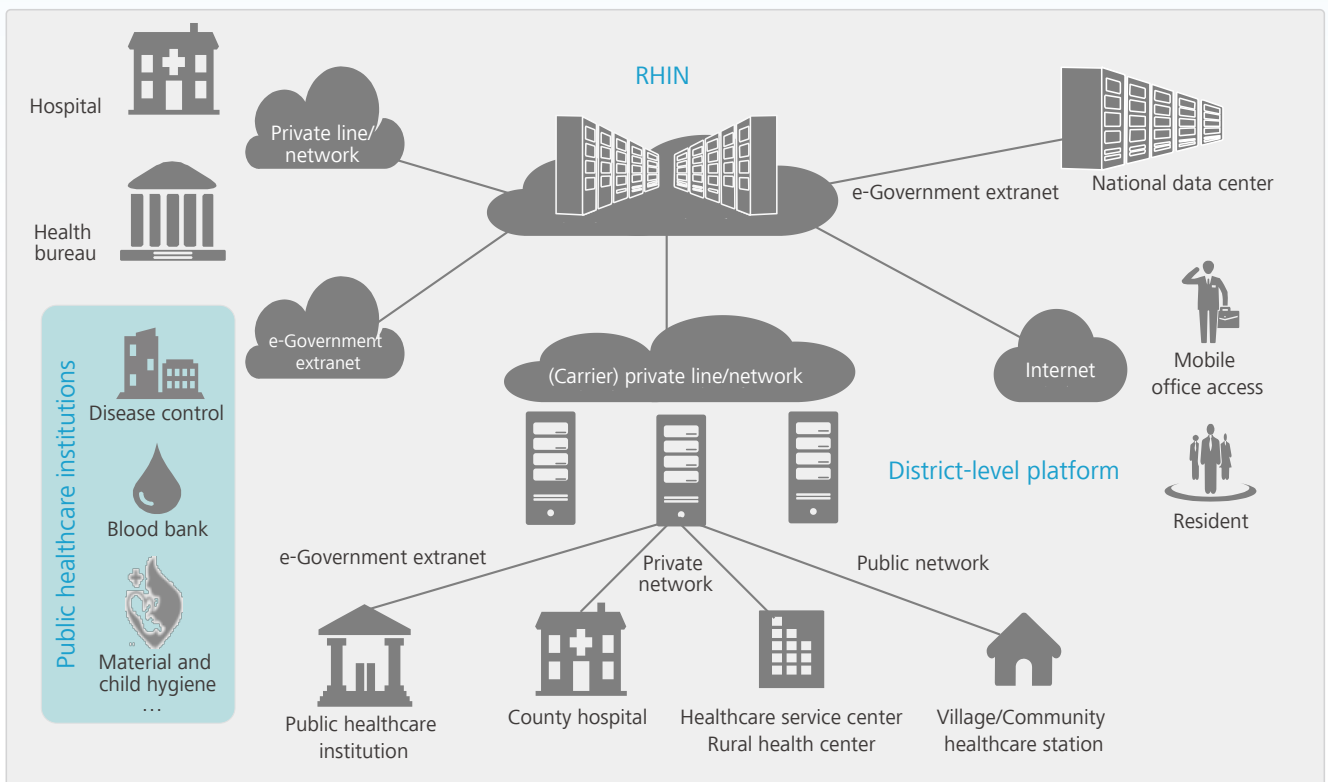




Huawei RHIN Solution

Background

Healthcare information and communications technologies (ICTs) witnessed rapid development in recent years. Medical institutions and healthcare departments are increasingly interested in developing an electronic health record–based (EHR-based) regional healthcare information network (RHIN) to enable unified and efficient service collaboration, network interconnection, and information sharing.

