

# Non-distributed Recovery Feature

This feature bundles all available recovery techniques for the non-distributed version of Odysseus. Among other things it contains techniques for a [Gap Recovery](#) (at-most once), a [Rollback Recovery](#) (at-least-once) and a [Precise Recovery](#) (exactly once).

All three classes of recovery techniques ensure that Odysseus continues the data stream processing after a restart, but they differ in their completeness and correctness guarantees. To achieve completeness and correctness respectively, the rollback and the precise recovery need additional plug-ins: an external application, [Backup of Data Streams \(BaDaSt\)](#), a meta attribute, [Trust](#), and [Checkpointing](#).

Additionally, there are other recovery techniques available with completeness and correctness guarantees between the three mentioned classes:

- [Stateful Gap Recovery](#)
- [Full Replay Recovery](#)

The recovery feature is designed to be extensible and a short manual of how to implement other recovery techniques is given [here](#).