

Microsoft Enterprise Agreement

Management / Process Improvement

For fiscal year 2007 I was asked to investigate returning to a Microsoft Enterprise Agreement. MedCath and its subsidiaries had not been on an Enterprise Agreement in several years. I managed the whole process from inception through the end of my time at MedCath and built a system to manage the licensing.

High-Level Details

- 4.5 million dollar deal over 3 years
- 2,400 seats of Enterprise Desktop, Standard CALs, Enterprise CALs, etc.
- 350 seats of Windows Server
- Several thousand seats of other software packages including Visio, SharePoint, Exchange, SQL, etc.
- Professional Services agreement with a dedicated TAM
- Dedicated Service Engineer for SCCM
- Partnered with CDW

My Responsibilities

- Managed the 3-month discovery phase of collecting our software liability and existing contracts and licenses
- Built models of our various options (continue outside an EA vs. a very focused EA vs. a comprehensive EA)
- Built justification documents for the Capital Committee and Board around IS recommendations
- Determine the vendor to partner with for execution of the agreement
- Primary point-of-contact and administrator for all Microsoft agreements
- Managed all Microsoft contracts (EA, Pro Services, DSE) and licensing after the deal was signed
- Provided quarterly and annual reports of software liability, current licensing, and recommendations to all units
- Responsible for providing allocation reports by department and facility for all transactions
- Managed the roll-out of Microsoft technologies related to the deal
- Provided annual reports on the effectiveness of the agreement (cost savings, etc.)

License Management

- Built a data warehouse (originally using SSIS, later using the below system)
- Built a system (.NET, Web Services, Windows Service) to normalize, integrate, and aggregate data from SCCM (hardware and software inventory) and Active Directory (population)
- Built a cube using SSAS
- Built reports using SSRS
- Built charts in PerformancePoint using MDX
- Built a scorecard and dashboard in PerformancePoint with drill-through into supporting evidence

The screenshot shows a complex Microsoft Excel spreadsheet used for managing software licensing. The main table lists various software titles, their counts, and associated facilities. A specific row for Adobe Acrobat Professional is highlighted, showing details for two locations: CSC and BHH. The overall interface is a standard Microsoft Office spreadsheet with various filters and sorting options visible.

Corporate Intranet (MedWeb)

Programming / Design and Process

I built 4 iterations of the entire company Intranet over my 11 years with MedCath. It was used by more than 6,000 users, contained more than 25,000 documents, and hosted many dozens of applications, reports, and e-forms.

The resource list used the AJAX Accordion control. When a section was selected, the Active Directory was queried to return all objects that had a businessCategory relationship to the user.

All activity on the Intranet was monitored and so the system could provide the end user with information about what resources were being used heavily by others.

All activity on the Intranet was monitored and the items that were used most heavily were promoted to the top of every page. Notice the site has very little wasted space; the bulk of the screen real estate is available for applications and information.

Your Network Identity

Information controlled by Human Resources

Employee ID: 532
First Name: Peter
Last Name: Lasne
Company (PL): MCI
Status: AF - Active Fulltime
Job Code: DIRIS - Director IS
Department: 10161 - Web Initiative
Exempt Status: True

Information controlled by Information Technology

Network ID: Lasnepa0
Display Name: Lasne, Peter
Mail Server: CLTECH
External E-mail (SMTP): plasne@medcath.com
Peter.Lasne@medcath.com
medweb@medcath.com
internet.system@medcath.com
webmaster@medcath.com

Account Created: 9/14/2005 10:48:56 PM EST
Password Last Set: 1/4/2010 9:39:01 AM EST
Exclude From Auto: (no exclusions)
Work Phone #: (704) 815-7693
Home Phone #:
FAX #:

Yahoo! News: Top Stories (read more)

WSOC-TV.com - Local News (read more)

Group: Technical Services

Month: March 2010

Get Open Tickets
Get Ticket Count

The Weather Channel

Open Service Desk Cases - Technical Services

Report Run Date and Time: 3/3/2010 4:23:58 PM

Case#	Status	Create Time	Close Time	Priority	Owner	Subject	Service/Application	Contact
SUP77056	Closed	3/3/2010 3:34:43 PM		MEDIUM	BARRVA0	New Distribution Group	Email	Bitzer, Josh
SUP75690	Closed	12/22/2009 12:28:07 PM		MEDIUM	CALVERA0	BHH Medicare/HCLL Server BHHD7NTFS	Windows OS Issues	Mayer, Peter
SUP76232	Closed	1/21/2010 10:11:54 AM		MEDIUM	CALVERA0	Dameware Utilities 6.7.x does not fully support Windows 7 and Windows Server 2008 R2	Application Related	Liesinger, Nick
CHG1985	Submitted	2/4/2010 6:08:37 PM		LOW	CALVERA0	Add additional CommVault Media Agent, enable Gridstor. Test CommVault Dedupe product	Backup	Borst, Cathy

Employee Action Request - Change Form

Form

Request #:

Effective Date: <- Today

Employee Information

Select Employee: (Please select)

Department (-): No Change

Team Leader/Supervisor or Manager:

Identity Management

Programming / Design and Process

Fields

This list contains information on all fields that are tracked for users, groups, and computers on the domain.

New	Actions	Settings	View: All Items											
Title	Code	Field Type	Scope	Authority	Update Frequency	Desc								
Name	cn	Column	Global	Directory	30 min	Also known as a cn, this is the name that is used in the directory system.								
Distinguished Name	dn	Column	Global	Directory	30 min	This is the fully-qualified unique name for something in the directory system. It describes not only the name of the object but also its location.								
Employee ID	empId	Column	User	Lawson	30 min	Employee IDs are defined by HR. They are a unique numeric string for each person and the primary key for someone in Lawson.								
SharePoint ID	spId	Column	User	SharePoint	as needed	SharePoint gives each user a unique numeric string that is used to identify them when making certain web service calls.								
First Name	firstName	Column	User	Lawson	30 min	A user has a first name and a legal name. In Lawson those are defined as preferred name and legal name respectively.								
Last Name	lastName	Column	User	Lawson	30 min	The last name of a user as it is in Lawson.								
Middle Name	middleName	Column	User	Lawson	30 min									
Legal Name	legalName	Column	User	Lawson	30 min									
Division	division	Column	Global	Directory; Lawson; SharePoint	30 min									
Location	location	Column	Global	Lawson; SharePoint	30 min									

