

Schlumberger
Oilfield Services

On-Line Help Conference
Europe 99

Single Source Publishing with XML

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June 4, 1999
On-Line Help Conference
London, UK

Summary

1. History
2. Structure of the documentation
3. What is XML?
4. New Authoring System (XML Workbench)
5. Specification and conversion
6. Publishing process
7. Lesson learned

1. History

- ◆ Schlumberger has implemented SAP
- ◆ The end-user documentation was a WinHelp on-line help (about 5000 pages)
- ◆ 12 man-years to author version 5
- ◆ Authored by former field people (trainers)
- ◆ CD-ROM publishing
- ◆ Authoring with Word, translation to RTF, conversion to WinHelp

Objectives of the documentation

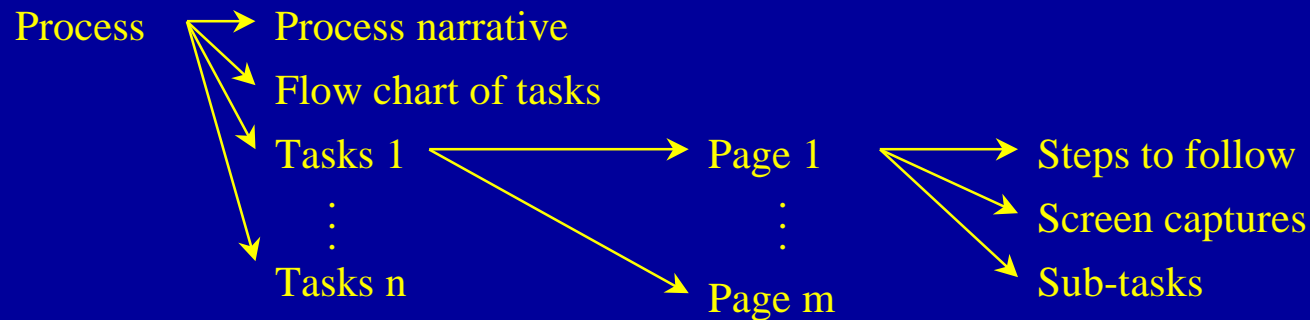
- ◆ To help the end-user to perform tasks, by:
 - giving a big picture of the business processes
 - giving detailed procedures for each task
 - providing FAQs, hints, and tricks

Teach the end-user
how to fish



2. Structure of the documentation

◆ Organized around the concept of process:



Total: 200 Processes, 100 Reports, 500 Tasks, 2000 Screen captures

◆ Navigation inside HOL:

- buttons, hyperlinks, TOC, Index, full-text search, search by natural language

Modularity of the documentation

- ◆ 800 XML documents (500 tasks, 300 narratives)
- ◆ 2000 screen captures (GIF files)
- ◆ 200 flowcharts (Visio + Image map)
- ◆ 4000+ links
- ◆ Each XML document and flowchart contains meta-data (its status)
- ◆ Each document follows a naming convention

Web interface: A Process Narrative

The screenshot displays the BASIS web interface. At the top, there is a navigation bar with the BASIS logo and a series of circular icons labeled CO, PS, GL, AP, AR, AM, SD, MM, PM, and HR. To the right of these icons are icons for a globe, a question mark, and a house. Below the navigation bar, the main content area is divided into two columns. The left column is titled 'ASSET MANAGEMENT' and contains a search bar with 'Transactions' and 'How do I ...?' dropdown menus. Below this is a section for 'AM Processes' with a 'Display/Hide All' button. A list of process titles is shown, with 'How do I Change an Asset Master Record?' expanded to show sub-links: 'Process Overview', 'Process Graphics', 'Change a Fixed Asset Class or Business Area (in ...)', and 'Transfer a Fixed Asset Between Cost Centers (in ...)'. A red arrow points from the 'Process Overview' link to the right column. The right column is titled 'BASIS How do I change an Asset Master Record?' and contains an 'Overview' section with a list of bullet points: Purpose, Trigger, Result, Performed by (Asset Management Clerks and Asset Management Accountants), and Used by (All). Below this is a 'What do I need to know?' section with 'Prerequisites/data' and 'Approval/authorization' sub-sections.

