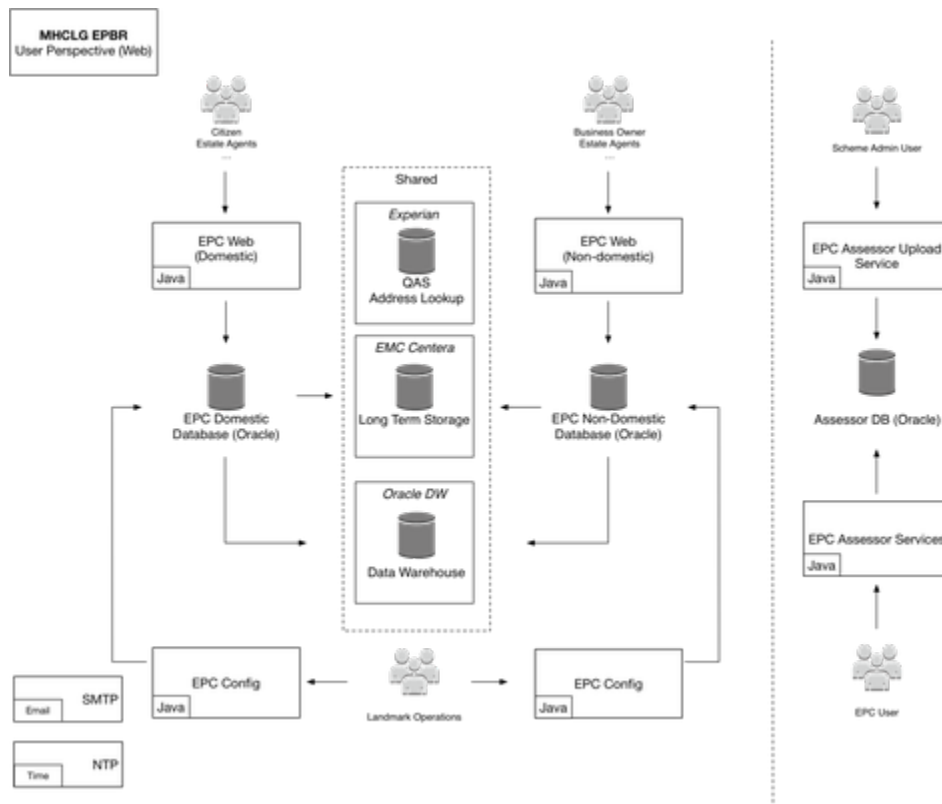# 01 - As Is

Purpose

The purpose of this document is to briefly summarise the existing EPBR architecture.

The intention is not to unnecessarily duplicate existing documentation provided by Landmark and Viewdeck. Existing documents will be attached and referenced where relevant.
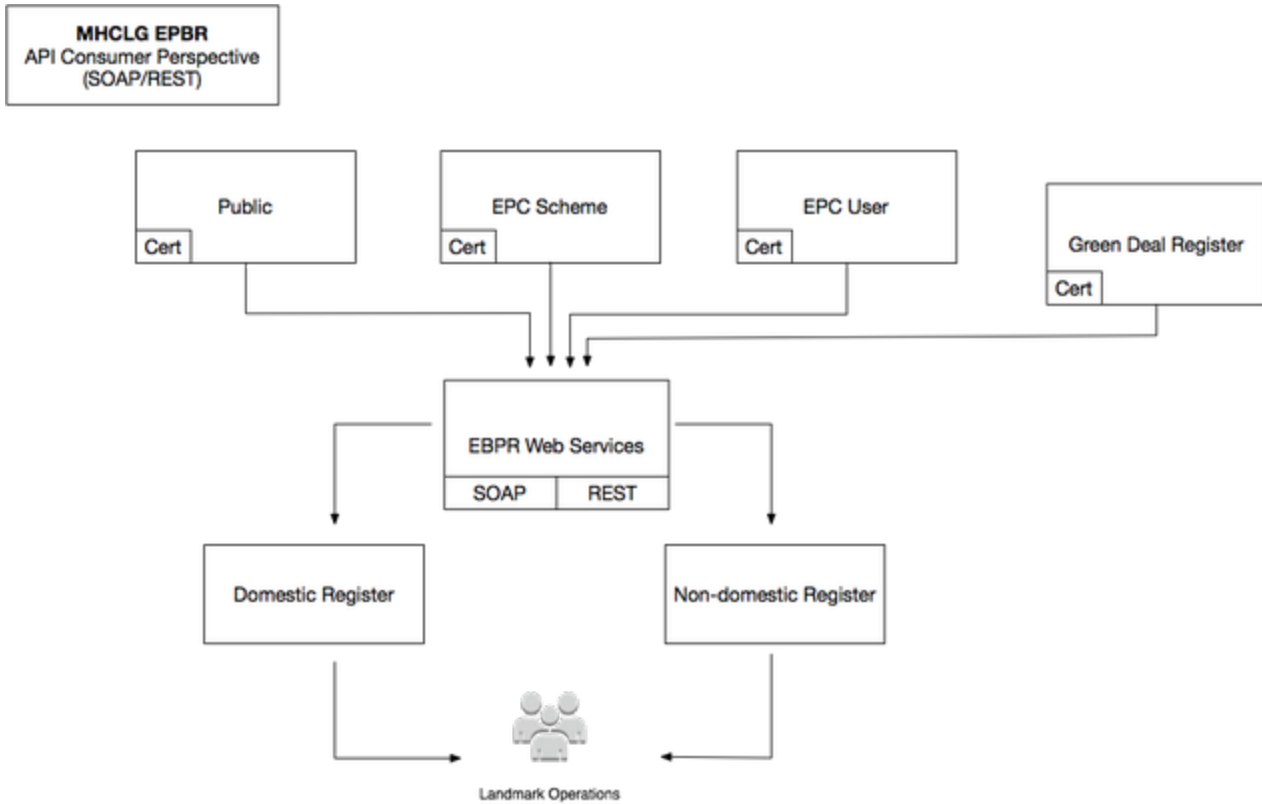
Sketches

