Presented By:
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# Introduction to Landfolio Framework

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# Terminology

- **Asset**
  - A license, permit or application
- **Action**
  - An obligation or task with a due date
- **Legal Entity**
  - A Company or Person record
- **Party**
  - A relationship between an Asset and a Legal Entity

# Background

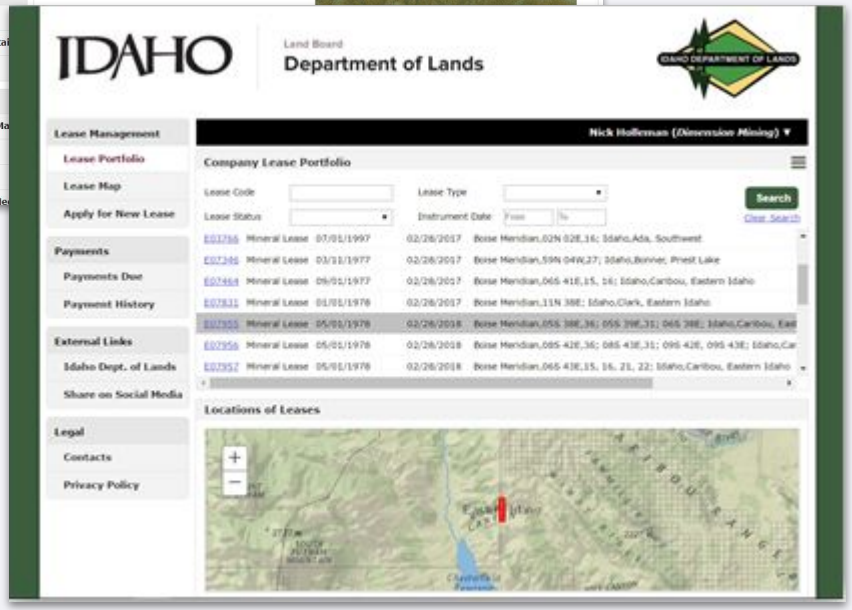
## Landfolio e-Government Portal

- Introduced in 2013 as a public-facing extension to Landfolio Back Office
- Provides public / license-holders / investors with visibility and transactional capability
- Configurable off-the-shelf system with higher level of UI customisation than Back Office

- Implemented for ~10 clients
  - Kenya
  - Tanzania
  - Uganda
  - Ethiopia
  - Zambia
  - South Africa (Petroleum Agency)
  - KP Province, Pakistan
  - Idaho State, United States
  - Papua New Guinea
  - The True Life Company

# Background

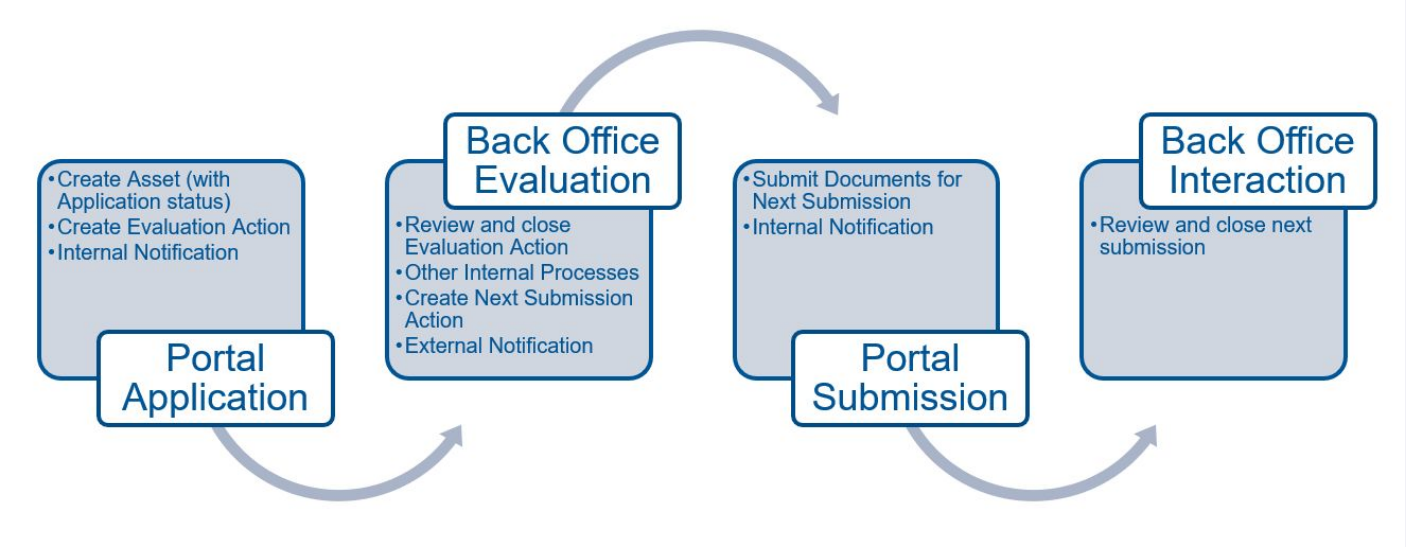
- Modular design
- Pages can display
  - static content
  - maps
  - dynamic content
  - transactional capabilities
- Each page has a page type examples
  - asset list
  - map
  - create action
- Configurable functionality per page type



