



# SHERLOCK CLOUD

A Secure & Managed Cloud Solution

San Diego Supercomputer Center @ UC San Diego

**"Failure to ensure appropriate security protection when using cloud services could ultimately result in higher costs and potential loss of business, thus eliminating any of the potential benefits."**

**"In recognition of the growing number of cyber threats against universities and health care systems, UC Office of the President has initiated a series of systemwide actions to strengthen the UC system's ability to prevent, detect and respond to such attacks."**

# THERE ARE RISKS TO HOSTING SENSITIVE DATA

Sensitive Data (PHI/PII) Is A Proven Hacker Target:

**According to BitSight Technologies, medical records on the black market sell for more \$ than credit card numbers**

**Records are used by criminals to obtain drugs and other treatments**

**Many organizations dealing with 'Ransomware'**

**Impact to individuals whose records are affected by breach**

**Penalties if a breach takes place**

**Impact to reputation/ notification to media outlets**

**And even if not audited, if a breach takes place, scrutiny will follow after the fact**

# INTRODUCING...



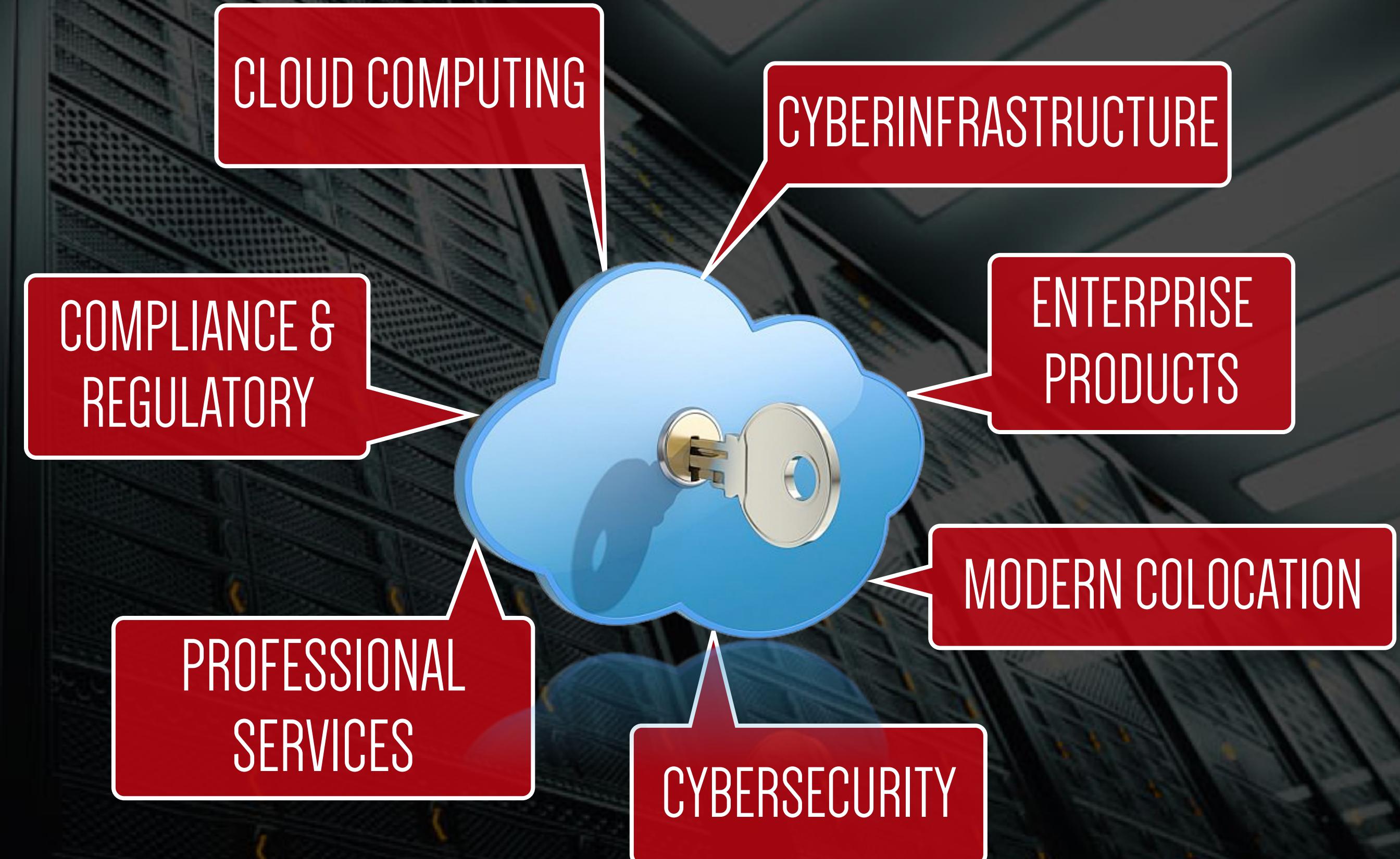
**SHERLOCK**  
Secure Cloud Solutions  @ SDSC



# SHERLOCK

CLOUD

Sherlock Cloud's Managed Infrastructure as a Service (IaaS) Cloud was developed to provide secure end-to-end Cyberinfrastructure for data and computing for academic, state and government partners.



