



13th Judicial Circuit

Technology Services 2010 Annual Report

Steve Smith
Technology Services Supervisor

Technology Services
Annual Report – 2010

Staff and Responsibilities

The Technology Services unit is staffed by 3 people:

Steve Smith, Supervisor

Staff Supervision

Technical Project Management

Hardware, Software and Network Management

Applications Development

Technology Bid & Contract Preparation and Review

Chris Fishman-Weaver

Hardware, Software and Network Management

Help Desk & End-User Support

Training & User Manuals

Nicholas Stultz

Applications Development

Staff Changes:

Staff Supervisor Steve Smith was hired on 7/21/2010 replacing Christopher Kilbride.

Configuration Overview

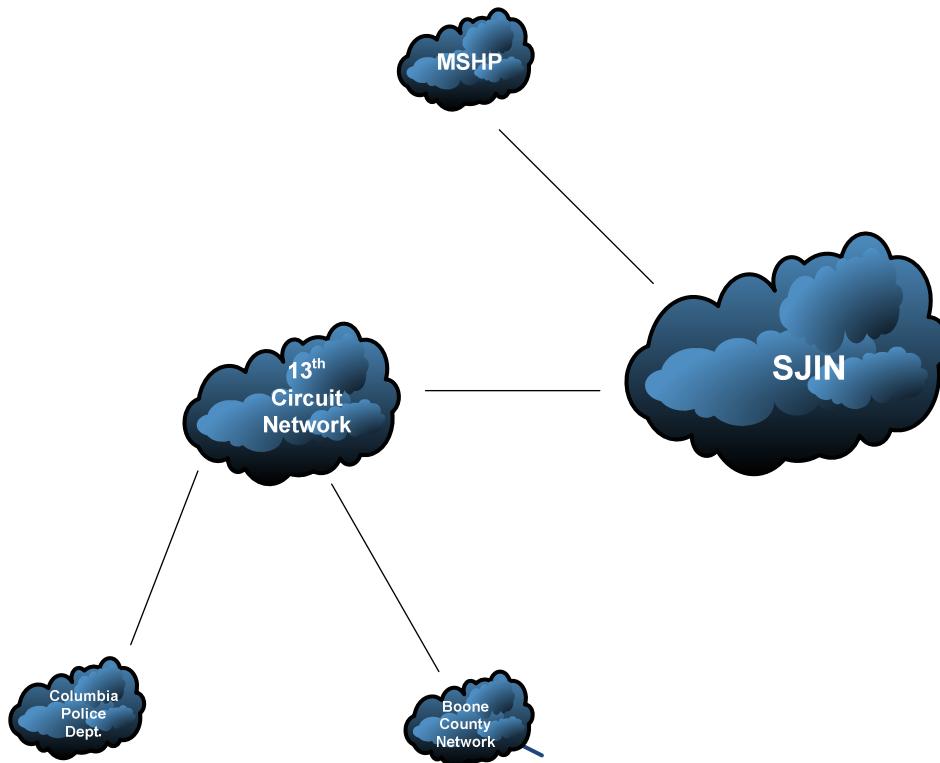
The computer network utilized by the 13th Judicial Circuit is part of the larger Statewide Judicial Information Network (SJIN) managed by the Office of State Courts Administrator (OSCA). The SJIN is the backbone that interconnects all circuit and appellate courts in Missouri.

OSCA provides to the courts certain components and software products utilized by all sites including file, print & database servers, domain controllers, communications devices and other myriad technical devices that allow components to work seamlessly. Over the years many of these components have been consolidated into two judicial data centers. Judicial Data Center 1 (JDC1) is located in Jefferson City, Missouri. Judicial Data Center 2 (JDC2) is located in Marshfield, Missouri.

OSCA provides and manages major software products that include the court case management software (JIS), juror software (JMS), email, office automation products, Case.Net and "Your Missouri Courts" (the judicial website) among others.

Components unique to the 13th Judicial Circuit are located within the Boone and Callaway county locations and managed by Technology Services staff. Technology Services develops and manages software applications used solely by the 13th Circuit. It also installs and manages purchased "off-the-shelf" software products not provided by OSCA such as Quickbooks & Tabquik.

Additionally, the 13th Circuit network interacts with portions of the Boone county network, the Columbia Police department, and the Missouri State Highway Patrol. The result is a blended responsibility and cooperation among circuit, state and local government entities.