# Background

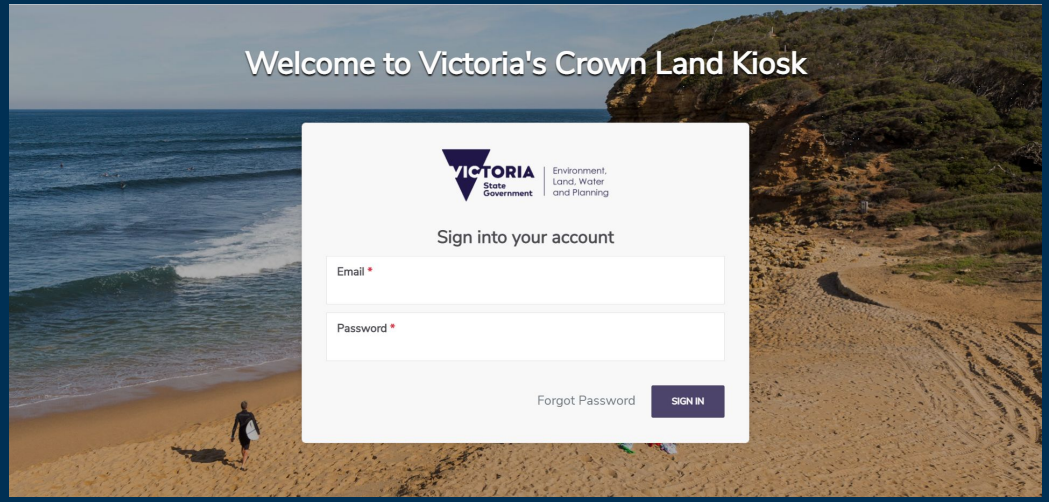
- Menus - configurable to allow navigation between pages
- Memberships / roles control access
- Representation of companies and people
- Payment gateway integrations
- Branding to client needs - banner, logos, fonts, colours

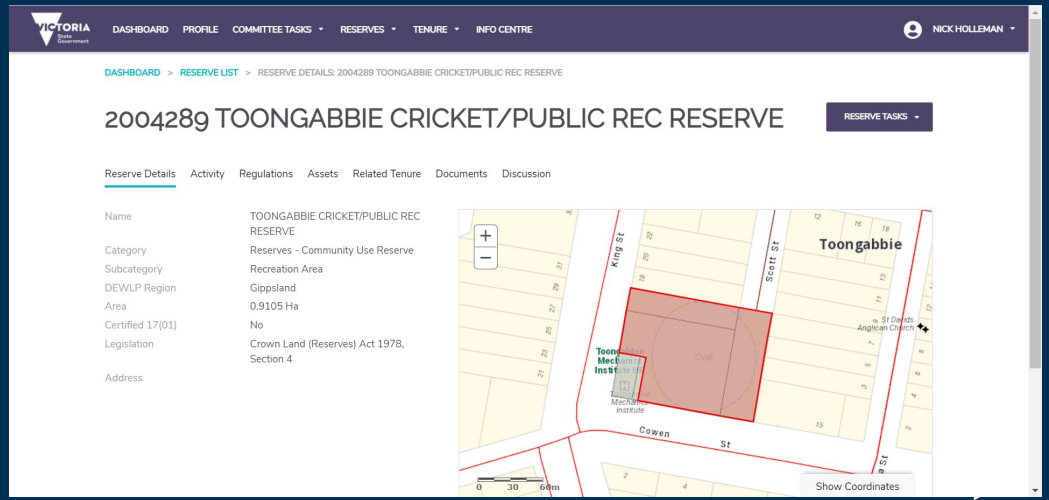
# Expected Interactions



# Introducing… Landfolio Framework

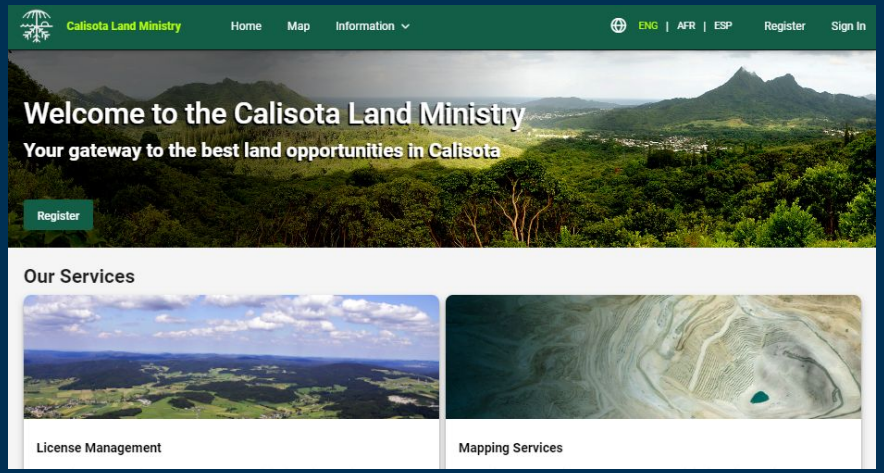
- Beginning in 2018, our e-Government Portal solution has been re-architected using ***Landfolio Framework***
  - Responsive
  - Fresh look and feel
  - More granular level of configuration
  - Fully multilingual
  - Right to left support



