

Re: Virtual List View functionality in ADAM and Outlook

Source:

http://www.tech-archive.net/Archive/Windows/microsoft.public.windows.server.active_directory/2004-11/0619.html

From: Matt Totty (LMCO/USAF) (*MattTottyLMCOUSAF_at_discussions.microsoft.com*)

Date: 11/09/04

Date: Tue, 9 Nov 2004 08:08:02 -0800

Al,

Why am I going to have to patch any clients– you lost me on that. If I can point to ADAM from outlook using generic LDAP then I at least have a solution for small organizations and tactical Air Force units sitting out there in the sand. A few added features would enable us to move this forward as a total GAL solution for the entire AF. If a patch was required, then I don't understand why it would be prohibitive. The Air Force loads patches everyday.

As for VLV– ADAM does support it. Following Dmitri's advice I have installed some hotfixes that will enable this functionality.

I can already get a pretty VLV to work gracefully using MasterKey Plus from Bolden James which DoD has an enterprise license for.

I should be able to point to ADAM from the Outlook LDAP client and get a Virtual List View if nothing else!

The OAB issue is completely different from the Virtual List View. Downloading portions of the directory is possible for addressing purposes using third party products.

In previous posts I explained repeatedly why we would want to offload Air Force GAL directory. I cannot stress enough that we have approximately 1 million objects– and the AF is going to want other services added. Do I continue to write all of these entries into the MAJCOM AD Forests? Do I continue to try to manage this volume of information with MIIS? (NO!) What about small orgs that want a connection using MIIS (there goes another million objects conenctor space!)From a texbook view– it doesn't sound that bad. But it has been a nightmare so far– MIIS is a great product– I am not slamming it– but it is defintiely a first generation product with bugs and performance issues. Let's don't sugar coat it. Synchronizing the AF GAL across 9 massive AD forests and several other entities is becoming untenable. I can show you if you want to come down. ;)

If lightning struck and we all decided to go down this path– yes we would be reinventing some components and processes. I don't see anything wrong with that due to the size of the AF and other services. However, you just saved tremendous overhead for MAJCOM AD's and the multiple MIIS implementation.

So if you think I am not going down the right path– do you have suggestions for the correct way to do this? I would appreciate any hints you guys might have! We probably need to talk over the phone to clear up any confusion. Would you be amenable to this?

Thanks.

"Al Mulnick" wrote:

> *Matt, I see what you're talking about but I'm concerned that you're going in
> a direction that will be much more difficult to manage than you want it to
> be. You obviously know best what you can and can't sell to them, but IMHO
> any solution that requires you to patch all those clients is going to take
> longer to deploy than you really may want to take.*

>
> *Using a VLV (I had to refresh my memory on this*

>
> http://msdn.microsoft.com/library/default.asp?url=/library/en-us/ldap/ldap/searching_with_the_ldap_vlv_control.asp

> *sounds nice enough, but my understanding of VLV's is that the client has to
> implement it and the directory has to support it. You ahve half of that
> already :)*

>
> *I think that's what Dmitri is talking about with the Outlook hotfixes, but I
> could be wrong about that and don't want to put words in this mouth. That's
> just how I read it.*

>
> *Address Lists seem to be the way to go for this feature (vs. ABV's) in terms
> of finished product, how it fits in to the overall solution, and efficiency.
> However, AL's require the RUS to process and it might be best for you to
> off-load the RUS process similar to how a hosting organization might want to
> do that. The advantage of using the built in functions is the ability to
> OAB's. You can't do that with the LDAP directory based solution as easily.
> I don't know your security policies around laptops and mobile users having
> off-line access to email clients and directories, but that would be a big
> issue you'd have to overcome if you off-load the GAL in many
> implementations.*

>
> *I'm not seeing this as doing what you want in the long term, at least not as
> well as the features in the product. I see this as something you'd have to
> start doing and then have to re-make pieces of the product solution
> components over time just to reach what's there now.*

>
> *I'm not sure I understand all of the issues that drove you there but
> duplicating a directory for presentation purposes when it might mean
> updating every client you own and then having to reinvent many of the
> product components (OAB for example) seems prohibitive. Without knowing the*

