#### **Web-based ENSDF editor**

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# **Topics:**

- 1. Concept of Web-editors
- 2. Light EXFOR and ENSDF Editors Projects
- 3. ENSDF Web Viewers and Editor
  - ENSDF Interpreted (ensdf+)
  - ENSDF interactive tree (ensdf±)
  - ENSDF web-editor (ensdf++)
- 4. Implementation of editing
  - Editing in popup window
  - Editing on the main window (build-in frame)
  - Editing original ENSDF and interpreted information
  - Integrated editing (e.g. parallel datasets, all levels)
- 5. Concluding remarks

## Concept

- Basic nuclear data formats (EXFOR, ENSDF, ENDF) are implemented as 80 columns formatted text files. From another hand, structure of information has hierarchical logic.
- Nowadays hierarchical documents allow advanced interpretation in modern forms of information systems (e.g. using XML language, graphical presentations, etc.).
- EXFOR and ENSDF files are presented by Web-viewers as an interactive graph-tree (iTree).

X4± and ensdf± are extended with edit-mode (top-menu, commands on nodes, editing data using dictionaries and help system, running checking and utility codes, save file original format, undo and other operations)

#### $\mathbf{EXFOR} \rightarrow \mathbf{View} \ \mathbf{X4t} \rightarrow \mathbf{Edit} \ \mathbf{X4t} \rightarrow \mathbf{EXFOR}$

EXFOR file	EXFOR logic	EXFOR file hierarchy
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## **Light EXFOR and ENSDF Editors Projects**

#### Light EXFOR Editor, 2010-2015 \_\_\_\_\_

/frozen/

/active/

- □ Web-viewer X4± presents information from EXFOR file as an interactive tree with interpreting codes and data according to EXFOR rules and dictionaries, using also information from NSR database and other sources.
- □ Web editor built on top of X4± Web-viewer: nodes of the tree are extended with commands for editing.

**□** Editing is implemented via pop-up windows.

#### Light ENSDF Editor, 2015-2016 \_\_\_\_\_

□ ENSDF file is presented as hierarchical document (ensdf±) - interactive tree (graph) with possibility to open/collapse branches and with commands associated with the nodes.

- User can remove/add/edit nodes, call checking and utility codes, do other useful operations.
- **Editing is implemented via pop-up windows and internal frames.**
- □ The Editor is called from MyEnsdf Web tool for ENSDF evaluators.
- Using AJAX technology sharing software infrastructure with Light EXFOR Editor.

#### **ENSDF Web Viewers and Editor**

- 1. ensdf+ interpreted ENSDF cards
- 2. ensdf± interactive tree-graph
- 3. ensdf++ web editor

#### **ENSDF Interpreted (ensdf+)**



#### **ENSDF Interpreted (ensdf+)**

Limited interactions: collapsing blocks of information, display options

#### Interpreted ENSDF: ensdf+ by V.Zerkin, IAEA-NDS, 2015-2016, ver-2016-02-04 ENSDF file ENS4tmp574/184Au.ens - MASS 184 🖄 -| Nuclide 184AU 🖄 Dataset /DECAY/ 184AU [184HG EC DECAY] & Ident Hist H Record(s): 1 GComm C Record(s): 8 GComm CE Record(s): 1 GComm CG Record(s): 4 GComm CL Record(s): 3 + P Record(s): 1 Parent ÷ Norm N Record(s): 1 PNorm PN Record(s): 1 UnplacedRadiation G Record(s): 12 Level Record(s): 20 End



Total: Nuclides:1 Datasets:1 Records:110 Cards:359



#### **ENSDF** interactive tree (ensdf±)





#### **Implementation of editing**

- 1. Editing in popup window
- 2. Editing on the main window (build-in frame)
- 3. Editing original ENSDF and interpreted information
- 4. Integrated editing (e.g. parallel datasets, all levels)

### **Editing in pop-up window**





#### Editing ENSDF cards on the main window



## **Integrated editing**

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#### **Integrated editing**

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#### **Concluding remarks**

- 1. Light Web editors are still "experimental projects"
- 2. There are still "technological questions"
- 3. Clear outline of the tasks (and users) is needed

# Thank you.

Citing of the materials of this presentation should be done with proper acknowledgement of the IAEA and author