ASP: Web Delivered Cancer Registry

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Agenda

- ASP Definition
- Value Proposition
- Considerations
- IMPAC’s Précis ASP
  - Functionality
  - Security & Privacy
  - Infrastructure & Reliability
- HIPAA & ASP’s: Fact vs. Fiction
- Précis-Central Demonstration
Application Service Provider: a company that provides software applications and the necessary IT infrastructure and support services to customers on a subscription basis. ASP’s typically host applications at a remote data center and deliver them to customers via the Internet.
Platform Architecture

Internet Compatible PC
- Main Facility
- Remote Facility
- Home

IMPAC ASP Data Center

Registry Application and Database
IMPAC hosts the Registry application from a remote data center.

IMPAC is responsible for:

- Server Hardware maintenance & support
- Daily data backups & offsite tape storage
- Timely software upgrades
- Maximum system availability
Value Proposition

Operational Benefits

- Reduced Capital Expenditures
  - No need to buy, maintain, or upgrade IT infrastructure
- Reduction in required internal IT resources
  - System maintenance and support included with ASP Hosting Service
  - Alleviates IT labor shortage & turnover issues
- Focus on Core Competence
- Multi-Site Accessibility
- Secure, off-site backup reliability
Value Proposition

Operational Benefits

- Maximum availability hardware infrastructure
  - Sophisticated, high-reliability servers
  - Virtual elimination of system down-time
- Scalability
  - Ability to accommodate additional users and applications without the client burden of purchasing new or additional hardware
- Rapid Implementation
  - No need to implement additional IT infrastructure
- Lower up-front investment / Predictable monthly costs
Value Proposition

Considerations

- Laws, Policies, etc...
- Costs: Long-Term vs. Short-Term
- Performance (System Response Time)
- Application Customization
- Risk of Data Exposure / Data Loss
- Risk of System Unreliability
Précis ASP

IMPAC Functionality

• Platform Options: Traditional or ASP Hosted
  - Précis-Central & Précis-Hospital
• ASP Client Hardware Minimum Requirements:
  - Pentium II PC’s, 266MHz, 64MB RAM
  - Win2000 Operating System (recommended)
  - 128 Kbps per user Internet connection (recommended)
  - Citrix ICA Client Software (provided by IMPAC)
  - No application or database servers!!
• IMPAC Practice Management / EMR ➔ Registry Interface
Step 1: Select Précis Desktop Icon

(0 Seconds)
Citrix ICA Client Initiates
(5 Seconds)
Step 2: IMPAC Data Center Username / Password Authentication
Précis Application Initiates

(10 Seconds)
Step 3: Précis Application Login

(12 Seconds)
Précis Application Available
(15 Seconds)
IMPAC Security & Privacy

• Data Center: Physical Environment
  - Nuclear fallout shelter
  - Reinforced for earthquake resistance

• Data Center: Physical Security
  - 1st line: 24x7 Security & Secure Card Key Authentication
  - 2nd line: Access Portal with Fingerprint Scanning Authorization
  - 3rd line: Secured Server Enclosure
Access Portal with Fingerprint Scanning Authorization
Précis ASP

IMPAC Security & Privacy

Server Enclosure
IMPA Security & Privacy

- Configurable for Multiple Log-in Layers
  - ASP Data Center Login
  - Application Login
- Firewall (Checkpoint)
  - Monitors and prevents unauthorized system access
- Encryption
  - Protects data confidentiality during electronic exchanges
  - 128-bit 3DES encryption
  - Frequently updated encryption keys
IMPAC Security & Privacy

- IMPAC HIPAA Initiative
  - IMPAC HIPAA Solution Task Force (May 2000)
  - Chief Privacy Officer (CPO)
    - Review and understand all proposed regulations
    - Proactively take necessary steps to compliance
Infrastructure & Reliability

- State-of-the-Art Facility
  - $1.2 Million HW, SW, and Networking investment
- Server Fail-Over Capabilities
  - RAID configuration
  - Hot swap/add/ removal without interruption
- Redundant Power Sources
  - Dual, fully redundant power grid (public and private)
  - Load-sharing power supplies between servers
  - Power conditioning between interruptions
  - Multiple-day backup generator for total outages
Infrastructure & Reliability

- 6MB Data Bandwidth
  - Redundant Internet Connectivity
  - Dual feed – no lag in switch over

- Registry Support Infrastructure
  - 15 Registry Client Services Personnel
  - 15 Registry Engineering Personnel
  - 11 On-Staff Certified Tumor Registrars
  - 8:00am – 8:00pm (EST) Application Support (M-F)
  - 24 x 7 ASP Data Center Support (non-business hours via beeper)
Précis ASP

Infrastructure & Reliability

- IMPAC History
- Oncology Information Systems Vertical Focus
- Diversified PM, EMR, and Registry Application Portfolio
- Diversified ASP Product Portfolio
- 70+ ASP Sites Live / Being Implemented
Fact vs. Fiction

• IS HIPAA’s intent to discourage or encourage the electronic exchange of data?

• Per HIPAA, can my patient data be stored at an offsite facility not in my immediate control?

• Is data transfer via the Internet HIPAA compliant?

• What are HIPAA’s minimum specification for levels of data encryption?
Précis ASP

Précis–Central Demonstration

Judy Jacobs Williams, RHIT, CTR
Thank you!
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