

# SQL Server Journey with SQL Authority

## Personal Notes of Pinal Dave

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## SQL SERVER – FIX : Error: 18486 Login failed for user 'sa' because the account is currently locked out. The system administrator can unlock it. – Unlock SA Login

April 23, 2009 by [pinaldave](#)

Today, we will riffle through a very simple, yet common issue – *How to unlock a locked "sa" login?*

It is quite a common practice that SQL Server is hosted on a separate server than application server. In most cases, SQL Server ports or IP are exposed to the web, which makes them risk prone. For hackers, System Admin login "sa" is the preferred account which they use for hacking. In fact, a majority of hackers try to hack into SQL Server by attempting to login using "sa" account. Once hackers gain access to server using "sa" login, they get a complete control over the SQL Server.

Hackers apply Brute Force method to hack "sa" login. Brute Force method is an attempt to guess a password using every possible combination. Be it in your machine where SQL Server is hosted or in your domain, if you have a policy setting that disables any account after a certain number of unsuccessful attempts, it will also disable all your SQL Server logins including "sa" login. In this scenario, SQL Server will display the following error:

msg: 18486

Login failed for user 'sa' because the account is currently locked out. The system administrator can unlock it.

### Fix/Solution/Workaround:

1) Disable the policy on your system or on your domain level. However, this may not be the most appropriate option as it will adversely affect your security protection level.

2) If this is a one-time issue, enable “sa” login WITH changing password of “sa” login.

```
ALTER LOGIN sa WITH PASSWORD = 'yourpass' UNLOCK ;  
GO
```

3) If this is a one-time issue, enable “sa” login WITHOUT changing password of “sa” login.

```
ALTER LOGIN sa WITH CHECK_POLICY = OFF;  
ALTER LOGIN sa WITH CHECK_POLICY = ON;  
GO
```

4) If you are not using “sa” login, switch your authentication from mixed mode authentication to windows authentication to remove your “sa” login account.

5) **BEST Practice:** Create another user with systemadmin role having the same rights as “sa” login and let “sa” login get disabled. Use the newly created account as this will not be exposed on the Internet and for hackers it will be a tough nut to crack! They will find it difficult to guess the right password and moreover, they will not be able to do Brute Force attack over it.

I am eager to know if there are other options to solve this problem.

If you simply want to change the “sa” password, you can follow my previous article [SQL SERVER – Change Password of SA Login Using Management Studio \(http://blog.sqlauthority.com/2007/12/29/sql-server-change-password-of-sa-login-using-management-studio/\)](http://blog.sqlauthority.com/2007/12/29/sql-server-change-password-of-sa-login-using-management-studio/).


Please note that it is not mandatory to reboot SQL Server or restart SQL Server services after changing the password for “sa” login. If you are interested, go through all the [comments \(http://blog.sqlauthority.com/2007/12/29/sql-server-change-password-of-sa-login-using-management-studio/\)](http://blog.sqlauthority.com/2007/12/29/sql-server-change-password-of-sa-login-using-management-studio/) and bring forth your opinion about this discussion.

Reference : Pinal Dave (<http://blog.SQLAuthority.com> (<http://blog.sqlauthority.com/>))

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## 18 Responses



1. on [April 23, 2009 at 5:32 pm](#) | [Reply](#)  [Brian Tkatch](#)  
Good idea for #5.

Is there a way to restrict the source for a login? For example, to restrict sa to be a local login.



2. on May 17, 2009 at 5:29 pm | Reply Kunal

Dear Pindal,

My Friend Forgot the SA password in SQL SERVER 2005

Is there any way to Reset "SA" password if the SQL Server is in SQL Server Authentication Mode Only....

and there is no other sysadmin account.

Or

Is there any way to change the Sql Server Authentication mode from Sql to Mixed Mode.



3. on May 19, 2009 at 2:26 am | Reply Imran Mohammed  
@Kunal.

SQL Server provides two types of Authentication,

Windows Authentication and SQL Server Authentication.

