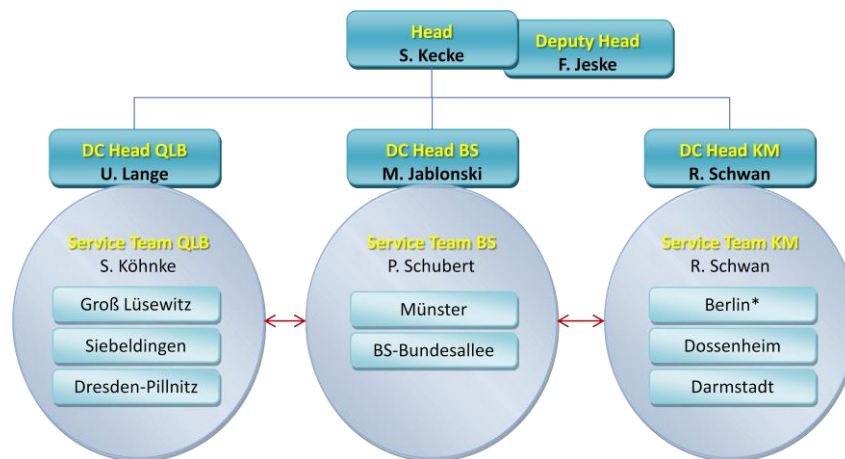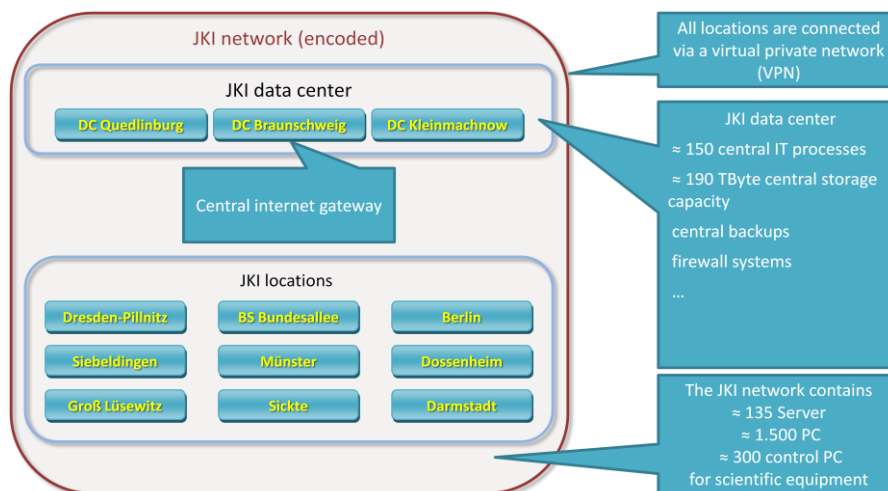# Tasks of the Central Data Processing Unit

Structure

Organisation

Data Processing Unit with headquarters in Quedlinburg maintains a virtual data center which is distributed over three JKI locations. The essential resources are located in Quedlinburg, Braunschweig and Kleinmachnow. These nodes are connected to the internet with high speed via German National Research and Education Network, DFN. They form the core of the JKI virtual private network.

Personnel resources and scope of duties are allocated to these nodes accordingly. Beyond that, the DP department has staff members in charge of user and application support at the other JKI locations as well.
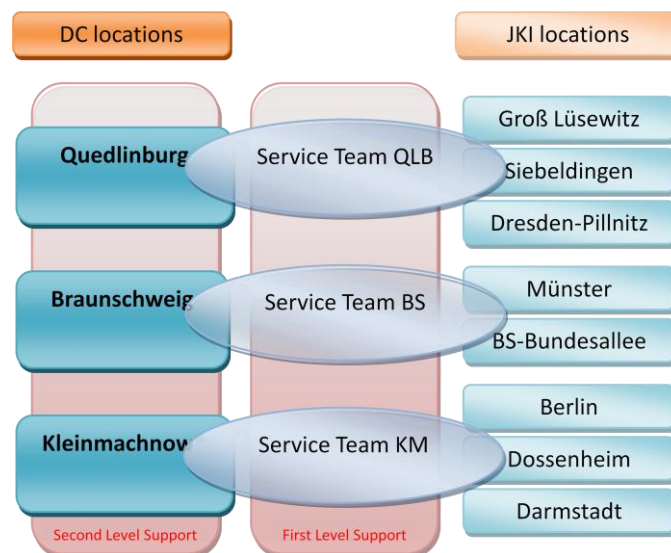

