

## Re: Application role to access xp\_cmdshell

**Source:** <http://www.derkeiler.com/Newsgroups/microsoft.public.sqlserver.security/2004-02/0258.html>

---

**From:** Dan Guzman (*danguzman\_at\_nospam-earthlink.net*)

**Date:** 02/17/04

Date: Tue, 17 Feb 2004 08:06:28 -0600

As long as the ownership chain is unbroken, direct permissions on xp\_cmdshell are not needed. This necessitates that your user procs be owned by 'dbo', your user database be owned by 'sa' and cross-database chaining (introduced in SQL 2000 SP3) be enabled. Example script below.

For security reasons, it is important that your user proc be coded in such a way that only the intended command can be executed. Also, you should enable cross-database chaining only if you fully trust users that have permissions to create dbo-owned objects. See Cross-database chaining in the SQL 2000 Books Online for more information.

You will also need to allow non-sysadmin users to execute xp\_cmdshell. You can do this from Enterprise Manager under Management-->SQL Server Agent-->Job System. Uncheck the 'Only users with sysadmin privileges...' check box and specify the Windows account you want to use as the OS security context for non-sysadmin users. This account should have the minimal permissions need to perform the needed tasks.

> *I'm also unsure whether to call sp\_setapprole from the sp's*  
> *or from the Access app.*

You'll need to execute sp\_setapprole directly from your application. From the Books Online:

<Excerpt href="tsqlref.chm::/ts\_sp\_sa-sz\_6tt1.htm">

The sp\_setapprole stored procedure can be executed only by direct Transact-SQL statements; it cannot be executed within another stored procedure or from within a user-defined transaction.

</Excerpt>

```
USE MyDatabase
EXEC sp_changedbowner 'sa'
GO
```

```
-- for SQL 2000 SP3+
EXEC sp_dboption 'MyDatabase', 'db chaining', true
GO
```

microsoft.public.sqlserver.security: Re: Application role to access xp\_cmdshell

```
CREATE PROC dbo.MyXpCmdShellProc
AS
EXEC master..xp_cmdshell 'MyCommand'
GO
GRANT EXEC ON dbo.MyXpCmdShellProc TO MyAppRole
GO
```

```
EXEC sp_setapprole 'MyAppRole', 'MyAppRolePassword'
EXEC dbo.MyXpCmdShellProc
GO
```

```
--
Hope this helps.
Dan Guzman
SQL Server MVP
"Carl Olsson" <caos@regerar.com> wrote in message
news:d495b147.0402170439.d8b1453@posting.google.com...
> I have an Access app linked to a SQL server db. This app uses
> xp_cmdshell in some stored procedures and it works fine. As long as
> the user is administrator... I'd like to set up an application role
> that can execute xp_cmdshell and access my db but I don't know how to
> do it as xp_cmdshell is in the Master db while everything else is in
> my own db. I'm also unsure whether to call sp_setapprole from the sp's
> or from the Access app.
>
> Can somebody please give me some code examples or direct me to a good
> site?
>
> /Carl
```