> *rest of the details that took you to this path, I can do no more than guess.*
>
> *Hopefully the conversation is at least helpful.*
>
> *Al*
>
> *"Matt Totty (LMCO/USAF)" <MattTottyLMCOUSAF@discussions.microsoft.com> wrote*
> *in message news:E9741A3D-ABBB-424E-8987-E13D80C1CCC6@microsoft.com...*
> *Ok guys.*
>>
>> *Lee- I have been a member of the MIIS users group for a long time. As a*
>> *matter of fact- we were running MIIS when it had no documentation lol. But*
>> *the simple fact is this. When you make changes to MIIS - many times you*
>> *have*
>> *to perform full synchronizations. With us- it takes days- and if we decide*
>> *to*
>> *add other services to the directory- it will only make matters worse. I*
>> *don't*
>> *even want to talk about the thousands of errors we have to resolve during*
>> *some sync cycles. Future plans for provisioning scenarios are complicated*
>> *by*
>> *the fact that we have to worry about crunching all of these objects. On*
>> *paper*
>> *MIIS will scale to the sky - in reality- performance becomes a huge*
>> *bottleneck.*
>>
>> *One of the scenarios we experienced a couple of times is that the MIIS*
>> *server DB becomes corrupted- and we have had to rebuild the box from*
>> *scratch.*
>> *Do I ask the AD admin to delete a million objects so I can repush them?*
>> *No-*
>> *they won't have that. So we have to spend three days doing bulk email*
>> *joins*
>> *and manual container joins. Which becomes messy at best.*
>>
>> *Al- the address book view is just something that the end user is used to.*
>> *I*
>> *have argued that there is really no overwhelming need for it. What is*
>> *simpler*
>> *than typing in a last name first initial in the VLV? I agree that these*
>> *views*
>> *by base don't really buy them a lot. But I am not going to be able to*
>> *change*
>> *the mindset in the AF overnight. However- it would be a knarly feature to*
>> *integrate with ADAM. The Major Commands within the Air Force want to be*
>> *able*
>> *to control how the GAL is presented to their users.*
>>
>> *My question is this- Could the functionality of ADAM be enhanced to*
>> *provide*
>> *the features necessary to provide a GAL similar to that of Exchange*

> > 2000/2K3?
> > *Is this idea too far out?*
> >
> >
> >
> > *"Lee Flight" wrote:*
> >
> >> *Matt,*
> >> *if you are seeking feedback/comparison on your MIIS performance*
> >> *experiences you might want to try on the MMSUG forum on yahoo*
> >> *groups if you have not already done so. All the MIIS experts seem*
> >> *to be there.*
> >>
> >> *Lee Flight*
> >>
> >> *"Matt Totty (LMCO/USAF)" <MattTottyLMCOUSAF@discussions.microsoft.com>*
> >> *wrote*
> >> *in message news:C9C60B82-A063-49C9-AB93-EFB9CAEB576A@microsoft.com...*
> >> > *Thank you gentlemen.*
> >> >
> >> > *Dmitri- we do currently use MIIS to bring all of our entries into ADAM*
> >> > *from*
> >> > *multiple AD's. I am trying to OFFLOAD the GAL to ADAM so that each*
> >> > *instance*
> >> > *of MIIS (15 servers curently) does not have to worry about crunching*
> >> > *through 1*
> >> > *million entries. We currently do a push and pull- and I want to do*
> >> > *pulls*
> >> > *only- to ADAM and have the end user hit ADAM for GAL purposes. In our*
> >> > *case*
> >> > *it*
> >> > *greatly reduces a lot of overhead. Overhead from an MIIS point of view*
> >> > *and*
> >> > *also from an AD point of view. Today a million objects- tomorrow*
> >> > *millions*
> >> > *more as the Air Force will have a need to integrate other services-*
> >> > *NAVY,*
> >> > *Army, into their Global. I see this coming and am trying to come up*
> >> > *with a*
> >> > *solution that is going to keep us from failing. Have you ever*
> >> > *synchronized*
> >> > *a*
> >> > *million entries in MIIS? ;)*
> >> >
> >> > *Lee- we only pull contact information- we exclude distribution lists.*
> >> >
> >> > *So something to consider from a technical standpoint- I do not want to*
> >> > *even*
> >> > *go off on a cost and development target- is to somehow integrate*
> >> > *features*
> >> > *into Outlook/ADAM that will enable Address Book View functionality. Is*