The 13th Judicial Circuit utilizes approximately 192 workstations (99 provided by the state), 25 notebook computers, and 81 network and local printers (7 provided by the state).

The circuit also utilizes video-conferencing equipment to help reduce overall costs for staff travel for meetings and prisoner transport. There are five mobile units and units built into the ground level and 3 West courtrooms.

Each of the courtrooms has a sound system. Additionally, the 3 West courtroom in the Boone County courthouse has several technology components for evidence presentation, teleconferencing and video conferencing. Technology Services provides technical support for these systems.

Inventory

Servers

There are several servers located in the Boone County Courthouse server room. There are no servers located in the Callaway County Courthouse or Callaway Juvenile Office.

BNEWCMNEMO – Data Repository/Applications Server

The BNEWCMNEMO server (Nemo) is actually a workstation located in the Boone courthouse server room running the Windows XP operating system. It has 4 GB of RAM and 6 TB of disk space with redundant RAID for a total of 3 TB usable space. It hosts files for the Court Reporters Case Catalyst, files for Fines & Costs and Court Services, and is the web and database server for CCTS (see below).

While Nemo was originally envisioned as a repository for only court reporter and FTR data, its purposes were expanded over time. Additionally, since it uses a workstation operating system it has certain limitations not found in a true server operating system. The primary problem is that only 10 users at a time can connect to its resources. It is desired to relocate CCTS, Fines & Costs and Court Services data to BNEAS1301 (see below) and return Nemo to its original purpose.

Nemo was purchased with funds provided by Boone County.

BNEIN1301 – Public Web Server

In 2010 the 13th Circuit developed its first internet application: the Attorney Calendar Conflict (see below). The application resides on a Linux-based server and is interfaced to the internet via a DSL modem. If other internet-based applications are developed they will also reside on this server.

BNEIN1301 was purchased with funds provided by the Administration of Justice Fund.

BNEAS1301 – Intranet/Applications/Database Server

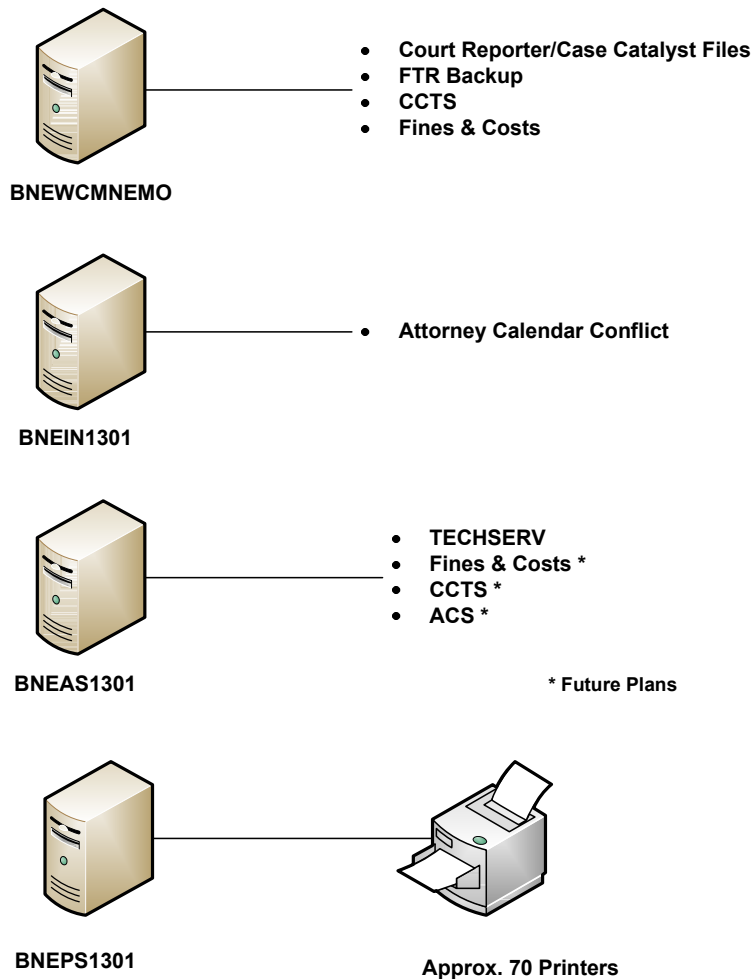
The dual considerations of Nemo being utilized beyond its capacity and OSCA having a surplus server have resulted in the 13th Circuit acquiring a Windows server in the Fall of 2010. This server has 6 GB of RAM and approximately 240 GB of disk space in a RAID configuration for a total of 120 GB usable space.

