



The OpenOffice.org Specification Process Demystified

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Sun Microsystems

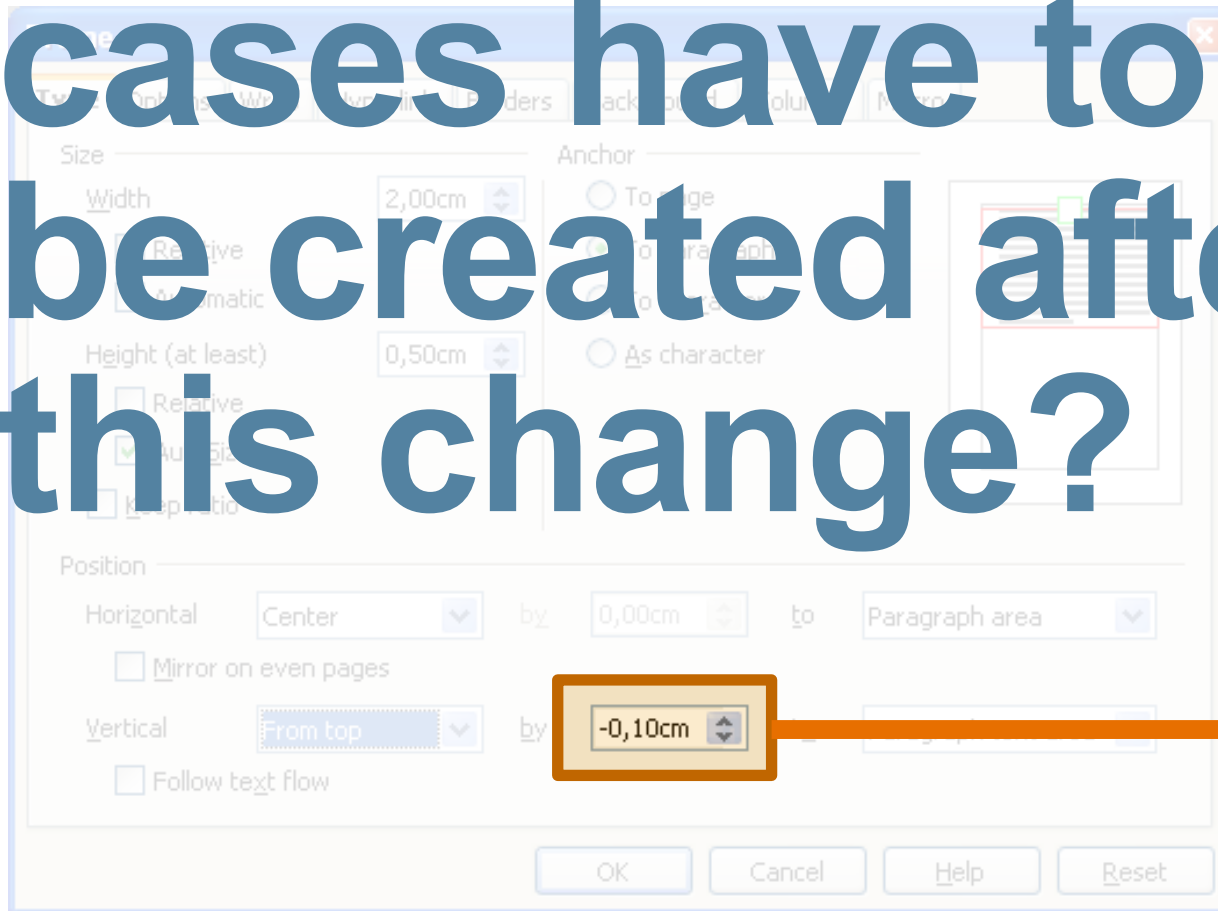


Agenda

- Why do we need specifications?
- Writing a specification
- A specification template - Why?
- Q&A

Why do we Need Specifications?

How many test cases have to be created after this change?



Negative values can now be entered here

... **Way too many**
But...

