

AE-EHR Web Servers

Systems Maintenance

April 24, 2012







Agenda

- AE-EHR Virtual Directories
- AE-EHR Virtual Object Engine
- VOE Control Panel App Groups
- Web Framework Configuration
- Server Specifications
- Web Services
- Data Access Paths
- Systems Maintenance

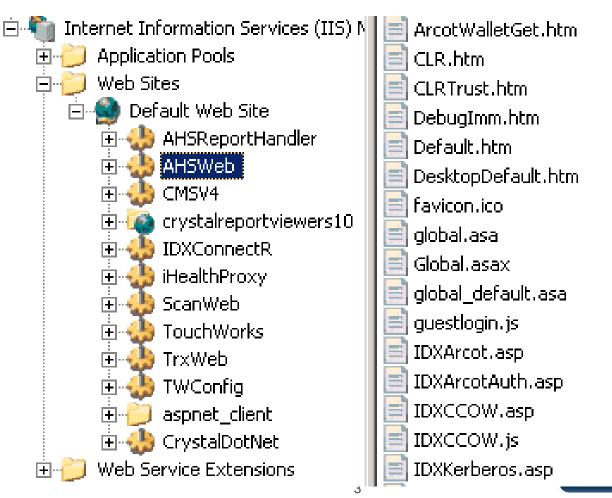




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AE-EHR Virtual Directories





AE-EHR Virtual Directories

- AHSWeb Framework
- Touchworks AE-EHR Program Files
- TrxWeb Dictate and PDA functions
- ScanWeb Scan Image Access
- CMSV4 VOE DB Communication
- AHSReportHandler AE-EHR Reports





AE-EHR Virtual Object Engine

۲	📢 ODBC Data Source Administrator		
	User DSN Sy	stem DSN File DSN Drivers	
	System Data S	Sources:	
	Name	Driver	
	ConnectRZa	ik SQL Server	
	DaveCxR	SQL Server	
	IDXwf	SQL Server	
	TWIS	SQL Server	
	Works	SQL Server	







AE-EHR Virtual Object Engine

Application Group - Name			×
Name of the Application Group:			
Number of threads in the thread pool:	2 📫		
	< <u>B</u> ack	<u>N</u> ext >	Cancel

Applicaton Group - Metadata			×
List of Metadata URLs:			
C:\Program Files\Allscripts Healthca	e Solutions\Touch\	Works Web\Met	aData∖IDXWF
[<u>A</u> dd	<u>E</u> dit	<u>R</u> emove
	< <u>B</u> ack	<u>N</u> ext >	Cancel

Application Group	- DAL 1 (of possible 3)	×
Name:	main	
🔽 Internal ODB	с	
ProgID:		
Connect String:	UID=v	
	< <u>B</u> ack <u>N</u> ext > Cancel	





AE-EHR Virtual Object Engine

- Allscripts Virtual Object Engine is the key communication mechanism between the web and database servers
- Leverages system level DSN's setup using ODBC



VOE Control Panel App Groups

• AHSWeb:

- IDXwf Database
- IDXWF ODBC
- Touchworks:
 - Works Database
 - Works ODBC
- TWIS (Document Imaging):
 - Impact Database
 - TWIS ODBC





Web Framework Configuration

- Database Server Connection Info:
 - Init.xml
 - <Db>: Confirm Server Name is Accurate
 - <Usr>: Confirm SQL Login
 - <Pwd>: Password is Encrypted during install





Server Specifications

- 11.2
 - Windows Server 2003 SP2 (x86 only)
 or Windows Server 2008 (x86 only)
 - Internet Explorer 6.0 SP3, 7.0, 8.0
- 11.4 DRAFT
 - Adds Windows Server 2008 R2 x64 support
 - Internet Explorer 7.0, 8.0, 9.0





Server Specifications

- 2 server class processor cores
- 2 GB RAM (at least)
- (2) 36 GB disk drives (10,000 rpm) configured as 1 logical RAID 1 device
 - Larger drive sizes may be substituted
- Production and test web servers can be virtualized
- GE Framework version 5.02 is required when using Internet Explorer 8, 5.03 required for IE 9





Libraries and Pre-Requisites

- 11.2
 - IIS
 - Microsoft .NET Framework 2.0 SP2 and 3.5 SP1
- 11.4 DRAFT
 - IIS
 - Microsoft .NET Framework 4.0
 - Microsoft Visual C++ 2010 redistributable





Web Services

- WWW Service:
 - Application service for IIS Servers
- AHSVOEService
 - AE-EHR Data Access Service
- Medcin Service
 - Retrieval of Medcin Templates
- Microsoft .NET 2.0, 3.5, 4.0
 - ASP .NET for New v11 Functionality





Data Access Paths

- Database
 - VOE Connections
- Document Imaging/Transcription
 - Windows File Share
- Printing
 - Preview handled locally
 - Hard copies sent through queue in database, pulled by spooler





System Maintenance

- Event Logs
- Performance Baseline
- Plan for Future Growth
- Bandwidth/Capacity
- Change Control
- Test vs. Live System Apply in Test First!





Event Logs - Regular Review

🖳 Computer Management (Local)	Туре	Date	Time	Source
🖻 🌇 System Tools	Information	08/11/2011	10:19:03	Print
🖻 🔝 Event Viewer	Information	08/11/2011	10:18:53	Print
Application	Information	08/11/2011	10:18:53	Print
iHealthGateway	Information	08/11/2011	10:18:53	Print
Microsoft Office Diagnostics	Information	08/11/2011	10:18:53	Print
Microsoft Office Sessions	(Information	08/11/2011	10:18:53	Print
	SError	08/11/2011	10:18:52	TermServDevices
∰ System ⊕ [=] Shared Folders	SError	08/11/2011	10:18:52	TermServDevices
E Kared Folders E Kared Local Users and Groups	SError	08/11/2011	10:18:52	TermServDevices
E W Performance Logs and Alerts	SError	08/11/2011	9:59:52 AM	W32Time
Device Manager	Warning	08/11/2011	9:59:52 AM	W32Time



Performance Baseline

• Create snapshot of normal metric levels

🙀 Performance	
🗑 Eile Action View Favorites	Window Help
← → 🗈 🖪 😫 🖬	
Console Root	Image: Image





Plan for Future Growth

- One web server for every 200 connections
- Validate load balancer configuration before moving into live
- Virtualization is supported for web servers
- Cloning of VMs has been mostly successful
 - Often have to revisit service account passwords in Virtual Directories where it is used.





Bandwidth/Capacity

- From end users to Web Server(s)
- Batch scanning can be a major contender for available bandwidth
- Recommended BW Requirements per site (with Scan and/or dictate)
 - Base: 1024 kbps
 - Plus per user: 40 kbps





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Change Control

- Keep things Stable
- Established Process, or your own?
- Use your ticketing system



Test vs. Live System

- Apply changes in Test First!
- Get real users to validate functionality after change before proceeding in Live.



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Questions?

