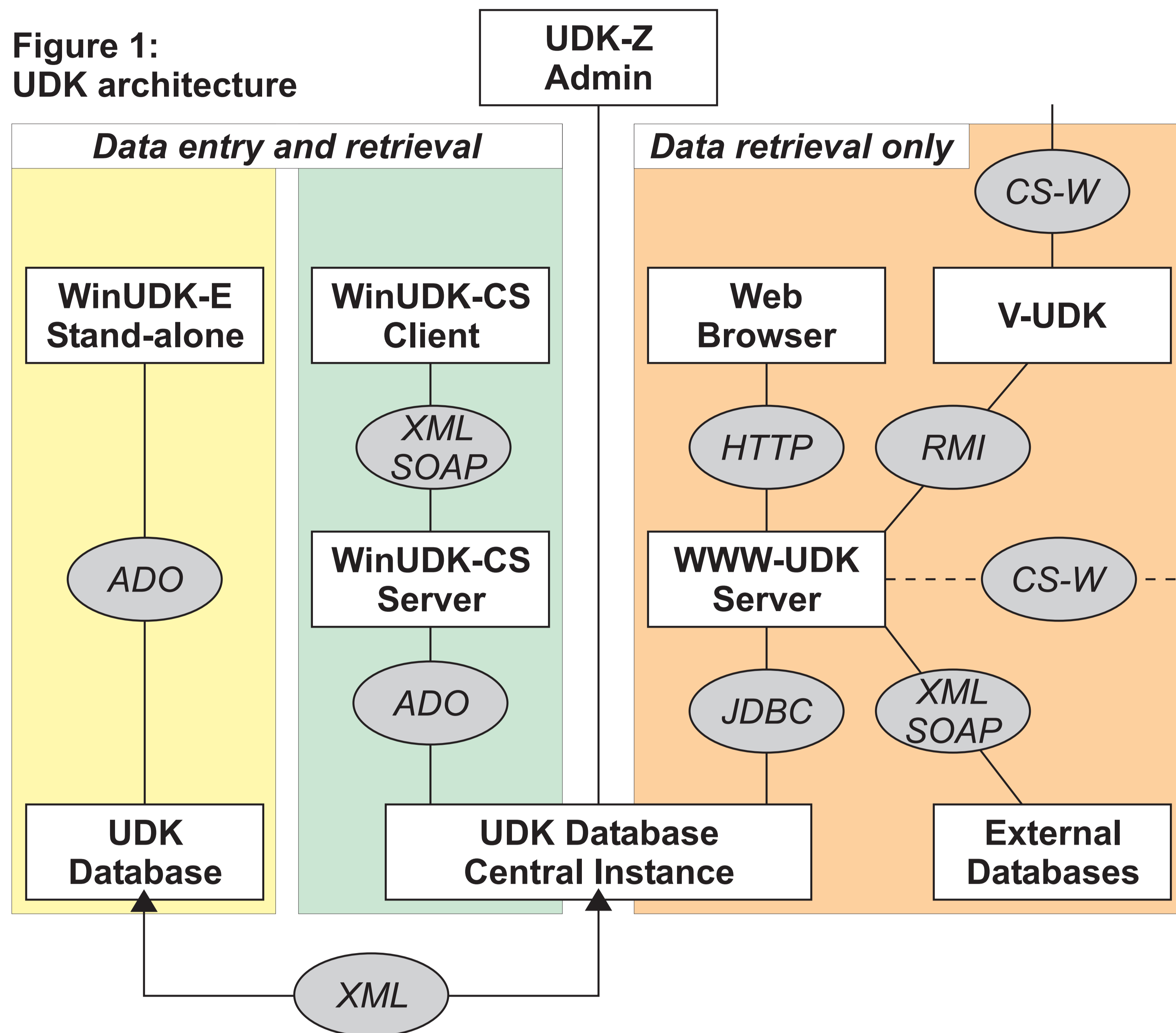


## Introduction

The *Umweltdatenkatalog* (UDK, environmental data catalog) is a metadata catalog that has been used since 1991 as a metadata registry for environmental information. It was developed as an information system to be used mainly by government agencies in Germany and Austria.

The purpose of the system is to give information providers a tool to create registries of relevant data holdings and responsible stakeholders. The metadata records were designed to answer questions like: Who holds where what kind of data in which format?

Figure 1:  
UDK architecture



## UDK flavors and architecture

Figure 1 describes the current UDK architecture in detail.

