

# MySQL

MySQL WEB MySQL RDBMS(Relational Database Management System  
RDBMS (Relational Database Management System) 1. 2. 3.  
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- MySQL
- MySQL
  - mysql utf8 utf8mb4

# MySQL

MySQL MySQL AB Oracle MySQL  
C C++ Python Java Perl PHP Eiffel Ruby Tcl MySQL PHP PHP Web MySQL  
GPL MySQL

# MySQL

MySQL  
Oracle Windows MySQL 3 mysql MySQL  
MySQL /etc/my.cnf→/etc/mysql/my.cnf→usr/local/mysql/etc → /.my.cnf  
/etc/my.cnf Windows .cnf .ini

# mysql utf8 utf8mb4

mysql utf8 utf8mb4

MySQL 5.5.3	utf8mb4	mb4	most bytes 4	unicode	utf8mb4	utf8
utf8	,	utf8mb4 ?	mysql	utf8	3	4
(Emoji	Unicode	ios android	)	Unicode		U
UTF-8	31	UTF-8	21	17	Unicode	
utf8	Mysql	UTF-8	Unicode			
Mysql	utf8	UTF-8	Mysql	Unicode		Unicode
Mysql	300	4	UTF-8			
Mysql	4	UTF-8	utf8mb4	5.5.3	(	select version();)
VARCHAR	CHAR					

## mysql utf8 utf8mb4

my5.5.3

```
select version();
```

MySQL 5.5.3	utf8mb4	mb4	most bytes 4	unicode	utf8mb4	utf8
--						
--1	alter table j1 default character set utf8mb4;					
ALTER DATABASE test CHARACTER SET = utf8mb4;						
--2	alter table j1 modify name varchar(20) character set utf8mb4 not null default					
ALTER TABLE `test` CHANGE COLUMN `name` `name` varchar(12) CHARACTER SET utf8mb4;						
--	TEXT	LONGTEXT				
--						
alter table test convert to character set utf8mb4;						

```
--  
--      mysqldump      utf8mb4
```

```
[client]  
default-character-set = utf8mb4  
[mysqld]  
character-set-server=utf8mb4  
collation-server=utf8mb4_unicode_ci  
[mysql]  
default-character-set = utf8mb4
```

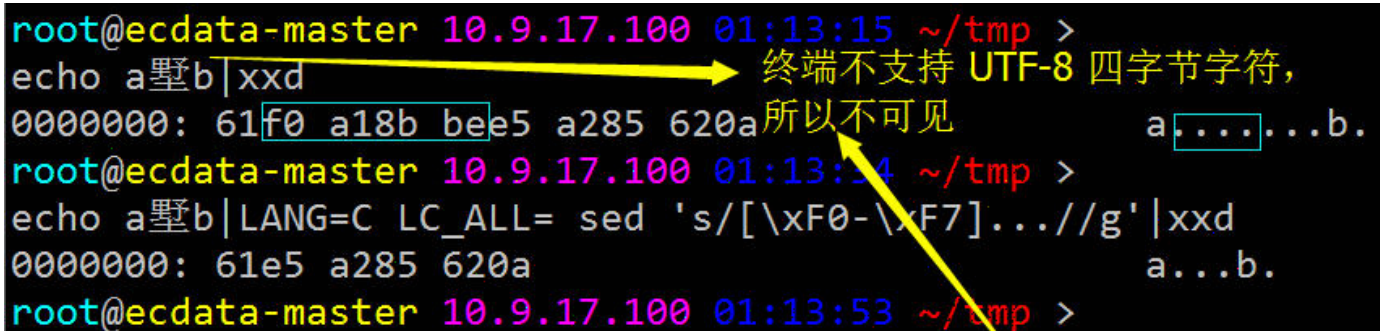
java      jdbc      mysql-connector-java-5.1.14.jar

mysql      u

## shell

sed awk python perl      load

```
root@ecdata-master 10.9.17.100 01:13:15 ~/tmp >  
echo a売b|xxd  
0000000: 61f0 a18b bee5 a285 620a 所以不可见 a....b.  
root@ecdata-master 10.9.17.100 01:13:34 ~/tmp >  
echo a売b|LANG=C LC_ALL= sed 's/[\xF0-\xF7]...//g'|xxd  
0000000: 61e5 a285 620a a...b.  
root@ecdata-master 10.9.17.100 01:13:53 ~/tmp >
```



```
echo a売b|LANG=C sed 's/[\xF0-\xF7]...//g'|xxd
```

## java

MySQL Unicode

```
for i=1->n  
int c=str.codePointAt(i);  
if (c<0x0000||c>0xffff) {  
    return false;  
}
```

web utf8

```
create table t1(name varchar(20) charset utf8mb4);
insert into t1 values(0xF0A09080);

set charset binary;
select * from t1;
```

## utf-8

4 utf8 :

- windows xp: xp 4 utf8 ,
- windows 7: 4 utf8
- mac os x: 4 utf8
- iPhone/iPad: 4 utf8

shell 4 utf8 , Navicat SecureCRT

**php** :

php utf8, mysql text character set utf8: 4 utf8

php utf8mb4, mysql text character set utf8: , 4 utf8 "?"

php utf8mb4, mysql text character set utf8mb4: 4 utf8

, winxp , 4 utf8 . utf8mb4 , utf8mb4 utf8 , .