REPUBLIC OF SRPSKA
REPUBLIC ADMINISTRATION FOR GEODETIC
AND PROPERTY AFFAIRS

CENTRALIZATION, VIRTUALIZATION AND ELECTRONIC DATA EXCHANGE

VRDNIK
18.-20.09.2019.

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STANKO SVITLICA
Assistant Director for IT

PERIOD BEFORE 2014.

Local Area Network
- ❑ At the level of the regional office
- ❑ Without appropriate equipment
- ❑ Data security is questionable

Servers, software solutions
- ❑ Local servers for each regional office
- ❑ Distributed software solutions

Communication
- ❑ Internal
- ❑ With stakeholders

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PERIOD BEFORE 2014.
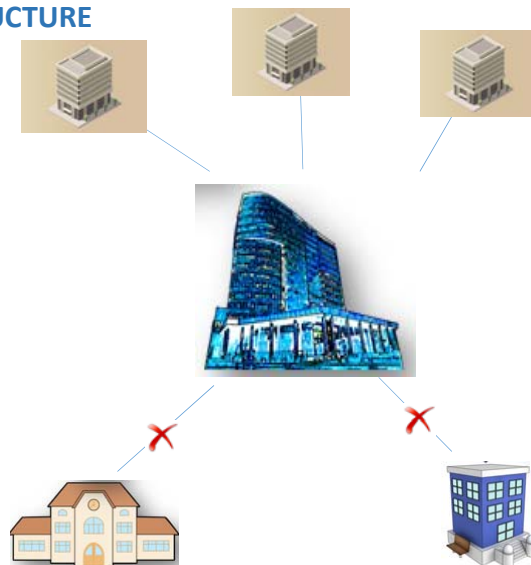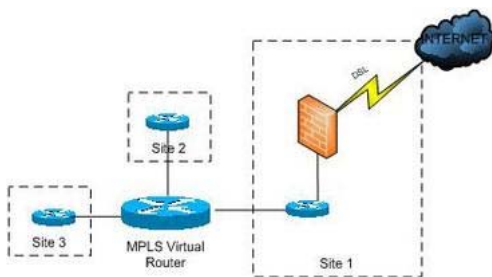
Problems faced by ICT employees

- A large number of servers
- Different application solutions
- Few IT staff at Headquarters, while there were no staff at regional offices
- Age structure of employees
- Frequent need to go to regional offices locations for service interventions
- Data replication
- Expensive telecommunication services, low throughput, insecure communication channels
- Server problem (constant lack of memory and space). The solution to buying new servers and more new ones ...

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ESTABLISHING COMMUNICATION INFRASTRUCTURE

Realization and result

- Procurement of communication equipment
- VPN connection for all regional offices with headquarter
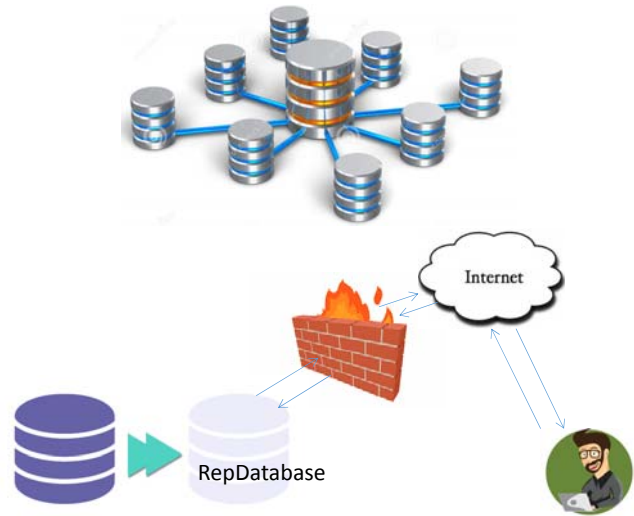- Ability to monitor and filter traffic online
- Antivirus Security Center

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CENTRALIZATION

Centralization of database servers

- ❑ All databases in one place
- ❑ Easier database administration
- ❑ Data integrity
- ❑ Increased data security
- ❑ Better support for internal system users

Data replication, DMZ and public insight

- ❑ Local data replication
- ❑ Availability of data for public insight
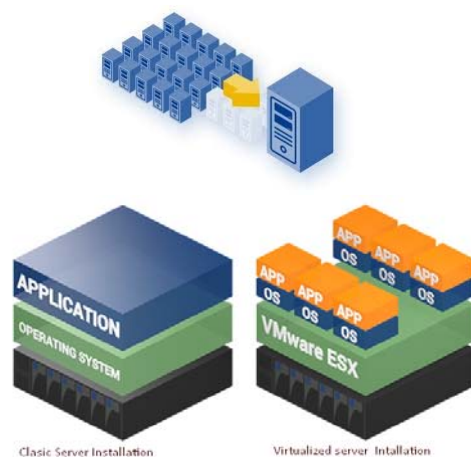- ❑ Conditions for creating data sets at user request