ADS Manager v0.1

Incoming | AutoMember | Settings | Record List

empl	cn	display	Status	Effective	Discovered	Source	St...	Th...	Actions
29025	AcevejG0	Acevedo, Jacob	Done	3/2/2010 4:32:09 PM	Lawson	now	[none]	[none]	header (3 of 3), refresh (17 of 17), supervisory (3 of 3), notify (update)
10805	AlfrC1	Alfon, Codu	Done	3/9/2010	3/3/2010 4:32:09 PM	Lawson	now	[none]	header (3 of 3), refresh (17 of 17), supervisory (3 of 3), notify (update)
14138	amickact	Amick, Angela	Done	11/19/2005	3/3/2010 4:32:09 PM	Lawson	now	[none]	header (3 of 3), refresh (17 of 17), supervisory (3 of 3), notify (update)
2840	BalITZ0	Balles, Tierra	Done	3/2/2010	3/3/2010 4:32:09 PM	Lawson	now	[none]	header (3 of 3), refresh (17 of 17), supervisory (3 of 3), notify (update)
13861	BassL1	Bass, Lynn	Done	3/9/2010	3/3/2010 4:32:09 PM	Lawson	now	[none]	header (3 of 3), refresh (17 of 17), supervisory (3 of 3), notify (update)
90497	BoeveM0	Boeve, Andrea	Done	3/3/2010	3/3/2010 4:32:09 PM	Lawson	now	[none]	header (3 of 3), refresh (17 of 17), supervisory (3 of 3), notify (update)
2923	BrandITZ0	Brandon, Tracy	Sleeping	3/2/2010	3/3/2010 4:32:09 PM	Lawson	now	[none]	header (3 of 3), refresh (17 of 17), supervisory (3 of 3), notify (update)
160363	BroadLE0	Broadbent, Lisa	Sleeping	3/2/2010	3/3/2010 4:32:09 PM	Lawson	now	[none]	header (3 of 3), refresh (17 of 17), supervisory (3 of 3), notify (update)
2771	BukkeJ0	Bukke, Joanne	Sleeping	3/2/2010	3/3/2010 4:32:09 PM	Lawson	now	[none]	header (3 of 3), refresh (17 of 17), supervisory (3 of 3), notify (update)
5108	CapakZ0	Capak, Kristin	Sleeping	3/2/2010	3/3/2010 4:32:09 PM	Lawson	now	[none]	header (3 of 3), refresh (17 of 17), supervisory (3 of 3), notify (update)

I developed all the tools to manage the network identity of more than 6,000 users. This included more than 30 aspects like creation, moves, litigation, synchronization, termination, review, and deletion.

Identity Management Log

You are viewing a feed that contains frequently updated content. When you subscribe to a feed, it is added to the Common Feed from the feed is automatically downloaded to your computer and can be viewed in Internet Explorer and other programs. Learn more

Subscribe to this feed

Active Directory Sync for Mary Damron

The account for was modified on 3/1/2010 5:54:12 PM. The following properties were changed (medcathe-EmployeeStatus, medcathe-Nbrf...

Active Directory Sync for Jennifer Rook

The account for was modified on 3/1/2010 5:54:12 PM. The following properties were changed

Active Directory Sync for Krystal Lockhart

The account for was modified on 3/1/2010 5:54:13 PM. The following properties were changed

Active Directory Sync for Kimber Stack

The account for was modified on 3/1/2010 5:54:13 PM. The following properties were changed

Browser

LDAP Finder

View: Organizational Units

Root: LDAP://dc=medcatdns,DC=com

Process Level: [list] [MCI]

Query: [company=MCI]

XForm

Results

cn

Welcome Admin Cache XML Editor HUB Network [tcp://clt5rifs:8] LDAP Network [LDAP://dc=medcatdns,DC=com] [LDAP://cn=Use LDAP://ou=Mex DACL Usage Census HUB Finder LDAP Finder

LDAP://CN=Lasnepa0,CN=Users,DC=medcatdns,DC=com

ID Account Access Path MemberOf Supervisor Log

First Name: Peter NTID: Lasnepa0

Legal Name: Peter LawID: 532

Last Name: Lasne Alias: Lasnepa0

Display: Lasne, Peter

Desc: CSC - Director, IS

Company: MCI Location: MCI City: Charlotte

Job Code: DIRIS Job Desc: Director, IS

Dept #: 10161 Dept Name: Web Initiative

Contact (Email / Phone): Status: AF

[mailto: intranet.system@medcatdns.co] Exempt: True

[mailto: medweb@medcatdns.com] NbrFTE: 100

[mailto: medwebsp@medcatdns.com] Salary Class: S

[mailto: Peter.Lasne@medcatdns.com] Hire Date: 1/27/1999

Directory Administrator - My Application

Columns: First Name, Last Name, Location

Query: user.name.first,Peter

Results

Location

Code: location Authority: Lawson, SharePoint Update Frequency: 30 min

A location is the place a user works, the location of a computer, or the management responsibility for a group. The Facilities list at the root of MedWebSp defines the location of an entity. In the case of users, the original code for location comes from Lawson and is then translated. In the case of a computer, the original code comes from prefix.

Chart Type: Line Bar Pie

Chart

Legend: Count

Count

Location

CLTMOBILE CSC HHA HMMC TSHH

1 2 3 4 5 6

Notable Technology

- Custom SharePoint Lists
- .NET WinForm App Admin Tool
- .NET Windows Service
- RSS feed of changes
- Silverlight 3.0 Admin Tool
- Connectivity (LDAP, SQL, Web Services)
- SSRS for historical data

Roles-Based Access Control

Programming / Design and Process

Account Pull Sets						
New	Actions	Settings		1 - 100	View:	All Items
 Account Pull Set - LDAP	Int Type	Desc		Start Date	Stop Date	Modified
This is for pulling data from any LDAP directory system, such as Active Directory.	Int Pull Set -	This pulls everyone in the Accounting department at BHH. It does not include disabled users but would include contractors and vendors.		6/17/2009	11:55 AM	
 Account Pull Set - Rollup	Int Type	This is simply a Set that contains a list of other Sets.		6/17/2009	9:51 AM	
This Pull Set reads data from a SharePoint group.	Int Pull Set -	This pulls everyone in the Accounting department at HMMC. It does not include disabled users but would include contractors and vendors.		6/17/2009	11:55 AM	
 Account Pull Set - SharePoint Group	Int Type	This Pull Set reads data from a SharePoint group.		6/15/2009	1:45 PM	
This reads data from a column in a SharePoint list.	Int Pull Set -	This pulls everyone in all Accounts Payable departments. Currently there are only AP depts for CSC and Partners but if others were added, this would include them as well. It does not include disabled users but would include contractors and vendors.		6/15/2009	1:45 PM	
 Account Pull Set - SharePoint List	Int Type	This reads data from a column in a SharePoint list.		6/15/2009	2:21 PM	
This is for SQL Server native client database connections.	Int Pull Set -	This pulls everyone that has a job code of an Administrative Assistant in the Administration department across all facilities. It does not include disabled users but would include contractors and vendors.		6/15/2009	8:44 AM	
 Account Pull Set - SQL Server	Int Type	This pulls all employee accounts that are active and work out of the Caldwell Memorial Hospital location. This includes vendors and contractors.		6/18/2009	12:26 PM	
This allows building a provider for any custom Account Type.	Int Pull Set -	This pulls all employee accounts that are active and work out of the Cardiac Imaging of NE Philadelphia location. This includes vendors and contractors.		6/18/2009	12:30 PM	
 Account Pull Set - Web Service	Int Type	This pulls all employee accounts that are active and work out of the Center for Cardiac Sleep Medicine in Fairfax location. This includes vendors and contractors.		6/18/2009	1:30 PM	
Cardiac Sleep Medicine in Fairfax	LDAP	This pulls all employee accounts that are active and work out of the Center for Cardiac Sleep Medicine in Fairfax location. This includes vendors and contractors.		6/18/2009	1:30 PM	
All Users at Partners Center for Cardiac Sleep Medicine in Lacombe	Account Pull Set - LDAP	This pulls all employee accounts that are active and work out of the Center for Cardiac Sleep Medicine in Lacombe location. This includes vendors and contractors.		6/18/2009	5:23 PM	
All Users at Partners Central New Jersey Heart Services	Account Pull Set - LDAP	This pulls all employee accounts that are active and work out of the Central New Jersey Heart Services location. This includes vendors and contractors.		6/18/2009	5:25 PM	
All Users at Partners Charlotte Mobile Cath Lab Route	Account Pull Set - LDAP	This pulls all employee accounts that are active and work out of the Charlotte Mobile Cath Lab Route location. This includes vendors and contractors.		6/18/2009	5:28 PM	
All Users at Partners ENC Mobile Route	Account Pull Set - LDAP	This pulls all employee accounts that are active and work out of the ENC Mobile Route location. This includes vendors and contractors.		6/18/2009	12:34 PM	
All Users at Partners Falmouth Hospital	Account Pull Set - LDAP	This pulls all employee accounts that are active and work out of the Falmouth Hospital location. This includes vendors and contractors.		6/18/2009	5:46 PM	

