Case Study

Upgrade and Migration of ArcGIS Enterprise (from 10.6.1 to 10.8.1)
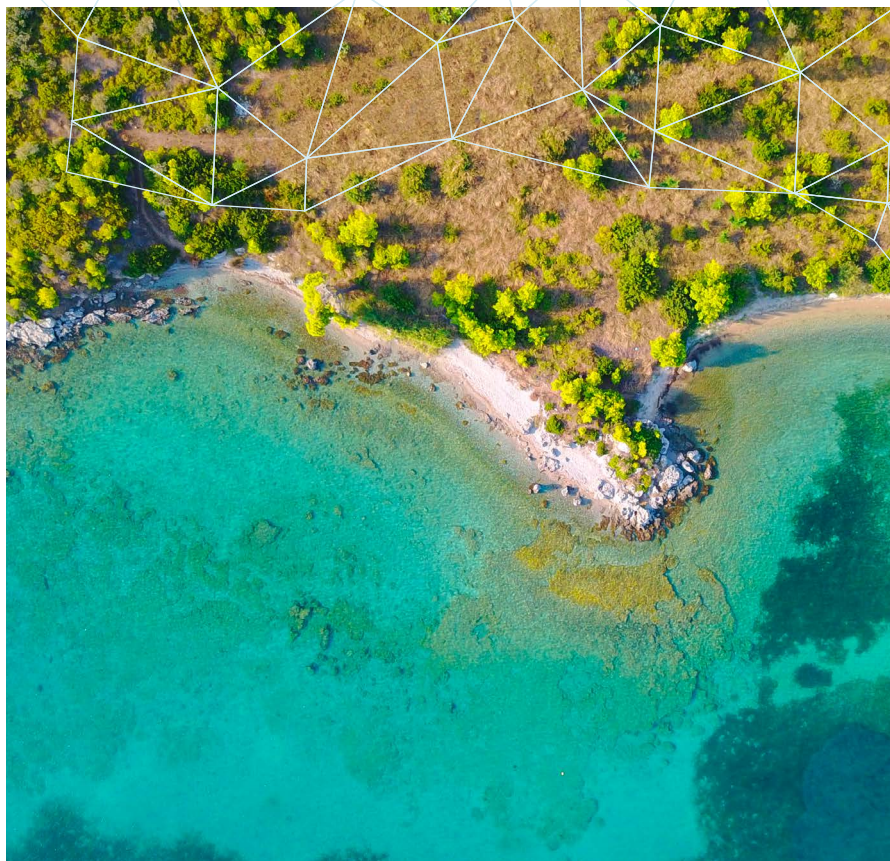
The customer

The main task of the Luxembourg Cadastre and Surveying Office (Administration du cadastre et de la topographie) is the provision of cadastral information, i.e. the issuing of documents and information with geographical reference to notaries, service providers in the real estate sector and private individuals, such as:

- extracts from the cadastral plan
- ownership records

The Luxembourg Cadastre and Surveying Office also makes various types of geodata available in a geoportal. From basic data to traffic networks to the digital elevation model, a multitude of geodata relevant to Luxembourg can directly be used online in this geoportal.

LE GOUVERNEMENT
DU GRAND-DUCHÉ DE LUXEMBOURG
Administration du cadastre
et de la topographie

The Challenge

The provision of the geodata of the geoportal is carried out by many different customers of the Luxembourg Cadastre and Surveying Office.
For the most part, the data is integrated via OGC WMS and Esri Map Services. These services are delivered through an ArcGIS Enterprise production environment.

The particular challenge in upgrading the ArcGIS Enterprise environment from version 10.6.1 to version 10.8.1 was to do it in production. The services had to be offered in the same quality even during the migration process. The operational downtime had to be as short as possible.

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The Solution

In order to meet the customer's requirements in the best possible way, the new production environment was set up in parallel as a replacement environment. This required flexible use of Esri tools and specially developed migration tools.

Due to a parallel setup of the new 10.8.1 environment, the existing productive environment could be used during the test phase without any interruptions. The already published services (WMS and Map Services) and webmaps, as well as groups and users, were first exported from the 10.6.1 environment by using the ArcGIS API for Python and then recreated (users, groups) or republished (Map Services and WMS) in the new 10.8.1 environment based on the exported information.

Since both ArcMap and ArcGIS Pro are used as desktop applications, it was necessary to create both Python 2-based scripts (for ArcMap) and Python 3-based scripts.

Customer's opinion

„con terra helped us migrate our internal ArcGIS Enterprise environment from ArcGIS 10.6 to ArcGIS 10.8 without any disruption to production. Their knowledge, experience and pragmatic approach have allowed us to plan and test the process and ultimately execute it successfully. We are very pleased with the result and will be happy to use con terra's services again in the future."

Jeff Konnen
Head of the Geoportal of the
Luxembourg Cadastre and Surveying Office

The Benefit

• Use of the new functionalities of ArcGIS Enterprise Version 10.8.1

• Upgrade of the general infrastructure by migration to a new machine

• Validation of the data store in the new environment is possible, allowing a wider range of services to be published

The Technology

• ArcGIS Enterprise

• ArcMap and ArcGIS Pro

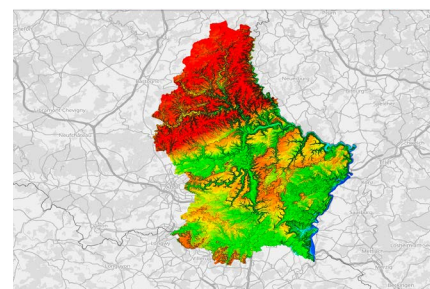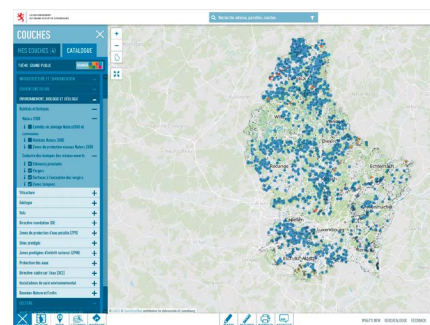• ArcGIS API for Python and Python 2

Summary

Within the scope of the project, it made sense to migrate to new servers with the updated version of the Esri technology instead of just upgrading the ArcGIS technology used. This had the advantage that not only the entire infrastructure could be renewed, but also only those components were migrated that were really needed.

The two pictures show extracts from the geoportal of the Luxembourg Cadastral and Surveying Office, which can be accessed via the link https://www.geoportail.lu/en/.

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