# Multilingual support

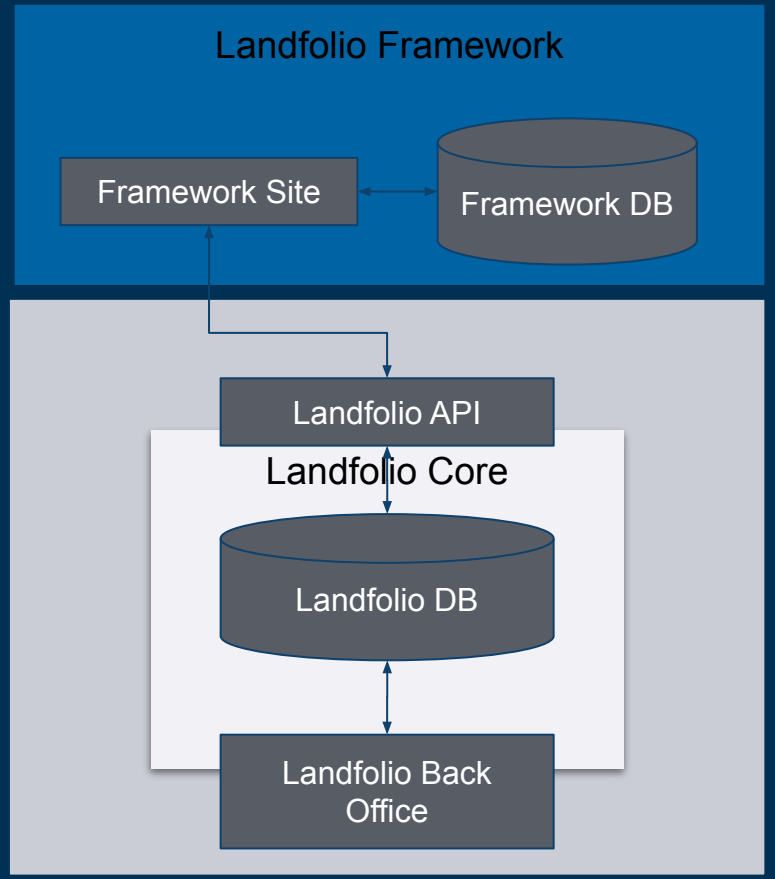
- Up to ten languages
- Every text element on the site can be configured in each language
- Left-to-right or right-to-left direction is associated with a given language



# High level system architecture

- Single Page Application built using Angular
- New UI on existing business logic
- Dependent on Landfolio core data model and business processes

- Framework is not a product, but a **tool kit** that allows us to build out **Use Case-centric solutions**



# System Components

- Framework provides **no ‘out the box’ User Interface**
- Administrators/configurors must first design and then build a site by
  - adding pages
  - defining their contents
  - organising inter-page navigation
- Configuration is stored in JSON that is dynamically loaded to render the site’s contents and retrieve relevant data

- Site contents and functionality is defined with *pages*, *sections*, *containers*, & *widgets*

# Pages

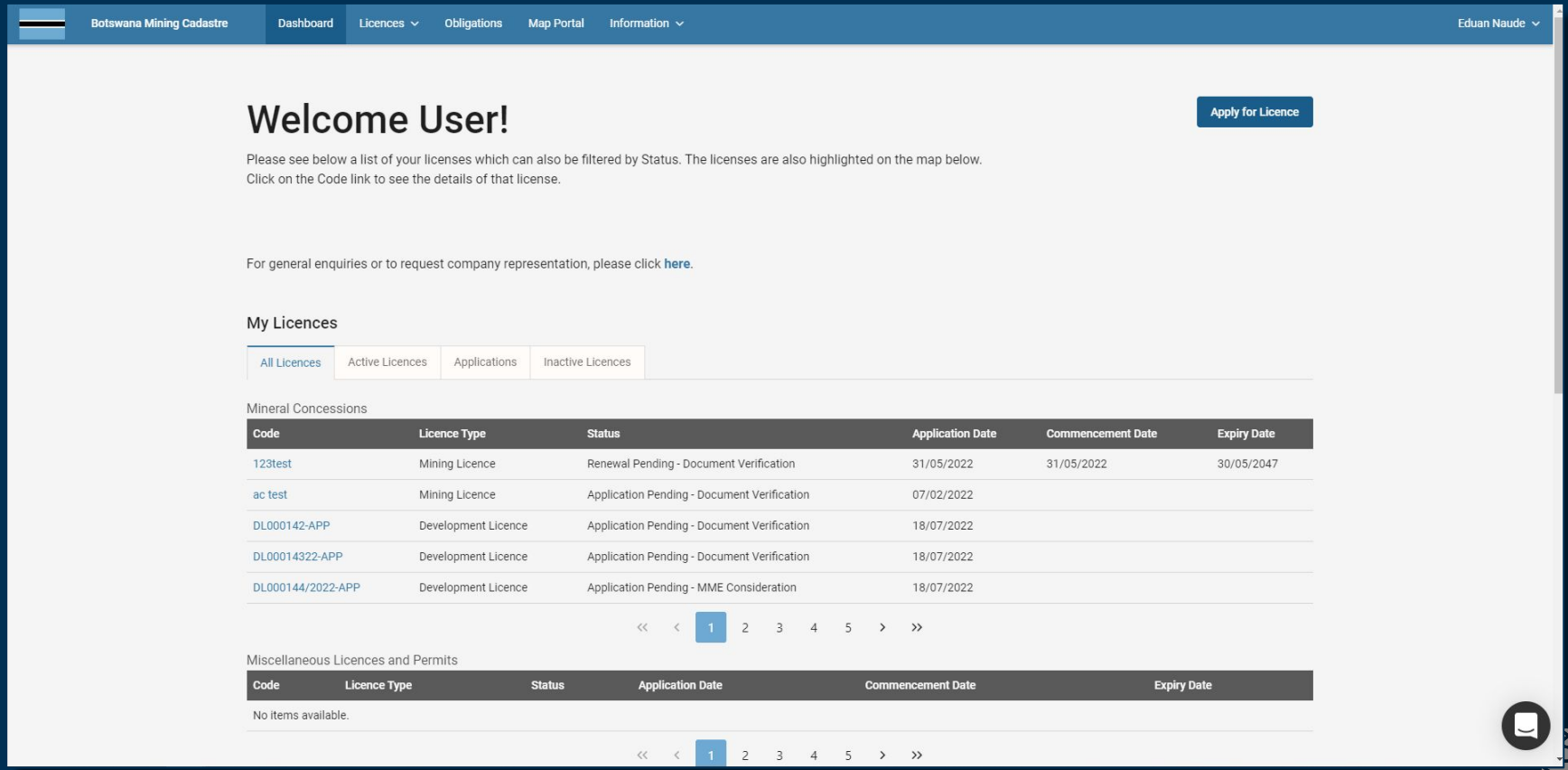
Each page belongs to a particular type, which defines its *context*

