN\\_ESCAPE\\_HANDLE](#) and [%SYN\\_UNESCAPE\\_HANDLE](#) in the “System-Supplied Subroutines and Functions” chapter of the *Synergy DBL Language Reference Manual*.
- ▶ [%HTTP\\_CLIENT\\_GET](#), [%HTTP\\_CLIENT\\_POST](#), and [%HTTP\\_SERVER\\_RECEIVE](#) in the “Synergy HTTP Document Transport API” chapter of the *Synergy DBL Language Reference Manual*.

### Examples

On Windows,

```
set HTTP_NOESCAPE=1
```

## HTTP\_RANDOM – File containing random data for HTTPS support



The HTTP\_RANDOM environment variable specifies a file that contains random data.

### Value

The path and name of a text file or an entropy-gathering device (if available on your system).

### Discussion

When the Synergy HTTP document transport API initializes HTTPS support, it uses random data to ensure that the data is secure, because random data helps prevent hackers from guessing patterns. For most systems, this random data can be gathered from recognized system entropy devices or from the screen itself, or from a temporary file filled with random logic. However, on some systems, these methods are not enough, and a “Cannot load random state” error is generated. To eliminate this error, you can define the HTTP\_RANDOM environment variable to point at a file that will be used (as a last resort) to gather random data when the HTTPS system is initialized.

### Setting location

The environment. On Windows, this environment variable can also be set in the [synergy], [dbr], or [myprog] section of **synergy.ini** (where *myprog* is any **.dbr** file).

### Used by

Synergy HTTP document transport API.

### See also

[“Synergy HTTP Document Transport API”](#) in the *Synergy DBL Language Reference Manual*.

### Examples

On Windows,

```
set HTTP_RANDOM=c:\windows\random.txt
```

On UNIX,

```
HTTP_RANDOM=/etc/entropy ;export HTTP_RANDOM
```

## HTTPSLIB – HTTPS runtime support file



The HTTPSLIB logical specifies the location of the HTTPS runtime support shared image file (**HTTPSLIB.EXE**).

### Value

The full path and filename of the **HTTPSLIB.EXE** shared image.

### Discussion

HTTPSLIB is used for HTTPS encryption.

### Setting location

The **SYNERGY\_STARTUP.COM** file found in SYS\$MANAGER (or **ACTIVATE\_SDE.COM** for alternate installations).

### Used by

Synergy HTTP document transport API.

### Examples

```
$ define/sys/exec HTTPSLIB SYNERGYDE$ROOT:[DBL.BIN]HTTPSLIB.EXE
```

## IDATASIZ – Irecovr buffer size



The IDATASIZ environment variable sets the size of the input buffer for the **irecovr** utility.

### Value

The size of the input buffer in bytes.

### Discussion

The default buffer size is 8192 bytes. The maximum size that you can set is limited to 32,768 bytes. Larger values can make **irecovr** run faster.

### Setting location

The environment.

### Used by

**Irecovr** utility.

### Examples

On UNIX,

```
IDATASIZ=4096 ;export IDATASIZ
```



## IGNIS2 – Ignore .is2 file




Setting the IGNIS2 environment variable allows a file to be opened even though a matching **.is2** file exists.

### Value

Any value.

### Discussion

When IGNIS2 is not set, an OPEN of an ISAM file fails if a file with the same name and the extension **.is2** exists.



The existence of an **.is2** file may mean that the previous use of **irecovr** failed and that the contents of the file are invalid.

### Setting location

The environment.

### Used by

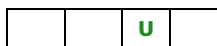
Runtime, compiler, **fcompare**, **fconvert**, **isutl**.

### Examples

On UNIX,

```
IGNIS2=1      ;export IGNIS2
```

# INTRAFILELOCKS – Control intraprocess file locking behavior



The INTRAFILELOCKS environment variable determines whether intraprocess file locks are enforced.

## Value

One of the following values:

- 0**      Do not enforce intraprocess file locks.
- 1**      Enforce intraprocess file locks. (default)

## Discussion

As of version 8.3, file locking is enforced among channels within the same process, and “File in use by another user” errors (\$ERR\_FINUSE) are generated as appropriate. This is the standard behavior on Windows and OpenVMS and avoids potential file problems that could result in loss of data on UNIX. Because UNIX locks are interprocess (unlike Windows and OpenVMS file locks, which are both inter- and intraprocess) and don’t block multiple uses on different channels from within the same process, we’ve provided this conventional approach to file locking. File-locking rules apply to all statements and routines that involve implicit or explicit file sharing (OPEN, COPY, SORT, DELET, RENAM, ISCLR, and ISAMC).

To override the default behavior (and continue executing version 8.1.7 and earlier applications that violate the above sharing rules), you can set INTRAFILELOCKS to 0.



We do not recommend setting INTRAFILELOCKS to 0. It is only supported for backwards compatibility.

On Oracle Solaris, which as of 8.1 supports inter- and intraprocess file sharing, INTRAFILELOCKS has no effect.

## Setting location

The environment.

## Used by

Runtime, xfServer.

## Examples

```
INTRAFILELOCKS=0 ;export INTRAFILELOCKS
```

## ISAMC\_REV – Create files compatible with other Synergy versions

WT	WN	U	
----	----	---	--

The ISAMC\_REV environment variable enables you to create ISAM files compatible with previous versions of Synergy using the ISAMC subroutine, or to convert ISAM files up to a higher revision level using **isutl** or **fconvert**.

### Value

One of the following revision numbers:

- 4** Create Synergy DBL 7-9 ISAM files.
- 6** Create Synergy DBL 10 ISAM files. (default)

### Discussion

By default, all ISAM files created with version 10 or higher are Revision 6 and are not recognizable by previous Synergy versions (although your program can still access files from earlier versions).

Revision 2 and 3 files cannot be used with the current version of **isutl**. In order to run **isutl** with these older files, you must first convert them to a minimum of Revision 5 using **isutl -p**. By default, this will convert the file to Revision 6, but if the file needs to be accessed by Synergy versions prior to 10.1 you'll need to specify **isutl -p 5** and convert the file to Revision 5 instead.



As of Synergy/DE 10, new Revision 2 and 3 files can no longer be created. Although you can still access them in 10.1, we plan to remove support for these revisions in a future release.

---

If you are using ISAMC\_REV to maintain an ISAM file revision other than the default, it must be set by every Synergy user who may create a file.



Setting this variable for the runtime does not affect how xfServer handles the file I/O. For example, if you set ISAMC\_REV in the **synergy.ini** file or in your application with SETLOG, and you're using xfServer for your file I/O, ISAMC\_REV will not be used by xfServer. You must also set ISAMC\_REV on the xfServer machine for the xfServer process.

---

## Environment Variables

ISAMC\_REV

### Setting location

The environment. ISAMC\_REV can be reset by the SETLOG subroutine, and the runtime interprets the new setting.



If you use SETLOG with ISAMC\_REV, only the current thread and newly created threads are affected. Prior threads are not changed.

---

### Used by

Runtime, compiler, **fcompare**, **fconvert**, **isutl**.

### See also

[“Patching an ISAM file to another version”](#) in the “Synergy DBMS” chapter of *Synergy Tools*.

### Examples

On UNIX,

```
ISAMC_REV=4      ;export ISAMC_REV
```

## ISLOGMAX – Maximum size of isutl log file

WT	WN	U	
----	----	---	--

The ISLOGMAX environment variable sets the maximum size of the **isutl** log file.

### Value

The maximum size of the **isutl** log file, in kilobytes, or one of the following values:

- 1**      Log file size is unlimited.
- 0**      Disable logging.

### Discussion

The default maximum size of the **isutl** log file is 1 megabyte (1,024 kilobytes). If the log file exceeds the maximum size, the oldest 25 percent of the file will be removed.

### Setting location

The environment.

### Used by

**isutl** utility.

### See also

- ▶ [isutl](#) in the “Synergy DBMS” chapter of *Synergy Tools*.
- ▶ [ISUTLLOG](#) on page 1-118.

### Examples

On UNIX,

```
ISLOGMAX=2048      ;export ISLOGMAX
```

## ISUTLLOG – isutl log filename

WT	WN	U	
----	----	---	--

The ISUTLLOG environment variable specifies the name of the log file for the **isutl** utility.

### Value

The path and name of the **isutl** log file.

### Discussion

The default log filename is **TEMP:isutl.log** on Windows and **DBLDIR:isutl.log** on UNIX.

### Setting location

The environment.

### Used by

**isutl** utility.

### See also

- ▶ [isutl](#) in the “Synergy DBMS” chapter of *Synergy Tools*.
- ▶ [ISLOGMAX](#) on [page 1-117](#).

### Examples

On UNIX,

```
ISUTLLOG=DBLDIR:isam.log      ;export ISUTLLOG
```

## **JBWAIT – Set wait time for RUNJB**

The JBWAIT environment variable was removed from Synergy DBL in version 8.3.

## KEEP\_BORDER – Always keep window border



The KEEP\_BORDER environment variable causes the WPO\_KEEPBRDR setting of the W\_PROC WP\_OPTION subfunction to be used.

### Value

1.

### Discussion

By default, when a window is one less in height or width than the size of the application window, the window border is turned off. WPO\_KEEPBRDR prevents window borders from being turned off due to the size of the window. The WPO\_HIDEBRDR option restores the default behavior.

### Setting location

The environment or the [synergy], [dbr], or [myprog] section of **synergy.ini** (where *myprog* is any **.dbr** file).

### Facilities

Runtime.

### Examples

```
KEEP_BORDER=1
```



# LIBBSIZ – Librarian buffer size



The LIBBSIZ environment variable sets the size of output cache buffers for the Synergy librarian. Using a larger buffer size may improve the performance on large libraries.

## Value

The size of a cache buffer in bytes.

## Discussion

The default buffer size is 16384 bytes. The maximum size you can set is limited by the memory available on your system.

## Setting location

The environment. On Windows, this environment variable can also be set in the [synergy] or [dblibr] section of **synergy.ini**.

## Used by

Librarian.

## Examples

On Windows, if set in the **synergy.ini** file,

```
[synergy]
LIBBSIZ=16384
```

## LIBNBUF – Number of librarian cache buffers

WT		U	
----	--	---	--

The LIBNBUF environment variable sets the number of cache buffers for the Synergy librarian.

### Value

The number of buffers.

### Discussion

The default is eight buffers. A higher number of buffers may improve the performance on large libraries. The maximum number of buffers you can set is limited only by the memory available on your system.

### Setting location

The environment. On Windows, this environment variable can also be set in the [synergy] or [dblibr] section of **synergy.ini**.

### Used by

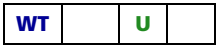
Librarian.

### Examples

On UNIX,

```
LIBNBUF=16      ;export LIBNBUF
```

## LNKBSIZ – Linker buffer size



The LNKBSIZ environment variable sets the size of output cache buffers for the Synergy linker.

### Value

The size of a cache buffer in bytes.

### Discussion

The default buffer size is 16384 bytes. Using a larger buffer size may improve performance on large programs. The maximum size you can set is limited by the memory available on your system.

### Setting location

The environment. On Windows, this environment variable can also be set in the [synergy] or [dblink] section of **synergy.ini**.

### Used by

Linker.

### Examples

On Windows, if set at the command prompt,

```
set LNKBSIZ=16384
```

## LNKNBUFF – Number of linker cache buffers

WT		U	
----	--	---	--

The LNKNBUFF environment variable sets the number of cache buffers for the Synergy linker.

### Value

The number of buffers.

### Discussion

The default is eight buffers. The maximum number of buffers you can set is limited by the memory available on your system.

### Setting location

The environment. On Windows, this environment variable can also be set in the [synergy] or [dblink] section of **synergy.ini**.

### Used by

Linker.

### Examples

On UNIX,

```
LNKNBUFF=16      ;export LNKNBUFF
```

## MAXMEM – Maximum allocated memory

WT		U	
----	--	---	--

The MAXMEM environment variable specifies the maximum amount of memory (in bytes) that the runtime allocates for user program code and data before removing inactive segments from memory.

### Value

The maximum amount of memory (in bytes) that you want allocated before inactive memory segments are removed from memory.

### Discussion

The default value for MAXMEM on UNIX is 1,310,720 bytes (1.25 MB). The default value on Windows is 8,388,608 bytes (8 MB). On Windows, a MAXMEM minimum of 4 MB is enforced, even if an explicit MAXMEM value has been specified. The maximum number of bytes that you can specify is limited by the memory available on your system.

Larger values may dramatically improve performance. Smaller values cause the memory segments to be released more often, slowing down performance but conserving memory.

If memory is not large enough to run the program after releasing all available segments, the internal value for maximum allocated memory is increased to be large enough to contain the minimum required program segments for execution. It is never reduced. If it exceeds any value specified by MAXMEMMAX, an error occurs.

If more than 10 segment reclamations occur in a one-second interval, MAXMEM is automatically increased by 100,000. To see the current MAXMEM value for your program, use SHOW MEMORY in the debugger.

If MAXMEM is greater than 50,000,000, the runtime never reclaims segments. This is to assist with VAX DIBOL code migration, where records in routines are assumed to be static records.

To check whether memory reclamation is occurring with a specific value of MAXMEM, set the MEMDBG environment variable to 1. The system beeps on each reclamation.

On Windows, for optimal performance, set MAXMEM per program in the [myprog] section of your **synergy.ini** file:

- ▶ When UI Toolkit is installed, a MAXMEM setting of 16 MB ( $16 \times 2^{20}$ ) is added to the [COMPOSER] section of **synergy.ini**.
- ▶ When Repository is installed, a MAXMEM setting of 3 MB ( $3 \times 2^{20}$ ) is added to the [RPS] section of **synergy.ini**.
- ▶ When ReportWriter is installed, a MAXMEM setting of 3 MB ( $3 \times 2^{20}$ ) is added to the [RPT] section of **synergy.ini**.

## Environment Variables

### MAXMEM

#### Setting location

The environment. On Windows, this environment variable can also be set in the [synergy], [dbr], or [myprog] section of **synergy.ini** (where *myprog* is any **.dbr** file).

#### Used by

Runtime.

#### Examples

On Windows, if set in the **synergy.ini** file,

```
[synergy]
MAXMEM=2097152
```

## MAXMEMMAX – Test maximum allocated memory



MAXMEMMAX is a debugging aid to see how your application would work if its memory was limited to a certain value.

### Value

The maximum amount of memory (in bytes).

### Setting location

The environment. On Windows, this environment variable can also be set in the [synergy], [dbr], or [myprog] section of **synergy.ini** (where *myprog* is any **.dbr** file).

### Used by

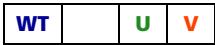
Runtime.

### Examples

On UNIX,

```
MAXMEMMAX=2000000 ;export MAXMEMMAX
```

## MAXRECURSELEVEL – Maximum number of recursion levels



MAXRECURSELEVEL enables you to specify a limit that is greater than the default 1500 levels of method, function, or subroutine calls (or the maximum for the system stack, if it is less, as on 64-bit Windows).

### Value

The maximum number of recursion levels that can occur before an error is generated.

### Discussion

By default, the runtime detects when approximately 1500 levels of method, subroutine, or function calls (or the maximum for the system stack) have been made and generates a fatal “Runtime stack overflow” error (STKOVN) when that level is exceeded. If the system stack allows, you can set MAXRECURSELEVEL to a value greater than 1500 to override the limit.



Based on the system stack, the specified value may or may not be possible. If it is not possible, your program could stop running without warning.

### Setting location

The environment.

### Used by

Runtime.

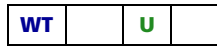
### Examples

On UNIX,

```
MAXRECURSELEVEL=2500 ;export MAXRECURSELEVEL
```



## MEMDBG – Monitor memory reclamation



The MEMDBG environment variable enables you to monitor memory reclamation.

### Value

Any value.

### Discussion

When MEMDBG is set, the runtime rings the terminal bell every time memory reclamation is performed. This allows you to tune your MAXMEM setting.




---

Do not set MEMDBG in the **synergy.ini** file. Doing so may result in serious problems.

---

### Setting location

The environment.

### Used by

Runtime.

### Examples

On Windows, if set at the command prompt,

```
set MEMDBG=1
```

## MINIMIZE\_LEADING – Reduce line spacing



The MINIMIZE\_LEADING environment variable reduces the amount of space between lines of text in windows on the screen.

### Value

One of the following values:

- 0** Normal leading (8 pixels) (default)
- 1** Less leading (6 pixels)
- 2** No leading (0 pixels)
- 3** Minimal leading (2 pixels)

### Discussion

Setting MINIMIZE\_LEADING to 1, 2, or 3 can enable you to fit more lines of text on your screen. It applies to all windows, including the application container window. (In contrast, the UI Toolkit's %U\_WNDSTYLE function only applies to one window.)

By default, the leading between rows is large enough to allow space for an edit control frame and its 3-D effects and to avoid any clipping of text within that edit control. Edit controls are used to frame input fields.

Setting MINIMIZE\_LEADING to 1 reduces the amount of leading to just the amount required to display the frame. Some clipping of text may occur, and 3-D effects of adjacent fields may overlap.

Setting MINIMIZE\_LEADING to 2 eliminates all leading between lines. This means that no extra space is allowed for an edit control frame. If edit controls are displayed, they overlap one another noticeably.

Setting MINIMIZE\_LEADING to 3 may be useful when using applications that are purely ACCEPT/DISPLAY/READS programs or that use only the Synergy windowing API and no UI Toolkit calls.

Calling %U\_WNDSTYLE for a window and specifying D\_NO\_LEADING is equivalent to setting MINIMIZE\_LEADING=2 for a single window. Specifying D\_NO\_LEADING overrides any setting of MINIMIZE\_LEADING for that window. However, if you call %U\_WNDSTYLE and specify D\_LEADING, the MINIMIZE\_LEADING setting applies to that window.

If you use `MINIMIZE_LEADING=2` to eliminate all inter-row spacing and you are using a Synergy window as a “background” display window, you may want to use

```
xcall w_proc(WP_POSITION, wndid, 0, 0)
```

to position that window at the exact upper-left corner of the application window. Otherwise, on some platforms and with some font combinations, the window may be placed several pixels below the very top.

## Setting location

The environment or the `[synergy]`, `[dbr]`, or `[myprog]` section of **synergy.ini** (where *myprog* is any **.dbr** file).

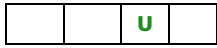
## Used by

Runtime.

## Examples

```
set MINIMIZE_LEADING=1
```

## MSGWAIT – Licensing and message controller



The MSGWAIT environment variable specifies the amount of time to wait for queued messages.

### Value

The total time in seconds to wait for queued messages.

### Discussion

MSGWAIT is normally set to 5 seconds. In excessively slow environments, this number can be increased such that a message time-out does not occur.

### Setting location

The environment.

### Used by

Runtime.

### Examples

```
MSGWAIT=10      ;export MSGWAIT
```

# NUMBUFS – Data file cache buffers

WT	WN	U	
----	----	---	--



This environment variable is deprecated and should no longer be set.

## Value

The number of buffers.

## Discussion

NUMBUFS sets the number of cache buffers used for each file.

Files opened with I/O caching (which occurs automatically in Synergy/DE 10 and above) allocate buffers dynamically depending on the size of the file. The number of buffers is based on the best mix of cache buffers for a particular file with respect to usage, and that is the sum of all keys’ index depths plus two times the number of keys. The size of each cache buffer is about the size of the index PAGE size for a file. See “Page size” in the “Synergy DBMS” chapter of *Synergy Tools* for more information.

## Setting location

The environment. On Windows, this environment variable can also be set in the [synergy], [dbl], [dbr], [dblink], [dblibr], or [myprog] section of **synergy.ini** (where *myprog* is any **.dbr** file).

## Used by

Runtime, compiler, **fcompare**, **fconvert**, **isutl**, **irecovr**.

## OPENNET\_POLL\_TIME – SQL OpenNet service poll interval

WT	WN		
----	----	--	--

The OPENNET\_POLL\_TIME environment variable specifies the period of time that **sqld** waits before polling the Synergy/DE OpenNet Server service (**SynSQL**).

### Value

The number of milliseconds to wait.

### Discussion

The OPENNET\_POLL\_TIME environment variable enables you to specify how often the service program **sqld** will check to see if the daemon(s) (**vtxnetd/vtxnet2**) are running. By default, **sqld** polls at 600,000-millisecond (10-minute) intervals.

### Setting location

OPENNET\_POLL\_TIME must be set in **opennet.srv**.

### Used by

xfODBC and SQL Connection.

### See also

- ▶ [“Understanding SQL OpenNet on Windows”](#) in the “Configuring Connectivity Series” chapter of the *Installation Configuration Guide*.
- ▶ [“The sqld program”](#) in the “Configuring Connectivity Series” chapter of the *Installation Configuration Guide*.

### Examples

The following example sets the poll interval to one minute (60,000 milliseconds):

```
OPENNET_POLL_TIME=60000
```

## OPTIMIZE\_REDRAW – Disable redraw optimization



The OPTIMIZE\_REDRAW environment variable disables the Synergy runtime’s optimization of screen redraw and causes all repainting to occur immediately.

### Value

0.

### Discussion

The Synergy runtime on Windows attempts to minimize the repainting of windows by occasionally turning updates off. Updates are automatically resumed when a W\_UPDT subroutine (or its implied equivalent) or any operation that causes physical window updates to occur (such as field input, menu processing, and so forth) is processed. However, some applications have experienced undesirable display effects while updates are off. Especially if updates remain off for an extended period of time, other windows on the desktop may “show through” the Synergy application.

To disable the optimization of redraw, set OPTIMIZE\_REDRAW in the environment prior to starting **dbr.exe**, or put it in **synergy.ini**. Currently, we only look for a value of 0, and if that is found, we disable repainting optimization. All other values for this variable currently have the same behavior as not setting the variable and cause normal redraw optimization to occur. However, we recommend that you only use a value of 0 or leave the variable unset, so that we may reserve other values for other possible operational behaviors in the future.

Setting OPTIMIZE\_REDRAW may cause excessive repainting to occur in the application, but it may also solve other display anomalies. We recommend that you do *not* use this setting unless you need it to cure known display problems. If OPTIMIZE\_REDRAW is set, XCALL U\_UPDATE(FALSE) (to explicitly turn updates off) has no effect.

If the container is not moved, only the container and contained windows are updated. However, if the container is moved or resized, the whole desk top is repainted when updates are turned back on. This is a Microsoft Windows limitation.

### Setting location

The environment or in the [synergy], [dbr], or [myprog] section of **synergy.ini** (where *myprog* is any **.dbr** file).

### Used by

Runtime.

### Examples

```
set OPTIMIZE_REDRAW=0
```

### PALETTE – Synergy color palette



The PALETTE setting defines entries in the color palette.

#### Value

PALETTE is specified as follows:

PALETTE=*f/b,f/b,f/b,f/b,f/b,f/b,f/b,f/b,f/b,f/b,f/b,f/b,f/b,f/b,f/b,f/b*

where each *f/b* pair is a color palette entry with a foreground color (*f*) and a background color (*b*). The first *f/b* pair is for color palette entry 1, the second is for color palette entry 2, and so forth.

#### Discussion

The color palette has 16 entries that are used to assign colors to renditions, which define the appearance of user interface elements in UI Toolkit programs and Synergy programs that use the windowing API. A default color palette is loaded into memory when the Synergy runtime starts, but you can use PALETTE to override the entire default color palette or just specific entries in the default color palette. Note that

- ▶ there are 256 user colors (color 0 through color 255) and 30 system colors (color 256 through color 285) that you can assign to palette entries. See “[Colors and the color palette](#)” in the “Synergy Windowing API” chapter of the *Synergy DBL Language Reference Manual* for more information.
- ▶ a PALETTE setting does not need to include all 16 color palette entries. You can omit an entry, but you must include a comma placeholder for the omitted entry unless it is at the end of the string. (See [Examples](#) below.)
- ▶ PALETTE settings override the default memory-resident color palette (or specific entries in the default color palette).

#### Setting location

The [colors] section of **synergy.ini**.

#### Used by

Runtime and UI Toolkit.

#### See also

- ▶ [COLORn](#) on page 1-36.
- ▶ “[Customizing the Look of Your Application](#)” in the “Customizing UI Toolkit” chapter of the *UI Toolkit Reference Manual*.



## Examples

The following example defines the entire color palette.

```
[colors]
PALETTE=264/271,0/15,264/271,270/269,0/7,0/7,0/7,0/7,0/7,0/7,0/7,0/7,0/7,0/7,0/7,0/7,0/7,0/7,0/15
```

The next example defines the second and fourth color palette entries as **270/269**. All other color palette entries will have their default values (or values set in **synergy.ini** if this setting is in **synuser.ini**).

```
[colors]
PALETTE=,270/269,,270/269
```

## PCMD – Print command



The PCMD environment variable specifies a print command and causes all LPQUE options to be ignored.

### Value

A command that LPQUE uses in place of the standard System V print command (for example, “lp”).

### Discussion

If you don’t have a printer connected but you want to test your programs, you can set PCMD equal to “cat,” and LPQUE will send your output to your terminal. (We recommend, however, that you use system option #22 and **dblpq**.)

System option #22 overrides PCMD.

### Setting location

The environment.

### Used by

Runtime.

### Examples

```
PCMD="lpr -q hp-laserjet" ;export PCMD
```

Using this example, the statement

```
lpque (prog.dbl)
```

produces the following command:

```
lpr -q hp-laserjet prog.dbl
```

## PRINT\_METHOD – LPQUE print method

WT	WN		
----	----	--	--

The PRINT\_METHOD environment variable enables you to choose the print method when using the LPQUE statement.

### Value

**escape.**

### Discussion

When PRINT\_METHOD=escape is set, data from files printed with the LPQUE statement goes directly to the printer, without Print Manager affecting the escape codes. The LPQUE statement uses printer driver default values, and any changes made to the driver are ignored.

### Setting location

The environment or the [synergy], [dbr], or [myprog] section of **synergy.ini** (where *myprog* is any **.dbr** file). To be used by xfServer, PRINT\_METHOD must be set in the Windows registry. Refer to [“Defining environment variables for xfServer services”](#) in the “Configuring xfServer” chapter of the *Installation Configuration Guide* for information on setting environment variables in the Windows registry.

### Used by

Runtime, xfServer.

### Examples

If set in the **synergy.ini** file,

```
[synergy]
PRINT_METHOD=escape
```

## PRINT\_PREVIEW\_BOTTOM – Bottom coordinate for print preview window

WT			
----	--	--	--

The PRINT\_PREVIEW\_BOTTOM environment variable specifies the lower coordinate for the print preview window in the Synergy Windows printing API.

### Value

The bottom coordinate, in pixels.

### Discussion

The print preview window enables users to preview any page of a document to see how it will look when it is printed. They can change the size or position of the print preview window. When you exit the print preview function, the bottom coordinate of the window is stored in PRINT\_PREVIEW\_BOTTOM by the Synergy Windows printing API. Do not edit this value manually.

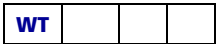
### Setting location

Written to the [synergy] section of the **synergy.ini** file by the Synergy Windows printing API.

### Used by

Synergy Windows printing API.

## PRINT\_PREVIEW\_LEFT – Left coordinate for print preview window



The PRINT\_PREVIEW\_LEFT environment variable specifies the left coordinate for the print preview window in the Synergy Windows printing API.

### Value

The left coordinate, in pixels.

### Discussion

The print preview window enables users to preview any page of a document to see how it will look when it is printed. They can change the size or position of the print preview window. When you exit the print preview function, the left coordinate of the window is stored in PRINT\_PREVIEW\_LEFT by the Synergy Windows printing API. Do not edit this value manually.

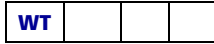
### Setting location

Written to the [synergy] section of the **synergy.ini** file by the Synergy Windows printing API.

### Used by

Synergy Windows printing API.

## PRINT\_PREVIEW\_SCROLL – Scrolling percentage in print preview window



The PRINT\_PREVIEW\_SCROLL environment variable specifies what percentage of the display area to scroll (if it is scrollable) when an arrow key is pressed.

### Value

A number between 1 and 100, inclusive, that specifies the percentage of the display area to scroll when an arrow key is pressed.

### Discussion

The print previewer evaluates this environment variable each time the previewer is opened, so that setting the value programmatically can take effect on the next preview.

If PRINT\_PREVIEW\_SCROLL is not set, or if it is set to an invalid value, the value defaults to 5 (1/20th of the display area).

### Setting location

The environment or the [synergy] section of **synergy.ini**.

### Used by

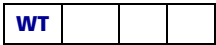
Synergy Windows printing API.

### Examples

The following example from the **synergy.ini** file scrolls 10 percent of the display area when an arrow key is pressed:

```
[synergy]
PRINT_PREVIEW_SCROLL=10
```

## PRINT\_PREVIEW\_TOP – Top coordinate for print preview window



The PRINT\_PREVIEW\_TOP environment variable specifies the upper coordinate for the print preview window in the Synergy Windows printing API.

### Value

The top coordinate, in pixels

### Discussion

The print preview window enables users to preview any page of a document to see how it will look when it is printed. They can change the size or position of the print preview window. When you exit the print preview function, the top coordinate of the window is stored in PRINT\_PREVIEW\_TOP by the Synergy Windows printing API. Do not edit this value manually.

### Setting location

Written to the [synergy] section of the **synergy.ini** file by the Synergy Windows printing API.

### Used by

Synergy Windows printing API.

## PRINT\_PREVIEW\_ZOOM – Zoom factor for print preview window



The PRINT\_PREVIEW\_ZOOM environment variable specifies the zoom factor for the print preview window in the Synergy Windows printing API.