Infrastructure

Fields of activity

IT infrastructure

- local area networks (LAN) at each location (passive and active components)
- WiFi
- Internet access at each location
- Security systems (VPN, Firewall, Spam filter, …)
- Active Directory (to manage user and access rules in the Active Directory)
- Storage systems (SAN, NAS)
- Backup
- Database management systems
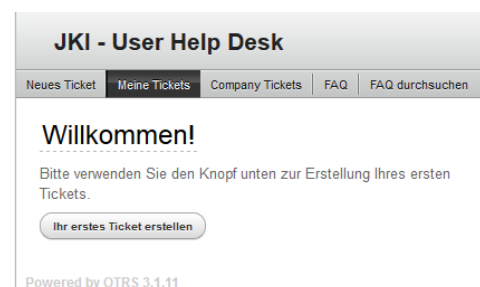- Server (server virtualisation)

IT service

To ensure a complete IT service in proper quality the IT staff is organised in Service Teams.
The following picture shows its organisation and distribution of tasks:

- Hard- and software support
- User support
- Central procurement (not yet at all locations)
- IT security and Privacy policy

To support the service the ticket system **OTRS** is used. So that everyone can open a ticket at any time. Use one of these possible ways:

- call your local service team
- send an e-mail to uhd-km@jki.bund.de,
  uhd-bs@jki.bund.de or uhd-qlb@jki.bund.de
- create your ticket online: http://dv-hilfe.jki.bund.de

IT processes

The Data Processing Unit operates a lot of IT systems and services for
- the management unit,
- the scientific projects of JKI institutes.

All services are organised in IT processes. These are the basis for
- funding,
- personal planning,
- security assessment and activities.

Selected examples:

- *Mach Information Manager* (management of documents and processes)
- Groupware *Exchange*
- *JKI Cloud* (cloud service for file exchange with extern partners)
- *LIMS* (laboratory information and management system)
- *easydbUniversity* (central image database)
- *FAT / FAT Search* (database for scientific activities in JKI)
- *JKI Open Conference System*
- *JKI Open Journal System*
- ...

Biometrics and Bioinformatics

Since 2014 the JKI has
- a bioinformatician (Dr. Jens Keilwagen, Institute SB, Quedlinburg)
- a statistician (Dr. Doreen Gabriel, Institute PB, Braunschweig)

Both of them work together in
- organising seminars,
- supporting JKI scientists,
- organising networking in JKI
- organising training events.

Participation in research projects

Data Processing Unit is a partner for a number of research projects and is involved in the development of databases and software.
- Externally funded projects
  - EU: (2 staff positions)
    GRACE,
    PreSto ERA-Net,
    G-TwYST
  - National: (1 staff position)
    Bundesprogramm ökologischer Landbau
    „Weiterentwicklung von Wissenstransfer- und Informationssystemen zur nachhaltigen Nutzung rebengenetischer Ressourcen"

- JKI projects
    - Involvement in a variety of research projects at several locations (database- and software developing)

Selected examples:

- *CADIMA*
  (Central Access Database for Impact Assessment of Crop Genetic Improvement Technologies)
- *VIVC*
  (Vitis International Variety Catalogue)
- *EU-Vitis*
  (The European Vitis Database)
- *Deutsche Genbank Reben*
  (german vitis genebank)
- *Deutsche Genbank Obst*
  (german fruit genebank)
- *Serothek / Mykothek / Virothek*
  (database of pathogens)
- *PiOData*
  (Pillnitz Fruit Database – experiment and evaluation data)
- …

Contact

Steffen Kecke
steffen.kecke@jki.bund.de

Julius Kühn-Institut (JKI)
Federal Research Centre for Cultivated Plants
 - Data Processing Unit -
Erwin-Baur-Str. 27
D-06484 Quedlinburg

e-mail: dv@jki.bund.de