The intent of this server is to host applications and databases that, for technical reasons, should not reside in JDC1 or JDC2. At this time it is anticipated that CCTS, Fines & Costs, and Court Services will reside there. As other applications are written/re-written they will likely reside on this server.

BNEAS1301 was originally purchased by OSCA and later surplused to the 13th Circuit and is now the property of the 13th Circuit.

BNEPS1301 – Print Server

This is the server that provides printing services for Boone County users. It is provided by OSCA.



2010 Developments

Attorney Conflict Calendar / Case Scheduler

In 2010 Technology Services staff worked with key court staff to create a new web-based application. The Attorney Calendar Conflict application allows attorneys to record dates each month in which the attorney has a calendar conflict with the court. This information is used by the Presiding Judge's secretary when scheduling court dockets. The application was deployed to a pilot group of six attorneys and associated law office staff. It is anticipated to be available for wide-spread use in 2011.

While the Attorney Conflict Calendar allows attorneys to log conflicts, examining those conflicts and comparing to case information from JIS in order to schedule dockets is still a laborious manual process. It is anticipated in 2011 that a Case Scheduler application will be developed to examine information from both Attorney Conflict Calendar and JIS in order to propose dockets. Since this new application will require significant training in JIS and additional technologies, the IT developer will be attending an OSCA-led developer training course in March 2011.

Workstation Replacement

In 2010, 96 state-owned workstations located in the 13th circuit were replaced by OSCA as part of a routine workstation replacement. OSCA has a 4-year rotation on state-owned workstations.

Consolidation

As part of an overall cost-saving measure OSCA continues to consolidate various network services. In 2010 file, database and email services were consolidated by OSCA to one of the data centers.

Inventory Update

Some, but not all, technology assets are recorded in the respective Boone and Callaway inventory applications maintained by each county. Some items such as monitors and some printers do not meet the monetary threshold for mandatory inclusion. However, knowing where these assets are physically located and the anticipated service life of each is important to accurately develop a budget for their eventual replacement.

In 2010 the Technology Services staff inventoried the technology equipment in both courthouses, the Juvenile Justice Center, Alternative Sentencing and the Callaway Juvenile Office. This inventory was recorded into a newly-developed Lotus Notes-based application. This project served the two-fold purpose of developing an accurate technology inventory and recording budgetary information to assist in identifying inventory items nearing end-of-life for budgeting.

Training

During 2010 the Technology Services unit conducted a number of technology-related training sessions on various topics. The topics offered and approximate numbers of attendees includes:

Webnotes – approximately 80 staff.

Getting More Out of Lotus Notes – approximately 60 staff.

Lotus Notes Calendar – approximately 10 staff.

3 West Technology Training – Marshal's staff (approximately 10).

Upcoming Changes

Budget/AP Interface

The court presently uses an aging Delphi-based Budget program to electronically capture and update budget information. Additionally the program prints the payment request that is ultimately sent to the Auditor's office where it is manually re-keyed. In 2011 the Budget program is anticipated to be modified to electronically submit payment requests.

Fines & Costs

In late 2010 Adult Court Services staff noted the Fines & Costs (F&C) program was behaving in a sluggish manner. The overall cause of the sluggishness was identified as the general way in which Delphi works – that entire tables are loaded into memory on a workstation as they are being used. When the F&C data was consolidated to JDC2 in June 2010 the problem intensified. In the Fall of 2010 certain configuration changes were made and the F&C data moved back to BNEWCMNEMO (Nemo) in the server room in the Boone County Courthouse as a means to alleviate the problem.

Nemo is technically a Windows XP workstation with a large amount of data storage. Since it is not running a true server operating system this configuration has certain limitations, chiefly that only 10 people at a time may connect to the resources of the workstation. With 4 court reporters using other files on the server and more than 6 people in ACS, staff are at times prevented from using Nemo.

With the acquisition of a surplus server from OSCA, IT staff will move F&C from Nemo to BNEAS1301 in 2011 thereby relieving Nemo.

ACS staff have also identified certain programming enhancements that will result in changes to certain data being captured and to screen layouts.