### Value

The zoom factor, which is a percentage.

### Discussion

The print preview window enables users to preview any page of a document to see how it will look when it is printed. They can zoom in or out, changing the size of the page as displayed in the window. When you exit the print preview function, the current zoom factor is stored in PRINT\_PREVIEW\_ZOOM by the Synergy Windows printing API.

If you want to set a system-wide default print preview zoom factor, you can set PRINT\_PREVIEW\_ZOOM in **synergy.ini**.

### Setting location

Written to [synergy] section of the **synergy.ini** file by the Synergy Windows printing API.

### Used by

Synergy Windows printing API.

### Examples

The following example from the **synergy.ini** file sets the zoom factor to 75 percent:

```
[synergy]
PRINT_PREVIEW_ZOOM=75
```



## PROFILE\_PROCESSOR\_TIME – Profile using accumulated CPU time

WT			
----	--	--	--

The PROFILE\_PROCESSOR\_TIME environment variable tells the Synergy DBL Profiler utility to calculate accumulated CPU time rather than elapsed CPU time.

### Value

Any value.

### Discussion

The Synergy DBL Profiler calculates elapsed CPU time according to the high-granularity system clock. To calculate accumulated CPU time, which is only updated every 20 milliseconds, set the PROFILE\_PROCESSOR\_TIME environment variable. Note that on a very fast processor, accumulated CPU time results can be so imprecise as to be almost meaningless, but may be advantageous when profiling significant amounts of input.

### Setting location

The environment or the [synergy] section of **synergy.ini**.

### Used by

Synergy DBL Profiler utility.

### See also

[“The Synergy DBL Profiler”](#) in the “General Utilities” chapter of *Synergy Tools*.

### Examples

```
set PROFILE_PROCESSOR_TIME=1
```

## PROXY\_HOST – Proxy host for remote URI requests



The PROXY\_HOST environment variable enables you to specify the proxy host name to use for remote URI requests through the Synergy HTTP document transport API.

### Value

The name of the proxy host server.

### Discussion

If PROXY\_HOST is set, remote URI requests are sent to this proxy host. If it's not set, a direct connection is attempted to the host contained in the URI.

### Setting location

The environment.

### Used by

Synergy HTTP document transport API.

### See also

[“Synergy HTTP Document Transport API”](#) chapter of the *Synergy DBL Language Reference Manual*.

### Examples

```
set PROXY_HOST="mymachine"
```

## PROXY\_LOCAL – Override handling of local URIs



The PROXY\_LOCAL environment variable enables you to override the handling of local URIs by the Synergy HTTP document transport API.

### Value

**true.**

### Discussion

By default, the HTTP document transport API connects directly to the host of a local URI. If PROXY\_LOCAL is set to **true**, the HTTP document transport API instead connects to the proxy server, identified by the PROXY\_HOST environment variable, for local URI requests.

### Setting location

The environment.

### Used by

Synergy HTTP document transport API.

### See also

[“Synergy HTTP Document Transport API”](#) chapter of the *Synergy DBL Language Reference Manual*.

### Examples

```
set PROXY_LOCAL="true"
```

## PROXY\_PORT – Proxy server port for remote URI requests



The PROXY\_PORT environment variable enables you to specify the port on the proxy server to use for remote URI requests through the Synergy HTTP document transport API.

### Value

The port number of the proxy host. The default is 80.

### Discussion

If PROXY\_PORT is set, the specified port is used when connecting to the proxy host. If it's not set, port 80 is used.

### Setting location

The environment.

### Used by

Synergy HTTP document transport API.

### See also

[“Synergy HTTP Document Transport API”](#) chapter of the *Synergy DBL Language Reference Manual*.

### Examples

```
set PROXY_PORT="85"
```

## PROXY\_SUBNET – Subnet mask to identify local URIs



The PROXY\_SUBNET environment variable specifies the subnet mask to use to identify local URIs within the Synergy HTTP document transport API.

### Value

The local subnet mask used to identify whether a given URI is a local URI. The default is 255.255.0.0.

### Discussion

This subnet mask is bitwise applied to the IP address of the host contained in the requested URI and compared to a known local IP address filtered by the same subnet mask to determine if the URI request is for a local server. Specify the subnet mask in dotted text form (for example, 255.255.255.0).

To help determine the correct value for PROXY\_SUBNET, you can view your subnet mask by running **ipconfig**. The following is sample output:

```
Windows IP Configuration

Ethernet adapter El90x1:

    IP Address. . . . . : 10.1.3.76
    Subnet Mask . . . . . : 255.255.0.0
    Default Gateway . . . . . : 10.1.1.1
```

### Setting location

The environment.

### Used by

Synergy HTTP document transport API.

### See also

[“Synergy HTTP Document Transport API”](#) chapter of the *Synergy DBL Language Reference Manual*.

### Examples

```
set PROXY_SUBNET="255.255.255.0"
```

## RECVCTL – Alter irecovr behavior

WT	WN	U	
----	----	---	--

The RECVCTL environment variable alters the default behavior of the **irecovr** utility.

### Value

**NO\_DSCAN.**

### Discussion

Setting RECVCTL to “NO\_DSCAN” tells **irecovr** not to scan the data file before recovering.

Normally, **irecovr** scans the data file before it starts recovery to determine if the data file is capable of being recovered.

### Setting location

The environment.

### Used by

**Irecovr** utility.

### Examples

On UNIX,

```
RECVCTL=NO_DSCAN      ;export RECVCTL
```

## RETAIN\_CONTEXT\_CHANGE\_ON\_SIGNAL – Set initial value of **g\_retaincontext**

WT		U	V
----	--	---	---

The RETAIN\_CONTEXT\_CHANGE\_ON\_SIGNAL environment variable is used by UI Toolkit's U\_START routine to determine the initial value of **g\_retaincontext** (a global defined in **tkctl.def**).

### Value

One of the following:

- 1** **g\_retaincontext** is set to true (1).
- Any other value **g\_retaincontext** is set to false (0).

### Discussion

RETAIN\_CONTEXT\_CHANGE\_ON\_SIGNAL sets the initial value of **g\_retaincontext**, which determines how context is handled when a menu entry is signaled from a method during I\_INPUT processing and a user action (such as a mouse click, ENTER, TAB, SHIFT+TAB, etc.) moves input context to a subsequent field or button. Prior to UI Toolkit 8.3, if a menu entry was signaled in this situation, Toolkit would incorrectly apply the menu entry processing to the subsequent field or button rather than to the field whose method called %M\_SIGNAL. This was corrected in Toolkit 8.3. By default, context now remains on the field whose method signaled the menu entry, which matches Toolkit behavior on UNIX and OpenVMS. You can, however, restore the previous behavior. If **g\_retaincontext** is set to true, Toolkit emulates Windows behavior for Toolkit versions prior to 8.3 (it moves input context to the subsequent field or button). If **g\_retaincontext** is set to false (the default), context remains on the field whose method signaled the menu entry.

For more information, see “**tkctl.def**” in the “Customizing UI Toolkit” chapter of the *UI Toolkit Reference Manual*.

If RETAIN\_CONTEXT\_CHANGE\_ON\_SIGNAL is not defined, **g\_retaincontext** is set to false (0).

### Setting location

The environment or the [synergy], [dbr], or [myprog] section of **synergy.ini** (where *myprog* is any **.dbr** file).

### Used by

UI Toolkit.

### Examples

```
set RETAIN_CONTEXT_CHANGE_ON_SIGNAL=1
```

## RETRYTIME – Change wait time for “File in use” errors

WT	WN		
----	----	--	--

To accommodate system events that may periodically access your files (such as virus scanners), OPEN, DELET, and RENAM will attempt to retry file access for up to 5 seconds before reporting that a file is in use. The RETRYTIME environment variable changes the amount of time they will retry.

### Value

The number of 1/10ths of a second to retry. The default is 50 (which is 5 seconds).

### Discussion

Because a virus scanner can take several seconds to scan a file, which sometimes causes a “File in use by another user” error (\$ERR\_FINUSE), the OPEN statement and the DELET and RENAM routines will by default retry for up to 5 seconds (50 one-tenth-of-a-second retries) before reporting that a file is in use. You can use RETRYTIME to lower the wait time if the operations are taking too long or raise it if you’re still getting unexplained \$ERR\_FINUSE errors.

### Setting location

The environment or the [synergy], [dbr], or [myprog] section of **synergy.ini** (where *myprog* is any **.dbr** file).

### Used by

Runtime, linker, librarian.

### Examples

The following example reduces the retry time to 1 second:

```
set RETRYTIME=10
```



## RPS – Repository directory



The RPS environment variable specifies the directory that contains your Repository distribution. It is required for normal operation of the Repository maintenance program and utilities.

### Value

The path, including the device, for the directory that contains the Repository distribution files.

### Setting location

- ▶ On Windows, the [synergy], [dbr], or [myprog] section of **synergy.ini** (where *myprog* is any **.dbr** file).
- ▶ On UNIX, the **setsde** file.
- ▶ On OpenVMS, the **SYNERGY\_STARTUP.COM** file (or **ACTIVATE\_SDE.COM** for alternate installations).

### Used by

Repository.

### Examples

On UNIX,

```
RPS=/usr/synergy/rps      ;export RPS
```

## RPSDAT – Repository data files directory



The RPSDAT environment variable defines the directory where Repository data files are located.

### Value

The path, including the device, for the directory that contains the Repository data files.

### Discussion

The default directory for Repository data files is the `rpsdat` subdirectory below the directory where Repository was installed. The RPSDAT directory contains the default repository files, **rpsmain.ism** and **rps-text.ism**, and the optional cross-reference file, **rpsxref.ism**.

### Setting location

- ▶ On Windows, the [synergy], [dbr], or [myprog] section of **synergy.ini** (where *myprog* is any **.dbr** file).
- ▶ On UNIX, the **setsde** file.
- ▶ On OpenVMS, the **SYNERGY\_STARTUP.COM** file (or **ACTIVATE\_SDE.COM** for alternate installations).

### Used by

Repository, ReportWriter, UI Toolkit, xfODBC, **fcompare**.

### Examples

On OpenVMS,

```
$ DEFINE/SYS/EXEC RPSDAT DKA0:[SYNERGY.RPS.RPSDAT]
```

## RPSLIB – Repository subroutine library directory



The RPSLIB environment variable defines the directory that contains the Repository subroutine library.

### Value

The path, including the device, for the directory that contains the Repository subroutine library.

### Discussion

The default directory for Repository subroutine library is the lib subdirectory below the directory where Repository was installed. The RPSLIB directory contains the subroutine library **ddlib.elb** (**ddlib.olb** on OpenVMS), as well as the definition file **ddinfo.def**.

### Setting location

- ▶ On Windows, the [synergy], [dbr], or [myprog] section of **synergy.ini** (where *myprog* is any **.dbr** file).
- ▶ On UNIX, the **setsde** file.
- ▶ On OpenVMS, the **SYNERGY\_STARTUP.COM** file (or **ACTIVATE\_SDE.COM** for alternate installations).

### Used by

Repository.

### Examples

On Windows,

```
[synergy]
RPSLIB=%SYNERGYDE%rps\lib
```

## RPSMFIL – Repository main file



The RPSMFIL environment variable specifies the full path and filename of the Repository main file.

### Value

The full path and filename of the Repository main file.

### Discussion

If the environment variable RPSMFIL is not set, Repository looks for the **rpsmain.ism** file in the path specified by RPSDAT. If RPSDAT is not set, Repository looks for the **rpsmain.ism** file in the current directory.

### Setting location

The environment. On Windows, this environment variable can also be set in the [synergy], [dbr], or [myprog] section of **synergy.ini** (where *myprog* is any **.dbr** file).

### Used by

Compiler, Repository, ReportWriter, UI Toolkit, xfODBC, **fcompare**.

### See also

[DBLDICTIONARY](#) on page 1-62.

### Examples

On Windows, if set in the **synergy.ini** file,

```
[synergy]
RPSMFIL=c:\home\rpsmain.ism
```

## RPSTFIL – Repository text file



The RPSTFIL environment variable specifies the full path and filename of the Repository text file.

### Value

The full path and filename of the Repository text file.

### Discussion

If the environment variable RPSTFIL is not set, Repository looks for the **rpstext.ism** file in the path specified by RPSDAT. If RPSDAT is not set, Repository looks for the **rpstext.ism** file in the current directory.

### Setting location

The environment. On Windows, this environment variable can also be set in the [synergy], [dbr], or [myprog] section of **synergy.ini** (where *myprog* is any **.dbr** file).

### Used by

Compiler, Repository, ReportWriter, UI Toolkit, xfODBC, **fcompare**.

### See also

[DBLDICTIONARY](#) on page 1-62.

### Examples

On UNIX,

```
RPSTFIL=/usr/rpstext.ism ;export RPSTFIL
```

## RPSTMP – Repository temporary files directory



The RPSTMP environment variable defines the location where Repository will create temporary files.

### Value

The path, including the device, for the directory that will contain Repository temporary files.

### Discussion

Repository puts any temporary files that it creates in RPSTMP if it is set. If RPSTMP is not set, Repository puts temporary files in TEMP if it is set. If TEMP is not set either, temporary files are placed in the current directory.

### Setting location

The environment. On Windows, this environment variable can also be set in the [synergy], [dbr], or [myprog] section of **synergy.ini** (where *myprog* is any **.dbr** file).

### Used by

Repository.

### Examples

On Windows, if set at the command prompt,

```
set RPSTMP=d:\temp
```

## RPSXFIL – Repository cross-reference file



The RPSXFIL environment variable specifies the full path and filename of the Repository cross-reference file.

### Value

The full path and filename of the Repository cross-reference file.

### Discussion

If the environment variable RPSXFIL is not set, Repository looks for the **rpsxref.ism** file in the path specified by RPSDAT. If RPSDAT is not set, Repository looks for the **rpsxref.ism** file in the current directory.

See “[Generating a Cross-Reference File](#)” in the “Utility Functions” chapter of the *Repository User’s Guide* for more information about Repository cross-reference files.

### Setting location

The environment. On Windows, this environment variable can also be set in the [synergy], [dbr], or [myprog] section of **synergy.ini** (where *myprog* is any **.dbr** file).

### Used by

Repository, ReportWriter.

### Examples

On OpenVMS,

```
$ DEFINE RPSXFIL DKA0:[REPORTS]RPSXREF.ISM
```

## RPT – ReportWriter directory



The RPT environment variable specifies the directory that contains your ReportWriter distribution. It is required for normal operation of the ReportWriter program and utilities.

### Value

The path, including the device, for the directory that contains the ReportWriter distribution files.

### Setting location

- ▶ On Windows, the [synergy], [dbr], or [myprog] section of **synergy.ini** (where *myprog* is any **.dbr** file).
- ▶ On UNIX, the **setsde** file.
- ▶ On OpenVMS, the **SYNERGY\_STARTUP.COM** file (or **ACTIVATE\_SDE.COM** for alternate installations).

### Used by

ReportWriter.

### Examples

On UNIX,

```
RPT=/usr/synergy/rpt      ;export RPT
```



## RPTDAT – ReportWriter data files directory



The RPTDAT environment variable defines the directory where ReportWriter data files are located.

### Value

The path, including the device, for the directory that contains the ReportWriter data files.

### Discussion

The default directory for ReportWriter data files is the RPTDAT subdirectory below the directory where the ReportWriter was installed. The RPTDAT directory contains the default report definition file, **reports.rpt**, and the window library file, **rptctl.ism**.

### Setting location

- ▶ On Windows, the [synergy], [dbr], or [myprog] section of **synergy.ini** (where *myprog* is any **.dbr** file).
- ▶ On UNIX, the **setsde** file.
- ▶ On OpenVMS, the **SYNERGY\_STARTUP.COM** file (or **ACTIVATE\_SDE.COM** for alternate installations).

### Used by

ReportWriter.

### Examples

On OpenVMS,

```
$ DEFINE/SYS/EXEC RPTDAT DKA0:[SYNERGY.RPT.RPTDAT]
```

## RPTDATE – Date input order



The RPTDATE environment variable specifies the input order for dates in ReportWriter. Setting RPTDATE affects the default date order that is used when dates are entered into ReportWriter input fields. Because it changes the UI Toolkit global variable **g\_date\_order**, it affects your application if you are using the ReportWriter's external subroutine interface.

### Value

One of the following input orders for date fields:

- 1 DDMMYY
- 2 YYMMDD

### Discussion

If RPTDATE is not set, the default input order for dates is MMDDYY.



---

If you are accessing ReportWriter from your application by external subroutine interface, using RPTDAT can affect the value of **g\_date\_order** in your application.

---

### Setting location

The environment. On Windows, this environment variable can also be set in the [synergy], [dbr], or [myprog] section of **synergy.ini** (where *myprog* is any **.dbr** file).

### Used by

ReportWriter.

### Examples

On OpenVMS,

```
$ DEFINE RPTDATE 2
```

## RPTEURO – European formatting



The RPTEURO environment variable specifies that European formatting conventions are applied to numeric values.

### Value

One of the following values:

- 0** MMDDYY or MMDDYYYY format
- 1** DDMMYY or DDMMYYYY format
- 2** YYMMDD or YYYYMMDD format

All other values are treated as 0.

### Discussion

If RPTEURO is set to any value, ReportWriter uses commas as decimal points and periods as separators in numeric values. If the date is a period date, RPTEURO is ignored.

When using RPTEURO, you must place a space between the literals and the comma in a subscript specification. For example:

```
"FIELD[1 , 2]"
```

This rule applies to subscripts specified within ReportWriter input fields and report schemas.

We recommend using the Synergy DBL LOCALIZE subroutine instead of RPTEURO in conjunction with ReportWriter's external subroutine interface. See [LOCALIZE](#) in the "System-Supplied Subroutines and Functions" chapter of the *Synergy DBL Language Reference Manual* for more information.

### Setting location

The environment. On Windows, this environment variable can also be set in the [synergy], [dbr], or [myprog] section of **synergy.ini** (where myprog is any **.dbr** file).

### Used by

ReportWriter.

### Examples

On UNIX,

```
RPTEURO=1 ;export RPTEURO
```

## RPTLIB – ReportWriter header file and shared library



The RPTLIB environment variable specifies the location of the ReportWriter header file (**reports.def**) and shared library (**synrpt.elb**, or **synrpt.exe** on OpenVMS).

### Value

The directory in which the ReportWriter header file and shared library reside.

### Discussion

RPTLIB should point to the rpt/lib directory under the directory where Synergy was installed.

### Setting location

- ▶ On Windows, the [synergy] section of **synergy.ini**.
- ▶ On UNIX, the **setsde** file.
- ▶ On OpenVMS, the **SYNERGY\_STARTUP.COM** file (or **ACTIVATE\_SDE.COM** for alternate installations).

### Used by

ReportWriter.

### Examples

On UNIX,

```
RPTLIB=/synergy/rpt/lib      ;export RPTLIB
```

## RPTRFIL – ReportWriter report definition file



The RPTRFIL environment variable specifies the full path and filename of the ReportWriter report definition file.

### Value

The full path and filename of the ReportWriter report definition file.

### Discussion

If the environment variable RPTRFIL is not set, ReportWriter looks for the **reports.rpt** file in the path specified by RPTDAT. If RPTDAT is not set, Repository looks for the **reports.rpt** file in the current directory.

### Setting location

The environment. On Windows, this environment variable can also be set in the [synergy], [dbr], or [myprog] section of **synergy.ini** (where *myprog* is any **.dbr** file).

### Used by

ReportWriter.

### Examples

On UNIX,

```
RPTRFIL=/usr/reports.ism      ;export RPTRFIL
```

## RPTTUT – ReportWriter tutorial data directory



The RPTTUT environment variable specifies the directory that contains the ReportWriter tutorial files.

### Value

The path for the directory in which the ReportWriter tutorial files are located.

### Discussion

The repository associated with the tutorial uses RPTTUT to locate the example data files. Do not modify this setting. It is unset automatically when ReportWriter is exited.

### Setting location

- ▶ On Windows, in the [rpt] section of **synergy.ini**. (This is set when ReportWriter is installed.)
- ▶ On UNIX, by **tutorial**.
- ▶ On OpenVMS, by **@tutorial.com**.

### Used by

ReportWriter.

### Examples

On Windows,

```
[rpt]
```

```
RPTTUT=%SYNERGYDE%rpt\tutor
```

## RPTUSR – ReportWriter argument string



The RPTUSR environment variable specifies the argument string used when chaining or spawning ReportWriter.

### Value

Refer to “[Spawning and Chaining to ReportWriter](#)” in the “Accessing ReportWriter from Your Application” chapter of the *ReportWriter User’s Guide* for the syntax and discussion of the ReportWriter argument string.

### Setting location

The environment. On Windows, this environment variable can also be set in the [synergy], [dbr], or [myprog] section of **synergy.ini** (where *myprog* is any **.dbr** file).

### Used by

ReportWriter.

### Examples

On UNIX,

```
RPTUSR="RPT:reports.rpt|myprog.dbr"      ;export RPTUSR
```

## RSFILPATH – Default file path for xfServer



The RSFILPATH environment variable defines the default directory on the xfServer machine for files that do not have a path specification.

### Value

The path on the server that you would like to use as the default file path.

### Discussion

The path set with RSFILPATH is used as a default location for files without a path specification. The directory you specify must already exist and must have write permission.

On Windows, if RSFILPATH is not specified, the default directory is C:\Users\Public\Public Documents. You can check the location of the default file path setting by running **synckusr** with the **-s** and **-p** options.



---

On Windows, if you have a local account (not a domain-level account) on the server, you can use the Local Path setting for the Home Folder in the user's account profile as the location in which to put files without a path specification. This setting overrides both RSFILPATH and the default directory mentioned above. To enable this, you will need to set the registry setting ENABLEUSERHIVE to 1 in **HKEY\_LOCAL\_MACHINE\SOFTWARE\Synergex\Synergy xfServer\service\_name\default** on the server machine.

---

On UNIX, if RSFILPATH is not specified, the default location for files without a path specification is the home directory.

### Setting location

On Windows, in the registry. We recommend that you use the Synergy Configuration Program to set environment variables for xfServer. See [“Defining environment variables for xfServer services”](#) in the “Configuring xfServer” chapter of the *Installation Configuration Guide*.

On UNIX, in the **synrc** file. See [“Defining environment variables for xfServer processes”](#) in the “Configuring xfServer” chapter of the *Installation Configuration Guide*.

### Used by

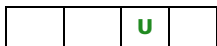
xfServer.



## See also

- ▶ [“Using xfServer on Windows”](#) and [“Using xfServer on UNIX”](#) in the “Configuring xfServer” chapter of the *Installation Configuration Guide*.
- ▶ [“The syncusr Utility”](#) in the “Configuring xfServer” chapter of the *Installation Configuration Guide*.

## RSLOGMAX – Maximum xfServer log file size



The RSLOGMAX environment variable specifies the maximum log file size allocated by the Synergy/DE xfServer daemon, **rsynd**.

### Value

The size of the log file in bytes.

### Discussion

The minimum log file size is 1,024 bytes. The default log file size is 10,000 bytes. This is enough room to log approximately 100 xfServer starts and stops. Use RSLOGMAX to specify a larger log file size.

Use RSYNDLOG (see [RSYNDLOG on page 1-171](#)) to specify a log file other than the default, **/usr/lib/rsynd.log**.

RSLOGMAX must be set prior to starting **rsynd**. Because **rsynd** is started from an **rc** system startup file, you must also set RSYNDLOG and/or RSLOGMAX there as well.

### Setting location

The environment before running **rsynd** (usually in the **/etc/rc** file).

### Used by

xfServer.

### See also

[“Using xfServer on UNIX”](#) in the “Configuring xfServer” chapter of the *Installation Configuration Guide*.

### Examples

The following example sets the maximum xfServer log file size to 20,000 bytes.

```
RSLOGMAX=20000
```

## RSYNDLOG – Alternate xfServer log file



The RSYNDLOG environment variable specifies an alternate log filename for the Synergy/DE xfServer daemon, **rsynd**.

### Value

The filename to which xfServer information is logged.

### Discussion

By default, Synergy/DE xfServer logs start and stop activity, along with unexpected signals, to the file **/usr/lib/rsynd.log**. You can specify an alternate log filename using RSYNDLOG.

Each log entry contains the following information:

- ▶ The entire path name of **rsynd**
- ▶ The date and time started
- ▶ The Synergy/DE xfServer version number
- ▶ The port number
- ▶ The pid
- ▶ Synergy/DE xfServerPlus enablement (if specified)
- ▶ Secure/nonsecure/trusted status
- ▶ Monitor enablement (if specified)

By default, the maximum log file size is 10K. This is enough room to log approximately 100 xfServer starts and stops. When this size is exceeded, the file is truncated to 0 bytes and then refilled with new activity. Use the RSLOGMAX environment variable (see [RSLOGMAX on page 1-170](#)) to specify a larger log file size.

RSYNDLOG must be set prior to starting **rsynd**. Because **rsynd** is started from an **rc** system startup file, you must also set RSYNDLOG and/or RSLOGMAX there as well.

### Setting location

The environment before running **rsynd** (usually in the **/etc/rc** file).

### Used by

xfServer.

## Environment Variables

RSYNDLOG

### See also

[“Using xfServer on UNIX”](#) in the “Configuring xfServer” chapter of the *Installation Configuration Guide*.

### Examples

```
RSYNDLOG=/usr/synergyde/dbl/rsynd.log      ;export RSYNDLOG
```

## RUSER – Client/server user name



The RUSER environment variable specifies a client/server user name.

### Value

One of the following:

<i>user_name[/password]</i>	Pass the specified user name and optional password to the server.
<b>SSPI</b>	(Windows) Tell xfServer to use Windows authentication to impersonate the client connection.

### Discussion

The RUSER environment variable is used to implement RUSER security with xfServer. The value of the RUSER environment variable (or registry setting) defines the user credentials (user name and password) passed to xfServer via the client. The server session created impersonates that user. When specifying a password, xfServer expects it to be in the form returned by the **setruser** utility.

On Windows, the most common way to set RUSER is in the registry via the **setruser** utility. RUSER set in the environment overrides RUSER set in the registry.



To test where RUSER is set on Windows, run the **synckusr** utility as follows:  
`synckusr -r`

This command displays the user name and password in masked form (for example, \261j\263W\256j). More importantly, it specifies which RUSER setting the runtime client uses. For more information about **synckusr**, see “[The synckusr Utility](#)” in the “Configuring xfServer” chapter of the *Installation Configuration Guide*.

Set RUSER as follows:

On	Do this
Windows	<p>To set RUSER in the registry, run <b>setruser</b> to create a Windows registry entry for the current user (in <b>HKEY_CURRENT_USER\Software\Synergex</b>) or <b>setruser -g</b> to set RUSER in a global registry location (<b>HKEY_LOCAL_MACHINE\Software\Synergex</b>) so that multiple users on a single machine all have access to the value.</p> <p>To set RUSER in the environment, run <b>setruser -n</b>, and set RUSER to the string that is generated:</p> <pre>RUSER="setruser_value"</pre>
UNIX	<p>Run the <b>setruser</b> utility, and set RUSER to the string that is generated:</p> <pre>RUSER="setruser_value" ;export RUSER</pre> <p>This command sets RUSER for the current log-in session. To set RUSER for every subsequent log-in session by this user, you can redirect the output from <b>setruser</b> to a file using the following command:</p> <pre>setruser &gt;filename</pre> <p>Then, place the output in your <b>.profile</b> file as follows:</p> <pre>RUSER="setruser_value" ;export RUSER</pre> <p>(Make sure you include the quotation marks.)</p>

For a list of options to the **setruser** utility, see [“The setruser Utility”](#) in the “Configuring xfServer” chapter of the *Installation Configuration Guide*.

**WIN**

---

An RUSER value of SSPI (all uppercase) instructs xfServer to use Windows authentication. You can set RUSER to this value by specifying “SSPI” as the user name (with no password) when prompted by the **setruser** utility. The only time you might need to do this is if you need to override a global RUSER (registry) setting set with **setruser -g**. (Normally, however, you can just run your Windows server in Restricted mode.)

---

Setting location

The environment and/or the Windows registry on Windows and the environment on UNIX. If RUSER is set in both the **HKEY\_LOCAL\_MACHINE\Software\Synergex** and **HKEY\_CURRENT\_USER\Software\Synergex** locations of the registry, the **HKEY\_CURRENT\_USER** setting takes precedence. If RUSER is set in both the environment and the registry on Windows, the setting in the environment takes precedence.



When RUSER is set in the **Synrc** node in the registry, as is required when configuring xfServerPlus for remote data access, it is read into the environment when **rsynd** starts up, and it is therefore considered to be set in the environment.

---

RUSER only needs to be set on the client.



If you use the SETLOG routine to set RUSER, only the current thread and newly created threads are affected. Prior threads are not changed.

---

## Used by

Runtime, compiler, **fcompare**, **fconvert**, **isutl**.

## See also

- ▶ “[Understanding xfServer security](#)” in the “Configuring xfServer” chapter of the *Installation Configuration Guide* for more information about security on Windows.
- ▶ “[Security modes](#)” in the “Configuring xfServer” chapter of the *Installation Configuration Guide* for more information about security on UNIX.