You can have Windows Authentication and

You can have Windows + SQL Server Authentication.

In no case you will have only SQL Server Authentication, you are talking about a hypothetical example which would never exists.

If you have an exception other than what I explained above, please provide more details or ask your friend to write a reply to this post.

Thanks,

~ IM.



4. on July 20, 2009 at 4:43 pm | Reply Dustin  
@ Imran Mohammed

Thanks a lot! That worked for me!!!!

->Connected to the Management Console, logged in with Windows Authentication instead of SQL Server Authentication! So i had Administrative rights and was able to set the 'sa' account back on! Thats it!

Great :-)



5. on August 28, 2009 at 12:43 pm | Reply [Rajiv Singh](#)  
Hi Pinal,

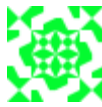
As in your entire article 4th & 5th option are valuable for security purpose. If the application running on web then It should follow to all DBA for security purpose.

Regards,  
Rajiv Singh



6. on January 22, 2010 at 12:55 pm | Reply [lgpadilla](#)  
Hello!!!

The fix worked great, tks!!!



7. on April 30, 2010 at 4:14 pm | Reply [Arun Prasad](#)  
Worked like a charm!!!

Thanx a lot!



8. on June 17, 2010 at 8:02 pm | Reply [Susan Van Eyck](#)  
Thank you so much for clearing up a big mystery!

I've had SQL-authenticated user accounts apparently locking and unlocking themselves for no good reason, and without DBA-assistance.

It's good to finally understand that the server's local security settings affect my SQL logins!



9. on August 5, 2010 at 1:06 pm | Reply [Chalapathi Pinisetty](#)  
Hi Pinal,

Can you explain how Active directory users can use SQL Server in a domain

Thanks.



10. on November 25, 2010 at 4:40 pm | [Reply](#) *hemu*  
Really useful.....grt :)



11. on November 29, 2010 at 2:17 pm | [Reply](#) *Shiju*  
Really helpful....thanks a ton



12. on January 25, 2011 at 3:38 pm | [Reply](#) *manisha*  
it works@@@ Thanks a lot!!!



13. on March 25, 2011 at 9:19 pm | [Reply](#) *Dora*  
Hi,

This article is very interesting !

But there' s something that i need to know :

You talked about how to unlock an account locked because of wrong passwords but what i need to know is how to enforce password policy to lock an SQL login as 'sa' after multiple numbers of failed attempts for example 3 attempts ?

How can i do this ??

I want to lock the account user with SQL authentication after 3 times of wrong passwords ?

HOW ?

Thank you to help



14. on April 1, 2011 at 12:57 pm | [Reply](#) *Sumesh*  
Hello,

Im using asp.net2.0 and sql sever 2000 in my windows server 2003 system. While im run my asp program the following error message arise."Login failed for user 'sa'.". I have change my authentication mode to mixed mode,but the issue is still persisting.Could you plese look into this and tell how to fix this problem.



15. on April 14, 2011 at 9:36 pm | [Reply](#) *ReneVilleda*

Hi, maybe too late, but personally I found another issue with some users that can not login with sa account

For some reason I do not know, I found a sa account with no default database, so they can not

login with sa account, I just change the default database and “voila”, they can login again with no trouble  
Hope It helps anyone



16. on December 10, 2011 at 3:44 pm | Reply jani

Dear All

i am using os win server 2003 enterprise edition, Sql server 2000 and Vb 6.0

Dear and install all supported applications crystal report Bism etc now when i am going to open vb exe file or application at that time i got this error

login failed for user 'sa'.

and try to search resolve this issue but still failed so please kindly help me as soon as possible me waiting all of your reply



17. on December 25, 2011 at 1:27 am | Reply siva

Hi All,

in one of my application i am running multiple reports in singleshot, but the issue is after running about 20 to 30 reports the 'sa' account of sql is getting lockedout. please help to fix this issue.

thanks in advance.



18. on April 8, 2012 at 6:42 am | Reply holld

thank you very much!

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