**At least
12
test case representatives
are needed for
methodical testing**

Exemplary Test Case Design

Parameter*	Anchor	Vertical	By	To
Valid Classes	To paragraph To character	From Top	-2.00....24.70	Margin; Paragraph Text; Area; Page Text Area
Invalid Classes	To page; As character	Top; Bottom; Center	min_val...-2,00-€; 24,70+€....max_val	Entire page

*Preconditions: Size of frame = 5x5 cm; cm as metric; page size=A4; orientation=portrait

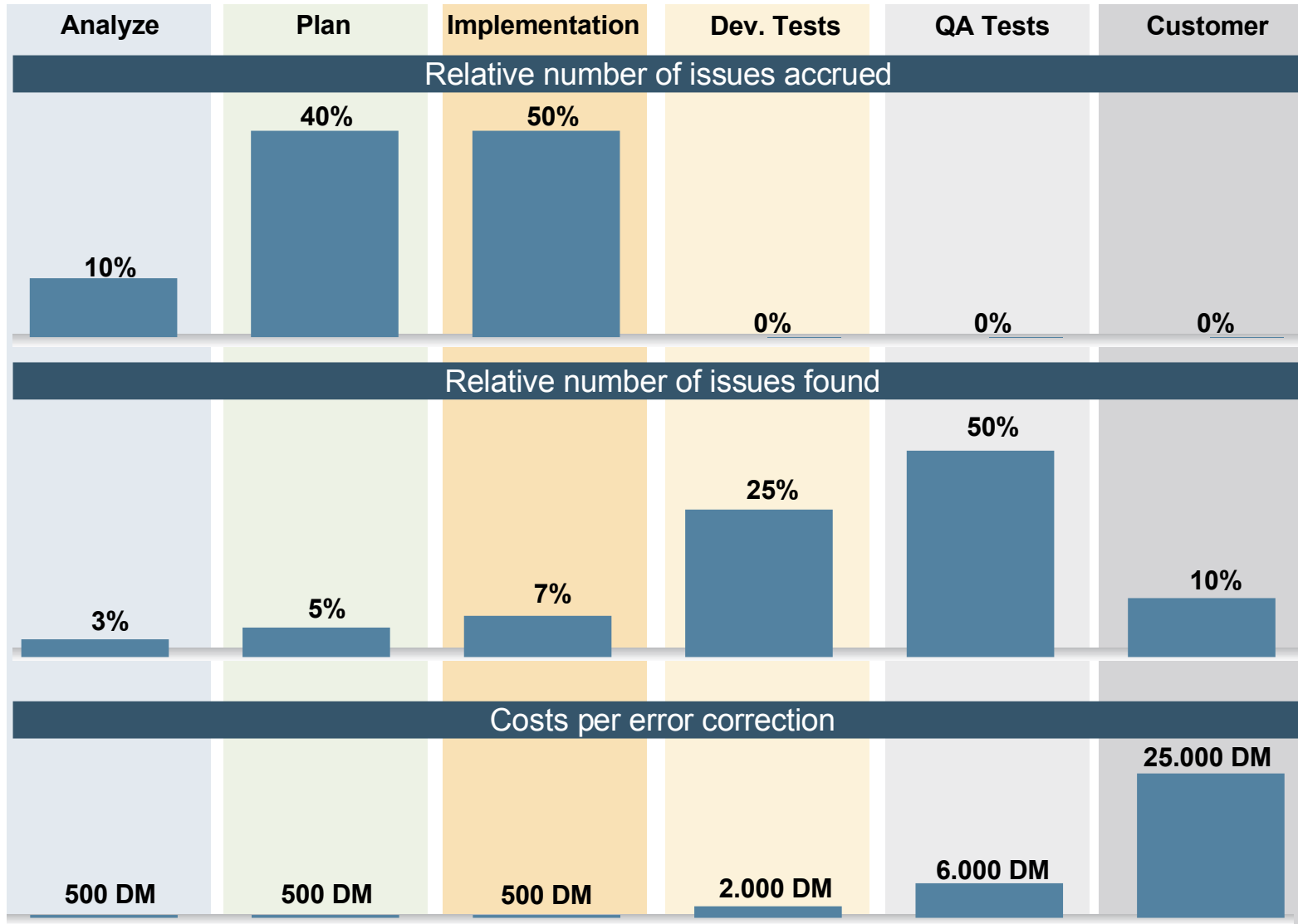
- To reduce the count of test cases some black-box methods (here: **equivalence class partitioning** with **boundary value analysis**) are being used.
 - > Find for each equivalence class a representative test case.
 - > Combine all valid classes with one invalid class.

Test Case Representatives

#	Anchor	Vertical	By	To	Result
1	To paragraph	From Top	-2.0	Margin	-2.00
2	To character	From Top	-1.43	Paragraph Text	-1.43
3	To character	From Top	-0.53	Area	-0.53
4	To paragraph	From Top	-0.01	Page Text Area	-0.01
5	To page	From Top	-2.00	Margin	To=0; by=locked
6	As character	From Top	-2.00	Paragraph Text	
7	To paragraph	Top	-1.01	Area	
8	To paragraph	Bottom	-0.90	Page Text Area	
9	To character	Center	-0.01	Margin	
10	To paragraph	Top	-2.01	Margin	
11	To paragraph	Top	24.71	Margin	
12	To paragraph	From Top	-2.0	Entire page	

More Impacts...