## Examples

The following example on Windows runs the **setruser** utility, which sets RUSER for the current user in a Windows registry entry.

```
setruser
```

The following example on Windows passes the user name Mark and the password \231\251o\2451p\228x to the server. (You would first need to run **setruser -n** to display the encoded password string to the screen. See “[The setruser Utility](#)” in the “Configuring xfServer” chapter of the *Installation Configuration Guide* for more information.)

```
set RUSER=Mark/\231\251o\2451p\228x
```

The following example on UNIX passes the user name John, without a password, to the server.

```
RUSER=John ;export RUSER
```

The following example on UNIX is an automated process that, as a result of using the grave accent characters (`), invokes **setruser**, assigns the output to RUSER, and exports it. (When **setruser** is invoked, it prompts you for a name and password. The name and password you type are immediately and automatically assigned to RUSER, with no cutting and pasting required.)

```
RUSER=`setruser` ;export RUSER
```

## RWUSRLIB – ELB for ReportWriter user-overloadable routines



The RWUSRLIB environment variable specifies the ELB in which user-overloadable subroutines and functions called by ReportWriter reside.

### Value

The full path and filename of the ELB or shared image in which the user-overloadable routines reside.

### Discussion

On OpenVMS, ReportWriter calls OPENELB on the shared image that is specified with RWUSRLIB before attempting to call the routines.

If you are using the ReportWriter external subroutine interface, you can pass the ELB name as a parameter to %RW\_INIT instead of specifying it with RWUSRLIB.

### Setting location

The environment. On Windows, this environment variable can also be set in the [synergy], [dbr], or [myprog] section of **synergy.ini** (where *myprog* is any **.dbr** file).

### Used by

ReportWriter.

### See also

[“Using User-Overloadable Routines”](#) in the “Customizing ReportWriter Routines” chapter of the *ReportWriter User’s Guide*.

### Examples

On Windows, if set in the **synergy.ini** file,

```
[synergy]
RWUSRLIB=c:\Apps\elbs\myUserRoutines.elb
```



## SCRIPT\_SH – SCRIPT\_SH.EXE shared image



The **SCRIPT\_SH** logical specifies the location of the shared image that contains the external routine interface to the Script compiler (**%SCR\_CLOSELIBRARY**, **%SCR\_ERRORCOUNT**, **%SCR\_OPENLIBRARY**, and **%SCR\_PROCESS**).

### Value

The full path and filename of the **SCRIPT\_SH.EXE** shared image.

### Setting location

The **SYNERGY\_STARTUP.COM** file found in **SY\$MANAGER** (or **ACTIVATE\_SDE.COM** for alternate installations).

### Used by

UI Toolkit.

### Examples

```
$ DEFINE/SYS/EXEC SCRIPT_SH WND:SCRIPT_SH.EXE
```

## SCSCOMPR – Client/server data compression



The SCSCOMPR environment variable enables data record compression between the server and clients.

### Value

One of the following values:

- 1**          Compression is requested.
- 0**          Compression is not requested. (default)

### Discussion

SCSCOMPR compresses blanks, nulls, zeros, and repeating characters. Compression can significantly improve the performance of read, write, and store operations on low-speed or busy networks, especially WANs. If you do not use SCSCOMPR, Synergy/DE xfServer will not compress transferred data records.

SCSCOMPR can be set on the server, on the client, or both. The system-specific sections below describe the various ways to set it and how the setting locations interact on each operating system.

To compress data sent to and from all clients, set SCSCOMPR to 1 on the server. Or, to compress data sent to and from individual clients, set SCSCOMPR to 1 on those clients only (and not on the server). To turn compression off, set SCSCOMPR to 0 (or don't set it at all) on both the client and the server. Setting SCSCOMPR to 0 in the client's environment does *not* turn off compression if it's requested on the server.

### WIN

SCSCOMPR can be set in the registry on the server or in the environment on the client. On the Windows server, use the Synergy Configuration program to set SCSCOMPR as follows:

1. From the xfServer/xfServerPlus tab, click the Add xfServer Service button, or select a service from the list of services and click the Modify Service button. The xfServer Information dialog box is displayed.
2. Select the Compress data packets check box. This sets SCSCOMPR in the registry under **HKEY\_LOCAL\_MACHINE\SOFTWARE\Synergex\Synergy xfServer\service\_name\Default** (for a specific instance of xfServer) or **HKEY\_LOCAL\_MACHINE\SOFTWARE\Synergex\Synergy xfServer\Default** (if you selected the <Default> entry).

## UNIX

SCSCOMPR can be set in the `/etc/synrc` file or a client's `.synrc` file on the server, or in the environment on the client. Setting SCSCOMPR to 0 in the `.synrc` file in the home directory of the client's account on the server will override the setting in the master `/etc/synrc` file, and no compression request will be made to that client from the server. This is a way of setting compression for individual clients from the server. To turn compression completely off, set SCSCOMPR to 0 (or don't set it at all) in all server setting locations (`/etc/synrc` and `.synrc` for each client), as well as in the client's local environment.

## VMS

SCSCOMPR can be set in the `SERVER_INIT.COM` file, the `DBLDIR:SYNRC.COM` file, or a client `SYNRC.COM` file. Setting SCSCOMPR to 0 in the `SYNRC.COM` file in the home directory of the client's account on the server will override the setting in the master `SERVER_INIT.COM` and `DBLDIR:SYNRC.COM` files, and no compression request will be made to that client from the server. This is a way of setting compression for individual clients from the server. To turn compression completely off, set SCSCOMPR to 0 (or don't set it at all) in all server setting locations (`SERVER_INIT.COM`, `DBLDIR:SYNRC.COM`, and `SYNRC.COM` for each client), as well as in the client's local environment.



If you use SETLOG with SCSCOMPR, only the current thread and newly created threads are affected. Prior threads are not changed.

## Setting location

See the [Discussion](#) above.

## Used by

Runtime, xfServer.

## See also

[“Using xfServer on Windows,”](#) [“Using xfServer on UNIX,”](#) and [“Using xfServer on OpenVMS”](#) in the “Configuring xfServer” chapter of the *Installation Configuration Guide*.

## Examples

On Windows, if set at the command prompt,

```
set SCSCOMPR=1
```

## SCSKEEPLIVE – Keepalive timer for connection recovery

WT	WN		
----	----	--	--

The SCSKEEPLIVE environment variable enables the client to override the TCP keepalive timer setting on the server used by xfServer connection recovery.

### Value

The value in seconds for the keepalive timer used by xfServer connection recovery. Valid values are 1 through 7200 (2 hours).

### Discussion

When connection recovery is enabled on the server (in either slave or master mode), setting SCSKEEPLIVE on the client overrides the TCP keepalive timer setting on the xfServer machine for that client.

When connection recovery is enabled in slave mode, setting SCSKEEPLIVE enables the feature for that client, even if SCSKEEPCONNECT is not set. (If SCSKEEPCONNECT is explicitly set to OFF or if KeepConnect on the server is off, setting SCSKEEPLIVE will *not* enable the feature, and a warning will be logged in the Windows event log on the server.)

If SCSPROFILE is also set, the value set with SCSKEEPLIVE will override the Keepalive setting in the specified profile.

### Setting location

On the xfServer client in the environment or in the [dbr] section of **synergy.ini**. To use the SETLOG routine to set SCSKEEPLIVE, call it prior to the first OPEN statement to the server.

### Used by

xfServer

### See also

- ▶ [“Using connection recovery”](#) in the “Configuring xfServer” chapter of the *Installation Configuration Guide*.
- ▶ [SCSKEEPCONNECT on page 1-181](#).
- ▶ [SCSPROFILE on page 1-188](#).

### Examples

```
SCSKEEPLIVE=120
```

## SCSKEEPCONNECT – Enable xfServer connection recovery

WT	WN		
----	----	--	--

The SCSKEEPCONNECT environment variable enables or disables the xfServer connection recovery feature for a client.

### Value

One of the following values:

- ON**      Enable connection recovery.
- OFF**     Disable connection recovery.

### Discussion

When connection recovery is enabled in *slave mode* on the server, setting SCSKEEPCONNECT to ON on the client will enable the feature for that client. Setting it to OFF or not setting it at all will disable connection recovery for that client.

When connection recovery is enabled in *master mode* on the server, setting SCSKEEPCONNECT to OFF on the client will disable the feature for that client. (Setting it to ON in this case has no effect.)

When connection recovery is disabled on the server, setting SCSKEEPCONNECT to ON on the client will have no effect, and a warning will be logged in the Windows event log on the server.

### Setting location

On the xfServer client in the environment or in the [dbr] section of **synergy.ini**. To use the SETLOG routine to set SCSKEEPCONNECT, call it prior to the first OPEN statement to the server.

### Used by

xfServer

### See also

[“Using connection recovery”](#) in the “Configuring xfServer” chapter of the *Installation Configuration Guide*.

### Examples

```
SCSKEEPCONNECT=off
```

## SCSKEEPCONTEXT – Time to maintain client context for connection recovery

WT	WN		
----	----	--	--

The SCSKEEPCONTEXT environment variable enables the client to override the KeepContext value on the server when using xfServer connection recovery.

### Value

The maximum number of seconds to maintain a client context after an unexpected socket disconnect. Valid values are 1 through 260000 (72 hours).

### Discussion

When connection recovery is enabled on the server (in either slave or master mode), setting SCSKEEPCONTEXT on the client overrides the KeepContext value set on the xfServer machine for that client.

When connection recovery is enabled in slave mode, setting SCSKEEPCONTEXT on the client enables the feature for that client, even if SCSKEEPCONNECT is not set. (If SCSKEEPCONNECT is explicitly set to OFF or if KeepConnect on the server is off, setting SCSKEEPCONTEXT will *not* enable the feature, and a warning will be logged in the Windows event log on the server.)

If SCSPROFILE is also set, the value set with SCSKEEPCONTEXT will override the KeepContext setting in the specified profile.

### Setting location

On the xfServer client in the environment or in the [dbr] section of **synergy.ini**. To use the SETLOG routine to set SCSKEEPCONTEXT, call it prior to the first OPEN statement to the server.

### Used by

xfServer

### See also

- ▶ [“Using connection recovery”](#) in the “Configuring xfServer” chapter of the *Installation Configuration Guide*.
- ▶ [SCSKEEPCONNECT](#) on page 1-181.
- ▶ [SCSPROFILE](#) on page 1-188.

### Examples

```
SCSKEEPCONTEXT=900
```

## SCSKEEPLLOCKS – Time to maintain locks for connection recovery

WT	WN		
----	----	--	--

The SCSKEEPLLOCKS environment variable enables the client to override the KeepLocks value on the server when using xfServer connection recovery.

### Value

The maximum number of seconds to maintain record locks when a client context is saved. Valid values are 0 through 43200 (12 hours).

### Discussion

When connection recovery is enabled on the server (in either slave or master mode), setting SCSKEEPLLOCKS on the client overrides the KeepLocks value set on the xfServer machine for that client. The value of SCSKEEPLLOCKS should not be larger than that of SCSKEEPCONTEXT because locks cannot be maintained after a client context has expired.



Take care when setting a value for SCSKEEPLLOCKS. In most cases, a relatively short time—no more than 5 minutes—should suffice. A longer time runs the risk that the user may give up waiting for the socket to reconnect, exit and restart the application, and then discover that records cannot be accessed because they are still locked.

When connection recovery is enabled in slave mode, setting SCSKEEPLLOCKS on the client enables the feature for that client, even if SCSKEEPCONNECT is not set. (If SCSKEEPCONNECT is explicitly set to OFF or if KeepConnect on the server is off, setting SCSKEEPLLOCKS will *not* enable the feature, and a warning will be logged in the Windows event log on the server.)

If SCSPROFILE is also set, the value set with SCSKEEPLLOCKS will override the KeepLocks setting in the specified profile.

If KeepLocks is set to non-zero on the server and you wish to disable this aspect of connection recovery for a specific client, set SCSKEEPLLOCKS to 0. This will ensure that all record locks held by that client are released as soon as an unexpected socket disconnect is detected.

### Setting location

On the xfServer client in the environment or in the [dbr] section of **synergy.ini**. To use the SETLOG routine to set SCSKEEPLLOCKS, call it prior to the first OPEN statement to the server.

### Used by

xfServer

## Environment Variables

### SCSKEELOCKS

#### See also

- ▶ [“Using connection recovery”](#) in the “Configuring xfServer” chapter of the *Installation Configuration Guide*.
- ▶ [SCSKEEPCONNECT](#) on page 1-181.
- ▶ [SCSKEEPCONTEXT](#) on page 1-182
- ▶ [SCSPROFILE](#) on page 1-188.

#### Examples

```
SCSKEELOCKS=600
```



## SCSPORT – Client/server port



The SCSPORT environment variable specifies the port used by xfServer.

### Value

The port number on which xfServer is running. Valid ports are 1024 through 65535.

### Discussion

The default xfServer port is 2330. On Windows and UNIX, set SCSPORT on both the client and the server when you want to use a port other than 2330. On an OpenVMS xfServer, SCSPORT is used only by **synxfpng**.

### Setting location

On the client, in the environment. On Windows, this environment variable can also be set in the [synergy], [dbl], [dbr], or [myprog] section of **synergy.ini** (where *myprog* is any **.dbr** file).

On the server, SCSPORT is not set in the environment. Instead, set the port number on Windows using the Synergy Configuration Program or on UNIX by starting **rsynd** with the **-p** option.

### Used by

Runtime, xfServer, **synxfpng**.

### See also

- ▶ [“Using xfServer on Windows”](#) and [“Using xfServer on UNIX”](#) in the “Configuring xfServer” chapter of the *Installation Configuration Guide*.
- ▶ [“The synxfpng Utility”](#) in the “Configuring xfServer” chapter of the *Installation Configuration Guide*.

### Examples

On a UNIX client,

```
SCSPORT=2331      ;export SCSPORT
```

# SCSPREFETCH – Enable READS prefetching and WRITES/PUTS buffering for xfServer

WT	WN	U	
----	----	---	--

The SCSPREFETCH environment variable enables READS prefetch support and WRITES/PUTS buffering by defining the maximum amount of memory to use for the buffer.

## Value

A number between 0 and 32, inclusive, that specifies the size of the prefetch buffer in kilobytes. Prefetching is off by default. Once prefetching is on, you can turn it off by setting SCSPREFETCH to 0.

## Discussion

To improve sequential READS performance when using xfServer, a prefetch feature is available that enables the client to prefetch (or buffer) sequential READS of records for files of any type that are open in input mode, relative files that are open for update, or ISAM files that are open for update and use the LOCK:Q\_NO\_TLOCK option. An intervening WRITE, DELETE, or STORE statement turns off the cache.

Similarly, buffering records improves sequential WRITES and PUTS performance, because it enables the client to temporarily hold sequential records and then write them to the server all at once. Buffering is used with relative and sequential files that are opened in output or append mode (WRITES) and with stream files that are opened in output or append mode (WRITES or PUTS). Buffering does not occur when WRITES is used with the GETRFA option.

The SCSPREFETCH environment variable controls both prefetching and buffering by enabling them to be turned on or off.



To enable or disable this feature on a file-by-file basis, regardless of the environment setting, use the SETLOG routine to set or clear SCSPREFETCH prior to the OPEN statement. The value of SCSPREFETCH is checked on every remote file open. (Note that after you open a file with SCSPREFETCH set, you cannot turn prefetching off on that channel until you close and reopen the file with SCSPREFETCH set to 0.)

We recommend that you set SCSPREFETCH to 8 initially and then change it if necessary. If SCSPREFETCH is set to an invalid value, a default value of 8 will be used.

The SCSPREFETCH value is also used by the **/bufstore** option of the **OPTIONS** qualifier on the **OPEN** statement if it is set, but it does not turn that option on or off. If SCSPREFETCH is not set, **/bufstore** uses a default value of 8 (i.e., 8K).

When a remote file is opened to xfServer with **/sequential**, any READS operation that includes the **LOCK** qualifier **Q\_NO\_LOCK** will enable SCSPREFETCH to improve performance.

## Setting location

On the client, the environment or the [synergy], [dbr], or [myprog] section of **synergy.ini** (where *myprog* is any **.dbr** file).

## Used by

xfServer.

## See also

- ▶ **READS** in the “Synergy DBL Statements” chapter of the *Synergy DBL Language Reference Manual*.
- ▶ **WRITES** in the “Synergy DBL Statements” chapter of the *Synergy DBL Language Reference Manual*.
- ▶ **PUTS** in the “Synergy DBL Statements” chapter of the *Synergy DBL Language Reference Manual*.
- ▶ **STORE** in the “Synergy DBL Statements” chapter of the *Synergy DBL Language Reference Manual*.
- ▶ **OPTIONS** in the “Synergy DBL Statements” chapter of the *Synergy DBL Language Reference Manual*.
- ▶ [System option #55 on page 2-46](#).

## Examples

On UNIX,

```
SCSPREFETCH=8      ;export SCSPREFETCH
```

The code below is an example of enabling and disabling SCSPREFETCH on a file-by-file basis:

```
xcall getlog('SCSPREFETCH', tmp_pre_val, tmp_len)      ;Check if prefetch
                                                         ; is already set
xcall setlog('SCSPREFETCH', 16, tmp_status)            ;If not, set prefetch
.
.
.
xcall setlog('SCSPREFETCH', '0', tmp_status)           ;Reset after processing
```

SCSPROFILE – Connection recovery settings



The SCSPROFILE environment variable enables the client to specify a set of predefined time values for xfServer connection recovery.

Value

One of the following values:

- DEFAULT**                      Use the default profile.
- MOBILE**                      Use the mobile profile.
- MOBILE2**                    Use the mobile2 profile.

Discussion

When connection recovery is enabled on the server (in either slave or master mode), setting SCSPROFILE on the client to one of the predefined profiles will override all of the connection recovery time values set on the server machine for that client. Using SCSPROFILE is simply a convenient way to override all the settings at once, rather than overriding them individually with SCSKEEPALIVE, SCSKEEPCONTEXT, and SCSKEEPLOCKS. Using SCSPROFILE is the only way to override the server’s setting for retry time.

When connection recovery is enabled in slave mode, setting SCSPROFILE on the client enables the feature for that client, even if SCSKEEPCONNECT is not set. (If SCSKEEPCONNECT is explicitly set to OFF or if KeepConnect on the server is off, setting SCSPROFILE will *not* enable the feature, and a warning will be logged in the Windows event log on the server.)

The profiles are defined as follows (times are in seconds):

Setting	Default profile	Mobile profile	Mobile2 profile
KeepContext	300	7200	7200
KeepAlive	150	60	60
KeepLocks	300	300	300
RetryTime	60	60	20

The Default profile represents the built-in connection recovery defaults.

The Mobile profile is suitable for use with an application that has no special handling for socket failures. It provides a reasonable time to re-establish a failed connection.

The Mobile2 profile is suitable for use with an application that has a built-in awareness of socket failures that enables the application to control what action to take after a failure. This awareness may be in the form of an IOHooks reconnect\_hook method or it could be code that reissues the I/O upon trapping a “Server connection retry failure” (\$ERR\_SRVCONTRY) error.

## Setting location

On the xfServer client in the environment or in the [dbr] section of **synergy.ini**. To use the SETLOG routine to set SCSPROFILE, call it prior to the first OPEN statement to the server.

## Used by

xfServer

## See also

- ▶ [“Using connection recovery”](#) in the “Configuring xfServer” chapter of the *Installation Configuration Guide*.
- ▶ [SCSKEEPLIVE](#) on page 1-180.
- ▶ [SCSKEEPCONNECT](#) on page 1-181.
- ▶ [SCSKEEPCONTEXT](#) on page 1-182.
- ▶ [SCSKEEPLOCKS](#) on page 1-183.
- ▶ [Synergex.SynergyDE.IOExtensions.IOHooks](#) in the “System-Supplied Classes” chapter of the *Synergy DBL Language Reference Manual*.

## Examples

```
SCSPROFILE=mobile
```

### SDE – Location of the main Synergy/DE directory



The SDE environment variable specifies the root directory of the Synergy/DE files.

#### Value

The path for the directory in which the Synergy/DE product subdirectories reside (dbl, lm, connect, rps, rpt, and toolkit).

#### Setting location

The **setsde** script file (located in the synergyde directory).

#### Used by

Runtime, Connectivity Series, License Manager, Repository, ReportWriter, UI Toolkit.

#### Examples

```
set SDE=/usr/synergyde ;export SDE
```

## SDMS\_AUDIT – Enable auditing of nonserver file operations

WT		U	
----	--	---	--

The SDMS\_AUDIT environment variable enables auditing of nonserver file operations and defines the pathname of the auditing file.

### Value

The full path and filename of the auditing log file. (Logicals are not allowed.)

### Setting location

The environment.

### Used by

Synergy DBMS, xfODBC.

### Examples

On UNIX,

```
SDMS_AUDIT=/usr/tmp/audit ;export SDMS_AUDIT
```

On Windows,

```
set SDMS_AUDIT=c:\Program Files\Synergex\SynergyDE\db1\audit
```

## SDMS\_AUDIT\_FILENAME – Limit audit output to specified file

WT	WN	U	
----	----	---	--

The SDMS\_AUDIT\_FILENAME environment variable filters the audit log by limiting it to operations made on a specific file. Up to three concurrent opens of this file are supported.

### Value

The full path and filename (without the extension) of the file to be audited.

### Discussion

The specified path and filename is compared against the name passed to the OPEN statement, without logical expansion. Therefore, if you open a file using a logical, you must set SDMS\_AUDIT\_FILENAME to the actual filename specified on the OPEN or a substring of that filename, or auditing will not occur. For example, if you open a file using “**DAT:myfile**”, where DAT=c:\tmp, SDMS\_AUDIT\_FILENAME must be set to either **DAT:myfile** or simply **myfile**. If you instead set SDMS\_AUDIT\_FILENAME to the expected file expansion, **c:\tmp\myfile.ism**, the file will not be audited.

### Setting location

The environment.

### Used by

Synergy DBMS, xfODBC.

### Examples

In the environment on Windows,

```
set SDMS_AUDIT_FILENAME=DAT:aphist
```



## SDMS\_AUDIT\_FLUSH – Flush entries for log events

WT	WN	U	
----	----	---	--

The SDMS\_AUDIT\_FLUSH environment variable specifies that entries will be flushed for each log event.

### Value

Any value.

### Discussion

This is an option when the SDMS\_AUDIT environment variable is used.

### Setting location

The environment.

### Used by

Synergy DBMS.

### Examples

On UNIX,

```
SDMS_AUDIT_FLUSH=1          ;export SDMS_AUDIT_FLUSH
```

## SDMS\_AUDIT\_FULL – Log additional audit information



The SDMS\_AUDIT\_FULL environment variable specifies that additional information should be logged for each file operation.

### Value

Any value.

### Discussion

This is an option when the SDMS\_AUDIT environment variable is used. It adds the first 50 bytes of each record to the log file.

### Setting location

The environment.

### Used by

Synergy DBMS, xfODBC.

### Examples

On UNIX,

```
SDMS_AUDIT_FULL=1                ;export SDMS_AUDIT_FULL
```

## SDMS\_AUDIT\_MODE – Log I/O modes when auditing



The SDMS\_AUDIT\_MODE environment variable specifies that I/O control modes should be logged for each file operation.

### Value

Any value.

### Discussion

This is an option when the SDMS\_AUDIT environment variable is used. It adds the I/O control modes to each logged entry.

### Setting location

The environment.

### Used by

Synergy DBMS, xfODBC.

### Examples

On UNIX,

```
SDMS_AUDIT_MODE=1          ;export SDMS_AUDIT_MODE
```

## SDMS\_AUDIT\_ROUTINE – Log routine name

WT	WN	U	
----	----	---	--

The SDMS\_AUDIT\_ROUTINE environment variable specifies that the name of the Synergy routine that executed the I/O statement, as well as the name of the routine that called the executing routine, should be logged for each file operation.

### Value

Any value.

### Discussion

This is an option when the SDMS\_AUDIT environment variable is used, and it only applies when running the runtime. It adds the name of the routine that executed the I/O statement to the log file, and if that routine is not the main routine, it also adds the name of the routine’s caller.

### Setting location

The environment.

### Used by

Runtime, Synergy DBMS.

### Examples

On UNIX,

```
SDMS_AUDIT_ROUTINE=1 ;export SDMS_AUDIT_ROUTINE
```

## SDMS\_AUDIT\_SRV – Enable auditing of multi-threaded file operations



The SDMS\_AUDIT\_SRV environment variable enables auditing of file operations on a threaded Windows program and defines the path and name used for generating auditing log files.

### Value

The full path and name used to generate the log filenames. (Logicals are not allowed.)

### Discussion

SDMS\_AUDIT\_SRV should be used when multiple individual file operations are expected, such as client connections to a server or different I/O threads of a threaded program.



Use SDMS\_AUDIT\_SRV instead of SDMS\_AUDIT on Windows (even in non-server situations) to audit threaded and .NET programs.

When auditing services such as **dbssvc**, xfServerPlus, xfServer, .NET services, or the SQL Connection OpenNet server, the system environment must be updated (and on Windows, the system must be rebooted) before the service is started.



Use of this environment variable slows down file I/O operations significantly, and it should not be used on a production machine. Operations are only logged on the system where physical file I/O occurs.

When SDMS\_AUDIT\_SRV is set, the name of the audit file created for each thread or client connection has the following format:

System	Filename
Windows	<i>path\name_threadID_time</i> where <i>path\name</i> is the value of SDMS_AUDIT_SRV, <i>threadID</i> is the thread ID, and <i>time</i> is the time the log was started, in the form hours, minutes, seconds and microseconds. (Trailing zeros in the microseconds value are omitted.)
UNIX	<i>path/name_PID</i> where <i>path/name</i> is the value of SDMS_AUDIT_SRV and <i>PID</i> is the process ID of the connected server.

## Environment Variables

### SDMS\_AUDIT\_SRV

#### Setting location

The environment.

#### Used by

Synergy DBMS, xfODBC.

#### Examples

On Windows, the following example creates one audit file named **c:\temp\audit\_threadID\_time** for each thread, resulting in files with names like **c:\temp\audit\_6720\_12100613**:

```
set SDMS_AUDIT_SRV=c:\temp\audit
```

On UNIX, the following example creates one audit file named **/usr/tmp/audit\_PID** for each client connection, resulting in files with names like **/usr/tmp/audit\_30662**:

```
SDMS_AUDIT_SRV=/usr/tmp/audit
```

## SDMS2\_FULL – Log additional ODBC calls to the database



The SDMS2\_FULL environment variable causes additional ODBC calls to be recorded to a log file for support purposes.

### Value

1.

### Discussion

On Windows and UNIX machines, use this variable with SDMS\_AUDIT or SDMS\_AUDIT\_SRV to provide ODBC-specific information.

### Setting location

In the environment with system-wide logicals. If you need to use Synergy DBMS logging in a client/server configuration, set the logicals on the server.

### Used by

Synergy DBMS, xfODBC.

### See also

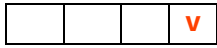
- ▶ [SDMS\\_AUDIT on page 1-191.](#)
- ▶ [SDMS\\_AUDIT\\_SRV on page 1-197.](#)
- ▶ “[Synergy DBMS logging](#)” in the “Data Access Errors and Error Logging” chapter of the *xfODBC User’s Guide*.

### Examples

On OpenVMS,

```
$ DEF/SYS/EXE SDMS2_FULL 1
```

## SDMS2\_LOG – xfODBC log file on OpenVMS



The SDMS2\_LOG logical defines the path and name of the Synergy DBMS log file on OpenVMS systems for use with xfODBC.

### Value

The path and name of the Synergy DBMS log file.

### Setting location

In the environment with system-wide logicals. If you need to use Synergy DBMS logging in a client/server configuration, set the logicals on the server.

### Used by

xfODBC.

### See also

[“Synergy DBMS logging”](#) in the “Data Access Errors and Error Logging” chapter of the *xfODBC User’s Guide*.

### Examples

```
$ DEF/SYS/EXE SDMS2_LOG DEVICE:[DIRECTORY] FILE
```



## SFWINIPATH – Location of synergy.ini file



The SFWINIPATH environment variable defines the location of **synergy.ini**.

### Value

The path, including the device, for the directory that contains the **synergy.ini** file. *Path* must be the full path specification without any logicals. Do not include the filename (**synergy.ini**) in this path specification.

### Discussion

If the directory specified by SFWINIPATH does not contain a **synergy.ini** file, or if SFWINIPATH is not defined, the default location is assumed. The default location of the **synergy.ini** file is synergyde\dbl. (However, since this is just a default file that will be removed during an upgrade or uninstallation, we recommend that you copy this file elsewhere and specify the path to the copied file with SFWINIPATH.)



This logic does not apply to the non-interactive runtimes (**db**s, **dbssvc**, and **dbspriv**). If the directory specified by SFWINIPATH does not contain a **synergy.ini** file, or if SFWINIPATH is not defined, the non-interactive runtimes do not read the file.

You can run the program **synckini** in the dbl\bin directory to locate the **synergy.ini** file that will be accessed.

Do not set SFWINIPATH in the **synergy.ini** file.

### Setting location

The environment.

### Used by

Compiler, runtime, linker, librarian, **isutl**, **fcompare**, Synergy .NET.

### See also

[“Synergy initialization files” on page 1-11](#) for more information about **synergy.ini**.

### Examples

If set at the command prompt,

```
set SFWINIPATH=c:\synergy\user1
```

## SFWUSRINIPATH – Location of **synuser.ini** file



The SFWUSRINIPATH environment variable defines the location of **synuser.ini**.

### Value

The path (including the device) for the directory that contains the **synuser.ini** file, or **1**, to indicate that the default location should be used. (The default location is the Synergex subdirectory of your local application data directory: Documents and Settings\*username*\Local Settings\Application Data.) The path must be the full path specification without any logicals. Do not include the filename (**synuser.ini**) in this path specification.