RepDatabase

Internet

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VIRTUALIZATION

Virtualization and backup solutions used

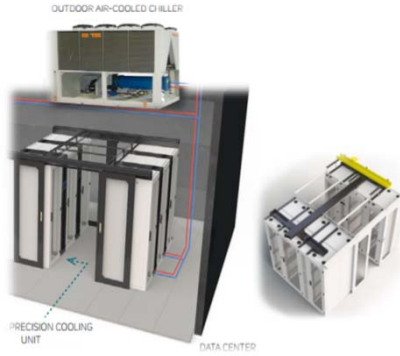- ❑ Wmware
- ❑ Veeam

Benefits

- ❑ Reduced need for strong cooling
- ❑ Less power consumption
- ❑ Simplified server maintenance
- ❑ Fewer servers
- ❑ Faster and easier Backup/Recovery
- ❑ Ideal for various types of testing

APPLICATION
OPERATING SYSTEM
Clasic Server Installation

APP OS APP OS APP OS
APP OS APP OS APP OS
VMware ESX
Virtualized server Intallation

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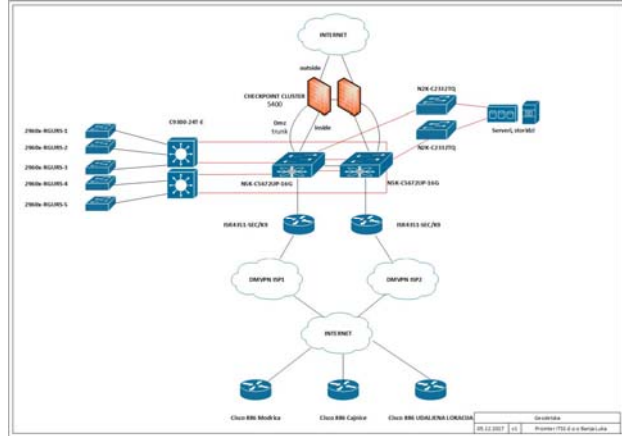18 -20 September, 2019, Vrdnik, Republic of Serbia

DATA CENTER

What have we achieved by building a modern datacenter?

- Guaranteed data availability 24/7
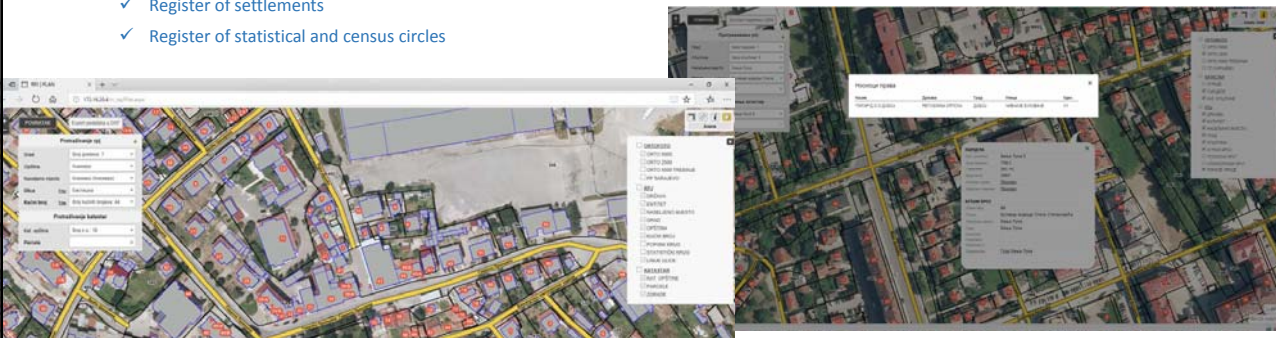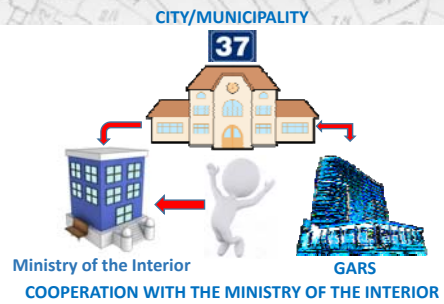- Data security
- Redundancy
- Traffic monitoring and filtering

Data center - Headquarter, planning solution

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ADDRESS REGISTER

- Software solution
- Address register in all cities/municipalities of Republika Srpska
- **200,000** addresses entered in the system
- Pilot Municipalities (Trebinje and Modrica)
- Other municipalities
- Registers of spatial units:
  - ✓ Register of settlements
  - ✓ Register of statistical and census circles

CITY/MUNICIPALITY

Ministry of the Interior

GARS

COOPERATION WITH THE MINISTRY OF THE INTERIOR

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ELECTRONIC DATA EXCHANGE

Data Sharing Agreements

- ❑ Signed Data Sharing Agreement with the Ministry of the Interior (Citizens Register)
- ❑ Agreement with Intermediary Agency for IT and financial services (Business Register)

What information is exchanged?

