

Three Gateway Technologies and a National Platform

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Abstract

The Australian Urban Research Infrastructure Network (AURIN) project (www.aurin.org.au) has established a data rich environment through which a multitude of data sets and tools are made available to the Australian urban research community. These data sets predominantly relate to the major urban settings of Australia, i.e. the major cities. The data is, wherever possible, made programmatically available through a federated, service-oriented architecture where *definitive* organisations of key data sets allow access to and use of their data to researchers across Australia through targeted services enabling remote access. There are currently over 1,800 data sets made available from over 70 major organisations in the AURIN platform from many major Government agencies (including federal, State and local government departments), industry and from academia. Over 7,000 users from academia, government and industry utilize the system. AURIN provides *single sign-on* federated access to the data resources through a targeted portal accessible through the Australian Access Federation (AAF – www.aaf.edu.au). More recently the AURIN platform has developed an open API through which data can be programmatically accessed by external researchers. This talk will cover the new developments in this area including the access to AURIN data and tools via this open API through mobile devices (both iPhone and Android) as well as through the Jupyter notebook technology (www.jupyter.org). The advantages and disadvantages of the solutions will be presented with specific focus on the non-technical challenges associated with making data and tools accessible outside of the AAF setting. Demonstrations of these solutions will be made.