User Perspective

ebpr-as-is...ve.graffle

API Consumer Perspective

ebpr-as-is...ve.graffle

Web Applications

Overview

The existing EPBR web applications are segmented by region (England & Wales and Northern Ireland) and by property type (Domestic and Non-domestic):

- UK & Wales Domestic: https://www.epcregister.com/
- UK & Wales Non-domestic: https://www.ndepcregister.com/
- Northern Ireland Domestic: https://www.epbniregister.com/
- Northern Ireland Non-domestic: https://www.epbniregisternd.com/

These are Java web applications, physically hosted at Landmark sites in Exeter and Newport.

The front end JavaScript code is minimal and there is no dependency on any framework.

Ignoring the Northern Ireland and England & Wales split, both the Domestic and Non-domestic web applications offer unauthenticated and authenticated access.

Unauthenticated users include:

- Property buyers and sellers
- Estate agents
- Tenants
- Landlords

- Property owners
- Business owners

Estate agency users are not authenticated but potentially frequent users of the web applications. Some estate agencies have had their IP addresses whitelisted by Landmark to prevent access being blocked.

Authenticated users include Energy Assessors. The web applications are secured using self-signed certificates issued and managed by Landmark. There is no external Certificate Authority. There is no login: users configure their browsers to trust the self-signed certificate.

Source Code

TODO: to be provided by Landmark.

Web Services

SOAP vs REST

The EPBR exposes a number of web services. There is a mix of SOAP and REST services. As services have been enhanced (and in consultation with service consumers), services have been migrated from SOAP to REST.

Web Service Security

The SOAP and REST services are secured using self-signed certificates issued and managed by Landmark. There is no external Certificate Authority.

Web Service Clients

Web service clients include:

- Accreditation Schemes
- Green Deal Register

Accreditation Schemes create and manage their own applications. These applications have their own services, databases etc. and may include additional information than is currently held in the EPBR, such as floor plans and photographs. For example: https://www.elmhurstenergy.co.uk/software/rdsap-mobile-software.

File Upload

Accreditation Schemes use a HTTPS file upload to either:

- upload the details of a **SINGLE** Energy Assessor
- upload the details of **ALL** Energy Assessors

Internal Configuration Applications

Configuration applications are used internally by Landmark users for system management and operational needs. These configuration applications are implemented in Oracle APEX.

Application Database

RDBMS

The application database is Oracle.

Model

TODO: to be provided by Landmark.

Stored Procedures and Triggers

TODO: to be provided by Landmark. We do know from the Viewdeck report that stored procedure use is "significant".

Search / Full Text Search

Searches (with the exception of address matching searches) are executed against the Oracle database directly. There is no separate search component (such as Elastic).

Encryption at Rest

Data is **NOT** encrypted at rest.

Data Warehouse

This is another source of further discovery work during Alpha:

datawarehouse-erd.zip

Long Term Storage (Centera)

Long Term Storage items include:

- Older PDF files (that are fully hydrated)
- XML report documents (e.g. for EPC reports)
- Audit logs

Newer PDF files are generated on demand (from a PDF template + data).

Domestic XML reports are compressed; Non-domestic XML reports are **NOT** compressed.

Data is **NOT** encrypted at rest.

Address Matching

An assessor may request a new address to be added. Before a new address is created, Landmark back office staff go through a somewhat manual process (with supporting tools and web sites) to determine whether the address already exists.

Landmark Address Matching Service Proposal

Landmark EPC Address Matching Training Manual

Runbook

Scheduled / Periodic Tasks

- Quarterly: apply PAF updates to **EACH** Register / environment.
- Monthly: apply Met Office 'Degree Days' data to each externally-facing Non-domestic Register.

Manual Tasks

None.