Pull Sets - I created a custom SharePoint list and then added some Content Types to define what types of systems could be used to determine membership lists.

Account Push Sets	
	New
	Actions
	Account Push Set - Active Directory
	This is for pushing data to an Active Directory group.
	Account Push Set - SharePoint Group
	This is for pushing data to a SharePoint group.
	Account Push Set - Web Service
	This allows us to build a provider for anything else using Web Services.
	acct_DirectorsAndUp_AZHII
	Account Push Directory
	acct_HR_AZHH
	Account Push Directory
	acct_HR_BHH
	Account Push Directory
	acct_HR_HMMC
	Account Push Directory

The concept behind RBAC is that once a user is well-defined you can drive what resources they have access to automatically.

I start with data from various systems, but most notably, the HR/Payroll system because it contains the most useful data, a person's job code, the department they work in the company that employs them, and where they work.

ADS Manager v0.1						
File Manual						
Incoming AutoMember Settings						
Auto Membership		232 items				
distinguishedName		Examined	Modified	Thru...	Act...	# of Me...
CN=acct_AdminTeam_HospDiv,CN=Users,DC=medcatlhdns,DC=com		3/3/2010 4:32:08 PM	4/24/2009 9:09:54 PM	(none)	True	0
CN=acct_CFO_AHHDN,CN=Users,DC=medcatlhdns,DC=com		3/3/2010 4:32:08 PM	4/24/2009 9:09:55 PM	(none)	True	1
CN=acct_CFO_HHA,CN=Users,DC=medcatlhdns,DC=com		3/3/2010 4:32:08 PM	4/24/2009 9:09:55 PM	(none)	True	1
CN=acct_CFO_HMC,CN=Users,DC=medcatlhdns,DC=com		3/3/2010 4:32:08 PM	4/24/2009 9:09:55 PM	(none)	True	1
CN=acct_President_AHHDN,CN=Users,DC=medcatlhdns,DC=com		3/3/2010 4:32:08 PM	9/30/2009 9:19:39 PM	(none)	True	1
CN=acct_President_AHHSO,CN=Users,DC=medcatlhdns,DC=com		3/3/2010 4:32:08 PM	4/24/2009 9:11:16 PM	(none)	True	1
CN=acct_President_HHA,CN=Users,DC=medcatlhdns,DC=com		3/3/2010 4:32:08 PM	4/24/2009 9:11:16 PM	(none)	True	1
CN=acct_President_HHNM,CN=Users,DC=medcatlhdns,DC=com		3/3/2010 4:32:08 PM	4/24/2009 9:11:16 PM	(none)	True	1
CN=acct_President_TSBB,CN=Users,DC=medcatlhdns,DC=com		3/3/2010 4:32:08 PM	4/24/2009 9:11:16 PM	(none)	True	1
		3/3/2010 4:32:08 PM	4/8/2009 1:23:06 AM	(none)	True	0
		3/3/2010 4:32:08 PM	2/17/2010 9:12:04 PM	(none)	True	2
		3/3/2010 4:32:08 PM	9/1/2009 5:23:31 PM	(none)	True	11
		3/3/2010 4:32:09 PM	4/24/2009 9:09:55 PM	(none)	True	3
		3/3/2010 4:32:09 PM	2/23/2010 9:14:16 PM	(none)	True	1
		3/3/2010 4:32:09 PM	2/12/2010 9:13:22 PM	(none)	True	0
		3/3/2010 4:32:09 PM	4/24/2009 9:09:55 PM	(none)	True	0
		3/3/2010 4:32:09 PM	2/23/2010 9:14:16 PM	(none)	True	1
		3/3/2010 4:32:09 PM	4/24/2009 9:09:55 PM	(none)	True	1
		3/3/2010 4:32:09 PM	4/24/2009 9:09:55 PM	(none)	True	1
		3/3/2010 4:32:09 PM	8/17/2009 9:41:15 PM	(none)	True	4
		3/3/2010 4:32:09 PM	2/12/2010 9:13:23 PM	(none)	True	1
		3/3/2010 4:32:09 PM	4/24/2009 9:11:16 PM	(none)	True	1
		3/3/2010 4:32:09 PM	4/24/2009 9:11:16 PM	(none)	True	1
		3/3/2010 4:32:09 PM	4/24/2009 9:11:16 PM	(none)	True	1
		3/3/2010 4:32:09 PM	4/24/2009 9:09:55 PM	(none)	False	unknown
		3/3/2010 4:32:10 PM	6/18/2009 9:33:17 PM	(none)	False	unknown
		3/3/2010 4:32:10 PM	4/24/2009 9:09:55 PM	(none)	True	4
		3/3/2010 4:32:10 PM	4/24/2009 9:09:55 PM	(none)	True	3
		3/3/2010 4:32:10 PM	2/25/2010 9:07:58 AM	(none)	False	unknown
		3/3/2010 4:32:10 PM	7/8/2009 8:26:31 PM	(none)	True	3

Push Sets - I created a custom list and then added some Content Types to define what types of systems could receive membership lists.

Roles - I then created a custom list that defines a role as some Pull Sets, some Push Sets, and some information about how often it should process.

Application - In order for the data to do anything there needed to be Windows Services, Web Services, and interfaces built that handle all the plumbing.