Errors & Costs



Errors & Efforts on OOs

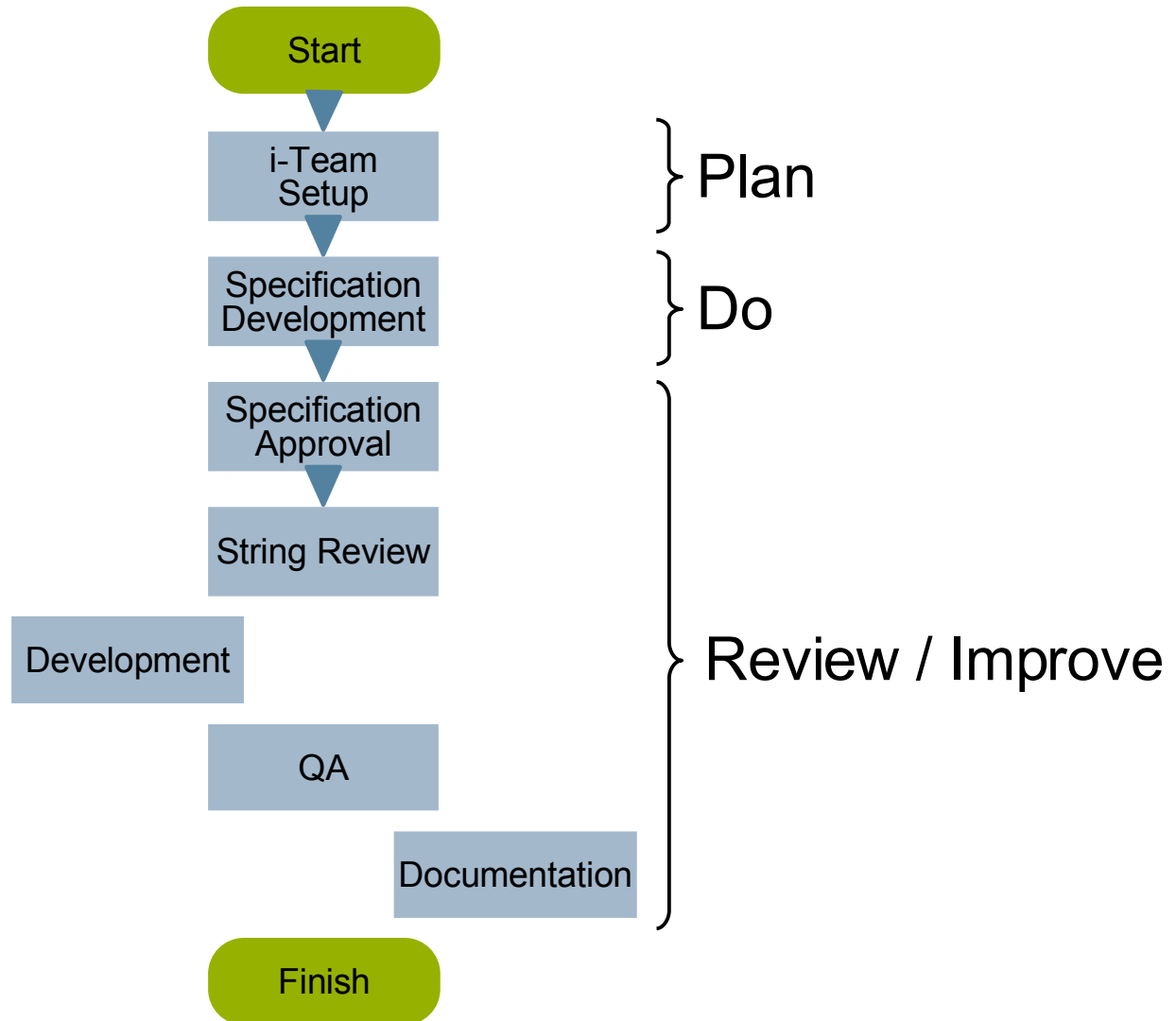
- **QA** evaluates issue
- **Program Management** sets target
- **Developer**
 - > Evaluates issue
 - > Sets up workspace
 - > Fixes issue
 - > Builds workspaces
 - > Evaluates fix
- **QA** evaluates fix in installation set
- **Release Engineering** integrates workspace
- **QA**
 - > Evaluates fix on master workspace
 - > Closes issue
- **Customer** installs fixed version

Conclusion

- Specifiying saves your time
- You increase the product quality
- You save others' time
- You can increase test coverage systematically if needed

Writing a Specification

Today's Process



Tomorrows Process



No Waterfall Model

How to Write a Specification?

