

Consortium for the Social, Behavioural, Educational and Economic Sciences



Workshop: Safe access to sensitive research data in Switzerland Bern, November 25<sup>th</sup>, 2022

# RDCnet: Connecting guest researcher workstations to provide secure access to sensitive microdata



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## **Definitions**

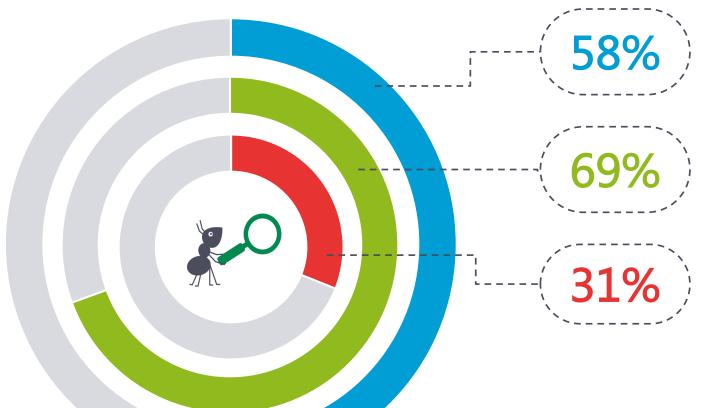
RDC Research Data Center

Guest Researcher
Workstation (GRW)

Thin-Client within a data safe room located in an RDC



## A few figures to begin with...



#### Travel costs for researchers

Travel costs were incurred by 58% of GRW users in 2017<sup>1</sup>

#### **GRWs** (Main location)

69% of the surveyed RDCs offer GRWs at their main location<sup>2</sup>

#### **GRWs** (Other locations)

31% of the surveyed RDCs offer GRWs at other locations<sup>2</sup>



## **Motivation RDCnet**

Goal: Improve access for research with sensitive data

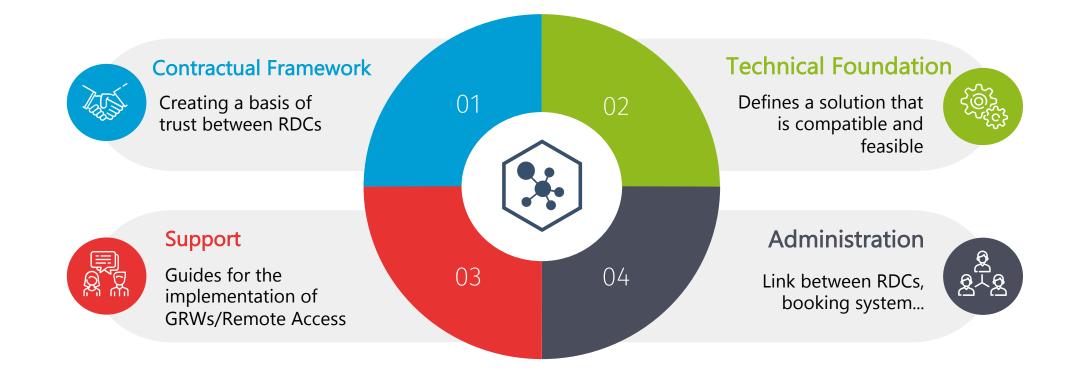
Status quo: On-site work at GRWs of the respective data-providing institutes

Solution: Consolidate GRWs of participating RDCs into a network of secure data access points



