

Re: System Administrator Implied Permissions

Source: <http://www.derkeiler.com/Newsgroups/microsoft.public.sqlserver.security/2003-04/0001.html>

From: Jose Molina (jmolina4@cox.net)

Date: 03/31/03

From: "Jose Molina" <jmolina4@cox.net>

Date: Mon, 31 Mar 2003 07:43:41 -0800

Hi Dan,

Thanks again.

-Jose

>-----Original Message-----

>> *Hi Dan,*

>> *Thanks for the clarification. Just to make sure I understand you correctly: when sql server 'creates' the sa login, it assigns it the System Administrator fixed server role.*

>

>*Correct.*

>

>> *It also assigns it to the public role of all databases (understandable) and has the boxes checked for the db_owner fixed database role (which is what I am questioning). If I understand what you are saying, then the literal assignment to the db_owner role is redundant in this case because as an administrator, you are a member of the dbo group and you are automatically given db_owner rights to every database(whether or not the db_owner box is checked).*

>>

>> *Whew... lots to say...*

>>

>> *Now, given this (if indeed true), why does SQL Server display this redundant information? Is there something*

I

>> *am missing?*

>

>*You are right that the reported information is redundant. The dbo user*

>*in each database is always a member of the public and db_owner roles.*

>*SQL Server shows that the sa and BUILTIN\Administrators logins have*

>access to all databases via the dbo user mapping and reports role
>membership accordingly. However, these logins were not explicitly added
>to those roles. Other sysadmin role members have the exact same
>privileges but aren't reported as public and db_owner role members for
>some reason.
>
>The bottom line is that sysadmin role members implicitly have full
>permissions regardless of reported role membership.
>
>--
>Hope this helps.
>
>Dan Guzman
>SQL Server MVP
>
>-----
>SQL FAQ links (courtesy Neil Pike):
>
><http://www.ntfaq.com/Articles/Index.cfm?DepartmentID=800>
><http://www.sqlserverfaq.com>
><http://www.mssqlserver.com/faq>
>-----
>
>"Jose Molina" <jmolina4@cox.net> wrote in message
>news:03af01c2f72f\$95fb6780\$3301280a@phx.gbl...
>> Hi Dan,
>> Thanks for the clarification. Just to make sure I
>> understand you correctly: when sql server 'creates' the
>> sa login, it assigns it the System Administrator fixed
>> server role. It also assigns it to the public role of
>> all databases (understandable) and has the boxes checked
>> for the db_owner fixed database role (which is what I am
>> questioning). If I understand what you are saying, then
>> the literal assignment to the db_owner role is redundant
>> in this case because as an administrator, you are a
>> member of the dbo group and you are automatically given
>> db_owner rights to every database(whether or not the
>> db_owner box is checked).
>>
>> Whew... lots to say...
>>
>> Now, given this (if indeed true), why does SQL Server
>> display this redundant information? Is there something
I
>> am missing?
>>

>> *Much Thanks Dan.*
>>
>> *-Jose*
>>
>>
>> >-----*Original Message*-----
>> >*Jose, I think I understand your question better now.*
>> *When you view*
>> >*login security in Enterprise Manager, the GUI will show*
>> *that logins*
>> >*mapped to the 'dbo' user are members of the public and*
>> *db_owner roles.*
>> >*This means that the 'dbo' user is a member of the*
>> *db_owner role and*
>> >*'dbo' (like all users) is a member of the public role.*
>> >
>> >*Permissions are not checked for sysadmin role members*
so
>> *all other role*
>> >*memberships and permissions are irrelevant*
>> >
>> >---
>> >*Hope this helps.*
>> >
>> >*Dan Guzman*
>> >*SQL Server MVP*
>> >
>> >
>> >*"Jose Molina" <jmolina4@cox.net> wrote in message*
>> >*news:007b01c2f6ef\$3b5f4c0\$a201280a@phx.gbl...*
>> >> *Hi Dan,*
>> >> *I am aware of this but I still need a little more*
>> >> *clarification. As an example: Does the db_owner*
fixed
>> >> *database role need to be assigned to any sysadmin*
role?
>> >> *I was under the impression that this role was*
implied.
>> >>
>> >> *Please advise.*
>> >>
>> >> *Thanks!*
>> >>
>> >> *-Jose*
>> >> >-----*Original Message*-----
>> >> >> *SQL Server initially creates the 'sa' user. Isn't*
>> >> *the*
>> >> >> *db_owner an implied permission for the fixed*
server
>> >> *role*
>> >> >> *System Administrator anyway? If this is the case,*

>> why
>> >> >> the redundancy?
>> >> >
>> >> >Members of the sysadmin role are automatically
mapped
>> to
>> >> the 'dbo' user
>> >> >in all databases. This is somewhat different that
>> being
>> >> a db_owner
>> >> >fixed database role member because the 'dbo' user
can
>> >> also perform
>> >> >functions on the owned database outside the database
>> >> context, such as
>> >> >DROP DATABASE.
>> >> >
>> >> >--
>> >> >Hope this helps.
>> >> >
>> >> >Dan Guzman
>> >> >SQL Server MVP
>> >> >
>> >> >-----
>> >> >SQL FAQ links (courtesy Neil Pike):
>> >> >
>> >> >[http://www.ntfaq.com/Articles/Index.cfm?](http://www.ntfaq.com/Articles/Index.cfm?DepartmentID=800)
>> >> >DepartmentID=800
>> >> ><http://www.sqlserverfaq.com>
>> >> ><http://www.mssqlserver.com/faq>
>> >> >-----
>> >> >
>> >> >"Jose Molina" <jmolina4@cox.net> wrote in message
>> >> >news:002601c2f68b\$0fce98c0\$3401280a@phx.gbl...
>> >> >> Hello,
>> >> >> I had a question concerning the database
permissions
>> >> >SQL
>> >> >> Server checks for the 'sa' role. The db_owner
fixed
>> >> >> database role is checked for each of the databases
>> >> >> when
>> >> >> SQL Server initially creates the 'sa' user. Isn't
>> >> >> the
>> >> >> db_owner an implied permission for the fixed
server
>> >> >> role
>> >> >> >System Administrator anyway? If this is the case,
>> >> >> why
>> >> >> >the redundancy?
>> >> >> >>

>> >> >> *Thanks!*

>> >> >>

>> >> >> *-Jose*

>> >> >

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