

Case Study LEIKA

Scheduling system for connections and resources



Client	Zweites Deutsches Fernsehen (German TV station)
Site	ZDF Headquarters, Mainz Planning and Production Department, Master Control Rooms

Use

Video, audio and command lines to ZDF's own studios, to other television broadcasters and to reporting and event locations are required for producing ZDF general programming. In Germany ZDF uses a signal transmission network permanently rented from German Telecom (DTAG) that links the regional studios throughout Germany to the broadcasting center in Mainz.

Any other national or international signal routes that may be required must be ordered and billed on a case-to-case basis with the relevant network service provider. The "Line Services" office at ZDF exclusively deals with the processing of these planning and ordering procedures.

Furthermore the planning office takes care of needed production resources like SNG trucks, edit places and other equipment. Some resources are provided by ZDF themselves others are ordered by external providers. LEIKA supports the planning and ordering of the resources and calculates the costs.

The "Line service" office is working on behalf of the journalists and editors. They are asking for the services they need for program production. They can type in their requirements directly to the LEIKA system to which they are all connected.

Functions

The LEIKA system supports the work performed in the "ZDF Line Services" office. Central tasks are planning, coordinating and ordering of connections and resources. LEIKA is a management system which includes the whole ordering process. The following functions are implemented:

Request of Resources

- Definition of the required resources
- Interface to the news system INEWS and takeover of common data for planning

Planning and coordination of resources

- Object-oriented configuration model
- Event Management
- Order Management
- Administration of documents and correspondence
- Scheduling of network connection incl. booking and conflict recognition
- Scheduling of other resources
- Assignment of resources (lists and graphical presentation)
- Communication to external partners by email/fax (sending/receiving)

Clearing

- Tariffs of resources and network connections
- Automatical calculating of costs
- Registration and control of the actual data (concerning usage time and costs)
- Provision of invoicing data for SAP

Event and Order Management LEIKA

The screenshot displays the LEIKA software interface for event and order management. The main window is titled 'Ereignis: E051100014'. On the left, a tree view shows the event structure, including 'Die Johannes B. Kerner Show 12/05' and its sub-items like 'Dokument', 'Korrespondenz', 'Kommunikation', and 'Übertragung'. The main area shows details for a specific event, including transmission dates (06.12.2005 to 07.12.2005), time slots (23:30 to 00:38), and transmission type (UESP P). It also displays the sender (Hamburg A+I via Hamburg ZDF) and receiver (Mainz ZDF). A table at the bottom lists transmission objects with columns for 'Nr.', 'St.', 'Funktion', 'Von', and 'Bis'. The table contains two rows: '1 G Sendeltg.' and '2 G KDO'. A detailed view of the objects is shown below the table, listing various transmission paths and their characteristics.

Nr.	St.	Funktion	Von	Bis
1	G	Sendeltg.	23:00	01:00
2	G	KDO	23:00	01:00

Solution

An Intel cluster of HP (with HP service Guard and Suse Linux Enterprise edition) is implemented for the LEIKA system. Oracle 9i is used as central database. There are about 50 PC workstations (Windows 2000, XP) connected to the server over the inhouse LAN. The graphical user interface is developed with Delphi 7.0. Further workplaces can connect with an application which is based on .NET.

The system LEIKA provides interfaces to

- the news system INEWS
- another inhouse developed planning and scheduling system
- SAP (for transmitting cost data)

Dimetis Services

Dimetis has designed and implemented the kernel of the LEIKA system and the interfaces. The server and PC hardware is provided by ZDF.