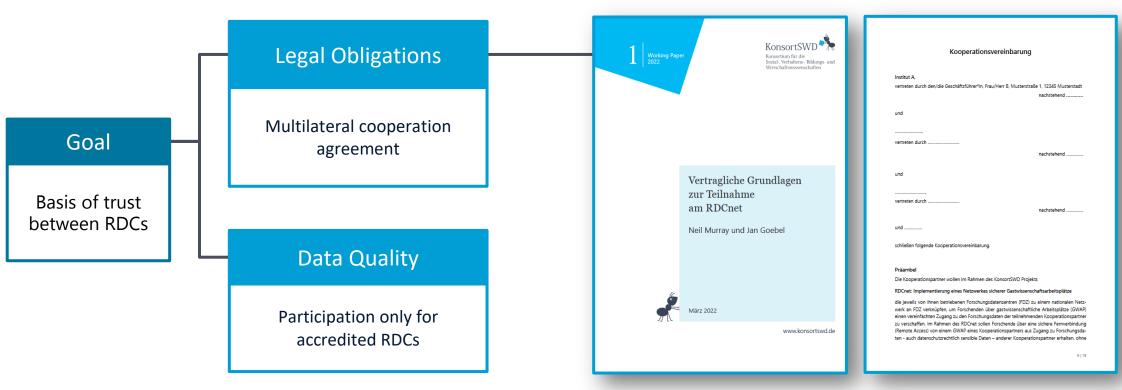


# Components of the RDCnet





## 1. Contractual Framework



Working Paper: https://zenodo.org/record/6358334



## 1. Contractual Framework

Workflow: Multilateral cooperation agreement





### 2. Technical Foundation

#### **Role Allocation**

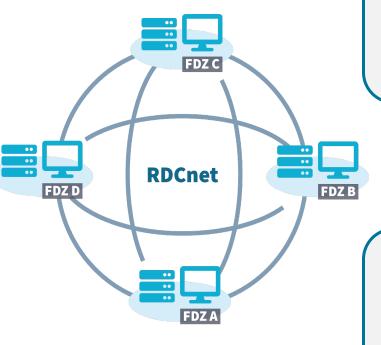
Each participating RDC is both a data receiver (GRW-Thin Client) and a data provider (Server infrastructure)

#### **Decentralization**

Each RDC provides its data as an independent host. At no time does the data physically leave the servers of the data-providing RDC.

#### **Remote Access**

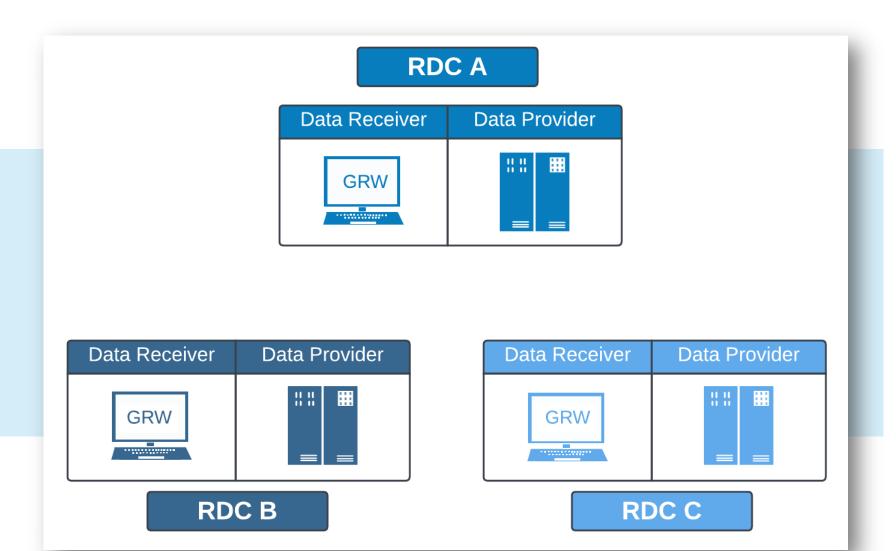
Agree on standardized software to minimize the implementation effort for all parties involved (VMware or Citrix)



