

# Improving Localization Process at Tektronix Using XML and XLIFF: A Case Study

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and  
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# Agenda

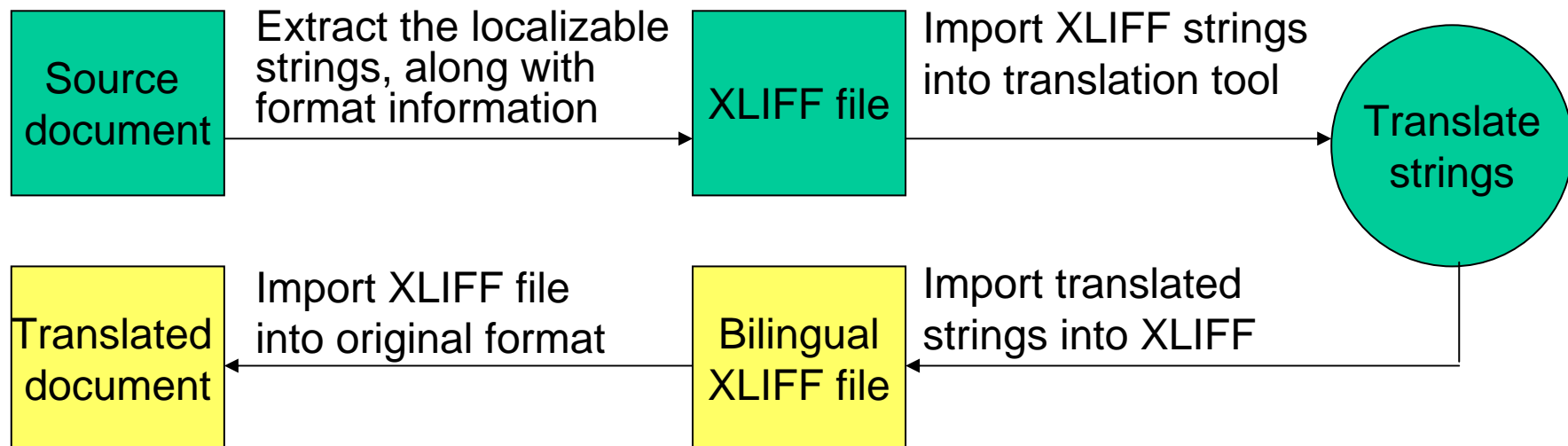
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- ▶ Overview of XLIFF 1.2: a Technical Introduction
- ▶ A quick demo
- ▶ Translation Model Prior to XML and XLIFF
- ▶ Translation Model Today
- ▶ Metrics: old way vs. new way
- ▶ Looking forward

# Overview of XLIFF 1.2 & Technical Introduction

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**XLIFF supports the extract & merge paradigm, an established model for efficient translation**



# XLIFF Translation Model

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- Isolate the translatable text in translation units

```
<trans-unit>  
  <source>Hello</source>  
  <target>Hello</target>  
</trans-unit>
```
- Retain the source document's structure
  - **External** to the XLIFF file, via a **skeleton file**  
– *- or -*  
– **Internally** with **<group>** elements
- Workflow, processing, segmentation, word count, binary-units, etc. are also supported in XLIFF

## . . .and now, a quick demo

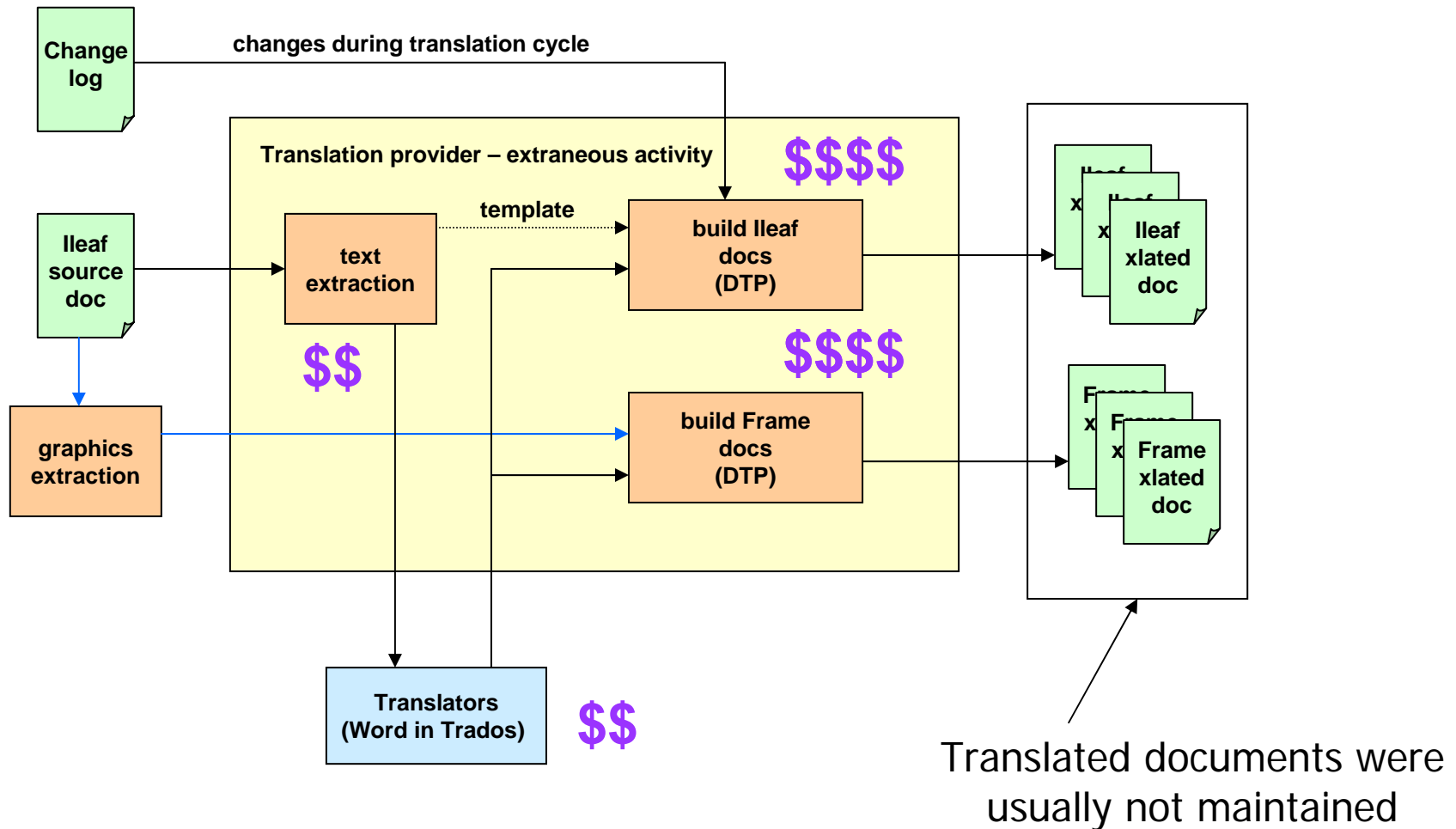
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Please, a show of hands from the audience, pick one of the following demonstrations

