

# AE-EHR Web Servers

Systems Maintenance

February 7, 2013

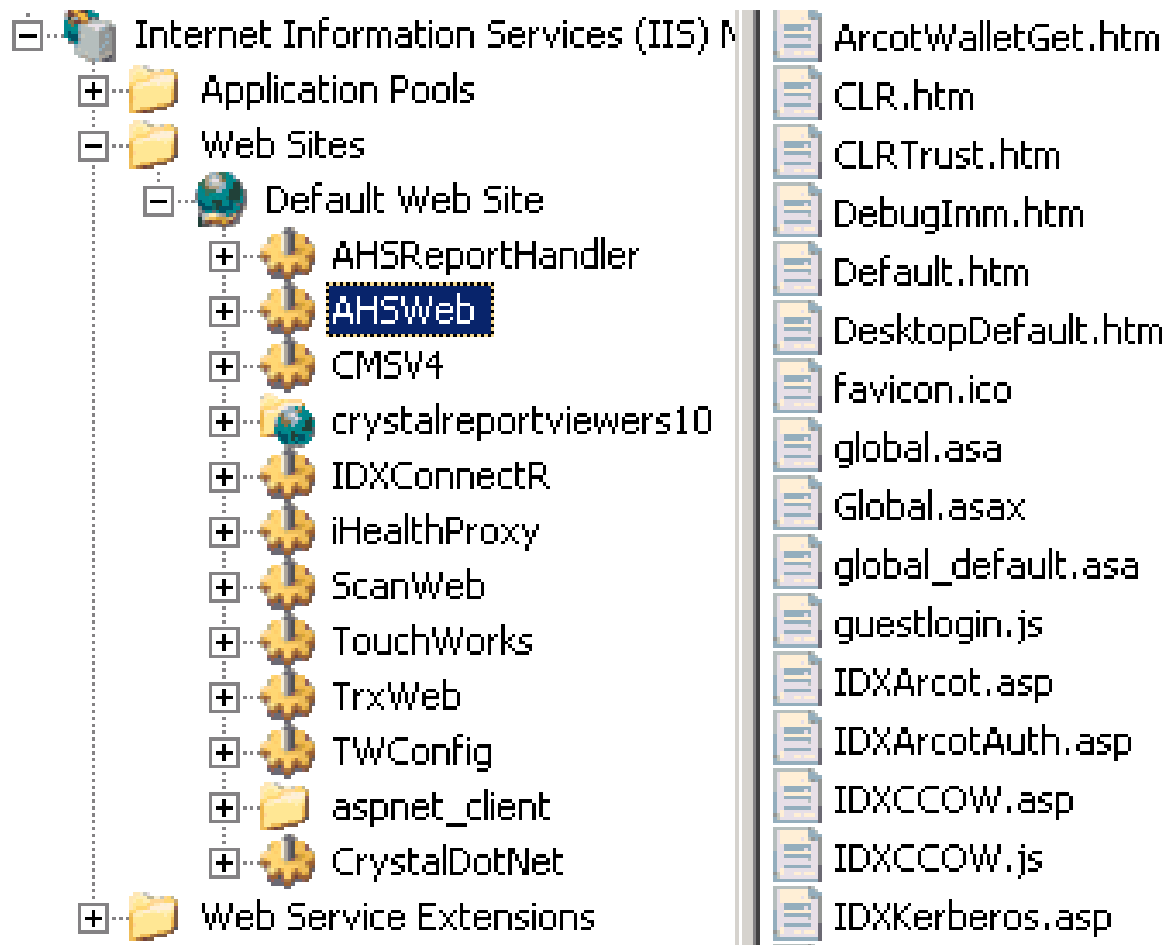
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# Agenda

