NX Knowledge Fusion Tips and Tricks

Raymond Kok
Siemens PLM Software
Office of Architecture & Technology
Agenda

- KF dialog ui_comp classes
- Selection intent (ug_section and ug_collector)
- Journaling coverage for Knowledge Fusion
- New NX classes (human, sheet metal, motion, drafting)
- Debugging in Knowledge Fusion ICE
KF dialog ui_comp classes

- Provide KF coverage for new NX UI blocks for construction of application User Interface.
- Allows for the construction of KF application UI which have the same look-and-feel as the NX 5 and NX 6 OOTB dialogs.
Agenda

- KF dialog ui_comp classes
- Selection intent (ug_section and ug_collector)
- Journaling coverage for Knowledge Fusion
- New NX classes (human, sheet metal, motion, drafting)
- Debugging in Knowledge Fusion ICE
Selection intent (ug_section and ug_collector)

Use of ug_collector and ug_section to enable Selection Intent for Knowledge Fusion;

Selection Intent lets you select and group multiple curves, edges and faces into collections with rules that define how a feature can use them. You choose which rules to use based on what you intend the feature to do.

This also works in combination with UDFs – the use of selection intent will make the use of UDFs in your KF application quite different!
Agenda

- KF dialog ui_comp classes
- Selection intent (ug_section and ug_collector)
- Journaling coverage for Knowledge Fusion
- New NX classes (human, sheet metal, motion, drafting)
- Debugging in Knowledge Fusion ICE
Who calls who?

`#include <uf.h>
#include <uf_kf.h>`

`DllExport extern void my_func (UF_KF_value_t *data, 
int num, 
UF_KF_value_t *rv)`

`Defun: ug_invokePDMServer()`

`RuleManager rm = workPart.ruleManager();
String rootName = "Root:";
String[] rules = rm.getDynamicRules( rootName );`
Agenda

- KF dialog ui_comp classes
- Selection intent (ug_section and ug_collector)
- Journaling coverage for Knowledge Fusion
- New NX classes (human, sheet metal, drafting)
- Debugging in Knowledge Fusion ICE
New NX classes (human, sheet metal, drafting)

- Knowledge Fusion classes automatically generated from NX Journamation
- Demonstration of several new classes including Knowledge Fusion coverage for Human Modeling, Sheet Metal and Drafting
Agenda

- KF dialog ui_comp classes
- Selection intent (ug_section and ug_collector)
- Journaling coverage for Knowledge Fusion
- New NX classes (human, sheet metal, motion, drafting)
- Debugging in Knowledge Fusion ICE
Due to the declarative nature of Knowledge Fusion programming language users typically have a need to know the update order of Knowledge Fusion rules.

In Knowledge Fusion ICE one can find an integrated debugger which is focused on the execution order or of rules, the formula of the rule and its corresponding value.
Thank you...

http://www.plm.automation.siemens.com