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# A Smarter Contribution to Electronic safety cases – Keep Watching...

ASCE User Forum

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## Keep Watching...

- Praxis are providing safety support to Thales for the Watchkeeper programme





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## A Smarter Contribution:

- As part of providing safety support, Praxis are compiling the Safety Case
- Main issues:
  - Maintain Praxis’ “look”
  - Combine separate ASCE files
  - Maintain Hazard Log links



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## 1 – the “look”:

- Constrained (to an extent) by previous versions of electronic Safety Cases
- ASCE output “feels” different
- What if we could tailor ASCE output to look more like what people expected?
- Like this...



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## 2 – the joining

- Currently, the “Safety Case” and the “Safety Argument” (GSN) are maintained separately
- But they need to intertwine seamlessly
  - The left-hand menu enables that
  - Internal links also help create the “joined-up feel”
- Like [this](#)...



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### 3 – the links:

- “The Hazard Log is unlikely to be acceptable as a Safety Case.” [Def Stan 00-56 Issue 2]
- But it is at the heart of the Safety Case:  
“A Safety Case shall be constructed using information from the Hazard Log.”
- So how do we do that?



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### 3 – the links: DNRs (1)

- “A Dynamic Narrative Regions (DNR) acts as an information 'chunk' that is mapped from an external data source such as other ASCE networks or **Hazard logs databases.**”  
[www.adelard.com]
- Great!
- However...



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## 3 – the links: DNRs (2)

- “Standard” DNRs lose the main attraction of a Hazard Log
  - linking between hazards, accidents and mitigations
- What if you could tailor the DNR to provide hyperlinks to associated data?
- Keep Watching...



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### 3 – the links: DNRs (3)

- “Tailored” DNRs can do just that – make the required data [hyperlinks](#)
- So Hazards link to Accidents – and back again
- All the benefits of DNRs...
- ...with the main benefit of a Hazard Log
- **and** the power to “control” HL views
- Like [this](#)...



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### 3 – the links: a bonus...

- Using the same approach, we have:
  - Produced linkable tables of ASCE nodes (e.g. solutions)
  - And the same for assumptions and contexts
- This was requested by some stakeholders
  - great benefit with little effort



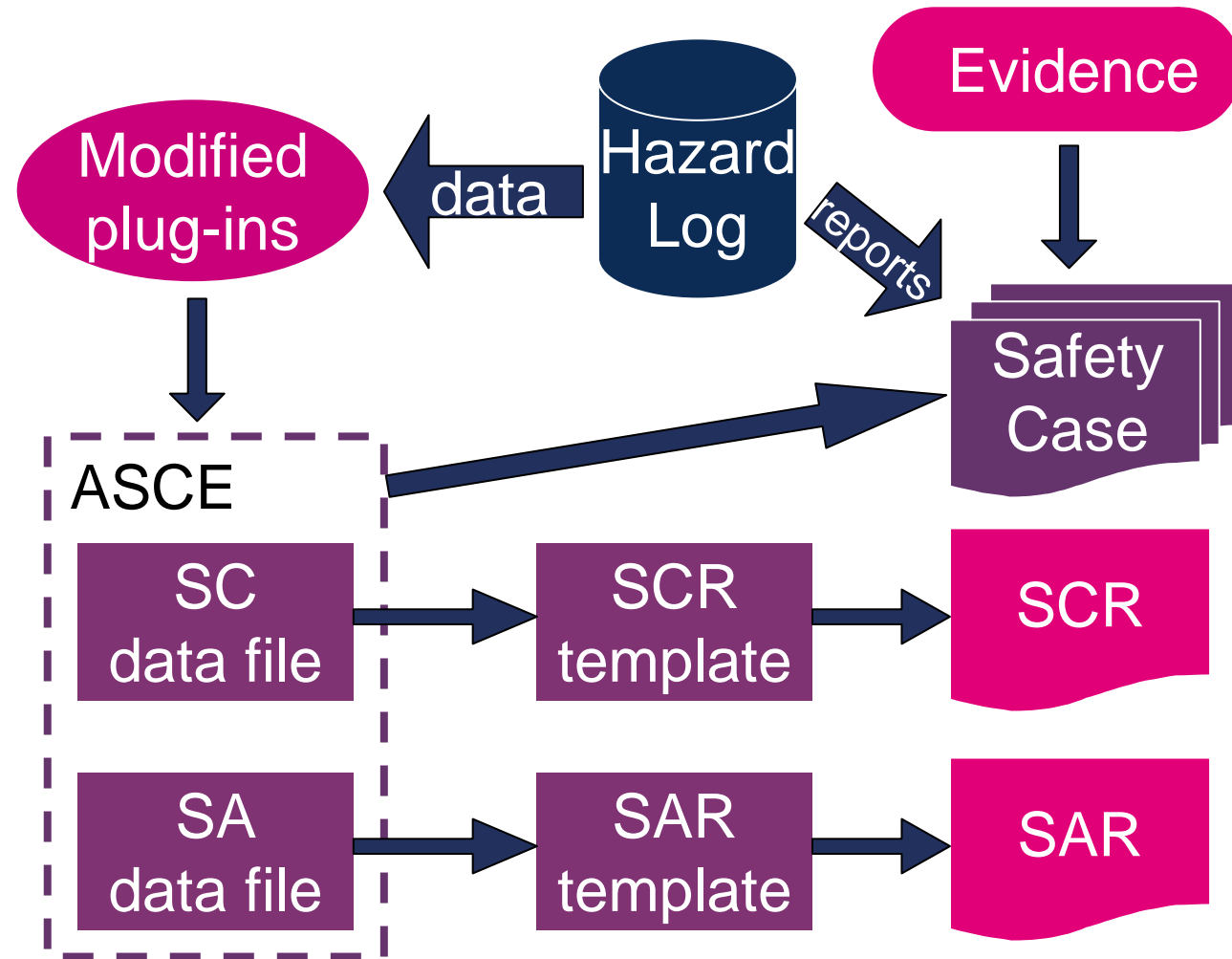
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## 4! – the delivery:

