

ASP: Web Delivered Cancer Registry

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ASP: Web Delivered Cancer Registry

Agenda

- ASP Definition
- Value Proposition
- Considerations
- IMPAC's Précis ASP
 - Functionality
 - Security & Privacy
 - Infrastructure & Reliability
- HIPAA & ASP's: Fact vs. Fiction
- Précis-Central Demonstration

ASP Definition

Dictionary



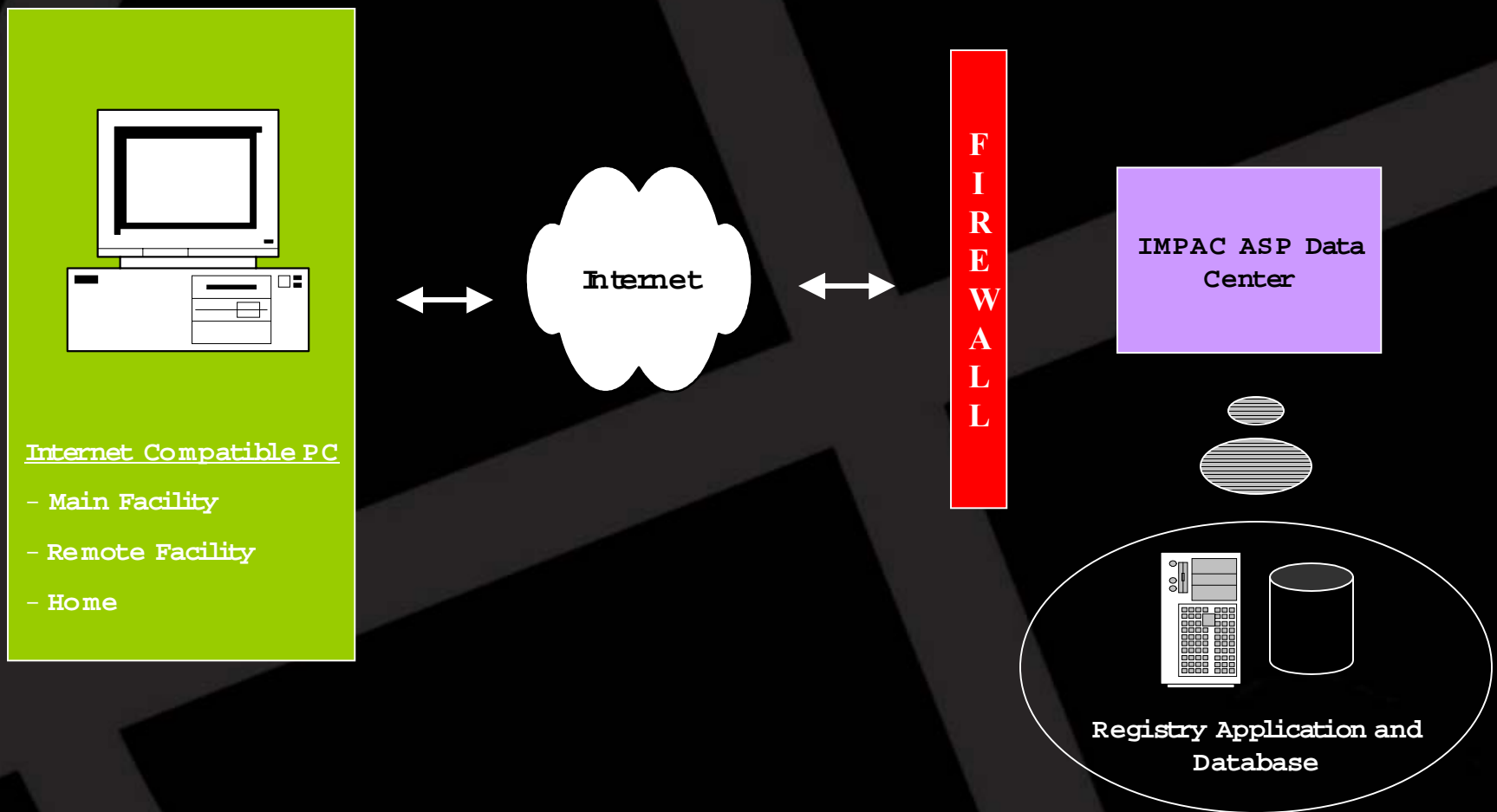
... a small venomous snake of Egypt usually held to be a cobra.

or

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.