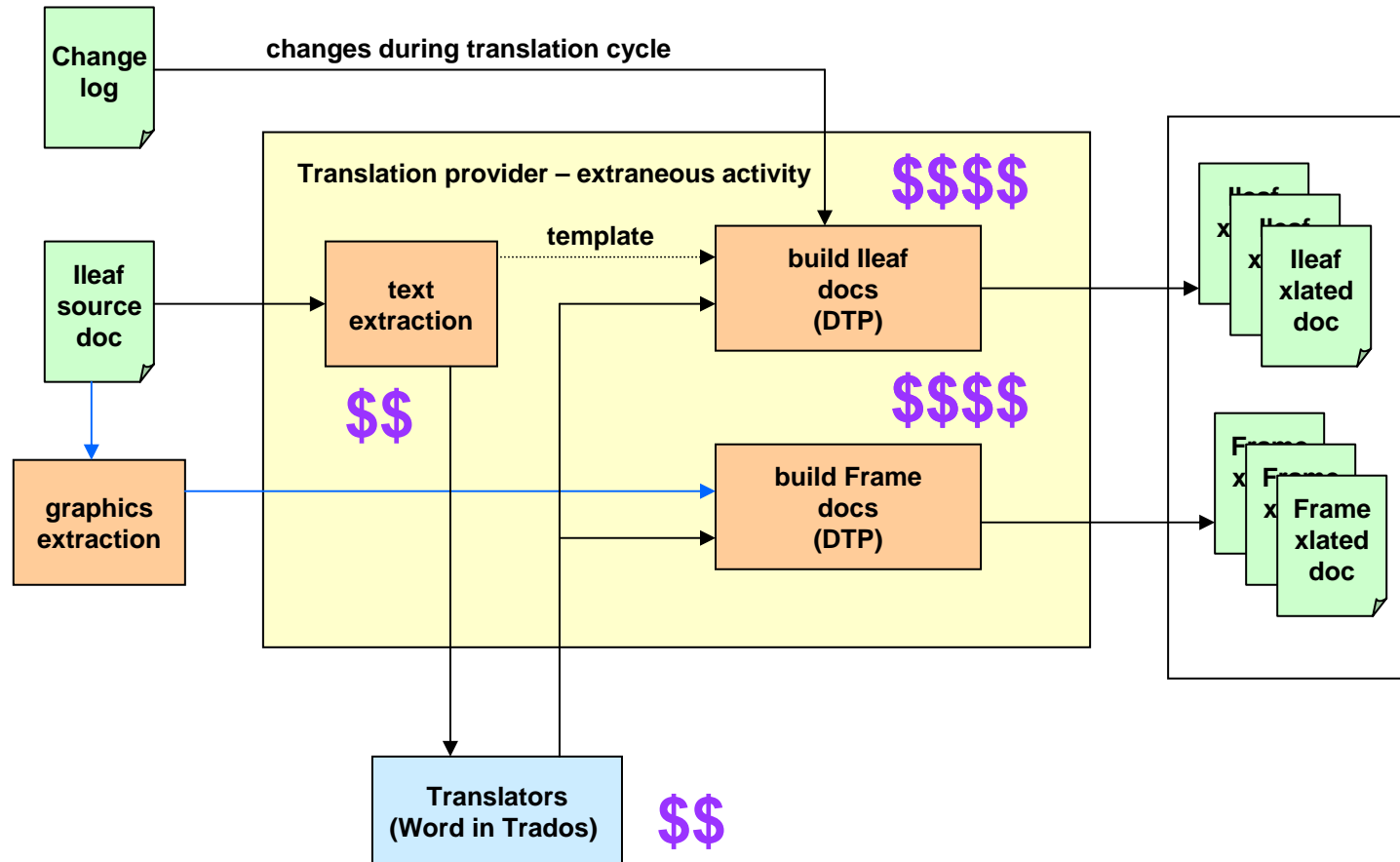
- ▶ SVG to XLIFF – translate – XLIFF to SVG
- ▶ DITA to XLIFF – translate – XLIFF to DITA
- ▶ HTML to XLIFF – translate – XLIFF to HTML
- ▶ Docbook to XLIFF – translate – XLIFF to Docbook
- ▶ XLIFF RoundTrip tool: any random XML file from the audience (hand it to me on a memory stick)

# Translation Model Prior to XML and XLIFF

## Translating with Interleaf was complicated



# Drawbacks to the non-XML, non-XLIFF approach



# Model today: XML-based translation

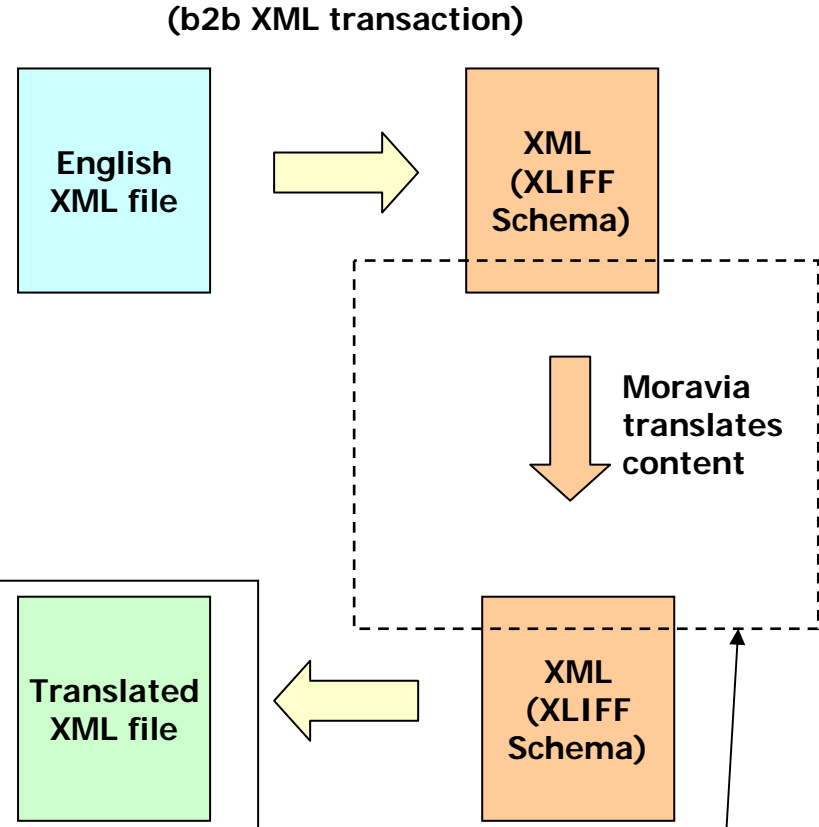
- ▶ Transform XML content

- From authoring DTD
- To XLIFF Schema

- ▶ Transform XML content

- From XLIFF Schema
- To authoring DTD

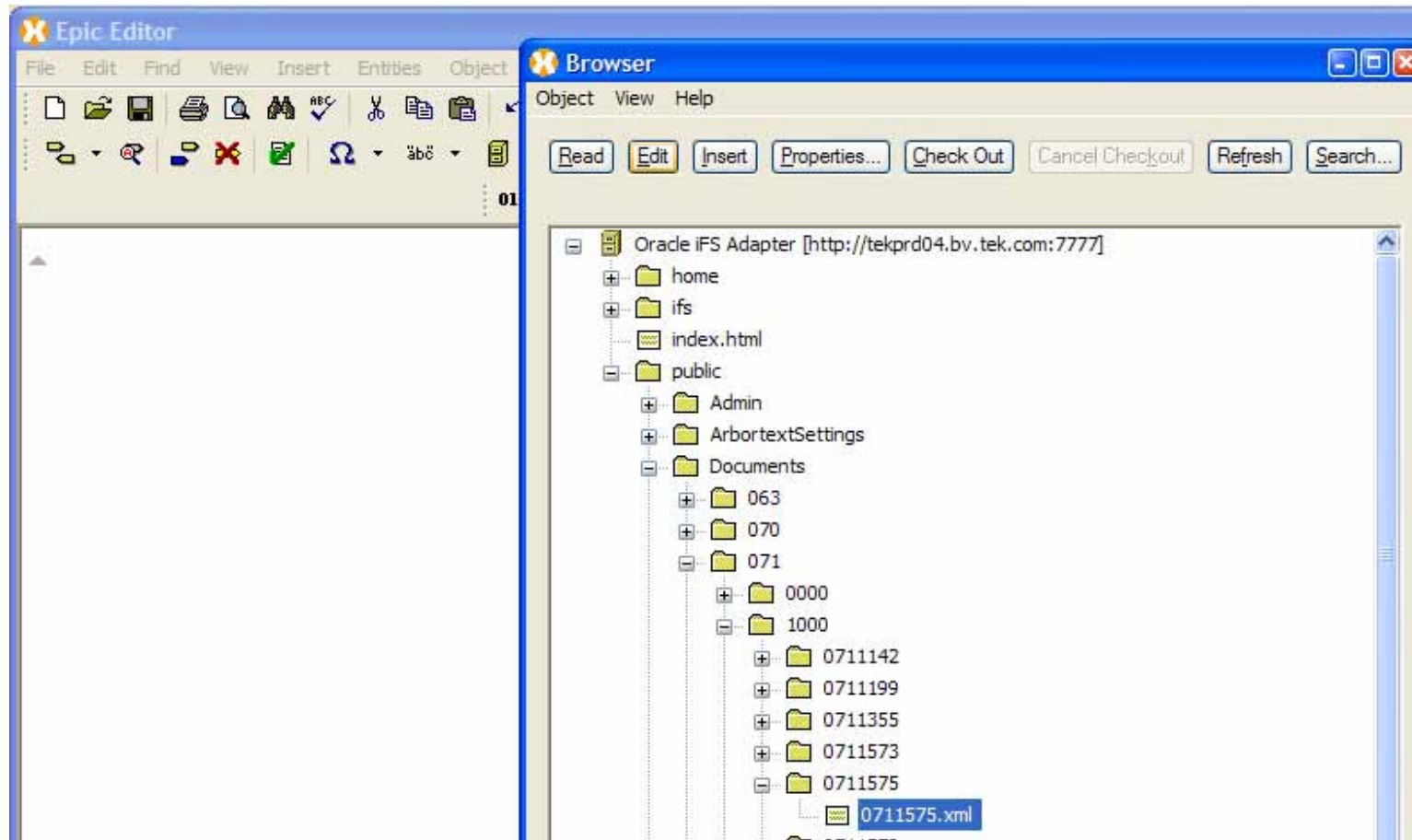
Translated documents are maintained (become assets)



