



# Plugins update

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# Overview

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- What are plugins?
- Examples
- New plugins



# What are plugins?

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- Mini-applications that provide extra functionality to ASCE
- Perform a variety of tasks, e.g.,
  - Analyse your ASCE network
  - Manipulate the narrative text inside nodes
  - Modify the layout of your network
  - *Examples coming up*



# Why have plugins?

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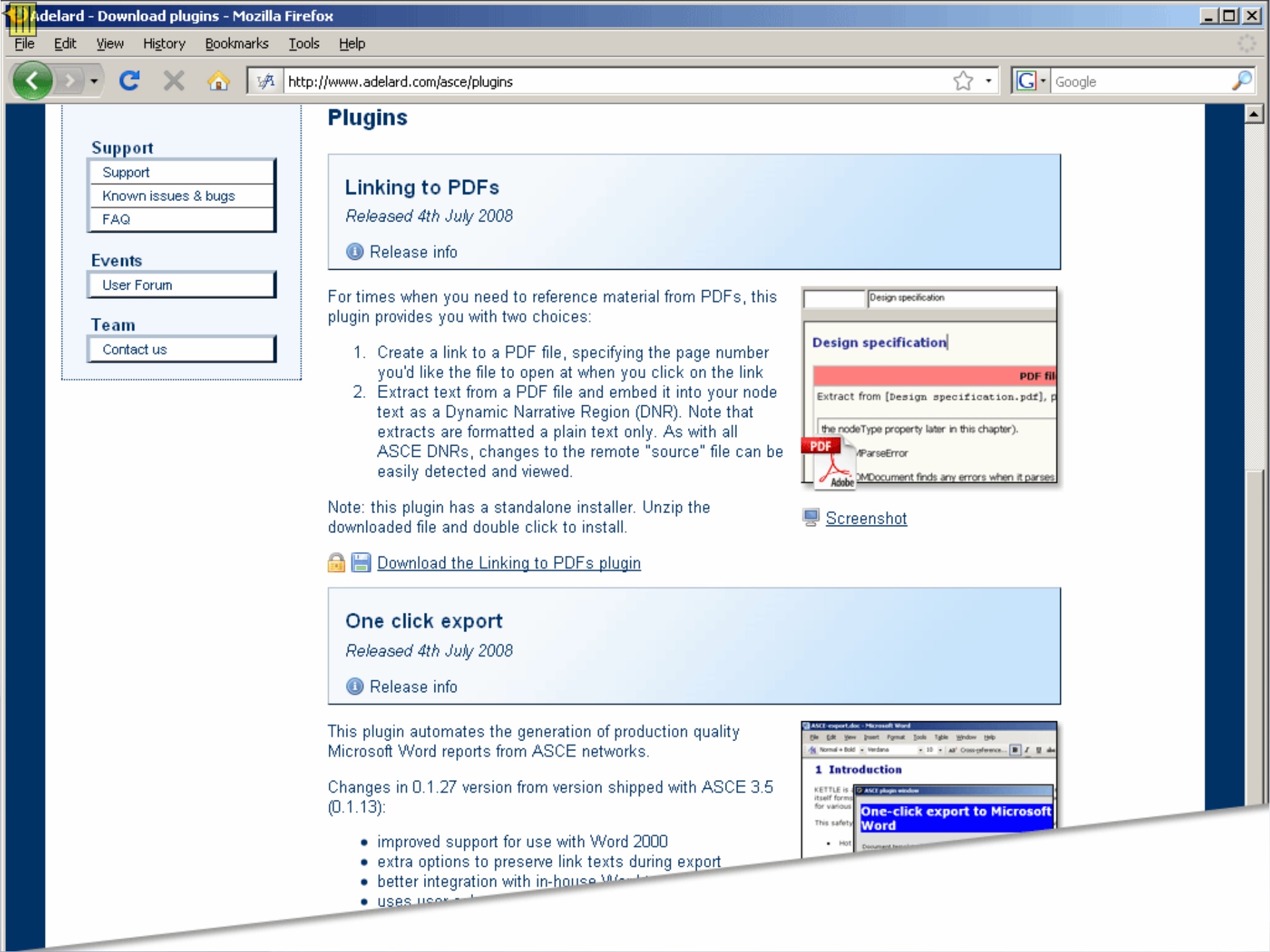
- Add functionality to ASCE between major releases
- Easy to distribute and install
- Flexible.