ASP Definition

Platform Architecture



ASP Definition

Recap

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

IMPAC Functionality

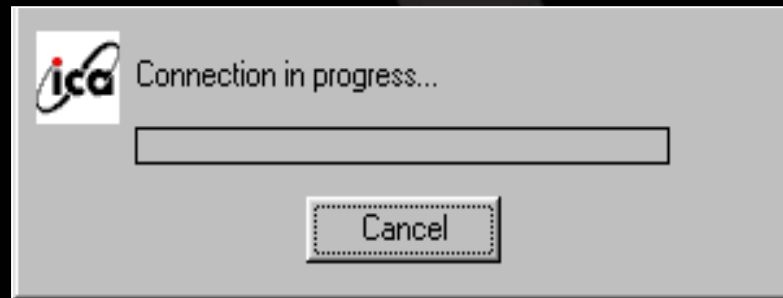
- Platform Options: Traditional or ASP Hosted
 - Précis-Central & Précis-Hospital
- ASP Client Hardware Minimum Requirements:
 - Pentium II PC's, 266 MHz, 64 MB RAM
 - Win2000 Operating System (recommended)
 - 128 Kbps per user Internet connection (recommended)
 - Citrix ICA Client Software (provided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

IMPAC Functionality



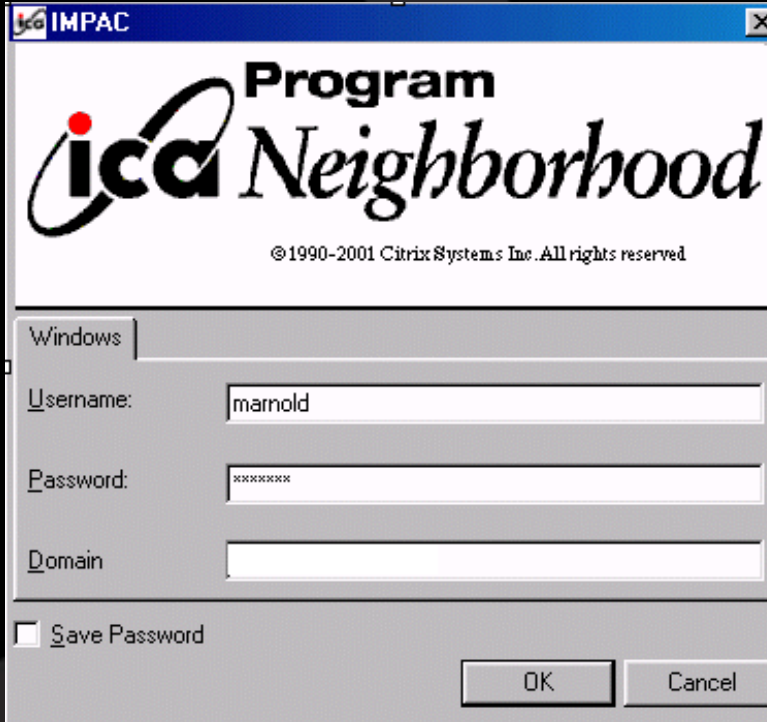
Step 1: Select Précis Desktop Icon
(0 Seconds)

IMPAC Functionality



Citrix ICA Client Initiates
(5 Seconds)

IMPAC Functionality



The screenshot shows a Windows-style dialog box titled "IMPAC". The main content area features the "ica Program Neighborhood" logo and the text "© 1990-2001 Citrix Systems Inc. All rights reserved". Below this, there are three input fields: "Username:" with the text "marnold", "Password:" with masked characters "*****", and "Domain:" which is currently empty. At the bottom left, there is a checkbox labeled "Save Password" which is unchecked. At the bottom right, there are two buttons: "OK" and "Cancel".

