

S1000D Conversion / Upgrade, Lessons Learned

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S1000D Conversion / Upgrade, Lessons Learned

Agenda:

Know Your Scope

Know Your Conversion Drivers

Know Your Conversion Source

Know Your Product Design Plan

Know The Impact Of Business Rules

Know Your Production Plan

Summary

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Know Your Scope

Original Conversion Scope:

Convert platform source data from S1000D Issue 2.3/3.0 to Issue 4.01 with an “as maintained” configuration selection in an IETP presentation.

“... How hard could that be?”

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Know Your Conversion Driver

Data conversions may have several drivers:

- DoD standardization mandate
- Customer driven conversion to enable perceived or real viewer enhancements
- OEM data reuse to enable production cost reductions

Who or what is the real conversion driver? DoD Program Office, TMSS, “The technician in the field” or the OEM?

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Know Your Conversion Driver

The main conversion driver should be the OEM's desire to enable effective data reuse and lower production costs.

Other drivers are important but may be unrealizable without focus being applied to effective data reuse as identified in the data modeling phase of the conversion.

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Know Your Conversion Source

Any perceived efficiencies to be gained through the use of automated content conversion routines can only be achieved if the source content structure is consistent.

Additional source file considerations:

- “Validated” does not mean “consistent”
- Lack of tagging or coding guidance in source files will render most automated routines useless
- Multiple source file S1000D issues means multiple conversion routines

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Know Your Conversion Source

Its not all bad news:

- Conversions present opportunities to replace unsustainable data models and architecture with a manageable file set
- Data audit results of conversion source files provide potential indicators of authoring trends that may be present in other data products

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Know The Product Design Plan

The product design should include:

- Robust “was/is” object mapping
- Complete “was/is” element and attribute mapping
- Defined acceptable reuse criteria
- Applicability modeling
- Change markup application and management
- Release management plan

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Know The Product Design Plan

Additional considerations:

- The product design plan should address sustainability, not just initial design and release
- Source file coding design should not be influenced by presentation method
- “Make it look like the old IETM” is NOT a design plan

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Know The Impact Of Business Rules

Business Rules and Business Rule Decision Points (BRDPs) are not mild coding suggestions that can be adopted over time. The importance of finalized BRDPs prior to start of work cannot be emphasized enough.

Additional Business Rule considerations:

- For DoD, involve TMSS as early and often as possible
- Decision Points must be as detailed as possible
- Consider specification hierarchy and precedence (S1000D / MIL-STD-1808 / MIL-STD-38784) during BRDP definition

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Know Your Production Plan

The production plan should identify the conversion methodology used. Options include:

- Block Content Conversion
 - A current revision is converted, delivered for review / comments and the remaining content deltas are incorporated into the converted source for a revision release
- Incremental Content Conversion
 - A revision is converted, follow-on change packages are converted and layered on original conversion content

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Know Your Production Plan

The case against an incremental conversion production plan:

- Forces the management and associated staffing of two products for the same platform
- Induces risk for errors (referencing / applicability) with each converted change package
- Product fielding becomes an easily movable marker (ultimately undesirable for the OEM and customer)

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Summary

Know Your Scope

Its not just files, its design and functionality too.

Know Your Conversion Drivers

OEMs have a stake in the conversion.

Know Your Conversion Source

Not all source files are created equally.

Know Your Product Design Plan

Plan for how to handle Issue Update 50, not just Issue 1.

Know The Impact Of Business Rules

Business Rules are not suggestions to be adopted over time.

Know Your Production Plan

Incremental conversions can be costly for everyone.

Thank you
for your attention!

Questions?