- These pre-requisites are needed
 - > A requirement (customer need)....
 - > ... and an **i-Team**
- Development starts with a kickoff chat (IRC #openoffice, GAIM, ...)

Kicking off a New Feature...

- **Develop a common sense of the goal**
 - > Introduce the feature
- **Nail down the priorities**
 - > Prioritize the sub-feature

Kicking off a New Feature...

- **Nail down the responsibilities**
 - > State clearly who is responsible for what
 - > Let the i-Team know who delivers what
- **Always keep the customer in mind**
 - > Whether an internal stakeholder or external client, the customer's satisfaction must be top priority

The Don't's in a Kickoff

- Don't:
 - > **Design the feature:**
This chat is for planning only. If there's design to be done, schedule another chat for that.
 - > **Try to solve technical problems**
Don't get bogged down in details at this first chat.
 - > **No Agenda**
As this is a planning chat, this chat needs to be prepared. Long, unproductive chats exhaust people.

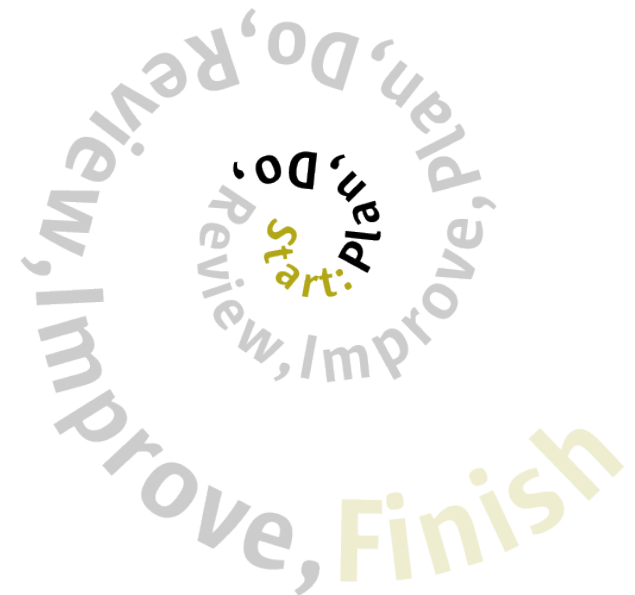
Plan

- I-Team Kickoff
- Detailed feature / sub-feature planning
- First design sessions



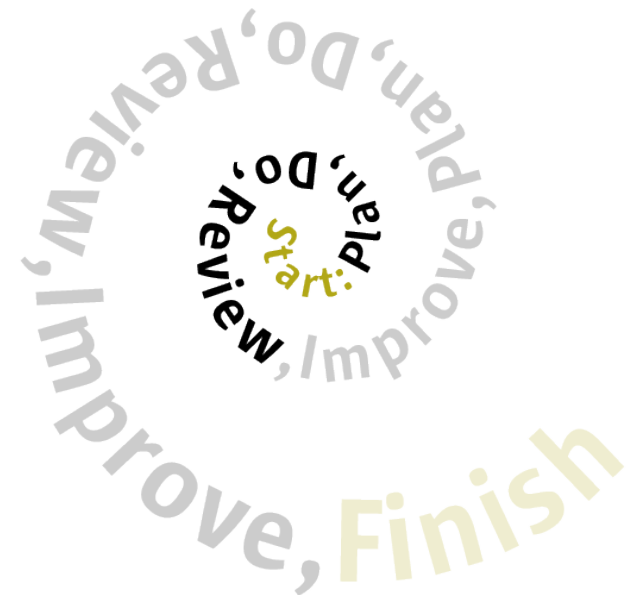
Do

- Create prototypes
- Write specification



Review

- i-Team reviews specification
- Based on three essential rules
 - > R1: **Complete**
 - > R2: **Clear**
 - > R3: **Simple**



Specification Rules

- **R1: Complete**
First and foremost a specification has to be complete. That means all relevant aspects of a feature have to be captured.
- **R2: Clear**
Each statement has to be unambiguously clear to Development, QA, User Experience, Documentation.
- **R3: Simple**
Each statement shall be as short and as simple as possible.

