



HIPAA in the Cloud

How to Effectively Collaborate with Cloud Providers

Speaker Bio

Chad Kissinger – Founder | OnRamp



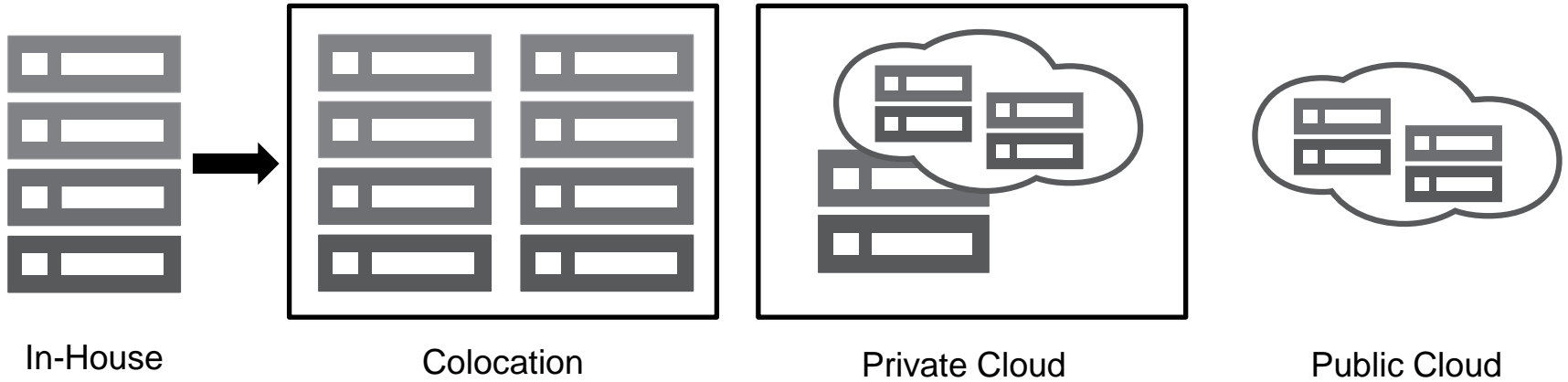
Chad Kissinger is the Founder of OnRamp, an industry leading high security and hybrid hosting provider that operates multiple enterprise class data centers located in Austin, Texas and Raleigh, North Carolina. As an SSAE 16 SOC II Audited, PCI and HIPAA compliant company, OnRamp specializes in working with companies in the Healthcare, Financial, Education and other industries meet the rigorous compliance requirements associated with the storage and transmission of sensitive data.

A leader in the development of OnRamp's HIPAA Compliant Hosting Solutions, Chad brings a wealth of experience, expertise and intimate knowledge of data privacy and security issues.

Agenda

- Evolution of the Cloud
- Comparison of Private vs. Public Clouds
- Other Regulatory Frameworks Similar to HIPAA
- Cloud Adoption in Healthcare - Benefits
- HIPAA in the Cloud - Obstacles
- Key Concerns for Working with Cloud Providers
- Health IT Cloud Forecast

