

# ConnectR Interface Webcast Series

Advanced Design and Useful Techniques

November 2011

# Welcome

- **Best Practice Techniques**
- **Useful Techniques**
  - Outbound Message Routing
  - Result-Driven Order Reconciliation
  - Interface-Driven Tasking
  - Script Usage
- **Galen Solutions & Upcoming Free Workshop**
- **Q&A – Chat and Live**

## Best Practice Techniques

- **Introduction & questionnaire document**
- **Obtain vendor specification**
- **Obtain vendor sample message**
- **Review Allscripts stored procedure documentation**
- **Ingredients for a successful interface project:**  
**<http://blog.galenhealthcare.com/2009/11/10/ingredients-for-a-successful-interface-project/>**

## Best Practice Techniques Cont.

- **Start with template interface**
- **Load (Extract) proof-of-concept message into/out of Enterprise EHR**
  - File-based interface
  - Winsock Handler
  - [http://wiki.galenhealthcare.com/HL7\\_Editors](http://wiki.galenhealthcare.com/HL7_Editors)

## Outbound Message Routing

- **Multiple Outbound Interfaces of the Same Type, commonly:**
  - Order – Lab and Radiology
  - Charge – Multiple PM systems in Multi-org
- **Setup**
  - Blocking in ConnectR Mapping
  - T-Tables for Streamlined Maintenance
- **Documentation**
  - [http://wiki.galenhealthcare.com/Outbound\\_Interface\\_Filtering](http://wiki.galenhealthcare.com/Outbound_Interface_Filtering)

# Outbound Message Routing cont.

Source System: Test Superset Outbound Source - [5000]      Target System: Test Order TW To Quest Target - [5100]

Source Message: ORD      Target Message: ORM

Source Msg Desc: V11 Test      Target Msg Desc: Test Quest

ORD

- SupersetData-SupersetData\_CMS Test
- ExtractEncounter\_CMS-ExtractEncounter\_CMS Test
- ExtractPatient\_CMS-ExtractPatient\_CMS Test
- ExtractPerson\_CMS-ExtractPerson\_CMS Test
- ExtractOrderItem\_CMS-ExtractOrderItem\_CMS Test
- ExtractInsurance-ExtractInsurance
- ExtractOrderAdditionalInformationString-ExtractOrderAdditionalInfo T

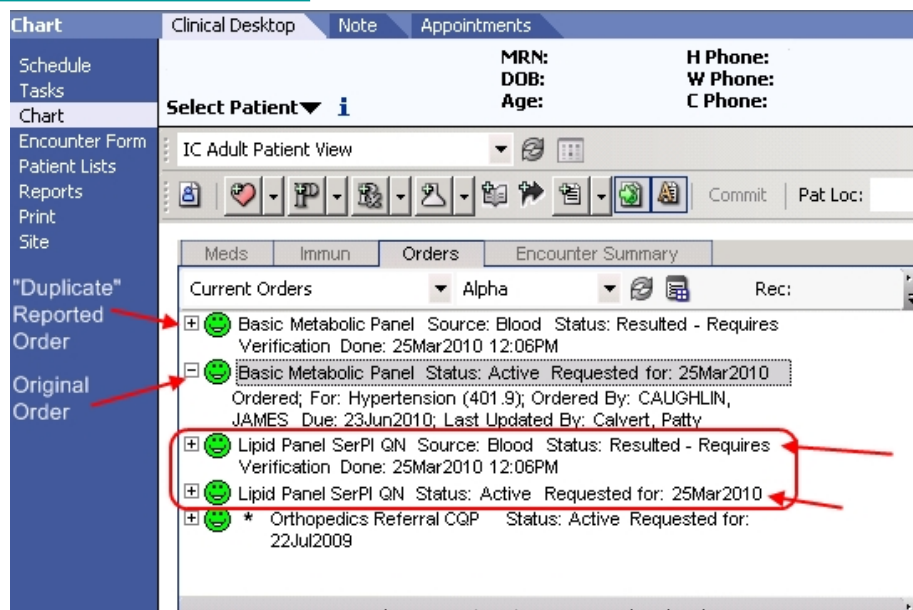
ORM

- MSH-Message header segment
  - [1]-Encoding Characters
    - (If Not ASpace(ExtractOrderItem\_CMS.1-[91]-ReqPerfLocC
  - [2]-Sending Application
    - ExtractOrderItem\_CMS.1-[91]-ReqPerfLocCode
  - [3]-Sending Facility
    - ExtractOrderItem\_CMS.1-[99]-SiteEntryCode
  - [4]-Receiving Application
  - [5]-Receiving Facility
    - 'ASK<32>QUEST<32>FOR<32>THIS'
  - [6]-Date/Time Of Message
    - Dt/Tm - Now to HL7(NOW)
  - [7]-Security
  - [8]-Message Type
    - 'ORM^001'

