

Technology	Default Port	SSL or other Encryption On by	Required	Direction
Client - Server Connections (mysql client, connectors, mysqldump, mysqlpump)				
MySQL Client to Server - MySQL Protocol - 3306	3306/tcp	Y	Y unless just using 33060	From Client to Server
MySQL Client to Server - New X Protocol - 33060	33060/tcp	Y	Y unless just using 3306	From Client to Server
MySQL Shell				
MySQL Client to Server - MySQL Protocol - 3306	3306/tcp	Y	Y unless just using 33060	From Shell to Server
MySQL Client to Server - New X Protocol - 33060	33060/tcp	Y	Y unless just using 3306	From Shell to Server
For checks, from Shell to GR server during InnoDB cluster configuration.	33061/tcp	Y	Y if running InnoDB Cluster	From Shell to GR Servers in the InnoDB Cluster
MySQL Workbench				
MySQL Client to Server - MySQL Protocol - 3306	3306/tcp	Y	Optional - pick at least 1	From WB to Server
MySQL Client to Server - New X Protocol - 33060	33060/tcp	Y	Optional - pick at least 1	From WB to Server
Connects via SSH Tunnel	22/tcp	Y	Optional - pick at least 1	From WB to Server
Client - Router Connections -				
MySQL Client Any SQL to Router - MySQL Protocol	6446/tcp	Y. Note: Inherited from Client and Server, if client's ssl-mode is VERIFY_IDENTITY, it will fail if the router is NOT running on the same IP as the server.	Required if Router provides RW access	Client Read/Write to Router
MySQL Client ReadOnly SQL to Router - MySQL Protocol	6447/tcp	""	Required if Router provides ReadOnly access	Client RO to Router
MySQL Router to Server - MySQL Protocol	3306/tcp	""	Required	Router to Server
MySQL Client Any API calls to Router - New X Protocol - 33060	6448/tcp	""	Required if Router provides RW access	Client to Router
MySQL Client ReadOnly Calls to Router - New X Protocol - 33060	6449/tcp	""	Required if Router provides ReadOnly access	Client to Router
MySQL Router to Server - New X Protocol - 33060	33060/tcp	""	Required	Router to Server
High Availability				
MySQL Group Replication internal communications port - 33061	33061/tcp	Y	Y	Group Replication - Communication between Group Members (Cluster members)
MySQL Replication	3306/tcp	Y	Y	Slave Connects to Master
External Authentication *				
MySQL Enterprise Authentication - LDAP *	389/tcp	Y	Only if using External Authentication to LDAP. Also supports use of SASL	Enterprise Authentication in MySQL server to LDAP
MySQL Enterprise Authentication - AD *	389/tcp	Y	Only if using External Authentication to LDAP	Enterprise Authentication in MySQL server to AD
Key Management (for TDE, Keyring Functions, etc) *				
KMIP - used with Oracle Key Vault, Gemalto KeySecure, Thales Vormetric key management server, Fernetix Key Orchestration *	Varies, See key manager/vault specific documentation.	Y	Only required if TDE is using a KMIP server	
Key Services - AWS KMS *	443/tcp	Y	Only required if TDE is using AWS KMS	
MEB backup				
Communicate to Local Instance	3306/tcp	Y	Optional - can connect with tcp socket pipe memory	Instance
If InnoDB Cluster/Group Replication	3306/tcp	Y	Required for InnoDB Cluster Backup	Members of Cluster/Group
Oracle Object Store	443/tcp	Y	Optional	From MEB to Object Store
AWS S3	443/tcp	Y	Optional	From MEB to S3
Backup to Media Manager (SBT API) *	Varies - See backup media manager specific documentation	Vendor dependent	Optional	From Memory Mangers Library to Media Manager Server (see vendor documentation)
Memcached Protocol Support				
MySQL Memcached Plugin	11211/tcp	N	Optional	From memcached client to mysql server memcached plugin