# Where do I get them?

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- A standard set ship with ASCE
- More on website
  - [www.adelard.com/asce/plugins](http://www.adelard.com/asce/plugins)
- Ask us to write one for you
- Write one yourself



**Support**

- Support
- Known issues & bugs
- FAQ

**Events**

- User Forum

**Team**

- Contact us

## Plugins

### Linking to PDFs

*Released 4th July 2008*

[Release info](#)

For times when you need to reference material from PDFs, this plugin provides you with two choices:

1. Create a link to a PDF file, specifying the page number you'd like the file to open at when you click on the link
2. Extract text from a PDF file and embed it into your node text as a Dynamic Narrative Region (DNR). Note that extracts are formatted a plain text only. As with all ASCE DNRs, changes to the remote "source" file can be easily detected and viewed.

Note: this plugin has a standalone installer. Unzip the downloaded file and double click to install.

[Download the Linking to PDFs plugin](#)



[Screenshot](#)

### One click export

*Released 4th July 2008*

[Release info](#)

This plugin automates the generation of production quality Microsoft Word reports from ASCE networks.

Changes in 0.1.27 version from version shipped with ASCE 3.5 (0.1.13):

- improved support for use with Word 2000
- extra options to preserve link texts during export
- better integration with in-house Microsoft Word
- uses user-defined templates



# Content import: 1

- Excel

The screenshot shows the ASCE Node Editor interface. The main window displays an 'Excel' region with a table of test results. Below it, a dialog box titled 'Edit the embedded Dynamic Narrative Region (DNR)' is open, showing the configuration for a 'Spreadsheet summary plugin'.

**Extract from Excel Region**  
Extraction from range [A1:D4] is as follows:

Test	Expected	Result
Max temperature	80C	Pass
Max fan speed	13000 rpm	Pass
Min fan speed	6000 rpm	Pass

**Spreadsheet summary plugin**  
This DNR imports data from a region of a Microsoft Excel spreadsheet.

Path to spreadsheet:

Name of sheet (optional):

Data range:  (e.g. A1:E4 or similar)

Please note the following:

- Do not specify a data range that refers only to empty cells to the left or above the first cells in the spreadsheet that actually contain data. Such a region cannot be selected and can cause a script timeout error.
- The maximum number of rows in the response is limited to 500.
- The database driver (Jat Provider) may trim empty rows and columns around the cells that contain data.
- Make sure the spreadsheet is closed, otherwise, the information displayed may not respect the format.

Buttons: Validate DNR element, Update DNR element and close, Close

# Content import: 2

- Cassandra hazard log

The screenshot shows the ASCE Node Editor interface. The main window displays a 'Cassandra Hazard log summary' for a file named 'export.mdb'. Below the title bar, there is a table with the following data:

Severities	Catastrophic	Critical	Marginal	Negligible
Probabilities				
Frequent	A	A	A	B
Probable	A	A	B	C
Occasional	A	B	C	D
Remote	B	C	D	D
Improbable	C	D	D	D
Incredible	D	D	D	D