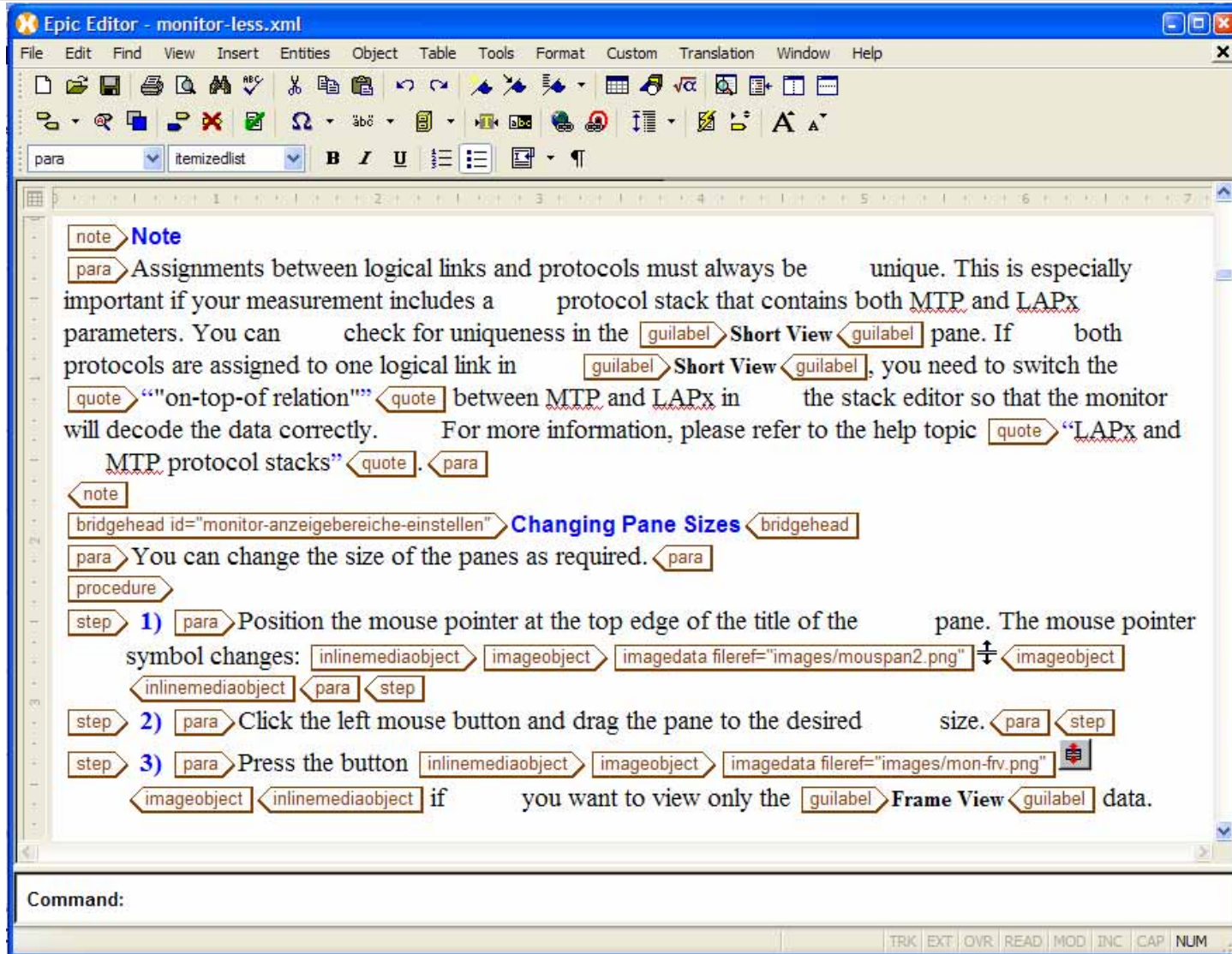
Remember, the translation vendors helped write XLIFF; they are quite comfortable with it

# Browse XML Repository for English file

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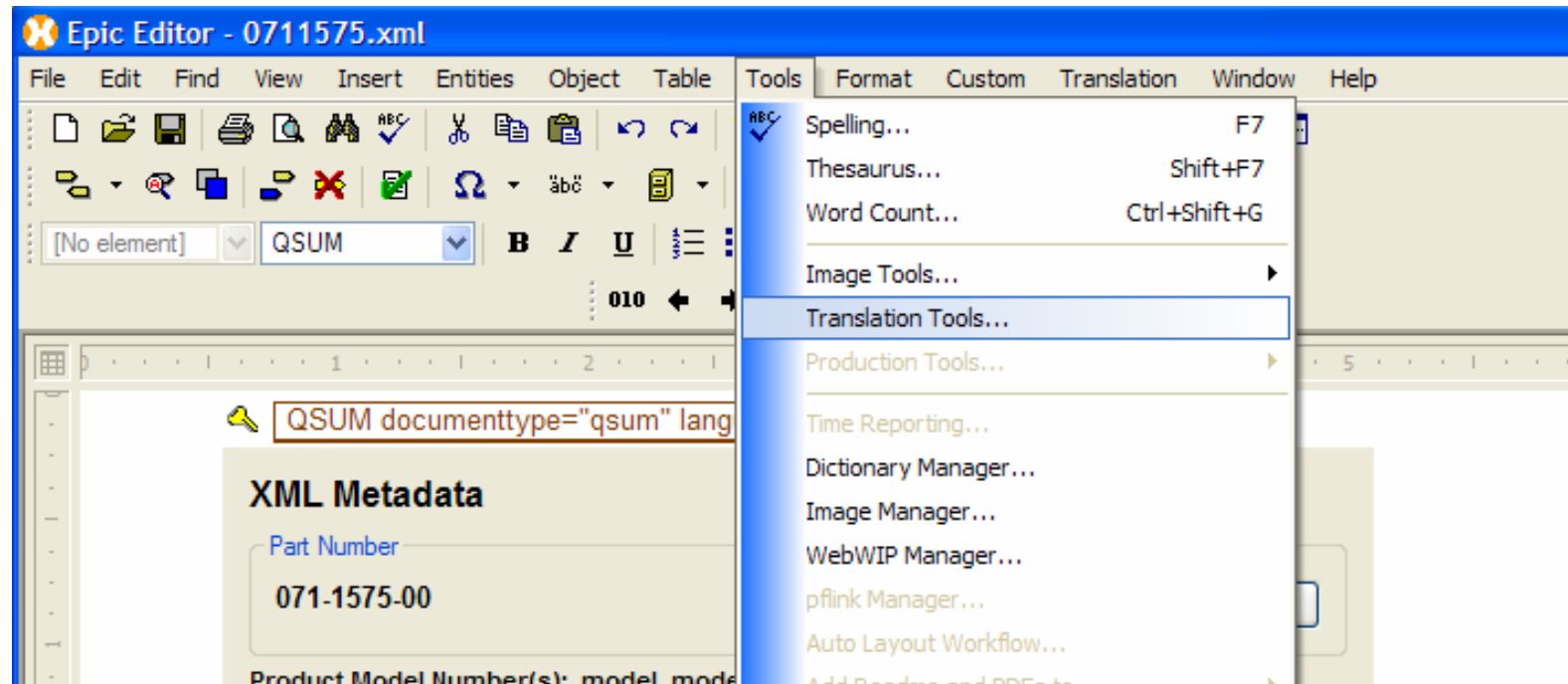


# Make final edits



an  
D to

# Select “Translation Tools” (custom feature)



- ▶ An XLIFF file is created from the English XML, and ftp'd to the translation vendor (along with the image files, and a composed PDF)

