

UFDC JPEG2000 Server Configuration

This serves the zoomable JPEG2000 images for UFDC by using the Aware JPEG2000 software. In addition, this server also serves images generated by the ASP.net application (SobekCM Image Server) which allows features to be drawn on the images by the SobekCM library before being served to the user. This is currently employed by the Aerials collection and will be utilized in the future for highlighting text on the page image.

Server Information

- Basic Server Information
 - Virtual machine on the CNS VMware vSphere4 infrastructure
 - HWID 11422
 - 4GB of RAM
 - C: drive – 80GB
 - Connected to UFDC shared storage of 12TB on CNS Managed storage
 - O/S – Server 2003 R2 (32 bit)

- Backup Strategy
 - The UFDC servers are all VMs running on the CNS VMware vSphere 4 infrastructure. The data on these VMs is not backed up by CNS so we are required to run our own backup jobs using the NSAM/Tivoli system.
 - Nightly backup of all data on server including system state through scheduled VDR snapshot and NSAM tape backup.
 - NSAM/Tivoli – A standard nightly tape backup, managed by Library IT staff. This backup may also include a system state backup to allow bare metal restore depending on the case.
 - VMware VDR image backup – This is a backup type built into the VMware vSphere system that allows us to take a snapshot of a VM on a schedule and do a complete restore of that VM, even from complete corruption or deletion. As this is a disk based backup solution and the snapshots themselves are not backed up to tape, this a first line backup tool, but only acceptable when combined with a tape based backup for redundancy. This backup solution is managed fully by Library IT staff. The cost of this solution equals the cost of the storage attached to the VDR appliance and is covered as part of the Library IT server budget.

Configuration Notes

These instructions assume a clean installation of Windows Server 2003 R2 with IIS installed. All testing done with versions of Server 2008 were failures due to performance issues.

All files required for the install are located in the server software subfolder in the IT software departmental SAN.

Software Installs

- Internet Information Services (IIS 6) – to support the SobekCM image server software
 - When adding this role to the server, be sure that ASP.net is included
- jdk-6u20-windows-i586.exe
 - This is the Java JDK currently in use
- apache-tomcat-6.0.26.exe
 - This the Apache tomcat service currently in use
 - Open Services and find the Apache Tomcat 6 service. Open its properties and set it to start automatically and on the Recovery tab set it to restart automatically on failure.
 - Set the Tomcat service to run under the UFDC service account
 - Test the installation. Browse to <http://localhost:8080> to verify functionality of the Tomcat installation.

Aware JPEG2000 Server (version 3.1)

- Copy contents of the Tomcat-shared-lib folder to a new folder located at: "C:\Program Files\Apache Software Foundation\Tomcat 6.0**common\lib**" (bold section will need to be created).
- Copy contents of Tomcat-shared-lib folder to existing folder located at: "C:\Program Files\Apache Software Foundation\Tomcat 6.0\lib"
- Copy "ImageServer" directory to: "C:\Program Files\Apache Software Foundation\Tomcat 6.0\webapps"
- Copy the DLLs from "Platform\win-x86-32" to the "C:\Windows\system32" directory on the Aware server.
- Edit the image server configuration file to point where the images are:
 - In current config this file is: C:\Program Files\Apache Software Foundation\Tomcat 6.0\webapps\imageServer\WEB-INF\imageServerConfig.xml
 - Find the imageServer.imageDir property and set as: <property name="imageServer.imageDir" value="[SOBEKCM_RESOURCE_LOCATION]" />

IIS Configuration

- Create a virtual directory named 'sobekingsrvr'
 - Enable running scripts to make this a virtual directory

- No special authentication is needed, since this application does not read any database nor does it access any network resources. The locally defined internet guest account should work.
- Ensure that ASP.net 2.0 is selected for this directory

SobekCM Image Server

- Install Latest Version
 - This can be installed simply by copying the contents of the DISTRIBUTABLE folder from the latest version of the software from [Configuration Management](#).