

# ClustrixDB Version and MySQL Version Compatibility

ClustrixDB provides general compatibility with MySQL and MariaDB functionality, but does not guarantee compatibility with any particular version. For the purposes of third party tools, you can configure ClustrixDB to display a specific version.

The value for the version variable will be a concatenation of `mysql_version` and `clustrix_version`. The value for `mysql_version` should be set according to your compatibility needs and the `clustrix_version` global variable is updated automatically on database upgrade.

```
sql> select @@version;

+-----+
| @@version |
+-----+
| 5.0.45-clustrix-9.1 |
+-----+
1 row in set (0.00 sec)
```

Changing the value of `mysql_version` may cause your application's behavior to change.

## Global Variables

These are the global variables related to version.

Name	Description	Default Value
<code>clustrix_version</code>	Clustrix software version	<auto populated>
<code>mysql_version</code>	The reported MySQL server version	5.0.45
<code>format_version</code>	A version string indicating the version of the software when the cluster was initial created.	<auto populated>
<code>version</code>	The reported server version	<auto populated>

## Caveats to Version Compatibility

### Replication from ClustrixDB (Master) to MySQL (Slave)

ClustrixDB can replicate to the following versions of MySQL with the using the specified values set for `mysql_version` on the ClustrixDB master. See [Using ClustrixDB as a Replication Master](#) for instructions on configuration.

ClustrixDB <code>mysql_version</code> (master)	MySQL version (slave)			
	5.0.*	5.5	5.6	5.7
5.0	✓	✓	✓	✓
5.5	✓	✓	✓	✓
5.6	✗	✓	✗	✗
5.7	✗	✗	✗	✗

Replication from ClustrixDB to ClustrixDB is not affected by the value for `mysql_version`.

## JDBC compatibility

Changing the MySQL value contained in `version` can have an impact on JDBC behavior, as JDBC will read the version and attempt to use features accordingly. ClustrixDB does not support the `tx_read_only` variable, which is used by JDBC when some specific MySQL values are set in `version`. The following chart outlines compatibility of Clustrix with different values for `version` and versions of JDBC:

JDBC	version 5.0.45	version 5.6.38	version 5.6.4	version 5.6.45	version 5.6.5
5.1.32	✓	Not Supported	✓	Not Supported	Not Supported
5.1.36	✓	Not Supported	✓	Not Supported	Not Supported
5.1.37	✓	✓	✓	✓	✓
5.1.40	✓	✓	✓	✓	✓

5.1.41	✓	✓	✓	✓	✓
5.1.43	✓	✓	✓	✓	✓
5.4.44	✓	✓	✓	✓	✓