| Page Type | Description |
|---|---|
| **Basic** | read-only contextless data (instructions, asset lists, etc) |
| **User Details** | user can view and edit their details, request representations, etc |
| **Company Details** | view and edit details of a company that the user represents |
| **Create Asset** | capture details and submit an application for a new asset |
| **Asset Details** | view and edit details of an existing license |
| **Create Action** | capture details and create a new ad-hoc action |
| **Action Details** | view and edit details of an existing action; submit information to meet an obligation |

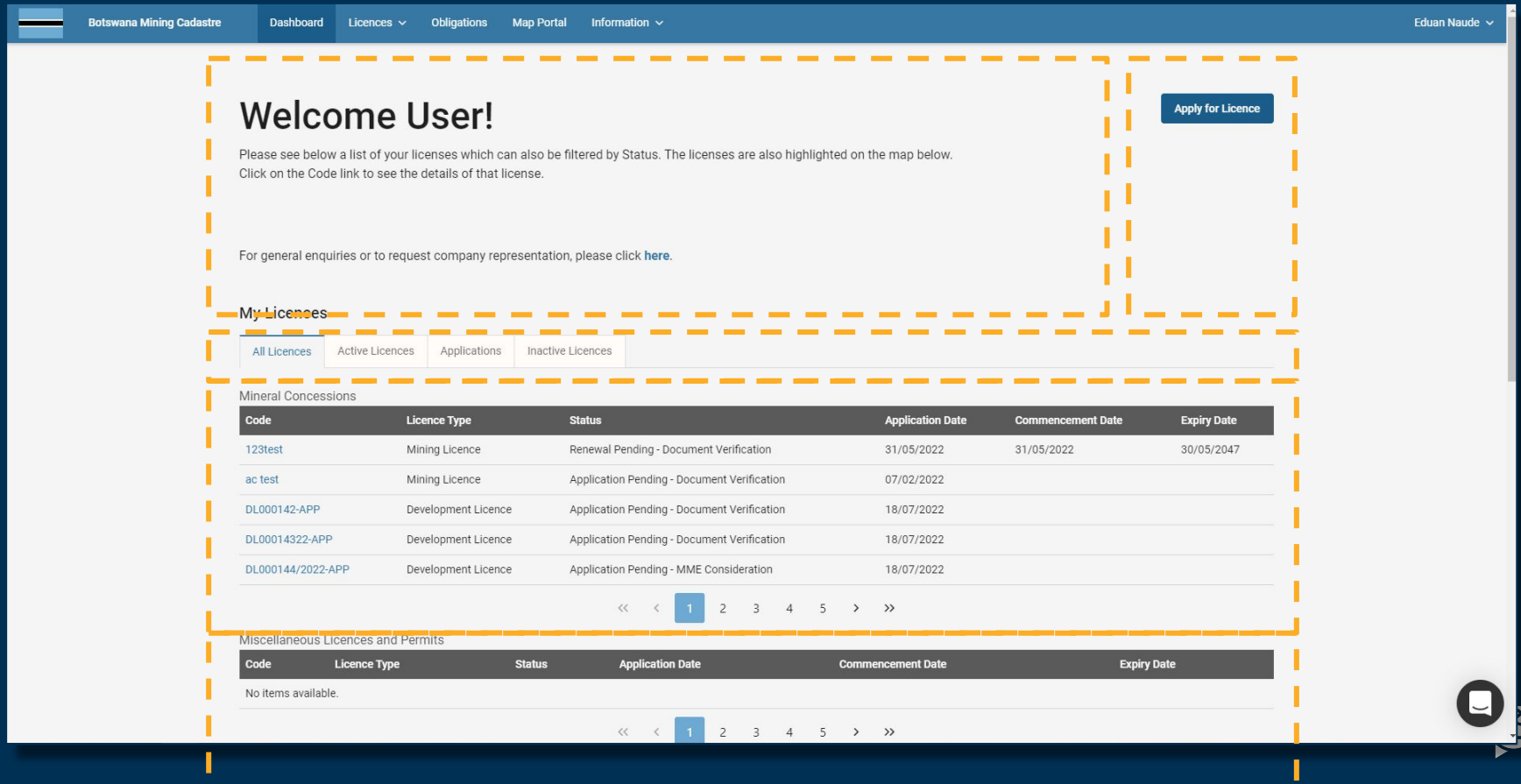
# Page Content

- Each page is configured with
  - Sections & Containers  (layout - position and arrangement)
  - Widgets (UI elements - content, data, functionality)

