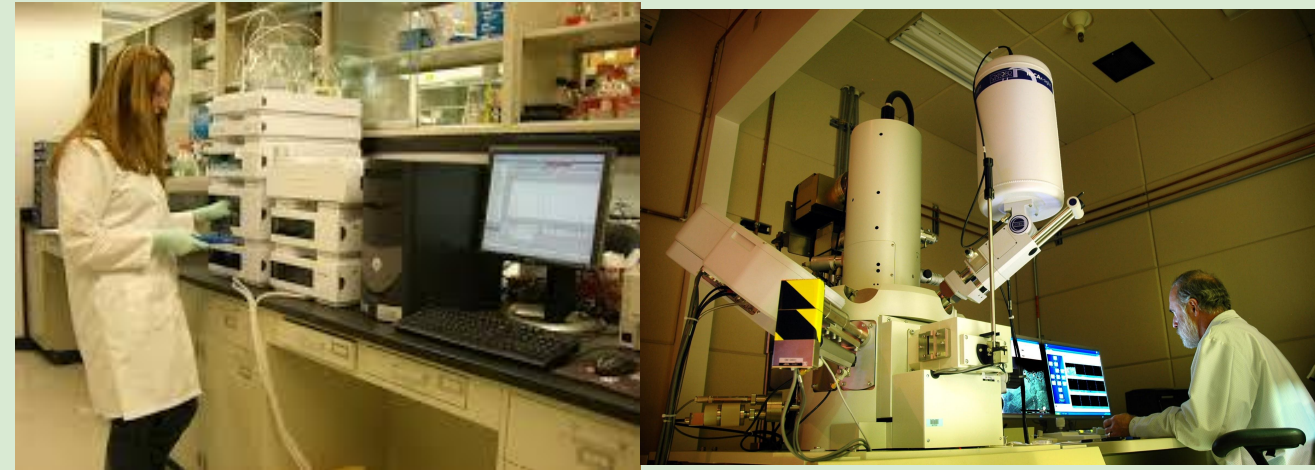


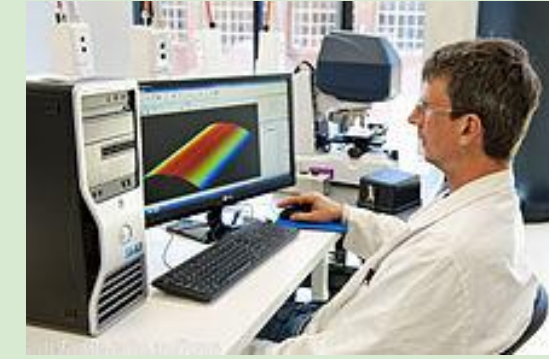
# CRBS System Integration Solutions: VM Hosting, Big Data Analysis, etc.

## Got data? We can help! Backups, Encryption in transit and at rest, Secure Sharing and more!

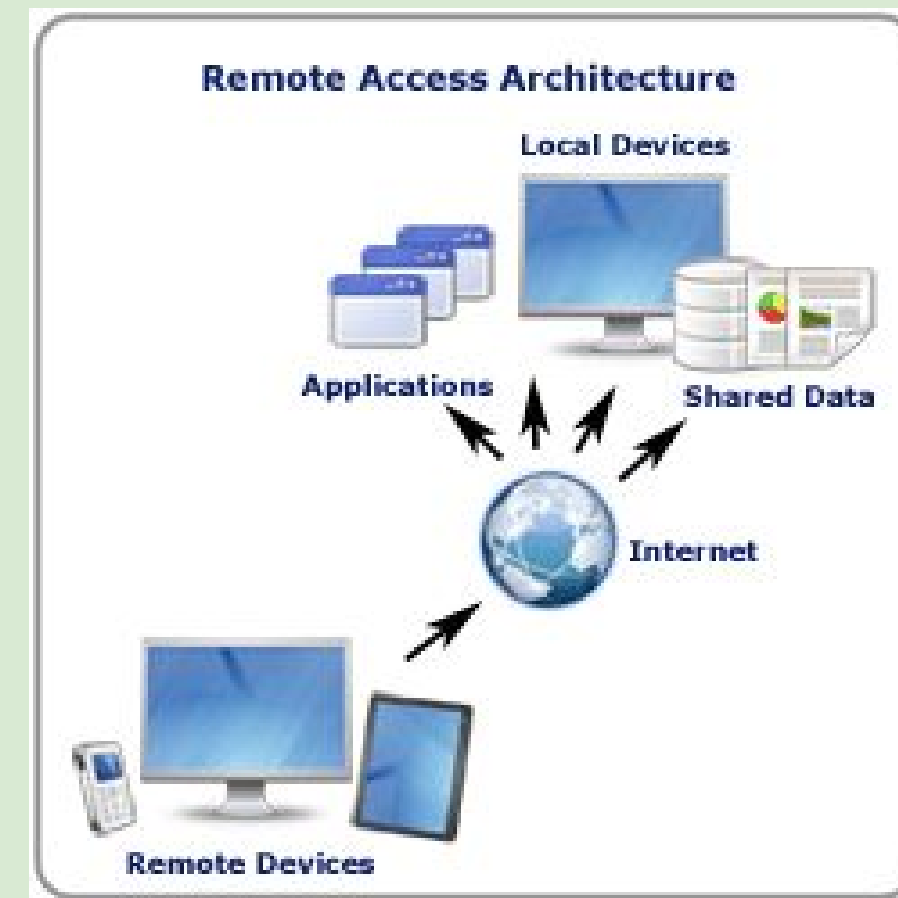
### Areas of Expertise:



- Research Support



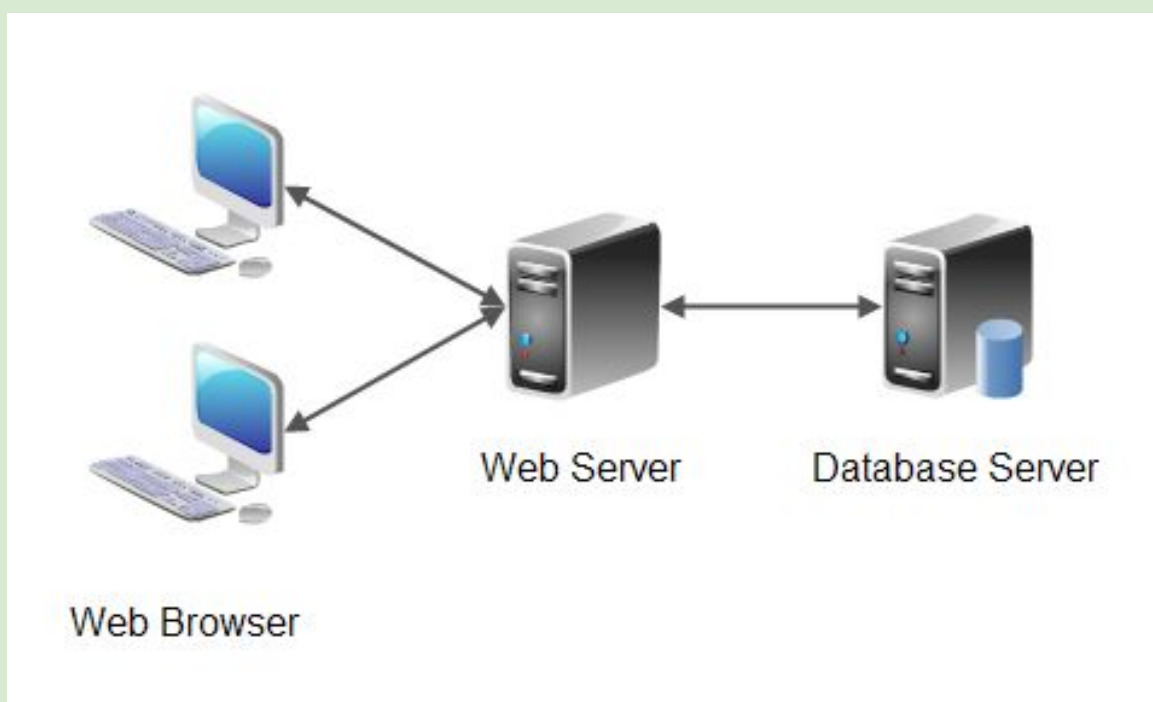
- 3rd party scientific software
  - SPSS, Matlab, Definiens, Amira, etc.



