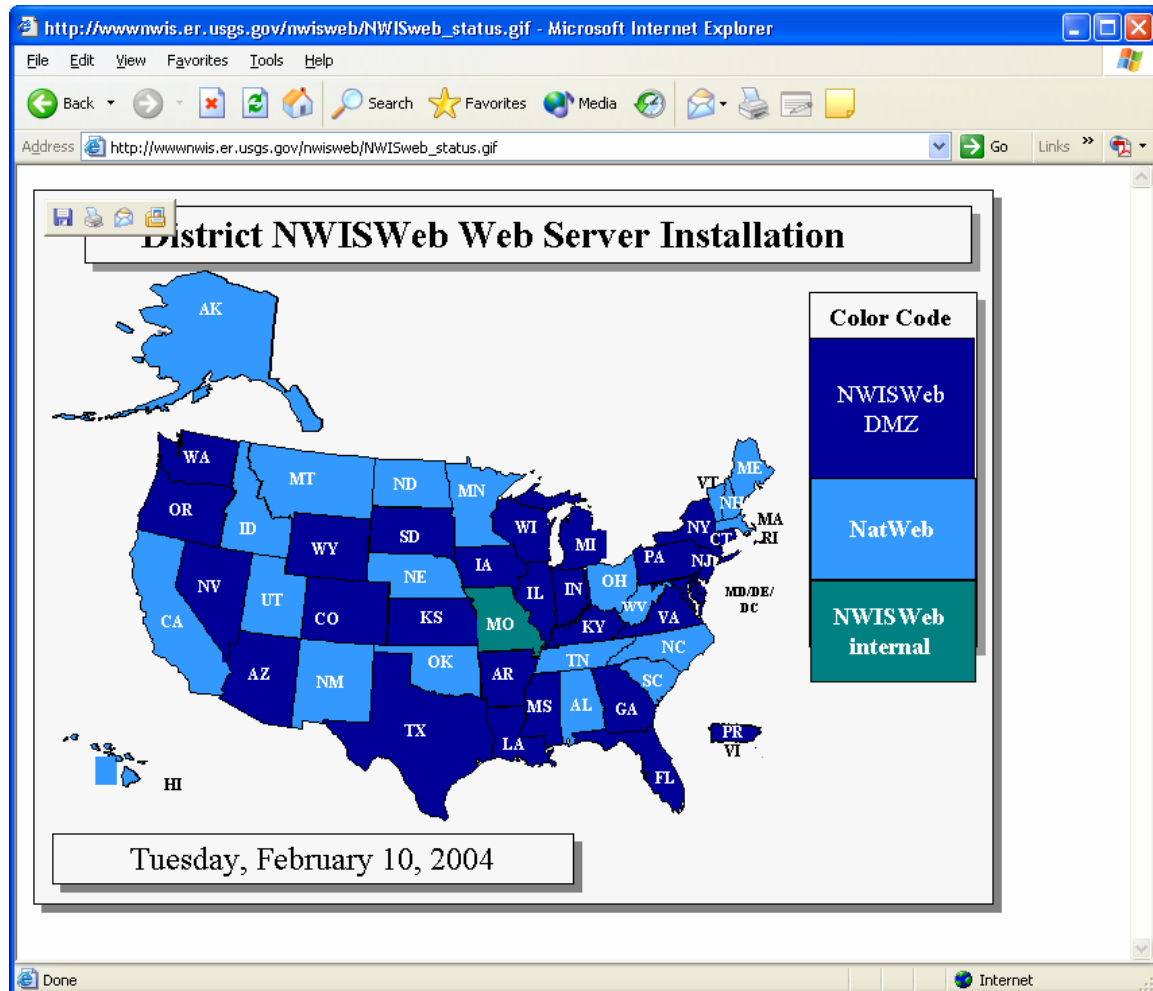


Description

ITAC NWISWEB-Web Side Issue

ITAC members felt that we needed to determine if there is a need for Districts to continue to have their local version of NWISWeb-Web side software on the Sun Ultra 5 workstation accessible by the public. These systems are currently in a temporary DMZ that only lasts through Aug 2004. The current status is



Plans need to be made on whether these systems need to remain locally or if this function can be migrated to NWISWeb in NatWeb that currently serves this data to the public. This migration could eliminate the establishment of a permanent DMZ at District level if serving NWISWeb to the public is the only function being performed in the District DMZ. To convert these temporary DMZ's to permanent status will require a certification and accreditation (C&A) process to be completed by July 31, 2004.

