

## Kirk's Korner



### Quick & Simple Tips

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## Displaying Additional SAS Log Messages with *MSGLEVEL=*

The SAS System can be directed to automatically display additional information directly to the SAS log by specifying the `MSGLEVEL= SAS System` option using an Options statement. The `MSGLEVEL=` option supports two options: N (which is the default) and I. By specifying `MSGLEVEL=I`, SAS displays to the SAS Log helpful information pertinent to merge and sort processing; as well as index usage and suggestions on what can be done to influence SAS to use an index; along with the usual assortment of notes, warnings, and error messages.

To demonstrate the effect of using a `MSGLEVEL=I` option, the following code example illustrates a program that performs a simple SQL join on two tables, MOVIES and ACTORS. As can be seen in the resulting SAS Log, an informative message was automatically generated explaining that the SAS system chose to use an available index called Rating to optimize WHERE clause processing. This type of information is not only helpful in gaining a better understanding of what the SAS system did to improve processing, but provides the specific name of the index that was selected to achieve improved processing.

### SAS Code:

```
OPTIONS MSGLEVEL=I;
PROC SQL;
  SELECT MOVIES.TITLE, RATING, LENGTH, ACTOR_LEADING
  FROM MOVIES,
  ACTORS
  WHERE MOVIES.TITLE = ACTORS.TITLE AND RATING = 'PG';
QUIT;
```

### SAS Log Results

```
OPTIONS MSGLEVEL=I;
PROC SQL;
  SELECT MOVIES.TITLE, RATING, LENGTH, ACTOR_LEADING
  FROM MOVIES,
  ACTORS
  WHERE MOVIES.TITLE = ACTORS.TITLE AND RATING = 'PG';
INFO: Index Rating selected for WHERE clause optimization.
QUIT;
```

### Contact Information

If you would like more information or have any questions about this tip, please contact: Kirk Paul Lafler, Software Intelligence Corporation at [KirkLafler@cs.com](mailto:KirkLafler@cs.com). Kirk has been working with the SAS System since 1979 and is a SAS Certified Professional®. His company provides custom SAS programming, application design and development, consulting services, and hands-on SAS training to clients around the world. Kirk is the author of four books including PROC SQL: Beyond the Basics Using SAS by SAS Institute, and more than three hundred peer-reviewed articles and papers that have appeared in professional journals and SAS User Group proceedings. Kirk can be reached at [KirkLafler@cs.com](mailto:KirkLafler@cs.com) with questions.

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