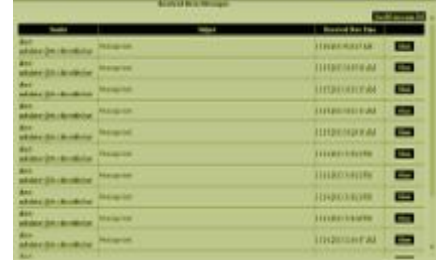


Project Overview:

This project involved putting in place a set of standards, protocols and services that enable simple, secure electronic transport of health information (push messaging) between healthcare participants. The intent is to facilitate “direct” communication with a focus towards more advanced levels of interoperability – something which cannot be achieved using simple paper. Direct focuses on transportation



security mechanism for the content meant to be exchanged, but does not specify the actual content itself. Any two participants, organizations or communities without a central governance structure can implement the Direct Project standards and services. The Direct Project applications are similar to commonly available email applications but go further in providing encrypted messaging to ensure the safety and security of exchanged information. Just like email, the Direct Project requires the user to know the recipient’s address. Most Direct Project applications do not include a system for searching and finding patient records or provider contacts (direct project addresses). Benefits of deploying a Direct Project application include having securely encrypted messages and attachments, cost-effective information exchange, and a relatively simple implementation.

Technology

ASP.NET 4.0, JavaScript, CSS, Window Service (.NET 4.0).

The web interface is interactive and simple to use which involves client side technologies (like JavaScript, CSS). The server technology involves ASP.NET in background which is used to encrypt the message using certificates and send message. For incoming message there is a window service running at the background which fetches incoming messages from mail server and decrypt the message using certificate and update the database.

About our Client:

Client Name: Confidential | Location: USA | Industry: Healthcare IT

Project Description

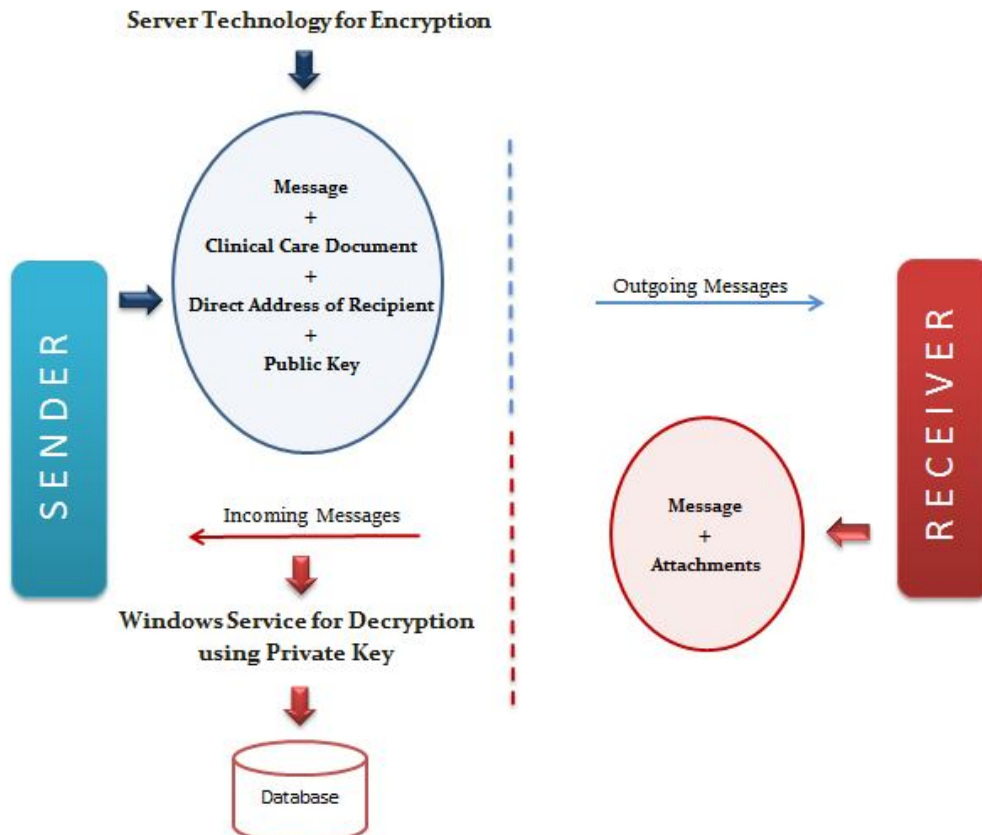
The Direct Messaging involves an interface to send messages. This interface provides the facility to enter direct address of recipients and the ability to attach Clinical Care Document (CCD) along with the messages. There is one more interface used to show incoming messages. Users have the provision to see incoming messages and open the attachment files.

Minimum Requirements:

The following are minimum requirements to participate in Direct exchange:

- Known and trusted “Direct addresses” for the sender and the recipient: a Direct address is an identifier of the provider and location. This address is essentially an email address.
- A digital certificate which associates (binds) the Direct address to a public key (often referred to as a “public certificate”) and to a private key.

In order to send a Direct message to another participant, a sender will require the recipient’s Direct address and the recipient’s public certificate. The receiver will receive the Direct message through his/her direct address and will decrypt it with the private key.



Screen Shots:



Screen 1: This is the screen shot of the interface used to send direct messages. User can select patient by patient name, medical record number, date of birth and social security number. The user can then select the referral provider and by default the latest 'CCD Summary Document' of the selected patient gets attached.



Screen 2: If a user wants to send a specific 'CCD Summary Document', then he has the option to send it from the CCD list of the patient.

Sender	Subject	Received Date Time	
direct-ambulatory@m.echatcertified.net	Message test	11/16/2013 9:23:27 AM	View
direct-ambulatory@m.echatcertified.net	Message test	11/15/2013 10:35:18 AM	View
direct-ambulatory@m.echatcertified.net	Message test	11/15/2013 10:33:15 AM	View
direct-ambulatory@m.echatcertified.net	Message test	11/15/2013 10:31:14 AM	View
direct-ambulatory@m.echatcertified.net	Message test	11/15/2013 10:29:10 AM	View
direct-ambulatory@m.echatcertified.net	Message test	11/14/2013 3:19:21 PM	View
direct-ambulatory@m.echatcertified.net	Message test	11/14/2013 3:19:21 PM	View
direct-ambulatory@m.echatcertified.net	Message test	11/14/2013 3:19:21 PM	View
direct-ambulatory@m.echatcertified.net	Message test	11/14/2013 3:18:16 PM	View
direct-ambulatory@m.echatcertified.net	Message test	11/14/2013 11:44:47 AM	View

Screen 3: There is provision for the user to see the list of received messages. Given below is the screen shot. When user clicks on view, message details are shown in popup window.

Received Message Details

[Back to list](#)

Subject: Message test

From: direct-ambulatory@m.echatcertified.net

Received Time: 11/16/2013 9:23:27 AM

Body: [Download Attachments](#) [Process Attachment](#)

Message test

Screen 4: Following is the screen shot to see the details of received message. User can download the attachment. User has the provision to process the attachment.