- HTML/Word delivered **together**
- Concept:
  - HTML Safety Case (“web-enabled”)
  - Two (Word) reports:
    - Safety Case Report
    - Safety Argument Report
- HTML for linking – including evidence
- Word Reports for conventional printing/reviewing
- Key - these 2 reports together contain the same data as the HTML (omitting evidence)

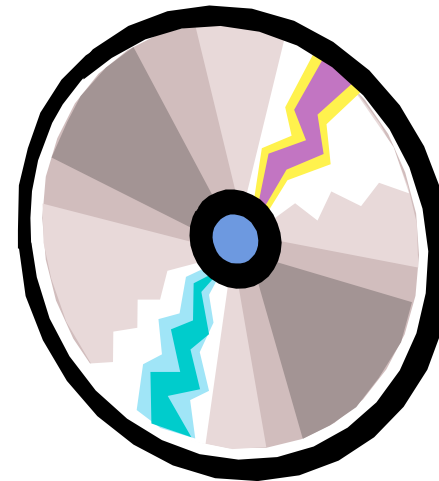
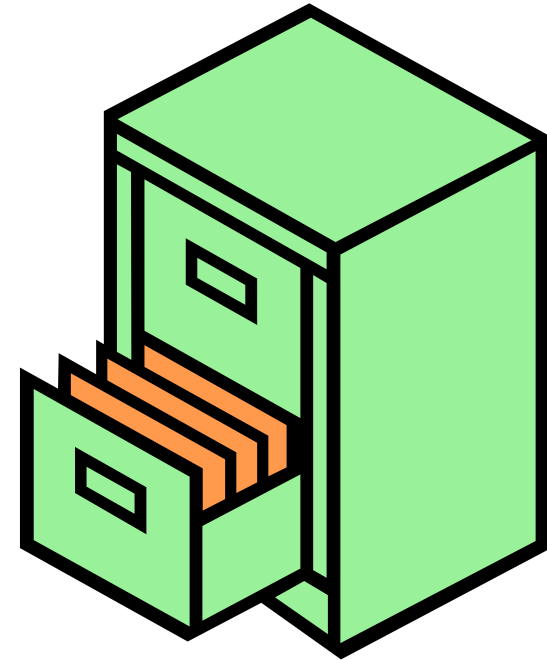
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1000 words...



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One down side...





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## Summary

- How has this all been possible?
  - ASCE
  - Plug-ins – that can be modified
  - Effort (and help!) to modify them
- Some early feedback:
  - “it is very well laid out and I really like it”



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## Questions?

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