



# CUSTOMER CONNECTION

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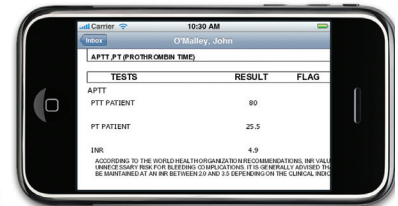
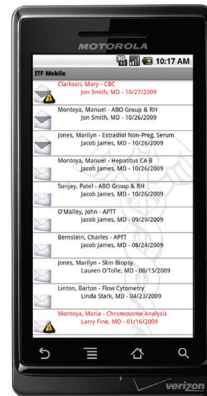
## A Smart Option: Mobile Connectivity Solution Gives Physicians 24/7 Access to Lab Results

Halfpenny Technologies has expanded the reach of its Integration Technology Framework™ (ITF) to the iPhone, BlackBerry and Android-powered smart phone platforms with the recent introduction of ITF-GoDoc. This “technology of tomorrow” is available today to give your institution a competitive edge with your physician community.

Focused on simplifying result reporting for labs and other ancillary service providers, Halfpenny has developed a streamlined, easy-to-view results presentation format that’s compatible with today’s most popular portable devices. Physicians are not only able to designate which reports are delivered to their smart phones but can also filter results according to a variety of criteria so that only those results deemed important are routed to the mobile device. This ability to filter results based upon physician preference limits alerts, providing a significant improvement over other clinical messaging systems, which can overload the physician with “nuisance” alerts. Physicians can even select specific lab tests for auto-trending so they can monitor result trends.

“As physicians seek more efficient ways of accessing and managing clinical information, they are increasingly relying on their handheld devices to provide them with time-critical information,” says Charles Halfpenny, president and founder of Halfpenny Technologies. “With ITF-GoDoc, physicians are able to review lab results, pathology reports and radiology reports at their convenience, which not only provides added flexibility but also enables them to respond more quickly to patient needs.”

ITF-GoDoc is an extension of Halfpenny’s ITF-Portal, a Web-based connectivity solution that allows clinicians to securely order lab procedures and review result reports via a standard Web browser. ITF-GoDoc ensures the secure transfer of clinical data to mobile devices via Halfpenny’s ITF-SecureConnect architecture, which utilizes a “push” concept similar to that used for BlackBerry e-mail. This approach eliminates the need for ITF-GoDoc to make a physical connection to a remote server to view each report, while ensuring HIPAA-compliant security and confidentiality.



ITF-GoDoc enables physicians to securely access essential clinical result reports from iPhone, BlackBerry or Android-powered smart phones.

“With ITF-GoDoc, physicians no longer have to wait for lab reports to arrive or take the time to log in to a laptop or desktop computer to review clinical results,” says Jerry Baker, CEO of Halfpenny Technologies. “Instead, physicians are alerted proactively when results or panic values are available, providing them with the data they need to expedite clinical care decisions.”

## Limited IT Resources? Halfpenny Offers a Practical, Affordable Solution

Halfpenny Technologies is the nation’s leading information technology partner for hospitals and independent laboratories. If your lab has an unmet technology need, chances are Halfpenny has a solution that can help you fill it, and at a lower cost than bringing on full-time employees or outlaying large sums from capital budgets.

If you or your clients have limited IT resources, we have experts in all areas and solutions to simplify the interfacing process. If you have the technology, but not the staff to get the projects to completion, we can fill in the gaps with project management and other services. Plus, Halfpenny offers a number of products and services that you might not be geared up for, such as our innovative new ITF-GoDoc solution and the ITF-Portal, a highly specialized interface engine that provides Google-like search capability, streamlined single page order entry and PDF generation for facilities unable to transmit or receive discrete data.

Halfpenny has expertise and practical, affordable solutions in a variety of areas, including:

- **EMR Interfaces** – We have facilitated interfaces for laboratory clients to more than 70 EMR systems, many of which have been bidirectional (orders and results).
- **Health Information Exchange** – ITF-Portal enables physicians to order laboratory procedures and review results in a secure, HIPAA-compliant environment from the hospital or laboratory through a standard Web browser.
- **Medical Necessity Checking** – Halfpenny’s MPChecker makes the medical necessity verification process simple, fast and accurate.
- **Web-Based Test Ordering** – ITF-Portal’s single screen ordering module is the cleanest, simplest Web-based ordering software on the market.
- **Secure Message Delivery** – SecureConnect provides all the security of a VPN without the accompanying implementation delay, expense and aggravation. Our staff or yours can establish connectivity to an outside facility in as little as 15 minutes without requiring the involvement of IT staff on either side of the connection.
- **Remote Report Auto-Printing** – SecureConnect can automatically remote-print any PDF file sent to a site and maintain an archive for easy reprinting when necessary—eliminating the need for faxing reports.
- **Reference and Cooperative Interfaces** – Whether the systems involved support HL7 or not, Halfpenny has the skills, tools and experience to get these complicated projects completed, along with the products to simplify the ongoing support that these projects inevitably require.
- **Test Dictionary Management** – Whether for lab-to-lab or for sophisticated, large scale EMR systems, test dictionary building and maintenance is a demanding task, and our staff of experts in laboratory testing can handle the whole project.
- **Project Management** – Halfpenny’s team of managers have experience implementing not only our solutions, but solutions provided by other vendors. We currently provide project management services to a number of top labs that have their own technology, but lack sufficient staff to manage the increasing demand for EMR interfaces. We can even augment your existing interface engine or portal solutions.
- **LOINC Services** – We can facilitate the entry of LOINC codes in our clients’ laboratory information systems (LIS) and can provide external storage and mapping of LOINC sets externally if an LIS is incapable of storing LOINC codes.

