# Landgate API Testing

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## Abstract

*A short summary of your work.*

## Introduction

Identify objectives, what does the solution look like, how will I achieve my objectives, give structure of report (where to find things in the report itself).

*The Introduction section should be written in a way that is accessible to researchers without specialist knowledge in that area and must clearly state - and, if helpful, illustrate - the background to the research and its aims. The section should end with a brief statement of what is being reported in the article.*

## Landgate

Landgate is the trading name of the Western Australian Land Information Authority, the statutory authority given charge of maintaining the state's land and property information system {Anonymous:2004tv}. The organisation is the inheritor of the mandate of various incarnations of the Department of Lands and Surveys, dating back to the original Survey Office in the 19th Century.

Their role incorporates managing property ownership and transfer records, as well as property valuations to government agencies {Anonymous:x1iQOCOB}. Vital to society in the connected age, Landgate is Western Australia's leading spatial data agency. Landgate has successfully commercialised spatial data creation and access. Their cumulative efforts considerably lessened their dependence on funding from the state government {Anonymous:2015va}. The success of this strategy has lead to a projected 5% increase in the number of datasets served through the 2015/16 financial year.

The Western Australian Land Information System (WALIS) is a partnership between government agencies, the private sector and the community. Their aim is to improve access to location information for the betterment of the Western Australian community {LocationInformationStrategyProgramCoordinationTeam:2012te}. The Shared Location Information Platform (SLIP) is WALIS's spatial data portal, the Western Australian government's Spatial Data Infrastructure (SDI), managed by Landgate. The portal presents datasets owned and maintained by authoritative agencies, standardises data formats and simplifies access.

SLIP Future is WALIS's programme to revamp the original SLIP Enabler portal and infrastructure {Anonymous:2014ww}. The custom built and open-source based infrastructure was deemed incapable of handling projected usage and implementing new features. WALIS built a new platform around Google's Software as a Service (SaaS) Google Maps Engine (GME). The new environment offered significant advantages in reliability, scalability and feature set {Anonymous:2014ww}.

In January 2015, Google announced the deprecation of Google Maps Engine {SLIPFuture:2015uc}. Further, they planned to shutter the service entirely by the end of January 2016 {Anonymous:2015tg}. Landgate and WALIS were left in search of a new provider for the SLIP Future programme. ESRI aggressively sought the business of GME refugee organisations {Anonymous:7YAzB1Ym} offering free software replacements and membership to business partnership programs. In July 2015, Landgate selected Esri's ArcGIS Server and Portal as the replacement for GME {Anonymous:2015uc}. Web services offering datasets in Esri's ArcGIS REST APIs will replace GME's API through a transition period through the end of 2015 and beginning of 2016.

## Web Services

The development of powerful and flexible web services was the foundation that allowed the mobile web to blossom. Web services enable interaction between computer systems over a network. One system may call on another to provide data or a service without requiring a human user to mediate the interaction {Anonymous:bRhwymPh}. Mobile devices have limited processing power and storage available, so off-device storage and processing empowers on-device applications.