
Subject: How do I describe this simple case?
Posted by [tobias](#) on Thu, 28 Apr 2005 15:16:59 GMT
[View Forum Message](#) <> [Reply to Message](#)

I wish to use the infrastructure scheme to describe something very simple, namely a set of stations and lines between these stations. Suppose I have four stations like in the figure below:

```
A ----- B ----- C
      /
D -----
```

I want it to be clear from the description that a train going from A to D have to reverse in B, while a train from A to C doesn't.

After studying the nifty example file (DemoNet), it is clear that this scheme can describe very complex things, but I am unsure how to describe this simple case. This is how far I have got:

- Stations need to be entered as operationControlPoints (ocps).
- The only way to reference an ocp is through the crossSection element.
- The crossSection element has an attribute called "dir" which is described as "Direction validity of element". I don't understand this, but it is the only way I have found to specify in which "end" of the station the line starts or stops.

Given this, I defined the direction "up" to be to the right in my figure and tried the implementation below. I described each line as going from one ocp to another and consisting of a single track. I used the mainDir attribute to specify which way the trains can travel, although I am not certain this is the correct way to use this attribute. For the pos-attribute I said that a line starts at 0.0 and ends at 1.0.

Can someone please tell me if I am on the right track here (no pun intended).

```
<railml>
<infrastructure>
  <operationControlPoints>
    <ocp ocpID="A"/>
    <ocp ocpID="B"/>
    <ocp ocpID="C"/>
    <ocp ocpID="D"/>
  </operationControlPoints>
  <lines>
    <line lineID="AB">
      <tracks>
        <track trackID="1" mainDir="both">
```

```

<trackTopology>
  <trackBegin>
    <bufferStop elemID="StartTrack1" pos="0.0"/>
  </trackBegin>
  <trackEnd>
    <bufferStop elemID="EndTrack1" pos="1.0"/>
  </trackEnd>
  <crossSections>
    <crossSection pos="0.0" dir="up" ocpIDRef="A"/>
    <crossSection pos="1.0" dir="down" ocpIDRef="B"/>
  </crossSections>
</trackTopology>
</track>
</tracks>
</line>
<line lineID="BC">
  <tracks>
    <track trackID="1" mainDir="both">
      <trackTopology>
        <trackBegin>
          <bufferStop elemID="StartTrack1" pos="0.0"/>
        </trackBegin>
        <trackEnd>
          <bufferStop elemID="EndTrack1" pos="1.0"/>
        </trackEnd>
        <crossSections>
          <crossSection pos="0.0" dir="up" ocpIDRef="B"/>
          <crossSection pos="1.0" dir="down" ocpIDRef="C"/>
        </crossSections>
      </trackTopology>
    </track>
  </tracks>
</line>
<line lineID="BD">
  <tracks>
    <track trackID="1" mainDir="both">
      <trackTopology>
        <trackBegin>
          <bufferStop elemID="StartTrack1" pos="0.0"/>
        </trackBegin>
        <trackEnd>
          <bufferStop elemID="EndTrack1" pos="1.0"/>
        </trackEnd>
        <crossSections>
          <crossSection pos="0.0" dir="down" ocpIDRef="B"/>
          <crossSection pos="1.0" dir="up" ocpIDRef="D"/>
        </crossSections>
      </trackTopology>
    </track>
  </tracks>
</line>

```

```
</track>
</tracks>
</line>
</lines>
</infrastructure>
</railml>
```
