



Working with Composite Messages

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Objectives



After reading this you should:

- ▶ understand why you need to pay attention to how you create strings from separate parts
- ▶ understand some of the key linguistic issues involved
- ▶ have some recommendations for best practice to take away

Based on an article at

<http://www.w3.org/International/articles/composite-messages/>

Composite messages

Composite messages

Internationalization issues

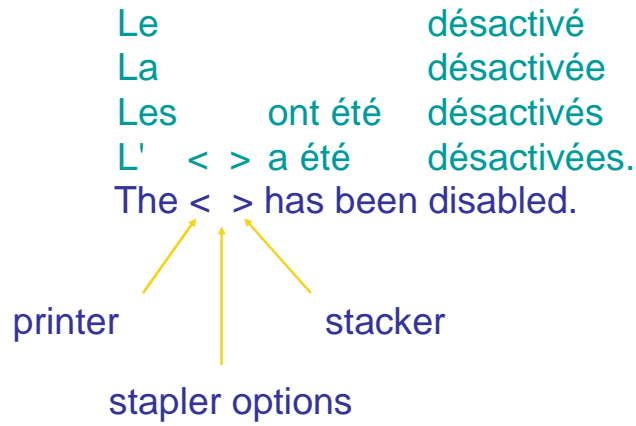
- Inflexible syntax





- Agreement & word/concept mappings

- Indistinguishable substrings

- Need for context

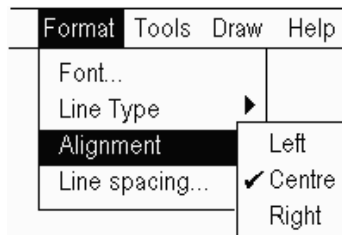
Recommendations



| Printer | |
|--|---|
| Printing  2-sided printing On Stream printing On | Stacker  Enabled When full No offset |
| Trays  1: Enabled 2: Enabled 3: Enabled | Binder  Enabled On |



Directory: C:/Workgroup/Scan
File name: MyFile.tif
Image Quality: Text
Original Size: Auto
Resolution: 300 dpi
Communication Test: Completed: Passed



Predefined, translatable text

printer, stacker or binder

Non-translatable, runtime defined text

Error occurred while processing job
%s

Numeric

Pages printed: %d

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Across separate display areas

Return web pages updated

veränderte Webseiten abrufen.

Time period for returned web pages:

Variables that cannot be reordered

```
printf( "There were %d spelling mistakes in file %s.", $spellerrors, $filename)
```



```
printf( "Datei %s enthält %d Rechtschreibfehler.", $spellerrors, $filename)
```

```
printf( "There were %1$d spelling mistakes in file %2$s.", $spellerrors, $filename)
```



```
printf( "Datei %2$s enthält %1$d Rechtschreibfehler.", $spellerrors, $filename)
```

Composite messages that are incomplete strings

```
print( "Retrieving last " );      print( "エラーログ" );          // 'error log'
print( desiredEntries );        print( totalEntries );
print( " of " );                print( "件から最新" );          // 'from last'
print( totalEntries );          print( desiredEntries );
print( " total log entries." );  print( "件を取り出します。" ); // 'retrieving'
```

1: "Retrieving last "

2: " of "

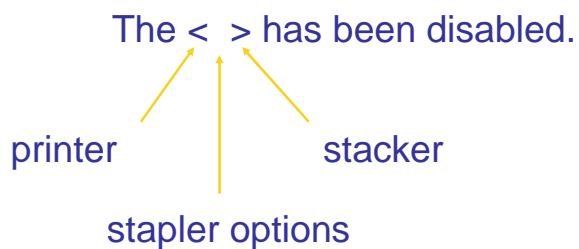
3: " total log entries."

Composite messages that are incomplete strings

```
print('Retrieving last ' + $requiredEntries + ' of ' +  
      $totalEntries + ' total log entries.');
```

```
print("Retrieving last $requiredEntries of $totalEntries total log entries.");
```

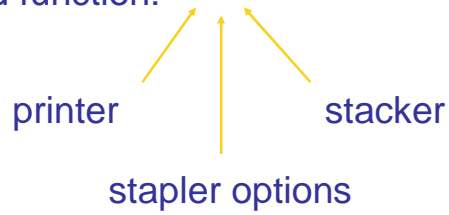
Gender agreement



L'imprimante a été désactivée.
Le module de reception a été désactivé.
Les options d'agrafages ont été désactivées.

Gender agreement

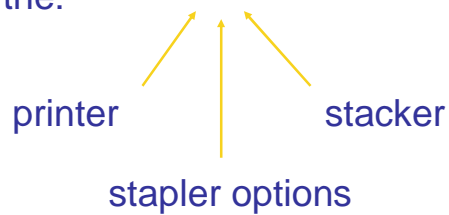
Disabled function:



Fonction désactivée: Imprimante
Fonction désactivée: Module de reception
Fonction désactivée: Options d'agrafages

Word and concept mappings

Turn on the:



Conectar? Encender? Activar?

Gender agreement and runtime-defined substrings

The file <file_name> has been scanned.

The section <section_title> gives further information.

The patient <person's_name> is ready..

El enfermo Richard está listo.
La enferma Julia está lista.

Number agreement.

| Number of pages | Russian word for 'page' |
|-------------------|--|
| 1 | страниц а |
| 2-4 | страниц ы |
| 5-10 | страниц |
| 11-20 (irregular) | страниц |
| 21 | страниц а |
| 22-24 | страниц ы |
| 25-30 | страниц |
| > 30 | Repeat pattern of endings for 1 to 10. |

Number agreement

%d page(s) printed.

Pages printed: %d

Отпечатано страниц: %d

%s near '%s' at line %d

%d 行の%s近くに%s

%1\$s near '%2\$s' at line %3\$d

%3\$d 行の%2\$s近くに%1\$s

| Topic | Part of speech | Translation of 'enabled' |
|-----------------|---------------------|--------------------------|
| stacker | masculine, singular | activé |
| printer | feminine, singular | activée |
| bar codes | masculine, plural | activés |
| stapler options | feminine, plural | activées |

enabled
disabled
enabled
enabled
disabled
stacker
printer
enabled
bar codes
stacker
disabled
etc.

stacker
enabled
disabled
stacker
enabled
disabled
printer
enabled
disabled
etc.

or message ids

or notes to the translator

Recommendations

Composite messages
Internationalization issues
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Recommendations

Recommendations

- ◆ Use a topic-comment approach whenever possible.
- ◆ Avoid sentence-like arrangements when they contain substrings that are predefined translatable text or numeric text.
- ◆ Use sentence-like arrangements with care if you have non-numeric and non-translatable text substrings (ie. text created at runtime). Do not use if the substring represents a proper noun.

- ◆ Where the parts of a composite message appear in separate locations, provide the translator with contextual information to show how the various parts of a composite message relate to each other.
- ◆ Provide information to the translator, where needed, to clarify what a substring represents.
- ◆ When requested by the localization group, provide information about the size of each substring.

 Further reading

Handling Composite Messages

<http://www.w3.org/International/articles/composite-messages/>

Re-using Strings in Scripted Content

<http://www.w3.org/International/articles/text-reuse/>