ASSET MANAGEMENT

Transactions ▾ How do I ...? ▾

AM Processes [Display/Hide All](#)

▶ **How do I Change a Fixed Asset Class or Business Area?**

▼ **How do I Change an Asset Master Record?**

- [Process Overview](#)
- [Process Graphics](#)
- [Change a Fixed Asset Class or Business Area \(in ...\)](#)
- [Transfer a Fixed Asset Between Cost Centers \(in ...\)](#)

▶ **How do I Create an Asset Master Record?**

▶ **How do I Forecast a Depreciation?**

▶ **How do I Process a Depreciation Posting Session?**

▶ **How do I Process a Post-Capitalization?**

▶ **How do I Process a Write-up?**

▶ **How do I Process Unplanned Depreciation?**

▶ **How do I Retire an Asset with Revenue with a Customer?**

▶ **How do I Retire an Asset with Revenue without a Customer?**

▶ **How do I Settle an Asset under Construction?**

▶ **How do I Transfer Fixed Assets between Cost Centers?**

BASIS **How do I change an Asset Master Record?**

Overview

- **Purpose:** Use this process to change information on the asset master record, e.g., cost center, asset class, business area, or depreciation life.
- **Trigger:** You receive a notification to change the description, inventory number, cost center, tax jurisdiction code, evaluation group, or depreciation parameters.
- **Result:** You change the Asset Master Record and transfer the asset to another business area / asset class.
- **Performed by:**
 - Asset Management Clerks
 - Asset Management Accountants
- **Used by:** All

What do I need to know?

- **Prerequisites/data:**

You must know the asset master record data to be changed - description, inventory number, cost center, tax jurisdiction code, evaluation group, or depreciation parameters. (How do I process a Transfer of Fixed Asset between Cost Centers? - AS02)

You must create a new asset master record with new asset class or business area, if that is the change to be performed. (How do I create an Asset Master Record? - AS01).
- **Approval/authorization:** Approval as specified by the Product Line

Web interface: Annotated screen capture of the SAP GUI

Transfer: Initial Screen
Transaction Goto Extras System Help

5. Process 1. ABUM was typed in to access this screen

Company code **STCW** 2. Complete fields
Asset **1600017048**
Sub-number 0

Date specif.
Document date **07/23/1997** 3. Complete fields
Posting date **07/23/1997**
Period 7

Transact.
Trans.type **300** Transfer of retir. old assets data from cap.asset 4. Complete field

Web interface: A Task

BASIS CO PS GL AP AR AM SD MM PM HR

ASSET MANAGEMENT

Transactions | How do I ...?

AM Processes [Display/Hide All](#)

- ▶ How do I Change a Fixed Asset Class or Business Area?
- ▼ How do I Change an Asset Master Record?
 - [Process Overview](#)
 - [Process Graphics](#)
 - [Change a Fixed Asset Class or Business Area \(in Change Asset Master Record\)](#)
 - [Transfer a Fixed Asset Between Cost Centers \(in Change Asset Master Record\)](#)
- ▶ How do I Create an Asset Master Record?
- ▶ How do I Forecast a Depreciation?
- ▶ How do I Process a Depreciation Posting Session?
- ▶ How do I Process a Post-Capitalization?
- ▶ How do I Process a Write-up?
- ▶ How do I Process Unplanned Depreciation?
- ▶ How do I Retire an Asset with Revenue with a Customer?
- ▶ How do I Retire an Asset with Revenue without a Customer?
- ▶ How do I Settle an Asset under Construction?
- ▶ How do I Transfer Fixed Assets between Cost Centers?

Change a Fixed Asset Class or Business Area (in Change Asset Master Record)

BASIS Overview

Transfer: Initial Screen Page: 1 of 2

Note Create a new Asset Master Record (AS01) with the new asset class and/or business area must be created **prior to** completing this task.

- ABUM**
or *Accounting > Financial accounting > Fixed assets > Postings > Transfer*
- Complete the following fields:
 - **Company code** :
 - **Asset (number)** :
- In the *Date specif. (Date specified)* group box, complete the following fields:
 - **Document date** :
 - **Posting date** :

The posting date represents the general ledger posting period. The posting period can differ from both the entry date day of entry into the system and the document date day of creation of the original document.
- In the *Transact.* group box, complete the **Trans type** (Transaction type) field
- Process the data:

Web interface: Indexes

Action verbs



ASSET MANAGEMENT

Transactions ▾ How do I ...? ▾

AM Processes

▶ **How do I Change**

▼ **How do I Change**

-  [Process](#)
-  [Process](#)
- [Change a Fixed Asset Class or Business Area \(in C](#)
- [Transfer a Fixed Asset Between Cost Centers \(in C](#)

▶ **How do I Create an**

▶ **How do I Forecast**

How do I ...?