### Discussion

The file located with SFWUSRINIPATH is used to override settings in the **synergy.ini** file. The non-interactive runtimes only look at the **synuser.ini** file if both SFWINIPATH and SFWUSRINIPATH are set.

For most services on a server, there is no user profile from which to read the file; therefore, it is unlikely that you would ever set this environment variable for a service.

### Setting location

The environment.

### Used by

Compiler, runtime, linker, librarian, **isutl**, **fcompare**, Synergy .NET.

### See also

[“Synergy initialization files” on page 1-11](#) for more information about **synuser.ini**.

### Examples

If set at the command prompt,

```
set SFWUSRINIPATH=c:\synergy\user2
```

## SHELL – Default shell



The SHELL environment variable specifies the shell that the SHELL subroutine will use.

### Value

The shell you want the SHELL subroutine to use.

### Discussion

On Windows, if this environment variable is set, the SHELL subroutine and the debugger use the shell that you specify in this environment variable, rather than the default shell specified by COMSPEC. (For more information about COMSPEC settings, see your Windows documentation.)

On UNIX, common shells are **sh**, **csh**, and **ksh**.




---

Other UNIX tools, such as **vi**, also use this environment variable.

---

### Setting location

The environment. On Windows, this environment variable can also be set in the [synergy], [dbr], or [myprog] section of **synergy.ini** (where *myprog* is any **.dbr** file).

### Used by

Runtime.

### Examples

On Windows, if set in the **synergy.ini** file,

```
[synergy]
SHELL=c:\windows\system32\cmd.exe /c
```

## SIG\_CORE – Crash on UNIX signals and Windows exceptions



The SIG\_CORE environment variable causes a program to crash rather than giving a runtime-assisted message with the Synergy line number on certain UNIX signals and Windows exceptions, such as segmentation faults. It is primarily used for system fault diagnosis.

### Value

Any value.

### Discussion

SIG\_CORE must be set when trying to use the debugger on the advice of Synerg/DE Developer Support.

When SIG\_CORE is set to any value, the program will crash with a system core dump on any signal or exception that would normally be interpreted by the runtime. On UNIX, you'll have to reset your terminal settings with the **stty** command.

Note that SIG\_CORE must be set in the environment *before* the dbr is launched. To turn SIG\_CORE off, issue the following command at the command line:

```
unset SIG_CORE
```



On Linux, you must set

```
ulimit -c unlimited
```

Otherwise, SIG\_CORE won't work and core files will not be produced.

---

### Setting location

The environment.

### Used by

Runtime.

### Examples

On UNIX,

```
SIG_CORE=on ;export SIG_CORE
```

## SODBC\_CNVFIL – xfODBC conversion setup file



The SODBC\_CNVFIL environment variable indicates that an xfODBC conversion setup file is to be used and specifies the path and name of the conversion setup file.

### Value

The path and name of the conversion setup file for the system catalog you want to regenerate.

### Discussion

You can specify a conversion setup file *before* you use **dbcreate** or DBA using the SODBC\_CNVFIL environment variable. Alternatively, you can specify a conversion setup file *as* you use **dbcreate** or DBA via **dbcreate**'s **-i** command line option or the Conversion setup field in the Generate System Catalog window of DBA.

If SODBC\_CNVFIL is set ahead of time, DBA and **dbcreate** automatically use the conversion setup file whenever you regenerate the system catalog. In addition, tables you delete in DBA are also marked for deletion in the conversion setup file.



SODBC\_CNVFIL should not be set until the conversion setup file has been created.

### Setting location

The environment. For client/server configurations, SODBC\_CNVFIL must be set on the server. (The conversion setup file must also be on the server.)

### Used by

xfODBC, **fcompare**.

### See also

- ▶ [“Specifying a conversion setup file”](#) in the “Preliminary Steps” chapter of the *xfODBC User's Guide*.
- ▶ [“Generating the System Catalog”](#) in the “Creating a System Catalog” chapter of the *xfODBC User's Guide*.
- ▶ [“Generating and Editing a Conversion Setup File”](#) in the “Viewing and Customizing the System Catalog” chapter of the *xfODBC User's Guide*.

### Examples

In the environment on Windows,

```
set SODBC_CNVFIL=GENESIS_HOME:sodbccnv.ini
```

## SODBC\_CNVOPT – Ignore “Excluded by ReportWriter” Repository setting



The SODBC\_CNVOPT environment variable includes all fields in the system catalog, regardless of their “Excluded by ReportWriter” settings in S/DE Repository.

### Value

1.

### Discussion

By default, if the “Excluded by ReportWriter” option in Repository is checked for a field, **dbcreate** does not include the field in the system catalog. To make the field available to ODBC-enabled applications, you can use Repository to clear this option. However, if you want *all* fields to be included in the generated system catalog, regardless of their “Excluded by ReportWriter” settings, set the SODBC\_CNVOPT environment variable.

If a field is used as a structure tag or key segment, it is automatically included in the system catalog, regardless of the report exclusion flag or the SODBC\_CNVOPT setting.

### Setting location

The environment where you run **dbcreate**.

### Used by

xfODBC.

### See also

[“Setting catalog generation options”](#) in the “Preliminary Steps” chapter of the *xfODBC User’s Guide*.

### Examples

In the environment on Windows,

```
set SODBC_CNVOPT=1
```

## SODBC\_COLLAPSE – Reduce number of columns for ODBC-enabled applications



The SODBC\_COLLAPSE environment variable compresses arrayed fields into a single column if the number of elements in a single field is greater than or equal to a limit you specify.

### Value

A positive number that specifies the limit for the number of elements that can become individual columns.

### Discussion

Use the SODBC\_COLLAPSE environment variable if a generated table has more than 254 columns, a condition that might occur if the original structure contains multi-dimensional arrayed fields that have been mapped into separate element columns during system catalog generation. Some ODBC-enabled applications do not permit tables with more than 254 columns.

For example, if you decide that a field with more than 10 elements should be combined into one column, set SODBC\_COLLAPSE to 10. If your structure has three fields—one with 6 elements, one with 10 elements, and one with 12 elements—the generated table has eight columns: 6 + 1 + 1. Because the second and third fields have reached the limit, each of these becomes a single column.

### Setting location

The environment where you run **dbcreate**.

### Used by

xfODBC.

### See also

[“Setting catalog generation options”](#) in the “Preliminary Steps” chapter of the *xfODBC User’s Guide*.

### Examples

In the environment on Windows,

```
set SODBC_COLLAPSE=10
```

## SODBC\_DBA – DBA location



The SODBC\_DBA environment variable specifies the location of the xfODBC Database Administrator (DBA) program.

### Value

The directory that contains the DBA program.

### Discussion

The filename for the DBA program on Windows and UNIX is **xfdba.dbr**. On OpenVMS, it's **XFDBA.EXE**.

SODBC\_DBA is required and is automatically set when you install xfODBC.

### Setting location

- ▶ On Windows, the environment or the [synergy] section of **synergy.ini**.
- ▶ On UNIX, in the **setsde** script file (located in the synergyde directory).
- ▶ On OpenVMS, **CONNECT\_STARTUP.COM**.
- ▶ For client/server configurations, SODBC\_DBA must be set on the server.

### Used by

xfODBC.

### See also

[Appendix A: Environment Variables](#) of the *xfODBC User's Guide*.

### Examples

In the **synergy.ini** file,

```
SODBC_DBA=c:\synergyde\connect\synodbc\dba
```



## SODBC\_INIFIL – xfODBC environment setup file



The SODBC\_INIFIL environment variable specifies the name and path of the xfODBC environment setup file.

### Value

The path and filename of your xfODBC environment setup file.

### Discussion

An environment setup file is a file that you write. It typically has a **.ini** filename extension and is placed in the GENESIS\_HOME directory, although these are not requirements.

SODBC\_INIFIL is used by the xfODBC driver when you connect to a database. It is not used when you create or modify a system catalog.

### Setting location

The connect file or the environment. In a client/server configuration, SODBC\_INIFIL must be set in the environment on the server. It is not set during installation. On Windows, SODBC\_INIFIL can be set in **opennet.srv**.

### Used by

xfODBC, **fcompare**.

### See also

[“Setting Options and File Locations”](#) in the “Preliminary Steps” chapter of the *xfODBC User’s Guide*.

### Examples

In the connect file,

```
SODBC_INIFIL=c:\synergyde\connect\synodbc\dat\envset.ini
```

## SODBC\_MCBA – Skip records with MCBA deleted-record characters



The SODBC\_MCBA environment variable instructs xfODBC to skip records that contain the MCBA deleted-record characters, which are four right brackets (]]]]) at the beginning or end of a record.

### Value

Any value.

### Discussion

By default, SODBC\_MCBA is not set; xfODBC does *not* skip records that contain the MCBA deleted-record characters. To instruct xfODBC to skip records that contain the MCBA deleted-record characters, set the SODBC\_MCBA environment variable to any value.

SODBC\_MCBA is used by the xfODBC driver when it accesses data. It is not used when you create or modify a system catalog.

### Setting location

The connect file, the current environment, or the system-level. For client/server configurations, set SODBC\_MCBA in the connect file on the server.

### Used by

xfODBC.

### See also

[“Recognizing the MCBA deleted-record characters”](#) in the “Configuring Data Access” chapter of the *xfODBC User’s Guide*.

### Examples

```
SODBC_MCBA=1
```

## SODBC\_NOGROUPNAME – Omit group and struct names from ODBC column names



The SODBC\_NOGROUPNAME environment variable causes group and struct field names to be omitted from column names in the system catalog.

### Value

Any value.

### Discussion

By default, if a field is part of a group or struct field in the repository, the group or struct field name is added as a prefix to the field name to create the column name in the system catalog. Setting SODBC\_NOGROUPNAME to any value supersedes this default.




---

Set SODBC\_NOGROUPNAME only if you are certain the resulting column names will be unique.

---

If you're going to set this variable, make sure you do so before generating your system catalog.

### Setting location

The environment where you run **dbcreate**.

### Used by

xfODBC.

### See also

[“Removing group and struct names from column names”](#) in the “Preliminary Steps” chapter of the *xfODBC User's Guide*.

### Examples

In the environment on Windows,

```
set SODBC_NOGROUPNAME=1
```

### SODBC\_NONULL – Set “Null allowed” property for system catalog columns

WT	WN	U	V
----	----	---	---



This environment variable is deprecated. We recommend setting the “Null allowed” Repository option to Yes or No for each field. See [“Preventing null updates and interpreting spaces, zeros, and null values”](#) in the “Preliminary Steps” chapter of the *xfODBC User’s Guide*.

The SODBC\_NONULL environment variable setting determines how the “Null allowed” property is set in the system catalog for repository fields whose “Null allowed” Repository value is Default (rather than Yes or No).

#### Value

One of the following values:

- 0** Set all columns to “null allowed.”
- 1** Set only date columns that aren’t part of the definition for the first key to “null allowed.” (This was the only supported behavior prior to version 9.3 of Connectivity Series.)
- 2** Set all columns to “null allowed” except those that are part of the first key definition.
- 3** Set all columns to “null allowed” except those that are part of an access key.
- 4** Set all columns to “null allowed” except integer, binary, Boolean, and non-date columns that are part of the first key definition.

#### Discussion

By default, SODBC\_NONULL is not set, which is the equivalent of setting it to **4**. If you set this environment variable, set it before you generate the system catalog. Note the following:

- ▶ If a field generated from a struct field is part of a key definition in the structure used to create the struct field, **dbcreate** will consider it as part of the key when setting “null allowed.”
- ▶ For **dbcreate** to consider a field as part of a key, the field must be in a key definition in the repository (not an overlay in the same position as the key).

#### Setting location

The environment where you run **dbcreate**.

#### Used by

xfODBC.

## See also

[“Preventing null updates and interpreting spaces, zeros, and null values”](#) in the “Preliminary Steps” chapter of the *xfODBC User’s Guide*.

## Examples

In the environment on Windows,

```
set SODBC_NONULL=4
```

## SODBC\_NOUNSIGNED – Ignore the “Negative allowed” Repository setting



The SODBC\_NOUNSIGNED environment variable instructs **dbcreate** to ignore “Negative allowed” Repository settings for fields when creating the system catalog.

### Value

Any value.

### Discussion

By default, SODBC\_NOUNSIGNED is not set; **dbcreate** checks the “Negative allowed” Repository setting to determine if the resulting column will be signed or unsigned.

If you set SODBC\_NOUNSIGNED to any value, **dbcreate** sets all numeric fields to signed unless they have validation ranges that are limited to positive values (in which case the resulting columns will be unsigned). This matches the behavior for Connectivity Series versions prior to 8.3.

If you set this environment variable, set it before generating your system catalog.

### Setting location

The environment where you run **dbcreate**.

### Used by

xfODBC.

### Examples

In the environment on Windows,

```
set SODBC_NOUNSIGNED=1
```

## SODBC\_ODBCNAME – Use Repository “Alternate name” field

WT	WN	U	V
----	----	---	---

The SODBC\_ODBCNAME environment variable causes xfODBC to use the values in the Repository “Alternate name” field as column names.

### Value

1.

### Discussion

Not all Repository field names make good ODBC column names. As an alternative, you can use the value in the Repository “Alternate name” field (if one is specified) as the column name by setting the SODBC\_ODBCNAME environment variable.

(Note that this is not related to the Repository ODBC table name option, which enables you to assign ODBC *table* names to file/structure combinations.)

### Setting location

The environment where you run **dbcreate**.

### Used by

xfODBC.

### See also

[“Setting catalog generation options”](#) in the “Preliminary Steps” chapter of the *xfODBC User’s Guide*.

### Examples

In the environment on Windows,

```
set SODBC_ODBCNAME=1
```

## SODBC\_TMPOPT – Exclude temporary files from system catalog



The SODBC\_TMPOPT environment variable causes xfODBC to exclude tables attached to temporary files from the system catalog.

### Value

1.

### Discussion

By default, when **dbcreate** generates a system catalog, it includes tables that describe temporary files (that is, files for which the Repository Temporary flag is set). To omit tables that describe temporary files, set SODBC\_TMPOPT.

### Setting location

The environment where you run **dbcreate**.

### Used by

xfODBC.

### See also

[“Renaming columns for clarity”](#) in the “Preliminary Steps” chapter of the *xfODBC User’s Guide*.

### Examples

In the environment on Windows,

```
set SODBC_TMPOPT=1
```



## SODBC\_TOKEN – Change the character used for arrayed fields and groups

WT	WN	U	V
----	----	---	---

The SODBC\_TOKEN environment variable enables you to change the character that the **dbcreate** utility (or DBA) uses when it generates column names for an arrayed field or group.

### Value

Any character that is valid as an SQL identifier character for your ODBC applications.

### Discussion

When you generate a system catalog for a repository that has an arrayed field, each element in the arrayed field is mapped as a separate column with a name that consists of the array name, the element's position in the array, and pound signs (#), by default, to delineate position values. (For example, a [2,2] arrayed field with the name **myarray** will be mapped to the following: **myarray#1#1**, **myarray#1#2**, **myarray#2#1**, and **myarray#2#2**.) The same is true of groups that are arrays. See [“Arrays”](#) in the *xfODBC User's Manual* for more information.

You can change the character used to delineate position values by setting SODBC\_TOKEN to the character you want to use. For example, you can instruct **dbcreate** to use underscore (\_) rather than #:

```
set SODBC_TOKEN=_
```

For the **myarray** field described above, this would result in the following columns: **myarray\_1\_1**, **myarray\_1\_2**, **myarray\_2\_1**, and **myarray\_2\_2**.

### Setting location

The environment where you run **dbcreate**.

### Used by

xfODBC.

### See also

[“Changing the position delimiter used for arrays”](#) in the *“Preliminary Steps”* chapter of the *xfODBC User's Manual*.

## SODBC\_USEFORMAT – Use decimal information in format string



The SODBC\_USEFORMAT environment variable instructs **dbcreate** to generate implied-decimal system catalog columns from repository fields with format strings that include decimal points.

### Value

1.

### Discussion

If your repository has a field that is not an implied decimal but that has a format string with a decimal point, you can instruct **dbcreate** to use the decimal information in the format string to create an implied-decimal column in the system catalog. To do this, set the SODBC\_USEFORMAT environment variable to 1 before generating the system catalog. For example, if SODBC\_USEFORMAT is set to 1 and your repository has a **d5** field with an XXX.XX format string, the field will appear as a **d5.2** column in the system catalog.

### Setting location

The environment where you run **dbcreate**.

### Used by

xfODBC.

### See also

[“Using decimal information in the repository format string”](#) in the “Preliminary Steps” chapter of the *xfODBC User’s Guide*.

### Examples

In the environment on Windows,

```
set SODBC_USEFORMAT=1
```

## SORTMEM – Memory used by SORT

WT	WN	U	
----	----	---	--

The SORTMEM environment variable specifies the amount of memory that is used by the SORT statement and the **isutl** utility.

### Value

The number of kilobytes of memory to be used by the sort. This value must be in the range 512 to 32767. The default value is 1024 for the runtime and xfServer. The **isutl** default is 10240 for nonterabyte ISAM files and 20480 for terabyte ISAM files.

### Discussion

SORTMEM is used by the SORT verb in the runtime, either locally or when both files specified to the SORT are remote. SORTMEM is used on the server when the sort is on the server. It is used by the runtime when the sort is local and not on a server.

### Setting location

For a local file, in the environment or **synergy.ini** (Windows).

For **isutl**, in the environment.

On a Windows server, in the Windows registry. Use the Synergy Configuration Program, or set SORTMEM as follows:

- ▶ For a specific instance of xfServer, set SORTMEM under **HKEY\_LOCAL\_MACHINE\SOFTWARE\Synergex\Synergy xfServer\servername\synrc**.
- ▶ For a system-wide setting, set SORTMEM under **HKEY\_LOCAL\_MACHINE\SOFTWARE\Synergex\Synergy xfServer\synrc**.

On a UNIX server, in the **synrc** file in the /etc directory (for all clients) or the **.synrc** file in the users \$HOME directory (for specific users).

### Used by

Runtime, xfServer, **isutl** utility.

### Examples

On UNIX,

```
SORTMEM=8192 ;export SORTMEM
```

## SQLJUSTINTIME – Generate cursor status on error condition



The SQLJUSTINTIME environment variable enables cursor status to be generated when an operation fails.

### Value

1.

### Discussion

To determine why an operation fails, set SQLJUSTINTIME. This creates the **ssqlerr.log** file, which contains an open cursor listing. If **ssqlerr.log** already exists, new logging is appended to the file, which may create a very large file.

### Setting location

The environment or **synergy.ini**. For client/server configurations, set SSQLLOG on the client.

### Used by

SQL Connection.

### Examples

```
set SQLJUSTINTIME=1
```

## SSQLEXT – Enable detailed logging



The SSQLEXT environment variable enables detailed logging for use by Synergy/DE Developer Support.

### Value

- 1.

### Discussion

To contact Synergy/DE Developer Support, see [“Product support information” on page xiv](#).

### Setting location

The environment or **synergy.ini**. For client/server configurations, set SSQLOG on the client.

### Used by

SQL Connection.

### Examples

```
set SSQLEXT=1
```

## SSQLLOG – Log SQL Connection function calls



The SSQLLOG environment variable enables logging for SQL Connection operations.

### Value

1.

### Discussion

For information on the sequence of SQL operations for a Synergy application, set SSQLLOG. This creates the **ssqlx.log** file, which contains a log of %SSC\_xxx function calls. If E\_CIDSEL, E\_CIDNOSEL, or E\_NOCIDS errors occur, **ssql.log** also contains errors and a list of open cursors.

### Setting location

The environment or **synergy.ini**. For client/server configurations, set SSQLLOG on the client.

### Used by

SQL Connection.

### Examples

```
set SSQLLOG=1
```

## SYN\_3D\_TOOLBAR – Apply 3-D edges to toolbar buttons



The SYN\_3D\_TOOLBAR environment variable gives toolbar buttons 3-D edges whenever themes are active.

### Value

1.

### Discussion

In Windows, “hot” is the style applied to toolbar buttons that are under the mouse pointer. When set to **1**, SYN\_3D\_TOOLBAR applies the hot style to all toolbar buttons in UI Toolkit applications on Windows, even those that aren’t under the mouse pointer. This gives the toolbar buttons 3-D edges.

### Setting location

The environment or the [synergy], [dbr], or [myprog] section of **synergy.ini** (where *myprog* is any **.dbr** file).

### Used by

UI Toolkit.

### Examples

In the **synergy.ini** file,

```
[synergy]
SYN_3D_TOOLBAR=1
```

## SYN\_RESIZE\_SCALE – Make application window resizable



The SYN\_RESIZE\_SCALE environment variable makes the application window resizable (in Synergy .NET) or scales all fonts in the application window (in traditional Synergy).

### Value

1.

### Discussion

For Synergy .NET applications that use the Synergy windowing API or UI Toolkit, setting SYN\_RESIZE\_SCALE to **1** causes the application window to become resizable and maximizable. All fonts in the application will be scaled (maintaining their aspect ratio) by the same percentage based on the largest font that will fit in the visible application window when resized. (There is only one font in Synergy .NET. The default for the Synergy windowing API is Consolas.)

For traditional Synergy applications, setting SYN\_RESIZE\_SCALE to **1** scales all fonts in the application window as described above.

For best results when scaling, we recommend using only TrueType or OpenType fonts. Note that message boxes, menu bars and toolbars (traditional Synergy only), buttons, ActiveX controls, and Windows common controls (e.g., Choose Color dialog, Choose Font dialog, Select Palette dialog, Open File dialog, Print Preview, etc.) will not scale.

### Setting location

The environment or the [synergy], [dbr], or [myprog] section of **synergy.ini** (where *myprog* is any .dbr file).

### Used by

UI Toolkit, Synergy windowing API.

### Examples

In the **synergy.ini** file,

```
[synergy]
SYN_RESIZE_SCALE=1
```



## SYN\_TRANSPARENCY\_THRESHOLD – Transparent color range threshold

WT			
----	--	--	--

The SYN\_TRANSPARENCY\_THRESHOLD environment variable specifies a value that can be added to or subtracted from each RGB component of the transparent color to constitute an acceptable transparency range. It is ignored on Windows 8 and higher.

### Value

The threshold above or below each RGB component of the transparent color to accept as within the transparency range. This value must be in hexadecimal notation, preceded by “0x”, as follows:

0xhh

### Discussion

This environment variable is primarily useful with JPEG images. Because JPEGs use a lossy compression algorithm, a pixel will not necessarily be returned in exactly the same color as it started out. Defining a transparency threshold can help eliminate transparency problems. For example, on a white background, a threshold of 0x10 can avoid white-looking blotches in the background. With the following settings

```
SYN_TRANSPARENT_COLOR=0xFF, 0xFF, 0xFF
SYN_TRANSPARENCY_THRESHOLD=0x10
```

Synergy/DE will accept colors as dark as 0xEF,0xEF,0xEF as transparent, which works well for JPEGs with a white background.

For non-JPEG images, a threshold is typically not needed, unless you are not certain about the exact background color (for instance, when images are scanned in or from a third-party source).

### Setting location

The environment or the [synergy], [dbr], or [myprog] section of **synergy.ini** (where *myprog* is any .dbr file).

### Used by

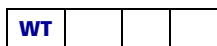
UI Toolkit, Composer, Synergy Windows printing API.

### Examples

In the **synergy.ini** file,

```
[synergy]
SYN_TRANSPARENCY_THRESHOLD=0x10
```

## SYN\_TRANSPARENT\_COLOR – Color treated as transparent



The SYN\_TRANSPARENT\_COLOR environment variable specifies a color to be treated as transparent. It is ignored on Windows 8 and higher.

### Value

The RGB triplet for the color you want to designate as transparent. This triplet must be in hexadecimal notation, separated by commas and preceded by “0x”, as follows:

`0xrr,0xgg,0xbb`

where *rr* is the value for red, *gg* is the value for green, and *bb* is the value for blue.

### Discussion

Only one color can be designated as transparent, and the specified color will be transparent in all images that contain it. *Transparent* means that pixels that correspond to that color be left unpainted, so that they show whatever color was painted at that location “behind” the image (for example, the face color on a button, or whatever else may have been printed in the same location on a page by the Synergy Windows printing API). This feature accommodates for the fact that not all users use the same background colors for toolbar and other buttons.

If SYN\_TRANSPARENT\_COLOR is not set, or if it is not set correctly, transparency will not be imposed on any images.



You can only use the SETLOG routine to set the value of SYN\_TRANSPARENT\_COLOR before loading the first image. After the first image is loaded, you cannot use SETLOG.

### Setting location

The environment or the [synergy], [dbr], or [myprog] section of **synergy.ini** (where *myprog* is any **.dbr** file).

### Used by

UI Toolkit, Composer, Synergy Windows printing API.

### Examples

In the **synergy.ini** file,

```
[synergy]
SYN_TRANSPARENT_COLOR=0xFF, 0xFF, 0xFF
```

## SYN\_ULIMIT – ulimit value



The SYN\_ULIMIT environment variable defines ulimit for the Synergy runtime and xfServer.

### Value

To raise the current maximum file limit, one of the following:

- ▶ A resource limit specified as the number of 512-byte blocks (the standard notation used by ulimit)
- ▶ A resource limit specified as the number of kilobytes, megabytes, or gigabytes, in the format *numberKb*, *numberMb*, or *numberGb*, respectively
- ▶ **-1**, to set ulimit to unlimited

To lower the current maximum file limit,

- ▶ A resource limit specified as the number of kilobytes followed by the letter “R” (*numberR*)

### Discussion

To raise the maximum file limit with SYN\_ULIMIT, you must add the setuid bit to the Synergy runtime and xfServer executables (**dbr**, **dbs**, and **rsynd**). This is no longer the default for a distributed runtime. (You do not need to set setuid to lower the file limit.)

In order for the Synergy runtime or xfServer to raise the ulimit value, **dbr** and **rsynd** must be owned by root and have the setuid bit set. To make root own **dbr** and **rsynd** and set the setuid bit, enter the following at the command line:

```
chown root dbr rsynd
chmod u+s dbr rsynd
```

If the setuid bit is not set, files created by the Synergy runtime or xfServer are limited to the system ulimit.

By default, when SYN\_ULIMIT is activated, files created with the Synergy runtime or xfServer are limited to 204800 blocks (104 MB) or the system ulimit if it is higher.



Do not use SYN\_ULIMIT if you use Connectivity Series. Instead, use your operating-system equivalent.

### Setting location

The environment.

## Environment Variables

### SYN\_ULIMIT

#### Used by

Runtime, compiler, linker, librarian, **fcompare**, **fconvert**, **isutl**.

#### Examples

In the example below, files are limited to 204800 512-byte blocks (which is 104,857,600 bytes, or 104 MB) or the system ulimit, if it is higher.

```
SYN_ULIMIT=204800 ;export SYN_ULIMIT
```

In the following example, files are limited to 104 MB, which is equivalent to the first example.

```
SYN_ULIMIT=104Mb ;export SYN_ULIMIT
```

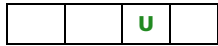
The example below sets an unlimited file limit.

```
SYN_ULIMIT=-1 ;export SYN_ULIMIT
```

The example below reduces the file limit to 50,000K.

```
SYN_ULIMIT=50000R ;export SYN_ULIMIT
```

## SYNBACKUP – Enable backup mode feature



The SYNBACKUP environment variable enables the backup mode feature, which means I/O update operations can be frozen so a Synergy system backup can safely be performed.

### Value

Any value.

### Discussion

The SYNBACKUP environment variable is available for use by the **synbackup** utility, which enables you to back up your Synergy system without terminating all applications or processes accessing the files. On UNIX, the current backup mode (Pending, On, Off, or Not Allowed) is maintained in a shared memory segment on the system. The **synbackup** utility initializes and maintains this shared memory segment, as well as sets the backup mode to Pending, On, or Off. The base address of this memory segment is stored in the file **DBLDIR:synbackup.cfg**. So that the runtime does not have to repeatedly open this file, it first checks the environment variable SYNBACKUP. The runtime only opens the **synbackup.cfg** file to retrieve the base address if SYNBACKUP is set.

When SYNBACKUP is not set, the backup mode feature is disabled.

### Setting location

The **setsde** file created by the installation, but it is commented out at installation and must be uncommented by the system administrator.

### Used by

**synbackup**.

### See also

[“The synbackup Utility”](#) in the “General Utilities” chapter of *Synergy Tools*.

### Examples

```
SYNBACKUP=1
```

## SYNBASEDATE – Base date for xfODBC Julian day conversions



The SYNBASEDATE environment variable sets the base date for conversion of date fields with the *JJJJJJ* format.

### Value

The date you want to use as a base date, in *YYYY-MM-DD* format. By default, SYNBASEDATE is set to 1752-09-14 (September 14, 1752).

### Discussion

When you enter a date into a field with the *JJJJJJ* format, xfODBC stores the date as the difference between the date and the SYNBASEDATE value. Changing this value changes the way dates are stored and read.



---

Once you've modified data in the database, do not change the SYNBASEDATE value or the database will be corrupted. In addition, if you use the Julian functions %JPERIOD or %NDATE, do *not* use SYNBASEDATE.

---

If you do not set this variable, xfODBC uses the same base date as the Synergy runtime.

SYNBASEDATE does not affect the way system catalogs are generated.

### Setting location

The connect file, the current environment, or the system-level. For client/server configurations, set SYNBASEDATE in the connect file on the server.

### Used by

xfODBC.

