

# internationalization at CA technologies

Date May 26, 2011

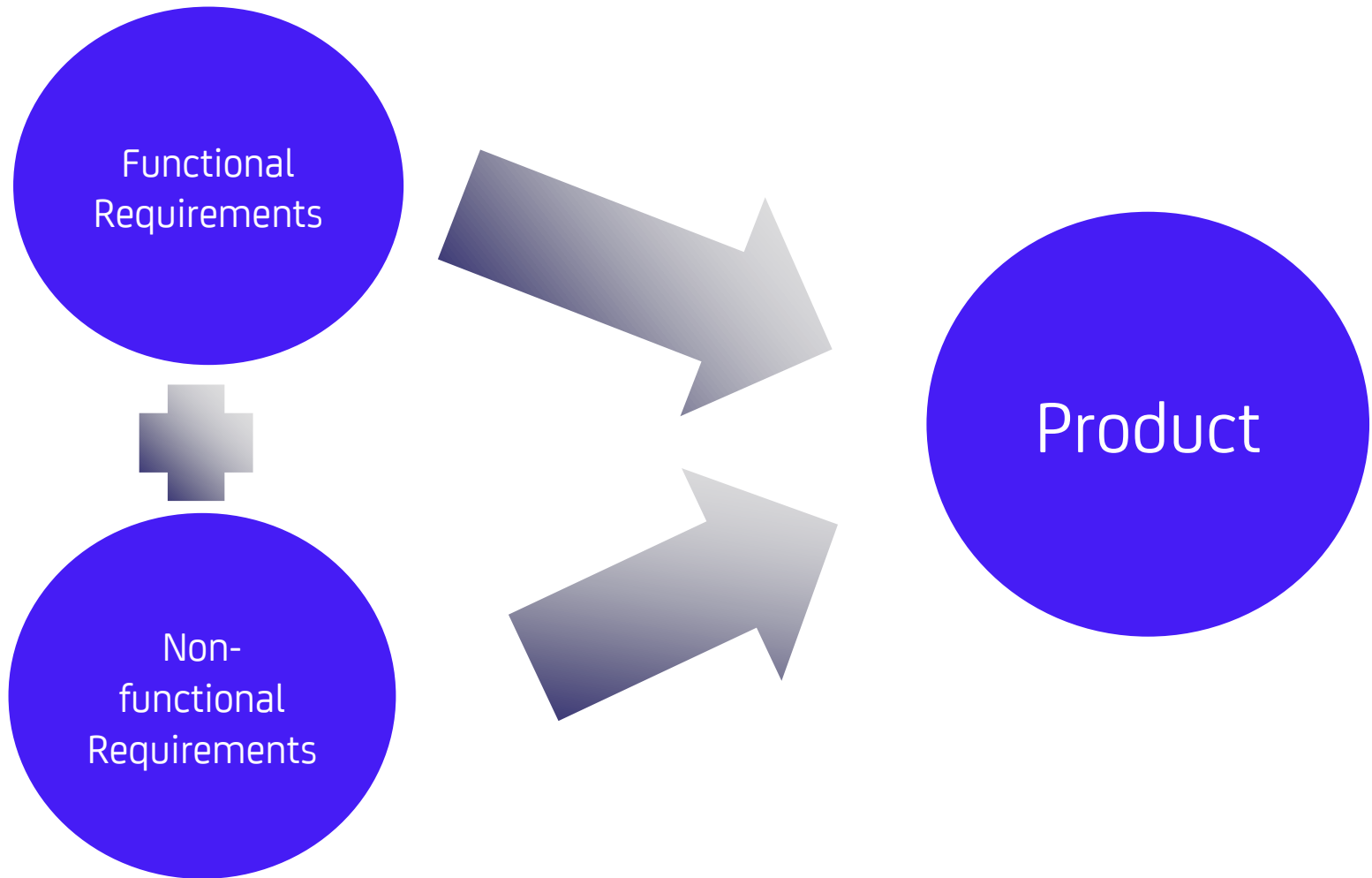


# Who am I?

- Alfons Neumann
- Sr. Director in the CoE internationalization
- Since 12 years with CA
- About 28 years IT experience

# Internationalization

# Functional vs. Non/functional requirements



# Non functional requirements

- Common basic features to make a product
  - Usable
  - Maintainable
  
- They make the difference!