- 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

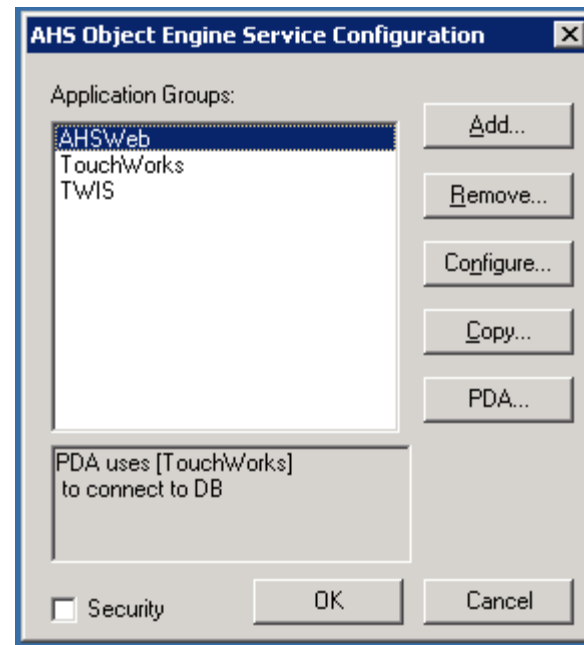
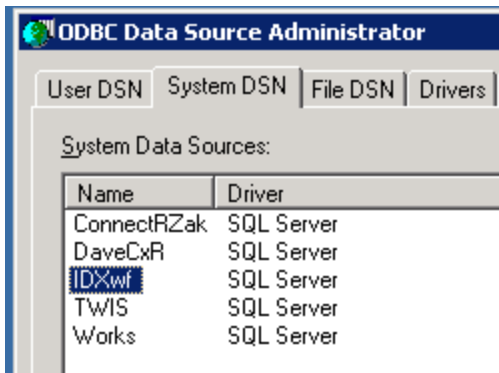
# AE-EHR Virtual Directories



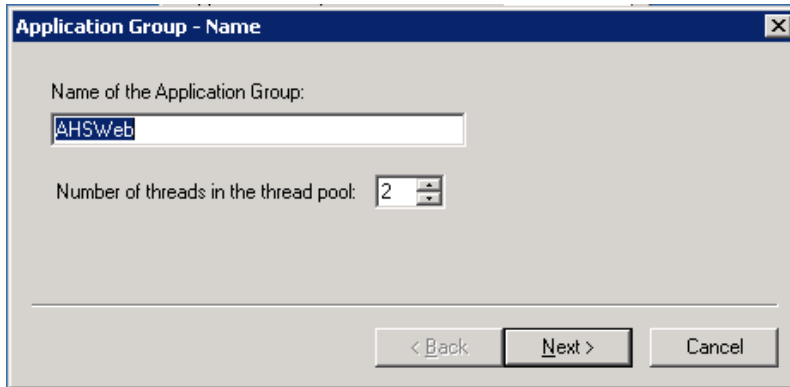
# AE-EHR Virtual Directories

- 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



# AE-EHR Virtual Object Engine

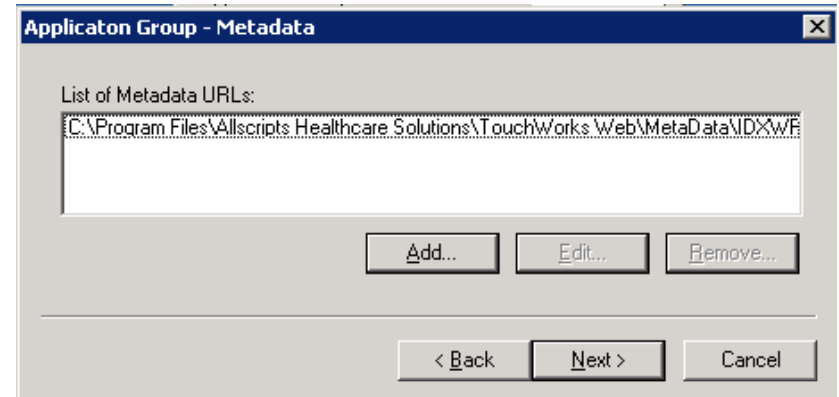


**Application Group - Name**

Name of the Application Group:

Number of threads in the thread pool:

