

Data Center News:

State of Wisconsin: Data center consolidation case study

By Stefanie McCann, Staff
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When Matt Miszewski was named CIO for the state of Wisconsin two years ago, he inherited 10 data centers and 2,500 distributed servers. Recently, Miszewski told SearchCIO.com about his aggressive plan to move the state's servers into a 36,000-square-foot data center - an eight-month project slated for completion in December.

Why consolidate?

Matt Miszewski We decided it was insane trying to keep up with maintenance, staffing, heating, power and air conditioning at 10 sites. It wasn't just the cost; there was across-the-board redundancy. For example, in one data center we had good redundancy and in another we had none. Operationally alone we're going to save \$8 million to \$10 million per year. That is a savings on technology reductions -- fewer servers, fewer licenses, fewer maintenance agreements, smarter use of technology, including virtualization of our server space -- and then personnel reductions.

Does that savings include heating, cooling and power costs?

Miszewski No. For example, one of our data centers is in a building ((Content component not found.)) that operates five days a week, but the data center doesn't have a separate cooling or heating system, so we're paying to heat or cool a building that is over 100,000 square feet for seven days a week because we don't have a separate data center.

Are you buying new boxes and consolidating the data or are you moving all the current servers to the new site?

Miszewski A mixture of both. We are centralizing a few boxes [picking up and moving], we are rationalizing as many as possible [taking off of current servers and moving onto common platforms but larger systems]. E-mail is a great example of the rationalization. We are moving from 220 distributed servers to 19 consolidated ones. From a cost of up to \$15 per mailbox per month down to \$3.

What benefits will you get from this project?

Miszewski One of the things that is glaring -- one of the 10 data centers built 15 years ago,

has planned downtime of 22 hours per year. We've calculated that loss of productivity to be \$2.7 million per year. With the new facility, we'll have 1.6 hours per year of planned downtime. It will be the difference between a tier-one data center and a tier three. We could have made a bigger investment for a tier-four data center, but for the state of Wisconsin, we didn't see that as a need.

What's the difference between a tier-one data center and a tier-four center?

Miszewski A tier one is a data center that was designed in 1970 with the specs of 28 hours downtime. There is no redundancy in a tier-one data center and only one power path. It was designed for water-cooled mainframes. A tier three and a tier four are comparable. They have redundant components; if the power goes out there is a diesel generator. They have two power feeds from different energy companies. A tier three is designed to be down 1.6 hours and a tier four has no downtime.

Will you have a mirror site?

Miszewski Our backup site will be a lights-out facility and it will be located 15-20 miles away. There is a limit of 25 miles because we can't effectively mirror beyond that distance.

What will you move first?

Miszewski We're going to eat our own dog food. The department of administration servers are moving first. We're moving before having to put another department through it.