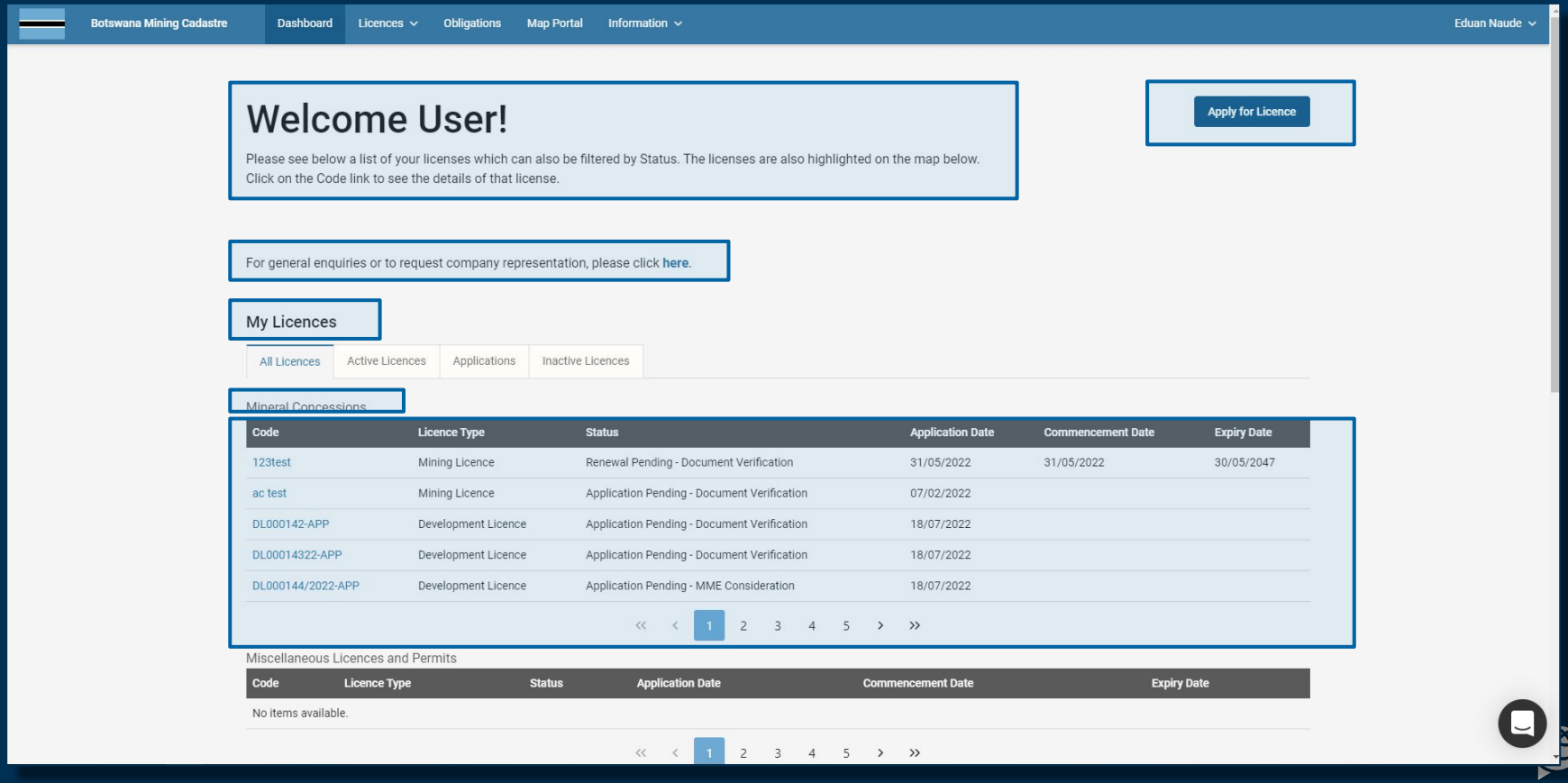
# Pages


Botswana Mining Cadastre
Dashboard
Licences
Obligations
Map Portal
Information
Eduan Naude
Welcome User!
Apply for Licence
Please see below a list of your licenses which can also be filtered by Status. The licenses are also highlighted on the map below.
Click on the Code link to see the details of that license.
For general enquiries or to request company representation, please click here.
My Licences
All Licences
Active Licences
Applications
Inactive Licences
Mineral Concessions
Code
Licence Type
Status
Application Date
Commencement Date
Expiry Date
123test
Mining Licence
Renewal Pending - Document Verification
31/05/2022
31/05/2022
30/05/2047
ac test
Mining Licence
Application Pending - Document Verification
07/02/2022
DL000142-APP
Development Licence
Application Pending - Document Verification
18/07/2022
DL00014322-APP
Development Licence
Application Pending - Document Verification
18/07/2022
DL000144/2022-APP
Development Licence
Application Pending - MME Consideration
18/07/2022
1
2
3
4
5
Miscellaneous Licences and Permits
Code
Licence Type
Status
Application Date
Commencement Date
Expiry Date
No items available.

# Sections & Containers



# Widgets


Botswana Mining Cadastre
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Licences
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Map Portal
Information
Eduan Naude
Welcome User!
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Licence Type
Status
Application Date
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123test
Mining Licence
Renewal Pending - Document Verification
31/05/2022
31/05/2022
30/05/2047
ac test
Mining Licence
Application Pending - Document Verification
07/02/2022
DL000142-APP
Development Licence
Application Pending - Document Verification
18/07/2022
DL00014322-APP
Development Licence
Application Pending - Document Verification
18/07/2022
DL000144/2022-APP
Development Licence
Application Pending - MME Consideration
18/07/2022
1
2
3
4
5
Miscellaneous Licences and Permits
Code
Licence Type
Status
Application Date
Commencement Date
Expiry Date
No items available.