# Non functional requirements (selection)

**Installability**

**Upgradability**

**Accessibility**

**Internationalization**

**Localizability**

**Securability**

**Supportability**

# Some Definitions

# What are we talking about?

— **internationalization** = **i18n**

— **Localization** = **L10n**

— **Globalization** = **G11n**

# l10n vs i18n vs g11n: What's the difference?



## Internationalization (i18n)

Internationalization is the process of designing a software application so that it can be adapted to **various languages** and regions without engineering changes.



## Localization (L10n)

Localization is the process of adapting internationalized software for a **specific region** or language by adding locale-specific components and translating text.



## Globalization (G11n)

Globalization is used as the **combination** of Internationalization and Localization.

Source: wikipedia.org

# Our answer:

## Center of Excellence for Internationalization

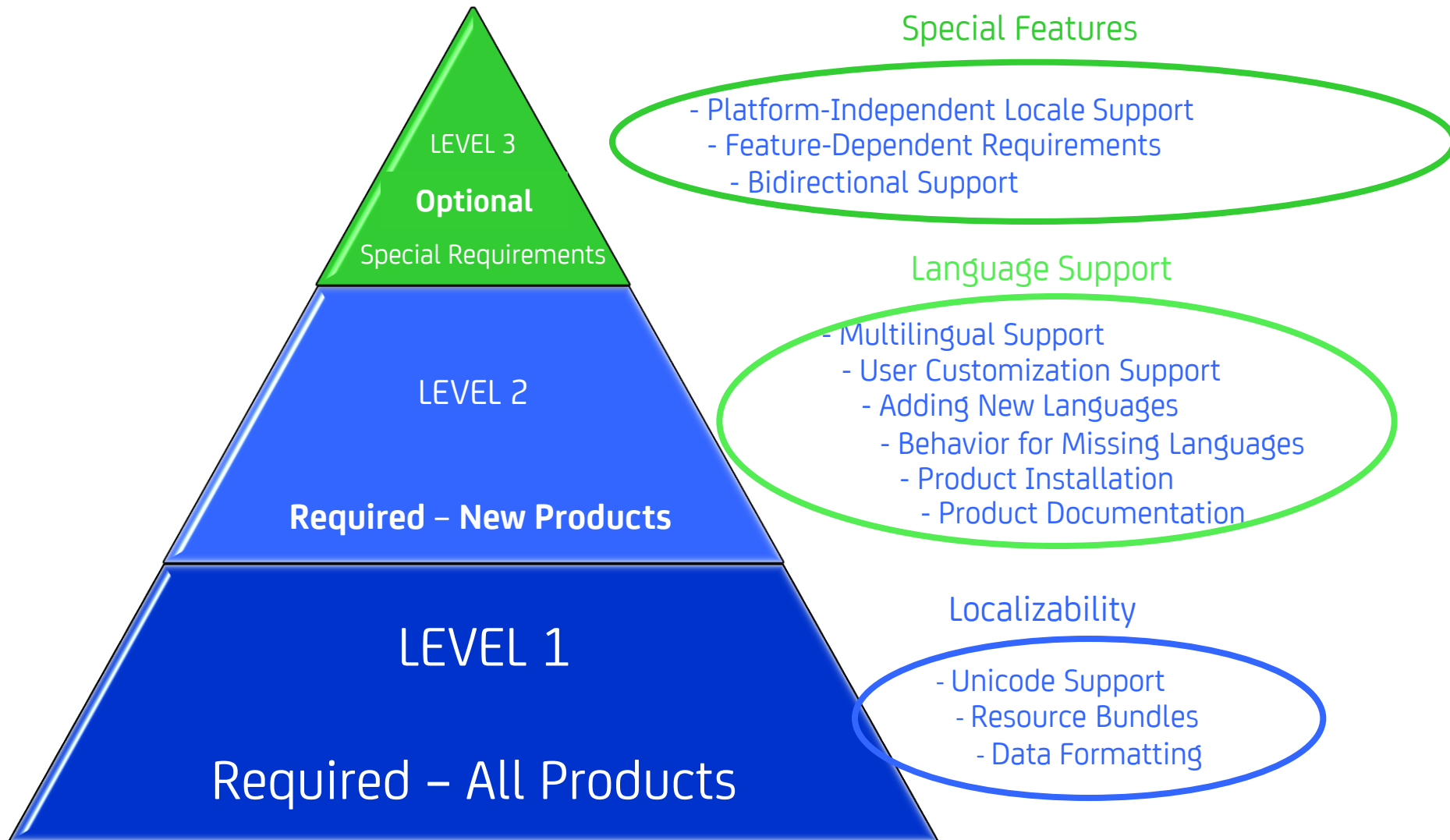
- One team of specialists
  - Architects
  - Software engineers
  - QA engineers
- Focused on **one** topic: internationalization
- Bundle the knowledge and experience
  - Allows high quality and efficiency
- Provide and maintain the i18n guidelines and policies within CA
- Provide tools to further automate the work

