Emergency Response Solution and SAP Integration
Pfalzwerke-Netz AG, Germany

Presentation by AED-SICAD

Florian Brandi-Dohrn

Esri European UC 2014

AED-SICAD: Key Facts

- **One of the biggest GIS-Software Application Companies in Europe**
  - German Company (Offices Sites in Bonn, Munich and Berlin)
  - > 180 employees in AED-SICAD AG, 340 in the group
  - 80% in private ownership 20% Esri Inc
  - Key Markets: EMEA
  - Esri Platinum Partner

- **Our offering**
  - COTS Software:
    - ☐ Utilities: ArcFM UT Product Suite
    - ☐ Land Management
 - Professional Services
  - International: Partner enabling

SCADA Integration: Management of Catastrophes

- Client: Pfalzwerke-Netz (Ludwigshafen, Germany)
- Supplier for electricity and gas
  - Network area: 5870 km²
    (SW of Germany, border of France)
  - Staff: 550 employees
- Electricity network
  - 1.250 km high and very high voltage
  - 4.570 km medium voltage
 - 8.640 km low voltage

Geographical Situation
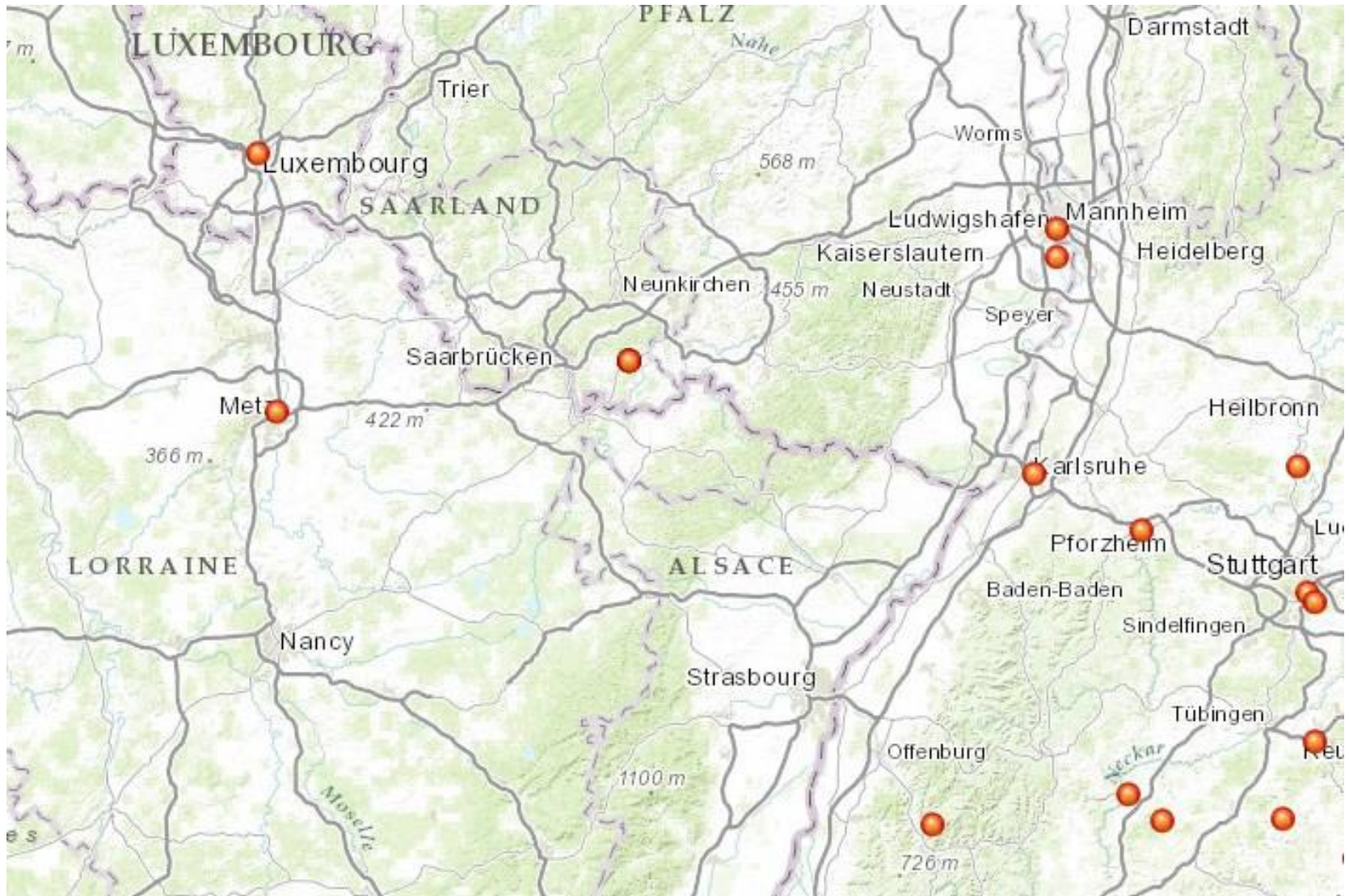
Objectives of Crisis Management System