Improve

- Reduction of defects in specification.
- Reduction of defects in implementation.



Finish

- Specification and implementation must be identical

Implementation

Specification



A Specification Template - Why?

A Specification Template - Why?

- It **simplifies writing** specifications,
- It **centralizes all information**
- It gives you **clear guidance** on:
 - > **“What”** belongs to a specification,
 - > **“How”** to write a specification, and...
- ...It **automates common tasks** like specifying user interfaces

A Specification Template -Why?

...and thus it saves
you and others time...

Issues of the Old Spec. Template

- Separation between specification template and specification guide
- No links to required companion documents
- Unnecessary sections
 - > Process related aspects (e.g. i-Team approvals)
 - > A motivation section, an user scenarios section, etc.
- Missing rules on how to write and read a specification
- Lack of examples

The New Specification Template

Software Specification Document

<State product name, but no product version>
 5 <State specification title here>

Specification Status	
Last Change	
Status	Preliminary

Abstract

10 <Starttyping here>

i-Team Members

Role	First Name, Last Name, Initials	E-Mail Address
Project Lead	<FirstName, LastName (Initials)>	<User@openoffice.org>
Specification Owner	<FirstName, LastName (Initials)>	<User@openoffice.org>
User Experience	<FirstName, LastName (Initials)>	<User@openoffice.org>
Development	<FirstName, LastName (Initials)>	<User@openoffice.org>
Quality Assurance	<FirstName, LastName (Initials)>	<User@openoffice.org>
Documentation	<FirstName, LastName (Initials)>	<User@openoffice.org>
Other roles	<FirstName, LastName (Initials)>	<User@openoffice.org>

<State reason here, if one role is not represented in i-Team.>

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<State Specification Title here>

15 **References and Reference Documents**

Reference Document	Check	Location (URL)
Specification Process Entry Check	<input type="checkbox"/> Filled	N/A
Product Requirement, RFE, issue (required)	<input type="checkbox"/> Not Available	<Please enter location here>
Product Concept Document	<input type="checkbox"/> Not Available	<Please enter location here>
Competitive Analysis	<input type="checkbox"/> Not Available	<Please enter location here>
Test Case Specification (required)	<input type="checkbox"/> Available	<Please enter location here>
Software Specification Rules	N/A	N/A
<Other, e.g. references to related specs>		

Acronyms and Abbreviations

Acronym / Abbreviation	Definition
<WYSIWYG>	<What You See Is What You Get>

1 Detailed Specification

20 <Starttyping here>

2 Migration

<Starttyping here If this part is irrelevant state a reason for its absence!>

3 Configuration

<Starttyping here If this part is irrelevant state a reason for its absence!>

25 **4 File Format**

<Starttyping here If this part is irrelevant state a reason for its absence!>

5 Open Issues

Issue	Initials	Date
<State issue here, State 'None' if all issues are solved>		<Format Dec 31, 2000>
<...>		

Document Change History

Rev	Change	Initials	Date
1			<Format Dec 31, 2000>

<State link to Specification here>

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There is Lots More Stuff in it ...

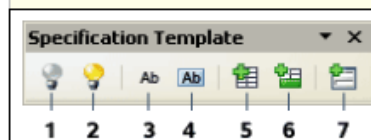
A Help which guides you through the template

Template Owner: Christian Jansen	Last Template Change:	Status of Template: Preliminary
Goal of this document: Template for OpenOffice.org software specifications		
Intended readership: Specification authors, specification reviewers (Development, Quality Assurance, User Experience Documentation)		
Send Feedback to: dev@specs.openoffice.org		

How to use this Template?

- First, make sure your Proxy Settings are set correctly.
- Follow the guidelines described in the yellow boxes.
- 5 ▪ Use the specification template tool bar to display help,
 - for adding a user interface element tables,
 - for expanding user interface element table, or
 - for adding a table to specify the tab order

10 The Specification Template Tool Bar



1. Hides Help Sections
2. Shows Help Sections
3. Hides Field Shadings

There is Lots More Stuff in it ...

Specification Status Section

Software Specification Document

<product name, but no product version>
<specification title here>

25

Specification Status

Last Change

Status

Preliminary

1. **PRELIMINARY**
status is the initial conception of a specification.
2. **STANDARD**
A specification with status Standard is considered to be stable and has the approval of the i-Team.
3. **OBSOLETE**
An Obsolete specification is a specification that has been identified unnecessary. For example due to; technology changes or changes in other standards or specifications.