# SERVICE PORTFOLIO



FISMA-Compliant Managed Services based on NIST 800-53 security requirements



HIPAA-Compliant Managed Services leveraging NIST 800-53 security requirements



NIST Controlled Unclassified Information (CUI) (NIST 800-171) Compliant Services



Sherlock SDSC-AWS Cloud Solution for Managing Protected Data

Sherlock Cloud is developed in accordance with NIST controls governing system access, information security, and management processes.



#### Policies, Processes & Procedures



#### Lifecycle Documentation



#### Annual Audits & Assessments



#### Regulatory Know-How



#### Administrative Safeguards

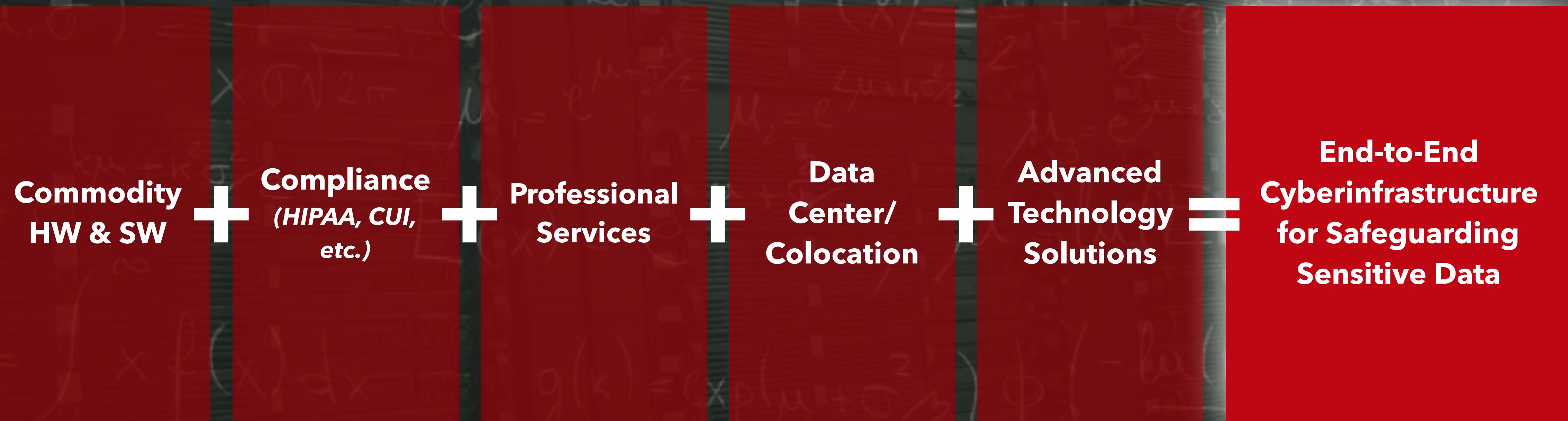


#### Technical & Security Safeguards



#### Physical security

# MORE THAN YOUR TYPICAL IAAS PLATFORM



# MANAGING YOUR ENTIRE STACK

## Policies, Assessments & Audits



**Yearly Security Training, Employee Background Checks**



**Lifecycle Documentation**



**Access Control and Authentication**



**Vulnerability Scanning and Monitoring**



**OS Management, Log Management, Configuration Management**



**Data at Rest Encryption, Data in Transit Encryption**



**Physical Security, Segmented Architecture, Backup & Archiving**

# TECHNOLOGY PLATFORM

## Best of Class Enterprise & Open Source Products

**Storage**: NetApp, Dell  
(File, Block, Database)

**Compute**: Commodity Hardware  
(Dell, IBM, etc.)

**Virtualization**: VMWare

**OS Support**: Windows and Linux



**Shared Services**: Backups (CommVault),  
Authentication (RSA, Active Directory),  
Configuration Mgmt. (Windows GP, Chef),  
Monitoring (Nagios), Managed File Transfer  
(GlobalScape), Secure Access (HW and SW VPNs),  
Anti Virus (Sophos), Certificate Authority,  
Account Auditing (Netwrix), Patch Management  
(SolarWinds)

**Security**: Firewall Segmentation (Juniper, Cisco,  
Vyatta, Sophos), IDS/IPS (Bro, Snort), Auditing  
and Log Management (Splunk), Vulnerability  
Scanning (Nessus), Web Application Firewall (F5)

A close-up photograph of a silver stethoscope lying on a light-colored wooden surface. In the background, a blue book is visible. The image serves as a backdrop for the text block.

