physics on screen

xMCF 3.0 schema and documentation revision 1

Nick Economidis, BETA-CAE Systems 27 May 2020



Amendments since last meeting (11th Dec 2019):

<femdata> is now complete in definition (issue #18)

FATXML-ENTITY schema is now available.
xMCF schema uses the same schema as FATXML to define femdata entities

New connection types

- <clinch_rivet_stud> (Clinchnietbolzen) under Rivets
- <rotav> (Rotationsverbindungen)
 - 'rotational_speed' added in <units>

Abaqus properties have names, not PIDs

Allow <part> to be defined by 'pname' as well as 'pid'.

Use 'part_index' as attribute for <partner> (issue #37)

Could not define contact on <assy> when part label was used.

Clarification of 'Description of Topology' (issue #42)

- Simplified the text in chapter 2.4, used to explain how xMCF groups connected parts.
- <connection group> concept is now more clear



Open Questions:

Need a reference URL for FATXML schema (issue #18)

<xs:include schemaLocation="FATXML_ENTITY_V1.2_R3.xsd"/>

Xerces C++ library for xsd1.1 validation (issue #40)

- Jira ticket XERCESC-2198
- Sent mail to Apache team

<u>Is section 'laser' needed? (issue #12)</u>

- Sections I, V, U, X, Y, HV, HY, Fillet, Radius are used
- Section Laser is not used in the document.

Is 'sheet angle' needed for <i-weld> (issue #39)

• Section 8.2.8.5 Element "sheet_parameter" lists "sheet_angle" as parameter for I-Weld in Table 99

Should version be 3.0r1 or 3.1?

Raised by Carsten Franke

<part> instance identifier (issue #24)



stay connected

















thank you!