# Snip of an XLIFF file: prepared for Moravia

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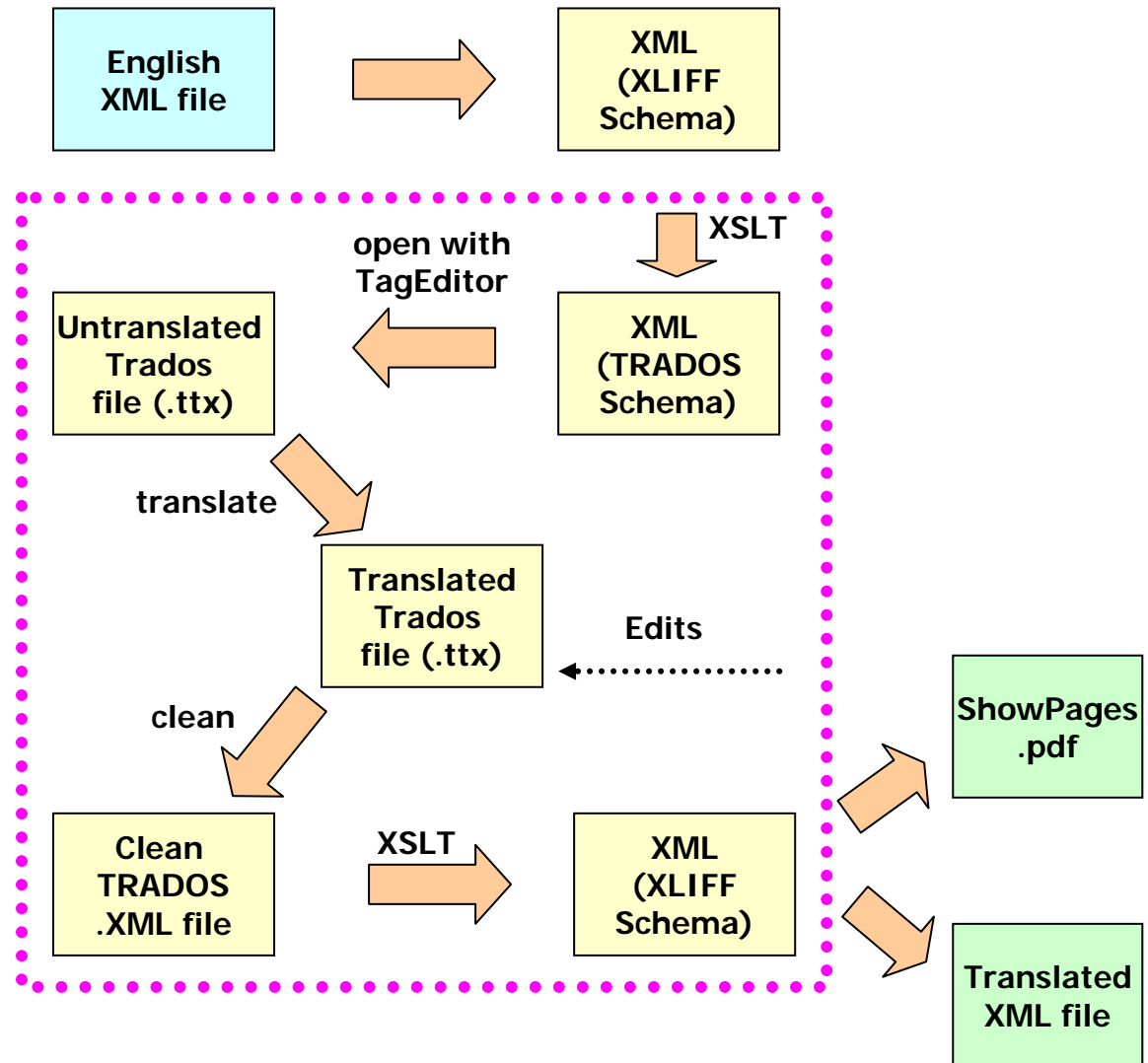
```
<trans-unit resname="Para" tek:trk="n c 7" id="n-c-7">  
  <source xml:lang="EN">Assignments between logical links and protocols  
    must always be unique. This is especially important if your measurement  
    includes a protocol stack that contains both MTP and LAPx parameters.  
    You can check for uniqueness in the <g id="guilabel-x-d0e318"  
    xmrk:ancs="5" ctype="x guilabel">Short View</g> pane.  
  </source>  
  <target state="needs-translation" xml:lang="ZH"> Assignments between  
    logical links and protocols must always be unique. This is especially  
    important if your measurement incl both MTP and LAPx parameters. Yo  
    id="guilabel-x-d0e318" xmrk:ancs=  
    View</g> pane.  
  </target>  
</trans-unit>
```

All Hierarchical information is preserved in XLIFF file

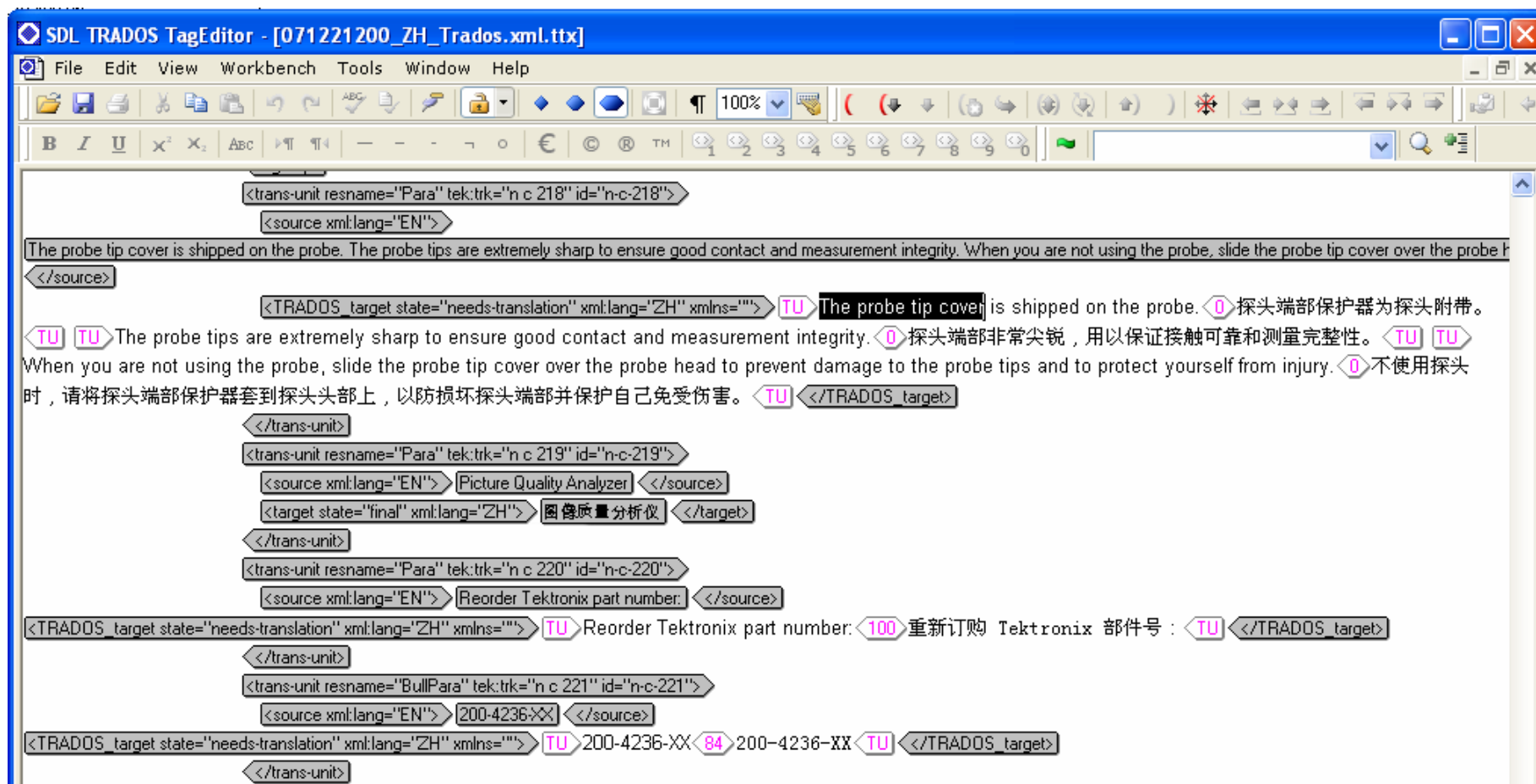
Text is presented as Source and Target elements in English; state attribute set to "needs translation"

# Translation Process on Vendor Side

- ▶ XLIFF pre-processing for translation in Trados (XSLT)
- ▶ Translation/Edit/Proof with Trados TagEditor and special .ini
- ▶ Post-processing (XSLT)
- ▶ Checks
  - XLIFF checklist
  - Sending files to ShowPages & QA with the help of the .pdf
- ▶ Final edits



# Translation with Trados TagEditor



# XLIFF file submission to Tektronix ShowPages

071225600\_ZH.pdf

创建操作系统恢复光盘

## 创建操作系统恢复光盘

此仪器并没有附带操作系统恢复光盘。如有必要，可使用下列步骤来创建一套可恢复操作系统的光盘。

说明： 以下过程可创建一套 Microsoft Windows 操作系统的恢复光盘。恢复操作系统之后，请使用产品软件 CD（部件号 020-2902-XX）重新安装 PQA500 应用软件。请按照随产品软件 CD 提供的说明重新安装 PQA500 应用软件。