Sherlock Cloud platform has already helped support a number of critical applications including Medical Fraud, Cancer Research, Enterprise Risk Management, Healthcare Research and more.

# WHY SHOULD IT BE YOUR STORY?

Because collaborating with Sherlock Cloud offers you a value-added solution. How?

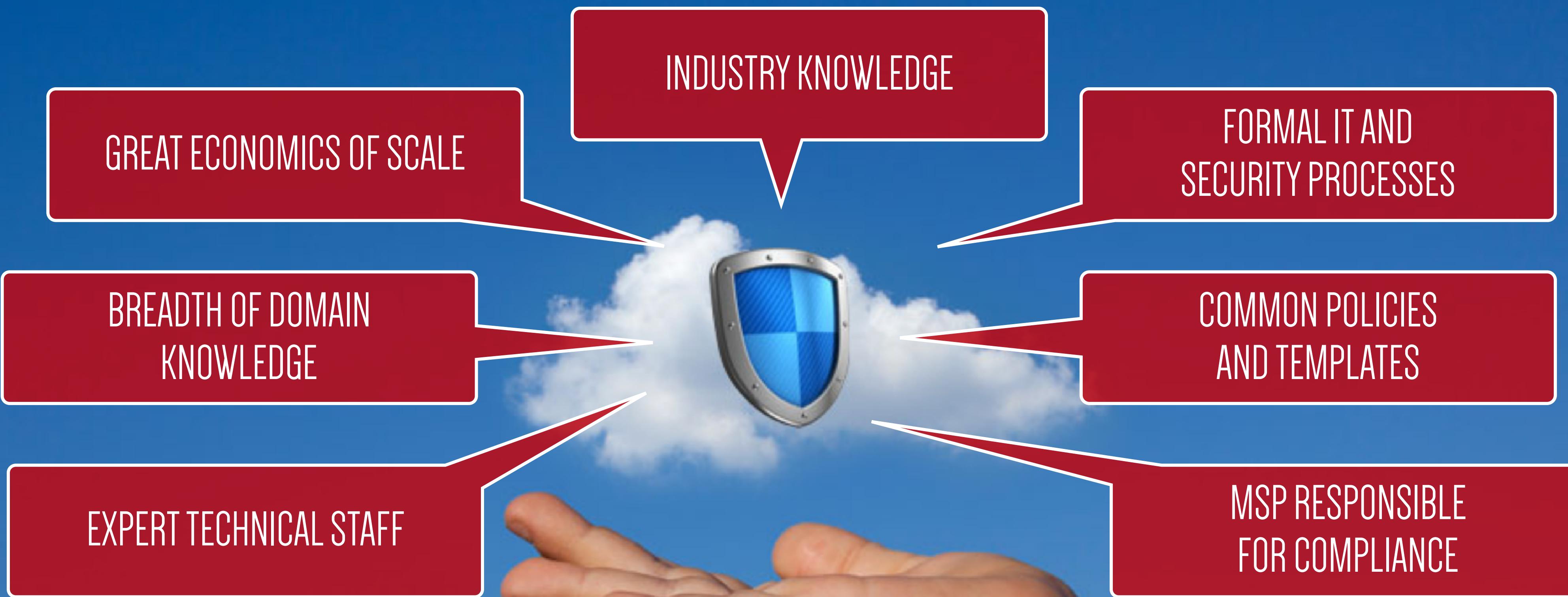
**We've already done the work...so you don't have to - with sizable investments in people and technology.**

**Plus, you can maximize the benefits of your partnership with Sherlock, including:**

- Technical and domain expertise within a top class academic institution
- Access to top-notch researchers and scientists
- Deep discounts on licensing offered to academia

**You'll be partnering with an outstanding team of technologists & researchers that will help you meet your goals.**

# ISN'T IT TIME THAT YOU PARTNERED WITH THE SHERLOCK CLOUD TEAM?



To learn more about how we can put the Sherlock Cloud to work for you, visit our website at:

**sherlock.sdsc.edu**

Or

Email us at:

**sherlock@sdsc.edu**