Summary/Findings

Approximately half the Districts have already migrated to NWISweb in NatWeb or have plans to complete this task in the next several months. If this is the only system that has been established in the District NWISWeb DMZ zone and provides no other function to the District, it is recommended that this system be shutdown. This would eliminate the DMZ which will require lots of paperwork to continue operating after July 31, 2004.

This recommendation is made assuming that 24x7 coverage is made available for assistance in solving network and NatWeb server problems as cooperators expect response from District personnel within hours. Initially, 18x7 coverage would be adequate.

Another consideration might be that this system not allow public access but rather only allow internal USGS access. This would allow the District to maintain this system as a backup in emergency situations such as flooding or when access to the WAN is unavailable.

Since this hardware is approximately 5 years old failures will be more frequent and maintenance costs will continue to climb. Plans should be made to replace this hardware within the next two years if a District plans to continue to utilize it to provide other functions.

All responses received are included below for reference.

Responses from NWISWeb-Web Side e-mail query

Scott McEwen

CO, KS, LA, and SD may wish to answer the specific question below, but they have provided me with related info a few months ago. Please see <http://www.rcolka.cr.usgs.gov/uo/comp/dmz2.html>

Oh, and the same for NWQL and BQS.

Gregory E. Senko

Pennsylvania feels strongly that we need to continue to have a local version of NWISWEB-web side software on the Sun Ultra 5 workstation for use by district staff. My feelings is that NWISWEB in NatWEB is sufficient for public access.

There IS another question I have about this subject. Will the districts be able to proxy serve data from the internal LAN to the public via NatWeb? We have applications that run on IIS. As a test, we briefly had NATWEB set up as a proxy server for them, and it worked fine. We currently have the Ultra 5 proxy serving them, and plan to switch to having NatWeb proxy serve them, once we migrate the district public pages. If we won't

be allowed to continue doing this in the future, then some alternative needs to be implemented.

James P. Eaads

Sorry I haven't gotten back to you sooner – just came back from Honduras last week and am catching up. With respect to the move to NATWEB, we decided to do it for a couple of reasons. One was just the administrative overhead that having to our own web site created. With me gone a fair amount this year, we felt that eliminating this would help Dixie and Shane keep up with things. In as much as we don't have a lot dynamic web content, we felt that this would be worth trying out. Also, with the current push to eliminate as many public web sites withing the USGS as possible, we were a good site to test this out. My biggest concern with it so far is that when it goes down or has problems, the response to get things back up is not as quick as when we were running it ourselves. When it was local we tended to watch it as close to 24x7 as possible and fix things as they occurred. Also, down time was carefully planned to have the least impact as possible. We have had occasions where problems with the Menlo Park server has rendered our site unable to update, and response to fix the problem was not a rapid as when we took care of it ourselves, and planned down time is out of our control – which obviously impacts us (the site is down as I write this). I thought originally that the three sites had failover so that if one went down another would take over – but I was apparently wrong in this belief. Overall I think they have done a pretty good job considering the resources they have, but if the USGS is going to seriously consider requiring everyone to migrate, a mechanism to better fund the process needs to be addressed. Most cooperators are getting real used to near 24x7 access, and WE hear about it when its not available. All in all, I'm not 100 percent sure I'd drop my local server now, and I definitely will be more reluctant to give up my ftp server unless I'm a lot more comfortable with the ease and stability of a replacement.

Don't know if this helps – but

J. David Wilson

We are running both a local NWISWeb web server (wa.waterdata.usgs.gov) for internal use (no public access) on our Ultra 5 and the national NWISWEB web server (waterdata.usgs.gov/wa) now in natweb. That is our nwis server sends data to both local and national nwisweb systems. In addition, to the local nwisweb access, we are utilizing the rdb data files generated on the Ultra 5 for a number of realtime applications. I am currently sending the most recent 100 values for each station to the new ftpext server. We have about 6 cooperators that pick up this data once per hour with ftp. The rdb streamflow data files are also used by 3 cooperators on leased lines that use the data for flood warning and monitoring. Our Ultra5 is not on a DMZ because there is no public access. I was assured by the nwisweb team some time ago that we would be able to keep our local nwisweb server indefinitely so I hope that will be the case.

Even though the map still shows us as not having nwisweb in natweb, we do as stated above. I added the national nwisweb data feed quite some time ago. In general, the migration went easily although there are times, mostly recently, when the national nwisweb updates are quite a bit slower than our local nwisweb. I am assuming that when natweb hardware problems settle down, this will not be much of a problem.

Richard Hollway

I think both AK and HI have remote NWISWeb only. OR hasn't done this ... yet.

