



PRODUCT OVERVIEW: WANG/OPEN WANG VS COBOL TO CLIENT COBOL

GENERAL DESCRIPTION PIR Group Inc provides a utility that *automatically* converts Wang VS COBOL to native MICRO FOCUS COBOL. The conversion output is always native to OPEN SYSTEM allowing the user to take full advantage of all the features of the destination platform. More than 10,000 programs have now been successfully converted. This extensive experience has enabled us to bring the conversion rate for the typical Wang program very near 100% on the first pass.

This cross-compiler was designed to provide a simple utility to work with. A single command converts a program and all the copy books used by the program. *An entire library of programs can be converted by a single command.* Status messages are generated during conversion to keep the user advised of progress.

The conversion utility includes many features to insure ease of program maintainability. For example, any COBOL names generated by the utility are extensions of the existing COBOL name. All converted code maintains the original alignment of the original Wang source code. This feature, and others outlined in the following detailed utility specifications gives evidence the high priority PIR assigned to producing easily maintainable code. This aspect of the utility design dramatically reduces your applications programmers' learning curve on the desired destination platform.

GENERAL FEATURES

- * Standard command interface is used to drive the conversion utility.
- * An entire program library can be converted with a single command.
- * Rewritten code appears in the same alignment as the original source code.
- * All field and file names become extensions of the original Wang field and file names.
- * All copy books are converted and retain the same identity.
- * All comments contained in the Wang code appear in the converted MICRO FOCUS program.
- * The tool generates a detailed error report.
- * The tool produces a cross-reference of files, subroutines and copy books.
- * Wang user subs are rewritten as subroutines on the destination platform.

SCREEN SUPPORT FEATURES

- * Extracts screens from the Wang program and creates native MICRO FOCUS SCREEN SECTION source code.
- * All Wang field attributes are converted to native MICRO FOCUS SCREEN SECTION source code.
- * All Wang FAC logic is converted to MICRO FOCUS SCREEN SECTION source code.
- * Utility redesigns the Wang FAC code, Wang Cobol names are kept intact.
- * Wang screen editing features are duplicated via MICRO FOCUS SCREEN SECTION codes.
- * A single level of OCCURS within the Wang screen definition is supported.
- * All features of the Wang DISPLAY AND READ are supported, including:
 1. PF KEYS are ...
 2. NO-MOD (imperative)
 3. ON PF KEY (imperative)
 4. Enabling or disabling the ENTER KEY
 5. Opening of CRT file
- * Wang PF key feedback, cursor feedback and cursor positioning is supported.
- * Figurative constants used as data elements is supported.



FILE SUPPORT FEATURES

- * Wang SELECT statements and file descriptions are rewritten to MICRO FOCUS SELECT statements and file descriptions.
- * Wang alternate key files are converted to MICRO FOCUS alternate indexes.
- * Generates code to handle READ with TIME-OUT clause.
- * Handles up to 16 record names under an FD.
- * Multiple record format files are handled within Micro Focus Cobol

MISCELLANEOUS FEATURES

- * Files are automatically converted to any MICRO FOCUS supported database.
- * Generates code to handle STOP verb, followed by a message.
- * The conversion utility allows MICRO FOCUS source code to be embedded within the Wang Cobol program as comments to be uncommented during conversion.
- * Code is generated to support RETURN-CODE.
- * Wang binary usage converted to MICRO FOCUS binary usage.
- * Wang MOVE WITH CONVERSION statement is converted to equivalent MICRO FOCUS code.



MOST FREQUENTLY USED OPTIONS OF THESE WANG USER SUBS ARE SUPPORTED:

BELL	Sounds the workstation alarm for the specified number of I/O seconds.
DATE	Performs the following dates : 1) converts the current system date and time to a formatted string, 2) converts dates between Gregorian and Julian formats, 3) performs calculations with dates, and 4) determines the day of the week that corresponds to a 20th century date.
DAY	Computes the day of the week that corresponds to a specified 20th century date.
EXTRACT	Provides information about the system and the program user.
PAUSE	Causes a program to pause for a specified amount of time.
RENAME	Renames files, lists.
SCRATCH	Provides the ability to scratch a file or library, with the options of bypassing expiration date checking and limiting access rights for a program with special privileges.
SET	Sets any of the allowable defaults that are available through the Command Processor SET Usage Constants function and the Procedure language SET command.
SORT	Sorts a character array on specified field, in either ascending or descending order. Output from SORT can be either the sorted array or a locator-type array. (The elements in a locator-type array indicate the positions of the sorted elements in the character array.)
STRING	Provides the following manipulation functions: <ol style="list-style-type: none">1. Moves a string to another variable and pads it with a specified character.2. Moves a portion of a string to another variable.3. Centers a string.4. Left or right justifies a string.5. Reverses the order of characters in a string.6. Translates the string according to a standard or user-specified translation table.

NOTE: The PIR Group policy on USER SUBS not previously encountered is to provide their equivalent functions via subroutines, in-line code, etc., which become the client=s property. These improvements to the WANG conversion utilities are provided without charge. Exceptions include some SSLs and other items mentioned below in AREAS REQUIRING MANUAL INTERVENTION.



AREAS REQUIRING MANUAL INTERVENTION. The Wang will permit certain programming practices which are not handled by MICRO FOCUS Cobol. Where such items are encountered, manual amendments must be made to the Wang code before conversion (preferred method), or to the MICRO FOCUS code after conversion. Changes can be made by the client, or they can be made by PIR Group Inc, based on a fixed bid.

- * Multiple Cobol statements on the same line need to be reformatted to one statement per line.
- * Creation of Procedures Aon the fly≡ *within* COBOL programs requires re-writing to allow this style of processing to occur externally .
- * Subscripting out of range, *unless*, after conversion, the AS/400 compile option of NORANGE is used.
- * Multiple record formats within any one physical file must be separated into unique physical files for full AS/400 functionality.
- * Spaces in numeric-defined fields are not permitted, zeros must be moved to numeric fields.
- * Fields beginning in Row 1, Column 1, are converted to fields beginning in Row 1, Column 2. Compiled listing must be examined to correct any resulting overlaps.
- * If used, PF Keys 25 through 32 must be re-mapped and included in the range PF1 through PF 24.
- * File status reads must be defined as 2 byte alpha on Wang
- * Embedded FACS (in-stream FACS) in data fields are not permitted. Requires rewriting for individual field definition.
- * WSXIO (full screen I/O) is not supported, requiring manual pre-conversion re-write to DISPLAY-WS.
- * Figurative constants on print lines.

LANGUAGES AND DATABASE MANAGERS NOT SUPPORTED. The following languages and Database Managers have no equivalents on the AS/400, and in fact may stand in the way of automated conversion.

Assembler (Requires re-writing to Micro Focus Cobol, or C).
RPG (Requires re-writing to Micro Focus Cobol, or C)
Basic (Requires re-writing to Micro Focus Cobol or C)
Wang WP (No solution offered)
Speed II (No solution offered)
Pace (No solution offered)
Oracle (Requires program modification, using SQL)