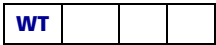
### See also

[“Setting the base date for Julian day conversions”](#) in the “Configuring Data Access” chapter of the *xfODBC User’s Guide*.

### Examples

```
SYNBASEDATE=1582-10-04
```

## SYNBIN – Composer directory



The SYNBIN environment variable specifies the directory that contains Composer. Workbench uses this environment variable to locate Composer.

### Value

The path for the directory in which Composer is installed.

### Setting location

In the [synergy] section of the distributed **synergy.ini** file installed with Synergy/DE.

### Used by

Workbench.

### Examples

SYNBIN=%SYNERGYDE32%composer

## SYNBITSIZE – 32- vs. 64-bit configuration



The SYNBITSIZE environment variable specifies whether the current configuration is 32-bit or 64-bit.

### Value

One of the following values:

**32**      32-bit configuration. (default)

**64**      64-bit configuration.

### Discussion

If the “64-bit configuration” check box is not selected in the Synergy/DE Options dialog, Workbench sets the value of the SYNBITSIZE environment variable to 32.

If “64-bit configuration” is selected for the current configuration, Workbench sets the value of SYNBITSIZE to 64.

You should never set or change this environment variable manually.

### Setting location

The environment.

### Used by

Workbench.

### Examples

SYNBITSIZE=64



## SYNCENTURY – Two-digit year used to determine default century



The SYNCENTURY environment variable defines a sliding window for Synergy/DE default century methods by specifying a two-digit year to be used as a defining point. Years prior to the specified year use one century, while years the same as or later than the specified year use a different century.

### Value

A two-digit year in the range 00 – 99.

### Discussion

UI Toolkit and ReportWriter enable you to define a method that is called whenever a default century is required. If no century method is registered but SYNCENTURY is defined, an internal century method is called. If SYNCENTURY is not defined or is invalid, Toolkit and xfODBC use the current system century, while ReportWriter uses 19 as the century for all dates stored in YYMMDD, YYJJJ, and YYPP formats.

The default century method used by Toolkit, ReportWriter, and xfODBC provides a sliding window whereby the default century for each side of the window is determined by SYNCENTURY and the current year. If the current two-digit year falls between 0 and SYNCENTURY, years between 0 and SYNCENTURY use the current system century, while years between SYNCENTURY (inclusive) and 99 use the previous century. If the current two-digit year falls between SYNCENTURY (inclusive) and 99, years between 0 and SYNCENTURY use the next century, while years between SYNCENTURY (inclusive) and 99 use the current system century.

The following table contains the translated four-digit year when SYNCENTURY is set to 50:

Current year	Year entered by user	Translated four-digit year
1998	0	2000
1998	49	2049
1998	50	1950
1998	99	1999
2000	0	2000
2000	49	2049
2000	50	1950
2000	99	1999



Selection and sorting of dates in YYYYMMDD, YYJJJ, or YYPP formats are not optimized if SYNCENTURY is set or if %RW\_CENTURY\_METHOD is specified.

## Setting location

For ReportWriter and UI Toolkit:

The environment. On Windows, this environment variable can also be set in the [synergy], [dbr], or [myprog] section of **synergy.ini** (where *myprog* is any **.dbr** file).

For xfODBC:

For standalone configurations, set SYNCENTURY in the connect file or in the environment. For client/server configurations, set it in the connect file on the server.

## Used by

ReportWriter, UI Toolkit, xfODBC, **fcompare**.

## See also

- ▶ [E\\_METHOD](#) and [%ECENTURY\\_METHOD](#) in the “Environment Routines” chapter of the *UI Toolkit Reference Manual* for more information on providing your own century method for Toolkit.
- ▶ “[Specifying a Century for Two-digit Years](#)” in the “Customizing ReportWriter Routines” chapter of the *ReportWriter User’s Guide* for information on providing your own century method for ReportWriter with %RW\_CENTURY\_METHOD.

## Examples

On Windows, if set in the **synergy.ini** file,

```
[synergy]
SYNCENTURY=50
```

## SYNCMPOPT – Options for all traditional Synergy compilations



The SYNCMPOPT environment variable specifies a list of compiler options that will be added to all traditional Synergy (dbl) compilations.

### Value

One or more valid compiler options, separated by a space.

### Discussion

SYNCMPOPT enables you to specify compiler options that are always used so you don't have to specify them manually each time you compile. These options will be inserted before any command line options entered on a single command line invocation of the compiler, or before each line in a list of commands that are either entered interactively or read from a redirected input file.

### Setting location

The environment or the [synergy] section of **synergy.ini**.

### Used by

Traditional Synergy compiler.

### Examples

If SYNCMPOPT is set on Windows as follows:

```
set SYNCMPOPT=-qnet -qalign
```

entering the command

```
dbl -l tt: source.dbl
```

causes the compiler to respond as if you had entered

```
dbl -qnet -qalign -l tt: source.dbl
```

If, however, you enter the command

```
dbl
```

and then enter the filename after the prompt, as follows:

```
DBL> source.dbl
```

the compiler responds as if you had entered the command

```
dbl -qnet -qalign source.dbl
```

## SYNCSCOPT – C# compiler options



The SYNCSCOPT environment variable specifies a list of C# compiler options that will be used when building a Synergy .NET assembly with xfNetLink .NET.

### Value

One or more valid C# compiler options, separated by a space.

### Discussion

You can use SYNCSCOPT to add C# compiler options to the command line that xfNetLink .NET uses to build the Synergy assembly. Set SYNCSCOPT before running the batch file generated by **gens** or, if you are using Workbench, before selecting Build > Build Assembly.

If you set SYNCSCOPT to an option that is already included on the generated command line, the option defined by SYNCSCOPT will be used.

See your C# documentation for a list of compiler options and their syntax.

### Setting location

At the command prompt, in the global environment (i.e., from the System Properties dialog box), on the Workbench command line, or on the Open tab of the Project properties dialog box in Workbench.

### Used by

Workbench, **gens**.

### See also

[“Creating an Assembly in Workbench”](#) and [“Creating an Assembly from the Command Line”](#) in the “Creating Synergy .NET Assemblies” chapter of the *xfNetLink & xfServerPlus User’s Guide*.

### Examples

If set at the command prompt,

```
set SYNCSCOPT=/baseaddress:0x123456 /warn:1
```

## SYNDEFNS – Default and other namespaces to import



The SYNDEFNS environment variable specifies namespaces to import implicitly. The first name in the list is the default namespace.

### Value

A semicolon-delimited list of namespaces to import.

### Discussion

Items declared (for example, unqualified subroutines and functions) without a namespace will be put into the first namespace in the list when a prototype for those items is created.

To also import any nested namespaces, add a wildcard character (\*) after the namespace name, (for example, **mydefaultnamespace.\***). A wildcard character cannot be used for the first namespace in the list.




---

**System** and **Synergex** (and namespaces nested within them) and **synglobal** are reserved namespace names.

---

If SYNDEFNS is not defined, **synglobal** is the default namespace.

If the **-qdefns** compiler option is specified, SYNDEFNS is ignored.

### Setting location

The environment or the [synergy] section of **synergy.ini**.

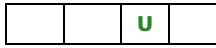
### Used by

Compiler, Workbench, Synergy Prototype utility.

### Examples

```
set SYNDEFNS = MyCompany
set SYNDEFNS = MyCompany.MyDivision
set SYNDEFNS = synglobal;MyCompany.*
```

## SYNDLOG – Alternate License Manager debug log file



The SYNDLOG environment variable specifies an alternate location and name for the Synergy/DE License Manager debug log file, **synd.log**.

### Value

The directory path and name of the log file you want to create. The default is **/usr/lib/synd.log**.

### Discussion

If the SYNDLOG value exceeds 96 characters, **/usr/lib/synd.log** is used.

### Setting location

The environment.

### Used by

License Manager server.

### See also

[“Error logging”](#) in the UNIX section of the “Configuring License Manager” chapter in the *Installation Configuration Guide*.

### Examples

```
SYNDLOG=/usr/lib/logs/synd.log ;export SYNDLOG
```

## SYNERGY\_NOLOCALE – Don't use local user's language settings

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Setting SYNERGY\_NOLOCALE stops the runtime from using the local user's language localization settings to determine valid uppercase and lowercase characters in the 8-bit range (above 128).

### Value

Any value.

### Discussion

Uppercase and lowercase characters are read from the local system LOCALE for the 8-bit (128–255) space. On UNIX and OpenVMS, no 8-bit characters are defined; you must define the LOCALE or set the LANG environment variable for your operating system to enable the correct multilanguage 8-bit characters. On Windows, LOCALE is an operating system definition (the ANSI international character set by default), and no action is necessary on your part unless you want pre-Synergy/DE 7.3.1a behavior. Prior to Synergy/DE 7.3.1a, A–Z and a–z with the 8th bit set were considered characters (although these rarely matched actual international characters). To revert to this behavior on any operating system, set SYNERGY\_NOLOCALE.

You must set SYNERGY\_NOLOCALE if you want to set DBLOPT=32 for two-byte characters.

### Setting location

The environment. On Windows, this environment variable can also be set in the [synergy] or [dbr] section of **synergy.ini**.

### Used by

Runtime.

### Examples

```
SYNERGY_NOLOCALE=1 ;export SYNERGY_NOLOCALE
```

## SYNERGYDE – Synergy/DE directory

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This environment variable is deprecated and should never be set manually. Its value is derived from the setting for SYNERGYDE32 or SYNERGYDE64.

The SYNERGYDE environment variable specifies where Synergy/DE resides.

### Value

The Synergy/DE directory where Synergy/DE was installed.

### Discussion

As of version 10, Synergy/DE installations are always installed to the default Program Files\Synergex location.

### Setting location

The environment.

### Used by

Runtime, Workbench, Composer.

### Examples

```
SYNERGYDE=c:\synergyde\
```



## SYNERGYDE32 – Synergy/DE directory for 32-bit installations



The SYNERGYDE32 environment variable specifies where Synergy/DE resides for a 32-bit installation.

### Value

The Synergy/DE directory where Synergy/DE was installed.

### Discussion

SYNERGYDE32 is set by the 32-bit Core Components installation when installing Synergy/DE 32-bit on either a 32-bit or a 64-bit operating system. It is also set by the 32-bit Synergy/DE Client installation. You should not change this or any other environment variable that is set by the system.

As of version 10, Synergy/DE installations are always installed to the default Program Files\Synergex location.

### Setting location

The environment.

### Used by

Runtime, Workbench, Composer.

### Examples

SYNERGYDE32=c:\synergyde\

## SYNERGYDE64 – Synergy/DE directory for 64-bit installations



The SYNERGYDE64 environment variable specifies where Synergy/DE resides for a 64-bit installation.

### Value

The Synergy/DE directory where Synergy/DE was installed.

### Discussion

SYNERGYDE64 is set by the 64-bit Core Components installation when installing Synergy/DE 64-bit on a 64-bit operating system. It is also set by the 64-bit Synergy/DE Client installation. You should not change this or any other environment variable that is set by the system.

As of version 10, Synergy/DE installations are always installed to the default Program Files\Synergex location.

### Setting location

The environment.

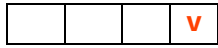
### Used by

Runtime, Workbench, Composer.

### Examples

```
SYNERGYDE64=c:\synergyde64\
```

## SYNERGYDE\$ROOT – Root directory for Synergy/DE files



SYNERGYDE\$ROOT is a “rooted” logical that points to the root directory of the location of the Synergy/DE files.

### Value

The path, including the device, for the directory that contains the Synergy/DE files.

### Discussion

Every Synergy logical is based in some way or another on the SYNERGYDE\$ROOT logical.

### Setting location

The **SYNERGY\_STARTUP.COM** file found in SYS\$MANAGER.

### Used by

Every Synergy product and utility that is installed on OpenVMS uses SYNERGYDE\$ROOT in some way.

### Examples

```
$ DEFINE/TRANS=CONCEALED SYNERGYDE$ROOT DKA0:[SYNERGYDE.]
```

## SYNEXPDIR – Export directory for prototype files



The SYNEXPDIR environment variable specifies the directory to which the Synergy Prototype utility will export prototypes if no directory is specified on the **dblproto** command line.

### Value

The path for the directory to which the Synergy Prototype utility will export prototype files.

### Discussion

If SYNEXPDIR is not defined, the Synergy Prototype utility will export prototypes to the current directory.



---

Traditional projects in Visual Studio ignore SYNEXPDIR.

---

### Setting location

The environment or the [synergy] section of **synergy.ini**.

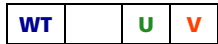
### Used by

Synergy Prototype utility.

### Examples

```
SYNEXPDIR=c:\mydir\prototypes\
```

## SYNIMPDIR – Directories to search for import files and prototypes



The SYNIMPDIR environment variable specifies the directories to search for files that contain namespaces in IMPORT statements and when checking prototypes.

### Value

One or more directory paths, separated by a comma.

### Discussion

When importing namespaces, all specified directories are searched in order of their appearance within the SYNIMPDIR environment variable. This list is searched after any directories specified by the **-qimpdir=import\_dir** compiler option.

Prototype (**.dbp**) files located in directories specified by SYNIMPDIR will be used for prototype checking when you compile.



Traditional projects in Visual Studio ignore SYNIMPDIR and use only the **-qimpdir** compiler option.

### Setting location

The environment or the [synergy] section of **synergy.ini**.

### Used by

Compiler, Workbench, Synergy Prototype utility.

### See also

**IMPORT** in the “Synergy DBL Statements” chapter of the *Synergy DBL Language Reference Manual*.

### Examples

```
SYNIMPDIR=c:\mydir\,d:\mydir
```

## SYNNET\_DEBUG – Enable debugging for the Synergy .NET assembly API

WT			
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The SYNNET\_DEBUG environment variable enables debugging for the Synergy .NET assembly API.

### Value

If the SYNNET\_DEBUG environment variable is set to a value of 1 when the first assembly is loaded, debugging will be enabled.

### Discussion

When debugging is enabled, debug messages are logged using the OutputDebugString Windows API function. You can view these messages using Visual Studio, other compatible C-level debuggers, or the DebugView program from [technet.microsoft.com/en-us/sysinternals/bb896647](http://technet.microsoft.com/en-us/sysinternals/bb896647).

### Setting location

Inherited from the parent process environment; in the [synergy], [dbr], or [myprog] section of **synergy.ini** (where *myprog* is any **.dbr** file); or set explicitly using the SETLOG routine before loading the first assembly.

### Used by

Synergy .NET assembly API.

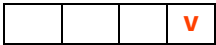
### See also

[“Debugging”](#) in the introduction to the “Synergy .NET Assembly API” chapter of the *Synergy DBL Language Reference Manual*.

### Examples

```
SYNNET_DEBUG=1
```

## SYNRPT – Location of the SYNRPT.EXE shared image



The SYNRPT logical points to **RPTLIB:SYNRPT.EXE** for use in activating the shared image that contains the ReportWriter shared library.

### Value

The full path and filename of the **SYNRPT.EXE** shared image.

### Setting location

The **SYNERGY\_STARTUP.COM** file found in SYSS\$MANAGER (or **ACTIVATE\_SDE.COM** for alternate installations).

### Used by

ReportWriter.

### Examples

```
$ DEFINE/SYS/EXEC SYNRPT RPTLIB:SYNRPT.EXE
```

## SYNSSL\_RAND – File containing random data for Synergy SSL encryption



The SYNSSL\_RAND environment variable specifies a file that contains random data.

### Value

The path and name of a text file or an entropy-gathering device (if available on your system).

### Discussion

When encrypting sensitive data, Synergy DBMS uses random data to ensure that the data is secure, because random data helps prevent hackers from guessing patterns. For most systems, this random data can be gathered from recognized system entropy devices or from the screen itself, or from a temporary file filled with random logic. However, on some systems, these methods do not generate enough random data to seed cryptographic algorithms, and a “Cannot load random state” error is generated. To eliminate this error, you can define the SYNSSL\_RAND environment variable to point at a file that will be used (as a last resort) to gather random data when encryption occurs.

### Setting location

The environment on the client and/or the server. On Windows, this environment variable can also be set in the [synergy], [dbr], or [myprog] section of **synergy.ini** (where *myprog* is any **.dbr** file).

### Used by

xfServer, xfServerPlus.

### See also

- ▶ [“Using Client/Server Encryption”](#) in the “Configuring xfServer” chapter of the *Installation Configuration Guide*.
- ▶ [“Using Encryption”](#) in the “Configuring and Running xfServerPlus” chapter of the *xfNetLink & xfServerPlus User’s Guide*.

### Examples

On Windows,

```
set SYNSSL_RAND=c:\windows\random.txt
```

On UNIX,

```
SYNSSL_RAND=/etc/entropy ;export SYNSSL_RAND
```



## SYNSSLLIB – Synergy SSL runtime support library



The SYNSSLLIB logical specifies the location of the Synergy SSL runtime support library (**synssllib.exe**).

### Value

The full path and filename of the **SYNSSLLIB.EXE** library.

### Discussion

SYNSSLLIB is used for network and data encryption. SYNSSLLIB is set by the installation.

### Setting location

The **SYNERGY\_STARTUP.COM** file found in SYS\$MANAGER (or **ACTIVATE\_SDE.COM** for alternate installations).

### Used by

Runtime, xfServer, xfServerPlus.

### Examples

```
$ define/sys/exec SYNSSLLIB SYNERGYDE$ROOT:[DBL.BIN]SYNSSLLIB.EXE
```

## SYNTXT – Message text file directory



The SYNTXT environment variable points to the directory where the **syntxt** ISAM file can be found.

### Value

The directory that contains **syntxt.ism**.

### Discussion

SYNTXT points to the directory that contains the message text file **syntxt.ism**. If this environment variable is not set, then the default directory is the one pointed to by DBLDIR.

### Setting location

The environment. On Windows, this environment variable can also be set in the [synergy], [dbr], or [myprog] section of **synergy.ini** (where *myprog* is any **.dbr** file).

### Used by

UI Toolkit.

### Examples

On Windows,

```
SYNTXT=s:\synergy\german
```

## SYNUSERDEF – File to include at beginning of compilation unit



The SYNUSERDEF environment variable specifies a file to implicitly include at the beginning of a compilation unit.

### Value

The file specification to include. The path can be full or relative. The default extension is **.dbl**.

### Discussion

SYNUSERDEF enables you to define identifiers that will apply across all files in a compilation unit. First create a file that contains the desired **IMPORT** statements, **.DEFINE** and **.INCLUDE** directives, etc., and store the file in an accessible location. Set SYNUSERDEF to the path and name of this file, and then compile your files.



Although SYNUSERDEF enables you to import multiple namespaces, we don't recommend using it this way. Instead, we recommend that you add explicit **IMPORT** statements, or (for non-.NET applications) use **SYNDEFNS**.

If the **-quserdef** compiler option is specified, SYNUSERDEF is ignored.

### Setting location

The environment or the [synergy] section of **synergy.ini**.

### Used by

Compiler, Workbench, Synergy Prototype utility.

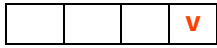
### See also

[SYNDEFNS on page 1-237](#).

### Examples

```
set SYNUSERDEF = c:\MyFiles\contacts.def
```

## SYNXML – SYNXML.EXE shared image



The SYNXML logical specifies the location of the shared image that contains the Synergy XML API library.

### Value

The full path and filename of the **SYNXML.EXE** shared image.

### Setting location

The **SYNERGY\_STARTUP.COM** file found in SYSS\$MANAGER (or **ACTIVATE\_SDE.COM** for alternate installations).

### Used by

Synergy XML API.

### Examples

```
$ DEFINE/SYS/EXEC SYNXML DBLDIR:SYNXML.EXE
```

## TABSET\_STYLE – Tab set style



The TABSET\_STYLE environment variable sets the initial style for all tabbed dialogs.

### Value

(optional) One or more of the following styles, separated by commas: (n)

<b>MULTILINE</b>	Multiple lines of tabs
<b>VERTICAL</b>	Left or right side
<b>BOTTOM</b>	Bottom or right
<b>RIGHT</b>	Bottom or right

If TABSET\_STYLE is set to nothing, the default style is used.

### Discussion

If you’re using the SETLOG subroutine to set TABSET\_STYLE, do so prior to calling the Toolkit U\_START subroutine.

### Setting location

The environment or the [synergy], [dbr], or [myprog] section of **synergy.ini** (where *myprog* is any **.dbr** file).

### Used by

UI Toolkit.

### See also

- ▶ The [DTS\\_DEFAULT subfunction](#) of %TS\_TABSET in the “Tab Set Routines” chapter of the *UI Toolkit Reference Manual* for setting the default tab set style at runtime.
- ▶ The [DTS\\_CREATE subfunction](#) of %TS\_TABSET in the “Tab Set Routines” chapter of the *UI Toolkit Reference Manual* for setting the tab set style per tab set and for descriptions of the various tab set styles.

### Examples

The following example sets the global default tab set style to contain multiple rows of vertical tabs, on the right side of the tabbed dialog.

```
[synergy]
TABSET_STYLE=MULTILINE, VERTICAL, RIGHT
```

## TBUF – Terminal output buffer size



The TBUF environment variable specifies the size of the terminal output buffer.

### Value

The size of the output buffer in bytes. It must be a value greater than 0 but less than 2048.

### Discussion

The default value is 128 bytes. Setting TBUF to a value greater than 128 may result in longer delays between updates.



TBUF only works if system option #12 is set with DBLOPT.

### Setting location

The environment.

### Used by

Runtime.

### Examples

```
TBUF=256 ;export TBUF
```

## TERM – Terminal type



The TERM environment variable specifies the terminal type to use.

### Value

The type of terminal you are using.

### Discussion

#### WIN

---

If you are using UI Toolkit, TERM should be set to **MSWINDOWS**. However, if neither DTKTERM nor TERM are set, Toolkit defaults to MSWINDOWS.

---

#### UNIX

---

You must set TERM if you are using UI Toolkit or the windowing API. Other UNIX tools, such as **vi**, also use TERM.

The operating system looks in the directory **/usr/subdir/terminfo** (where *subdir* is either **share**, **lib**, or **share/lib**) or in the file **/etc/termcap** for your terminal type. The terminal type for your process may already be set. If it is, make sure it's valid. If TERM is not set or is set to a nonexistent terminal type, Synergy DBL returns an error at startup (unless system option #30 is set).

---

### Setting location

The environment. On Windows, this environment variable can also be set in the [synergy], [dbr], or [myprog] section of **synergy.ini** (where *myprog* is any **.dbr** file).

TERM can be reset by the SETLOG subroutine, and the runtime interprets the new setting.

### Used by

Runtime.

### See also

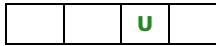
[“Customizing Key Mapping for Menu Shortcuts”](#) in the “Customizing UI Toolkit” chapter of the *UI Toolkit Reference Manual* for more information about terminal types.

### Examples

On UNIX,

```
TERM=vt100 ;export TERM
```

## TERMCAP – Termcap file



When **termcap** is linked into the Synergy runtime, the **TERMCAP** environment variable either determines the file to use instead of **/etc/termcap** or is set to the **termcap** entry itself.

### Value

The name of either a **termcap** file or a **termcap** entry.

### Setting location

The environment.

### Used by

Runtime.

### Examples

```
TERMCAP=/usr/dbl/ansi.tc ;export TERMCAP
```



## TKLIB\_SH – TKLIB\_SH.EXE shared image



The TKLIB\_SH logical specifies the location of the shared image that contains the UI Toolkit libraries.

### Value

The full path and filename of the **TKLIB\_SH.EXE** shared image.

### Setting location

The **SYNERGY\_STARTUP.COM** file found in SYS\$MANAGER (or **ACTIVATE\_SDE.COM** for alternate installations).

### Used by

UI Toolkit.

### Examples

```
$ DEFINE/SYS/EXEC TKLIB_SH WND:TKLIB_SH.EXE
```

## TNMBR – Current terminal number



The TNMBR environment variable specifies the current terminal number.

### Value

The number you want the TNMBR subroutine to return for your terminal.

### Discussion

It is your responsibility to ensure that you don't give the same terminal number to more than one terminal.

When a non-interactive runtime (**db**s, **dbssvc**, or **dbspriv**) is used, or when an interactive runtime is used with input or redirected output, TNMBR defaults to -1.

On Windows, if you don't set TNMBR, the runtime uses the default value, which is 0 in all Windows environments.

On UNIX, avoid setting TNMBR to 254 or 255 when using SEND and RECV.

### Setting location

The environment. On Windows, this environment variable can also be set in the [synergy], [dbr], or [myprog] section of **synergy.ini** (where *myprog* is any **.dbr** file).

TNMBR can be reset by the SETLOG subroutine, and the runtime interprets the new setting.

### Used by

Runtime.

### Examples

On OpenVMS,

```
$ DEFINE TNMBR 1
```

## TRIM\_HOME – xfODBC system catalog caching file



The TRIM\_HOME environment variable specifies the location of the **trim.ini** (UNIX only) and **trim.msg** files. The **trim.ini** file specifies the amount of space allocated for each shared memory segment used by the system catalog cache. The **trim.msg** file supplies error text for the **syngenload** program.

### Value

The directory with a lib subdirectory that contains either **trim.msg** (on Windows and OpenVMS) or both **trim.ini** and **trim.msg** (on UNIX).

### Discussion

The Connectivity Series installation sets this environment variable. Do not change this setting.

### Setting location

The **opennet.std** file, which must be on the server.

### Used by

SQL OpenNet and xfODBC.

### See also

[“System Catalog Caching”](#) in the “Configuring Data Access” chapter of the *xfODBC User’s Guide*.

## TYPE\_FACE – Font name



In traditional Synergy, the TYPE\_FACE environment variable sets the typeface of the global font if a global font is not otherwise specified. In Synergy .NET, it specifies the font typeface that should be used.

### Value

The name of the desired Windows font (or typeface). The default is Courier New.

### Discussion

Traditional Synergy uses the specified typeface for application windows less than 132 columns and for the debugger window. If you want to specify a new font using TYPE\_FACE, it should be a font that comes in standard Windows packages.

You may want to use a fixed font because the character columns will always have the same alignment from row to row (as they would on a VT-100 or other text terminal), and text positioning will remain consistently aligned. We recommend that you use a fixed font when doing non-Toolkit processing.

Another style consideration when choosing a typeface is whether you want a serif or a sans-serif font. Serifs are the little strokes (or “feet”) at the ends of a letter’s main strokes. A sans-serif style does not have these ending strokes. Serif typefaces are generally recommended for larger bodies of text because the serifs on each letter can help guide the eyes. Sans-serif typefaces work well for short phrases, headings, and small amounts of text.

To find a list of available typefaces, open the Character Map utility (in the Accessories group). The typeface names are case sensitive.

We recommend that you use the FONT\_GLOBAL environment variable rather than TYPE\_FACE.

### Setting location

The environment or the [synergy], [dbr], or [myprog] section of **synergy.ini** (where *myprog* is any **.dbr** file).

### Used by

Runtime, debugger.

### See also

- ▶ [“Using Fonts on Windows”](#) in the “Customizing UI Toolkit” chapter of the *UI Toolkit Reference Manual* for the hierarchy used to determine the global font.
- ▶ [FONT\\_GLOBAL](#) on page 1-96.

## Examples

In the **synergy.ini** file,

```
[synergy]  
TYPE_FACE=Terminal
```

## UMASK – File mode creation mask



The UMASK environment variable sets the file mode creation mask (umask) for xfServer and xfServerPlus.

### Value

An octal umask value you want to set. Refer to the octal form of `umask(1)` in the UNIX man pages for details.

### Discussion

Some security implementations cause the umask value to be cleared. You must use the UMASK environment variable in those instances.

### Setting location

The **synrc** file or the environment. If set in the environment, UMASK must be set before xfServer or xfServerPlus is started. Setting it in the **synrc** file is the better choice because it guarantees that the UMASK setting will be used.

### Used by

xfServer, xfServerPlus.

### Examples

The example below creates a file **-rw-rw-r--** (read and write by owner, read and write by group, and read only by others).

```
UMASK=02      ;export UMASK
```

## VFYCTL – Change isutl behavior

WT	WN	U	
----	----	---	--

The VFYCTL environment variable changes the default behavior of the **isutl** utility.

### Value

**NO\_DSCAN.**

### Discussion

Setting VFYCTL to “NO\_DSCAN” tells **isutl** not to scan the data file before verifying the index. Normally, **isutl** prescans the data file to determine if the data file is capable of being recovered.

### Setting location

The environment.

### Used by

**Isutl** utility.

### Examples

On UNIX,

```
VFYCTL=NO_DSCAN      ;export VFYCTL
```

## VORTEX\_API\_LOGFILE – Connectivity Series client-side log file



The VORTEX\_API\_LOGFILE environment variable turns on logging and specifies the path and name of the file that will log statements issued to the database by the xfODBC driver or SQL Connection.

### Value

The path and name of the Vortex API log file you want to produce. You do not need to specify a filename extension.

### Discussion

Vortex API logging is helpful in debugging queries. By recording Vortex API calls made by the xfODBC driver on a Windows client, you can see the exact SQL statement issued to the database, debug SQL statement errors, and verify optimization. Use VORTEX\_API\_LOGOPTS to set options for the log file. If you set VORTEX\_API\_LOGFILE without VORTEX\_API\_LOGOPTS, the log file includes a list of all operations along with a total count for each operation.

Once you have successfully logged the error, turn logging off by unsetting VORTEX\_API\_LOGFILE and VORTEX\_API\_LOGOPTS (and reboot if necessary). Logging slows performance, and the log files can quickly fill your disk.