Abstract Section: The source for the “Guide to new features”

Abstract

<Start typing here>

30

The Abstract section provides a concise and comprehensive overview of the purpose and contents of the entire document. In addition to this the Abstract will serve as input for Marketing in order to prepare the [Guide to New Features](#). Don't use more than 150 words in the Abstract.

30

There is Lots More Stuff in it ...

The i-Team

i-Team Members

Role	First Name, Last Name, Initials	E-Mail Address
Project Lead	<First Name, Last Name (Initials)>	<User@openoffice.org>
Specification Owner	<First Name, Last Name (Initials)>	<User@openoffice.org>
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Other roles	<First Name, Last Name (Initials)>	<User@openoffice.org>
<State reason here, if one role is not represented in i-Team.>		

There is Lots More Stuff in it ...

Links to important reference documents

<Specification Title here>

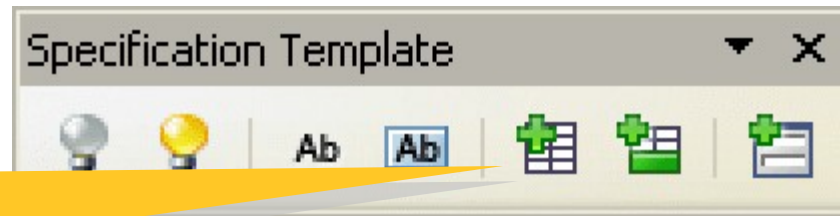
35 **References and Reference Documents**

Give references to any documentation relevant with regards to this specification.
 Before writing a specification make sure that the items of the [Specification Process Entry Check](#) have been addressed.

Reference Document	Check	Location (URL)
Specification Process Entry Check	Failed	N/A
Product Requirement, RFE, issue (required)	Not Available	<Please enter location here>
Product Concept Document	Not Available	<Please enter location here>
Competitive Analysis	Not Available	<Please enter location here>
Test Case Specification (required)	Not Available	<Please enter location here>
Software Specification Rules	N/A	N/A
<Other, e.g. references to related specs>		

There is Lots More Stuff in it ...

Tooling for
“automatic”
User Interface
specification



1 Detailed Specification

<Start typing here>

Table <Table Number>: User Interface elements of Figure <Figure Number>

#	Type	Properties	Comment
<#>	ComboBox	Control Properties Enabled: <Yes/No> Max. Row Count: <Specify number here e.g. 20> Vis. Row Count: <Specify number here e.g. 8> Selected Item: <Specify item here> Tool Tip Text: <Specify string here> A11Y Text: <If needed specify string here> Other: <Specify properties here>	
		<Enter English String Here> <Enter German String Here>	
	Slider Separator SpinField TextArea TreeControl TextField		

There is Lots More Stuff in it ...

Concrete examples
for junior specification
writers

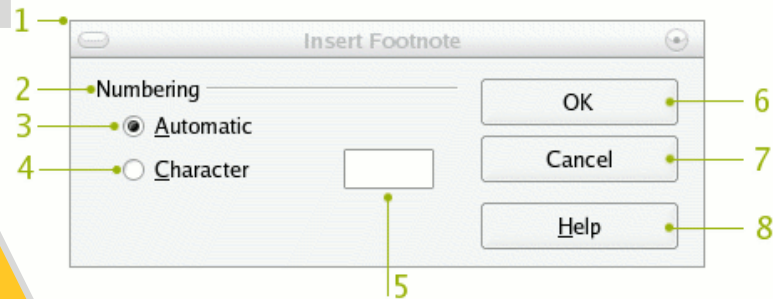


Figure 1 Shows a mock-up of an fictive Insert Footnote dialog

Table 1: User Interface elements of Figure 1

#	Type	Properties	Comment
1	Dialog	Control Properties State: Modal Closable: Yes Close Operation: Dispose Is iconifiable: No Is maximizable: No Resizable: No Always On Top: Yes	
		String English Insert Footnote	String German Fußnote Einfügen

Further Information and Feedback

- **Specification Project on OOo Wiki**
<http://wiki.services.openoffice.org/wiki/Category:Specification>
- **Specifaction Project Website**
<http://specs.openoffice.org/>
- **Specification Template**
<http://specs.openoffice.org/collaterals/template/OpenOffice-org-Specification-Template.ott>
- **Feedback**
dev@specs.openoffice.org



Thank You!

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Jörg Sievers**

Sun Microsystems