HIPAA in the Cloud



HIPAA in the Cloud

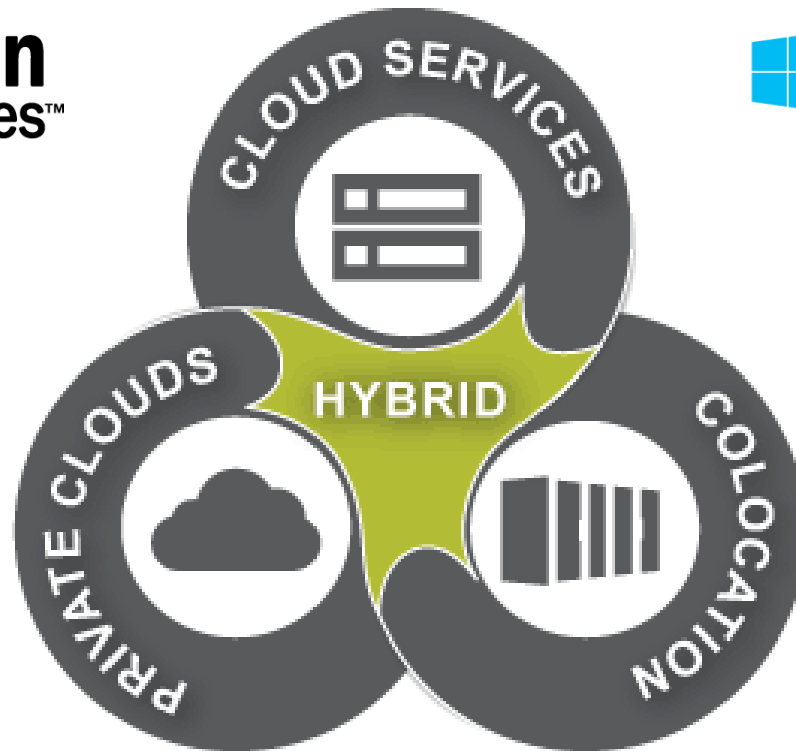
Public Clouds

- Multi-tenant Environment
- Shared Equipment
- Typically Pay-as-you-go
- Less Control Over Hardware Performance - “Noisy Neighbors”
- No Physical Access to Equipment
- Hard or Impossible to Inspect/Audit

Private Clouds

- Single Tenant Environment
- Dedicated Equipment
- Customized Solutions
- Guaranteed Performance (Single Tenant)
- Easy to Inspect/Audit
- Suited for Secured Confidential Information & Core Systems

HIPAA in the Cloud



HIPAA in the Cloud

Public vs. Private Cloud - Key Concern

How do I achieve auditable compliance?

HIPAA in the Cloud



BANKING



E-COMMERCE



GOVERNMENT



HEALTHCARE



HIPAA in the Cloud



GLBA gives the authority to eight federal agencies to administer and enforce the Financial Privacy Rule and the Safeguards Rule which govern the collection and disclosure of personal financial information and requires financial institutions to implement and maintain safeguards to protect customer information

HIPAA in the Cloud



The Payment Card Industry Data Security Standard (PCI DSS) is a set of requirements that prescribe operational and technical controls to protect cardholder data.

HIPAA in the Cloud



FISMA is United States legislation that defines a comprehensive framework to protect government information, operations and assets against natural or manmade threats.

HIPAA in the Cloud

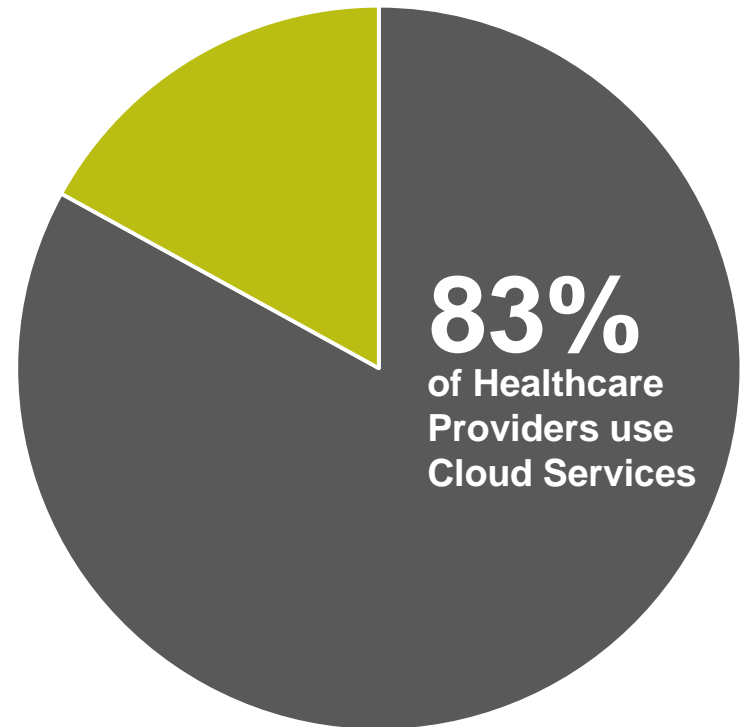


HIPAA gives the Department of Health and Human Services the authority to mandate the use of standards for the interchange of patient health information and to mandate the steps entities must take to provide for the security and privacy of patient health information.

