The Nexus application is a software tool designed to generate SEED metadata in StationXML format for typical PASSCAL temporary networks with minimal operator knowledge and time. This process is streamlined by: Leveraging IRIS’s Nominal Response Library (NRL); removing user inputs that are atypical or have standard defaults; abstracting the details of SEED format; using MiniSEED inspection to populate meta data fields; and by reducing input fields to selections appropriate to typical networks.

Nexus is developed in the Python programming language, using and contributing to the community developed Obspy Python toolbox. This allows the community to contribute back to, and review the software, as well as make use of its libraries or specific routines that may be useful in other software tools.