

# Auditing Data Access Operations

*Describes MapR Filesystem, MapR Database, and MapR Event Store For Apache Kafka operations that are audited by default and operations that can be selectively enabled or disabled for auditing.*

This type of auditing is for operations that are managed by the MapR Filesystem, MapR Database, and MapR Event Store For Apache Kafka. These operations take place within volumes and have effects at the level of the MapR file system.

## Auditing of Operations on Directories and Files

The following table shows whether ( Y ) or not ( N ) the following operations on files and directories are audited. In the table, the operations with Y in the **Selective Auditing Support** column can be included and/or excluded from auditing and operations with N in the **Selective Auditing Support** column are audited by default and cannot be excluded from auditing. Use the name specified in the **Operation Name to use for Selective Auditing** column when you run the maprccli [SelectiveAuditingOfOperations.html#concept\_nzd\_j5g\_h5) command to enable or disable auditing for that operation.

Operation	Name in Audit Logs	Operation Name to use for Selective Auditing	Directories	Files	Selective Auditing Support
Change group owner	CHGRP	chgrp	Y	Y	Y
Change owner	CHOWN	chown	Y	Y	Y
Change permissions	CHPERM	chperm	Y	Y	Y
Create	CREATE	create	N/A	Y	Y
Create symbolic link	CREATESYM	createsym	Y	Y	Y
Delete	DELETE	delete	N/A	Y	Y
Disable auditing	DISABLEAUDIT	N/A	Y	Y	N
Enable auditing	ENABLEAUDIT	N/A	Y	Y	N
Offload file	FILE-OFFLOAD	fileoffload or filetieroffloadevent	N/A	Y	Y
Recall file	FILE-RECALL	filerecall or filetierrecallevent	N/A	Y	Y
Check status of tiering job for file	FILE_SCAN	filescan	N/A	Y	Y
Abort ongoing offload or recall of file	TIER_FILE_JOBABORT	filetierjobabort	N/A	Y	Y
Get status of tiering job for file	TIER_FILE_JOBSTATUS	filetierjobstatus	N/A	Y	Y
Offload volume or offload file	FILE_TIER_OFFLOAD_EVENT	filetieroffloadevent	N/A	N	Y
Recall volume or recall file	FILE_TIER_RECALL_EVENT	filetierrecallevent	N/A	N	Y
Get attributes	GETATTR	geattr	N	N	Y
Get extended attributes	GETXATTR	getxattr	Y	Y	Y
Get the mode bits for files/directories accessed over NFS	GETPERM	getperm	Y	Y	Y
List extended attributes	LISTXATTR	listxattr	Y	Y	Y
Lookup	LOOKUP	lookup	Y	Y	Y
Create directory	MKDIR	mkdir	Y	N/A	Y
Read a file	READ	read	N/A	Y	Y
Read a directory	READDIR	readdir	Y	N/A	Y
Remove extended attributes	REMOVEXATTR	removexattr	Y	Y	Y
Rename	RENAME	rename	Y	Y	Y
Delete a directory	RMDIR	rmdir	Y	N/A	Y
Set attributes	SETATTR	setattr	Y	Y	Y
Set extended attributes	SETXATTR	setxattr	Y	Y	Y
Truncate a file	TRUNCATE	truncate	N/A	Y	Y

Operation	Name in Audit Logs	Operation Name to use for Selective Auditing	Directories	Files	Selective Auditing Support
Write to a file	WRITE	write	N/A	Y	Y

Auditing of Operations on MapR Database Binary Tables and JSON Tables

The following operations on both types of MapR Database tables are audited by default. Operations with **Y** in the **Selective Auditing Support** column can be included and/or excluded from auditing. Operations with **N** in the **Selective Auditing Support** column are audited by default and cannot be excluded from auditing. Use the name specified in the **Operation Name to use for Selective Auditing** column when you run the maprcli (SelectiveAuditingOfOperations.html#concept\_nzd\_j5g\_h5) command to enable or disable auditing for that operation.

Operation	Name in Audit Logs	Operation Name to use for Selective Auditing	Selective Auditing Support
Create a column family	DB_CFCREATE	tablecfcreate	Y
Modify a column family	DB_CFMODIFY	tablecfmodify	Y
Delete a column family	DB_CFREMOVE	tablecfdelete	Y
Scan a column	DB_CFSCAN	tablecfscan	Y
Get data	DB_GET	tableget	Y
Perform incremental bulk load	DB_IMPORTBUCKET	N/A	N
Perform full bulk load	DB_IMPORTSEGMENT	N/A	N
Put data	DB_PUT	tableput	Y
Compact a table region	DB_REGIONCOMPACT	N/A	N
Look up a region on the current node	DB_REGIONLOOKUP	N/A	N
Merge two consecutive regions	DB_REGIONMERGE	N/A	N
Split a region into two	DB_REGIONSPLIT	N/A	N
Configure a replica for a table	DB_REPLICAADD	N/A	N
Edit the replica for a table	DB_REPLICAEDIT	N/A	N
List the replicas for a table	DB_REPLICALIST	N/A	N
Remove a replica for a table	DB_REPLICAREMOVE	N/A	N
Scan a table	DB_SCAN	tablescan	Y
Create a table	DB_TABLECREATE	tablecreate	Y
View information about a table	DB_TABLEINFO	tableinfo	Y
Modify a table	DB_TABLEMODIFY	tablemodify	Y
Add an upstream source to a replica	DB_UPSTREAMADD	N/A	N
List all upstream sources for a replica	DB_UPSTREAMLIST	N/A	N
Remove an upstream source for a replica	DB_UPSTREAMREMOVE	N/A	N

Auditing of Operations on MapR Event Store For Apache Kafka

The following operations on MapR Event Store For Apache Kafka are audited by default. Operations with **Y** in the **Selective Auditing Support** column can be included and/or excluded from auditing. Operations with **N** in the **Selective Auditing Support** column are audited by default and cannot be excluded from auditing. Use the name specified in the **Operation Name to use for Selective Auditing** column when you run the maprcli (SelectiveAuditingOfOperations.html#concept\_nzd\_j5g\_h5) command to enable or disable auditing for that operation.

Operation	Name in Audit Logs	Operation Name to use for Selective Auditing	Selective Auditing Support
Modify attributes or permissions of a stream	DB_CFMODIFY	tablecfmodify	Y
Produce messages to topics of a stream	DB_PUT	tableput	Y
Add a replica	DB_REPLICAADD	N/A	N

Operation	Name in Audit Logs	Operation Name to use for Selective Auditing	Selective Auditing Support
Edit a replica	DB_REPLICAEDIT	N/A	N
List the replicas for a stream	DB_REPLICALIST	N/A	N
Remove a replica	DB_REPLICAREMOVE	N/A	N
Consume messages from topics of a stream	DB_SCAN	tablescan	Y
Add an upstream source to a replica	DB_UPSTREAMADD	N/A	N
List all upstream sources for a replica	DB_UPSTREAMLIST	N/A	N
Remove an upstream source from a replica	DB_UPSTREAMREMOVE	N/A	N