

Format Table Proposal:

1. Same rules for single row and multi-row tables
2. No need for first column as a row number or even sequential
3. No need for first row to be transformed into a parameter.
4. Supports all Type entries, but must be consistent for all entries

Model_Specific Parameters

SINGLE ROW TABLE IN .AMI FILE

(Xyz (Table (1 2 3))(Type Integer)...))

(Xyz (Table 1 2 3)(Type Integer)...) Special case of missing () for first column like List

I would deprecate the special case except that there is existing usage of this. So the rule is that the values of 1-row table can be surrounded by 0 or 1 parenthesis pairs.

To/From DLL:

(xyz 1.0 2.0 3.0)

(In general these integers could be represented as decimal number or in scientific notation. So 3 might be encoded as 2.9999999, but interpreted as integer 3.)

EDA Tool Generation or Interpretation BASED ON AMI FILE:

xyz 1 2 3

This is a Table of 3 columns (versus Corner or List), and it already knows to interpret the values as Integers.

MULTI-ROW TABLE IN .AMI FILE

(xyz (Table (1 2 3)(4 5 6))(Type Integer)...))

To/From DLL:

(xyz 1.0 2.0 3.0 4.0 5.0 6.0)

Still a 1-dimensional string, but .dll (whose author also created the .ami file) automatically interprets xyz as a 3-column table for data structure population.

EDA Tool Interpretation BASED ON AMI FILE information:

xyz 1 2 3

4 5 6

Reserved_Parameters

Same rules, but reserved parameters have fixed interpretation conventions for columns that everyone understands. For example, Tx_Jitter and Rx_clock_PDF, have the same special rules:

Type Float (all numbers are float, but can be recast as integers or float)

1. First column is to be a row number (actually it looks like a bin number)
2. Second column is a time value relative to a center value
3. Third column is value, from 0 to 1 and with the total of that column equal to 1.

Type UI (all numbers are still float), but the reserved parameter documentation describes how to recast the number.

1. Second column is UI and same rules as above

In all cases, the dll and EDA tool knows how to interpret reserved parameters and encode/decode the 1-dimensional string from .ami file information and legal hard-coded options in the .dll for Table.

I would rather deprecate one of these choices, but that is a separate issue of related to overloading the Type entry to mean that it is a flag without regard to the actual data type.