# Bus Scheduling

EnRoute is a public organisation that is responsible for the scheduling of bus routes and the maintenance of busses in their workshop. All busses are put in maintenance before they can be used for a route. Once a bus passes the maintenance check, it is in a good condition and can be used for assignment to bus routes.

Busses can be assigned to a route in advance to allow scheduling, however, a bus can effectively drive only one route at once. Busses that are not actively driving a route, remain in storage. At that point, the route assignment can still be revoked. Before the driving of a route is activated, a driver should be assigned to it. After activation (i.e. the bus actively starts driving the route) the route assignment cannot be revoked anymore.

When a bus has a defect (e.g. due to an accident, its battery died, ...), it goes back to the workshop. If the bus has a defect while active on a route, the bus driver will call the maintenance shop and the bus is towed back to the workshop. This also ends the route assignment and a replacement bus will be assigned to the route. When a route assignment comes to a (normal) end, the bus is back in storage and thus available for new assignments.

It can also happen that a bus driver is on sick leave. In that case, the driver assignment is suspended, and a replacement driver needs to be assigned for driving the route. As soon as the original bus driver is back at work, he or she can resume his/her assignment for driving the route.