### 创建恢复光盘

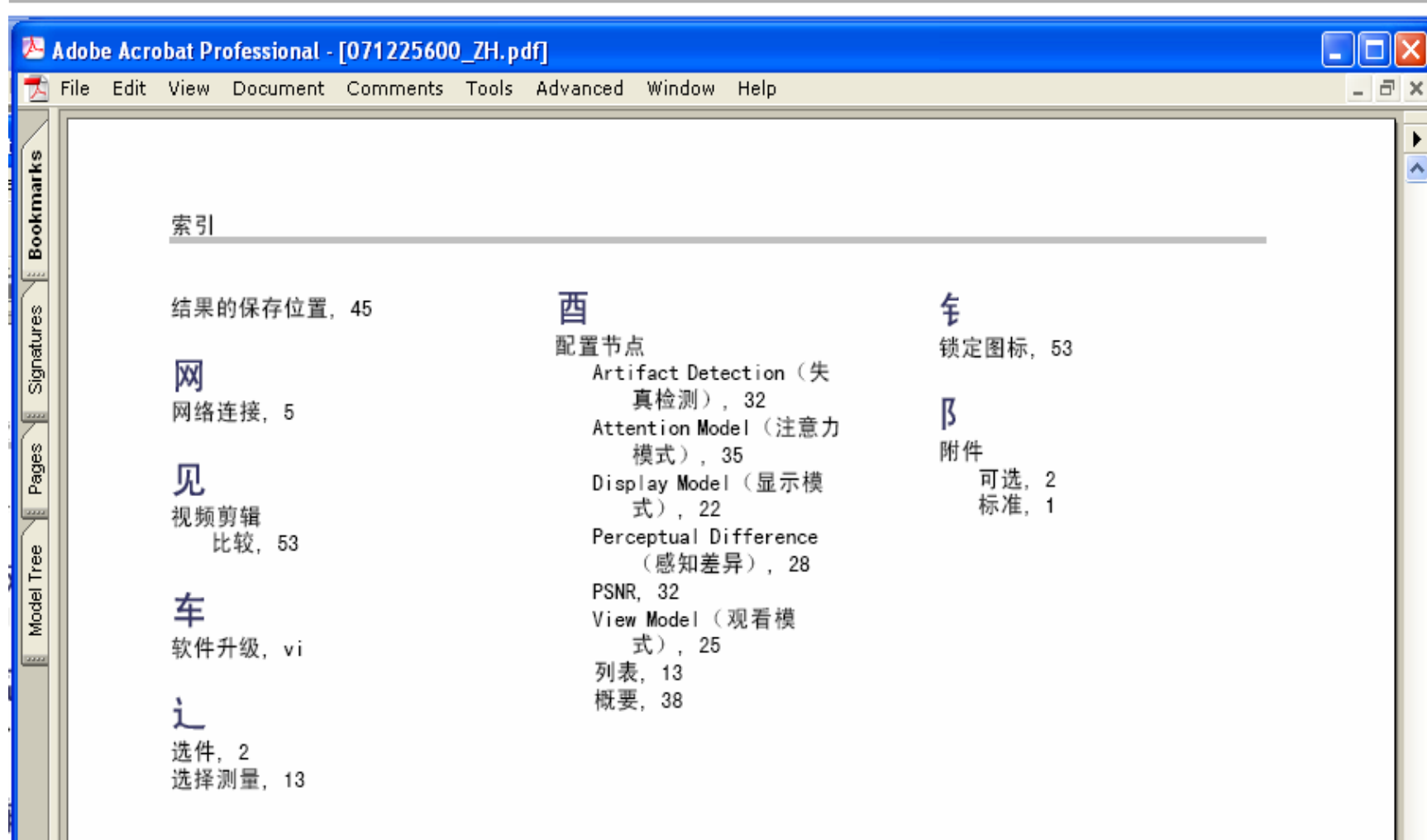
前提条件您将需要：

- 带有 CD-R/W 或 DVD±R/W 驱动器以及光盘刻录软件的单独 PC。
- USB 闪存驱动器（1 GB 或更大）或局域网，用于将 ISO 映像文件从仪器传输到带光盘刻录机的 PC。
- 空白 CD-R 光盘（大约 5 张，具体数量取决于备份文件的数量）。

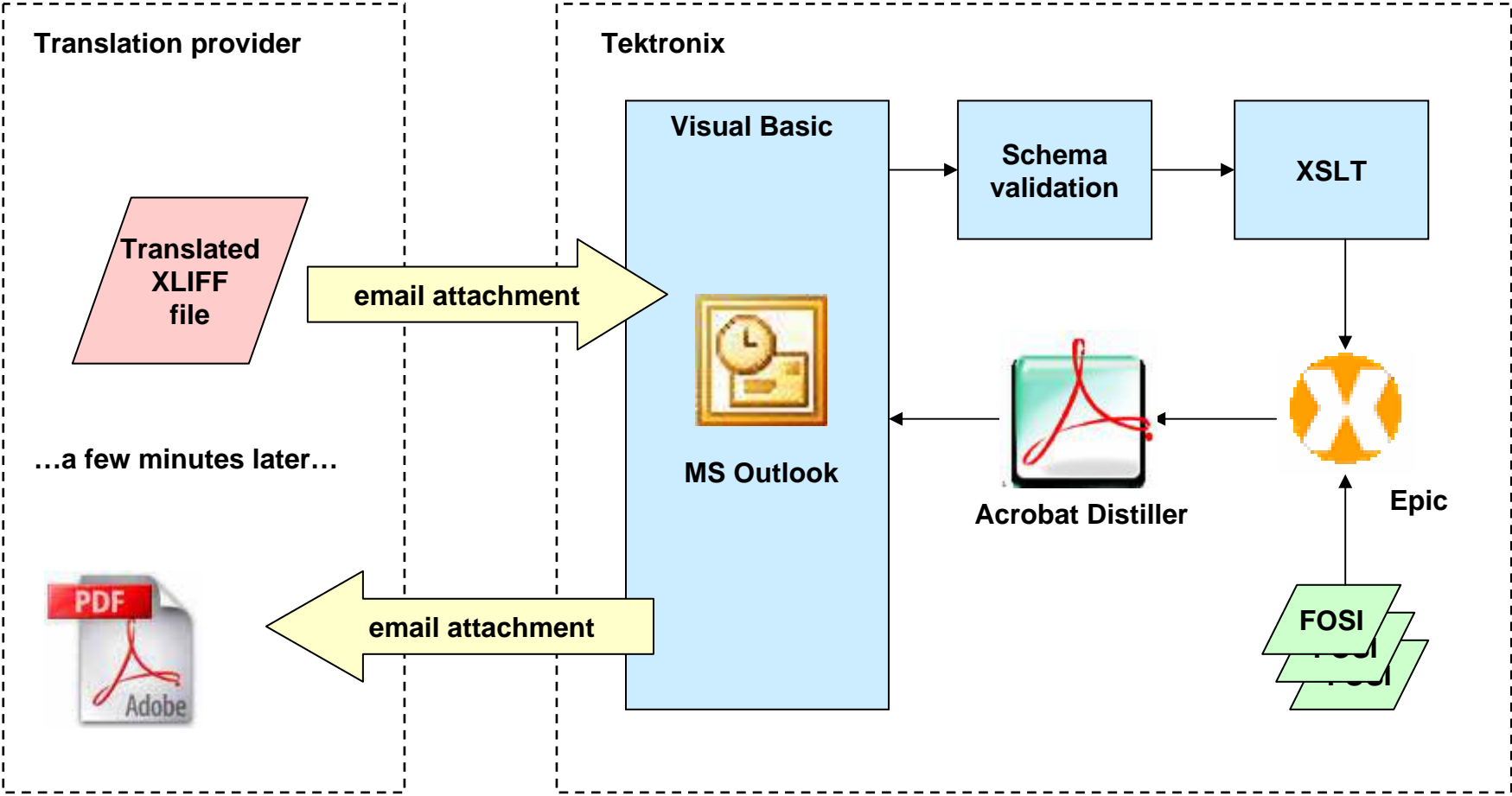
要创建一套恢复光盘，请执行下列操作：

1. 在仪器上导航至 C:\backup。
2. 使用 USB 闪存驱动器（或通过 LAN）将所有标有 backupN 的文件传输到带有光盘刻录机的 PC。
3. 使用光盘刻录软件，将所有的备份 ISO 映像文件（backup1.iso 至 backupN.iso）刻录到光盘上。使用备份文件名、仪器名称、仪器序列号和日期为每张光盘贴上标签。

