con·terra
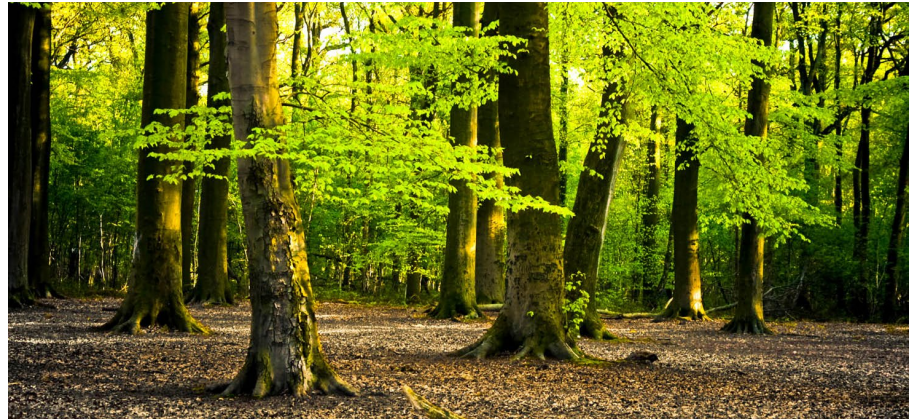
Landesbetrieb Wald und Holz Nordrhein-Westfalen

State Forestry Administration for North Rhine-Westphalia

ForstGIS NRW – The platform for on and offline apps

The Customer

The State Forestry Administration for North Rhine-Westphalia (Landesbetrieb Wald und Holz NRW) comprises fourteen regional forestry commissions, the forestry commission in the Eifel National Park, and the Training and Testing Forestry Office in Arnsberg Forest. The foresters in the forestry districts guarantee a widespread presence throughout the state.

The primary mission of Wald und Holz NRW is to sustainably secure and develop the forest and its functions, to manage the state woodland, and to perform forestry services, such as supporting forest owners in managing their forestland. Other activities include forest surveillance, performing special forest and timber programmes, such as promoting the use of timber by maximising its material and energy potential, and informing the public about the elementary yet multifaceted significance that the forest has for people.

www.wald-und-holz.nrw.de

The Challenge

Wald und Holz NRW was looking for a solution that allowed it to develop independent, task-oriented apps. The apps had to provide the best-possible support to users in the forest, even in the event that no data connection was available. Another basic requirement was that it should use an advanced and future-proof technological foundation that can be seamlessly integrated into the Forestry Administration's existing IT infrastructure, and thus become part of the ForstGIS NRW solution.
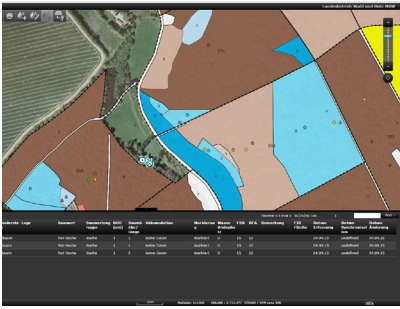
The Solution

The new Web GIS platform was implemented on the basis of map.apps technology from con terra. In addition to providing standard functions, such as the ability to visualise spatial data, print out maps and perform editing, apps developed on the platform are capable of offline operation. The user-specific data (and apps) required for the specific tasks are distributed through the available deployment architecture of the Forestry Administration.

Depending on the data type and app, the collected and modified data is synchronised seamlessly into the Forestry Administration's central data store. This is done automatically by services in the ArcGIS for Server infrastructure and is supported by security and access-control mechanisms. The data is then available to all users, quickly and centrally.

Technologies

- map.apps
- map.apps Offline
- map.apps SDI
- security.manager
- ArcGIS for Server

ForstGIS NRW – The platform for on and offline apps

Benefits

Within a short space of time, the Web GIS platform ForstGIS NRW from Wald und Holz NRW enabled the efficient realisation of a range of specialist apps, which the Administration implemented either itself or in a joint development project with con terra.

The following are among the apps that have been realised:

- ForstGIS offline (basic app for head forest rangers)
- Wildlife App (for monitoring game bite)
- Biotopbaum App (for mapping dead wood)
- ForstGIS online (additional functions available with a connection to the intranet)

Now that it has the ability to create task-based apps, Wald und Holz NRW is in a position to provide its employees with tools that not only result in a significant reduction in their workload but also increase data quality and enhance their task efficiency.

Summary

Wald und Holz NRW's objectives have now been more than fulfilled, thanks to the use of this map.apps-based solution. The on and offline functions that have now been created sustainably support a wide range of the Forestry Administration's specialist requirements and offer a high degree of flexibility, as well as being future-proof and user friendly.

Customer's opinion

map.apps has enabled us to provide users with apps that have a specialised focus, within a short space of time. Our ability to incorporate our own know-how in the apps allowed us to create highly efficient tools that are oriented towards user requirements, for in-forest deployment. In particular, users appreciate the intuitive interface and unproblematic data exchange.

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