MRBACS Roles								1 - 100	View:	All Items	
New	Actions	Settings	Title	Desc	Update Priority	Include Full Sets	Exclude Full Sets	Push Sets	Last Run	ExecTime	Modified
			Accounts Payable	Membership in this Role gives access to everything that a person working for the Accounts Payable department would need.	Low	Accounts Payable Department	Decommissioned Facilities	Accounts Payable Members	success @ 3/2/2010 12:33:12 AM	1,094	3/2/2010 12:33 AM
			Business Continuity Users	Members of this Role are given access to all resources needed during complex operations during extra-normal conditions.	Low	IS Department; Supervisors at CSC; Supervisors at Dallas; Supervisors at Tempe; Vice Presidents	Decommissioned Facilities	res_BusinessContinuityUsers	success @ 3/1/2010 1:53:59 PM	4,344	3/1/2010 1:54 PM
			Business Resumption Members	This role takes everyone involved in designing BRP plans and gives them access to resources that they need (ex. the BRP SharePoint site).	Low	BRP Audit; BRP Benefit; BRP CentralBuOff; BRP Construction; BRP CorpCoor; BRP CorpTreasury; BRP DecSup; BRP FinRep; BRP HR; BRP IS; BRP Legal; BRP ManageCare; BRP MatMgmt; BRP Medicare; BRP Partners; BRP Payroll; BRP RiskMgmt; BRP WorkersComp; Crisis Management Team		Business Resumption Members	success @ 3/2/2010 11:15:24 AM	8,797	3/2/2010 11:15 AM
			Case Management	This role grants everyone involved in Case Management with the resources they need to complete that job.	Low	Case Managers at AHH; Case Managers at AHH-Care; Case Managers at AHH-CH; Case Managers at BH4; Case Managers at HH4; Case Managers at HMC; Case Managers at HMC-Care; Case Managers at UCH4; Case Managers at TSHH		Quality CaseMgmt Members	success @ 3/2/2010 12:46:16 PM	3,234	3/2/2010 12:46 PM

Voice-over-IP

Management / Training

For fiscal year 2009, it was determined that MedCath needed a single phone platform across all sites. This would allow administrative staff to be competent across all locations, provide new functionality, and allow replacement of legacy systems that were costly to continue supporting.

High-Level Details

- \$800k deal over a year deployment
- An Avaya phone system was used (G450/CS8510) with implementation services from IBM
- Initial Deployment Scope: 1 full hospital (HMMC), 1 hospital expansion (LMCHH), our Corporate offices (CSC)
- About 900 phones were deployed, some analog, some digital, and some VoIP
- Voicemail was stored on Microsoft Exchange Server 2007
- Call control can be entirely managed via Microsoft Communicator

My Responsibilities

- Participated heavily in the 3-month exploration phase (vendors, technology, implementation partners, etc.)
- Managed the deployment for HMMC and CSC (including a lot of hands-on work, ie. administration, phones, etc.)
- Conducted all training for HMMC and CSC - the emphasis was on how to best communicate, of which the phone is one option, not a total solution (ie. IM, email, blogs, etc.)
- I managed the Avaya and IBM relationship after deployment (support, upgrades, training, etc.)

A comprehensive Unified Communications and Unified Messaging strategy must seek to encompass all realtime and messaging methods into a single platform making it easy for the user to work. It is important to note that for any given feature, there are a number of ways to accomplish it. To make it easier I have built this chart to show what we feel is the best way to access that feature (most of the time, there are exceptions of course).

	Phone	Modular Messaging	Outlook	Communicator
Call an employee	yes	no	yes	best*
Call a contact	yes	no	best	best
Call a random number	best	no	no	yes
Forward a call	best	no	no	future
Put call on hold	best	no	no	best
Call logging	yes	no	yes	no
Check voicemail	yes	no	best	no
Change a greeting	yes	best	no	no
Set Phone Out-Of-Office	yes	best	no	no
Set Email Out-Of-Office	no	no	yes	no
Check availability	no	no	yes	best
Conference	yes	no	no	no
Instant Messaging	no	no	no	yes
Send a file	no	no	yes	best
Live Meeting	no	no	no	future
Video Conferencing	no	no	no	future
Send a FAX	no	no	future	no
Receive a FAX	no	no	future	no



* When placing a call using Click-to-Call, you don't necessarily have to open your Communicator, in most Office applications (including SharePoint) you can click on the presence bubble next to someone's name and place a call directly.

Phones



There are a couple of different phones that could be deployed at your desk.

Avaya 9630G (left) - These phones are IP phones meaning they communicate over the same connection as your computer.

Avaya 2410 (right) - These phones are traditional TDM digital phones.

The phones have similar features in that they can make calls, have multiple lines presented to them, park calls, transfer calls, conference calls, check voicemail, etc. There is really very little functionality difference between the units other than the 9630Gs have a better display on them. The reason you would have one phone or the other is usually a factor of cost - the 9630Gs require power-over-ethernet, which can be expensive if the station isn't already wired to accommodate that.



[Click here to view documentation.](#)

[Click here to view documentation.](#)

SOX Review Process

Programming / Process Improvement

SOX 2009-Q2 System Security Audit Cover Sheet

Start Date:	1/1/2009				
End Date:	3/31/2009				
System Audited	Data Owner	Signed?	System Admin	Signed?	Summary
AHH HBOC CompOps	Hartman, Mark	yes	Edwards, Bo	yes	
AHH HBOC Financials	Hartman, Mark	yes	Edwards, Bo	yes	
AHHSD HBOC CompOps	White, Jean	no	Marnach, Dan	no	
AHHSD HBOC Financials	White, Jean	no	Marnach, Dan	no	
AZHH HBOC CompOps	Jaffee, Don	yes	Zuschlag, Jay	yes	
AZHH HBOC Financials	Jaffee, Don	yes	Zuschlag, Jay	yes	
BHH HBOC CompOps	Jordan, Ken	no	Mayer, Peter	no	
BHH HBOC Financials	Jordan, Ken	no	Mayer, Peter	no	
BHH HBOC CompOps	Hays, Michelle	no	Guldry, Richard	no	
BHH HBOC Financials	Hays, Michelle	no	Guldry, Richard	no	
BHNM HBOC CompOps	Todd, Sharon	yes	West, Rose	no	
BHNM HBOC Financials	Todd, Sharon	yes	West, Rose	no	
BMC HBOC CompOps	Vance, JoBeth	yes	Leal, Jose	no	
BMC HBOC Financials	Vance, JoBeth	yes	Leal, Jose	no	
LMCHH HBOC CompOps	Alesh, Dick	no	Chapman, Al	no	
LMCHH HBOC Financials	Alesh, Dick	no	Chapman, Al	no	
TSHH HBOC CompOps	Jeffress, Chuck	no	Chaisson, Edward	no	
TSHH HBOC Financials	Jeffress, Chuck	no	Chaisson, Edward	no	
Rick Calvert Security Officer MedCath Inc.					
Date					

Master System List

This list contains all systems that are expected to be part of the audit.

