Subject: May I use z parameter for notch as engine tractiveEffort?
Posted by yutaka.manchu on Thu, 02 Oct 2014 07:40:28 GMT
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Dear All,

Some engines have an acceleration/power control lever with several notches.
Each notch limits the acceleration/power level of the engine.

To express this notion, I'd like to confirm the correctness to use z parameter of valueTable written in
" http://wiki.railml.org/index.php?title=RS:valueTable_tractiv eEffort", as "'z' is the additional parameter extending the dependency to y = f(x,z)" and "In case of several curves versus the x-coordinate there is the child element <columnHeader>, which takes the values of the z-coordinate as parameter for the array of curves.".

According to "http://wiki.railml.org/index.php?title=RS:columnHeader", it could be expressed as followings;

```
  <vehicle id="ve_6000-Mc1" name="6000-Mc1" length="9.0" speed="60.0"
bruttoWeight="3145.8" bruttoAdhesionWeight="393.2">
    <engine>
      <propulsion id="peMotor" powerType="electric" power="1105000"
rotationMassFactor="1.0" description="Motor">
        <tractiveEffort>
          <valueTable xValueName="Speed" xValueUnit="km/h"
yValueName="Tractive Effort" yValueUnit="N" zValueName="Notch"
zValueUnit="1">
            <columnHeader zValue="1">
            </columnHeader>
            <valueLine xValue="0.0">
              <values yValue="5950.1" />
            </valueLine>
            <valueLine xValue="36.5">
              <values yValue="4200.0" />
            </valueLine>
             ...

            <columnHeader zValue="2">
            </columnHeader>
            <valueLine xValue="0.0">
              <values yValue="10016.1" />
            </valueLine>
            <valueLine xValue="35.0">
              <values yValue="8200.0" />
            </valueLine>
```

```
            ...

          </valueTable>
        </tractiveEffort>
      </propulsion>
    </engine>
  </vehicle>
```

May I ask you if my understanding is right?

Best regards,
Utah (Yutaka Manchu)

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----== posted via PHP Headliner ==----

Subject: Re: May I use z parameter for notch as engine tractiveEffort?
Posted by Joerg von Lingen on Thu, 09 Oct 2014 07:00:28 GMT
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Dear Utah,

your assumption is correct. The structure of ValueTable allows to define a 3D matrix of values. The effort curve is
normally given as effort vs. speed but there might be another parameter like notch position or line voltage etc to
define a group of curves instead a single one.

Best regards,
Jörg von Lingen

Yutaka Manchu wrote on 02.10.2014 09:40:
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>

Subject: Re: May I use z parameter for notch as engine tractiveEffort?
Posted by yutaka.manchu on Mon, 13 Oct 2014 22:23:47 GMT
View Forum Message <> Reply to Message

Dear JÃ¶rg,

Thank you very much to write back to me!

Best regards,
Utah (Yutaka Manchu)

Joerg von Lingen wrote:
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