



# Word DNR plugin update

Luke Emmet

loe@adelard.com

5<sup>th</sup> November 2008

# Background

---

- ASCE has powerful plugin engine
- Includes ability to extract and manage content from external sources
- Key technology is the DNR – Dynamic Narrative Region

# Existing DNRS

---

- DNRS exist for wide range of formats
  - Excel
  - Databases (MS Access, ODBC)
  - Other ASCE networks
  - PDF
  - DOORS
  - Embedded issues
  - ...

# Linking to Word

---

- A lot of evidence is held in Word files
- We can already link to the file as a whole
  - Could be 100 pages
  - Any change to the file would be detected
  - But we wouldn't know what changed
- But could we do similar thing to other DNRS?
  - Extract a section of word document
  - Often requested by users
- Desire for Word DNR plugin has been around for some time
- Some early prototypes have been released
  - But not production quality

# Technical challenges

---

- ASCE uses open standards
- Node narrative is plain HTML
  - Allows export
  - Data longevity
- Need to get content from Word document as HTML
  - Word created HTML is very verbose
  - Needs cleaning
- Performance hit
  - Need to open full MS document in the background, convert to HTML, then extract content
  - Could be slow for large documents

# Word DNR - solution

---

- Solved the problem of cleaning Word HTML
- To address performance problem
  - We can cache the temporary HTML generated from Word
  - So first extraction is slower, subsequent one are fast
  - Multiple extractions from a document same cost as a single one
- We have a working beta, provides 2 DNRS
  - Link to a specific section in a Word document
  - Extract some paragraphs from a document
- Can reference all headings and custom bookmarks
  - Word document must already have a table of contents

# Demo – plugin form

- Plugin form
- Shows selecting a word document
- Table of contents analysed
- A particular heading is selected
- Number of subsequent paragraphs can be specified
- Preview of content shown

**Edit the embedded Dynamic Narrative Region (DNR)**

**Word DNR**

File  ...

Heading/Bookmark

Extract paragraphs from  to

*Preview of content:*

**Recommendations**

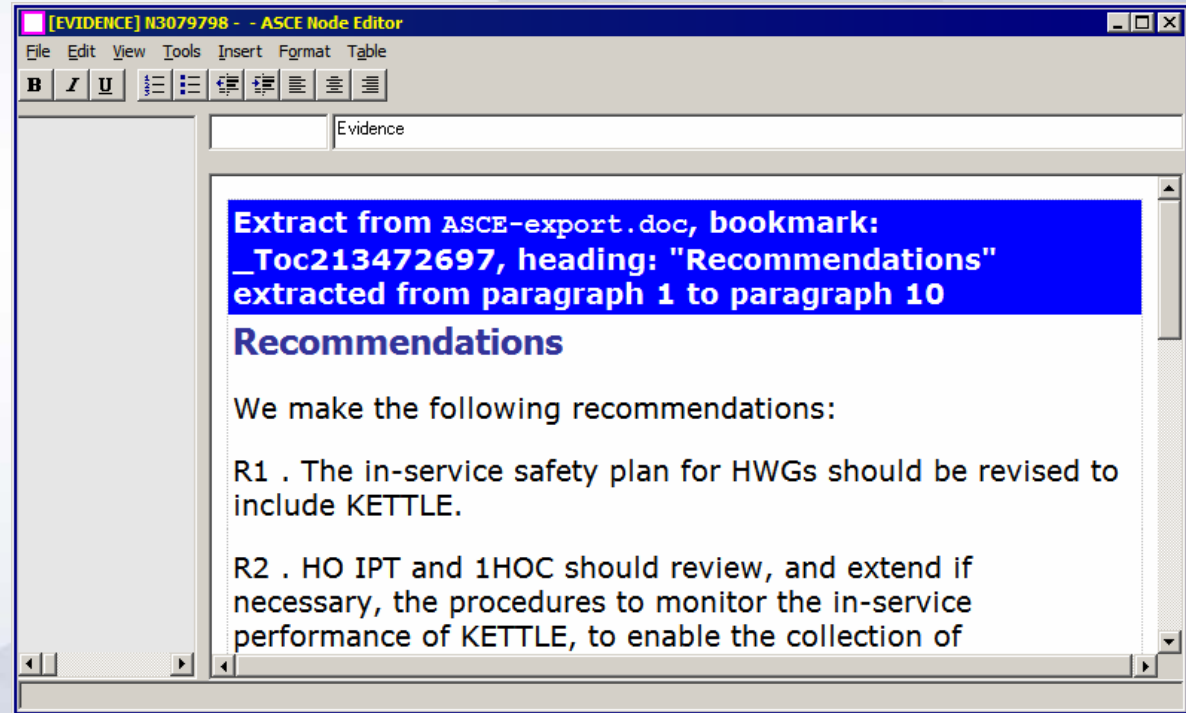
We make the following recommendations:

R1 . The in-service safety plan for HWGs should be revised to include KETTLE.

R2 . HO IPT and IHOC should review, and extend if necessary, the procedures to monitor the in-service performance of KETTLE, to enable the collection of

# DNR updated

- DNR content generated and displayed in node narrative
- As with other DNRS, changes to the underlying content can be detected and shown



# Related

---

- Other plugins for office documents
- PDF plugin
  - Extracts pages from PDF
  - Seems to work with most versions of acrobat
- Excel plugin
  - Extracts a region from a spreadsheet
- MS Access plugin
  - Runs an SQL query on a database



**Demo**

# Availability

---

- Beta available for evaluation
- Contact [asce\\_support@adelard.com](mailto:asce_support@adelard.com) if you are interested in trying it and giving some feedback



End of slides