UUID communication for measurements

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Why UUID communication?

- There are 36 primary ways to define roundness on drawings
    - And many more secondary ways

- So there are two choices
    1. Capture all the measurement methods in the master model
    2. Leave all the measurements in the measurement system

UUID communication allows us to leave the measurements in the measurement system

But as we have seen its more complicated
We need more than a single UUID

Proposal - double entry UUIDs

- First UUID identifies the context
- Second UUID identifies the property

Master Model

System A

Measurement file or device

System B

"What is the grip length of this pin?"

```
<measure context="UUID1" property="UUID2"/>
```

"The grip length of the pin is 0.53"

```
<measurement context="UUID1" property="UUID2">
        <time_stamp>sjjsj</time_stamp>
        <credential>cage_code</credential>
        <value>0.53</value>
</measurement>
```
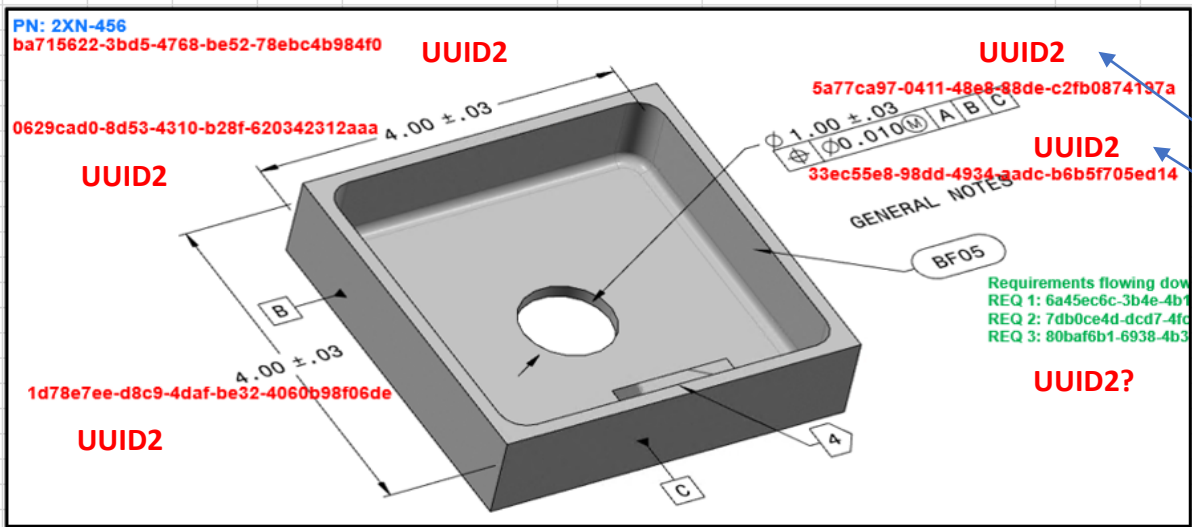
Discussion

- The system fails if you do not know the first UUID
  - Maybe this is goodness
  - Maybe use a second transaction

```
<instance twin="UUID1" prototype="UUID0">
        <name>brand new pin</name>
        <serial_number>007</serial_number>
        <time_stamp>sjjsa</time_stamp>
</instance>
```

PN: 2XN-456
ba715622-3bd5-4768-be52-78ebc4b984f0
UUID2

0629cad0-8d53-4310-b28f-620342312aaa
UUID2

5a77ca97-0411-48e8-88de-c2fb0874197a
UUID2

33ec55e8-98dd-4934-aadc-b6b5f705ed14
UUID2

4.00 ±.03
⌀ 1.00 ±.03
⌀ 0.010 M A B C

GENERAL NOTES

BF05

Requirements flowing dow
REQ 1: 6a45ec6c-3b4e-4b1
REQ 2: 7db0ce4d-dcd7-4f0
REQ 3: 80baf6b1-6938-4b3

UUID2?

1d78e7ee-d8c9-4daf-be32-4060b98f06de
UUID2

			UUID	
		QIF report number	90a58928-e904-4ada-bbfa-b419c3c86a56	UUID1?
		Supplier Cage code	6C8L3	Lockheed Martin, 200 Lockheed Martin Blvd, Orlando FL
		Serial number HR	UUID	
		SN 1	2ef63418-1b37-435f-b6ed-d5aabd1f72d2	UUID1

UUID0

Item	Native #	Description HR	UUID	Note		Actual Size
	PLM information					
LM Certified AP242 derived model	2XN-456	Bracket Harness	ba715622-3bd5-4768-be52-78ebc4b984f0	Based on Catia Test_20230908_2XN-456		
etc						
	PMI information		AP242 Persistent ID			Actual Size
PMI Requirement #1	4.00±.03	Distance	0629cad0-8d53-4310-b28f-620342312aaa	"Left to Right" relative to Note 4		4.0258
PMI Requirement #2	4.00±.03	Distance	1d78e7ee-d8c9-4daf-be32-4060b98f06de	"Up and Down" relative to note 4		4.0187
PMI Requirement #3	⌀1.00 ± .03	Size	5a77ca97-0411-48e8-88de-c2fb0874197a			1.0187
PMI Requirement #4	j ⌀0.010m A,B,C	True Position	33ec55e8-98dd-4934-aadc-b6b5f705ed14			0.0097
etc			UUID2s (multiple)			etc