# Widget Types

| Widget Type | Description |
| --- | --- |
| **Content Block** | Display static HTML content |
| **Asset List** | Display a list of assets |
| **Asset Details** | View / edit properties of an asset |
| **Map** | View / edit shapes in a map |
| **Commodities** | View / edit commodities on an asset |
| **Document List** | View / edit list of documents on an asset |
| **Structured Data** | View / edit structured data on an asset |

# Widgets

Configure widgets by:

- Select source data set
- Choose which properties to display
- Choose the order/sequence
- Choose the labels (in multiple languages)
- etc.

# Behaviour

Some widgets can respond to UI interactions

- Task Widget => Button Click
- List Widget => Hyperlink Click

Add behaviour to your Widgets

e.g.

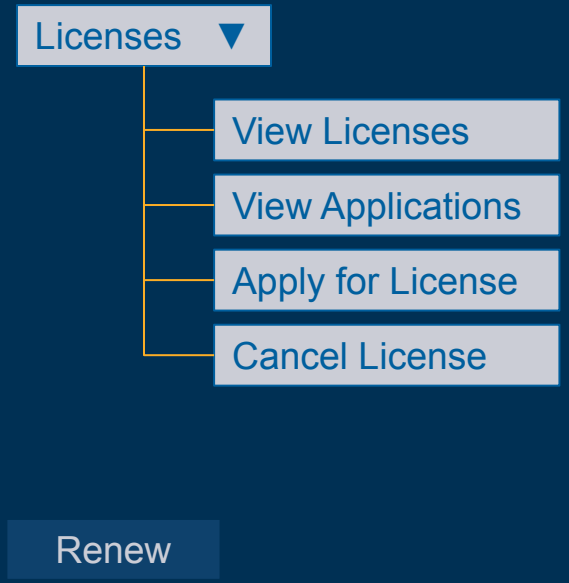
- Submit Draft
- Navigate to ‘Home’ page
- Generate Report

# Navigation

2 Types of Navigation:

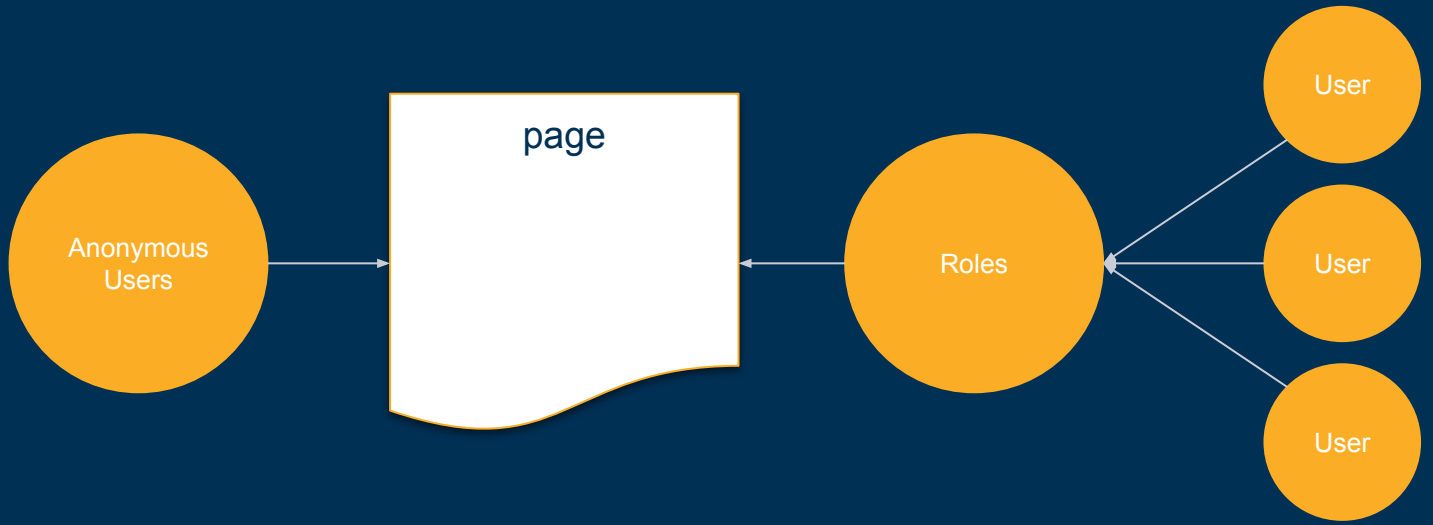
- **Main Menu**
  - Cascading (parent-child)
  - Links to pages
  - Not visible if user doesn't have access to destination page

- **Tasks** (buttons and links on pages)
  - Trigger **behaviours** (including navigation)
  - Provide **context** (information supplied to destination page)