Facility	Title	SysType	Source Path	Source File	File Count	System Admin	Data Owner
AHH	AHH HBOC CompOps	STAR CompOps	\ d20ntfs\c\$\inetpub\root\COMPOP\AHH	AHHMPCO*.TXT	1	Edwards, Bo	Hartman, Mark
AHH	AHH HBOC Financials	STAR Financials	\ d20ntfs\c\$\inetpub\root\COMPOP\AHH	AHHMPGS*.TXT	1	Edwards, Bo	Hartman, Mark
AHSD	AHSD HBOC CompOps	STAR CompOps	\ d20ntfs\c\$\inetpub\root\COMPOP\AHSD	AHSDMPCO*.TXT	1	Marnach, Dan	White, Jean
AHSD	AHSD HBOC Financials	STAR Financials	\ d20ntfs\c\$\inetpub\root\COMPOP\AHSD	AHSDMPGS*.TXT	1	Marnach, Dan	White, Jean
AZHH	AZHH HBOC CompOps	STAR CompOps	\ d20ntfs\c\$\inetpub\root\COMPOP\AZHH	AZHEMPCO*.TXT	1	Zuschlag, Jay	Jaffee, Don
AZHH	AZHH HBOC Financials	STAR Financials	\ d20ntfs\c\$\inetpub\root\COMPOP\AZHH	AZHEMPGS*.TXT	1	Zuschlag, Jay	Jaffee, Don
BHH	BHH HBOC CompOps	STAR CompOps	\ d20ntfs\c\$\inetpub\root\COMPOP\BHH	BHHMPCO*.TXT	1	Mayer, Peter	Jordan, Ken
BHH	BHH HBOC Financials	STAR Financials	\ d20ntfs\c\$\inetpub\root\COMPOP\BHH	BHHMPGS*.TXT	1	Mayer, Peter	Jordan, Ken
DSC	CBO HBOC CompOps	STAR CompOps CBO	\ d20ntfs\c\$\inetpub\root\COMPOP	*.TXT	9	Hermosillo, Edward	Fentem, Don
DSC	CBO HBOC Financials	STAR Financials CBO	\ d20ntfs\c\$\inetpub\root\COMPOP	*.TXT	9	Hermosillo, Edward	Fentem, Don
CSC	CSC HBOC CompOps	STAR CompOps CSC	\ d20ntfs\c\$\inetpub\root\COMPOP	*.TXT	9	Hess, Alonzo	Ward, Don
CSC	CSC HBOC Financials	STAR Financials CSC	\ d20ntfs\c\$\inetpub\root\COMPOP	*.TXT	9	Hess, Alonzo	Ward, Don
HHA	HHA HBOC CompOps	STAR CompOps	\ d20ntfs\c\$\inetpub\root\COMPOP\HHA	HHAMPCO*.TXT	1	Guldry, Richard	Hays, Michelle
HHA	HHA HBOC Financials	STAR Financials	\ d20ntfs\c\$\inetpub\root\COMPOP\HHA	HHAMPGS*.TXT	1	Guldry, Richard	Hays, Michelle
HHNH	HNHM HBOC CompOps	STAR CompOps	\ d20ntfs\c\$\inetpub\root\COMPOP\HNHM	HNHMPCO*.TXT	1	West, Rose	Todd, Sharon
HNM	HNHM HBOC Financials	STAR Financials	\ d20ntfs\c\$\inetpub\root\COMPOP\HNHM	HNHMPPS*.TXT	1	West, Rose	Todd, Sharon
HMC	HMC HBOC CompOps	STAR CompOps	\ d20ntfs\c\$\inetpub\root\COMPOP\HMC	HMCMPCO*.TXT	1	Leal, Jose	Vance, JoBeth
HMC	HMC HBOC Financials	STAR Financials	\ d20ntfs\c\$\inetpub\root\COMPOP\HMC	HMCMPGS*.TXT	1	Leal, Jose	Vance, JoBeth
LMCHH	LMCHH HBOC CompOps	STAR CompOps	\ d20ntfs\c\$\inetpub\root\COMPOP\LMCHH	LMHMPCO*.TXT	1	Chapman, Al	Daniel, Chris
LMCHH	LMCHH HBOC Financials	STAR Financials	\ d20ntfs\c\$\inetpub\root\COMPOP\LMCHH	LMHMPGS*.TXT	1	Chapman, Al	Daniel, Chris
TSHH	TSHH HBOC CompOps	STAR CompOps	\ d20ntfs\c\$\inetpub\root\COMPOP\TSHH	TSHMPCO*.TXT	1	Chasson, Edward	Pogue, Kirk
TSHH	TSHH HBOC Financials	STAR Financials	\ d20ntfs\c\$\inetpub\root\COMPOP\TSHH	TSHMPGS*.TXT	1	Chasson, Edward	Pogue, Kirk

Employee Log

Hospital	Run Date	Employee Name	HBOC Login	View	Opt Batch	Term Date	Notes
AHH	01-05-2009	BURRIS, ALLISON	BURRIAAD	BBWR - Bus.Off.w/o Refunds	X		
AHH	01-05-2009	BURT, GEORGIA	BURTGA0	ACON - Controller's Menu		11/7/2008	
AHH	01-05-2009	CARPENTER, AMANDA	CARPEAZ0	Collection Agency			
AHH	01-05-2009	CASTRO, MARITZA	CASTRMZ0	BBWR - Bus.Off.w/o Refunds	X		

Being a public company, MedCath was required to audit access to systems which contained financial data. Getting access lists from multiple systems, disseminating them to the Data Owners for audit, then to the System Administrators for adjustment, and finally to the Security Officer for final approval was very difficult. To assist, I wrote some software that would wrap that whole process into a managed system.

- Interaction with the system was entirely through SharePoint and Excel
- Web Services to extract system lists into Excel
- Use of data from identity systems to highlight rows that likely need to be adjusted

- Use of SharePoint folder security with hidden folder views - simple to use and yet secure
- Email reminders for outstanding tasks
- Non-repudiation by using a Change Log
- ASHX Handler to generate Excel cover sheet

