Utilities: ROTATE

The ROTATE utility can be used to rotate tape volumes on which generations of a generation data group reside. It can also be used to catalog any data set using the volume information of an existing cataloged data set.

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Rotating Data Sets in a Generation Data Group (GDG)

Suppose "U.USERID.DATA" is a cataloged generation data group consisting of four generations (0, -1, -2, -3), each on a different magnetic tape volume. To create a new generation cataloged on the same volume as 'U.USERID.DATA(-3)', execute the ROTATE utility as follows:

```c
// EXEC PGM=ROTATE,PARM='U.USERID.DATA(-3)'
```

If ROTATE has been invoked AFTER any reference to the GDG data set using relative generation numbers, the new relative generation numbers will not "take effect" during the current jobstream (See NOTE2). If ROTATE has been invoked BEFORE any such reference, then after execution of the utility, the new generation can be referred to as follows:

```c
//OUTPUT DD DSN=U.USERID.DATA(0),DISP=(OLD,KEEP)
```

For example, if the data sets in the generation data group are cataloged on TAPEA, TAPEB, TAPEC, and TAPED, the following table shows how the data sets will be cataloged after execution of the utility. The data sets have not moved but they have changed generation numbers.

<table>
<thead>
<tr>
<th>Tape</th>
<th>Data Set Name Before</th>
<th>Data Set Before</th>
</tr>
</thead>
<tbody>
<tr>
<td>TAPEA</td>
<td>U.USERID.DATA.G0004V00</td>
<td>U.USERID.DATA(0)</td>
</tr>
<tr>
<td>TAPEB</td>
<td>U.USERID.DATA.G0003V00</td>
<td>U.USERID.DATA(-1)</td>
</tr>
<tr>
<td>TAPEC</td>
<td>U.USERID.DATA.G0002V00</td>
<td>U.USERID.DATA(-2)</td>
</tr>
<tr>
<td>TAPED</td>
<td>U.USERID.DATA.G0001V00</td>
<td>U.USERID.DATA(-3)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tape</th>
<th>Data Set Name After</th>
<th>Data Set After</th>
</tr>
</thead>
<tbody>
<tr>
<td>TAPED</td>
<td>U.USERID.DATA.G0005V00</td>
<td>U.USERID.DATA(0)</td>
</tr>
<tr>
<td>TAPEA</td>
<td>U.USERID.DATA.G0004V00</td>
<td>U.USERID.DATA(-1)</td>
</tr>
<tr>
<td>TAPEB</td>
<td>U.USERID.DATA.G0003V00</td>
<td>U.USERID.DATA(-2)</td>
</tr>
<tr>
<td>TAPEC</td>
<td>U.USERID.DATA.G0002V00</td>
<td>U.USERID.DATA(-3)</td>
</tr>
</tbody>
</table>

Cataloging a Data Set Using Old Volume Information
The ROTATE utility can also be used to catalog a data set using the volume information of an existing cataloged data set. The data set names must be expressed as fully qualified names and NOT as generations of a generation data group. To use this feature, specify two data set names in the \texttt{PARM} field separated by a comma as follows:

\begin{verbatim}
// EXEC PGM=ROTATE,PARM='U.USERID2.INVENT,U.USERID2.ACCOUNTS'
\end{verbatim}

After execution of the utility, 'U.USERID2.ACCOUNTS' will be cataloged on the same volume as 'U.USERID2.INVENT'.

\textbf{Note}

This utility can be used for tape data sets residing on 20 or fewer volumes.

\begin{table}[h]
\centering
\begin{tabular}{|c|p{12cm}|}
\hline
\textbf{RETURN CODE} & \textbf{EXPLANATION} \\
\hline
0 & Normal end of the step. \\
8 & The current generation was coded in the PARM field. \\
U100 & An abnormal condition occurred. \\
\hline
\end{tabular}
\end{table}

\textbf{Note}

The IBM JCL User's Guide states that "relative generation numbers are obtained from the catalog as it existed at the beginning of the first step that specifies the generation data set by relative generation number."

\textbf{Your Comments are Welcome}

We welcome your comments and suggestions on this and all UFIT documentation. Please send your comments to:

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