# XLIFF file submission to ShowPages (cont.)



# Tektronix tool for the translation provider

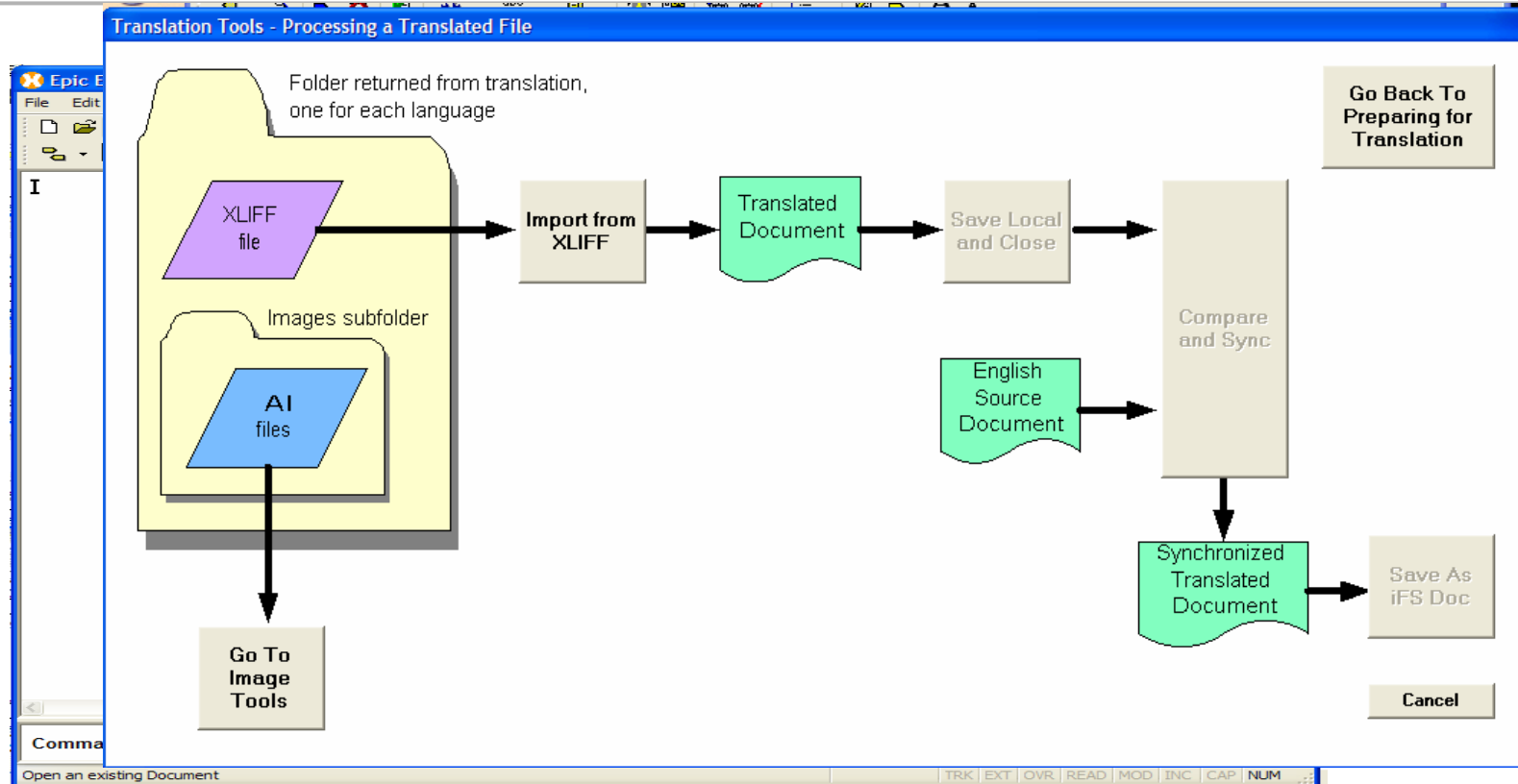


# Moravia finalizes the target; changes state

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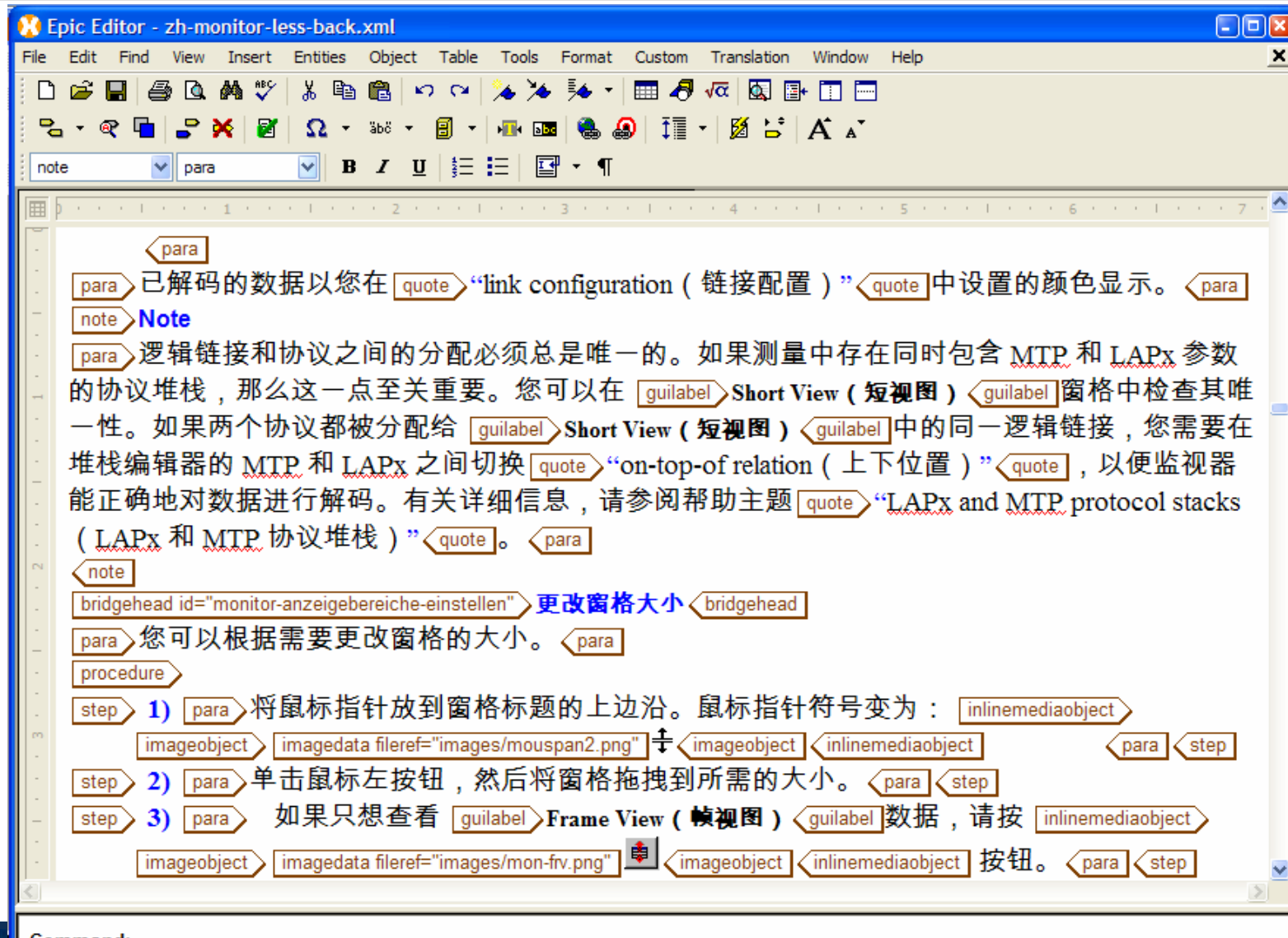
```
<trans-unit resname="Para" tek:trk="n c 7" id="n-c-7">  
  <source xml:lang="EN"> Assignments between logical links and protocols  
  must always be unique. This is especially important if your measurement  
  includes a protocol stack that contains both MTP and LAPx parameters.  
  You can check for uniqueness in the <g id="guilabel-x-d0e318"  
  xmrk:ancs="5" ctype="x guilabel">Short View</g> pane.  
  </source>  
  <target state="needs-review-translation" xml:lang="ZH"> 逻辑链接和协  
  议之间的分配必须总是唯一的。如果测量中存在同时包含 MTP 和 LAPx 参  
  数的协议堆栈，那么这一点至关重要。您可以在 <g id="guilabel-x-  
  d0e123" xmrk:ancs="5" ctype="x-guilabel" >Short View ( 短视图 ) </g>  
  窗格中检查其唯一性。  
  </target>  
</trans-unit>
```

