

**SESUG 2022 Paper 158**  
**Processing Complex Data Types HOW**  
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## **ABSTRACT**

SAS provides versatile tools for ingesting complex data types like XML, JSON, and CSV. Python also provides tools to read these data types. This session will review methods of doing so under SAS and Python via the Jupyter notebook. The basic structures of these files will be reviewed. With available time, additional techniques of reviewing the raw data and understanding that structure will be covered.

## **INTRODUCTION**

The conference session is a Hands-on-Workshop. As such, there is a lot of flexibility in content. As suggested by the abstract, processing of the complex data types of XML, JSON, and CSV through the use of SAS and Python will be covered. Exactly what that data will look like (there are example data in the session but others could be viewed) may vary based on audience preference.

With time, dealing with common errors in those data files will be discussed.

One of my favorite tools is the UNIX/Linux command environment because there are an extremely wide variety of components to review data. If we have a bit of extra time we can also talk about those.

As such, this is only a placeholder paper. Take a look at the Presentation itself for details.

## **CONCLUSION**

You can process these datatypes in multiple tools. Which one is the “best” really depends on which you are most familiar or is the preference of your organization.

## **ACKNOWLEDGMENTS**

I would like to thank the organizers of this conference. This is neither my first SESUG nor first time speaking at SESUG – I’ve always enjoyed working with the organizers.

I also want to thank my employer for their support in attending (and speaking at) this conference even though I’m not allowed to mention their name. Last, and certainly not least, is my spouse Mary who doesn’t complain when I spend time working on conference materials.

## **CONTACT INFORMATION**

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