WinUDK software enables the registration and retrieval of metadata. It may be used in single user mode (WinUDK-E) in connection with Microsoft's JET-Engine, as well as in client-server mode (WinUDK-CS) using SOAP technology and an external SQL database system, e.g. Oracle. WinUDK supplies a comfortable menu-driven interface for data entry and retrieval. Two screenshots are shown in Figure 2.

The WWW-UDK enables research on UDK catalogs via the internet by means of standard browser technology. Thirteen German federal states and the German government currently provide their UDK data to the public via the WWW-UDK.

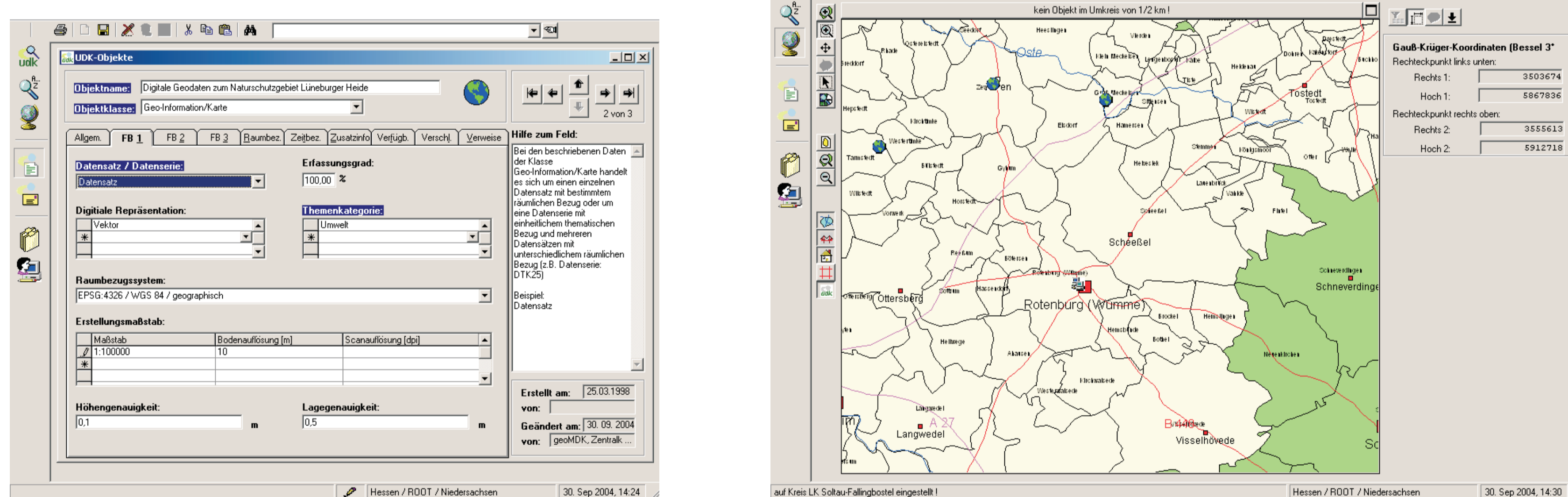
Finally, the Virtual UDK (V-UDK) offers an extensive search within all available, distributed WWW-UDK's using standard browser technology as well.

## UDK data model

The UDK uses six different object classes to categorize UDK metadata records: *Data collection / database* (1), *Service / Application / Information System* (2), *Document / Report / Publication* (3), *Geodata / Digital Map* (4), *Organizational unit / assignment* (5) and *Proposal / Project / Program* (6).

Besides the object classes mentioned above, addresses describing individuals and organizations are stored as UDK metadata records as well.

Figure 2:  
WinUDK graphical user interfaces



## Outlook: Integration in the national Spatial Data Infrastructure

In the current version 5 of the UDK, the metadata model has been modified in order to comply with the relevant international standards, particularly ISO 19115 (Geographic Information - Metadata) and ISO 19119 (Geographic Information - Services).

In the near future, the WWW-UDK 5.0 will be equipped with an OGC-compatible web catalog service interface. By this means, it will be possible to integrate the UDK into the evolving national spatial data infrastructures in Germany, namely the GeoMIS.Bund and the GDI-DE, as well as into other spatial data infrastructures.

Figure 3 shows the basic UDK 5.0 configuration and object classes which conform to the ISO 19115 and ISO 19119 in UDK version 5.0.



Figure 3:  
GDI-DE integration