SOX Audit > Change Log

Change Log

New	Actions	Settings	Audit	System	Title	User
2010-Q2	Audit	System	2010-Q2	LMCHH HBOC Financials	Chapman, Al	
2010-Q2	LMCHH HBOC CompOps	Chapman, Al	2010-Q2	LMCHH HBOC CompOps	Chapman, Al	
2010-Q2	TSHH HBOC Financials	Calvert, Rick	2010-Q2	TSHH HBOC CompOps	Calvert, Rick	
2010-Q2	TSHH HBOC CompOps	Calvert, Rick	2010-Q2	TSHH HBOC CompOps	Calvert, Rick	
2010-Q2	LMCHH HBOC CompOps	Calvert, Rick	2010-Q2	LMCHH HBOC CompOps	Calvert, Rick	
2010-Q2	HMC HBOC CompOps	Calvert, Rick	2010-Q2	HMC HBOC CompOps	Calvert, Rick	
2010-Q2	HHNM HBOC CompOps	Calvert, Rick	2010-Q2	HHNM HBOC CompOps	Calvert, Rick	
2010-Q2	AHSD HBOC CompOps	Calvert, Rick	2010-Q2	AHSD HBOC CompOps	Calvert, Rick	
2010-Q2	AHH HBOC CompOps	Calvert, Rick	2010-Q2	AHH HBOC CompOps	Calvert, Rick	
2010-Q2	AHH HBOC Financials	Calvert, Rick	2010-Q2	AHH HBOC Financials	Calvert, Rick	
2010-Q2	BHH HBOC CompOps	Calvert, Rick	2010-Q2	BHH HBOC CompOps	Calvert, Rick	
2010-Q2	BHH HBOC Financials	Calvert, Rick	2010-Q2	BHH HBOC Financials	Calvert, Rick	
2010-Q2	DSC HBOC CompOps	Calvert, Rick	2010-Q2	DSC HBOC CompOps	Calvert, Rick	
2010-Q2	DSC HBOC Financials	Calvert, Rick	2010-Q2	DSC HBOC Financials	Calvert, Rick	
2010-Q2	CSC HBOC CompOps	Calvert, Rick	2010-Q2	CSC HBOC CompOps	Calvert, Rick	
2010-Q2	CSC HBOC Financials	Calvert, Rick	2010-Q2	CSC HBOC Financials	Calvert, Rick	
2010-Q2	HHA HBOC CompOps	Calvert, Rick	2010-Q2	HHA HBOC CompOps	Calvert, Rick	
2010-Q2	HHA HBOC Financials	Calvert, Rick	2010-Q2	HHA HBOC Financials	Calvert, Rick	
2010-Q2	HNHM HBOC CompOps	Calvert, Rick	2010-Q2	HNHM HBOC CompOps	Calvert, Rick	
2010-Q2	HNHM HBOC Financials	Calvert, Rick	2010-Q2	HNHM HBOC Financials	Calvert, Rick	
2010-Q2	LCHH HBOC CompOps	Calvert, Rick	2010-Q2	LCHH HBOC CompOps	Calvert, Rick	
2010-Q2	LCHH HBOC Financials	Calvert, Rick	2010-Q2	LCHH HBOC Financials	Calvert, Rick	
2010-Q2	TSHH HBOC CompOps	Calvert, Rick	2010-Q2	TSHH HBOC CompOps	Calvert, Rick	
2010-Q2	TSHH HBOC Financials	Calvert, Rick	2010-Q2	TSHH HBOC Financials	Calvert, Rick	

Key:

- Overdue - more than 60 days have passed since this audit started.
- Incomplete - there is still time to complete this step, but it should be done soon.
- Completed - there is nothing else to be done.
- Unknown - the status cannot be determined.
- Current Step - the current step that needs action is highlighted in blue.

2009 Q2 HHNM HBOC Financials

Started 39 days ago on 01/01/2009.

Approval	Processing	Completion
Todd, Sharon	West, Rose	Calvert, Rick

2009-Q2 HHNM HBOC CompOps

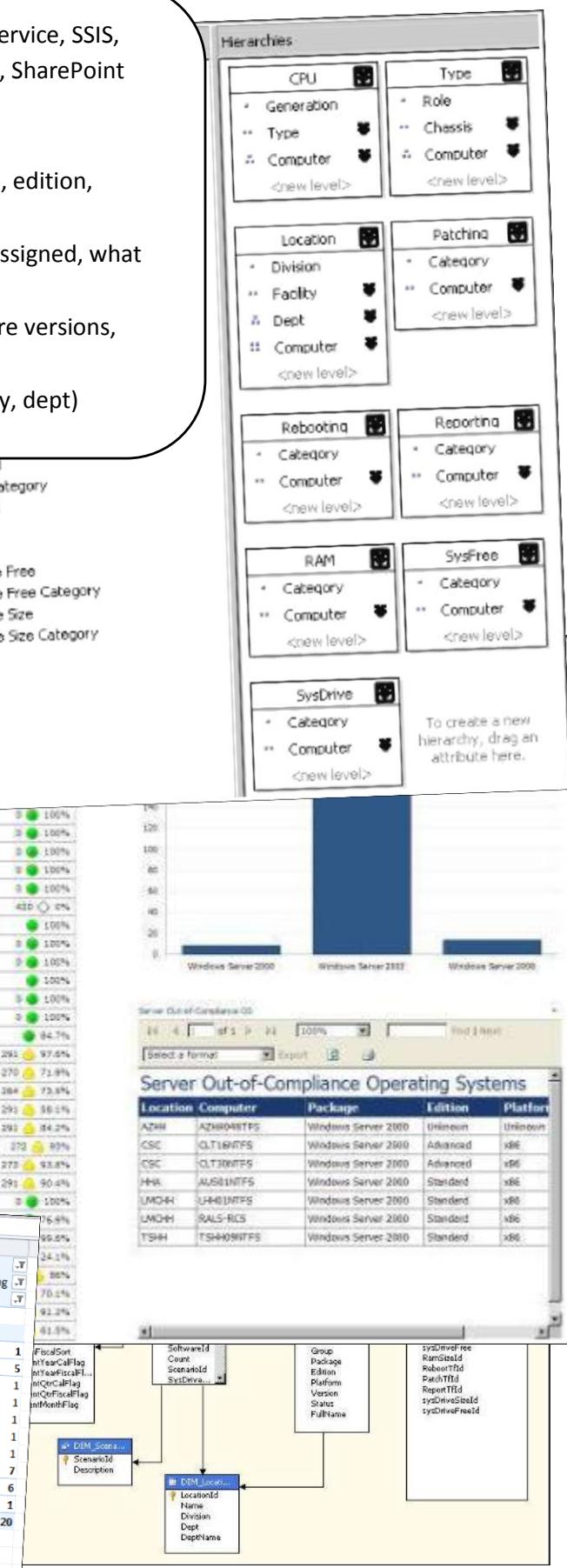
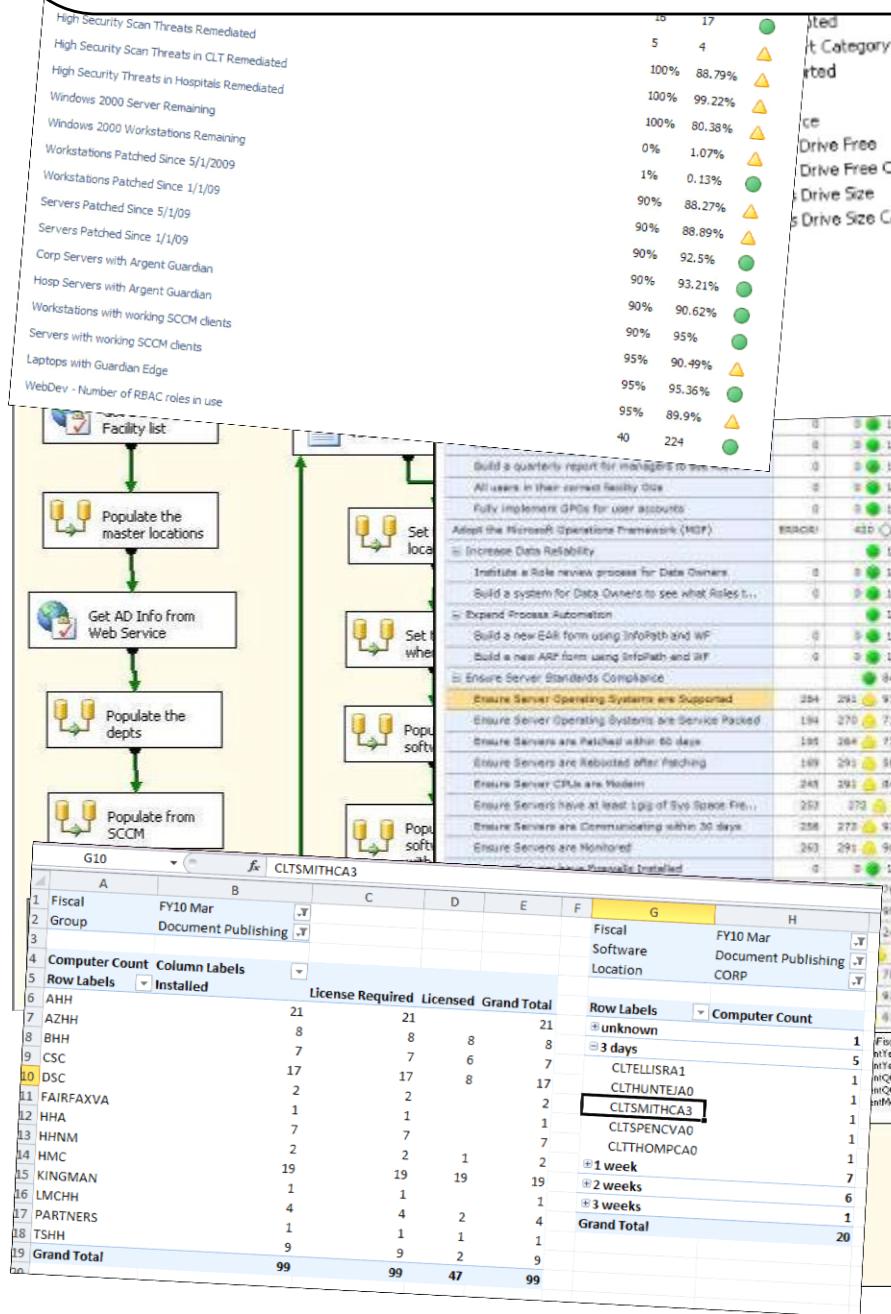
Started 39 days ago on 01/01/2009.