Block Message If ExtractOrderItem\_CMS.1-[91]-ReqPerfLocCode Leading/Trailing Spaces Removed does not equal 'Quest', Or'd with '~\&'

## Result-Driven Order Reconciliation

- [http://wiki.galenhealthcare.com/AE-EHR\\_Interfaced\\_Result-Driven\\_Order\\_Reconciliation](http://wiki.galenhealthcare.com/AE-EHR_Interfaced_Result-Driven_Order_Reconciliation)
- <http://blog.galenhealthcare.com/2010/10/11/order-reconciliation-woes/>

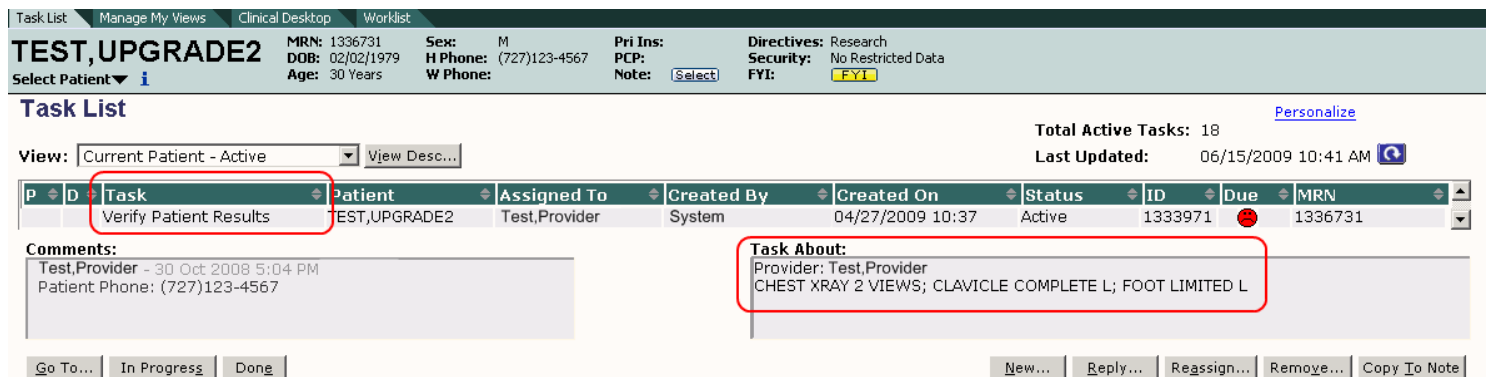


The screenshot shows a clinical desktop interface with a sidebar on the left and a main content area. The sidebar includes options like 'Chart', 'Encounter Form', 'Patient Lists', 'Reports', 'Print', 'Site', and 'Duplicate Reported Order'. The main content area displays 'Current Orders' for a patient, with a list of orders including 'Basic Metabolic Panel' and 'Lipid Panel SerPI QN'. Red arrows point to specific order details and status indicators.

Order ID	Order Name	Source	Status	Notes
+	Basic Metabolic Panel	Blood	Resulted - Requires Verification	Done: 25Mar2010 12:06PM
-	Basic Metabolic Panel		Active	Requested for: 25Mar2010 Ordered; For: Hypertension (401.9); Ordered By: CAUGHLIN, JAMES Due: 23Jun2010; Last Updated By: Calvert, Patty
+	Lipid Panel SerPI QN	Blood	Resulted - Requires Verification	Done: 25Mar2010 12:06PM
+	Lipid Panel SerPI QN		Active	Requested for: 25Mar2010
+	* Orthopedics Referral CQP		Active	Requested for: 22Jul2009

## Interface-Driven Tasking

- **Scenario: Rolling out tasking functionality to only a couple of clinics**
  - Task based upon site order was placed and ordering provider
  - Utilize t-tables and ConnectR mapping logic to manage
- [http://wiki.galenhealthcare.com/Interface-Driven\\_Tasking](http://wiki.galenhealthcare.com/Interface-Driven_Tasking)
- [http://wiki.galenhealthcare.com/Rotating\\_Coverage\\_Tasking](http://wiki.galenhealthcare.com/Rotating_Coverage_Tasking)



Task List | Manage My Views | Clinical Desktop | Worklist

**TEST, UPGRADE2** MRN: 1336731 Sex: M Pri Ins: Directives: Research  
 Select Patient ▼ i DOB: 02/02/1979 H Phone: (727)123-4567 PCP: Security: No Restricted Data  
 Age: 30 Years W Phone: Note: [Select] FYI: FYI

**Task List** Personalize

View: [Current Patient - Active] [View Desc...]