HIPAA in the Cloud

HIPAA in the Cloud - Adoption & Use

83% of Healthcare Provider Organizations are using Cloud Services w/ SaaS-Based Applications being the most popular (66.9%) and 9.3% plan to adopt cloud services.



HIPAA in the Cloud



ADOPTION & USE

TOP REASONS FOR ADOPTING



MAINTENANCE
COSTS



SPEED OF
DEPLOYMENT



STAFFING
CHALLENGES

83% USE CLOUD SERVICES



CLINICAL
APPS +
DATA



HIE

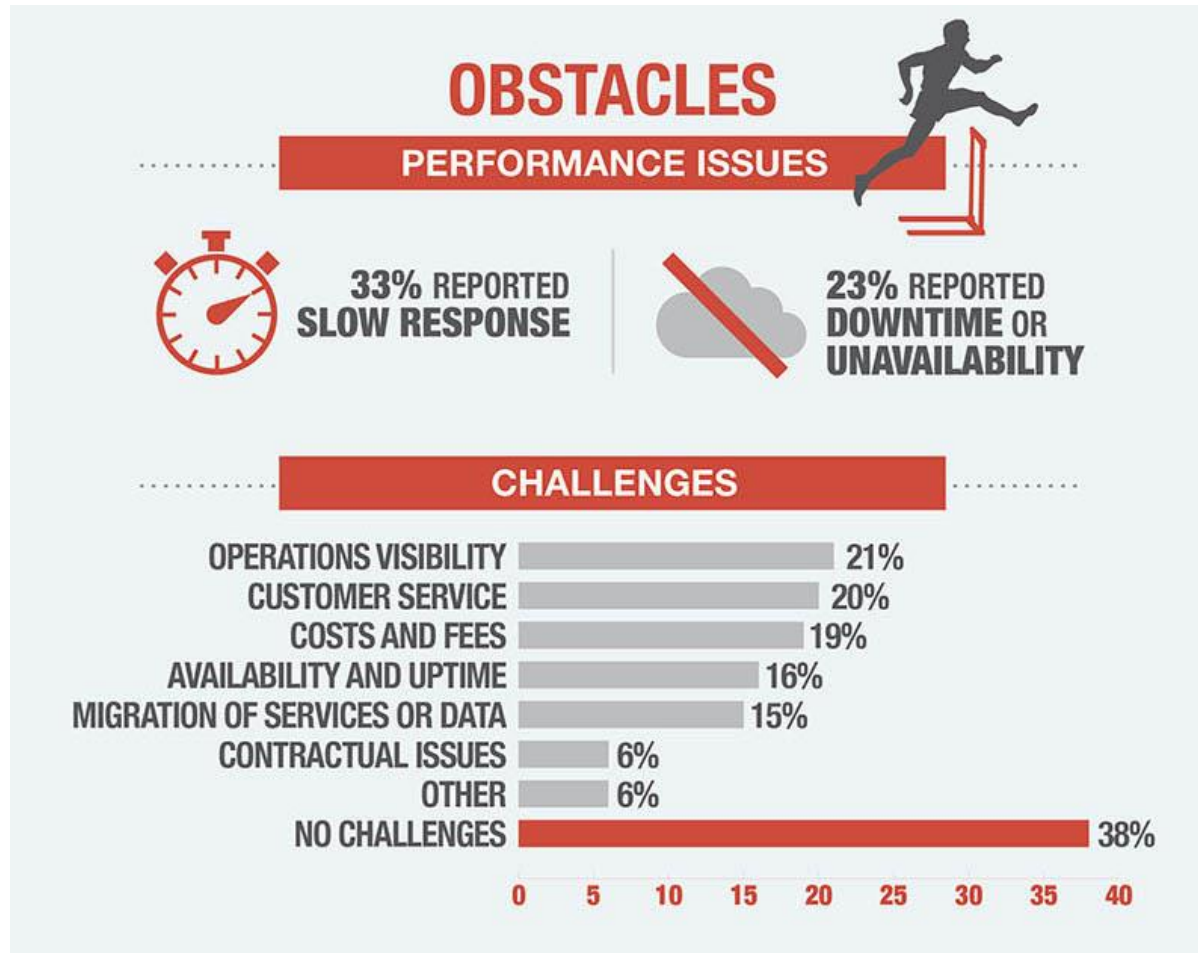


HR APPS
+ DATA



BACK UP +
DISASTER
RECOVERY

HIPAA in the Cloud



HIPAA in the Cloud

Disassociation with Infrastructure

In a physical IT environment, the key components of a compute infrastructure are easily identified and the safety of the data stored within the environment can easily be determined.

In a cloud infrastructure, the location of these components, whether they are properly configured, and whether they even exist is not always clear.

HIPAA in the Cloud

Considerations - **Compliant Collaboration**



Collaboration between in-house employees and subcontractors is necessary to meet and maintain compliance

HIPAA in the Cloud

Considerations - **Security / Compliance**



Risk associated with storing electronic protected health information (ePHI) on platforms or within environments that do not have HIPAA compliant hosting processes, systems, and procedures.

HIPAA in the Cloud

Considerations - **Compliant Encryption**



Ensuring compliance with NIST standards for all compute, storage and transmission media used to handle ePHI.

HIPAA in the Cloud

Considerations - Media Sanitization



Ensuring compliance with NIST standards for appropriately rendering storage media unusable, unreadable, or indecipherable.