Approval	Processing	Completion
Todd, Sharon	West, Rose	Calvert, Rick

Computer Inventory

Programming / Business Intelligence

- **Technology Used:** Web Services, SQL, LDAP, .NET Windows Service, SSIS, SSRS, SSAS, PerformancePoint, Excel, SharePoint Custom Lists, SharePoint KPIs
 - **Hardware Metrics:** RAM, CPU, drive space, chassis, role, etc.
 - **Software Metrics:** OS + installed software, grouping, package, edition, platform, version, etc.
 - **License Metrics:** what is required, what is available, what is assigned, what isn't licensed
 - **Compliance Metrics:** patch levels, reboot after patch, software versions, hardware requirements, reporting frequency, etc.
 - **Dimensions:** time (month, qtr, year), location (division, facility, dept)



JCAHO Reporting

Programming / Process Improvement

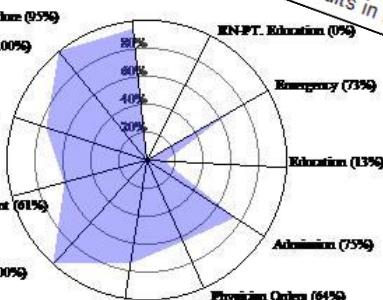
The Quality department at MedCath needed a way to quickly conduct JCAHO surveys at the hospitals and then aggregate that information for reporting. Prior to this system that I developed, they were collecting the information on paper and then aggregating the results manually in Excel.

- Technologies: Web Services, ASP.NET, and AJAX
- Multiple survey templates were supported
- I wrote a graphics library and ASHX handler to build the radar graph
- Branching and section invalidation were supported
- Load and Save functionality for surveys in progress
- Submission workflow for approving surveys
- An ASHX handler allowed the data to be extracted to Excel (click on a link and the data is in Excel)
- The entire solution is XML for storage and XSL to HTML for presentation delivered through AJAX

JCAHO Quarterly Tracer Survey

Location:	BHH	Surveys:	CCU_109996_PCU_4_30_2007 on 8/13/2007 6:42:4	Load
		Patient Tracer		New
Group:	Admission		Refresh	
Name:	CCU_109996_PCU_4_30_2007		Save	Submit

Admission:	6 out of 8 (75%)
Physician Orders:	7 out of 11 (64%)
Historical and Physical:	6 out of 8 (75%)
MD Progress Notes:	6 out of 6 (100%)
Medication Management:	11 out of 18 (61%)
RN-Assessment:	16 out of 21 (76%)
RN-Care:	13 out of 13 (100%)
Operative/Procedure:	18 out of 19 (95%)
RN-PT. Education:	0 out of 5 (0%)
Restraints:	0 out of 0 (NaN%)
Emergency:	16 out of 22 (73%)
Blood Administration:	0 out of 0 (NaN%)
Education:	1 out of 8 (13%)
Grand Total:	100 out of 139 (72%)



ID	Question	Reference(s)	Answer
AD001	Is there evidence of Identification Data?	IM.6.20 EP 2	<input checked="" type="radio"/> Yes <input type="radio"/> No
AD002	Does the patient have an Advance Directive? <i>(not scored)</i> - Rate of patients presenting with AD	IM.6.20 EP 3	<input type="radio"/> Yes <input checked="" type="radio"/> No
AD003	Is the A.D. in the chart?	IM.6.20 EP 3	<input type="radio"/> Yes <input checked="" type="radio"/> No
AD004	Was patient provided A.D. information?	RI 2.80 EP 2 CoP 482.13(b)(1) (2)	<input checked="" type="radio"/> Yes <input type="radio"/> No
AD005	Does the facility have an identified mechanism for prompting follow-up in the event the patient does have an AD but it is not in the chart?	RI 2.80 EP 8 CoP 482.13(b)(2) (3)	<input checked="" type="radio"/> Yes <input type="radio"/> No

Web Services

SharePoint

SQL Reporting

Intranet (ASP.NET)

InfoPath

Excel

Email

B2B over Internet

Silverlight

XML WebPart

Silverlight

XML/XSL

ASHX Handler

Web Services for everything...

The collage includes the following screenshots:

- MedWeb > Payroll Employees:** A SharePoint page showing payroll reports for employees, with fields for Username (me), Pay Period End (2/27/2010), and Include Reports (PR198, LP198, PR195). A "Run" button is visible.
- Information Services Repository:** A SharePoint library listing various audit flowcharts and process documents, such as "Medical Manager HIPAA Audit Flowchart.docx" and "FAS SOX Audit Flowchart.docx".
- Word Processor:** A Microsoft Word document titled "Quarterly Website Review" containing review details for a website.
- Microsoft InfoPath Form:** A form titled "ArizonaHeartHospital2010-02-23.xml" showing a "Review Date" of 2/23/2010 and a "Platform" of DNN 4.5.
- Excel Spreadsheet:** A table showing the count of various services or features, such as "Status Complete" (Count 15) and "Row Labels Count" (e.g., ACC and STS Reporting, Accounts Payable).
- Configuration Panel:** A panel titled "WebService URL v1.0" with fields for "Method Name" (Display), "Parameters" (instance={asyncInstance}&t), and "Async Instance" (PosPay). It also shows an "XSL URL" field.