Circuit Court Technology Services (CCTS)

Circuit Court Technology Services (CCTS) is a web-based application used as a portal for two existing applications - Focus on Kids and JJC Case Management. The portal has a user-management component that defines users to the system and also defines permissions within each application. Ruby on Rails is the development platform. The application is currently housed on BNEWCMNEMO. As Nemo does not have a true server operating system it has certain limitations – primarily that no more than 10 users at a time can connect to it.

As older Delphi-based applications are rewritten it is anticipated they will be added as modules to CCTS. In order to add additional users to CCTS it will require that it be relocated from Nemo to the new applications server BNEAS1301.

In late 2010 the back-end components of CCTS were upgraded to new versions. As time permits CCTS will be migrated from BNEWCMNEMO to BNEAS1301 and tested.

Website Redesign

The web presence of the 13th Circuit is being internally re-evaluated. A web committee comprised of members of the two clerks' offices, the court administrator's office, the juvenile office and IT has been formed. The high-level goals of the committee are to 1) organize the content for the new website and 2) decide how that content will be managed. Once these key items are decided the framework of the website can be developed.

Organizing the content includes identifying audiences and topics of interest. Managing the content includes identifying who can specify content updates, who and how that content gets updated.

One of the current technical limitations is that IT staff are required to make even the smallest change to the website. One of the desires is to have the site be more interactive with both selected court staff and the public.

As the committee continues to meet more detail will develop and eventually a design framework constructed. The goal is to have the updated website completed by the end of 2011.

Booking Software

The booking software used by the court is antiquated. The 13th Circuit's IT staff are collaborating with other law enforcement and emergency response departments to develop a coordinated records management system that will include a booking component. It is anticipated that the software will be available as early as 2012, so the present booking software needs to remain functional until then.

Windows 7 & Office 2010

The current desktop operating system and office automation suite, Windows XP and Office XP, will be phased out in the judiciary in favor of Windows 7 (W7) and a new office automation suite, possibly Office 2010 or Lotus Symphony, over the next few years. OSCA staff are presently testing all major applications including JIS, JMS, and Lotus Notes. Office automation suites will also be evaluated, particularly for integration in JIS (e.g. Word merge). Once testing is completed these products should be considered 'certified' in the court's environment. OSCA states that mass upgrades to these products throughout the state could begin as early as calendar 2013. However, specific dates for upgrade, particularly for the 13th Circuit, are not yet known.

There is technically no reason why court staff who do not use JIS could not start using W7 as workstations are replaced. There is a logistical problem, however. In order for Technology Services staff to support both XP and W7 they will each require two workstations – one with XP and one with W7. This is so that they can continue to support staff on both operating systems. Also, staff who create documents with Office 2010 or Lotus Symphony products (e.g. Word, Excel) will have to remember to save documents in a format compatible with earlier versions prior to making them available to users still on Office XP.

It is recommended to keep staff consistent, and make the transition at one time during the next workstation replacement.

Backups to JDC2

Prior to server consolidation in June 2010 OSCA had the responsibility for backing up all data residing on servers in the 13th Circuit which included court-developed applications such as Fines & Costs, Court Services, and the court reporter's Case Catalyst.

After consolidation the court reporters' Case Catalyst program was working at such a slow pace as to be nearly unusable and also affected the responsiveness of other court applications as data files were copied. As a remedy the court reporter data files were relocated back to the 13th Circuit server room. Likewise, the Fines & Costs and Court Services programs were nearly unusable as well. They were reconfigured to store the data on the Nemo server as a remedy.

The Nemo server has redundant disk drives so if one fails the others prevent data loss. Should something happen to Nemo (e.g. motherboard fails), however, there is no provision for additional backups to another device or location should Nemo fail.

It is anticipated that as existing Delphi-based applications are rewritten they will be relocated from JDC2 back to the new server (BNEAS1301). Those applications and data will also need to be backed up.

It is the 13th Circuit's position that all data and applications backed up prior to the consolidation should remain the responsibility of OSCA. After much discussion with OSCA in 2010, OSCA agreed to provide a separate Network Attached Storage (NAS) device. We anticipate the NAS device will be available in Spring of 2011. Technology Services staff will then manage the backups of the various applications.

eFiling / eBench & Dual Monitors

The Office of State Courts Administrator (OSCA) is developing applications that will allow attorneys to electronically file documents with the court through the internet, and allow court staff (including judges) to view court documents through computer monitors. OSCA envisions that court dockets could be entirely paper-free by generating dockets electronically, and having the judge process the dockets at the bench.