- How do I Change... ?
- How do I Compare... ?
- How do I Create... ?
- How do I Display... ?
- How do I Execute... ?
- How do I Forecast... ?
- How do I Generate... ?
- How do I Post... ?
- How do I Process... ?
- How do I Record... ?
- How do I Retire... ?
- How do I Run... ?
- How do I Scrap... ?
- How do I Sell... ?
- How do I Settle... ?
- How do I Transfer... ?

[/Hide All](#)

Business Area?

[Business Area \(in C](#)

[Cost Centers \(in C](#)

SAP transaction codes

ASSET MANAGEMENT

Transactions ▾ How do I ...? ▾

Transactions

- ABAD
- ABAO
- ABAV
- ABNA
- ABUM
- ABZU
- AFAB
- AS02
- SART
- SM37
- YS90

[Display/Hide All](#)

Change a Fixed Asset Class or Business Area?

Create an Asset Master Record?

[Business Overview](#)

[Graphics](#)

- [Change a Fixed Asset Class or Business Area \(in C](#)
- [Transfer a Fixed Asset Between Cost Centers \(in C](#)

▶ **How do I Create an Asset Master Record?**

Single Source Publishing with XML

1. History
2. Structure of the documentation
- 3. What is XML?**
4. New Authoring System (XML Workbench)
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3. What is XML?

- ◆ eXtensible Markup Language
- ◆ W3C Recommendation, Feb 1998 (XML 1.0)
- ◆ XML is a subset of SGML
 - “The goal of XML is to enable generic SGML (Standard Generalized Markup Language) to be served, received, and processed on the Web in the way that is now possible with HTML.”

XML vs. HTML

- ◆ **HTML:** *language for visual presentation of a document; it is an application of SGML (a document type definition = DTD).*
- ◆ **XML:** *meta-language for designing document contents; it is an abbreviated version of SGML, to make it easier for you to define your own document types, and to make it easier for programmers to write programs to handle them.*

Example of XML and HTML

◆ HTML

```
<CENTER><H3>How do I change a Master...</H3></CENTER>  
<H4><FONT COLOR="#006600">Overview</FONT></H4>  
<UL>  
<LI><B>Purpose: </B>Use this process to change...</LI>  
</UL>
```

◆ XML

```
<Title ID="8837"><Title-body>How do I change a Master...</Title-body></Title>  
<Overview>  
  <Purpose><Para><Text>Use this process to change...</Text></Para></Purpose>  
  <Trigger><Para><Text>You receive a notification...</Text></Para></Trigger>  
</Overview>
```

4. New XML authoring system

◆ Goal:

- Harmonize the authoring of the documents
- Facilitate the update
- Manage the translations
- Manage the variants (area and PL specificities)
- Publish through several media (Web, print...)
- Publish customized variants on demand

◆ Solution:

- XML authoring system

New XML authoring system (cont.)

◆ Tools:

- XML editor (Arbortext Adept Editor)
- XML Doc. Man. System
 - Novasoft NovaManage (Doc. Man. System)
 - INSO Balise (SGML/XML middleware)
- Converter to HTML (INSO HTML-Package)
- Composer to PDF (Adobe Frame Maker + SGML)