- Data sharing

### Automated, Scalable, Repeatable Flexible IT Infrastructure

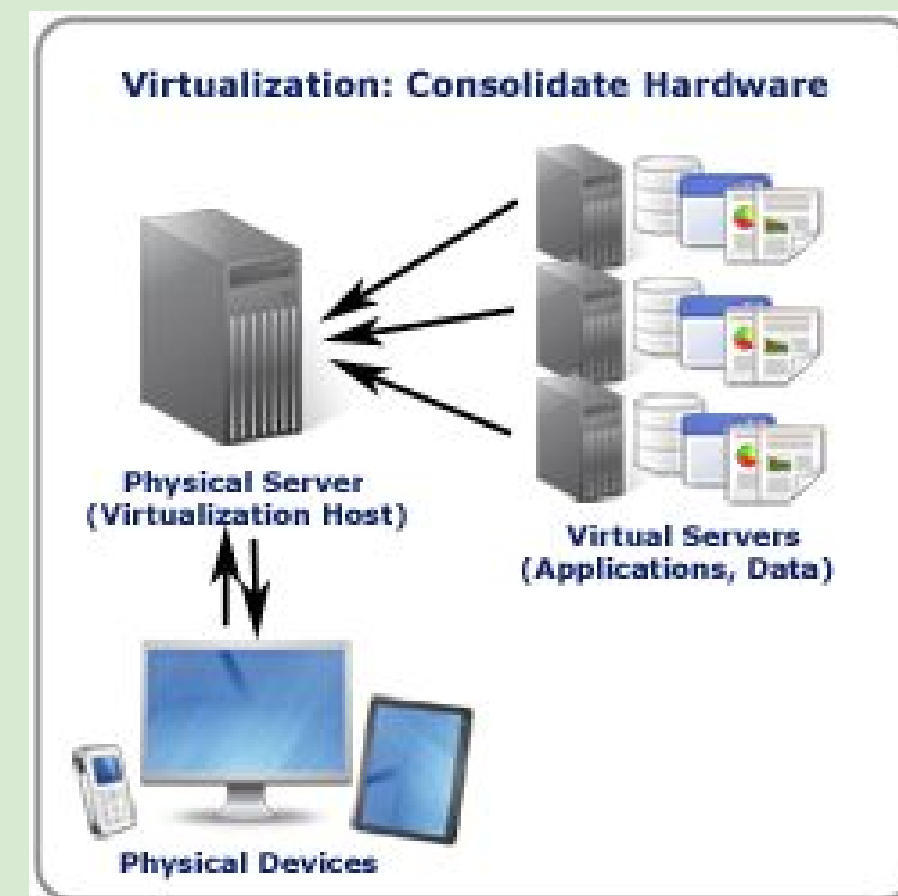
- Amazon AWS
- Google G Suite
- Performance optimization
- Hardware specifications
- Consulting services by the hour



- Apache web servers
- Tomcat webapp servers



- Data protection
  - LDAP, Active Directory (AD)
  - Firewall configuration
  - Application configuration



- VMWare based virtualization

#### SAMPLE ESTIMATE: Limited access FTP server

##### For initial setup:

- 2 hours of consulting services at \$141.00/hr to discuss security, authorization/authentication, networking, etc.
- 10 hours of setup at \$91.00/hr, covering
  - setup of a Windows Server 2016 VM with 100GB local storage, 4GB RAM
  - setup of 1TB external NFS mounted primary storage
  - setup of backup of primary storage to a server located elsewhere on campus