Shawn C. Noble

Iowa plans to move our NWISWeb to Natweb by the Aug 2004 deadline.

David K. Yancey

Sorry, CA never did install a local NWISweb server so we have never had to do a migration.

Brenda J Athow

SD continues to run NWISWeb-Web side software locally. There are times when the local site works but the National one does not. Currently we have a problem with a site that we took over from another state. On the National NWISWeb only about half the links work as they are supposed to. There were also times when data from sites do not show up on the National side but display just fine locally. We are not opposed to turning off the local server once both servers run for a reasonable length of time with no problems..

There is still the issue of having local hazard monitoring web applications locally. We currently have rt-www running locally so that we can get the turnaround time needed for hazards monitoring. We are evaluating the scripts that Kansas has for their RTQW pages mentioned in Scott McEwen's email as a replacement for the rt-www.

E. Jessica Alvarez

One reason Tim McElhone mentioned to me was that he needed to keep his local NWISWeb server and continue to allow public traffic to it because most of his sites are non-goes (dial-up) and NWISWeb does not server this type of data. Hopefully if we get the NWISRT depot setup then people like Tim will be able to transfer his data to the NWISRT server so that it can be processed and served to the public.

Brian D Reece

Texas is in the process of migrating our local NWISWeb-Web side users to NWISWeb in NatWeb. We have installed a simple message at the top of all of our internal pages

strongly encouraging people to point to NatWeb. Our local webserver logs have been decreasing since we put the message in place. We thought we'd give everyone an opportunity to change the URL on their own.,

NWISWeb is recommending the easiest way is to do a DNS remap our tx.waterdata.usgs.gov address to point directly at NWISWeb in NATWeb, thus the request never makes it to our server. We plan on using that option no later than the end of March 2004 and removing the machine from our local DMZ and back into our internal pool.

We do have one minor non-NWISWeb application being served from tx.waterdata.usgs.gov which we need to migrate before shutting down. The migration can be done and will be completed prior to our end of March 2004 retirement date.

FYI, tx.waterdata.usgs.gov is now using the required rsync method for transferring files instead of FTP.

Vance E. Nichols

The Ohio District did migrate to NATWEB and have been very happy. It's one of those things that one sets and forgets (almost) ... there's still maintenance. The maintainer still has to make sure all the reported data to the public is correct/true. Even with the feelings of good insurance in the redundant NATWEB machines, we keep the local NWISWeb running to compare. The local NWISWeb also assists the field people when our LAN and WAN are down, which happens.

Steven J Brady

Scott, thanks for providing the link to the information and it is still valid to the KS District. I think we could overcome the technical challenges, if we were forced to move everything to NATWeb but it may be at a significant cost. Both in terms of the conversion and possibly some lost functionality. The resources to do the conversion may be hard to get as Xiodong Jian has moved on to other work and is not directly supporting RTQW any longer.

Anthony R Koebele

NatWeb displays the District of North Dakota's Home page. Overall our experience with NatWeb has been positive. I feel Districts would benefit if NatWeb had more graphics packages available. Second, Districts also would benefit if we had a mechanism to handle NatWeb issues during non-business hours.

Like most Districts our web pages have incorporated NWISWeb as well as customized pages. Our customized pages rely on NatWeb replication (private NatWeb directories replicating to public NatWeb directories) for the pages to be displayed to the public. Replication failures have occurred on NatWeb. The replication problems are usually

handled in a reasonable amount of time. However, when a replication problem occurs on a weekend or over a holiday, the issue may not be resolved for many hours. During the time period of the replication problem, our NWISWeb pages remain current; however, our customized pages may be several hours behind.

For example, we generate real-time graphs with NWISWeb for sites located in the Ukraine. These graphs are presented in English; we also generate customized graphs in Ukrainian. The Ukrainian graphs are generated locally and pushed to NatWeb. If a replication error occurs, the graphs presented in English on NWISWeb are current while the customized graphs in Ukrainian may be several hours behind.

Gabe Newman (Telephone call)

Generally agrees that Missouri could retire the local version of NWISweb.

Ray Reed (Telephone Call)

YMP could turn off the local version of NWISweb.

Margaret Bunch

Nevada has directed the public to waterdata.usgs.gov/nv for several years now. We do still run nv.waterdata.usgs.gov for public access as a backup system for when waterdata.usgs.gov is not available for use. The District feels that we could migrate to NWISWeb in NatWeb if support was available 24x7. This 24x7 support must include the ability to address USGS WAN network problems as well as the NatWeb server itself. It does appear that the majority of recent problems encountered are a result of network failure, not a NatWeb system failure.