Total Active Tasks: 18  
 Last Updated: 06/15/2009 10:41 AM [G]

P	D	Task	Patient	Assigned To	Created By	Created On	Status	ID	Due	MRN
		Verify Patient Results	TEST, UPGRADE2	Test, Provider	System	04/27/2009 10:37	Active	1333971	<span style="color: red;">●</span>	1336731

**Comments:**  
 Test, Provider - 30 Oct 2008 5:04 PM  
 Patient Phone: (727)123-4567

**Task About:**  
 Provider: Test, Provider  
 CHEST XRAY 2 VIEWS; CLAVICLE COMPLETE L; FOOT LIMITED L

Go To... In Progress Done

New... Reply... Reassign... Remove... Copy To Note



# Scripts in ConnectR

- **Uses**
  - Complex Logic
  - Database and File Access
- **Development**
  - Step 1. VBScript
  - Step 2. Mapping
- **Troubleshooting**
  - Test Script in ConnectR
  - Running as .VBS

# Script Usage

The screenshot displays a software interface with a menu bar (File, Edit, Reports, Window, Help) and a toolbar (Message, System, Mapping, Translation, Script, Date Format, Error, Server). The 'Script' tab is active, showing the following configuration:

- Script: CheckOldResultStageTest
- Language: VBScript
- Deactivate:
- Description: CheckOldResultStageTest
- Script Usage: Script Mapping Function

The 'Definition' section shows the script code:

```
function CheckOldResultStageTest(OrderNumberEXT,NewResultStage)
Dim oCon
Dim oRS
Dim datasource
Dim vcommand
Dim user
Dim user
Dim pass
Dim OldResultStage

'Pass in Dictionary Name, Field and value to be ssearched for. This script will select against that sql table and see
if there is a match. If Yes, it will return a Y, if No an N will be returned.
'Example:
'Input:
'OrderNumberEXT:TW155440
'NewResultStage: F

datasource = "WorksTest"
user = "connectr"
pass = "connectr"

'Establish the Connection

Set oCon = CreateObject("ADODB.Connection")      This Creates the database object
oCon.Open "Data Source=" & datasource, user, pass  This opens the object -- data source, username, password

'Do the lookup on the dictionary

vcommand = "select top 1 r.ResultStage from Order_Activity oa (NOLOCK) left join Order_Activity_Header oah on oah.OrderN
Item_Result ir on ir.ActivityHeaderID = orm.ResultActivityHeaderID left join Result r on r.ID = ir.CurrentID where oa.OrderN

Set oRS = CreateObject("ADODB.Recordset")
oRS.Open vcommand,oCon, 3, 1, -1

If(oRS.EOF) then
  CheckOldResultStageTest = (NewResultStage)
  exit function
End If

OldResultStage = oRS(0)

If OldResultStage = "F" Or OldResultStage = "C" Then
  CheckOldResultStageTest = "F"
Elseif NewResultStage = "N" Then
  CheckOldResultStageTest = "F"
Else CheckOldResultStageTest = "I"
```

The 'Target' window shows a script error:

```
Script Error: <10>
Description: Either BOF or EOF is True, or the current record has been deleted. Requested
operation requires a current record. <10>
Line: 34 <10>
Column: 0Script Error: (30).
```

Below the error message, the 'Msg Type' is 'Application Error' and the 'Msg ID' is '696394'. The 'Message' is 'FileResult\_CMS' and the 'Length' is '181'.