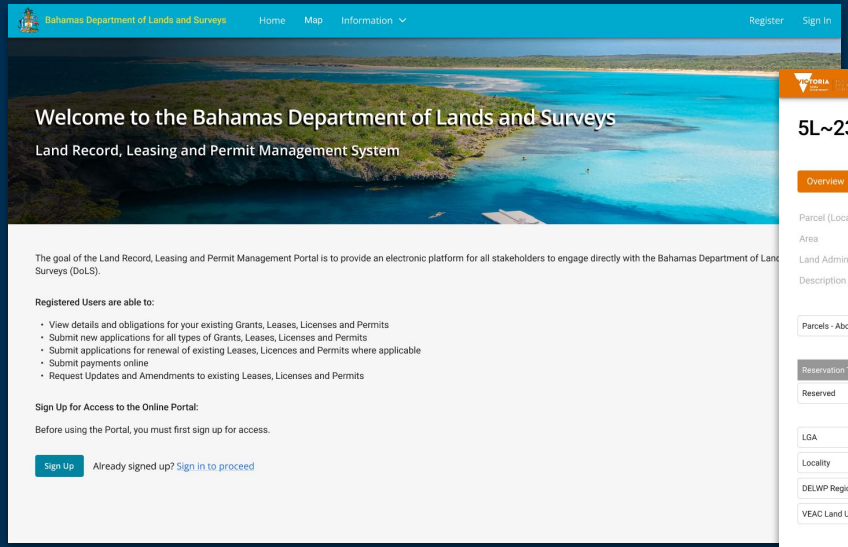
# Access Control

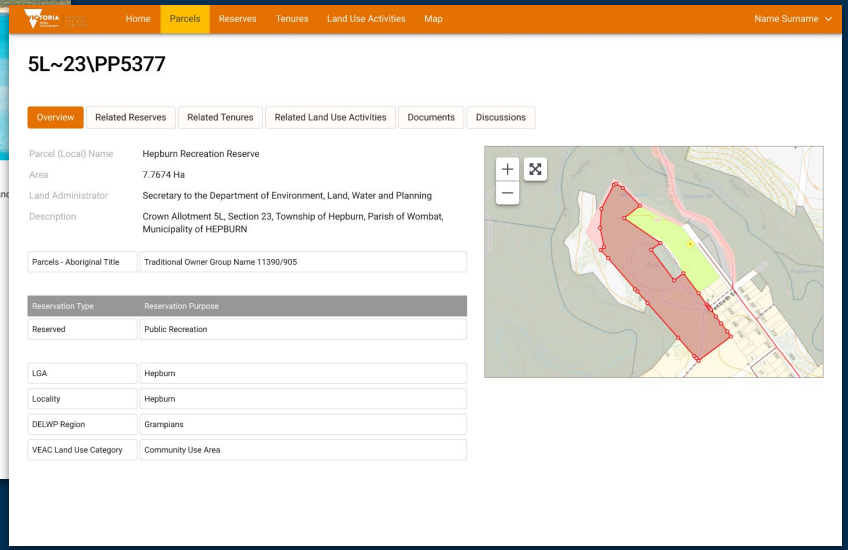
- Each page has access control
- Access can be granted to Anonymous Users and/or Signed In Users (via configurable roles)
- User authentication will soon support SAML2 and OpenID Connect
- Representation of other legal entities is managed with a request/approval workflow