### Setting location

The environment. We recommend that you use log files to debug in a stand-alone configuration. If you need to use Vortex API logging in a client/server configuration, set the environment variables on the client. For services such as web servers that use the xfODBC driver, you can use the Env. variables field in the xfODBC Setup window to set this environment variable on the client.

### Used by

xfODBC, SQL Connection.

### See also

- ▶ [VORTEX\\_API\\_LOGOPTS](#) on page 1-265.
- ▶ “[Vortex API logging](#)” in the “Data Access Errors and Error Logging” chapter of the *xfODBC User’s Guide*.
- ▶ “[SQL Connection Troubleshooting and Error Logging](#)” in the “Error Logging and Messages” chapter of the *SQL Connection Reference Manual*.

### Examples

```
VORTEX_API_LOGFILE=c:\vortex
```



## VORTEX\_API\_LOGOPTS – Connectivity Series client-side log options



The VORTEX\_API\_LOGOPTS environment variable specifies options for the file determined by VORTEX\_API\_LOGFILE.

### Value

One or more of the following, separated by a plus sign (+):

<b>APPEND</b>	Append logging information to existing log file.
<b>ERROR</b>	Log only statements with errors.
<b>FULL</b>	Perform full logging.
<b>PLAY</b>	Set an option that enables Synergy/DE Developer Support to play back an operation.
<b>RECORD</b>	Log data for support.
<b>TIME</b>	Log execution time for statements.

### Discussion

Vortex API logging is helpful in debugging queries. By recording Vortex API calls made by the xfODBC driver and SQL Connection, you can see the exact SQL statement issued to the database, debug SQL statement errors, and verify optimization.

Use the VORTEX\_API\_LOGFILE environment variable to specify the name and location of the log file that is generated. If you set VORTEX\_API\_LOGFILE without setting VORTEX\_API\_LOGOPTS, the log file includes a list of all operations along with a total count for each operation.

Once you have successfully logged the error, turn logging off by unsetting the VORTEX\_API\_LOGFILE and VORTEX\_API\_LOGOPTS environment variables (and reboot if necessary). Logging slows performance, and the log files can quickly fill your disk.

### Setting location

The environment. For services such as web servers that use the xfODBC driver, you can use the Env. variables field in the xfODBC Setup window to set this environment variable on the client.

### Used by

xfODBC, SQL Connection.

## Environment Variables

### VORTEX\_API\_LOGOPTS

#### See also

- ▶ [VORTEX\\_API\\_LOGFILE](#) on page 1-264.
- ▶ “[Vortex API logging](#)” in the “Data Access Errors and Error Logging” chapter of the *xfODBC User’s Guide*.
- ▶ “[SQL Connection Troubleshooting and Error Logging](#)” in the “Error Logging and Messages” chapter of the *SQL Connection Reference Manual*.

#### Examples

To record a full operation log and CPU time,

```
VORTEX_API_LOGOPTS=FULL+TIME
```

## VORTEX\_HOME – SQL Connection default settings file



The VORTEX\_HOME environment variable specifies the location of **net.ini**, the SQL Connection default settings file.

### Value

The directory that contains a lib subdirectory ([.lib] on OpenVMS) that contains the **net.ini** file.

### Discussion

SQL Connection looks for **net.ini** in the current directory or in **VORTEX\_HOME/lib**. The Connectivity Series installation (Windows), setsde (UNIX), or SYSS\$MANAGER:CONNECT\_STARTUP.COM (OpenVMS) sets this environment variable. Do not change this setting.

### Setting location

The **opennet.std** file, which must be on the server.

### Used by

SQL Connection.

### See also

[“Using network initialization files to set network defaults”](#) in the “Welcome to SQL Connection” chapter of the *SQL Connection Reference Manual*.

## VORTEX\_HOST\_HIDECPF – Prevent failed thread from stopping SQL OpenNet server

WT	WN		
----	----	--	--

When set, the VORTEX\_HOST\_HIDECPF environment variable prevents an SQL OpenNet server from hanging when a thread fails.

### Value

Any value.

### Discussion

The Connectivity Series installation automatically sets this environment variable. We don't recommend changing this setting.

### Setting location

The **opennet.std** file, which must be on the server.

### Used by

xfODBC, SQL Connection.

### Examples

VORTEX\_HOST\_HIDECPF=1

## VORTEX\_HOST\_LOGFILE – SQL OpenNet log file



The VORTEX\_HOST\_LOGFILE environment variable turns on logging and specifies the path and name of the log file used to log statements passed to SQL OpenNet from the xfODBC driver and SQL Connection.

### Value

The path and name of the Vortex host log file you want to produce. You do not need to specify a filename extension.

### Discussion

VORTEX\_HOST\_LOGFILE specifies the file that logs calls and errors generated through SQL OpenNet server. You can use it to determine the driver API calls made between the driver client and the OpenNet server.

Vortex host logging applies only to a client/server configuration. You can use Vortex host logs only with **vtxnet2**. **Vtxnetd** (on Windows) does not support the VORTEX\_HOST\_LOGFILE environment variable.

Use the VORTEX\_HOST\_LOGOPTS environment variable to set options for the log file. If you set VORTEX\_HOST\_LOGFILE without setting VORTEX\_HOST\_LOGOPTS, the log file includes a list of all operations along with a total count for each operation.

Once you have successfully logged the error, turn logging off by unsetting the VORTEX\_HOST\_LOGFILE and VORTEX\_HOST\_LOGOPTS environment variables (and reboot if necessary). Logging slows performance, and the log files can quickly fill your disk.

### Setting location

The server, as follows:

- ▶ On Windows, the **opennet.srv** file before starting **vtxnet2**.
- ▶ On UNIX, the environment before starting **vtxnetd**.
- ▶ On OpenVMS, a system-wide logical before starting the server program.

### Used by

xfODBC, SQL Connection.

## Environment Variables

### VORTEX\_HOST\_LOGFILE

#### See also

- ▶ [VORTEX\\_HOST\\_LOGOPTS](#) on page 1-271.
- ▶ “[Vortex host logging](#)” in the “Data Access Errors and Error Logging” chapter of the *xfODBC User’s Guide*.
- ▶ “[SQL Connection Troubleshooting and Error Logging](#)” in the “Error Logging and Messages” chapter of the *SQL Connection Reference Manual*.
- ▶ “[The vtxnetd and vtxnet2 Programs](#)” in the “Configuring Connectivity Series” chapter in the *Installation Configuration Guide*.

#### Examples

```
VORTEX_HOST_LOGFILE=c:\vortex
```

## VORTEX\_HOST\_LOGOPTS – SQL OpenNet log options



The VORTEX\_HOST\_LOGOPTS environment variable specifies options for the file determined by VORTEX\_HOST\_LOGFILE.

### Value

One or more of the following, separated by a plus sign (+):

<b>FULL</b>	Perform full logging.
<b>ERROR</b>	Log only statements with errors.
<b>TIME</b>	Log execution time for statements.
<b>RECORD</b>	Log data for support.
<b>PLAY</b>	Set an option that enables Synergy/DE Developer Support to play back an operation.

### Discussion

Vortex host logging applies only to a client/server configuration.

Use the VORTEX\_HOST\_LOGFILE environment variable to specify the name and location of the log file that is generated. If you set VORTEX\_HOST\_LOGFILE without setting VORTEX\_HOST\_LOGOPTS, the log file includes a list of all operations along with a total count for each operation.

Once you have successfully logged the error, turn logging off by unsetting the VORTEX\_HOST\_LOGFILE and VORTEX\_HOST\_LOGOPTS environment variables (and reboot if necessary). Logging slows performance, and the log files can quickly fill your disk.

### Setting location

The server, as follows:

- ▶ On Windows, the **opennet.srv** file before starting **vtxnet2** or **vtxnetd**.
- ▶ On UNIX, the environment before starting **vtxnetd**.
- ▶ On OpenVMS, the system-wide environment before starting the server program.

### Used by

xfODBC, SQL Connection.

#### See also

- ▶ [VORTEX\\_HOST\\_LOGFILE](#) on page 1-269.
- ▶ “[Vortex host logging](#)” in the “Data Access Errors and Error Logging” chapter of the *xfODBC User’s Guide*.
- ▶ “[The vtxnetd and vtxnet2 Programs](#)” in the “Configuring Connectivity Series” chapter in the *Installation Configuration Guide*.
- ▶ “[SQL Connection Troubleshooting and Error Logging](#)” in the “Error Logging and Messages” chapter of the *SQL Connection Reference Manual*.

#### Examples

To record a full operation log and CPU time,

```
VORTEX_HOST_LOGOPTS=FULL+TIME
```



## VORTEX\_HOST\_SYSLOG – Generate system messages for fatal SQL OpenNet errors



The VORTEX\_HOST\_SYSLOG environment variable instructs the SQL OpenNet server to generate messages for the event log (Windows), **syslog** (UNIX), or the operator console (OpenVMS) when an attempt to connect to an SQL OpenNet server causes fatal errors.

### Value

Any value.

### Discussion

The Connectivity Series installation automatically sets this environment variable. We don't recommend changing this setting.

### Setting location

The server, as follows:

- ▶ On Windows, the **opennet.std** file, which must be on the server.
- ▶ On UNIX, the environment (the **startnet** file) before starting **vtxnetd**.
- ▶ On OpenVMS, a system-wide logical before starting the server program (**CONNECT\_STARTUP.COM**).

### Used by

xfODBC, SQL Connection.

### See also

- ▶ [“Error Logging for xfODBC”](#) in the “Error Logging and Messages” chapter of the *xfODBC User's Guide*.
- ▶ [“SQL Connection Troubleshooting and Error Logging”](#) in the “Error Logging and Messages” chapter of the *SQL Connection Reference Manual*.
- ▶ [“The vtxnetd and vtxnet2 Programs”](#) in the “Configuring Connectivity Series” chapter in the *Installation Configuration Guide*.

### Examples

On Windows,

```
VORTEX_HOST_SYSLOG=1
```

## VORTEX\_HOST\_NOSEM – Crash on SQL OpenNet access violation

WT	WN		
----	----	--	--

When set to 1, the VORTEX\_HOST\_NOSEM environment variable causes SQL OpenNet (**vtxnnetd** or **vtxnnet2**) to crash when there’s an access violation (similar to SIG\_CORE for the Synergy runtime). This enables you to attach the Windows debugger and should be used only at the request of Synergy/DE Developer Support.

### Value

- 

### Discussion

Set VORTEX\_HOST\_NOSEM in the **opennet.std** file before setting VORTEX\_HOST\_HIDEGPF. When VORTEX\_HOST\_NOSEM is set, VORTEX\_HOST\_HIDEGPF is ignored.

The SQL OpenNet service must be restarted after setting VORTEX\_HOST\_NOSEM.

### Setting location

The **opennet.std** file, which must be on the server.

### Used by

xfODBC, SQL Connection.

### Examples

VORTEX\_HOST\_NOSEM=1

## VORTEX\_ODBC\_CHAR – ODBC string descriptions



The VORTEX\_ODBC\_CHAR environment variable determines how strings are passed and described.

### Value

One of the following values:

- 1** Pass strings as SQL\_VARCHAR but describe them as SQL\_CHAR.
- 12** Pass and describe strings as SQL\_VARCHAR. (default)

### Discussion

Some applications, such as Microsoft Data Transformation Services (DTS), require strings to be passed as they are described, which is the ODBC standard. By default, however, the xfODBC driver passes strings as SQL\_VARCHAR (that is, with trailing spaces removed), but describes them as SQL\_CHAR.

VORTEX\_ODBC\_CHAR is used by the xfODBC driver when it sends data to the application. It does not affect the way system catalogs are generated.

### Setting location

The system environment. For client/server configurations, VORTEX\_ODBC\_TIME must be set on the client. (For a service, such as IIS or SQL Server, you must reboot after setting VORTEX\_ODBC\_TIME.)

### Used by

xfODBC.

### See also

[“Changing the way xfODBC describes strings”](#) in the “Configuring Data Access” chapter of the *xfODBC User’s Guide*.

### Examples

```
VORTEX_ODBC_CHAR=12
```

## VORTEX\_ODBC\_DATETIME – Control how datetime columns are retrieved



The VORTEX\_ODBC\_DATETIME environment variable determines how datetime columns are retrieved.

### Value

One of the following integer values for SQL data types:

- 1**        Return datetime columns as SQL\_CHAR.
- 9**        Return datetime columns as SQL\_DATE.
- 10**       Return datetime columns as SQL\_TIME.
- 11**       Return datetime columns as SQL\_TIMESTAMP. (default)

### Discussion

By default, datetime columns are returned as SQL\_TIMESTAMP values, but you can change the SQL data type for these columns by setting VORTEX\_ODBC\_DATETIME to the integer value for a SQL type. For example, to retrieve datetime columns as SQL\_DATE values, set VORTEX\_ODBC\_DATETIME to 9.

### Setting location

The system environment. For client/server configurations, VORTEX\_ODBC\_DATETIME must be set on the client. For a service, such as IIS or SQL Server, you must reboot after setting VORTEX\_ODBC\_DATETIME, unless you set it in a DSN (see [“Adding a user or system DSN”](#) in the “Configuring Data Access” chapter of the *xfODBC User’s Guide*).

### Used by

xfODBC.

### See also

[“Changing the data type for returned datetime columns”](#) in the “Configuring Data Access” chapter of the *xfODBC User’s Guide*.

### Examples

The following instructs xfODBC to retrieve timestamp columns as SQL\_DATE values:

```
VORTEX_ODBC_DATETIME=9
```

## VORTEX\_ODBC\_TIME – Describe time columns as SQL\_TIME or SQL\_TIMESTAMP

WT	WN		
----	----	--	--

The VORTEX\_ODBC\_TIME environment variable determines how time columns are described.

### Value

One of the following values:

- 10** Describe time columns as SQL\_TIME. (default)
- 11** Describe time columns as SQL\_TIMESTAMP.

### Discussion

ADO.NET retrieves SQL\_TIME columns (the default data type for time columns in xfODBC) as System.TimeSpan, which is a .NET data type that represents a time interval, rather than a specific time. So unless an application is written to use a time interval, the time must generally be calculated from timespan values. VORTEX\_ODBC\_TIME, however, can make these calculations unnecessary by instructing the xfODBC driver to describe time columns as SQL\_TIMESTAMP. Note the following:

- ▶ If VORTEX\_ODBC\_TIME is not set (which is the default), the xfODBC driver describes time columns as SQL\_TIME.
- ▶ SQL\_TIMESTAMP values have both a date and a time, so to create a SQL\_TIMESTAMP value, xfODBC includes the date 1-1-1.

### Setting location

The system environment. For client/server configurations, VORTEX\_ODBC\_TIME must be set on the client. For a service, such as IIS or SQL Server, you must reboot after setting VORTEX\_ODBC\_TIME, unless you set it in a DSN (see [“Adding a user or system DSN”](#) in the *“Configuring Data Access”* chapter of the *xfODBC User’s Guide*).

### Used by

xfODBC.

### See also

[“Time columns and ADO.NET”](#) in the *“Accessing a Synergy Database”* chapter of the *xfODBC User’s Guide*.

### Examples

```
VORTEX_ODBC_TIME=11
```

## VORTEX\_SHM\_BASE – Base address for system catalog caching



The VORTEX\_SHM\_BASE environment variable sets the base shared memory address for system catalog caching.

### Value

A hexadecimal value for the shared memory subsystem address that will be used as the base address for system catalog caching. This value is either 8 or 16 digits and must be in the correct format for the underlying architecture. (For example, on x86 systems, use 00000008 for address 80000000.) If this environment variable is not set (which is the default), the operating system determines this address.

### Discussion

On UNIX systems you may need to set the base address for system catalog caching. See [“Adjusting the shared memory subsystem settings”](#) in the “Configuring Data Access” chapter of the *xfODBC User’s Guide*. Synergy/DE Developer Support may ask you to set this on other operating systems as well.

### Setting location

The environment or

- ▶ the **opennet.srv** file on Windows.
- ▶ the **startnet** script on UNIX.
- ▶ the **STARTNET.COM** file on OpenVMS.

Note that when VORTEX\_SHM\_BASE is set in both the environment and one of the above files (or script), the settings must be identical.

### Used by

xfODBC.

## VORTEX\_SHM\_FILE – .dat file for system catalog caching



The VORTEX\_SHM\_FILE environment variable specifies the location and name of the .dat file that xfODBC uses for system catalog caching.

### Value

The path and name of the **synodbccache.dat** file.

### Discussion

To run **syngenload** from the command line on Windows or OpenVMS, you must set VORTEX\_SHM\_FILE. (On UNIX, this is set for you. See [“Running syngenload from the command line \(Windows and OpenVMS\)”](#) in the “Configuring Data Access” chapter of the *xfODBC User’s Guide*. Synergy/DE Developer Support may ask you to set this in other cases as well.

### Setting location

The environment or

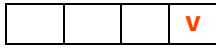
- ▶ the **opennet.srv** file on Windows.
- ▶ the **startnet** script on UNIX.
- ▶ the **STARTNET.COM** file on OpenVMS.

Note that when VORTEX\_SHM\_FILE is set in both the environment and one of the above files (or script), the settings must be identical.

### Used by

xfODBC.

## VTXIPC\_SO – VTXIPC\_SO.EXE shared image



The VTXIPC\_SO logical specifies the full path and filename of the **VTXIPC\_SO.EXE** shared image, which is distributed with xfODBC.

### Value

The full path and filename of **VTXIPC\_SO.EXE**. The filename is always **VTXIPC\_SO.EXE**.

### Discussion

The xfODBC installation sets the VTXIPC\_SO logical in **CONNECT\_STARTUP.COM**, a file that's read when the system is started. VTXIPC\_SO is required; it must be set.

### Setting location

The **CONNECT\_STARTUP.COM** file.

### Used by

xfODBC.

### Examples

```
$ DEFINE/SYS VTXIPC_SO DKA300:[SYNERGYDE.CONNECT] VTXIPC_SO.EXE
```



## WBNOINC – Suppress .INCLUDE processing while Workbench is tagging

WT			
----	--	--	--

The WBNOINC environment variable suppresses the processing of include files while Workbench is tagging.

### Value

Any value.

### Discussion

You may want to use WBNOINC if your machine has a slow processor or insufficient memory to cache your include files, since processing include files can involve a lot of overhead and may slow Workbench significantly while you are typing.

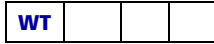
### Setting location

The [synergy] section of the **synergy.ini** file or the global environment. (See [“Settings on Windows” on page 1-10.](#))

### Used by

Workbench.

## WBTAGCOUNT – Number of characters that change between retags in Workbench



The WBTAGCOUNT environment variable enables you to control the number of times context tagging can occur in a short span of time by changing the number of characters that must be typed before retagging occurs.

### Value

The number of characters that must be typed before retagging occurs. To turn off tag optimization, set the value to 0.

### Discussion

To optimize performance, Workbench retags only when either a certain amount of time has elapsed or a certain number of characters have changed since the last tag. This prevents frequent retags from occurring in a short period and causing a slowdown in large projects. The defaults are 10 seconds or 10 characters. These values are recommended for most users; however, more frequent tag operations may be desirable for faster computers to make sure tagging is always accurate.

To change the frequency at which retagging occurs, use WBTAGCOUNT to change the number of characters that must be typed before retagging occurs. (You can also set the WBTAGDELAY environment variable to change the number of seconds that must pass.)

### Setting location

In Workbench using the **syn\_set** command (not the **set** command).



Although WBTAGCOUNT and WBTAGDELAY can be set anywhere in the environment, we recommend only setting them in Workbench, because they have no effect on the runtime. To fine-tune performance on a per-project basis, consider setting WBTAGCOUNT and WBTAGDELAY in the Open tab of the Project Properties dialog.

### Used by

Workbench.

### See also

[WBTAGDELAY on page 1-283.](#)

### Examples

In Workbench, to make retagging occur after every six characters are typed,

```
syn_set wbttagcount=6
```

## WBTAGDELAY – Number of seconds between retags in Workbench

WT			
----	--	--	--

The WBTAGDELAY environment variable enables you to control the number of times context tagging can occur in a short span of time by changing the number of seconds that must elapse between retags.

### Value

The number of seconds that must elapse before retagging occurs. To turn off tag optimization, set the value to 0.

### Discussion

To optimize performance, Workbench retags only when either a certain amount of time has elapsed or a certain number of characters have changed since the last tag. This prevents frequent retags from occurring in a short period and causing a slowdown in large projects. The defaults are 10 seconds or 10 characters. These values are recommended for most users; however, more frequent tag operations may be desirable for faster computers to make sure tagging is always accurate.

To change the frequency at which retagging occurs, use WBTAGDELAY to change the number of seconds that must pass before retagging occurs. (You can also set the WBTAGCOUNT environment variable to change the number of characters that must be typed.)

### Setting location

In Workbench using the **syn\_set** command (not the **set** command).



Although WBTAGCOUNT and WBTAGDELAY can be set anywhere in the environment, we recommend only setting them in Workbench, because they have no effect on the runtime. To fine-tune performance on a per-project basis, consider setting WBTAGCOUNT and WBTAGDELAY in the Open tab of the Project Properties dialog.

### Used by

Workbench.

### See also

[WBTAGCOUNT](#) on page 1-282.

### Examples

In Workbench, to make retagging occur after six seconds have elapsed,

```
syn_set wbtagdelay=6
```

## WND – UI Toolkit directory



The WND environment variable specifies the directory that contains your UI Toolkit distribution. It is required for normal operation of UI Toolkit tools and programs.

### Value

The path, including the device, for the directory that contains the UI Toolkit distribution files.

### Setting location

- ▶ On Windows, the [synergy], [dbr], or [myprog] section of **synergy.ini** (where *myprog* is any **.dbr** file).
- ▶ On UNIX, the **setsde** file.
- ▶ On OpenVMS, the **SYNERGY\_STARTUP.COM** file (or **ACTIVATE\_SDE.COM** for alternate installations).

### Used by

UI Toolkit.

### Examples

On UNIX,

```
WND=/usr/synergy/toolkit ;export WND
```

## WNDC – Default colors



The WNDC environment variable enables color and defines the default color palette for the windowing API and UI Toolkit applications.

### Value

*palette1, palette2, ..., palette16*

Each color palette entry (*palette1*, *palette2*, and so forth) defines the foreground (character) color and the background color in the form *foreground/background*, where *foreground* and *background* are single characters that each signify a color. These characters, which are not case sensitive, are as follows:

<b>D</b>	Dark (black)
<b>B</b>	Blue
<b>G</b>	Green
<b>C</b>	Cyan
<b>R</b>	Red
<b>M</b>	Magenta
<b>Y</b>	Yellow
<b>W</b>	White

For example, D/W, W/D, B/W, B/Y, R/W.

### Discussion

Color palette entries are separated by commas, and you can skip a color palette entry by placing consecutive commas in the string. If you omit a palette entry at the end of the string, you don't need to mark its place with a comma. Any omitted palette entries default to the colors for palette entry one, and if palette entry one is not specified, it defaults to white characters on a black background (W/D). The background color for palette entry number one is the default background color for the entire screen.



If WNDC is set, Synergy DBL attempts to do color processing. If you're not using a color terminal, don't set WNDC.

---

#### UNIX

You must also add the following codes to the **termcap** file entry for the terminal you intend to use:

*bB=color definition sequence for blue background*  
*bC=color definition sequence for cyan background*  
*bD=color definition sequence for black background*  
*bG=color definition sequence for green background*  
*bM=color definition sequence for magenta background*  
*bR=color definition sequence for red background*  
*bW=color definition sequence for white background*  
*bY=color definition sequence for yellow background*  
*fB=color definition sequence for blue foreground*  
*fC=color definition sequence for cyan foreground*  
*fD=color definition sequence for black foreground*  
*fG=color definition sequence for green foreground*  
*fM=color definition sequence for magenta foreground*  
*fR=color definition sequence for red foreground*  
*fW=color definition sequence for white foreground*  
*fY=color definition sequence for yellow foreground*

where **b** indicates background, **f** indicates foreground, and **B, C, D, G, M, R, W,** and **Y** indicate the colors listed above. To find out the escape sequence for each color, refer to the manual for the terminal you're using.

---

#### VMS

The WNDC logical must exist for color to be enabled.

---

The screen is updated using ANSI color escape sequences.

The WNDC environment variable is not used on Windows. Instead, a default color palette and a default set of Synergy color definitions are loaded into memory when the Synergy runtime starts. See “[Colors and the color palette](#)” in the “Synergy Windowing API” chapter of the *Synergy DBL Language Reference Manual* for more information.

### Setting location

The environment.

### Used by

Runtime.

## Examples

### UNIX

---

The example below defines palette entry one as green characters on a blue background, entry two as red characters on a yellow background, entry four as black characters on a white background, and all other palette entries as green characters on a blue background (like palette entry one).

```
WNDC=g/b,r/y,,d/w ;export WNDC
```

The example below defines palette entry three as white characters on blue, palette entry five as black characters on red, and all other palette entries as white characters on black.

```
WNDC=,,w/b,,d/r ;export WNDC
```

The example below enables color but initializes all palette entries to white on black.

```
WNDC=, ;export WNDC
```

---

### VMS

---

The example below defines palette entry one as green characters on a blue background, entry two as red characters on a yellow background, entry four as black characters on a white background, and all other palette entries as green characters on a blue background (like palette entry one).

```
$ DEFINE WNDC "G/B,R/Y,,D/W"
```

The example below defines palette entry three as white characters on blue, palette entry five as black characters on red, and all other palette entries as white characters on black.

```
$ DEFINE WNDC ",,W/B,,D/R"
```

The example below enables color but initializes all palette entries to white on black.

```
$ DEFINE WNDC ", "
```

---

## XF\_REMOTE\_HOST – Host name for xfServerPlus



The XF\_REMOTE\_HOST environment variable defines the host name of the machine on which xfServerPlus is listening for remote calls from xfNetLink Synergy.

### Value

The name of the machine where xfServerPlus is running.

### Discussion

Specifying the host name enables xfNetLink to read it as a default.

### Setting location

On Windows, in the **synergy.ini** file. On UNIX and OpenVMS, in the environment.

### Used by

xfNetLink Synergy Edition.

### See also

[“Specifying the Host Name and Port Number”](#) in the “Configuring and Testing xfNetLink Synergy” chapter of the *xfNetLink & xfServerPlus User’s Guide*.

### Examples

```
XF_REMOTE_HOST = elmo
```



## XF\_REMOTE\_PORT – Port number for xfServerPlus



The XF\_REMOTE\_PORT environment variable defines the port number of the machine on which xfServerPlus is listening for remote calls from xfNetLink Synergy.

### Value

The port number of the machine where xfServerPlus is running.

### Discussion

Specifying the port number enables xfNetLink to read it as a default.

### Setting location

On Windows, in the **synergy.ini** file. On UNIX and OpenVMS, in the environment.

### Used by

xfNetLink Synergy Edition.

### See also

[“Specifying the Host Name and Port Number”](#) in the “Configuring and Testing xfNetLink Synergy” chapter of the *xfNetLink & xfServerPlus User’s Guide*.

### Examples

```
XF_REMOTE_PORT = 2367
```

## XF\_RMT\_DBG\_TIMEOUT – Connect session time-out for xfNetLink Synergy (debug)



The XF\_RMT\_DBG\_TIMEOUT environment variable controls the length of time that xfNetLink Synergy waits for an acknowledgment from the session started by the xfServerPlus logic server when running in debug mode.

### Value

The desired time-out value, in seconds.

### Discussion

The connect session time-out is set separately for normal and debug operation. The default debug connect session time-out is 10 minutes.

### Setting location

On Windows, in the **synergy.ini** file. On UNIX and OpenVMS, in the environment.

### Used by

xfNetLink Synergy Edition.

### See also

[“Specifying Time-out Values”](#) in the “Configuring and Testing xfNetLink Synergy” chapter of the *xfNetLink & xfServerPlus User’s Guide*.

### Examples

To set a six-minute time-out,

```
XF_RMT_DBG_TIMEOUT = 360
```

## XF\_RMT\_TIMEOUT – Call time-out for xfNetLink Synergy



The XF\_RMT\_TIMEOUT environment variable controls the length of time that xfNetLink Synergy Edition waits for the results of a remote routine call to xfServerPlus.

### Value

The desired time-out value, in seconds.

### Discussion

The call time-out is measured for each send–receive request between xfNetLink and xfServerPlus. The default is 30 minutes (1800 seconds).

### Setting location

On Windows, in the **synergy.ini** file. On UNIX and OpenVMS, in the environment.

### Used by

xfNetLink Synergy Edition.

### See also

“[Specifying Time-out Values](#)” in the “Configuring and Testing xfNetLink Synergy” chapter of the *xfNetLink & xfServerPlus User’s Guide*.

### Examples

To set a 20-minute time-out,

```
XF_RMT_TIMEOUT = 1200
```

## XF\_RMTCONN\_TIMEOUT – Connect session time-out for xfNetLink Synergy (normal)



The XF\_RMTCONN\_TIMEOUT environment variable controls the length of time that xfNetLink Synergy Edition waits for an acknowledgment from the session started by the xfServerPlus logic server when running in normal mode.

### Value

The desired time-out value, in seconds.

### Discussion

The connect session time-out is set separately for normal and debug operation. For normal operation, the default connect session time-out is two minutes.

### Setting location

On Windows, in the **synergy.ini** file. On UNIX and OpenVMS, in the environment.

### Used by

xfNetLink Synergy Edition.

### See also

[“Specifying Time-out Values”](#) in the “Configuring and Testing xfNetLink Synergy” chapter of the *xfNetLink & xfServerPlus User’s Guide*.

