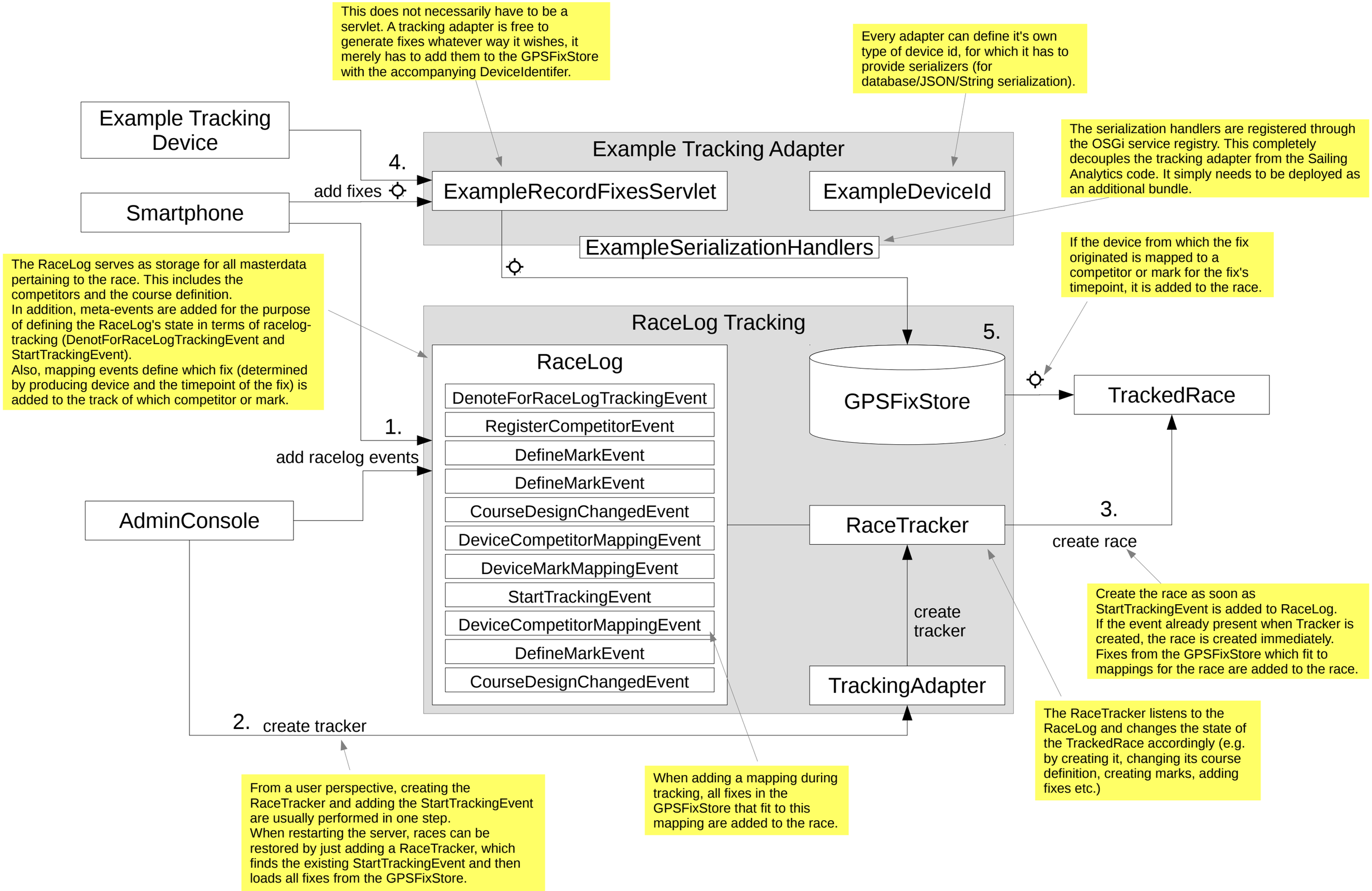
This does not necessarily have to be a servlet. A tracking adapter is free to generate fixes whatever way it wishes, it merely has to add them to the GPSFixStore with the accompanying DeviceIdentifer.
Every adapter can define it's own type of device id, for which it has to provide serializers (for database/JSON/String serialization).
Example Tracking Device
Smartphone
4.
add fixes
Example Tracking Adapter
ExampleRecordFixesServlet
ExampleDeviceId
ExampleSerializationHandlers
The serialization handlers are registered through the OSGi service registry. This completely decouples the tracking adapter from the Sailing Analytics code. It simply needs to be deployed as an additional bundle.
The RaceLog serves as storage for all masterdata pertaining to the race. This includes the competitors and the course definition.
In addition, meta-events are added for the purpose of defining the RaceLog's state in terms of racelog-tracking (DenotForRaceLogTrackingEvent and StartTrackingEvent).
Also, mapping events define which fix (determined by producing device and the timepoint of the fix) is added to the track of which competitor or mark.
If the device from which the fix originated is mapped to a competitor or mark for the fix's timepoint, it is added to the race.
RaceLog Tracking
5.
RaceLog
DenoteForRaceLogTrackingEvent
RegisterCompetitorEvent
DefineMarkEvent
DefineMarkEvent
CourseDesignChangedEvent
DeviceCompetitorMappingEvent
DeviceMarkMappingEvent
StartTrackingEvent
DeviceCompetitorMappingEvent
DefineMarkEvent
CourseDesignChangedEvent
GPSFixStore
TrackedRace
1.
add racelog events
AdminConsole
RaceTracker
3.
create race
create tracker
TrackingAdapter
Create the race as soon as StartTrackingEvent is added to RaceLog.
If the event already present when Tracker is created, the race is created immediately.
Fixes from the GPSFixStore which fit to mappings for the race are added to the race.
2. create tracker
The RaceTracker listens to the RaceLog and changes the state of the TrackedRace accordingly (e.g. by creating it, changing its course definition, creating marks, adding fixes etc.)
From a user perspective, creating the RaceTracker and adding the StartTrackingEvent are usually performed in one step.
When restarting the server, races can be restored by just adding a RaceTracker, which finds the existing StartTrackingEvent and then loads all fixes from the GPSFixStore.
When adding a mapping during tracking, all fixes in the GPSFixStore that fit to this mapping are added to the race.