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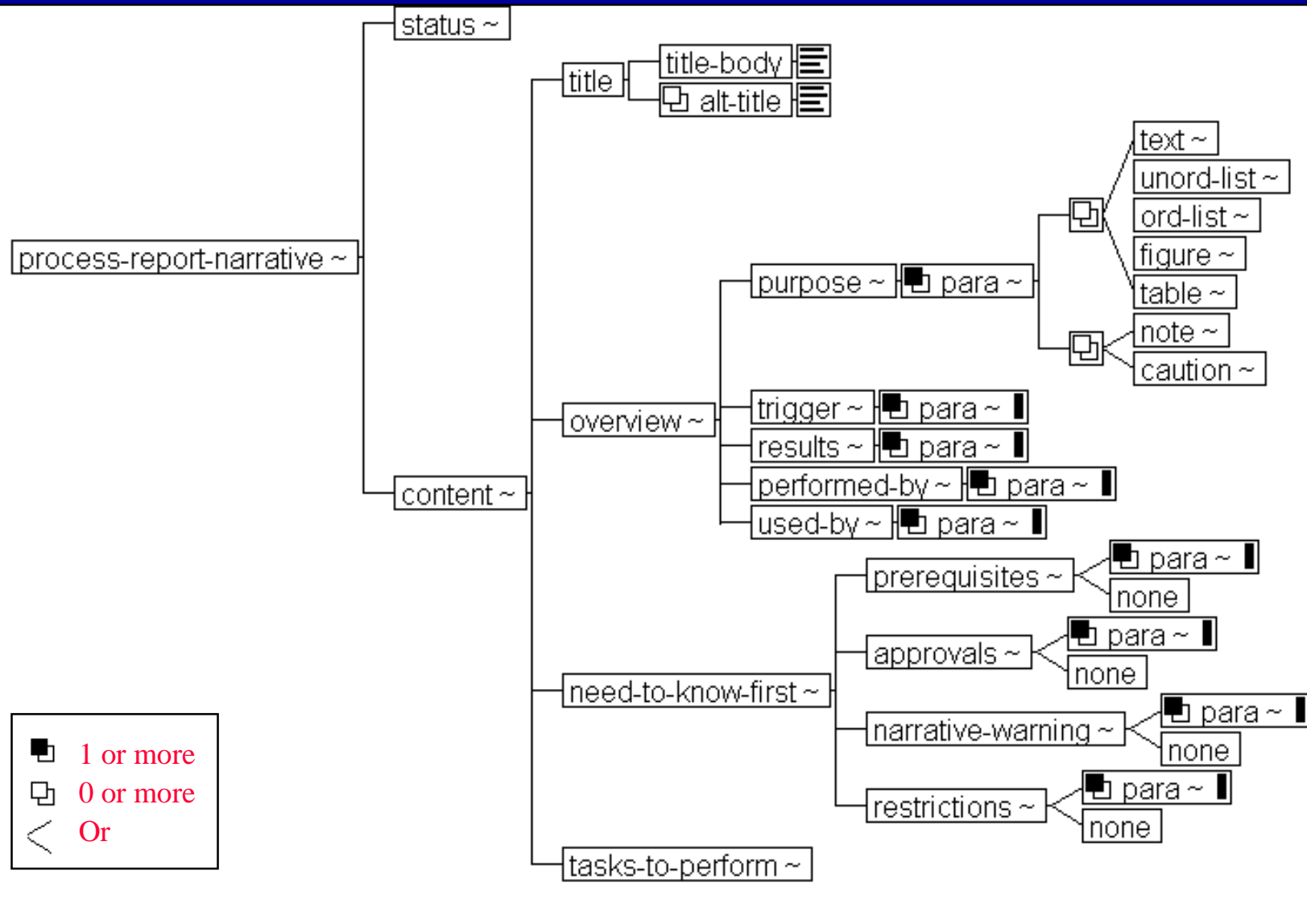
5. Specification and conversion

1. Conception of 2 Document Type Definitions (DTDs)
2. Conversion from RTF to XML

Conception of 2 DTDs

- ◆ Analysis of the document types:
 - 2 types identified (task, narrative)
 - Structure of each type very homogenous
- ◆ Creation of the DTDs:
 - Reuse the Schlumberger corporate DTD
 - Creation of elements specific to the SAP GUI
- ◆ Importance of the role of the contractor (AIS)

Example: DTD for "Narratives"



Conversion from RTF to XML

- ◆ Source RTF is tagged with "WinHelp" codes
- ◆ Converter:
 - Built on Balise
 - Uses heuristics to extract the semantic
- ◆ Cleaning-up of the data:
 - Iterative work (conversion, "log" analysis, cleaning-up of the RTF or modification of the XML)
 - Takes time, requires a lot of care