### Examples

To set a three-minute time-out,

```
XF_RMTCONN_TIMEOUT = 180
```

## XFBOTCLASSPATH – Path for runtime JAR file for xfNetLink Java



The XFBOTCLASSPATH environment variable specifies the path and filename for the **rt.jar** file.

### Value

The path and name of the **rt.jar** file.

### Discussion

If you are using Java 1.7 and targeting an earlier version of Java for your Java application, you must set the XFBOTCLASSPATH environment variable to the path and filename of the **rt.jar** file *before* building the JAR file. This path is usually *java.home\lib\rt.jar*.

XFBOTCLASSPATH works in conjunction with XFEXTDIRS.

### Setting location

In the environment.

### Used by

xfNetLink Java.

### See also

- ▶ [XFEXTDIRS on page 1-294](#)
- ▶ If you're generating class wrappers in Workbench, see [“Building the JAR File”](#) in the “Creating a JAR File in Workbench” section of the “Creating Java Class Wrappers” chapter of the *xfNetLink & xfServerPlus User's Guide*.
- ▶ If you're generating class wrappers from the command line, see [“Building the JAR File”](#) in the “Creating a JAR File from the Command Line” section of the “Creating Java Class Wrappers” chapter of the *xfNetLink & xfServerPlus User's Guide*.

### Examples

```
XFBOTCLASSPATH = c:\Program Files\Java\jdk1.6.0_23\jre\lib\rt.jar.)
```

## XFEXTDIRS – Path for Java classes and JAR files for xfNetLink Java



The XFEXTDIRS environment variable specifies the directory that contains the Java classes and JAR files required by your application.

### Value

The path for the directory that contains additional Java classes and JAR files required by your application.

### Discussion

If you are using Java 1.7 and targeting an earlier version of Java for your Java application, you must set the XFEXTDIRS environment variable to the path that contains additional classes and JAR files needed by your application, such as those required for encryption. This environment variable must be set *before* building the JAR file. The path is usually *java.home\lib*.

XFEXTDIRS works in conjunction with XFBOOTCLASSPATH.

### Setting location

In the environment.

### Used by

xfNetLink Java.

### See also

- ▶ [XFBOOTCLASSPATH](#) on page 1-293.
- ▶ If you're generating class wrappers in Workbench, see [“Building the JAR File”](#) in the “Creating a JAR File in Workbench” section of the “Creating Java Class Wrappers” chapter of the *xfNetLink & xfServerPlus User's Guide*.
- ▶ If you're generating class wrappers from the command line, see [“Building the JAR File”](#) in the “Creating a JAR File from the Command Line” section of the “Creating Java Class Wrappers” chapter of the *xfNetLink & xfServerPlus User's Guide*.

### Examples

On UNIX,

```
XFEXTDIRS = usr/Java/jdk1.6.0_23/jre/lib      ;export XFEXTDIRS
```

## XFNLS\_LOGFILE – Filename for debug trace information

WT		U	
----	--	---	--

The XFNLS\_LOGFILE environment variable specifies the filename for debug trace information on xfNetLink Synergy.

### Value

The filename. Include the full path if the file is not in the working directory.

### Discussion

When you run an xfServerPlus session in debug mode from xfNetLink Synergy, you can use XFNLS\_LOGFILE to specify that the packets be written to a file instead of to the screen. The file is created if it does not exist. If it already exists, additional material is appended to the end.

### Setting location

On Windows, in the **synergy.ini** file. On UNIX, in the environment.

### Used by

xfNetLink Synergy Edition.

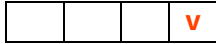
### See also

[“Specifying Debug Options”](#) in the “Configuring and Testing xfNetLink Synergy” chapter of the *xfNetLink & xfServerPlus User’s Guide*.

### Examples

```
XFNLS_LOGFILE = Myfile.txt
```

## XFODBCUSR\_SO – Shared image for routines for user-defined data



The XFODBCUSR\_SO logical specifies the full path and filename for the shared image that contains routines for user-defined data.

### Value

The full path and filename of the shared image for user-defined data routines. The filename is always **XFODBCUSR\_SO.EXE**.

### Discussion

The xfODBC installation sets the XFODBCUSR\_SO logical in **CONNECT\_STARTUP.COM**, a file that's read when the system is started.

XFODBCUSR\_SO must be set. It specifies the location of the **XFODBCUSR\_SO.EXE** file, which contains routines to handle user-defined data. The Connectivity Series distribution includes a default **XFODBCUSR\_SO.EXE** file, but you can create your own routines and overwrite this file.

### Setting location

The **CONNECT\_STARTUP.COM** file.

### Used by

xfODBC.

### See also

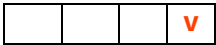
[Appendix A: Environment Variables](#) of the *xfODBC User's Guide*.

### Examples

```
$ DEFINE/SYS XFODBCUSR_SO DKA300:[SYNERGYDE.CONNECT]XFODBCUSR_SO.EXE
```



## XFPL\_API – XFPL\_API.EXE shared image



The XFPL\_API logical specifies the location of the shared image that contains the xfServerPlus API routines (SET\_XFPL\_TIMEOUT, XFPL\_LOG, and XFPL\_REGCLEANUP).

### Value

The full path and filename of the shared image **XFPL\_API.EXE**.

### Setting location

The **SYNERGY\_STARTUP.COM** file found in SYSS\$MANAGER.

### Used by

xfServerPlus.

### Examples

```
$ DEFINE/SYS/EXEC XFPL_API SYNERGYDE$ROOT:[DBL]XFPL_API.EXE
```

## XFPL\_BASECHAN – Base channel number for xfServerPlus



The XFPL\_BASECHAN setting specifies the channel number to be used by xfServerPlus to open files, such as the Synergy Method Catalog (SMC) files.

### Value

2 through 254.

### Discussion

By default, xfServerPlus uses 243 as the base channel number. This is the channel number that xfServerPlus tries first whenever it needs to open a channel. For example, when opening the SMC files (**cdt.ism** and **cmpdt.ism**), xfServerPlus attempts to use channels 243 and 244. If 243 is not available, it tries 244, then 245, and so on until an open channel is found. If your Synergy server applications use hard-coded channels that are in the range used by xfServerPlus, you may receive a “Channel is in use” error (\$ERR\_CHNUSE). To avoid this problem, set XFPL\_BASECHAN in the **xfpl.ini** file to specify that a different base channel number be used.

For example, if you set

```
XFPL_BASECHAN = 150
```

xfServerPlus will attempt to open the SMC files on channels 150 and 151. If 150 is currently in use, xfServerPlus will try 151, then 152, and so on until it finds an open channel. Should xfServerPlus reach channel 255 without finding an open channel, it will go to XFPL\_BASECHAN – 1 (149 in our example) and continue down from there to channel 1.

### Setting location

The **xfpl.ini** file.

### Used by

xfServerPlus.

### See also

- ▶ “[Specifying a Base Channel Number](#)” in the “Preparing Your Synergy Server Code” chapter of the *xfNetLink & xfServerPlus User’s Guide*.
- ▶ “[Using the xfpl.ini File](#)” in the “Configuring and Running xfServerPlus” chapter of the *xfNetLink & xfServerPlus User’s Guide*.

### Examples

```
XFPL_BASECHAN = 150
```

## XFPL\_COMPRESS – Compress data for xfServerPlus



The XFPL\_COMPRESS setting specifies that data containing repeated zeroes or spaces be compressed when it is sent to or from xfServerPlus.

### Value

One of the following values:

- ON**      Use compression.
- OFF**     Don't use compression. (default)

### Discussion

Setting XFPL\_COMPRESS to ON compresses data sent to and from xfServerPlus that contains repeated zeroes and spaces. Using compression can improve network throughput. Note that xfServerPlus compression does not compress the entire packet. The improvement in network throughput for any particular application will depend on the average packet size and the amount of compressible data.

### Setting location

The **xfpl.ini** file.

### Used by

xfServerPlus.

### See also

- ▶ [“Configuring Compression”](#) in the “Configuring and Running xfServerPlus” chapter of the *xfNetLink & xfServerPlus User's Guide*.
- ▶ [“Using the xfpl.ini File”](#) in the “Configuring and Running xfServerPlus” chapter of the *xfNetLink & xfServerPlus User's Guide*.

### Examples

```
XFPL_COMPRESS = ON
```

## XFPL\_DBR – Run xfServerPlus with dbr instead of dbs



The XFPL\_DBR environment variable specifies that xfServerPlus should use **dbr** instead of **dbs**.

### Value

Any value.

### Discussion

By default, the xfServerPlus program (**xfpl.dbr**) uses the **dbs** runtime which is a reduced-size runtime intended for detached programs. However, there may be circumstances where your application requires that you run xfServerPlus with the regular runtime, **dbr**. For example, your application might need to use the Synergy windowing API.

Although it is possible to run xfServerPlus with **dbr**, we do not recommend doing so because it will adversely affect performance. When using **dbr**, xfServerPlus sessions will start slower and require more memory than when using **dbs**.

If XFPL\_DBR is set and session logging is turned on, “XFPL\_DBR logical is set” will be written to the **xfpl.log** file.

### Setting location

On Windows, in the registry. (You can use the Synergy Configuration Program to set xfServerPlus environment variables on Windows.) On UNIX, in the **synrc** file. You can also set it in the environment on UNIX, but it must already be set when **rsynd** is started.

XFPL\_DBR can be set so that it applies to a specific instance of xfServerPlus or to all instances of xfServerPlus. Set it the same as you would XFPL\_SMCPATH or XFPL\_INIPATH.

### Used by

xfServerPlus.

### Examples

```
XFPL_DBR = 1
```

## XFPL\_DEBUG – Enable xfServerPlus debug logging



The XFPL\_DEBUG setting determines whether debug logging takes place when xfServerPlus logging is enabled.

### Value

One of the following values:

- ON**      Enable debug logging.
- OFF**     Don't enable debug logging. (default)

### Discussion

The XFPL\_LOG setting (see [XFPL\\_LOG on page 1-304](#)) must be set to ON in the **xfpl.ini** file for XFPL\_DEBUG to have effect. Debug logging records all the information that is recorded when XFPL\_FUNC\_INFO (see [XFPL\\_FUNC\\_INFO on page 1-303](#)) and XFPL\_SESS\_INFO (see [XFPL\\_SESS\\_INFO on page 1-308](#)) are set to ALL as well as additional information (such as packet contents) that may be useful in troubleshooting problems with an xfNetLink–xfServerPlus application.

### Setting location

The **xfpl.ini** file.

### Used by

xfServerPlus.

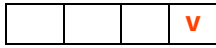
### See also

- ▶ “[Setting Options for the xfServerPlus Log](#)” in the “Configuring and Running xfServerPlus” chapter of the *xfNetLink & xfServerPlus User's Guide* for details on what information is logged when XFPL\_DEBUG is set.
- ▶ “[Using the xfpl.ini File](#)” in the “Configuring and Running xfServerPlus” chapter of the *xfNetLink & xfServerPlus User's Guide*.

### Examples

```
XFPL_DEBUG=ON
```

## XFPL\_DTL – XFPL\_DTL.EXE shared image



The XFPL\_DTL logical specifies the location of the shared image that contains the C DLL for xfServerPlus.

### Value

The full path and filename of the shared image **XFPL\_DTL.EXE**.

### Setting location

The **SYNERGY\_STARTUP.COM** file found in SYSS\$MANAGER.

### Used by

xfServerPlus.

### Examples

```
$ DEFINE/SYS/EXEC XFPL_DTL SYNERGYDE$ROOT:[DBL.BIN] XFPL_DTL.EXE
```

## XFPL\_FUNC\_INFO – Enable xfServerPlus function logging



The XFPL\_FUNC\_INFO setting determines the level of function and subroutine logging when xfServerPlus logging is enabled.

### Value

One of the following values:

NONE	No function information is logged. (default)
CRITICAL	Only critical function information is logged.
ALL	All function information is logged.

### Discussion

The XFPL\_LOG setting (see [XFPL\\_LOG on page 1-304](#)) must be set to ON in the **xfpl.ini** file for XFPL\_FUNC\_INFO to have effect. Function logging records information about the Synergy routines that are called from the xfNetLink client.

### Setting location

The **xfpl.ini** file.

### Used by

xfServerPlus.

### See also

- ▶ “[Setting Options for the xfServerPlus Log](#)” in the “Configuring and Running xfServerPlus” chapter of the *xfNetLink & xfServerPlus User’s Guide* for details on what information is logged when XFPL\_FUNC\_INFO is set.
- ▶ “[Using the xfpl.ini File](#)” in the “Configuring and Running xfServerPlus” chapter of the *xfNetLink & xfServerPlus User’s Guide*.

### Examples

XFPL\_FUNC\_INFO=ALL

## XFPL\_LOG – Enable xfServerPlus logging



The XFPL\_LOG setting enables xfServerPlus logging.

### Value

One of the following values:

- ON**      Logging is enabled.
- OFF**     Logging is not enabled. (default)

### Discussion

By default, xfServerPlus always logs errors to the application event log (Windows), syslog (UNIX), or operator console (OpenVMS). You can log additional information to the xfServerPlus log by setting XFPL\_LOG to ON. This setting only turns logging on and off. Additional settings control what type of information is logged; see [XFPL\\_SESS\\_INFO on page 1-308](#), [XFPL\\_FUNC\\_INFO on page 1-303](#), and [XFPL\\_DEBUG on page 1-301](#).

### Setting location

The **xfpl.ini** file.

### Used by

xfServerPlus.

### See also

- ▶ [“Using Server-Side Logging”](#) in the “Configuring and Running xfServerPlus” chapter of the *xfNetLink & xfServerPlus User’s Guide*.
- ▶ [“Using the xfpl.ini File”](#) in the “Configuring and Running xfServerPlus” chapter of the *xfNetLink & xfServerPlus User’s Guide*.

### Examples

```
XFPL_LOG=ON
```



## XFPL\_LOGFILE – xfServerPlus log filename



The XFPL\_LOGFILE setting specifies the name of the log file for xfServerPlus logging.

### Value

The path and name of the logfile. The default is **DBLDIR:xfpl.log**.

### Discussion

The log file must be on the machine that xfServerPlus is running on. If logging is turned on and you do not specify XFPL\_LOGFILE, the default is used.

If XFPL\_SINGLELOGFILE (see [XFPL\\_SINGLELOGFILE on page 1-309](#)) is set to OFF, a date/time stamp is appended to the end of the log filename.

### Setting location

The **xfpl.ini** file.

### Used by

xfServerPlus.

### See also

- ▶ “[Setting Options for the xfServerPlus Log](#)” in the “Configuring and Running xfServerPlus” chapter of the *xfNetLink & xfServerPlus User’s Guide*.
- ▶ “[Using the xfpl.ini File](#)” in the “Configuring and Running xfServerPlus” chapter of the *xfNetLink & xfServerPlus User’s Guide*.

### Examples

```
XFPL_LOGFILE=c:\work\xfLog.log
```

## XFPL\_LOGICAL – Define logicals for xfServerPlus



The XFPL\_LOGICAL setting is used to define logicals that are used in the Synergy Method Catalog.

### Value

The logical name and its path in the format

`XFPL_LOGICAL:logical_name=path`

### Discussion

Logicals that are used within the Synergy Method Catalog to point to the directories that ELBs or shared images reside in must be defined in the **xfpl.ini** file (or **SERVER\_INIT.COM** on OpenVMS) so that xfServerPlus can resolve them.

For ELBs that are linked to dependent ELBs, define the logicals for both the primary and the dependent ELBs in **xfpl.ini**.

### Setting location

On Windows and UNIX, in the **xfpl.ini** file. On OpenVMS, in the **DBLDIR:SERVER\_INIT.COM** file.

### Used by

xfServerPlus.

### See also

- ▶ [“Defining Logicals”](#) in the “Preparing Your Synergy Server Code” chapter of the *xfNetLink & xfServerPlus User’s Guide*.
- ▶ [“Using the xfpl.ini File”](#) in the “Configuring and Running xfServerPlus” chapter of the *xfNetLink & xfServerPlus User’s Guide*.

### Examples

On Windows,

`XFPL_LOGICAL:MyLogical=c:\work\elbs`

## XFPL\_INIPATH – xfpl.ini file location



The XFPL\_INIPATH environment variable specifies the location of the **xfpl.ini** file when it is not in the default location.

### Value

The full pathname for the **xfpl.ini** file.

### Discussion

By default, xfServerPlus reads the **xfpl.ini** file from the DBLDIR directory. Use the XFPL\_INIPATH environment variable when **xfpl.ini** is not in DBLDIR.

### Setting location

On Windows, in the registry. (You can use the Synergy Configuration Program to set xfServerPlus environment variables on Windows.) On UNIX, in the environment or in the **synrc** file. On OpenVMS, in **SYNRC.COM**.

XFPL\_INIPATH can be set so that it applies to a specific instance of xfServerPlus or to all instances of xfServerPlus. See [“Setting the XFPL\\_INIPATH Environment Variable”](#) in the “Configuring and Running xfServerPlus” chapter of the *xfNetLink & xfServerPlus User’s Guide* for details.

### Used by

xfServerPlus.

### See also

[“Setting the XFPL\\_INIPATH Environment Variable”](#) in the “Configuring and Running xfServerPlus” chapter of the *xfNetLink & xfServerPlus User’s Guide*.

### Examples

In the environment on UNIX,

```
XFPL_INIPATH = /usr/temp      ;export XFPL_INIPATH
```

## XFPL\_SESS\_INFO – Enable xfServerPlus session logging



The XFPL\_SESS\_INFO setting determines the level of session logging when xfServerPlus logging is enabled.

### Value

One of the following values:

<b>NONE</b>	No session information is logged. (default)
<b>CRITICAL</b>	Only critical session information is logged.
<b>ALL</b>	All information is logged.

### Discussion

The XFPL\_LOG setting (see [XFPL\\_LOG on page 1-304](#)) must be set to ON in the **xfpl.ini** file for XFPL\_SESS\_INFO to have effect. Session logging records information about the xfNetLink–xfServerPlus connection, such as when the session was started and stopped and whether compression was enabled.

### Setting location

The **xfpl.ini** file.

### Used by

xfServerPlus.

### See also

- ▶ [“Setting Options for the xfServerPlus Log”](#) in the “Configuring and Running xfServerPlus” chapter of the *xfNetLink & xfServerPlus User’s Guide* for details on what information is logged when XFPL\_SESS\_INFO is set.
- ▶ [“Using the xfpl.ini File”](#) in the “Configuring and Running xfServerPlus” chapter of the *xfNetLink & xfServerPlus User’s Guide*.

### Examples

```
XFPL_SESS_INFO=CRITICAL
```

## XFPL\_SINGLELOGFILE – Log all processes in a single file

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The XFPL\_SINGLELOGFILE setting specifies that all processes writing to the xfServerPlus log file will be written to a single file.

### Value

One of the following values:

- ON**     A single log file is created.
- OFF**    A log file is created for each session. (default)

### Discussion

Used in conjunction with XFPL\_LOG (see [XFPL\\_LOG on page 1-304](#)). By default, information from each session is logged to a separate log file named with the log file name plus a date and time stamp to differentiate the files. If you would prefer that all sessions write to a single log file, set XFPL\_SINGLELOGFILE to ON. You can identify which log entries are associated with which session by the session ID. Multi-file logging generally gives better performance.

### Setting location

The **xfpl.ini** file.

### Used by

xfServerPlus.

### See also

- ▶ “[Setting Options for the xfServerPlus Log](#)” in the “Configuring and Running xfServerPlus” chapter of the *xfNetLink & xfServerPlus User’s Guide*.
- ▶ “[Using the xfpl.ini File](#)” in the “Configuring and Running xfServerPlus” chapter of the *xfNetLink & xfServerPlus User’s Guide*.

### Examples

```
XFPL_SINGLELOGFILE=ON
```

## XFPL\_SMCPATH – Synergy Method Catalog files location



The XFPL\_SMCPATH environment variable specifies the location of the Synergy Method Catalog files when they are not in the default location.

### Value

The pathname of the SMC files.

### Discussion

By default, the Method Definition Utility (MDU) and xfServerPlus read the SMC data files from the DBLDIR directory. Use the XFPL\_SMCPATH environment variable when these files are not in DBLDIR.

### Setting location

On Windows, in the registry for use by xfServerPlus and in the environment for use by the MDU. (You can use the Synergy Configuration Program to set xfServerPlus environment variables on Windows.) On UNIX, in **synrc** or the environment for use by xfServerPlus and in the environment for use by the MDU. On OpenVMS, in the **SERVER\_INIT.COM** file for use by xfServerPlus and in the environment for use by the MDU.

XFPL\_SMCPATH can be set so that it applies to a specific instance of xfServerPlus or to all instances of xfServerPlus. See [“Setting the XFPL\\_SMCPATH Environment Variable for xfServerPlus”](#) in the “Defining Your Synergy Methods” chapter of the *xfNetLink & xfServerPlus User’s Guide* for details.

### Used by

Method Definition Utility, xfServerPlus.

### See also

- ▶ [“Specifying Which SMC to Update”](#) in the “Defining Your Synergy Methods” chapter of the *xfNetLink & xfServerPlus User’s Guide*.
- ▶ [“Setting the XFPL\\_SMCPATH Environment Variable for xfServerPlus”](#) in the “Defining Your Synergy Methods” chapter of the *xfNetLink & xfServerPlus User’s Guide*.

### Examples

As a system-level environment variable on Windows,

```
XFPL_SMCPATH = c:\temp
```

## XSHOW – Keep application iconized



The XSHOW environment variable specifies that an application should remain as an icon until U\_START is called.

### Value

Any value.

### Discussion

If XSHOW is not set, window size adjustments can be seen as the footer, information line, and toolbars are added when the applications starts up. To postpone the display of the application window until this sizing is complete, set XSHOW to any value.

A special value, HIDE, keeps the application window hidden. Setting XSHOW to HIDE has the same effect as setting APP\_STATE to HIDDEN.

The XSHOW environment variable affects the current program and any programs spawned by the current program.

### Setting location

The environment or the [synergy], [dbr], or [*myprog*] section of **synergy.ini** (where *myprog* is any **.dbr** file).

### Used by

Runtime.

### Examples

In the **synergy.ini** file,

```
[synergy]
XSHOW=1
```





# 2

## System Options

### Setting an Option 2-3

Explains how to set a system option with the DBLOPT environment variable and describes the following system options:

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#2 – Default file specification on STOP.....	2-5
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#5 – CRT mode.....	2-7
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System options #9, #14, #20, #25, and #26, which were available in a previous version of Synergy DBL, are obsolete and ignored.

---

## Setting an Option

By default, an option is not set. Specifying an option as an argument to the DBLOPT environment variable sets that option. If Synergy DBL doesn't recognize an option on your operating system, that option is ignored.

On Windows and UNIX, do *not* use quotation marks when defining multiple runtime options. For example:

```
set DBLOPT=1,7,16,22
```

or

```
DBLOPT=1,7,16,22
```

On OpenVMS, when you define multiple system options, you *must* enclose them in quotation marks. If you don't use quotation marks, DCL interprets the logical as a search list, and the runtime will only process the first option specified. For example:

```
define DBLOPT "1,7,16,35"
```

See [DBLOPT on page 1-71](#) for more information.

You can also set or reset a system option at runtime using the %OPTION function. See [%OPTION](#) in the “System-Supplied Subroutines and Functions” chapter of the *Synergy DBL Language Reference Manual* for more information.

This section explains in detail all system options that are available on the various operating systems. The online release notes file, **REL\_DBL.TXT**, may contain additional information about system options.

## #1 – Default SEND queue

WT		U	V
----	--	---	---

System option #1 determines the default terminal number for the SEND statement.

If you set option #1, the default terminal number is 255, and the message being sent is inserted into the global message queue. System option #13 also sets the default terminal number, and it overrides option #1. If option #13 is set, option #1 is ignored.

If you don't set option #1 or #13 and you don't specify a terminal number in a SEND statement, the default terminal number is the number of the terminal running the program. The message is inserted into the terminal's local message queue.

For more information about sending and receiving messages, see [“Synergy DBL messages and message queues”](#) and [“Receiving messages”](#) in the “Welcome to Synergy DBL” chapter of the *Synergy DBL Language Reference Manual*.

## #2 – Default file specification on STOP

WT		U	V
----	--	---	---

System option #2 controls the default file specification for the STOP statement.

If you set option #2, the filename extension and path default to the extension and path of the program requesting the chaining. For example, on UNIX, if you run a program called **current** with the following command line:

```
dbr /usr/mine/current.app
```

the statement

```
STOP next
```

causes the program to chain to **/usr/mine/next.app**.

If you don't set this option, the filename extension defaults to **.dbr** on Windows and UNIX and to **.exe** on OpenVMS, and the path defaults to the current directory. For example, if you chain to a program called **next** from the program **/usr/mine/current.app** on UNIX, the Synergy runtime attempts to transfer execution control to the program **next.dbr** in the current directory.

## #3 – ISAM file I/O caching

		U	
--	--	---	--



As of Synergy/DE 10, all systems implicitly enable file I/O caching; system option #3 is automatically implied.

---

System option #3 enables ISAM file caching on all OPENs for Revision 4 and 5 ISAM files.

When system option #3 is set, or when you use the **/cache** qualifier in the OPEN OPTIONS string (see [OPTIONS](#) in the “Synergy DBL Statements” chapter of the *Synergy DBL Language Reference Manual*), the runtime performs three types of caching to ISAM files depending on how the file was opened:

- ▶ Files opened with SHARE:Q\_EXCL\_RW get full caching. ISAM I/O is cached and is not written to disk until a CLOSE or FLUSH is issued. Blocks remain in read cache until that time.
- ▶ Files opened with SHARE:Q\_EXCL\_RO get a write-through form of caching. ISAM I/O is cached, but all output is written simultaneously to disk. Blocks remain in read cache until a CLOSE or FLUSH is issued.
- ▶ Files open without exclusive access get a write-through form of caching. ISAM I/O is cached, but all output is written simultaneously to disk. Blocks remain in read cache until either the file is updated by another user or a CLOSE or FLUSH is issued.

In all cases, if the cache becomes full before a CLOSE or FLUSH is issued, the oldest blocks will be flushed. (The NUMBUFS environment variable determines the size of the cache; see [NUMBUFS on page 1-133](#) for more information.)

When you use ISAM file caching, an additional amount of memory and system resource is required for each file OPEN.

On Windows, ISAM file I/O caching is always enabled.

## #5 – CRT mode

WT		U	V
----	--	---	---

System option #5 determines whether terminal I/O should be interpreted as CRT I/O.

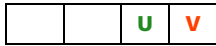
If you set option #5, Synergy DBL assumes that terminal I/O is I/O to or from a CRT. This option acts the same as the `FLAGS` subroutine runtime option flag 4.

If you don't set this option, CRT mode is reset upon program start-up. Any terminal I/O is assumed to be non-CRT I/O.

Option #5 is automatically set if option #35 is set.

On OpenVMS, Synergy DBL interprets the terminal setting to set the default for this option.

## #7 – Message manager



System option #7 determines whether the runtime uses the Synergy message manager or the local message facilities.

If you set option #7, Synergy DBL uses the Synergy message manager (which is the Synergy DBL daemon on UNIX) if it is available. If the message manager is not available, this option is ignored.

### **VMS**

---

Option #7 is on by default.

If this option is not set, Synergy DBL uses the local message facilities for the SEND and RECV statements, which means that interprocess SENDs and RECVs are not possible.

---



## #10 – Interrupt character(s)

WT		U	V
----	--	---	---

System option #10 controls whether or not the interrupt character(s) are ignored at program start-up and between chains.

If option #10 is set, the interrupt character(s) are ignored at program start-up and between chained programs, and the state of the FLAGS subroutine runtime option flag 8 is automatically set on entry to each program. You can control when an interrupt character is processed (in other words, not ignored) throughout your program by unsetting and resetting flag 8.

If you don't set this option, Synergy DBL processes any interrupt character that the user types unless flag 8 is set.

## #11 – Rounding vs. truncation

WT		U	V
----	--	---	---

System option #11 determines whether Synergy DBL rounds or truncates expression results by default.

If option #11 is set, Synergy DBL truncates results in the following situations at compile time:

- ▶ Stores from an implied-decimal type or an alpha type in implied-decimal format (for example, “1.3”) to either an integer, a decimal, or an implied-decimal with a smaller fractional precision
- ▶ Intrinsic functions and system-supplied subroutines when an implied-decimal value is passed as an argument to a routine expecting a decimal or integer value
- ▶ The following data references when an implied-decimal value is used in place of a decimal or integer value (where *dexp* is specified):

```
dim_var[dexp, dexp, ...] ^arg(dexp)
var(dexp)                ^argn(dexp)
var(dexp, dexp)          ^d(exp, dexp)
var(dexp:dexp)
```

- ▶ The GOTO statement when an implied-decimal value is used in place of a decimal or integer value (where *dexp* is specified):
 

```
goto (lbl, lbl, ...) dexp
```
- ▶ I/O statements when an implied-decimal value is used as a channel argument or qualifier value
- ▶ Multiplication or division operations, if the result is an implied-decimal value with more than 10 digits of fractional precision
- ▶ READ and WRITE statements when you specify the record number as the third argument (where *dexp* is specified):
 

```
read(channel, data_area, dexp)
```
- ▶ %IMPLIED with an alpha argument containing an implied-decimal value whose fractional precision is greater than 10

If option #11 is not set, Synergy DBL defaults to rounding in each of the above situations. When rounding, if the leftmost digit (or the eleventh digit for multiplication or division) of the fractional precision is in the range 5 through 9, Synergy DBL adds one to the absolute value of the whole number part (or the fractional part for multiplication or division). For example, if system option #11 is not set and you specify 3.5 as the record number to read in a READ statement, you get the fourth record. If system option #11 is set, you get the third record.