> > > *this*
> > > *something that is just too wild to consider? It seems on a high level*
> > > *that*
> > > *since ADAM and AD are closely married this would be something that is*
> > > *at*
> > > *least achievable from a technical standpoint. I am not of the school*
> > > *that*
> > > *you*
> > > *would even want to have a view by base since I can type in a last name*
> > > *and*
> > > *have the entries appear. But this is the military and they demand it.*
> > >
> > > *As far as LDAP instances go– We have close to 108 bases– so that is not*
> > > *going to be a solution.*
> > >
> > > *For the tactical untis (people fighting the wars) in the middle east*
> > > *and*
> > > *elsewhere– they are going to love the fact that they can access the GAL*
> > > *via*
> > > *ADAM.*
> > >
> > >
> > > *"Lee Flight" wrote:*
> > >
> > >> *Following from Dmitri, you can change the name of the service that*
> > >> *appears in the drop–down. I currently have Outlook 2003 running on*
> > >> *WinXP with three LDAP address books LDAP1,LDAP2 and LDAP3*
> > >> *in the drop–down, respectively pointing to:*
> > >>
> > >> *an ou in an application partition in an ADAM instance*
> > >>
> > >> *a container in a different application partition in the same ADAM*
> > >> *instance*
> > >>
> > >> *an ou in an application partition in a different ADAM instance, this*
> > >> *one*
> > >> *is ADAMsync'ed from AD*
> > >>
> > >> *all instances are on the same WinXP box*
> > >>
> > >> *A couple of other things to think about are:*
> > >>
> > >> *what objects you will have in the address list, contacts will be fine*
> > >> *but you will have problems, I think, if you need to handle*
> > >> *Distribution*
> > >> *Lists that might exist in your Exchange GAL*
> > >>
> > >> *what credentials that you will be using to bind to the ADAM instance,*
> > >> *I'm presuming that the outlook clients are domain based. I just*
> > >> *wondering*
> > >> *if there is a way of using permissions for the binding user to return*

> > > > *the*
> > > > *appropriate "view" (if you are using restricted views in that way).*
> > > >
> > > >
> > > > *Lee Flight*
> > > >
> > > >
> > > > *"Dmitri Gavrilov [MSFT]" <dmitrig@online.microsoft.com> wrote in*
> > > > *message*
> > > > *news:e2vZQjfwEHA.3936@TK2MSFTNGP10.phx.gbl...*
> > > > > *Ah, you are using Outlook. Then your choices are somewhat limited.*
> > > > >
> > > > > *First of all, you can only have a single "address book" entry per*
> > > > > *LDAP*
> > > > > *service in the dropdown. You can certainly point it at ADAM, and it*
> > > > > *will*
> > > > > *work just fine (after you apply the QFE and create a subtree-ized*
> > > > > *index*
> > > > > *for*
> > > > > *CN).*
> > > > >
> > > > > *I guess you can configure multiple LDAP services, pointing to the*
> > > > > *same*
> > > > > *ADAM*
> > > > > *instance, each with a different search base -- this will give you an*
> > > > > *illusion of multiple address books. I am not sure if you can control*
> > > > > *the*
> > > > > *name of the service that appears in the drop-down. The other*
> > > > > *limitation*
> > > > > *is*
> > > > > *that you can not have one user belong to multiple "address books",*
> > > > > *because*
> > > > > *you can not have it in two different containers at the same time.*
> > > > >
> > > > > *However, if you just need to support a single GAL, then you can*
> > > > > *certainly*
> > > > > *push it into ADAM. Take a look at adamsync (currently in beta), that*
> > > > > *will*
> > > > > *help you to bring data from AD into ADAM and keep it in sync.*
> > > > > *Alternatively,*
> > > > > *you can use MIIS to do the syncing. IIFP (MIIS-lite) is free -- it*
> > > > > *will*
> > > > > *work*
> > > > > *for AD-ADAM synchronization.*
> > > > >
> > > > > *--*
> > > > > *Dmitri Gavrilov*
> > > > > *SDE, Active Directory Core*
> > > > >
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> > > > *"Matt Totty (LMCO/USAF)"*
> > > > *<MattTottyLMCOUSAF@discussions.microsoft.com>*
> > > > *wrote*
> > > > *in message*
> > > > *news:761F533D-F25D-4077-BE60-82AAEC4DFBF1@microsoft.com...*
> > > > > *We need to be able to present the end user with a drop down view of*
> > > > > *Air*
> > > > > *Force*
> > > > > *bases using outlook/ADAM. Currently- the user achieves this via an*
> > > > > *Exchange*
> > > > > *address book view based on SMTP address in their respective Active*
> > > > > *Directories. If I can somehow do the same thing using Outlook/ADAM,*
> > > > > *then*
> > > > > *the*
> > > > > *Air Force can effectively offload thier Global Address List to ADAM.*
> > > > > *There*
> > > > > *are*
> > > > > *multiple reasons why we would like to do this which I can describe*
> > > > > *in*
> > > > > *more*
> > > > > *detail if you wish. But the main point I am trying to make is that*
> > > > > *we*
> > > > > *need*
> > > > > *to*
> > > > > *achieve a similar end user experience with the end user using ADAM*
> > > > > *as*
> > > > > *he*
> > > > > *would by using the AD/Exchange ABV. If we can even come close that*
> > > > > *would*
> > > > > *be*
> > > > > *outstanding.*
> > > > >
> > > > > *"Dmitri Gavrilov [MSFT]" wrote:*
> > > > >
> > > > > > *Hmm. ADAM base schema does not include showInAddressBook*
> > > > > > *attribute,*
> > > > > > *which*
> > > > > > *means all special logic that exists in AD for this attribute will*
> > > > > > *not*
> > > > > > *work*
> > > > > > *(even if you import it). So, you will have to implement your own*
> > > > > > *solution*
> > > > > > *based on regular LDAP queries (including VLV, if you need it).*
> > > > > >
> > > > > > *If you define your scenario in more detail, we might be able to*
> > > > > > *generate*
> > > > > > *some ideas.*
> > > > > >