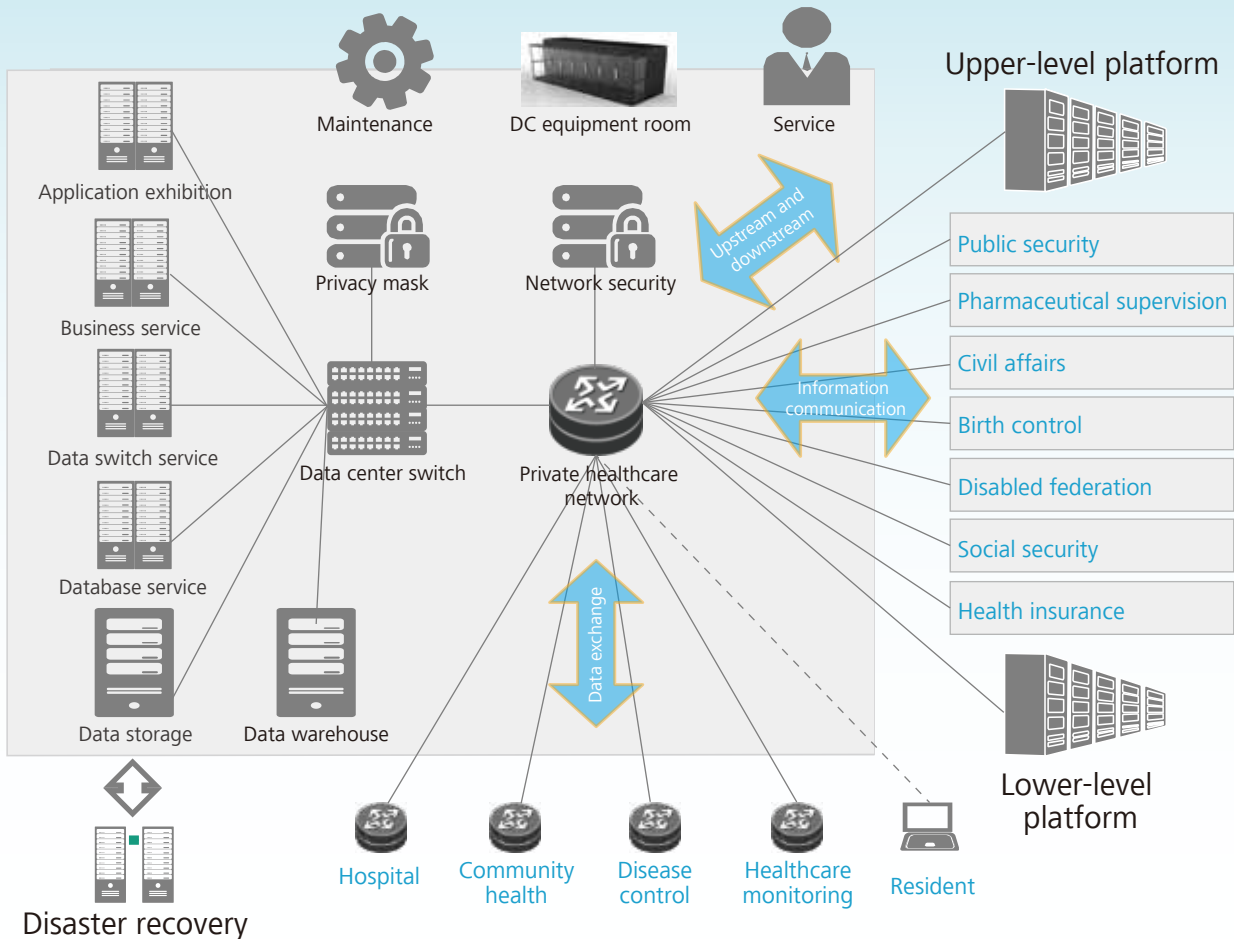


The RHIN collects information stored in different medical institutions to form a comprehensive and dynamic information system.

The development of the RHIN, unlike that of traditional medical IT systems, covers an impressive array of services. The RHIN also faces a variety of challenges, such as wide service coverage, long construction periods, difficult operation and maintenance (O&M) management, heavy traffic, high security requirements, complicated technologies, and diverse standards.

Solution

Based on the meticulous study and full understanding on the requirements and challenges in RHIN construction, Huawei leverages its rich experience in healthcare ICT system development to help medical institutions construct the RHIN. The infrastructure laid a solid foundation for the follow-up ICT system development.



Highlights

The solution has the following highlights:

- 48-TB non-block cloud data center network, meeting service exchange requirements in regional medical institutions
- Ultra-large virtual layer-2 network (including 512 TRILL nodes), supporting fast, large-scale migration and registration of virtual machines (1000 VMs per second)
- Unified storage and management for PB-level structured, half-structured, and non-structured service data
- Unified data backup and archiving
- Hadoop-based NoSQL database that accelerates the exploration and utilization of healthcare data
- Active-active data center and disk array-level same-city disaster recovery solutions, ensuring 0 service interruption and 0 data loss
- Regional healthcare virtual cloud platform, allowing the multiplexing of computing resources, lowering the TCO by 30%, and improving system operation and maintenance efficiency by 100%
- Security protection for networks, hosts, management, virtualization, and applications, meeting the Tier 3 information security protection requirements on the RHIN
- Integration of existing e-Government and carrier network resources, allowing the construction of secure, reliable, and high-performance private healthcare networks
- AR G3 multi-service enterprise-level routers, enabling flexible and ubiquitous access from primary-level medical institutions