How TSM data retention works

Because both SQLsafe and TSM play very important but different roles in determining data file retention, some advance planning and configuration is required before you begin using SQLsafe with TSM.

First, determine your data retention requirements. For example, you may want to groom (delete) backup archive sets after 7 days. Your TSM Administrator will need to create a new management class for SQLsafe and configure the desired data retention period in TSM (such as, retain all backup files for one week).

> ✅ **Tip**
>
> When configuring TSM, note that SQLsafe accepts up to 260 characters for the TSM file path name.

Once TSM has been configured, backups can now be performed automatically using SQLsafe policies or manually using the SQLsafe CLI or XSP. When you perform a backup, you can define how long SQLsafe should retain a backup archive. Backup archives that age beyond the specified time period will not be available to restore through the SQLsafe user interfaces. However, keep in mind that these data files will be available on the TSM Server until TSM grooms the backup archives according to the retention time.

Setting data retention in SQLsafe Backup Policy jobs

When using the Management Console, you can configure the SQLsafe retention period (Remove files older than) option on the Location tab of the Policy wizard. This option specifies how long SQLsafe should keep this backup archive available for restore. The SQLsafe Backup Agent will automatically mark these data files as inactive on the TSM Server, which allows the files to be groomed (deleted) by TSM. This expiration processing is based on the retention values configured for the SQLsafe management class.

Setting data retention through the CLI

When using the SQLsafe CLI, use the -delete backup option to specify when SQLsafe should make a backup archive as inactive.

For example:

```
sqlsafecmd backup northwind TSM -tsmhighlevel BACKUP -tsmmanagementclass SQLsafe -delete 1weeks
```

> ✅ **Tip**
>
> You do not need to specify the Low Level filename when grooming files through SQLsafe. The Low Level filename is automatically generated in the following format: `<instance name>_<database name>_<backup type>_<timestamp>.safe`

After the designated time period, SQLsafe marks the backup archives as "deleted" in the Management Console, signaling they are no longer available to restore. However, these backup archives are simply inactive until they are permanently groomed from the TSM Server. You can manually browse inactive backup archives using the TSM Browse command and then manually restore the backup archive

Setting Data Retention through the XSP
When using the XSP, use the `@delete` parameter. This parameter functions in the same way as the `-delete` backup option in the CLI. For more information, see the sample XSP scripts available from the Programs menu.