- Precaution as a protection of men and assets
- Faster assistance in case of accidents involving people
- Reducing duration of outages (during crisis)
- Reducing excess load on assets during outage
- Minimizing additional cost
- Quick restoration of energy supply

Concrete Requirements

- Graphical overview of the actual supply status within the whole network area
- Easy-to-use
- Active support of the crisis management team
- Analysis functionality during the crisis
- Overview on affected customers and communities
- Online- / web-based service
- Communication with internal & external systems
- Reconstruction of a crisis event

Crisis Management: Architecture
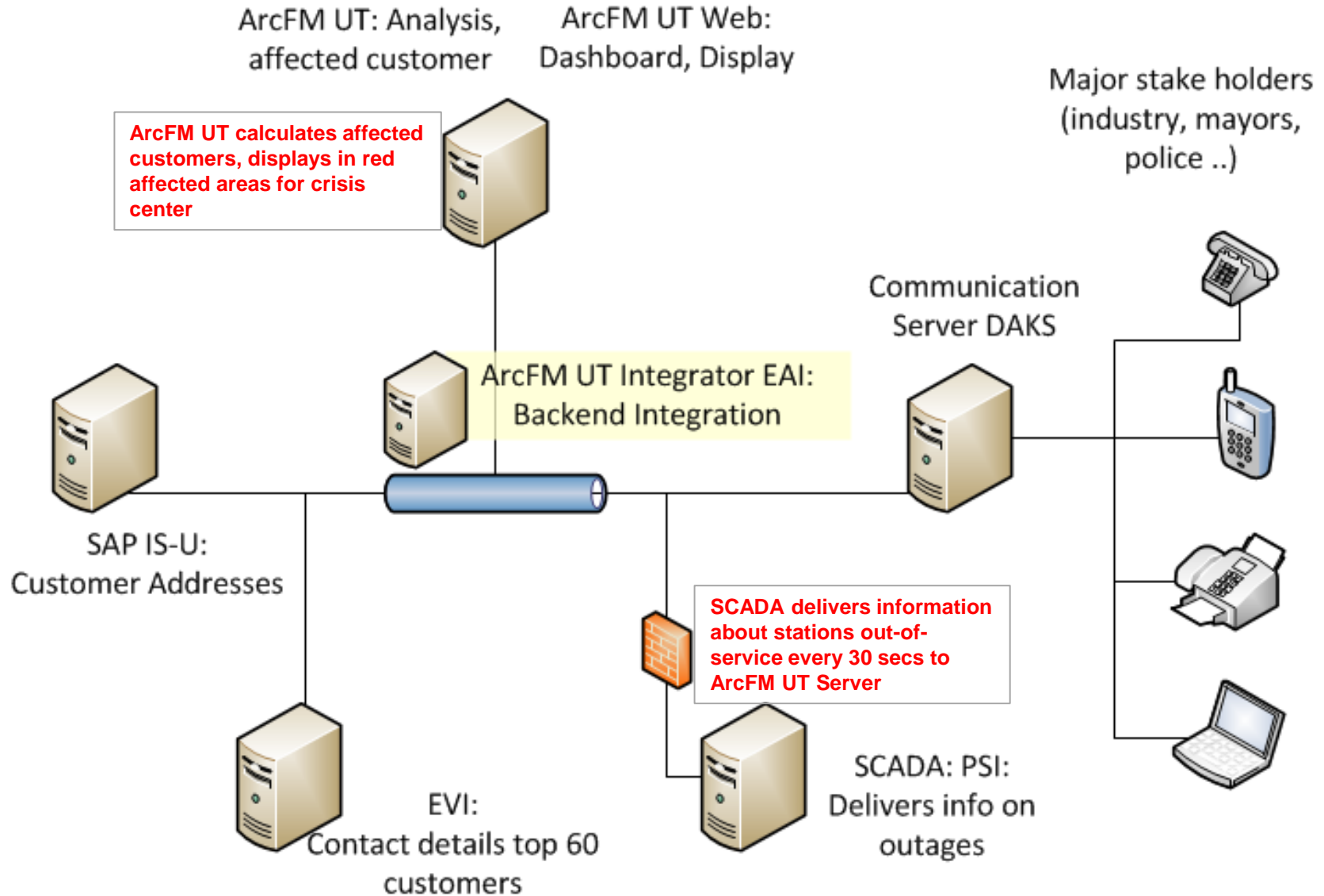
ArcFM UT Integrator