Education Portal

Programming / Process Improvement

MedWeb > Education

Arizona

Home Educators Arizona

Welcome Lasne, Peter | My Site | My Links | Site Actions

Go: Words: none

View All Site Content

Documents

- Templates
- How to use this site

Lists

- Classes
- Enrollment
- Tasks

Reports

- My Class Activity
- My Employees Activity
- My Facility Activity

Discussions

Sites

People and Groups

Education > Arizona

Welcome to the Arizona Heart Hospital Education site. If you are looking for education offerings that are not on this site, you might check www.decisioncritical.net.

Click on this icon to view a calendar of upcoming classes.

Click on this icon to learn how to use this site.

Current Class Offerings

Title	Start Time	Description	Requires Approval
Advanced Cardiac Life Support Class (April 2010)	4/13/2010 8:00 AM	Once registered, need to contact #1045. \$25.00	Yes

My Upcoming Classes

Class	Class Date	Status
There are no items to show in this view of the "Enrollment" list. To create a new item, click "New" above.		

My Tasks

Title	Due Date
There are no items to show in this view of the "Tasks" list. To create a new item, click "New" above.	

- * Out-of-the-box features to make a SharePoint Portal
- * SharePoint Designer form modifications
- * Web Services and JavaScript to pre-populate forms
- * Email approval process
- * Web Services jobs to manage workflows and validation
- * ASHX Handlers for generating Excel files

The Education Coordinator at the Heart Hospital of Arizona wanted an easy way to make employees aware of classes that were being offered at the hospital, collect their desire to attend, collect approval from their supervisor, and finally report on their attendance both to the hospital and the State.

View: Calendar

October, 2009

Sunday Monday Tuesday Wednesday Thursday Friday Saturday

27	28	29	30	1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	1

8:00 AM BLS Renewal Class (Oct) 2009

Education > Arizona > Classes > Basic Life Support Class (March) 2010

Classes : Basic Life Support Class (March) 2010

Click here to enroll in this class.

Generate an attendance sheet.

New Item | Edit Item | Delete Item | Manage Permissions | Workflows | Alert Me | Export Event

Title: Basic Life Support Class (March) 2010

Floor Classroom
10 8:00 AM
10 11:00 AM
, Sue
registered, need to contact #1045. \$15.00 deposit required for book and station. Refundable upon class attendance.
Included in ACLS class

Attach File | Spelling...

Class: Basic Life Support Class (March) 2010

Attendee: Lasne, Peter

Notification Address: Peter.Lasne@medcath.com

Please provide an email address that can be used to remind you of the enrollment.

OK Cancel

Created at 8/27/2009 2:43 PM by Crosby, Sue
Last modified at 10/16/2009 12:35 PM by Crosby, Sue

CLASS ATTENDANCE ROSTER

Roster Number:		
Contractor Name:	Agreement No.:	
ARIZONA HEART HOSPITAL		
Training Date:	Start Time:	End Time:
05/04/2010	8:00 AM	11:00 AM
Type of Training:	Class/Lab Hours	
Course Topic: Basic Life Support Class (May) 2010 (please select from State approved menu curriculum ONLY)		
#	Trainee Name (Print or Type)	Trainee Signature
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
Print Instructor Name & Company: Crosby, Sue		Print Instructor Name & Company:
Instructor Signature:		Instructor Signature:

Pending Approval

A	D	E	F	G	H	I
EmpId	Department	Class Name	Class Date	Signed Up	Approved On	Attended
26886 97100 - Education	Sheath Pulling Class		9/2/2008	10/16/2008	Pending Approval	FALSE
26953 93000 - Inpatient	BLS Renewal: Session 2 (Oct)		10/1/2008	10/16/2008	Approved	FALSE
25344 93000 - Inpatient	BLS Renewal: Session 2 (Oct)		10/1/2008	10/16/2008	Approved	FALSE
26753 97120 - Social Services	BLS Renewal: Session 2 (Oct)		10/1/2008	10/16/2008	Pending Approval	FALSE
26616 93000 - Inpatient	BLS Renewal: Session 2 (Oct)		10/1/2008	10/16/2008	Approved	FALSE
26341 94030 - Operating Room	BLS Renewal: Session 2 (Oct)		10/1/2008	10/16/2008	Pending Approval	FALSE
25379 93000 - Inpatient	ACLS Renewal : Part 2 (Nov)		11/21/2008	10/16/2008	Approved	FALSE
27032 93010 - CCU	ACLS Part 1 (Nov)		11/20/2008	10/16/2008	Approved	FALSE
27032 93010 - CCU	ACLS Renewal : Part 2 (Nov)		11/21/2008	10/16/2008	Approved	FALSE
27031 93010 - CCU	BLS Renewal Class: Session I (Oct)		10/1/2008	10/16/2008	Approved	FALSE
26999 93010 - CCU	BLS Renewal Class: Session I (Oct)		10/1/2008	10/16/2008	Approved	FALSE
27006 93000 - Inpatient	ACLS Renewal : Part 2 (Nov)		11/21/2008	10/16/2008	Approved	FALSE
27006 93000 - Inpatient	ACLS Part 1 (Nov)		11/20/2008	10/16/2008	Approved	FALSE
27045 93000 - Inpatient	ACLS Part 1 (Nov)		11/20/2008	10/16/2008	Approved	FALSE
27045 93000 - Inpatient	ACLS Renewal : Part 2 (Nov)		11/21/2008	10/16/2008	Approved	FALSE
25152 97002 - Nursing Admin	BLS Renewal Class : Session 2 (Mar)		3/4/2009	10/16/2008	Approved	FALSE
27037 94000 - Day Patient	ACLS Part 1 (Nov)		11/20/2008	10/16/2008	Approved	FALSE
27037 94000 - Day Patient	ACLS Renewal : Part 2 (Nov)		11/21/2008	10/16/2008	Approved	FALSE
26931 93000 - Inpatient	ACLS Part 1 (Nov)		11/20/2008	10/16/2008	Approved	FALSE
26931 93000 - Inpatient	ACLS Renewal : Part 2 (Nov)		11/21/2008	10/16/2008	Approved	FALSE
26607 93010 - CCU	BLS Renewal Class: Session I (Oct)		10/1/2008	10/16/2008	Approved	FALSE
26607 93010 - CCU	ACLS Part 1 (Nov)		11/20/2008	10/16/2008	Approved	FALSE
26607 93010 - CCU	ACLS Renewal : Part 2 (Nov)		11/21/2008	10/16/2008	Approved	FALSE
25031 97002 - Nursing Admin	BLS Renewal Class : Session 1 (Nov)		11/5/2008	10/16/2008	Approved	FALSE

Close