The VanSUG Newsletter

In this issue

Who We Are

The Vancouver SAS Users Group (VanSUG) is an informal group of SAS users in the Vancouver area who meet and share their knowledge. There are no fees – we simply meet every spring and fall to have presentations, networking, and fun! Check us out at `vansug.ca`.

Newsletter Inputs

This newsletter is for and by the local Vancouver SAS community. If you'd like to contribute to a future newsletter, please email us at `vansug@gmail.com`!

Executive Team

President:
Colleen McGahan
    (BC Cancer Agency)

Vice President:
Nate Derby (Stakana Analytics)

Other Members:
Scott Albrechtsen (BC Hydro)
Mei Chong (BC Centre
    for Disease Control)
Fareeza Khurshed
    (BC Cancer Agency)
Libo Lu (KBM Group)
Julia Zhu
    (Cardiac Services BC)

Executive Update

Colleen McGahan: `vansug@gmail.com`

Firstly, I'd like to thank Cathy Rupp, Sharon Relova and Brian Sun for their contribution to VanSUG. They have each recently stepped down from the VanSUG Executive Team: Cathy recently had her second child, Sharon is soon expecting her first, and Brian moved to Toronto for a new job. Congratulations to all of them! If you are interested in joining the Executive Team, please don't hesitate to contact one of us.

We've received some positive feedback about our new Business Analytics session in the afternoon of the VanSUG meeting, with over 80% of attendees ranking it 4 or above out of 5 for its overall content. The areas our users are most interested in hearing about are predictive analytics, statistics, data visualization, text analytics, and forecasting. We will endeavour to provide you with presentations on these topics but we rely on you, our users, to help us out and get involved.

The thought of presenting might be a daunting prospect, but you might be surprised at how rewarding it can be and how it can enhance your career. Don't let the lack of confidence get the better of you! Presentations come from firsthand experience on a project you've been involved in, which is often new to most of the rest of us. Many of us will benefit from hearing what you have to say, and VanSUG relies on volunteers like you to present. Why not take that plunge and do a presentation? There's nothing to lose and lots to gain! Contact us at `vansug@gmail.com`.

TIPS & TRICKS: Useful String Functions

Howard Cherniack: `cherns@compuserve.com`

SAS has a large number of useful string functions! Here are some of them:

- `catx( sep, a, b, c ... )`: removes leading and trailing blanks from the character expressions `a`, `b`, `c`, ..., then concatenates them, separating them with the character expression `sep`.

- `compl( str )`: compresses multiple blanks in the character expression `str` to single blanks.

- `scan( str, n, delims )`: returns the nth word (as defined by delimiters in the character expression `delims`) of the character expression `str`.

- `substr( str, posn, len )` on the right side of an assignment: returns the substring, starting at position `posn` for `len` characters, of the character expression `str`.

- `substr( str, posn, len )` on the *left* side of an assignment: takes the character value of the right side of the expression and inserts it into the string `str`, at position `posn` for `len` characters.

- `strip( str )`: returns the contents of the character expression `str` with the leading and trailing blanks removed.

There are many more! For more info, check out `goo.gl/U9XIa`.

New Executive Team Members

Libo Lu is an analyst with KBM Group, focusing on business analytics in marketing industry. His daily works include large-scale data manipulation, advanced predictive modeling and reporting, and new methodology development. Libo holds a master's degree in Statistics from the University of British Columbia. He is also a fan of Anthony Minghella, Ang Lee and Christopher Nolan.

Julia Zhu is a data analyst at Cardiac Services BC, Provincial Health Services Authority. She holds a bachelor's degree in Health Information Science and Computer Science from the University of Victoria (2008) and a master's degree in Electrical Engineering from Tsinghua University (2002). She has 4 years of SAS experience. In her daily work, she uses SAS to perform data quality monitoring, data extraction and manipulation, report generation, and various research and analysis work.

TIPS & TRICKS: Tracking Data Sources

Fareeza Khurshed: fkhurshed@gmail.com

If you're appending multiple data sets together in a `SET` statement and would like to know which data set an observation comes from, you can use the `INDSNAME` option to identify the data source. This comes in particularly useful when using shortcuts to append multiple datasets at once, such as `SET class:` or `SET class1-class5`. This option is available in SAS 9.2+.

```
DATA example;
  SET sashelp.shoes sashelp.class INDSNAME=innames;
  source_dataset=innames;
RUN;

PROC PRINT DATA=example;
RUN;
```

TIPS & TRICKS: Transposing without PROC TRANSPOSE

Helen Wong: wong_ju@hotmail.com

You can transpose a data set without `PROC TRANSPOSE`! Here is an example:

```
DATA Trend;
  INPUT IDs GPID1 GPID2 Y1 Y2 Y3 Y4;
  DATALINES;
1 1 0 26 20 18 11
2 1 0 34 35 29 22
3 1 0 41 37 25 18
4 1 0 29 28 22 15
;
RUN;

DATA TrendLong;
  SET Trend;
  DV = Y1; trial = 1; OUTPUT;
  DV = Y2; trial = 2; OUTPUT;
  DV = Y3; trial = 3; OUTPUT;
  DV = Y4; trial = 4; OUTPUT;
  KEEP IDs GPID1 GPID2 DV TRIAL;
RUN;
```

TIPS & TRICKS: The WHICHN Function

Fareeza Khurshed:
fkhurshed@gmail.com

```
WHICHN( x, a, b, c, ...)
```

is a simpler way to code the following line:

```
IF x=a OR x=b OR x=c OR ...
```

where `x`, `a`, `b`, and `c` are all numeric variables. The function returns 0 if the first argument is not found and otherwise returns the index of the first variable the match was found in (1 for `a`, 2 for `b`, etc.). You can use array shortcuts in the variable list.

For character variables, `WHICHC` is used instead of `WHICHN`.

Our next meeting will be on **November 28, 2012**. Check out the VanSUG website at vansug.ca later for more information!

Archives presentations and newsletters, as well as a link to scheduled SAS training courses held in Vancouver, can all be found on the VanSUG website at vansug.ca!

The **2012 Western Users of SAS Software (WUSS) Conference** will be held in Long Beach, CA on September 5-7. Come on down! Information can be found at wuss.org.

The first **Western Canadian SAS Users Summit** (WestSUS) will be in Minneapolis, MN on September 16-18, 2012. It's part of the Midwest SAS Users Group (MWSUG) conference. For more information, see westsus.ca.

Archives presentations and newsletters, as well as a link to scheduled SAS training courses held in Vancouver, can all be found on the VanSUG website at vansug.ca!