

def~instant-action

Definition

Action type for a [def~timeline](#)Key `Instant action types` performed include:

- `COMMITTS` - `action type` which denotes an **atomic write** of a batch of records into a [def~table](#) (see [def~commit](#)).
- `CLEANS` - `action type` which denotes a background activity that gets rid of older versions of files in the [def~table](#), that are no longer needed.
- `DELTA_COMMIT` - `action type` which denotes an **atomic write** of a batch of records into a [def~merge-on-read \(MOR\) def~table-type](#) of [def~table](#), where some/all of the data could be just written to [delta logs](#) (see [def~commit](#)).
- `COMPACTION` - `action type` which denotes a background activity to reconcile differential data structures within Hudi e.g: merging updates from [delta log](#) files onto [def~base-files](#) columnar [file formats](#). Internally, compaction manifests as a special [def~commit](#) on the timeline (see [def~timeline](#))
- `ROLLBACK` - `action type` denotes that a [def~timeline](#) of `instant action type` commit/delta commit was unsuccessful & rolled back, removing any partial files produced during such a write
- `SAVEPOINT` - `action type` marks certain file groups as "saved", such that cleaner will not delete them. It helps restore the [def~table](#) to a point on the timeline, in case of disaster/data recovery scenarios.

Related concepts

1. [def~timeline](#)
2. [instant state](#)
3. [def~instant-time](#)
4. [def~table](#)
5. [def~commit](#)