

One Health EJP - RaDAR model inventory: a user-friendly tool for annotating and exchanging models

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Abstract

The lack of a harmonized model exchange formats among modelling tools impedes communication between researchers, since the exchange and usage of existing models in various software environments can be very difficult. The RaDAR model inventory aims to provide a platform to exchange models among professionals utilizing the Food Safety Knowledge Exchange (FSKX) Format (de Alba Aparicio et al. 2018) as a harmonized model exchange format. FSKX defines a framework that encodes all relevant data, metadata, and model scripts in an exchangeable file format. However, the creation of such a file can be a time-consuming and difficult process. To increase the usage of the FSK standard, we developed the RaDAR model inventory web application that targets the process of creating an FSKX file for the end user. Our inventory aims to be a user-friendly tool that allows users to create, read, edit, write, execute and compile FSKX files within the web browser. The possibility of sharing models with the public or a specific group of people facilitates collaboration and the exchange of information. Since the RaDAR model inventory is based on the open-source technology of Project Jupyter (Granger and Perez 2021), it can support nearly all relevant programming languages executed within a reproducible cloud-computing environment. The intuitive nature of the RaDAR model along with its wide range of features reduce the threshold for contribution to a harmonized model exchange format and eases collaboration. The RaDAR model inventory can be accessed at <http://ejp-radar.eu>.

Keywords

Information exchange, Modelling, Model exchange, RaDAR

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Conflicts of interest

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