# Import the translated XLIFF file



- ▶ XLIFF is transformed back into authoring DTD
- ▶ Attributes and hierarchy are preserved
- ▶ Translated file is checked into XML repository

# Translated file can go on its merry way . . .



# PDF file is automatically created for print

装入的协议堆栈决定要显示哪些协议参数。与解码错误相关的消息和信息元素都被加亮显示。

- Packet View (分组视图) : 该窗格以十六进制、ASCII、十六进制+ASCII、EBCDIC 或二进制格式显示 Short View (短视图) 中所选的帧。如果您在 Frame View (帧视图) 中选择了单个协议参数, 则相应的值会在 Packet View (分组视图) 矩阵中加亮显示。


已解码的数据以您在“link configuration (链接配置)”中设置的颜色显示。

**Note**


逻辑链接和协议之间的分配必须总是唯一的。如果测量中存在同时包含 MTP 和 LAPx 参数的协议堆栈, 那么这一点至关重要。您可以在 Short View (短视图) 窗格中检查其唯一性。如果两个协议都被分配给 Short View (短视图) 中的同一逻辑链接, 您需要在堆栈编辑器的 MTP 和 LAPx 之间切换“on-top-of relation (上下位置)”, 以便监视器能正确地对数据进行解码。有关详细信息, 请参阅帮助主题“LAPx and MTP protocol stacks (LAPx 和 MTP 协议堆栈)”。