Example: RTF => XML

```

$#>{bmc E:\mm -\GRAPHICS\SL-SMALL.BMP} How do I create a
Contract Release Order?

Overview

{bmcwd E:\mm -\GRAPHICS\SMALLBLUE.BMP}
  Purpose: Use this process to create (release)
  purchase orders based on the prices and conditions
  defined in a contract with a vendor.

{bmcwd E:\mm -\GRAPHICS\SMALLBLUE.BMP} Trigger:
  A requirement exists for a material, external service or an
  asset that is covered under a contract.

{bmcwd E:\mm -\GRAPHICS\SMALLBLUE.BMP} Result:
  A purchase order is created (released) to a vendor that
  uses the contract as a reference. Each purchase order
  release updates the accumulated statistics of the contract.

{bmcwd E:\mm -\GRAPHICS\SMALLBLUE.BMP}
  Performed by:
  Warehouse/Store/Material/Administrative Staff

{bmcwd E:\mm -\GRAPHICS\SMALLBLUE.BMP} Used by
  which Product Lines: All

What do I need to know?

{bmcwd E:\mm -\GRAPHICS\SMALLBLUE.BMP}
  Prerequisites/data:
  {bmcwd E:\mm -\GRAPHICS\SMALLGREEN.BMP}
  Contract number
  {bmcwd E:\mm -\GRAPHICS\SMALLGREEN.BMP}
  Quantity to release
  {bmcwd E:\mm -\GRAPHICS\SMALLGREEN.BMP}
  Delivery requirements
  
```

```

<title><title-body>How do I create a Contract Release
Order?</title-body></title>

<overview>
<purpose><para><text>Use this process to create (release) purchase orders
based on the prices and conditions defined in a contract with a
vendor.</text>
</para></purpose>
<trigger><para><text>A requirement exists for a material, external service
or an asset that is covered under a contract.</text></para></trigger>
<results><para><text>A purchase order is created (released) to a vendor
that uses the contract as a reference. Each purchase order release
updates the
accumulated statistics of the contract.</text></para></results>
<performed-by><para><text>Warehouse/Store/Material/Administrative
Staff</text></para></performed-by>
<used-by><para><text>All</text></para></used-by></overview>

<need-to-know-first>
<prerequisites><para>
<unord-list><list-item><para><text>Contract number</text></para></list-
item>
<list-item><para><text>Quantity to release</text></para></list-item>
<list-item><para><text>Delivery requirements</text></para></list-item>
</unord-list></para>
</prerequisites>
  
```

\$ Create a Contract Release Order

```

* MM_CCRO_PH_COM
> main u
  
```

Naming Convention

Single Source Publishing with XML

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6. Publishing process

1. Update of the documents by the writers (trainers)
2. Multi-formats publishing (HTML, PDF...)

Update of the documents

◆ Authoring process:

- 12 writers on the same floor
- Editing of the documents in Adept:
 - Controlled environment
 - Macros to speed up the authoring
- Visualization in HTML for control
- Check into the document management system
- Quality control (structure, content, and links)
- Inclusion of annotated screen captures
- Creation of flowcharts with hyperlinks

Authoring process with XML

◆ Ease of use of the XML editor:

- The writers did not know XML
- The DTDs allow them to concentrate on the content, not on the formatting
- The DTDs ensure consistent documentation
- HTML viewer is mandatory
- Very positive learning curve