< Back   Next >   Cancel

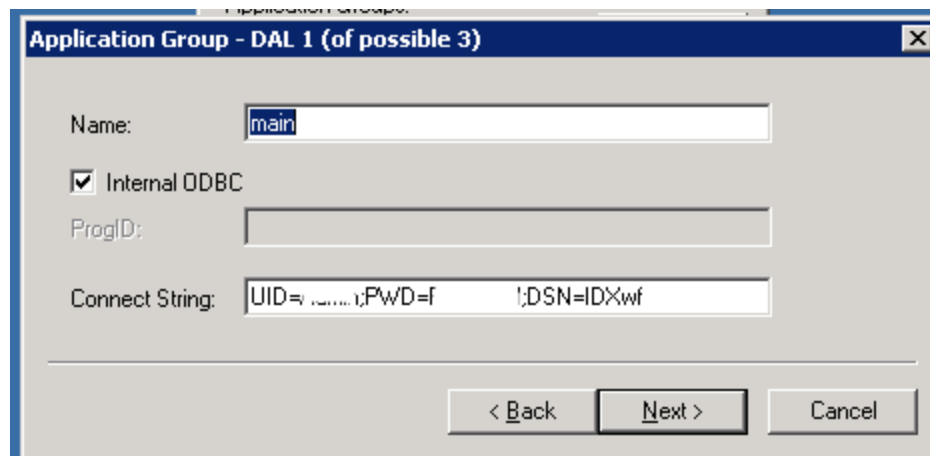


**Application Group - Metadata**

List of Metadata URLs:

Add...   Edit...   Remove...

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**Application Group - DAL 1 (of possible 3)**

Name:

Internal ODBC

ProgID:

Connect String:

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# 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**
  - 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**
  - 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