#### **Flexibility**

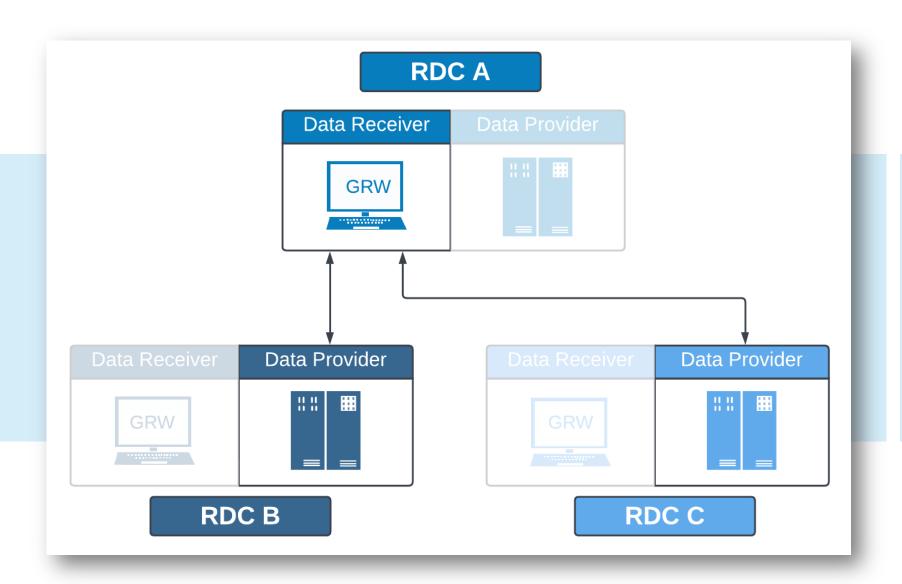
Data-providing RDCs decide where, when and by whom their data can be accessed, as well as which software and hardware is provided for the researcher.





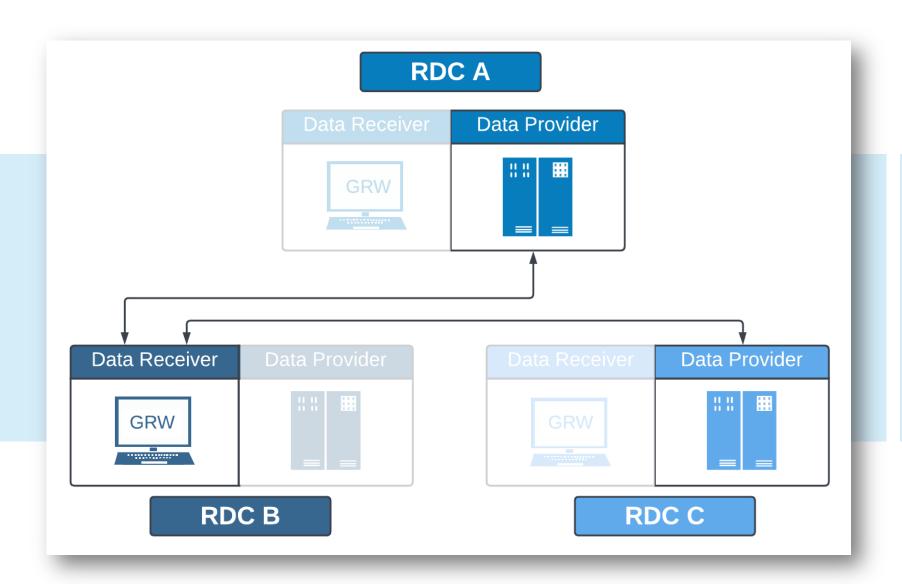
#### Networkstructure





#### Networkstructure





#### Networkstructure



## 3. Support



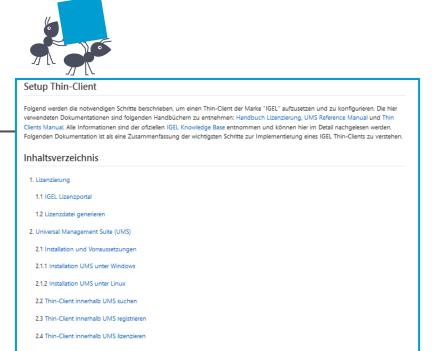
Provide contact and guide to meet technical criteria for participation in RDCnet.



1. Implementation of a GRW (using an IGEL thin client as an example) to fulfill the role of data receiver.



2. Implementation of remote access (using VMware Horizon as an example) to fulfill the role of data provider.



1. Lizenzierung

Example: Guide for implementing IGEL thin clients



## 4. Administration





# Roadmap

# Contractual Framework

Development of TOM and multilateral cooperation agreement

2021

# Technical Foundation

Defining suitable remote access procedures



#### Pilot Network

Successive integration of the pilot project partners in the prototype RDCnet



#### Dissemination

Deployment of the RDCnet service





## Thanks for your attention



In cooperation with

