

## COBOL SUPPORT IN PATHFINDER

PATHFINDER provides a rich and diverse level of support for COBOL programs. Due to the structure of COBOL, all COBOL source statements must be parsed to locate references to objects and fields

The following provides a list of specialized features included in PATHFINDER for COBOL programs:

### **30 character field names**

The field names stored within PATHFINDER's Field X-ref can be up to 30 characters. Support is provided to inquire on the 30 character field names.

### **Alias field names**

PATHFINDER's Field X-ref supports COBOL alias field names. The "Field Where Used" data is determined, when appropriate, by analyzing either program references to the alias field name, or to the external field name, depending on the type of COPY statement (DD, DDR, DDS, or DDSR).

### **Program described fields**

PICTURE clauses located in the File Section are scanned to determine the usage of program described fields and are included in the Field X-ref. The from/to position, the size of field, and the field type are determined by analyzing all the various syntaxes of the PICTURE clause.

### **OCCURS clause**

OCCURS clauses are analyzed to determine the from/to positions for program described fields that occur in PICTURE clauses.

### **MOVE CORRESPONDING phrase**

The MOVE CORRESPONDING phrases are analyzed to determine field usage in both the moving "from" format and the moving "to" format. The I/O specified for each format is located and used to determine the type of field usage.

### **COPY statement**

The source member specified within a COPY statement is located. All statements within the copied member are parsed and all references to field and objects are included in the X-ref. The source member appearing in the COPY statement is also included in the Object X-ref. Any copied statements that specify a PICTURE clause will also be included in the field X-ref. The fields appearing in the copied member that are referenced by the program will be included in the "where used" information. Also, all PICTURE fields located in the copied member will be saved to allow PATHFINDER to provide a file layout on the fields defined in

a copied member. The REPLACING phrase is analyzed and each properly matched occurrence of operand-1 within the copied member is replaced by the associated operand-2.

### **Qualified field names**

When a field name is qualified by a file's format name, field usage for that field will be based on the qualified field name.

### **File usage**

For COBOL programs, PATHFINDER looks at the source statements for both the SELECT clause and the OPEN statement to determine the type of file, the file name, and the type of file access (INPUT, OUTPUT, I/O, and EXTEND phrases). All the source statements for the SELECT clause as well as the source statements for the OPEN statement are included in the X-ref for the file being referenced. PATHFINDER uses the 30 character "file-name" in the SELECT clause to locate the appropriate OPEN statement in the Procedure Division.

### **Additional object references**

PATHFINDER also searches for CALL, SORT, and MERGE statements. These statements are parsed and the objects that they reference are included in the Object X-ref.

### **Spacing charts for printer files**

PATHFINDER analyzes COBOL source programs and provides a diagram (spacing chart) for the report layout.

For further information, please contact our Technical Services department. We can be reached by email at [info.hawkinfo.com](mailto:info.hawkinfo.com) or call us Monday-Thursday, 7 a.m. to 5 p.m. (MST) and Friday 7 a.m. to 3 p.m., VOICE (970) 498-9000 or FAX (970) 498-9096.