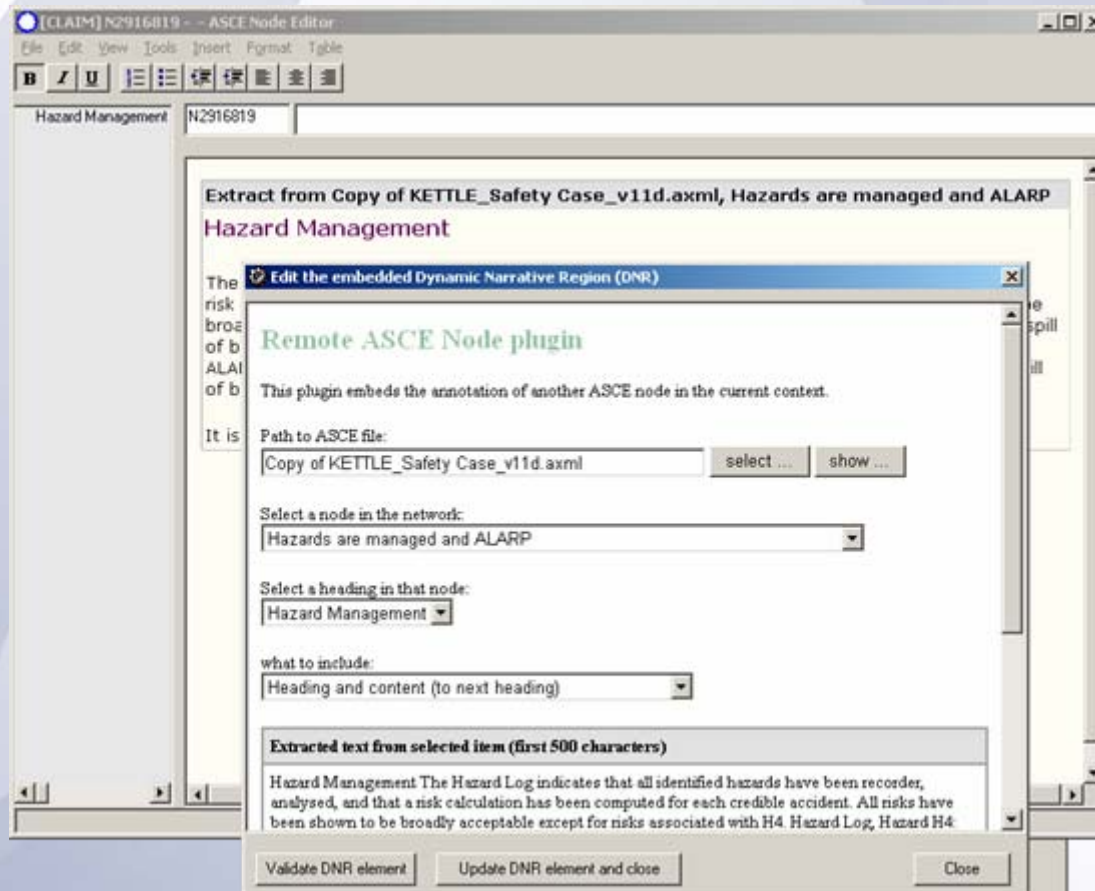
An 'Edit the embedded Dynamic Narrative Region (DNR)' dialog box is open in the foreground. It has a title bar and a pink header 'Cassandra Hazard Log summary plugin'. The text inside reads: 'This plugin checks the status of all hazards contained in a Cassandra hazard log.' Below this, there is a text field for the 'Path to MS Access file exported from a Cassandra Hazard Log v32' containing the path: '..\..\My Documents\ASCE branch plugins\external\s73 version-mapping\_rev\mdb\cass export.mdb'. A 'Display' dropdown menu is set to 'Accident status summary'. At the bottom of the dialog, there is a 'Current risk matrix' table:

Severities	Catastrophic	Critical	Marginal	Negligible
Probabilities				
Frequent	A	A	A	B
Probable	A	A	B	C
Occasional	A	B	C	D
Remote	B	C	D	D
Improbable	C	D	D	D

Buttons at the bottom of the dialog include 'Validate DNR element', 'Update DNR element and close', and 'Close'.