◆ Strong support needed in the beginning

- Assistance from local "help desk" necessary

Management of the documents

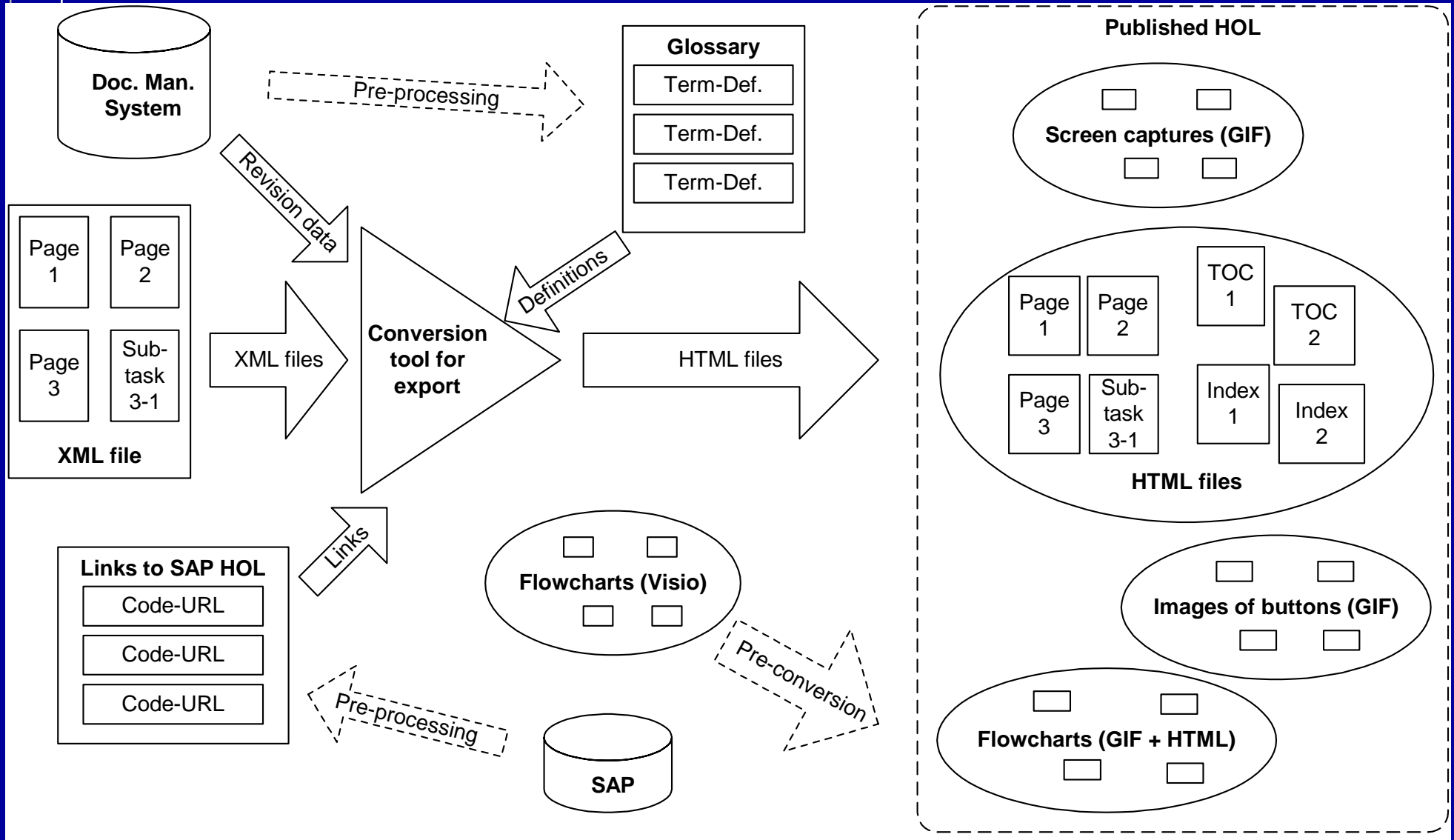
- ◆ The EDMS is easy to use
- ◆ The authoring system is a success
- ◆ Some inconvenient:
 - Glossary on database not easy to update
 - Flowcharts are on 2 formats
 - Update of buttons somewhat cumbersome
 - The 2 DTDs have some limitations

Publishing

◆ Construction of the help-on-line:

- Export of the last updated documents (XML, GIF, "images map")
- Construction of the navigation tools (links, indexes, tables of content)
- Creation of more than 3000 HTML files
- Compilation with HTML-Help to check links
- Integration to SAP for context sensitivity

Publishing of the HOL



Publishing (cont.)

◆ Production of print:

- Extraction from the database for a specific population
- Creation of manuals through a composition tool (Frame Maker + SGML)

◆ Multilingual translation (future plan):

- From English to French and Spanish
- Semi-automatic translation (memory translation)
- Database management of the translated modules

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7. Lesson learned

- ◆ Preparing your project
- ◆ Writing the specifications
- ◆ Working with an external consultancy
- ◆ Before go live
- ◆ After go live

Preparing your project

- ◆ Get the right documentation
- ◆ Learn XML
- ◆ Go to experts (company or outside)
- ◆ Learn what EDMS can do
- ◆ Get the right tools
- ◆ Plan your project

Writing the specifications

◆ DTDs, conversion to XML, export to HTML

- Analyze your documents
- Identify their complexity
- Specify as much as you can

◆ Document management system

- Have a look on existing specifications
- Identify the documentation processes and the actors
- Identify the system requirements
- Write the request for bids

Working with an external consultancy

- ◆ Be ready to discuss technical issues with it, or get somebody to do it for you
- ◆ Test, test, and test again
- ◆ Listen to your contractor
- ◆ Get the proper documentation from it

Before go live

- ◆ Test, test, and test
- ◆ Install the software on the users' computers
- ◆ Train the users
- ◆ User documentation

After go live

- ◆ Help desk
- ◆ Be ready to fine tune
- ◆ Quality control
- ◆ Prepare future updates

Questions?