HIPAA in the Cloud

Considerations - **Security Incident Response**



Cloud users and providers must prepare for security incidents and adequately detect, report, forensically examine, mitigate and contain and eradicate risk associated with the incidents.

HIPAA in the Cloud

Considerations – **Availability / Uptime**



EPHI must be “appropriately” available to authorized users. This often requires a Disaster Recovery (DR) or secondary site to maintain availability in the case of a cloud outage.

HIPAA in the Cloud

Evaluating Providers

TOP CONSIDERATIONS WHEN SELECTING A CLOUD PROVIDER



WILLINGNESS TO ENTER
INTO A **BUSINESS**
ASSOCIATE AGREEMENT



PHYSICAL + TECHNICAL
SECURITY

HIPAA in the Cloud

Evaluating Providers

- Employee Training
- Media Handling & Sanitization Policies
- Information System Development Lifecycle
- Cooperative Policies
- Coordinated Incident Response

HIPAA in the Cloud

Subcontractor Negotiations

Business Associates Agreements

- Should reflect division of responsibilities
- Should include (but usually do not) the Administrative, Technical, and Physical measures the customer must still take to protect ePHI
- Realistic patient access, amendment and accounting of access request handling

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Subcontractor Negotiations

Indemnification & Limitations of Liability

- Indemnifications were specifically excluded from the Omnibus rule despite many requests to address them. Vendors won't accept indemnifications normally.
- Limitations of Liability “contain” the amount of risk accepted and facilitate pricing of vendor products