# Content import: 3

- Other ASCE networks





# Content import: 4

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- Also:
  - Doors
  - HARMS
  - MS Access
  - MS Word
  - PDF
  - ODBC-compliant databases, e.g. Oracle, MS SQL Server, MySQL
  - and more
- Plus
  - any source we can talk to using COM
  - standard formats such as XML

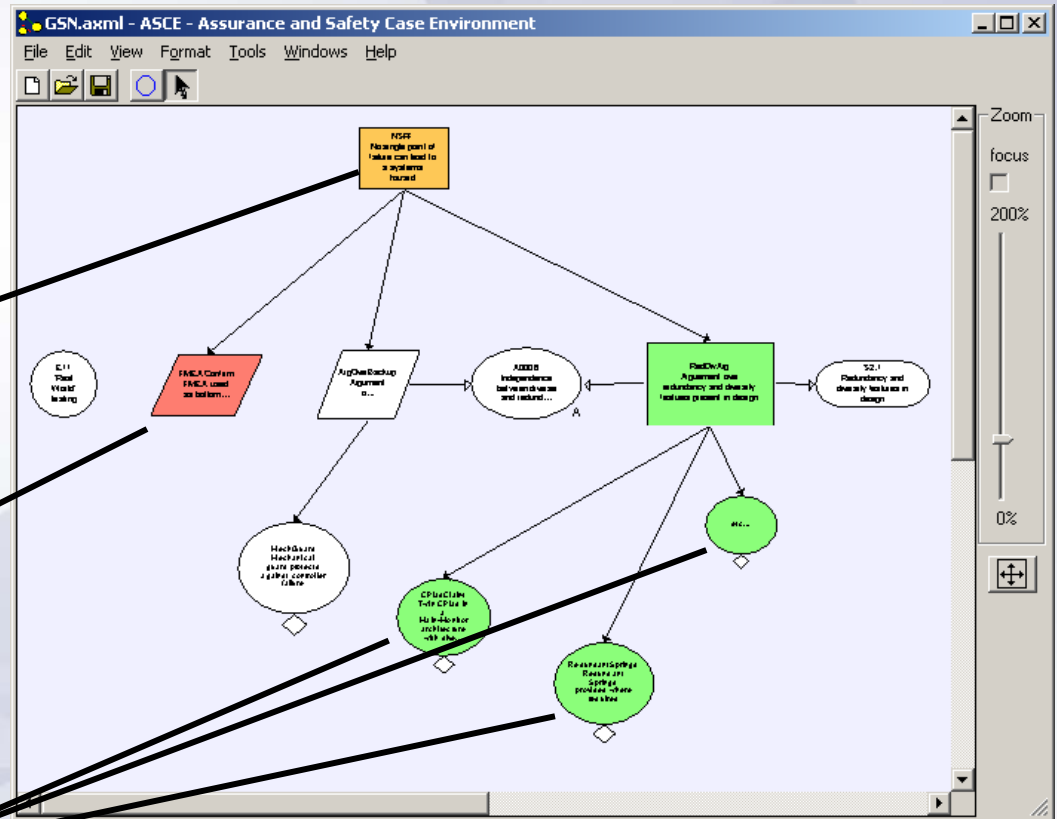
# Visual/analytical

- Show goal completion: cascade “completed” status of solutions to the goals they support

Orange indicates that not all supporting goals are high confidence

Low confidence

High confidence



# Content export

- One-click Word export

The image displays two windows side-by-side. The left window is a software application titled '[CLAIM] - KETTLE is adequately safe to use, in the environment defined by the...'. It shows a sidebar with navigation options: Introduction, Scope, Safety criteria and risk, Safety criteria, and Risk class statement. The main content area is titled 'Risk class statement' and contains the following text: 'The identified KETTLE hazards, their target probability Risk Class C, and evidence to show that the target probabilities are achieved, are tabulated below. Quantitative evidence comes from field experience (see Field experience , In-service evaluation of KETTLE by 1HO)'. Below this text is a table with the following data:

Hazard	Description	Target probability (occurrences per operating hour)	Quantitative evidence
H1	Loss or corruption of Water	.01	No issues during field use
H2	Incorrect Handling	n/a	No issues during field use

The right window is a Microsoft Word document titled 'ASCE-export.doc - Microsoft Word'. It shows the exported content, including a numbered list of safety criteria and risk class sections. The list items are: '1. The occupational safety of the wider environment in which it is used (see Field experience , In-service evaluation of KETTLE by 1HO)', and '2. The safety of interconnected equipment, e.g. the TEAPOT system'. Below the list is a section header '3 Safety criteria and risk class', followed by a paragraph: 'This section of the safety case defines the safety criteria for KETTLE and based on the safety analyses and operational experience to date.' This is followed by two sub-sections: '3.1 Safety criteria' and '3.2 Risk class statement'. The '3.2 Risk class statement' section contains the same text and table as seen in the software application window.