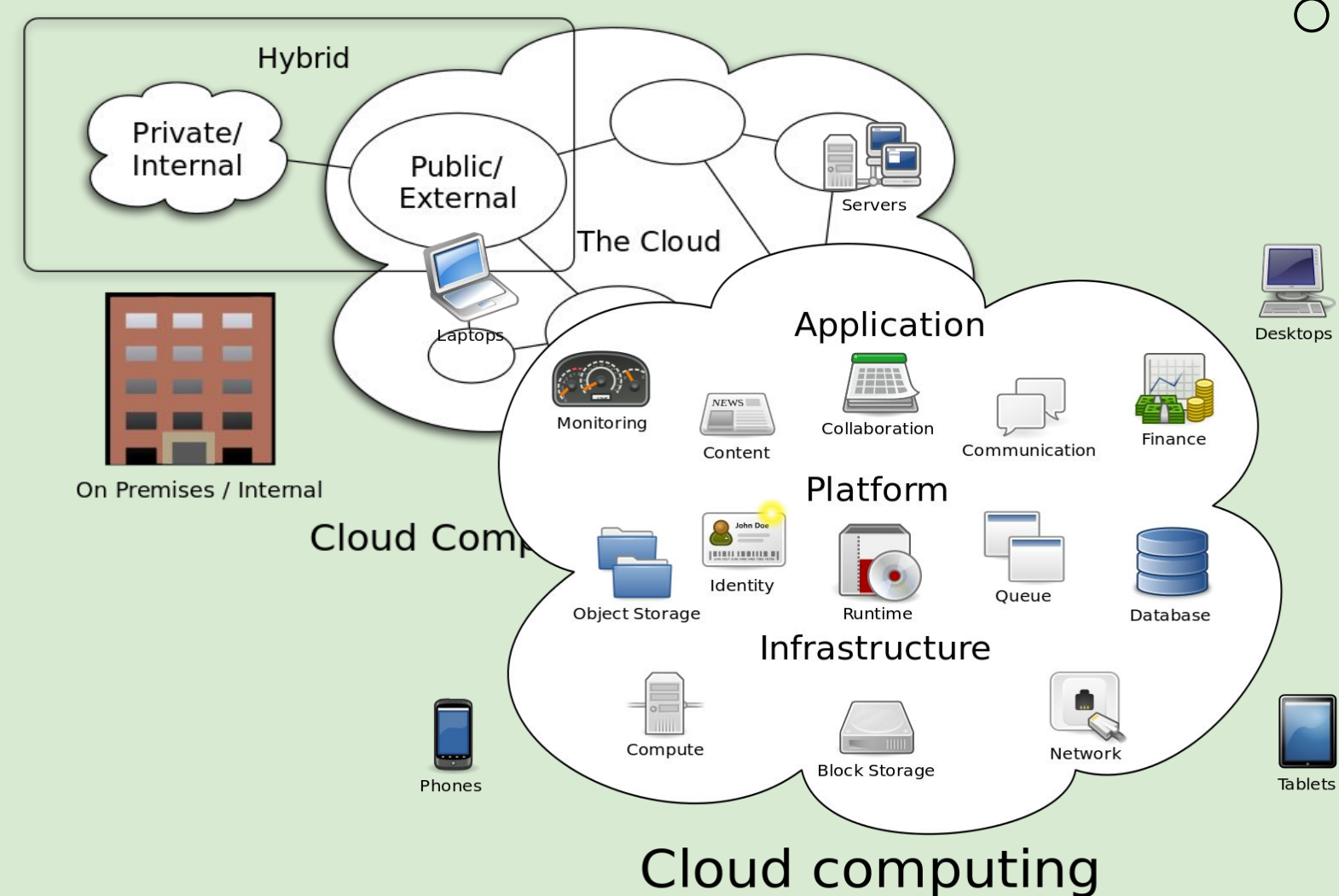
Additional configuration, software installation, etc., including but not limited to implementation of custom access controls may incur additional fees based on our hourly rate of \$91.00/hr.

##### Monthly fees would start at:

- \$145/mo for the VM
- \$290/TB/month for a primary copy with second backup copy

##### Features:

- Setup fee includes:
  - setup of VM, primary data storage and backups for both
  - **working with users to make sure they are able to use the new system.**
- Monthly fee includes:
  - **Resolution of any future technical issues** related to accessing the VM or the data to which it provides access.
  - **Hardware and software updates and maintenance**
  - **User management**
    - Creating new users
    - Deleting users
    - Password changes
    - Access restrictions and modifications
  - **General security notices**
- **Additional data protection** through use of a virtual machine, separate from the data storage server, to restrict electronic access to the data.
- Data storage in a server room with **dedicated power, cooling and network**, reducing downtime.
- Option to start with a primary copy only and **add backup copy later** for an additional monthly fee.



- Hybrid Cloud Computing
- Amazon and/or Google hosting and storage



- Big data management
  - 8TB - 2 PB
  - ZFS, NFS, Samba



- Database administration
  - MariaDB, MySQL and Postgres

**IMPORTANT NOTE:** We are not familiar with the details of the data that would be stored and it is your responsibility to determine the suitability of our environment and infrastructure for your needs, as it would be if you were to use Amazon, Google, etc. Additionally, we provide secure storage of the data and secure transfer of it to an authorized user. Once the data is on the user's resource, e.g. laptop, workstation, USB key, etc., it's security is the responsibility of the user and/or their local IT support team.