# Galen Community & Solutions

## Allscripts Interface Developers Network:

<http://interfaces.galenhealthcare.com>



## Clinical Conversion Toolkit:

<http://blog.galenhealthcare.com/2011/04/06/clinical-conversion-toolkit/>



## Solutions Store:

<http://solutions.galenhealthcare.com>

### Featured Solutions:

- Order Cleanup



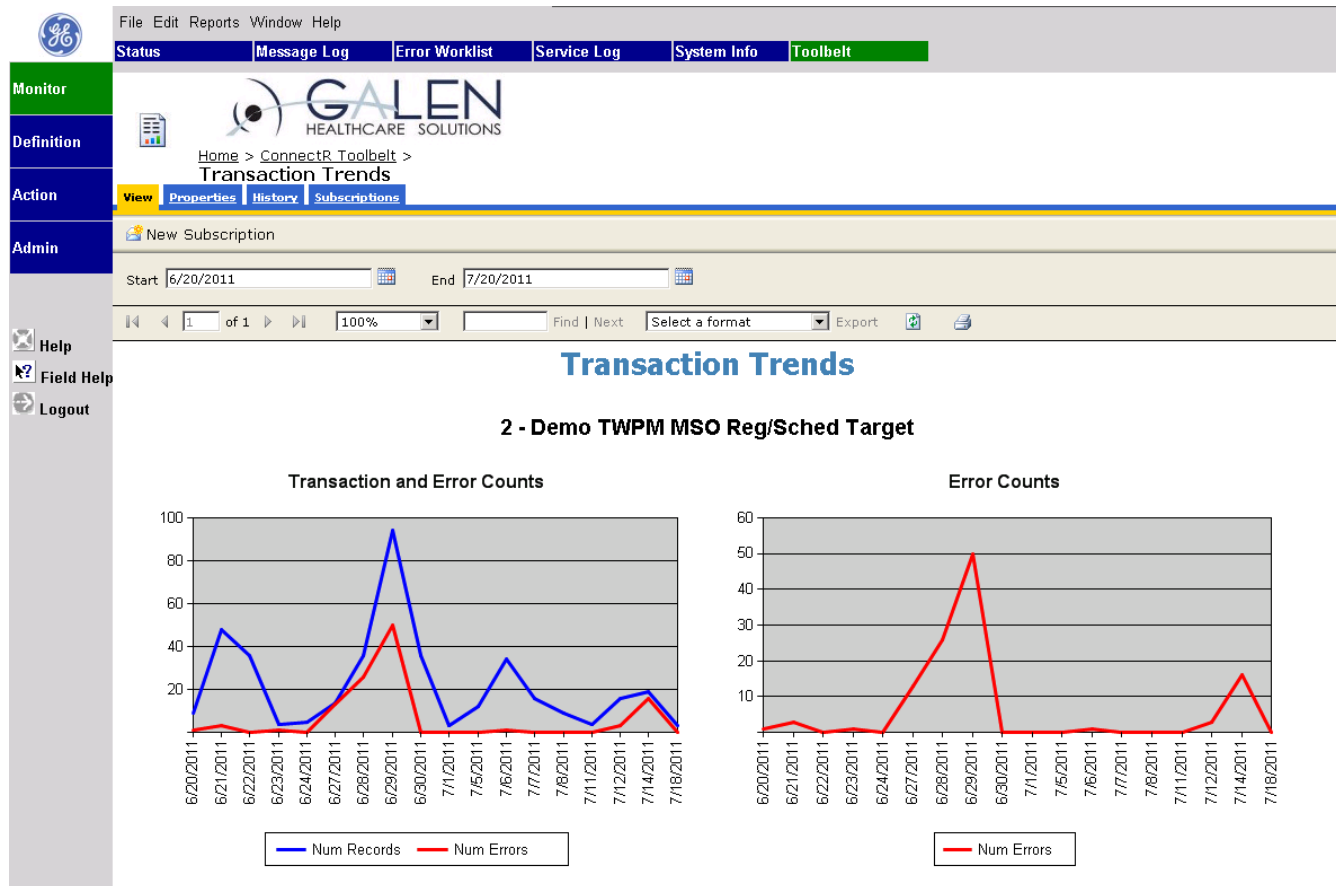
- Task Cleanup



- Worklist Cleanup



# ConnectR Toolbelt



# Announcing Free Result Interface Training!

<http://galenbostoninterfacetraining.eventbrite.com/>

**Who:** [Allscripts Interface Analysts](#)

**What:** [Free Result Interface Training](#)

**Where:** [70 Federal Street, 7th Floor, Boston, MA 02110.](#)

**When:** Wednesday, December 14th, 2011 from 9AM-5PM with lunch provided. There will also be a cocktails and networking hour from 4PM-5PM with beer, wine and light snacks.