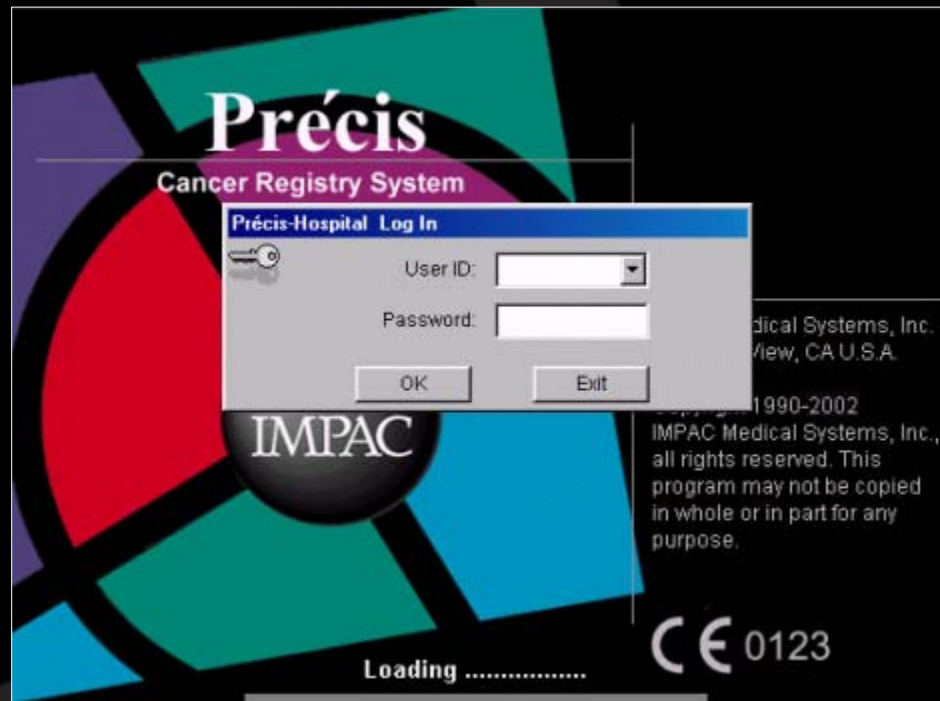
Step 2: IMPAC Data Center Username /
Password Authentication

IMPAC Functionality



Précis Application Initiates
(10 Seconds)

IMPAC Functionality



Step 3: Précis Application Login
(12 Seconds)

IMPAC Functionality

The screenshot displays the 'Précis-Hospital Master Patient Index' window. It features a menu bar (File, Edit, Follow-Up, Reports, Utilities, Communications, Help) and a toolbar. The main area contains a table of patient records with columns: Last Name, First Name, MI, Maiden, DOB, SS#, Med Rec #, and Accn#. Below the table is a 'Summary View' section with various input fields for patient details.

Last Name	First Name	MI	Maiden	DOB	SS#	Med Rec #	Accn#
ACID	REFLUX	TOM		1917/12/21	999999999	999999	199200129
ADAMS	SAMUEL	Q		1904/04/01	111111161	072589	198900086
ADAMS	JOHN	Y	QUINCY	1925/11/16	123451234	999999	199000080
ADAMS	EVA	Q		1929/06/29	999999999	999999	199100008
ADAMS	ABIGAIL	W		1929/06/29	999999999	999999	199100045
AGORIPINA	GINA	R	SAMUELS	1921/08/24	999999989	9999999	199000085
AIRPLANE	MARTHA	S	STEWART	1916/06/29	012345679	073270	199900004
ALLEN	FRIEDA	S	LAKE	1941/06/07	999999999	999999	199100101
ALLRIGHT	MABEL	S	WHODUNIT	1929/07/14	111111171	051591	198900088
ALPHA	HEATHER	W		1971/11/30	999999999	096094	199700110
AMERICA	CAPTAIN			1934/11/12	999999999	999999	199800016
AMINUTE	JESS	I		1939/04/21	999999999	999999	199200038
ANDEVE	ADAM	E		1966/05/12	111111114	058496	198900071
ANDREWS	URSULLA	B		1967/03/05	999999999	999999	199100056

Summary View

Primary Site: C619 (00)	Abstractor's Initials: TST	Reported To State: y
Tx Summary: R,S	Last Contact Date: 03/20/2001	Edit Check Status: (9) Suspended
Vital Status: (1) Alive	Follow Up Due Date:	Alt Med Rec#: 999999999
Diagnosis Date: 08/19/1992	Follow Up Status:	Hospital ID: 0006999990
First Tx Date: 06/19/1992	Case Status: (1) Incomplete	Tumor Conference: (0) Not done
Abstract Date: 10/07/1992	Case Completed: 01/07/1997	
Disease Free Survival: (0) Normal activity	Suspense Date:	

User ID: Aneta | Displayed Patients / Total Patients: 1/1176 | Selected Record: 1 | Date: 5/6/02 | Last Name: ACID | First Name: REFLUX

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

IMPAC Security & Privacy



Access Portal with Fingerprint Scanning
Authorization

IMPAC Security & Privacy



Server Enclosure

IMPAC 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 3 DES 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

- 6 MB 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 Tutor Registrars
 - 8:00am – 8:00pm (EST) Application Support (M-F)
 - 24 x 7 ASP Data Center Support (non-business hours via beeper)

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

HIPAA & ASP'S

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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