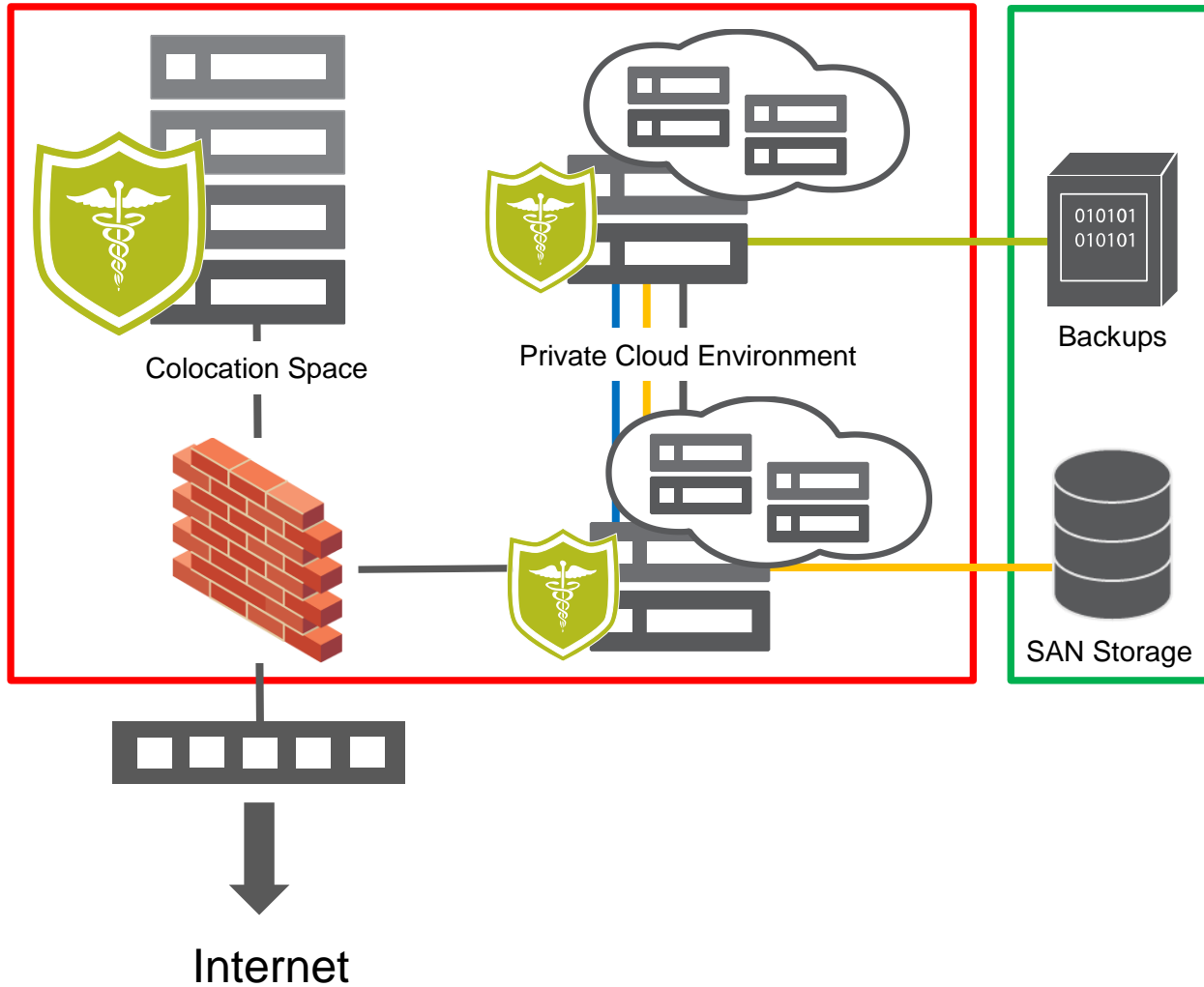
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Subcontractor Negotiations

Privacy Injury Liability & Insurance

- Privacy Injury Liability - Breach notification, credit monitoring and other expenses related to a breach are usually handled by customer.
- Insurance – Breach notifications and other remediation are conducted by Covered Entity – their insurance should cover these costs.

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HIPAA in the Cloud



FORECAST

PARTLY SUNNY

NEARLY ALL ADOPTERS WILL EXPAND CLOUD SERVICES

AREAS OF EXPANSION



HOSTING OF
ARCHIVED DATA



BACK UP +
DISASTER
RECOVERY



HOSTING OF
OPERATIONAL
APPS + DATA



ONLY 6% WILL NOT ADOPT
CLOUD SERVICES IN THE FUTURE

HIPAA in the Cloud

Q&A

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Thank you!