

# Changes to the Copygroup Command

Additional finishing operations are being allowed at the copygroup (medium map) level. These are CORNER (corner staple), SADDLE (saddle stitch out) aka SADDLEOUT, EDGE (edge stitch), FOLD (fold in), CUT (separation cut), and PERFORATE (perforation cut), and PUNCH.

The following new syntax will be valid on the COPYGROUP command:

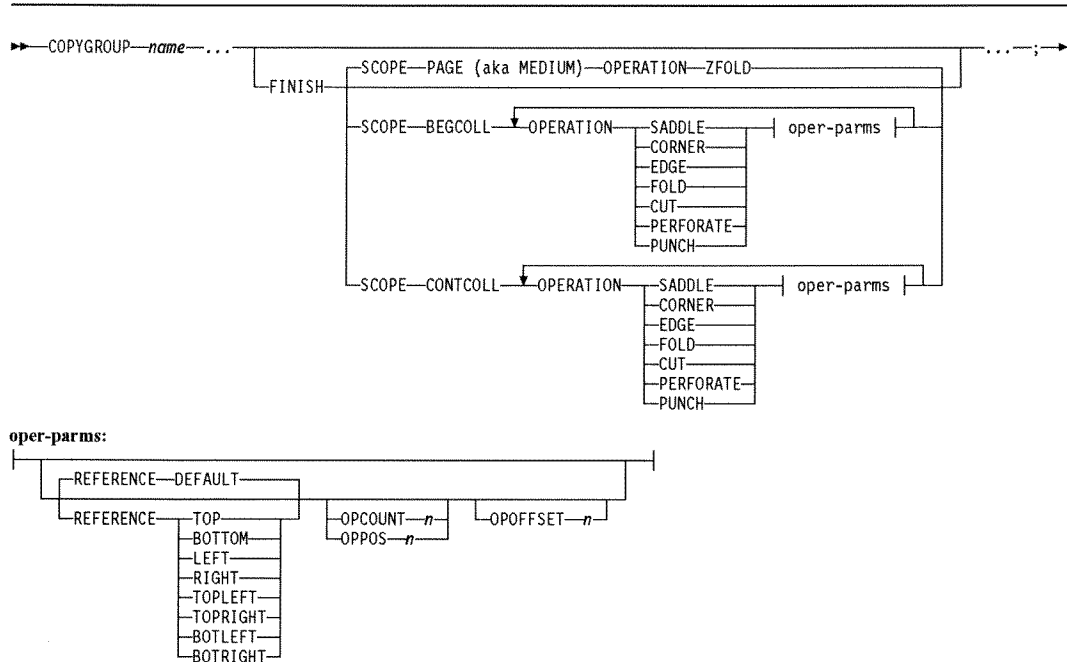


Figure 1. Syntax drawing for new COPYGROUP syntax elements

|                  |  |
|------------------|--|
| <b>OPERATION</b> | Specifies the type of finishing operation.   |
|                  | <b>Note:</b> Compatible Operations can be repeated within a specified Scope.   |
|                  | <b>Note:</b> Your print server may have a limit on the number of collection operations allowed to be "open" at one time.   |
| <b>SADDLE</b>    | (aka SADDLEOUT) - same as on Formdef   |
| <b>CORNER</b>    | same as on Formdef   |
| <b>EDGE</b>      | same as on Formdef   |
| <b>FOLD</b>      | same as on Formdef   |
| <b>CUT</b>       | same as on Formdef   |
| <b>PERFORATE</b> | same as on Formdef   |
| <b>PUNCH</b>     | one or more holes are to be punched or drilled into the media along the finishing axis. This operation is applied to the collected media, not to individual media. |

**REFERENCE** Determines the reference corner or edge for the finishing operation.  
(Steve,, These parameters are the same as for the Formdef. Copy REFERENCE and all its' subparms from the FORMDEF command.)

**OPCOUNT n | OPPOS n**

(Steve, copy these parms and all their subparms from the FORMDEF command.)

**OPOFFSET**

(Steve, copy this parm and all its' subparms from the FORMDEF command.)

**SCOPE**

Determines to which sheets the finishing operation is applied.

**Note:** Scope can be repeated within a Finish subcommand but only one Scope of a particular type is allowed per Copygroup. E.G Only one SCOPE BEGCOL is allowed per Copygroup.

**PAGE (or MEDIUM)** Medium-map level, each medium or sheet.

The specified finishing operation is applied to each sheet individually. ZFOLD is only operation valid for this scope.

**Collection Scope** Medium-map level, collection of media or sheets. All sheets generated by this medium map are collected and the specified finishing operations are applied to this collection. Note that not all combinations of finishing operations are compatible. Compatible combinations of finishing operations are presentation-device specific.

**BEGCOLL**

Begin medium-map level collection. This causes a sheet eject and starts a medium-map-level media collection for the operation specified. If a collection for the same finishing operation is already in progress from a previous medium map, that collection is terminated and its' specified finishing operation is applied. The media collection that is started continues until:

1. End of document is reached.
2. A medium map is invoked that is not CONTINUE COLLECTION for this same operation.

When a finishing collection is terminated for any of the above reasons, the specified

finishing operation is applied.

#### **CONTROLL**

Continue medium-map level collection. This continues a medium-level media collection that was started for the same finishing operation by a previous medium map. The media collection that is started continues until:

1. End of document is reached.
2. A medium map is invoked that is not CONTINUE COLLECTION for this same operation.

When a finishing collection is terminated for any of the above reasons, the specified finishing operation is applied.

### **Finishing Operation Nesting Rules:**

When more than one finishing operation that involves a collection of media is specified for some portion of the print file, a nesting of the operations is defined first by the scope of the operation, and second by the order of the operation in the data stream.

Finishing operations with a broader scope are nested outside of finishing operations with a narrower scope. The following scopes are listed in descending order of their scopes:

1. Print-file level finishing (SCOPE PRINTFILE)
2. Document-level finishing, each document in the print file (SCOPE ALL)
3. Document-level finishing, a selected document in the printfile (SCOPE n)
4. Medium-map-level finishing - a collection of sheets (SCOPE BEGCOLL)

### **Finishing Operation Implementation Notes:**

1. AFP environments limit the number of finishing operations that can be nested at the medium map (COPYGROUP) level to sixteen.
2. In AFP environments, the nesting of identical finishing operations at the medium-map-level is not supported. Two finishing operations are identical if the OPERATION, REFERENCE, OPCOUNT or OPPOS, and OPOFFSET are the same.

### **New finishing support Examples**

```

/*****/
/* FinXmp - Finishing example: */
/* Copygroup 1 begins finishing collection for */
/* Corner Stapling, Folding, and Separation Cut. */
/* Copygroup 2 continues the fold, cut and corner */
/* operations, and stops all others. */
/* Copygroup 3 continues any corner stapling, */
/* begins a new punch and fold group, and stops */
/* all others. */
/*****/
FORMDEF FinXmp Replace Yes;

```

```

COPYGROUP 1
  FINISH
    SCOPE BEGCOLL OPERATION corner REFERENCE topleft
    OPERATION fold
    OPERATION cut;

COPYGROUP 2
  FINISH
    SCOPE CONTCOLL OPERATION fold
    OPERATION cut
    OPERATION corner;

COPYGROUP 3
  FINISH
    SCOPE CONTCOLL OPERATION corner REFERENCE topleft
    SCOPE BEGCOLL OPERATION punch
    OPERATION fold;

```