%xuload - Dataset Loading and Format Management Utility

Overview

The `%xuload` macro loads datasets into the SAS work library while managing formats and informats. It provides flexible control over format handling, dataset sorting, and encoding, with three distinct modes for format processing: smart, keep, and remove.

Version Information

- **Version**: 1.0
- **Last Updated**: 13JUL2022
- **Author(s)**: Atorus Research

Dependencies

- SAS version: SAS 9.4 V9
- No macro dependencies
- Optional format catalog (.sas7bcat) for 'keep' mode

Parameters

Parameter	Required	Default	Description
inds	Yes	-	Space-separated list of input dataset names
sourcelib	Yes	-	Name of the input library
sortvars	No	-	Variables to sort by
encoding	No	-	Dataset encoding specification
mode	No	smart	Format processing mode (smart/keep/remove)
fmtlib	No	&sourcelib	Library containing format catalogs (required for keep mode)
debug	No	N	Whether to retain temporary datasets (Y/N)

Return Values/Output

Creates in WORK library:

- Loaded datasets with processed formats/informats
- Optional sorting applied if specified
- Log messages for format processing actions

Processing Details

1. Input Validation:

- Verifies required parameters
- Validates mode parameter values
- Checks dataset existence
- Validates format catalog availability for 'keep' mode

2. Format Processing Modes:

- **smart**: Removes unexpected formats/informats
- **keep**: Preserves formats using specified format catalog
- **remove**: Strips all formats/informats

3. Dataset Processing:

- Loads datasets with specified encoding
- Applies format processing according to mode
- Performs optional sorting
- Handles multiple datasets sequentially

Examples

Basic Usage

```
%xuload(dm, sdtm, sortvars=usubjid);
```

Multiple Datasets with Format Preservation

```
%xuload(dm ae, crf, encoding=asciiany, mode=keep, fmtlib=crf);
```

Remove All Formats

```
%xuload(
    inds=adsl adae,
    sourcelib=adam,
    mode=remove,
    sortvars=usubjid
);
```

Common Issues and Solutions

Issue	Solution
Missing format catalog	Verify .sas7bcat exists in fmtlib
Dataset not found	Check sourcelib and dataset names

Issue	Solution
Invalid formats	Use 'smart' mode to clean formats

Notes and Limitations

- 'smart' mode removes formats not in SASHELP.VFORMAT
- 'keep' mode requires valid format catalog
- 'remove' mode strips ALL formats/informats
- Processes multiple datasets sequentially
- Temporary format search path modification in 'keep' mode
- Debug mode retains intermediate processing datasets

See Also

- %xufmt: For format creation
- %xuloadcsv: CSV file loading utility
- %xusave: Dataset saving utility

Change Log

Version	Date	Author	Changes
1.0	13JUL2022	Atorus Research	Initial version