- **Transfer of data and function calls in the background**

SAP GUI

ArcFM UT

Front end

Back end

SOAP

SAP XI (WBI / TIBCO / BIZTALK)

ArcFM UT Integrator

SAP

SOAP

IDOC

RFC

Database

ArcGIS Server
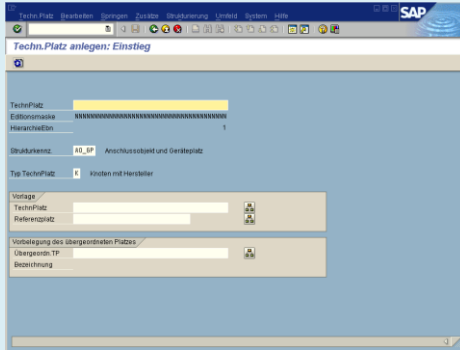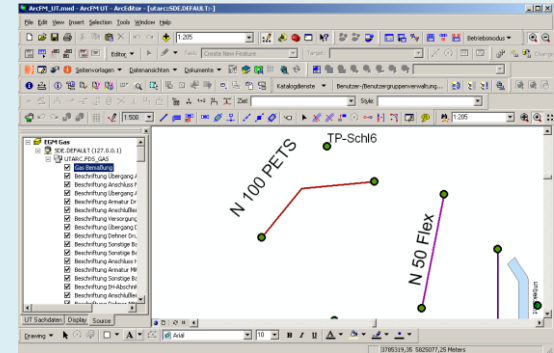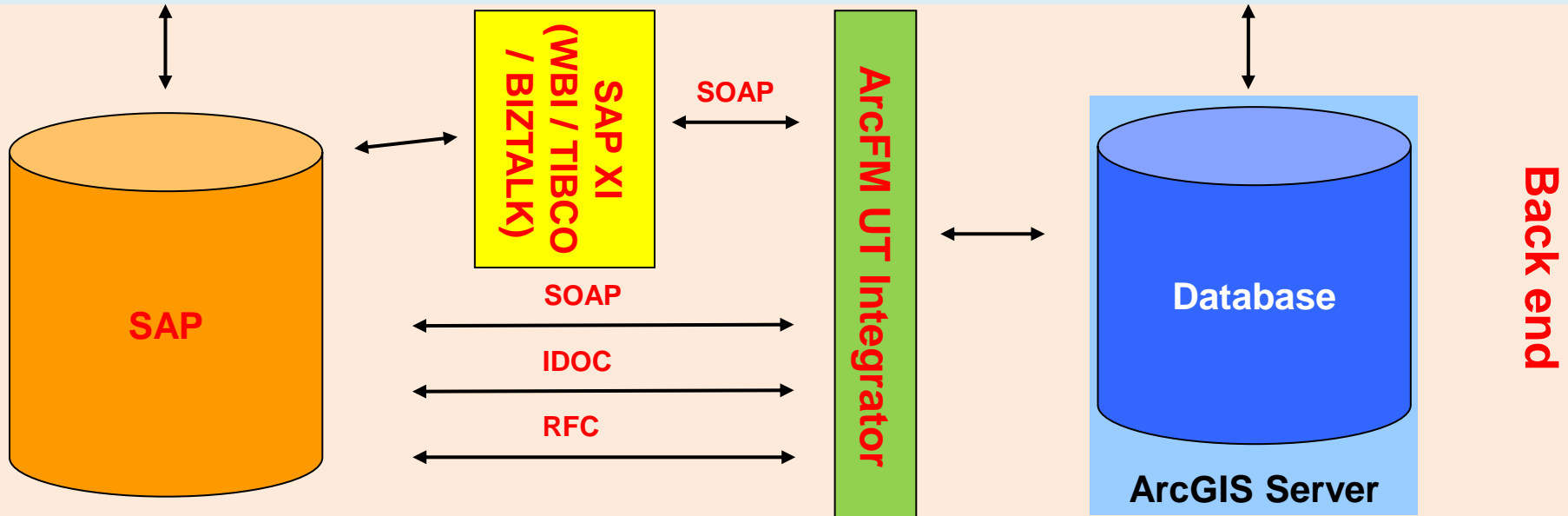
ArcFM UT Integrator EAI