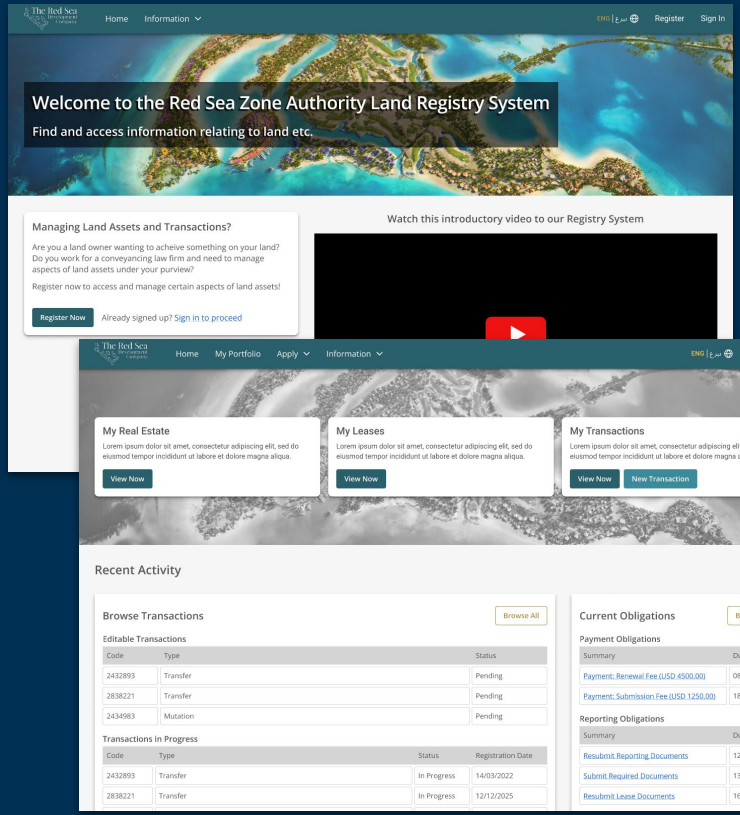


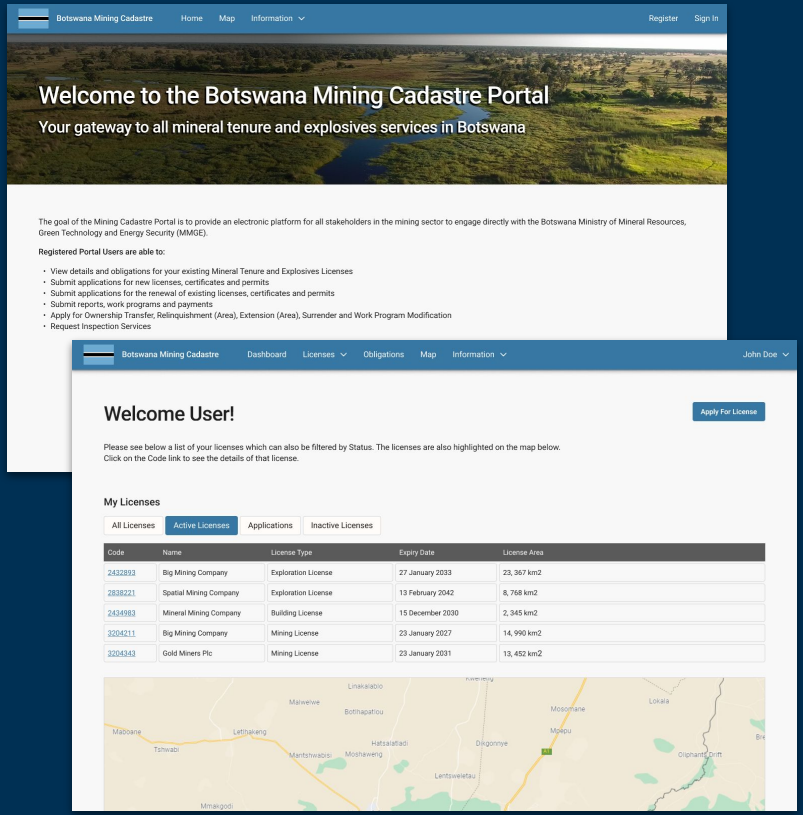
# Styling

- Banners, logos, fonts and colours (Primary & Secondary) configurable via CSS




Home
Information
ENG | عربي
Register
Sign In
Welcome to the Red Sea Zone Authority Land Registry System
Find and access information relating to land etc.
Managing Land Assets and Transactions?
Are you a land owner wanting to acheive something on your land? Do you work for a conveyancing law firm and need to manage aspects of land assets under your purview?
Register now to access and manage certain aspects of land assets!
Register Now
Already signed up? Sign in to proceed
Watch this introductory video to our Registry System
Home
My Portfolio
Apply
Information
John Doe
My Real Estate
Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.
View Now
My Leases
Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.
View Now
My Transactions
Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.
View Now
New Transaction
Recent Activity
Browse Transactions
Browse All
Editable Transactions
Code
Type
Status
2432893
Transfer
Pending
2838221
Transfer
Pending
2434983
Mutation
Pending
Transactions in Progress
Code
Type
Status
Registration Date
2432893
Transfer
In Progress
14/03/2022
2838221
Transfer
In Progress
12/12/2025
Current Obligations
Browse All
Payment Obligations
Summary
Due Date
Payment: Renewal Fee (USD 4500.00)
08/03/2022
Payment: Submission Fee (USD 1250.00)
18/03/2022
Reporting Obligations
Summary
Due Date
Resubmit Reporting Documents
12/03/2022
Submit Required Documents
13/03/2022
Resubmit Lease Documents
16/03/2022


Botswana Mining Cadastre
Home
Map
Information
Register
Sign In
Welcome to the Botswana Mining Cadastre Portal
Your gateway to all mineral tenure and explosives services in Botswana
The goal of the Mining Cadastre Portal is to provide an electronic platform for all stakeholders in the mining sector to engage directly with the Botswana Ministry of Mineral Resources, Green Technology and Energy Security (MMGE).
Registered Portal Users are able to:
View details and obligations for your existing Mineral Tenure and Explosives Licenses
Submit applications for new licenses, certificates and permits
Submit applications for the renewal of existing licenses, certificates and permits
Submit reports, work programs and payments
Apply for Ownership Transfer, Relinquishment (Area), Extension (Area), Surrender and Work Program Modification
Request Inspection Services
Botswana Mining Cadastre
Dashboard
Licenses
Obligations
Map
Information
John Doe
Welcome User!
Apply For License
Please see below a list of your licenses which can also be filtered by Status. The licenses are also highlighted on the map below.
Click on the Code link to see the details of that license.
My Licenses
All Licenses
Active Licenses
Applications
Inactive Licenses
Code
Name
License Type
Expiry Date
License Area
2432893
Big Mining Company
Exploration License
27 January 2033
23, 367 km2
2838221
Spatial Mining Company
Exploration License
13 February 2042
8, 768 km2
2434983
Mineral Mining Company
Building License
15 December 2030
2, 345 km2
3204211
Big Mining Company
Mining License
23 January 2027
14, 990 km2
3204343
Gold Miners Plc
Mining License
23 January 2031
13, 452 km2
Linakalabio
Malwelwe
Botlhapatlou
Lokala
Mosomane
Maboane
Letlhakeng
Mopipi
Tshwabi
Hatsalatladi
Dikgonnye
Mantshwabisi
Moshaweng
Lentsweletau
Mmaigodi

# What's the Status Quo?

Go-live underway for Botswana Mining Cadastre Portal (soft go-live while UAT's are being performed)

We continue to build out functionality to support a number of implementations that we expect to go live over the next six to twelve months with portals built using Landfolio Framework:

- Natural Resource Permitting and Licensing Portal, Government of the NorthWest Territories, Canada
- Victoria State Land Use Activity Portal, Australia
- Red Sea Zone Authority Land Registry System, Saudi Arabia
- Bermuda Land Title Registry Office
- Sint Maarten Kadaster
- Barbados Land Registry
- Bahamas Land Record, Leasing and Permit Management System
- Namibia Mining Cadastre Portal

# What Next?

We are investigating use cases to build out companion products to Landfolio Back Office using existing or upcoming Framework functionality

# Can we see it?

Yes!

A demo for the Botswana Mining Cadastre is coming up soon.

Hang in there for the next exciting installment.

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# Thank You

## Credits

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