**更改窗格大小**

您可以根据需要更改窗格的大小。

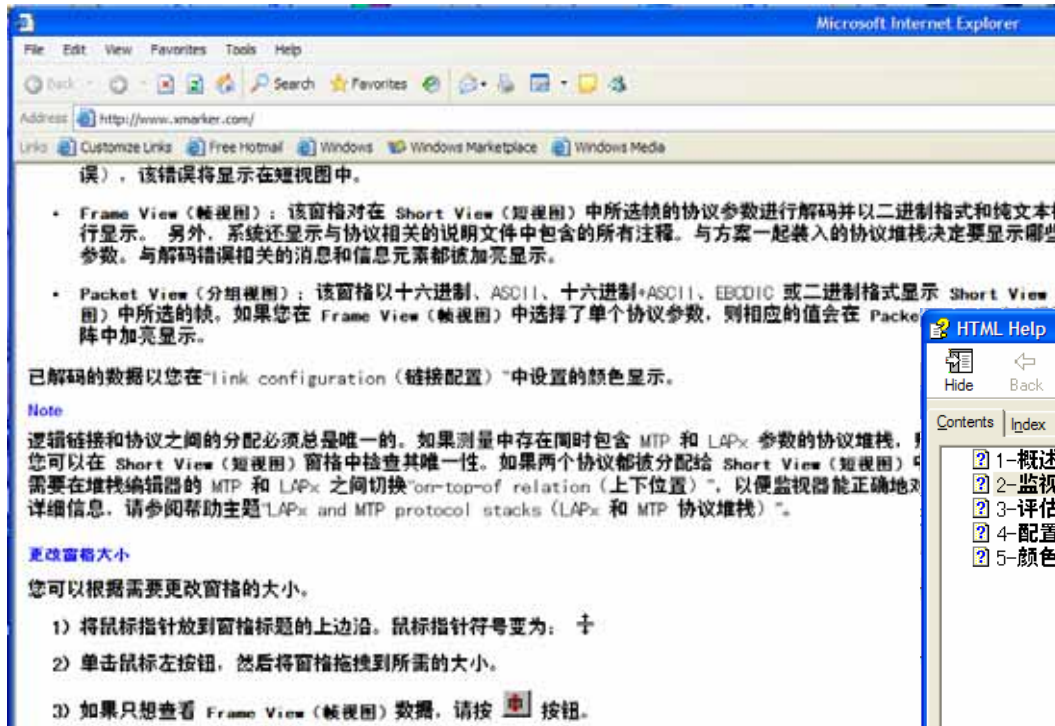
1. 将鼠标指针放到窗格标题的上边沿。鼠标指针符号变为：

2. 单击鼠标左按钮, 然后将窗格拖拽到所需的大小。

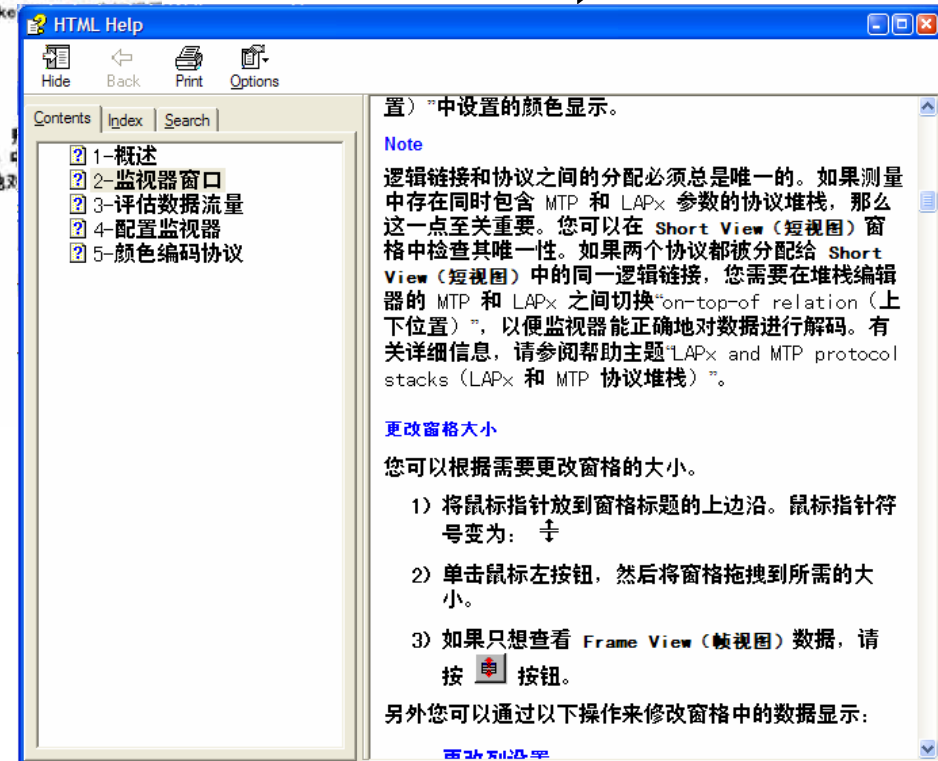
3. 如果只想查看 Frame View (帧视图) 数据, 请按  按钮。

另外您可以通过以下操作来修改窗格中的数据显示：

# Other media from the same translated XLIFF

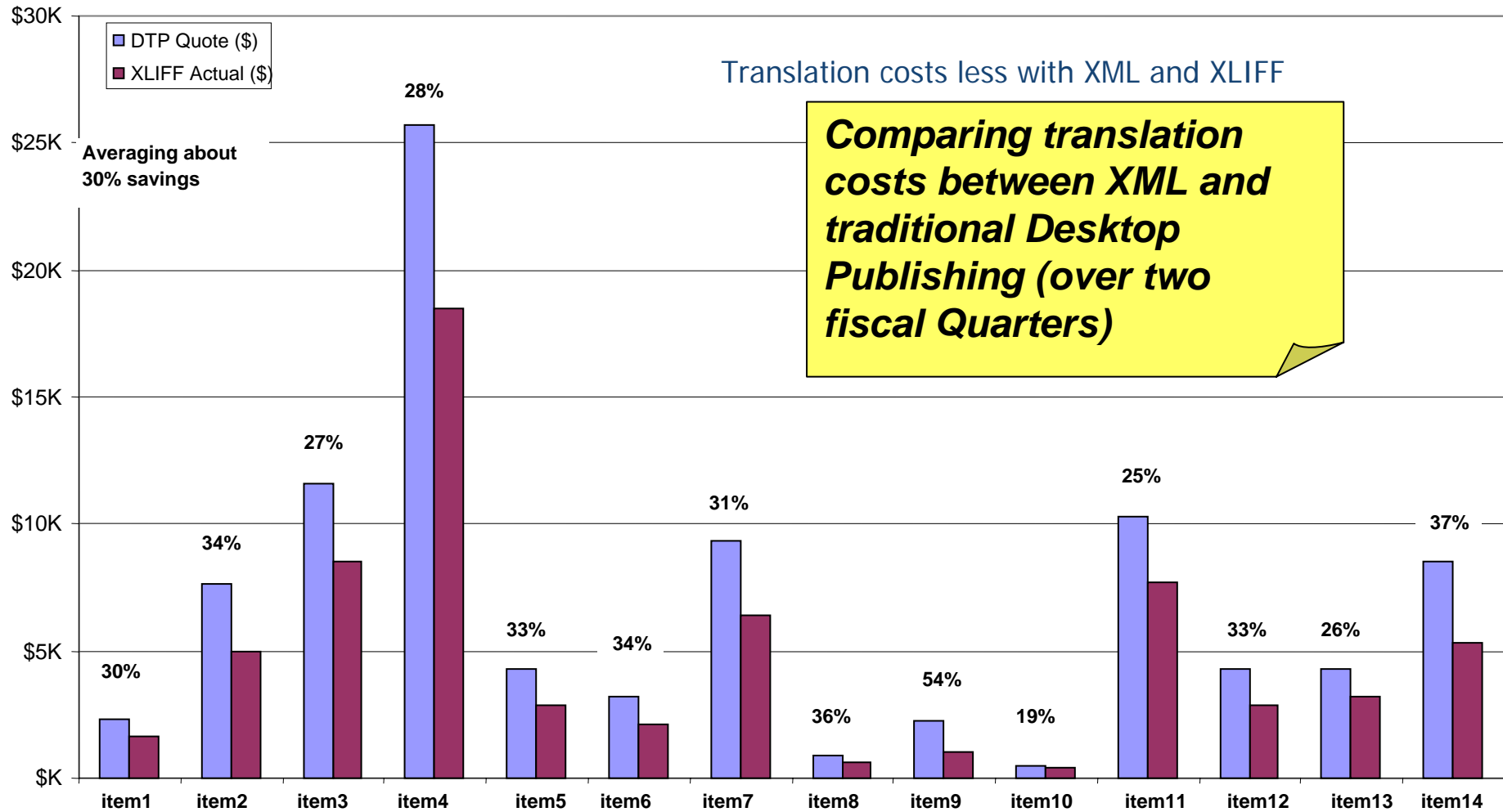


Chinese Online Help generated from translated XLIFF file

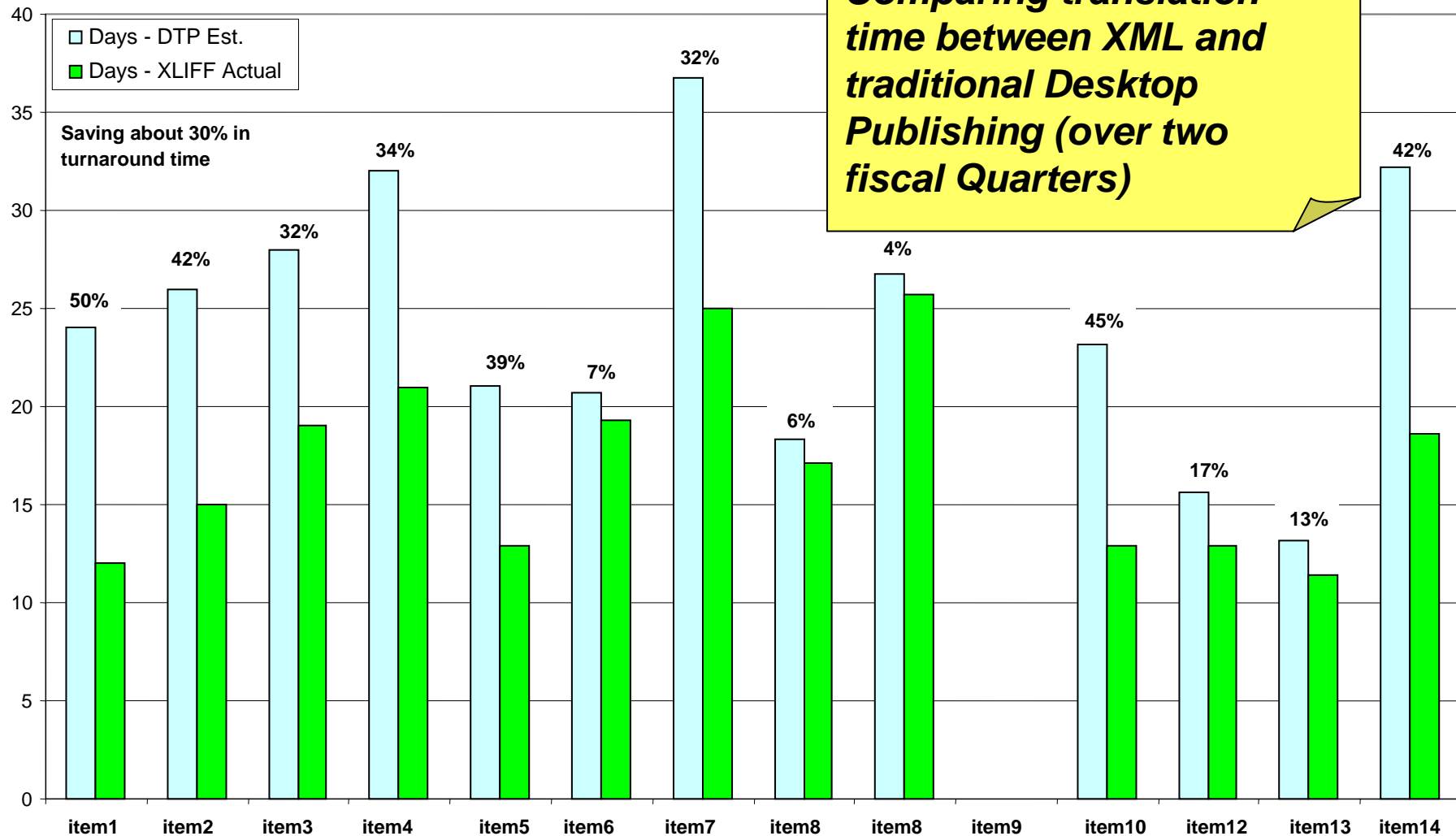


Chinese HTML (future) generated from translated XLIFF file

# Metrics: old way vs. new way, quantifying the savings in money and time



# Metrics: old way vs. new way, quantifying the savings in money and time



# Advantages of the current model

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- ▶ No DTP work
  - This saves time and costs
  - Note: page integrity is not required for technical documentation
- ▶ No text extraction and re-integration
  - This saves time and costs and reduces the potential for errors
- ▶ All localized translation units stay in the Tektronix repository and can be re-used in updated manuals.
  - This saves Tektronix translation costs and time for 100% matches
- ▶ XML files are small and easy to transfer
  - This saves time for up- and downloading files to FTP sites

## Advantages of current model (cont.)

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- ▶ Simple overall workflow
  - This facilitates planning and scheduling
- ▶ Creation of a .pdf of the translated files within minutes
  - This allows to check the translation in its final layout & context
- ▶ Multiple outputs at the “push of a button” from the same XML source (PDF, HTML, Online help)
  - You will be ahead of “media creep”
- ▶ Familiar environment for Tektronix writers when creating the files for translation
- ▶ No dependency on proprietary software technologies with a system that relies on open, widely accepted standards like XML and XLIFF

# How Tektronix developed the new model

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- ▶ Planning, management buy-in
- ▶ Programming, development, testing, implementation
  - 100% of the development and customization was done by two full-time Tektronix employees, with strong management championship
- ▶ Showpages
  - Developed and supported by the same two people
- ▶ Training and support
  - Ongoing training and support by the same two people

# How can I use XLIFF/XML for publishing?

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- ▶ In Tektronix case the XLIFF process builds on a XML based publishing environment.
  - It requires planning, investments and resources to create it.
  - If you have it already, you should take advantage of XLIFF.
- ▶ What XML based publishing systems would be suitable as basis for the XLIFF process?
  - There are many customizable XML publishing systems on the market and also companies who are specialized in creating customized XML-based publishing solutions.
- ▶ Involve the localization vendor to help with the integration of the necessary localization steps into the XML publishing system
  - XSL scripts
  - Workflow

Okay, this is good, but we can make it better with additional XLIFF features, and other standards

- ▶ XLIFF 1.2 will go to OASIS Ballot in the next few weeks
- ▶ XLIFF 2.0 is in the requirements gathering stage; please drop by the website and consider joining the TC, or making suggestions

[http://www.oasis-open.org/committees/tc\\_home.php?wg\\_abbrev=xliff](http://www.oasis-open.org/committees/tc_home.php?wg_abbrev=xliff)

- ▶ Whitepaper that tells this story on the Moravia website under press releases.

<http://www.moraviaworldwide.com/TektronixPR>

# Questions?

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