- ❑ Real estate technical data
- ❑ Digital cadastral map data
- ❑ Property right holders data
- ❑ Address register data
- ❑ Citizens Register data

Regional Offices

Ministry of the Interior (Citizens Register) ⟷ **Headquarter** ⟷ **APIF** (Business Register)

Local community Address register

Write SOAP · **Web Service** · Read SOAP
TCP socket · TCP socket
Read SOAP · **Client Application** · Write SOAP

ICT STRATEGY
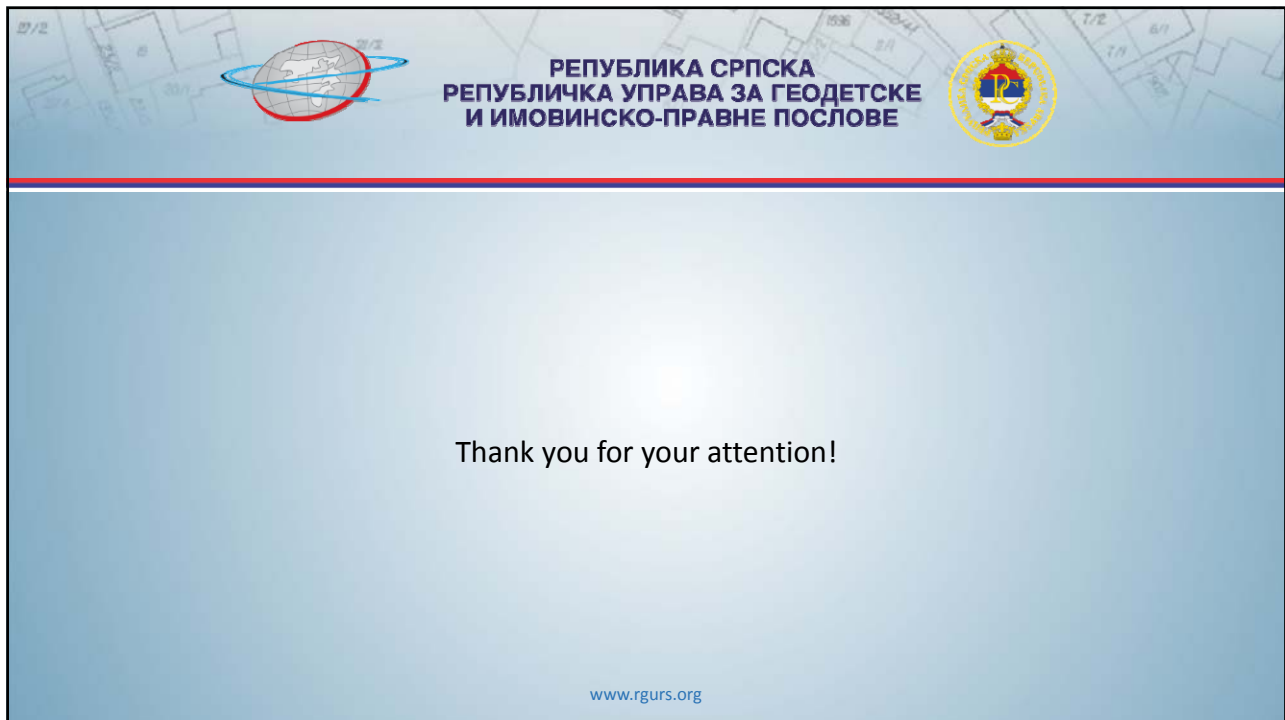
ICT strategy:

- For period of 10 years

Strategic goal:

- Optimal, stable, interoperable, comprehensive and sustainable IS

Strategic goals by area:

- Integrated system and communication infrastructure
- Software tools in the job function
- Information security
- Appropriate equipment and customer support
- GARS IS as an integral part of the eGovernment system of Republic of Srpska

	Current application solution / database	GARS IS subsystem
1	Pisarnica	DMS
2	eTerraSoft	
3	Laris	
4	IPP	
5	MapSoft, DIGIT, Katane/Kataze	eCadastral RS
6	Knjiga uloženih ugovora (Flat Contracts Register)	
7	Registar cijena nepokretnosti (Sales Price Register)	
8	Adresni registar (Address register)	
9	Poslovno informacioni sistem (Business information system)	
10	SatWork	ERP
11	Pošta (Post)	
12	Utrošak goriva (Fuel consumption)	
13	Digitalni arhiv (Digital Archive)	Digital Archive
14	SUFI (Finnacial software)	SUFI
15	COP (Finnacial software)	COP
16	GeoPortal	GeoPortal
17	Intranet portal	Intranet portal
18	Redmine	
19	Red čekanja (User records in regional office Banja Luka)	CRM

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РЕПУБЛИКА СРПСКА
РЕПУБЛИЧКА УПРАВА ЗА ГЕОДЕТСКЕ
И ИМОВИНСКО-ПРАВНЕ ПОСЛОВЕ

Thank you for your attention!

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