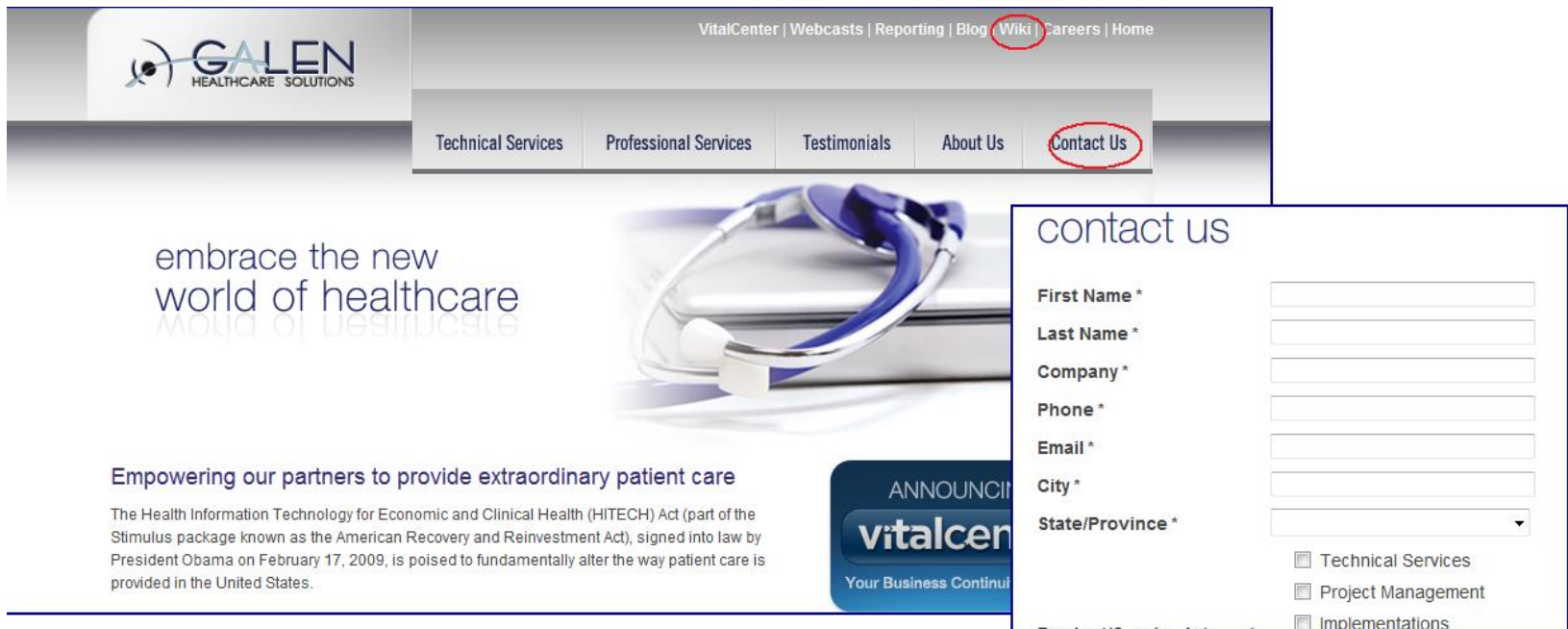
**Why:** Learn about more of the intimate details, nuances, and best-practices surrounding Allscripts result interfaces

## Agenda:

- [Imagelink](#)
- [Reconciliation w/ and w/o electronic order interface](#)
- [Common errors](#)
- [Requisitions](#)
- [Requested Performing Location](#)
- [Auto syncing](#)
- **Much More!**

Thank you for joining us today, for additional assistance....

You can contact us through our website at [www.galenhealthcare.com](http://www.galenhealthcare.com)



The screenshot shows the Galen Healthcare Solutions website. The navigation menu includes: VitalCenter | Webcasts | Reporting | Blog | **Wiki** | Careers | Home. The main menu includes: Technical Services | Professional Services | Testimonials | About Us | **Contact Us**. The contact form is titled "contact us" and includes the following fields: First Name \*, Last Name \*, Company \*, Phone \*, Email \*, City \*, and State/Province \*. Below the form are three checkboxes:  Technical Services,  Project Management, and  Implementations. The website also features a stethoscope image and a section titled "Empowering our partners to provide extraordinary patient care" with text about the HITECH Act.