The state of this option is overridden in routines using the ROUND or TRUNCATE option on MAIN, SUBROUTINE, and FUNCTION.

This option is only used at compile time. It is ignored at runtime.

## #12 – Buffered terminal output



System option #12 affects buffered terminal output.

Option #12 determines whether or not you'll be able to customize the size of the terminal buffer. If you set it, you can customize the size of the terminal buffer for use with the TBUF environment variable. (For more information about TBUF, see [TBUF on page 1-254](#).)

This option does not affect the Synergy windowing API.

## #13 – Default SEND queue

WT		U	V
----	--	---	---

System option #13 determines the default terminal number for the SEND statement.

If you set option #13, the default terminal number is 254, and the message being sent is inserted into the group message queue. Option #1, which also sets the default terminal number, is ignored.

If you don't set this option or option #1 and you don't specify a terminal number in a SEND statement, the default terminal number is the number of the terminal running the program. The message is inserted into the terminal's local message queue.

For more information about message queues, see [“Synergy DBL Messages and Message Queues”](#) in the “Welcome to Synergy DBL” chapter of the *Synergy DBL Language Reference Manual*.

## #16 – Quit character



System option #16 maps the quit character to the interrupt character.

If you set option #16, pressing the quit character has the same effect as pressing the interrupt character. For example, on OpenVMS, CTRL+Y performs the same function as CTRL+C.

If you don't set this option, the quit character quits out of the program.

The quit characters and interrupt characters supported by Synergy DBL are listed in [Appendix C: Terminal Keys with Special Functions](#) in the *Synergy DBL Language Reference Manual*.

Option #16 is automatically set if option #35 is set.

On UNIX, if system option #16 is set, when possible, we trap the suspend signal (TSTP) and perform the same action as when we trap interrupt.

On OpenVMS, you can restart the program at the point of interruption by issuing a DCL CONTINUE command.

## #17 – Terminal number returned by TNMBR

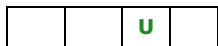
WT		U	V
----	--	---	---

System option #17 controls how the TNMBR routine determines the terminal number.

On OpenVMS, if you set option #17, TNMBR uses the physical device to determine the terminal number for a virtual terminal. If you don't set option #17, TNMBR returns a number based on the VT device specification for a virtual terminal.

For more information about the TNMBR routine, see [TNMBR](#) in the “System-Supplied Subroutines and Functions” chapter of the *Synergy DBL Language Reference Manual*.

## #18 – In-place MERGE and logical end-of-file



System option #18 controls how the in-place MERGE statement handles the logical end-of-file in the primary file. (An in-place MERGE merges two or more sorted files without creating a new output file; the secondary file is merged into the first input file. For more information, see [MERGE](#) in the “Synergy DBL Statements” chapter of the *Synergy DBL Language Reference Manual*.)

If you set option #18, the in-place MERGE extends the primary file by the number of records merged from the secondary file. All records past the logical end-of-file in the primary file are copied to the end of the primary file’s extension.

If you don’t set option #18, the in-place MERGE treats any logical end-of-file character or record as the end of usable data in the primary file. Any records that follow the logical end-of-file are overwritten.

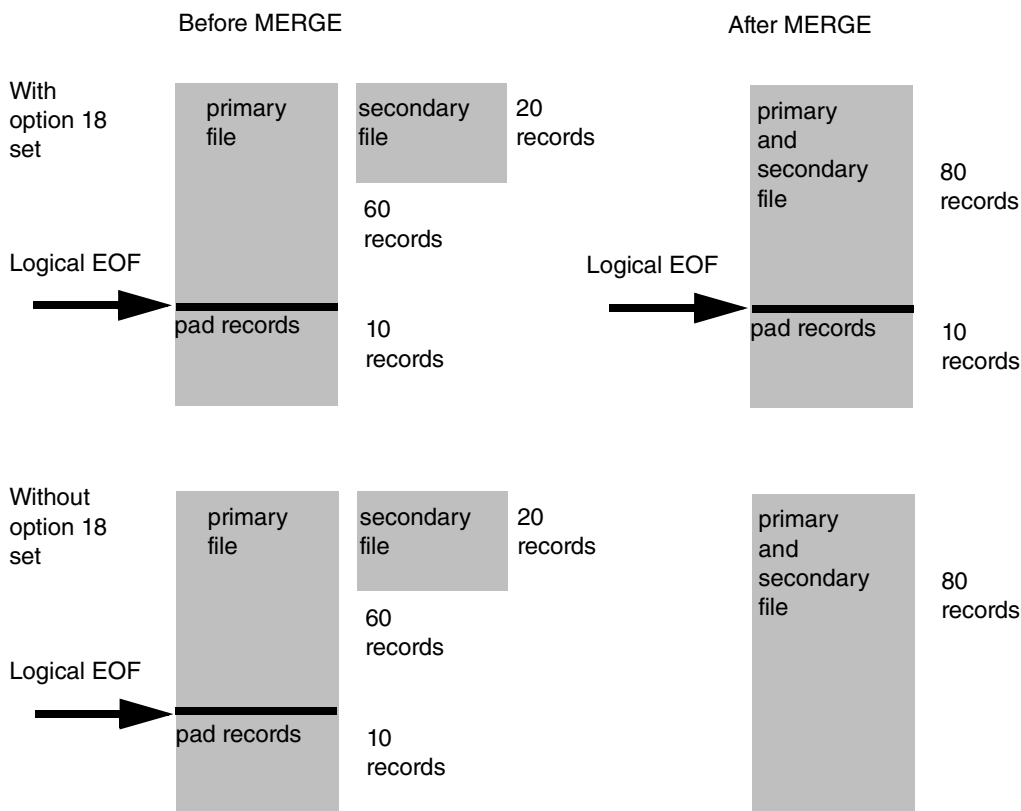


Figure 2-1. System Option #18 – In-place MERGE and logical end-of-file.

## #21 – Interrupt trapping

WT		U	V
----	--	---	---

System option #21 determines whether or not the interrupt character is trappable.

If you set option #21, the ONERROR statement cannot trap the interrupt character, which means that a user can press the interrupt character to interrupt your program.

If you don't set this option, the ONERROR statement traps the interrupt character, which may make it difficult to abort your program.



## #22 – LPQUE statement

WT		U	V
----	--	---	---

System option #22 determines how the LPQUE statement interfaces with the operating system.

---

### WIN

If you set option #22, the runtime sends LPQUE arguments to the file **DBLDIR:dblpq.bat**, which can contain customized print commands. If you do not set this option, the runtime sends the print job directly to the Microsoft Windows print manager. Option #22 can be set in the environment or the **synergy.ini** file. See “[Printing with LPQUE](#)” in the “Windows Development” chapter of the *Professional Series Portability Guide*.

If you want more functionality than the default LPQUE statement provides, we recommend that you not set option #22 and that you use the Synergy Windows printing API instead. (See the “[Synergy Windows Printing API](#)” chapter in the *Synergy DBL Language Reference Manual* for more information.)

---

### UNIX

If you set option #22, the runtime sends LPQUE arguments to the script file **DBLDIR:dblpq**, which you can change to your own printing specifications. The LPQUE statement then executes the arguments in **dblpq** instead of those in the default printing program.

If you don’t set this option, the LPQUE statement arguments executes the default printing program. Default UNIX printing programs are as follows:

System V	<b>lp</b>
BSD	<b>lpr</b>

We recommend that you examine the **dblpq** file to make sure it’s set up appropriately when you install Synergy DBL.

---

### VMS

If you set option #22 and the program is running from an interactive session, the LPQUE statement spawns a PRINT statement to print a specified file, which enables you to add PRINT options after the filename.

If you don’t set this option, or if you do set it and the program is *not* running from an interactive session, the LPQUE statement uses the **\$sndjbc** system service to print a specified file. Any switches that follow the filename are ignored. This feature works within detached or batch processes. You cannot use wildcard characters in the file specification.

---

## #23 – In-place MERGE and duplicate records

WT	WN	U	
----	----	---	--

System option #23 determines where the in-place MERGE statement places duplicate records.

If you set option #23, the in-place MERGE places duplicate records from the second input file *after* their matching records from the first input file.

If you don't set this option, the in-place MERGE statement places duplicate records from the second file *before* their matching records from the first file.

For more information about the MERGE statement, see [MERGE](#) in the “Synergy DBL Statements” chapter of the *Synergy DBL Language Reference Manual*.

## #27 – Suppression of record truncation I/O error

WT	WN	U	V
----	----	---	---

System option #27 allows storage of a larger record into a smaller destination buffer on a READ or READS and allows a write of a larger buffer to a smaller record on a STORE, WRITE, and WRITES.

If system option #27 is set, both the \$ERR\_IRCSIZ and \$ERR\_TOOBIG errors are disabled for ISAM files, and the \$ERR\_TOOBIG error is disabled for non-ISAM files. (Instead of generating an error, truncation occurs.) Disabling these errors enables programs that take advantage of incorrectly sized buffers to continue to function correctly.

If this option is not set, errors \$ERR\_IRCSIZ and \$ERR\_TOOBIG are enabled, and a READ or READS isn't allowed to store a larger buffer into a smaller destination, nor is a STORE, WRITE, or WRITES allowed to pass a larger buffer to a smaller record.



Use system option #27 with caution. An application that allows a record larger than the file's defined record size to be written may eventually cause a significant field of the record to be truncated without warning as new fields are added to the record.

---

## #28 – Mapping decimal data type to numeric



System option #28 causes the compiler to map decimal subroutine arguments (**d**) to numeric (**n**).



---

Option #28 is a compiler option only. It has no effect at runtime. The compiler checks for this option when it compiles your modules. Once your modules are built, you cannot map the decimal data type to numeric.

---

If system option #28 is set, the compiler treats any subroutine arguments declared as type **d** as type **n**.

If this option is not set, no mapping of the decimal data type occurs.

In Synergy .NET, the **-N** compiler option performs the same function.

## #29 – Dimensioned variable

WT		U	V
----	--	---	---

System option #29 determines whether the compiler requires dimension specifications on a dimensioned variable.

If you set option #29 and a dimensioned variable is referenced without dimension specifications (“[ ]”), Synergy DBL generates a “Dimension specifications required for {var}” compiler error. Dimension specifications are *not* required on subroutine arguments and the argument to the ^PASSED data reference operation.

If you don’t set option #29, Synergy DBL won’t require dimension specifications on dimensioned variables.

## #30 – Default terminal definition



System option #30 controls whether the runtime disregards the TERM environment variable in determining what type of terminal you are using.

If you set option #30, the runtime is forced to use the default, built-in terminal definition regardless of how the TERM environment variable is set. The default terminal definition includes all Compaq VTxxx series capabilities.

If you don't set this option, the runtime looks at TERM to determine which type of terminal you are using.



VT100 terminals may have a problem with the EC (erase character) **termcap** code in the Synergy windowing API. We suggest that you use VT102 or greater terminals if you want to use this option.

If you usually use TERM=vt100, setting system option #30 significantly reduces the character output to the terminal on screen clearing and attribute changes, which improves screen painting.

---

## #31 – IF statement format

WT	WN	U	V
----	----	---	---

System option #31 determines which IF statement syntax the Synergy compiler recognizes.

If you set option #31, the compiler uses the alternate form of the IF statement during compilation, instead of the ANS DIBOL form. The alternate IF form is equivalent to using the alternate IF compiler option (for example, **-a** or **-qaltif** on UNIX).

Using the alternate IF syntax, an ELSE clause matches the previous IF clause. ANS DIBOL IF syntax, on the other hand, matches the ELSE clause with the previous THEN clause.

We'll use the following pseudocode as an example:

```
if (expr1)
  then if (expr2)
    stmt1
  else stmt2
```

With option #31 set, **stmt2** is executed only if **expr1** is true and **expr2** is false. If option #31 is not set, ANS DIBOL IF compilation is used, and **stmt2** is executed whenever **expr1** is false.

## #32 – Uppercasing and lowercasing

WT	WN	U	V
----	----	---	---

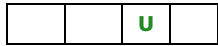
System option #32 eliminates the uppercasing and lowercasing of all two-byte characters and characters whose ASCII code is greater than 127.

If you set system option #32, the uppercasing and lowercasing of the kanji language and all other two-byte characters is eliminated.

If system option #32 is not set, uppercasing and lowercasing occurs as normal.



## #33 – SHARE qualifier disabling



File locking on UNIX is implemented using the same system resource as record locking. For this reason, each file open requires at least one lock (for conventional file locking), in addition to any record locks applied by a READ operation. An application that opens a large number of files could exceed the maximum number of system-wide locks and generate the following error: “Internal runtime failure: Record locking problem.”

In the event this occurs, we recommend that you increase your system kernel parameter that controls the maximum number of locks allowed (typically FLCKREC or LOCKS, depending on your operating system). The parameter should be set to at least

*number of running Synergy applications \* maximum open files per application \* 2*

As a temporary solution, you can set system option #33, which disables this conventional file locking. As a result, however, all file SHARE access is also disabled.



Any file access that would normally have generated a “File in use by another user” error will now be allowed to continue and potentially cause data loss. This includes OPEN(O:mode), COPY, SORT, DELET, RENAM, ISCLR, and ISAMC.

On Oracle Solaris systems, file locking is handled differently. Synergy uses a Solaris-only locking facility that allows true (Windows- and VMS-style) file sharing. (This is always in effect and is not disabled by option #33.) In addition, however, the conventional file locking must also be performed to handle network file access (NFS) to non-Solaris machines or when pre-8.1 Synergy runtimes are used to access the same files, where the Solaris-only locking facility is not available. If neither of these situations can occur, we recommend using system option #33 to turn off the additional conventional file locking. This can have a dramatic impact on systems with a large number of concurrent Synergy users.

## #34 – Command line syntax



Setting option #34 makes the runtime (**dbt**) and the following utilities understand a non-UNIX-style command line: **dbl**, **dbl8**, **dblink**, and **dblibr**.

By default, Synergy DBL supports UNIX-style command line syntax on Windows with switches that follow a minus sign (-). However, when system option #34 is set, Synergy DBL recognizes command line switches that follow a slash character (/).

In addition, if this option is set, file specifications must contain backslash characters (\) between directories and subdirectories; you cannot optionally use a slash character. Also, you must use a minus sign (-) as the line continuation character instead of a backslash in command files specified on the command line.

The following table illustrates the effects of system option #34:

Option #34	Style	Command line switch	Continuation character
Not set	UNIX	-	\
Set	Windows	/	-

## #35 – VAX DIBOL-compatible functionality

WT		U	V
----	--	---	---

System option #35 provides VAX DIBOL-compatible functionality for certain Synergy DBL features. If you set system option #35, the following changes to Synergy DBL behavior occur:

- ▶ **WAIT I/O statement qualifier:** If you specify a value of 0 for the WAIT I/O statement qualifier, it indicates “wait forever” instead of “no wait.”
- ▶ **Quit mapping:** The quit character is mapped to the interrupt character.
- ▶ **Appending to a nonexistent file:** If you open a file that does not exist in append mode, a “File not found” error is generated.
- ▶ **CRT mode:** Synergy DBL assumes that terminal I/O is I/O to or from a CRT.
- ▶ **Invalid key checking:** Invalid key checking is enabled (as if you had set system option #45). An error is generated if the key is not correctly specified.

### WIN, UNIX

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- ▶ **BEGFL subroutine:** The BEGFL subroutine resets the key of reference to zero for an ISAM file.
  - ▶ **PARSE subroutine:** The PARSE subroutine stops at the semicolon (;) and doesn’t include it in the filename or file extension.
- 

### VMS

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- ▶ **TT: on the OPEN statement:** If you open TT: while running from a command procedure, you only get input from the terminal, not the command procedure. Synergy DBL no longer opens both SYS\$INPUT: and SYS\$OUTPUT:.
- ▶ **O:P mode on the OPEN statement:** If you open print files in **O:P** mode, Synergy DBL uses sequential files with no carriage control, as opposed to sequential VFC. This implementation is more efficient if you’re outputting a large print file to a laser printer with escape sequences and graphics data, rather than standard carriage-return/line-feed records. (Each DISPLAY or WRITES statement for a VFC file incurs two bytes of overhead.)
- ▶ **O:S mode on the OPEN statement:** If you open a file in **O:S** mode with RECSIZ specified, Synergy DBL creates a fixed-length file.
- ▶ **Echoing control characters:** Synergy DBL echoes just the control symbol (^) by default, not control characters (for example, ^A and ^G).

- ▶ Line feeds on the FORMS statement: The FORMS statement on a channel opened to a file with carriage return carriage control outputs one extra line feed, advancing the paper one space more than the number specified in the FORMS statement. For example,

```
open(chn, o, "file.ddf")
forms(chn, 2)
```

results in <CR><LF><LF> (three extra lines) if option #35 is set or <CR><LF> (two extra lines, as specified) if option #35 is not set.

- ▶ RENAM subroutine: The RENAM subroutine no longer works the same as the DCL command RENAME. Instead, it operates as in the following example:

If you have three files named **FILE.A;1**, **FILE.A;2**, and **FILE.B;1**, and you use the RENAM subroutine as follows:

```
xcall renam("FILE.A", "FILE.B")
```

Synergy DBL deletes **FILE.B;1** and renames **FILE.A;\*** to **FILE.B;\***. If flag 3 of the FLAGS subroutine is set, the existence of **FILE.B;1** causes a “Cannot supersede existing file” error (\$ERR\_REPLAC). (Normally, **FILE.A;2** is renamed to **FILE.B;2** by default.)

- ▶ RUNJB detached process: The process created by the RUNJB subroutine is detached. However, if the RUNJB *subprocess* argument is present, or if the *io\_flag* argument has a nonzero value, option #35 is ignored.
- ▶ Message returned from ERTXT subroutine: The returned message includes the facility, severity, and mnemonic, and the *position* argument is loaded with the starting position of the message text. If option #35 is not set, the text does not include the facility, severity, or mnemonic, and *position* has a value of 1.



When you set option #35, options #5, #16, #38, #39, and #45 are also set. See [#45 on page 2-38](#) for an important note.

If system option #35 is not set, Synergy DBL handles the above functions as they are documented in their respective sections.

## #36 – File flushing



Synergy writes data directly to the operating system, but in many cases, the operating system caches data before writing it to the actual media. A flush operation is required to bypass this behavior. By default, the runtime does not flush WRITE, STORE, or DELETE operations on indexed, sequential, and relative files to disk. (The runtime does, however, flush ISAM files to disk after a CLOSE operation.) In addition, the runtime buffers WRITES to sequential files (open in output or append mode) in 8K buffers and only writes the cache buffer to the operating system when the buffer is full. This is done to improve sequential write performance, especially over mapped drives.

Setting system option #36 enables the flushing feature of the runtime for non-sequential files and uses the O\_DSYNC file open flag. This ensures that all writes to the disk are flushed for data integrity; however, the file modification time is still cached. This is the best compromise between performance and guaranteed data integrity. Our current method of flushing ISAM files to disk flushes past any write caching that may be set up on the system. If system option #36 is set and you want to enable flushing for sequential files, add a FLUSH statement on the channel, immediately following the OPEN.

On most Windows and UNIX systems, using system option #36 is faster than using the FLUSH statement. (On Windows it is significantly faster.)

On OpenVMS, if system option #36 is set, nonoutput files are not opened for deferred write or write behind caching.

Alternatively, you can use the FLUSH statement to flush files to disk programmatically. (See [FLUSH](#) in the “Synergy DBL Statements” chapter of the *Synergy DBL Language Reference Manual* for details.)

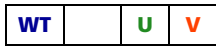


---

The **rpsuti** program disables system option #36. This improves performance for those who have system option #36 set in their environment.

---

## #37 – VAX DIBOL-compatible store



System option #37 forces VAX DIBOL-compatible functionality on decimal-to-decimal and alpha-to-decimal stores. If option #37 is set, decimal-to-decimal assignments are translated. For example, assume you have the expression

```
dfld2=dfld1
```

where dfld1 contains “1 23”. With option #37 set, Synergy DBL stores “1023” into **dfld2**. If the option is not set, no translation occurs.

On alpha-to-decimal stores, Synergy DBL won’t ignore extra characters in the alpha source if option #37 is set. For example, the following statement causes a “Bad digit encountered” error (\$ERR\_DIGIT):

```
D5=A10 containing "XYZ--01234"
```

Alternatively, you can specify the /ALTSTORE compiler qualifier for each individual file for which you want to force an alternate store.




---

System option #37 is a compiler option. It has no effect at runtime. The compiler checks for this option when it compiles your modules. Once your modules are built, you cannot change their store functionality.

---

## #38 – VAX DIBOL–compatible OPEN with O:P

WT		U	V
----	--	---	---

System option #38 provides VAX DIBOL–compatible functionality for the OPEN statement with **O:P** mode.

If you open print files in **O:P** mode, Synergy DBL uses sequential files with no carriage control, as opposed to the default sequential VFC format. This implementation is more efficient if you're outputting a large print file to a laser printer with escape sequences and graphics data, rather than standard carriage-return/line-feed records. (Each DISPLAY or WRITES statement for a VFC file incurs two bytes of overhead.)

Option #38 is automatically set when option #35 is set.

## #39 – VAX DIBOL–compatible OPEN with TT: and echoing characters

WT		U	V
----	--	---	---

System option #39 provides VAX DIBOL–compatible functionality for the following features:

- ▶ TT: on the OPEN statement
- ▶ Echoing control characters

If you set system option #35, the following changes to the Synergy runtime behavior occurs:

- ▶ If you open TT: while running from a command procedure, you only get input from the terminal, not the command procedure. The runtime no longer opens both SYS\$INPUT: and SYS\$OUTPUT:.
- ▶ The runtime echoes just the control symbol (^) by default, not control characters (for example, ^A and ^G) for characters entered by a READS statement. (Note that ^Z is an exception to this rule.)

Option #39 is automatically set when option #35 is set.



## #40 – XCALL profiling

WT		U	V
----	--	---	---

System option #40 enables XCALL profiling.

This option enables profiling for CPU time in the current routine only on all modules compiled with the profiling compiler option (**/profile** on OpenVMS and **-u** or **-qprofile** on all other systems).

See “[The Synergy DBL Profiler](#)” in the “General Utilities” chapter of *Synergy Tools* for more information about routine profiling.

### #41 – Cumulative XCALL profiling

WT		U	V
----	--	---	---

System option #41 enables cumulative XCALL profiling.

If you set option #41, the profiling results for each subroutine include the CPU times for all subroutines XCALLED, rather than just the current subroutine, and any system or Synergy runtime routines.

See “[The Synergy DBL Profiler](#)” in the “General Utilities” chapter of *Synergy Tools* for more information about routine profiling.

## #42 – Profiling regardless of compiler options

WT		U	V
----	--	---	---

System option #42 enables profiling of all routines, regardless of whether the profiling compiler option was set.

If you set option #42, all routines are profiled.

See “[The Synergy DBL Profiler](#)” in the “General Utilities” chapter of *Synergy Tools* for more information about routine profiling.

## #43 – Stop message

WT		U	V
----	--	---	---

System option #43 controls whether a Synergy application produces a stop message when a STOP statement is executed.

If you set system option #43, no stop message is displayed, and the application terminates immediately.

If system option #43 is not set, the following message is displayed:

**%DBR-S-STPMSG, STOP**

**%DBR-I-ATLINE, At line *x* in routine STOP (test.dbl)**

---

### WIN

If system option #43 is set, the message “%DBR-S-STPMSG, STOP, at line *x* in routine *xyz* (*xyz.dbl*)” is suppressed when a stop statement is reached. The application terminates immediately, and any text output of the program disappears from the screen.

If system option #43 is not set, a stop message is produced in one of the following two forms:

- ▶ If the application’s output is not redirected, the stop message is displayed in a message box. The user must click the OK button to terminate the application. This setting allows the user to read text output from the program.
  - ▶ If the application’s output is redirected to a file, the stop message is printed to the file instead of being displayed in a message box.
-

## #44 – No flush on CLOSE



System option #44 “turns off” the **fsync()** system routine to disable flushing on a CLOSE.

If you set system option #44, the runtime won’t call **fsync()** when it closes an ISAM file. On some systems **fsync()** is quite slow, which is why you may want to turn it off.

If system option #44 is not set, the runtime calls **fsync()** each time it closes an ISAM file. Calling **fsync()** guarantees that data is written from the system cache back to disk.

## #45 – Invalid key checking

WT	WN	U	V
----	----	---	---

System option #45 affects the way the implicit key of reference is determined for indexed READs. If the key argument to the READ statement is not a key within the specified buffer, an “Illegal key was specified” error (\$ERR\_BADKEY) is generated.



The checking done for system option #45 assumes that when a key field contained within the record buffer passed on the READ (or FIND) statement is used, the key is either nonsegmented or does not exceed the length of the first segment. If system option #45 is set and you change a file to use segmented keys, you must update your application to use a key buffer that is no longer contained within the record.

---

Option #45 is automatically set if option #35 is set.

## #47 – Local message manager



System option #47 turns off the Synergy message manager and tells Synergy DBL to use the local message manager. It is the opposite of system option #7, which instructs Synergy DBL to use the Synergy message manager rather than local message facilities.

On UNIX, the default is that system option #7 is *off*.

On OpenVMS, the default is that system option #7 is *on*. System option #47 turns option #7 off.

See [system option #7 on page 2-8](#) for more information.

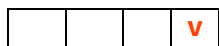
## #48 – Initialize SQL Connection

WT	WN	U	
----	----	---	--

System option #48 signals the Synergy runtime to allocate the necessary memory for the SQL Connection. You can also set option #48 using %OPTION. When using %OPTION, SQL Connection is only initialized when %OPTION gets option #48, and SQL Connection is shutdown, releasing resources, when option #48 is not set. Using %OPTION allows only those programs using SQL Connection to use extra resources; using system option #48 allows all programs to use extra resources.



## #49 – Disable debug on OpenVMS



System option #49 tells the runtime *not* to enter the debugger when you run Synergy programs built with the **/debug** compiler option.

## #50 – Continue NOLOCK I/O when record locking error occurs

		U	
--	--	---	--

When system option #50 is set and you get an internal runtime failure due to a record locking problem (for example, when opening a record on an NFS server that does not support record locking, such as OpenVMS), the OPEN is automatically retried using the NOLOCK qualifier.

## #52 – Line profiler

WT		U	V
----	--	---	---

System option #52 enables line-level profiling of Synergy programs.

If you compile a module with **/profile** (**-u** on UNIX and Windows) and set system option #52, a line execution count for the module is generated into a file called **lines.dat**. You can use the **DBLDIR:profline** program to decode this data file into a file (**lines.lst**) that contains the profile.

See “[The Synergy DBL Profiler](#)” in the “General Utilities” chapter of *Synergy Tools* for more information about routine profiling.

### #53 – RECORD defaults to LOCAL RECORD

WT		U	V
----	--	---	---

When system option #53 is set, the default record type for routines declared with the REENTRANT qualifier is LOCAL rather than the usual default of STACK.

This option affects every invocation of the Synergy compiler.

## #54 – Relax rules for compiling with -qcheck

WT		U	V
----	--	---	---

When system option #54 is set, compiling with the **-qcheck** option (or **/CHECK=BOUNDS** on OpenVMS) only generates a subscript error for data outside the defining data area (common space, routine record space, global space, and literal space). (On OpenVMS, only routine record space and literal space can be checked.)

If system option #54 is not set, a subscript error occurs if the subscript is beyond the definition of the individual field. For example, given the following data division:

```
record
  var      , 2d4
  var1     , d4
```

var(3) causes a subscript error if system option #54 is *not* set but not if it *is* set. However, var(4) causes an error in either case.



System option #54 will cause subscript errors if used in conjunction with arrays in class data. Therefore, it should not be used with object-oriented code.

---

## #55 – Map Q\_NO\_LOCK to Q\_NO\_TLOCK



When system option #55 is set, READS with LOCK:Q\_NO\_LOCK is automatically mapped to READS with LOCK:Q\_NO\_TLOCK. This setting enables you to make use of the READS prefetch feature of xfServer (and thus improve performance when doing sequential reads) without modifying your code.



---

Because Q\_NO\_TLOCK uses fewer resources than Q\_NO\_LOCK and provides similar performance to a READS on a file opened for input, system option #55 will provide performance gains, regardless of whether or not you use the prefetching feature.

---

Do not use this option if you want to see concurrent changes made by other users, as Q\_NO\_TLOCK does not guarantee changes will be seen. (See [LOCK](#) in the “Synergy DBL Statements” chapter of the *Synergy DBL Language Reference Manual* for more information.)

See [READS](#) in the “Synergy DBL Statements” chapter of the *Synergy DBL Language Reference Manual* for more information about the prefetch feature of xfServer.

## #56 – Ignore GRFA on GETRFA and RFA qualifiers

WT	WN	U	
----	----	---	--

Prior to Synergy/DE 9.3.1, a GETRFA or RFA qualifier variable that exceeded 6 bytes was allowed. As of 9.3.1 and the introduction of GRFAs, however, if the size of a GETRFA or RFA argument is anything other than 6 or 10 bytes, an “Invalid record’s file address” error (\$ERR\_INVALIDRFA) is generated. Setting system option #56 turns off this behavior and causes all RFAs that exceed 6 bytes to be treated as 6-byte RFAs.





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