> > > > > --
> > > > > *Dmitri Gavrilov*
> > > > > *SDE, Active Directory Core*
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> > > > > *"Matt Totty (LMCO/USAF)"*
> > > > > *<MattTottyLMCOUSAF@discussions.microsoft.com>*
> > > > > *wrote*
> > > > > *in message*
> > > > > *news:A2ACA407-6E20-4FE1-BF1D-DE99D61A873A@microsoft.com...*
> > > > > > *Thank you – this is outstanding information.*
> > > > > >
> > > > > > *The last question I have now before I get the patch and begin*
> > > > > > *testing*
> > > > > *is*
> > > > > *this.*
> > > > > >
> > > > > > *Is there a way to create ABV type views within ADAM? It may be*
> > > > > > *a*
> > > > > *stretch,*
> > > > > > *but this is the final piece of the puzzle before I lay out my*
> > > > > *proposal.*
> > > > > > *The*
> > > > > > *end user would like to be able to drill down by AF base*
> > > > > > *level.Thanks*
> > > > > *guys.*
> > > > > >
> > > > > > *"Dmitri Gavrilov [MSFT]" wrote:*
> > > > > >
> > > > > > > *The second bit (contanerized index) is useful for one-level*
> > > > > > > *VLV*
> > > > > > *searches.*
> > > > > > > *Basically, it is the index on (parentID + attributeValue).*
> > > > > > > *This*
> > > > > > *index is*
> > > > > > > *useless for subtree searches, the ones that Outlook does for*
> > > > > > > *generic*
> > > > > > *LDAP*
> > > > > > > *sources.*
> > > > > > >
> > > > > > > *The new index (subtree-ized index) is on (ancestorID +*
> > > > > > *attributeValue).*
> > > > > > *Note*
> > > > > > > *that ancestorID has multiple values, one for each ancestor of*
> > > > > > > *the*

> > > > *given*
> > > > > *node. This index allows to run subtree searches by fixing the*
> > > > *ancestorID*
> > > > > *to*
> > > > > > *the ID of the search base, and then using the corresponding*
> > > > > > *index*
> > > > *range*
> > > > > *for*
> > > > > > *VLV window positioning.*
> > > > > >
> > > > > > *If there's no index that can be used for VLV, then we perform*
> > > > > > *the*
> > > > > *complete*
> > > > > > *search and dump the results into a temp table, then use it*
> > > > > > > *for*
> > > > > *window*
> > > > > > > *positioning. However, if the search is too large (more than*
> > > > > > > *10000*
> > > > > > *entries by*
> > > > > > > *default -- defined by an ldap policy), then we fail with*
> > > > > > > *unavailable*
> > > > > > > *extension error.*
> > > > > > >
> > > > > > > *--*
> > > > > > > *Dmitri Gavrilov*
> > > > > > > *SDE, Active Directory Core*
> > > > > > >
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> > > > > > >
> > > > > > > *"Lee Flight" <lef@le.ac.uk-nospam> wrote in message*
> > > > > > > *news:#vv5CTMwEHA.3808@TK2MSFTNGP15.phx.gbl...*
> > > > > > > > *What does this kind of index do? I had thought that the 2nd*
> > > > > > > > *bit*
> > > > > > > > *was for VLV functionality...*
> > > > > > > >
> > > > > > > > *Thanks*
> > > > > > > > *Lee Flight*
> > > > > > > >
> > > > > > > > *"Dmitri Gavrilov [MSFT]" <dmitrig@online.microsoft.com>*
> > > > > > > > *wrote*
> > > > > > > > *in*
> > > > > > *message*
> > > > > > > *news:OF6YQOKwEHA.3624@TK2MSFTNGP09.phx.gbl...*
> > > > > > > > *The indexing is done in the background. When the index is*