- **Bi-directional**
- **Synchroneous / assynchroneous**
- **Interfaces**
  - SOAP / XML
  - IDOC
  - RFC
  - Table Reader
  - CSV files
- **May "talk" to other EAI busses (BizTalk, WBI …)**
- **Reliable and secured communication**
  - Logging (Messages, Jobs, …)
  - Email notification

Overview on GUI

Overview on GUI

Outage and Crisis Management System: Active Support

- Check lists
- Emergency planning
- Operational guidelines
- Wording of the law
- Guidelines

Outage and Crisis Management System: Forecast

- Redlining
  - Symbol
  - Line
  - Text
  - Area
- Forecast for affected networks
- Forecast for affected information groups

Outage and Crisis Management System: Reconstruction of an Event
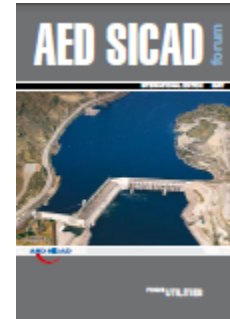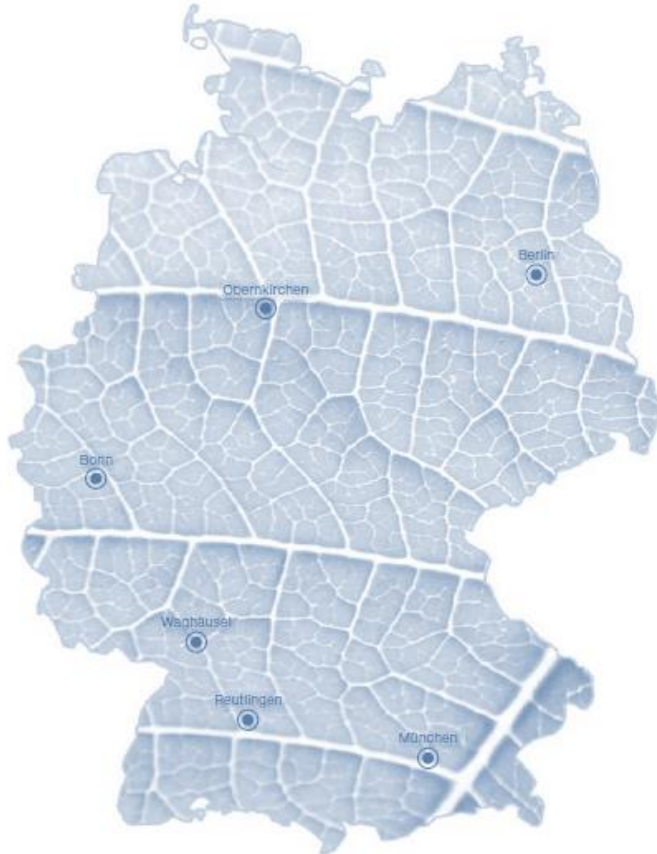
- Recall of chronologically archived states
  - Example: Storm "Kyrill"

Thank You for Your Attention

More details:
Success Story
Available,
please contact
me at our booth

Florian Brandi-Dohrn
AED-SICAD Aktiengesellschaft
Carl-Wery-Str. 22
D - 81739 Munich
Germany

Tel.: +49 (0) 45026 - 100
Florian.brandi-dohrn@aed-sicad.de
www.aed-sicad.com