## PDF Files Inside HL7 Result Messages: Enhancing Data Presentation for a Competitive Edge

That’s right, PDF files can be embedded into HL7 messages and processed into patient charts by several EMR systems. In fact, Halfpenny Technologies has already implemented this trend-setting strategy for several clients across the nation. HL7 lab result messages are a great way to send clinical lab results, especially for tests that report out numeric values or simple text results such as “positive/negative.” Most EMRs have refined the presentation of this type data into an effective format that clinicians are familiar with.

Unfortunately, interpretive data, such as pathology and cytology, has been relegated to being presented as plain text without the formatting and graphics that enhance modern paper reporting. New developments in the EMR world are breaking this barrier to effective presentation and Halfpenny is leveraging these new capabilities to help build loyalty for our clients within their physician communities.

More EMR vendors are supporting the importation of PDF files, and some, including eClinicalWorks, NextGen, and MeridianEMR, are even accepting PDF files as part of an HL7 message. The process involves translating the binary PDF file data using one of several industry standard algorithms similar to the techniques used to embed photographs into email.

Of course, just as each vendor has its own interpretation of the HL7 standard, each has its unique specification for how the “embedded” PDF data has to be incorporated into an HL7 message. Halfpenny’s Interface Technology Framework (ITF) is perfectly suited to meeting the challenges of presenting the data in whatever format the EMR vendor demands.

Embedded HL7 transmission is just one of the ways that Halfpenny leverages PDF result reporting to make your laboratory stand out from the competition. Contact us to see how we can make the presentation of your data as exceptional as the quality of your service.

## Application Scripting: A Proven Solution for Simplifying Data Exchange with Legacy Systems

It’s just like magic, yet it’s totally practical. It’s the ‘medium tech’ solution to interfacing and data import/export projects for older legacy systems that don’t support data exchange. If an IT project involves tasks that a user could perform with a keyboard and/or a mouse, it can probably be scripted.



So what is scripting? Scripting involves the use of a special computer programming language that runs another computer program as if it were a human user doing the same task. Script programs send keystrokes, keyboard commands and even perform sophisticated mouse operations automatically, reliably and without making any typos.

Modern systems with inherent HL7 capabilities make the exchange of data among disparate systems manageable, but many labs still have to integrate with older systems that can't easily accept external data or export critical data for loading into other systems. Using clerical staff to enter data is costly and error-prone. In a project with a large volume of data, it can also be expensive, especially if the need is ongoing.

A script to enter data into a legacy system can accept input in nearly any format that the upstream system can provide, be it HL7, delimited text or formatted text. The script programming languages that Halfpenny uses have the sophisticated data manipulation and validation capabilities needed to organize the data for proper entry. The script can start the program on the legacy system, log in if necessary and make its way through all the screens needed to enter the data—just as a user would. It can even extract new record numbers or other data that is presented to the user during the process. It can then package up that data and pass it along to other systems. Such capabilities are extremely important for registration and order entry functions.

In data export scenarios, a whole universe of techniques is available for capturing data and formatting it for downstream use. Among the options are generating reports to a file, reporting to a virtual printer, copying fields from Windows applications and even copying screens from a UNIX terminal.

Among the scripted projects Halfpenny has in production are:

- Patient registration
- Order entry
- Laboratory result entry
- Base table updates
- Test dictionary building and maintenance
- EMR document importation

Contact your Halfpenny project manager or sales representative to arrange for one of our scripting experts to analyze whether this powerful technology can help solve your toughest data exchange challenges.

## Meet Rob Stuart – Lead Implementation Analyst

With a calm demeanor that masks an enthusiasm and drive to continue growing and learning, Rob Stuart has been a Lead Implementation Analyst with Halfpenny Technologies since June of 2008. Rob's medical technology degree from West Virginia University (WVU) and his personal interest in computer technology made him a perfect addition to Halfpenny's unique, cross-disciplinary team.

Rob was recruited on WVU graduation day by Halfpenny's Vice President of Clinical Services, Joyce Compton, who also serves as an adjunct assistant professor at WVU School of Medicine. Rob did not have to spend much time thinking about the opportunity. He knew that joining a leading company in healthcare information integration would give him "a chance to work with computers in a growing field where my degree was still relevant. The HIE field will give me more advancement opportunities than if I were a traditional medical technologist and I get to learn several new skill sets in the process."

In the year and a half that he has been with Halfpenny, Rob has garnered experience in all of the disciplines needed to facilitate the successful development and implementation of clinical laboratory data exchange projects. Says Rob, "I've learned so much about different types of secured connectivity; the strengths, weaknesses and quirks of various EMR systems; the complexity of reference laboratory integration; and the details of the HL7 standard. This job really is a non-stop learning experience that combines social, educational and computer skills."

While Rob's commitment to professionalism at work is obvious in everything he does, it's not the only challenge on his plate right now. Rob and his wife had a daughter in mid July of 2009, and, as if that isn't enough to keep him occupied, he took up golf this past year. No word yet on his handicap.