# New and recent plugins

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- Link to PDF
- Status Field Editor
- Embedded Issues
- Resource Manager

# Link to PDF

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- Create DNRs with PDF content
- Create hyperlinks to PDF which specify the page number; when the network is viewed in HTML, clicking on the link will open the linked PDF file at the correct page
  - Already on website
  - New version, out next week, will support Acrobat 9

# Status Field Editor

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- Extend functionality of existing node status field dialog
- This plugin allows you to edit status fields of multiple nodes simultaneously
  - Out next week



# Embedded issues

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- Track issues within your ASCE network, e.g.,
  - risks
  - actions
  - assumptions
  - etc.by embedding a DNR in the relevant node narrative
- Create summary table as DNR in another node, collating all issues of a given type.
  - Can also interrogate another ASCE network to produce this summary
  - Publish in safety case report
  - Already on website



# Resource Manager

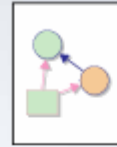
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- Manage links to external files
- Makes it easy to version your network and its supporting files

# Managing versions

ASCE

Version 1



V1 of ASCE file  
links to v1 of  
supporting evidence

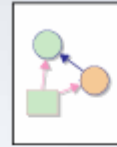
Evidence



# Updating evidence

ASCE

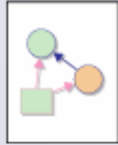
Version 1



Evidence updated

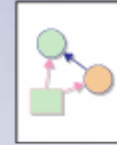
# Create a new version

**Version 1**

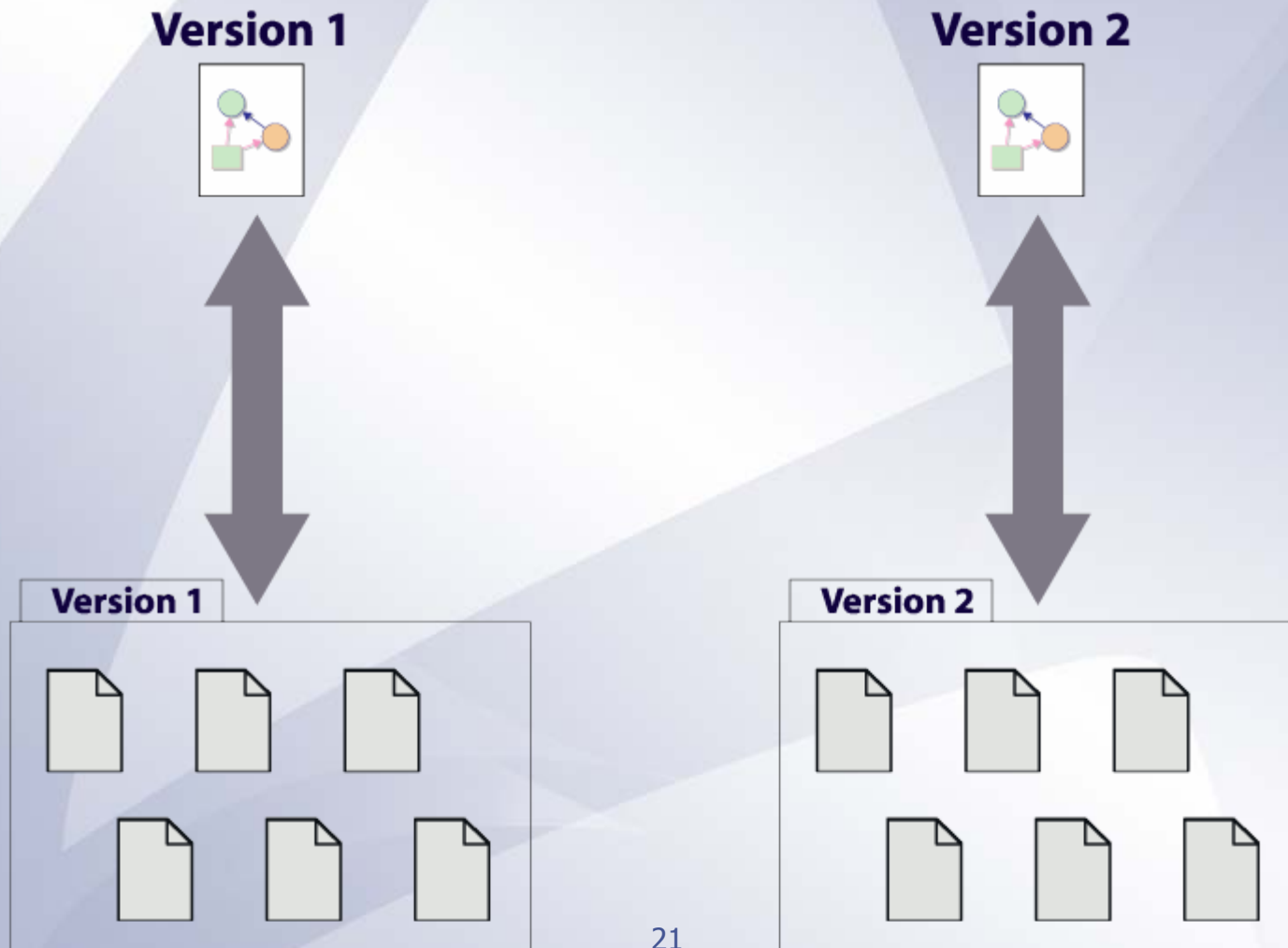


(saved as)

**Version 2**



# New version of ASCE and evidence files



# Multiple link to resource(s)

The screenshot displays the ASCE Node Editor interface. The main window, titled '- References - ASCE Node Editor', shows a list of references in a scrollable area. The references are:

- Safety Plan for Hazard and Op
- PQR Safety Ca
- PQR Hazard Lo
- Alpha Electroni
- Alpha Electroni
- HWG Interoper
- Alpha Electroni
- Alpha Electroni

The main text area contains the following references:

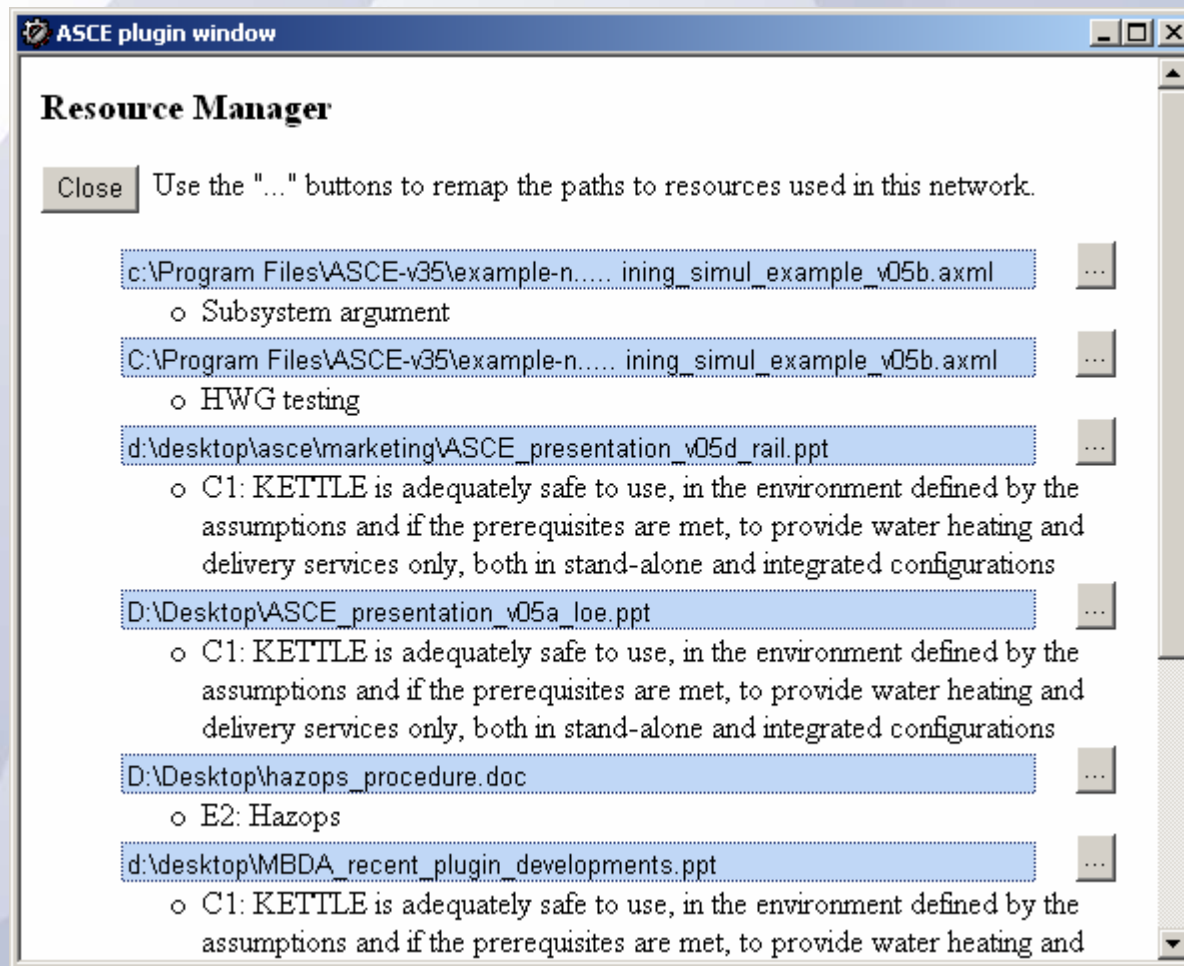
- References**
- Limsey Air Field Hazard Log, Issue D563/2012**
- Safety Plan for Limsey Air base. Document D242/5003/2, Issue 1.0, 2004.**
- Hazard and Operability Study on DY677. Document W861/5003/12, version 1.0, 2004.**
- PQR Safety Case Part 2. Issue 2.0, Doc. Ref. CD00067/HAL/R-05, 2003.**
- PQR Hazard Log. Issue 2.0, Doc. Ref. CD00067/HAL/R-04, 2003.**
- Alpha Electronics. Scope of Supply Definition**

Four cyan arrows point from the 'Hazard DB' icon to the following references:

- Limsey Air Field Hazard Log, Issue D563/2012
- Safety Plan for Limsey Air base. Document D242/5003/2, Issue 1.0, 2004.
- Hazard and Operability Study on DY677. Document W861/5003/12, version 1.0, 2004.
- PQR Safety Case Part 2. Issue 2.0, Doc. Ref. CD00067/HAL/R-05, 2003.

The status bar at the bottom indicates: 'Updating node data and saving testbed3.xml...'

# Remapping



# Resource Manager

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- Plugin also has “packaging” capability — scoops up your ASCE file and all the supporting files (which could be scattered across your computer or office network) and copies them into a single folder.
- Ideal for
  - Archiving
  - Zipping and emailing
  - Burning to CD
- Links to files are remapped as relative paths, making the package totally portable
- Out next week



# The future

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- Plugins to play an increasing role in ASCE
- Improvements for version 4 include
  - Better integration with user interface
  - More powerful
  - Even easier and quicker to develop
- Plugin Manager will help users keep track of which plugins they have installed, what version etc. Also takes care of installation.