



John Arlinger

6 February 2015

Minutes StanForD2010

2015-02-06

Place:	Phone meeting, 09:00-11:00 CET
Participants:	Teemu Paldanius, Ponsse Pasi Palonen, Parker Antti Korkiakoski, John Deere Tapio Räsänen, Metsäteho Juha-Antti Sorsa, Metsäteho Jonas Thorsson, Dasa Mikael Eliasson, LogMax Lars Henriksson, SDC John Arlinger, Secretary Johan J. Möller, Chairman

§ 1 Opening of meeting

Johan J Möller opened the meeting.

§ 2 Agenda

The agenda was accepted by the meeting.

§ 3 Updates to Pre-Release 3.1 after meeting in November

FPR ANNOTATIONS

The meeting decided to update the following annotations in fpr-schema (based on proposal from Jonas Thorsson, Dasa 2014-12-17):

Element	Description
LoadNumber	Load number. The same number for all transport objects when <u>Several PartialLoads registered per Load when</u> co-loading is carried out. (Old load code 2). LoadNumber should be reset when starting at new harvesting object.
LoadKey	Machine specific identity per load and transport object . Must be totally unique for a certain

	MachineKey. Running no, reset only when MachineKey is changed
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PRODUCTVERSION

The possibility of improving the definition of ProductVersion was discussed in the Finnish StanForD phone meeting a week before the present meeting.

ProductVersion is going to be used in WoodForce / KAOS systems in a way that every time when there is a new version of Product in the forest company back end system or KAOS service, the value of ProductVersion is changed. The value can be anything from 1 ... 9999999999. At the same time also the value of modificationDate of the Product is changed and based on that and ProductUserID (which does not change if only the content of the product is modified) the updating in the machine is done.

The meeting decided to update the annotation of ProductVersion according to the following text:

“~~Additional~~ Identity information of a product version. Identity element normally to be used by logging organization. No constraints in standard concerning how to use this element.”

SHIFTKEY

Mikael Eliasson, LogMax, raised (2015-01-15) the question whether the minutes in (paragraph 5, page 10, MONITORING DATA PER SHIFT) are correct. Did we really decide to add optional element ShiftKey to both Individual- and Combined-MachineWorkTime?

The meeting decided to not include ShiftKey in Individual- and Combined-MachineWorkTime. This issue may very well be discussed again when implementing a new version 4.0. The main argument for this decision was that all implementations must be able to handle a situation where ShiftKey is not registered at all since it is an optional element.

§ 5 Bark functions

Björn Hannrup has carried out a preliminary comparison between the recently proposed Lithuanian bark function (logistic type of function) and the existing functions (Zacco, Skogforsk spruce and Skogforsk pine). The main results are presented in table 1-3 below.

Table 1.
Scots pine. Mean deviation and standard deviation between measured and calculated double bark thickness.

Species	In data	Bark function	n	Mean deviation (mm)	Std. dev. (mm)
Pine	All measurements	Skogforsk pine	1 276	2,7	5,0
Pinel	Top end measurements	Skogforsk pine	781	1,8	2,5
Pine	All measurements	Zacco pine	1 276	10,0	11,8
Pine	Top end measurements	Zacco pine	781	2,5	3,0
Pine	All measurements	Petrauskas m. fl	1276	6,1	7,0
Pine	Top end measurements	Petrauskas m. fl	781	2,8	2,7

Table 2.

Norway spruce. Mean deviation and standard deviation between measured and calculated double bark thickness.

Species	In data	Bark function	n	Mean deviation (mm)	Std. dev. (mm)
Spruce	All measurements	Skogforsk spruce	991	3,7	2,7
Spruce	Top end measurements	Skogforsk spruce	639	3,1	2,2
Spruce	All measurements	Zacco spruce	991	3,9	2,7
Spruce	Top end measurements	Zacco spruce	639	3,6	2,4
Spruce	All measurements	Petrauskas m. fl	991	4,1	2,8
Spruce	Top end measurements	Petrauskas m. fl	639	3,7	2,4

Table 3.

Birch. Mean deviation and standard deviation between measured and calculated double bark thickness.

Species	In data	Bark function	n	Mean deviation (mm)	Std. dev. (mm)
Birch	All measurements	Skogforsk pine	235	4,7	8,9
Birch	Top end measurements	Skogforsk pine	151	7,0	5,1
Birch	All measurements	Zacco pine	234	12,8	11,5
Birch	Top end measurements	Zacco pine	151	8,1	5,2
Birch	All measurements	Petrauskas m. fl	234	5,8	8,5
Birch	Top end measurements	Petrauskas m. fl	151	3,9	5,2

The conclusions drawn from Björns analyses are:

- Lithuanian works fine for the Swedish validation data for Norway spruce. This means that we could exclude the bark function categories “Zacco” and “Skogforsk spruce” when updating to version 4.0
- Whether the logistic type of bark function performs satisfactory on Scots pine is an open question. Some adjustments would be needed for Scots pine since we would need some kind of correction factor for latitude. An analysis of the possibility to adjust the slope of the curve must also be made.
- The possibility to use the Lithuanian function also for Scots pine must be evaluated until the autumn meeting.

Skogforsk is presently hesitant about implementing this new function as a matrix (table) due to the fact that a table is quite complex to implement, support and control in comparison with a function where only a limited number of parameters are included in the spi-file.

The StanForD group may decide to always require a ”proof of improvement” if someone proposes any new type of bark function in order to avoid having to add

an unlimited number of different bark functions. Presently it seems like the logistic type of function probably performs so well that the chances that we need new types of functions are probably limited.

§ 4 Decision to implement 3.1 Release

The meeting decided to publish the final “version 3.1 Release”.

§ 5 Other issues

No other issues.

§ 6 Next meeting

Regular StanForD2010 meeting in Vanda 15th – 16th of April 2014.

§ 7 End of meeting

Johan thanked everyone for their participation.