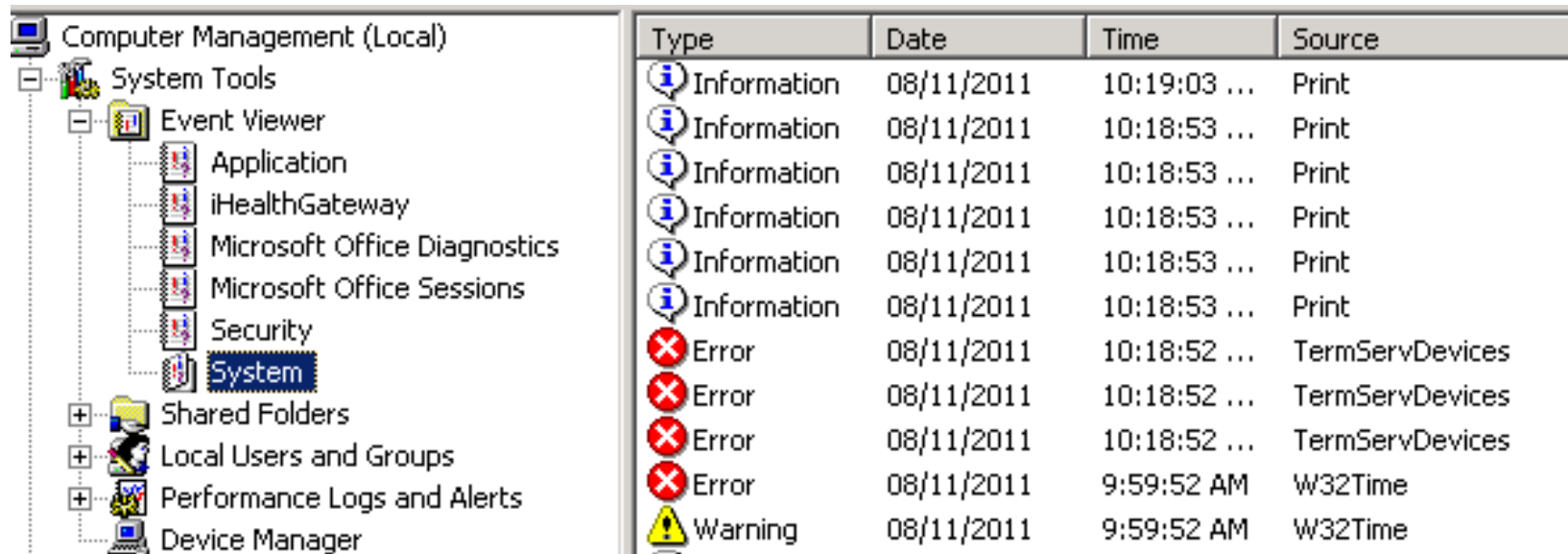
# Data Access Paths

- **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

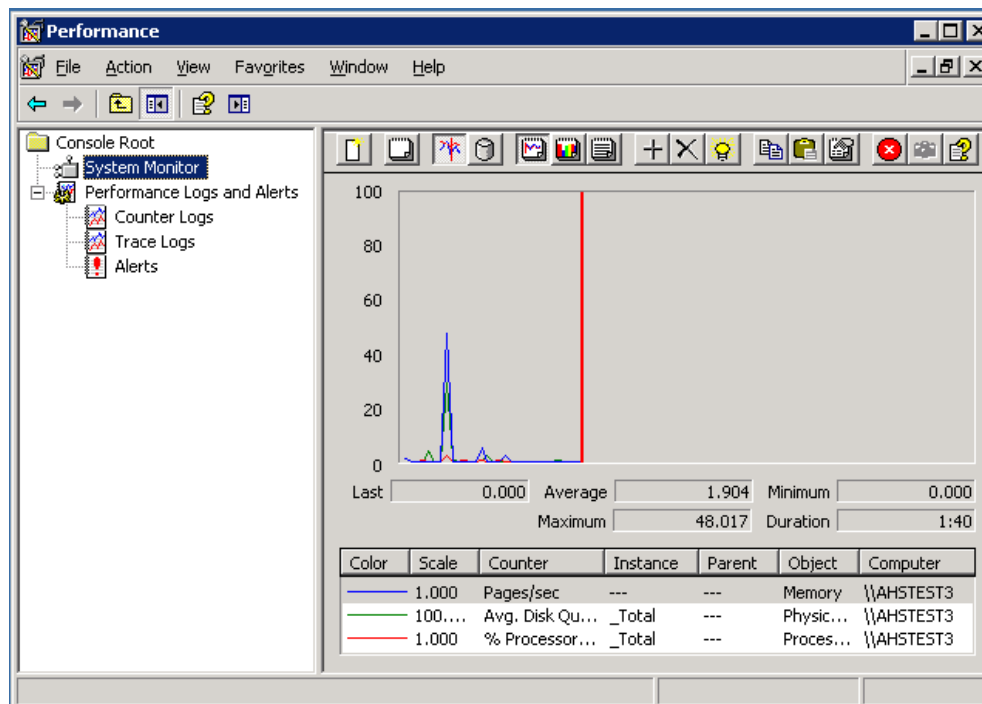


| Type        | Date       | Time         | Source          |
|-------------|------------|--------------|-----------------|
| Information | 08/11/2011 | 10:19:03 ... | Print           |
| Information | 08/11/2011 | 10:18:53 ... | Print           |
| Information | 08/11/2011 | 10:18:53 ... | Print           |
| Information | 08/11/2011 | 10:18:53 ... | Print           |
| Information | 08/11/2011 | 10:18:53 ... | Print           |
| Information | 08/11/2011 | 10:18:53 ... | Print           |
| Error       | 08/11/2011 | 10:18:52 ... | TermServDevices |
| Error       | 08/11/2011 | 10:18:52 ... | TermServDevices |
| Error       | 08/11/2011 | 10:18:52 ... | TermServDevices |
| Error       | 08/11/2011 | 9:59:52 AM   | W32Time         |
| Warning     | 08/11/2011 | 9:59:52 AM   | W32Time         |



# Performance Baseline

- Create snapshot of normal metric levels



# 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

# 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.

# Agenda - Review

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# Questions?