I18n:

The Scope

# Center of Excellence for Abilities

## i18n policy - overview



# Internationalization: Scope (selected)

- Externalize hard-coded strings
- Eliminate concatenation of strings
- GUI design to fit different languages
- ! Strings exceed during translation
- Date and time fitting different locales
- First working day of the week
- Number presentation
  - 8.000,00 € is not 8,000.00 €
- Full Unicode support
- 3rd party tools
- Installation
- User specific culture
- OS/browser specific culture setting
- DB support for Unicode

l18n under the hut

# Different Language Environments

Testing on 1 Asian and 1 Western language environment

## **Asian**

Japanese  
S-Chinese  
Korean  
T-Chinese

## **Western**

French  
German  
Spanish  
Italian  
Brazilian Portuguese

Note: Full tests in all supported languages are performed after the translation

# Testing with pseudo localized resources

# I18n under the hut: Testing with pseudo localized files

## Screen without pseudo localized resources

The screenshot shows the CA Cloud Insight 8.0 web application running in a Windows Internet Explorer browser. The address bar shows the URL `http://localhost/Oblicore.asp`. The application header includes the CA logo, the title "CA Business Service Insight", and user information: "515 new alert(s) | admin (Oblicore) | Logout | Home | Get Started | Help". The navigation menu includes "Dashboard", "Services", "Service Level Mgmt", "Reports", "Design", and "Administration".

The main content area is titled "Exceptions". It features a "Find" search panel on the left with the following fields:

- Name:
- Exception Status:
- Contract Party:
- Contract:
- Effective:  to
- Created by User:
- Service Domain:
- Domain Category:
- Service:

A "Search" button is located below the search fields. Below the search panel, there is a "Saved Searches" section with a dropdown menu and a "Search" button. Below the search panel, there is an "Alphabetically" section with a list of letters: A B C D E F G H I J K L M N O P Q R S T U V W X Y Z.

Below the search panel, it says "One result found." Below this, there is a table with the following columns: "Name", "Justification", "Effective from", and "Effective to". The table contains one row with the following data:

Name	Justification	Effective from	Effective to
hoean01 exception	verify-test		

# I18n under the hut: Testing with pseudo localized files

CA Cloud Insight™ 8.0 - Windows Internet Explorer

http://localhost/Oblicore.asp

File Edit View Favorites Tools Help

CA Cloud Insight™ 8.0

CA Business Service Insight 5 5 1H2new alert(s) ~~~~~ | japanese (Oblicore) ~~~~~ | 1HyLogout~ | ★ | 2z6Get Started ~~~~~ | 2VHelp~

1H\_Dashboard ~~~~~ 1H2Services ~~~~~ 2kfService Level Mgmt ~~~~~ 2kkReports ~~~~~ 2knDesign~

2kwAdministration ~~~~~

2H8Exceptions ~~~~~

## をッ2H8Exceptions ~~~~~

をッ14Find ~~~~~ 1AnAdd New ~~~~~

をッ9oName:~

をッ2HAException Status: ~~~~~ 2SWActiv ~

をッ2HBContract Party: ~~~~~

をッ2HCCContract: ~~~~~

をッ2HDEffective:~ 2011/04/20 ~~~~~ 2kto~ 2011/06/19 ~~~~~  
yyyy/MM/dd yyyy/MM/dd

をッ2HECreated by User: ~~~~~

をッ2HFSERVICE Domain: ~~~~~

をッ2HGDdomain Category: ~~~~~

をッ2HHSERVICE: ~~~~~

をッ1AISearch~

をッ2c0Saved Searches: ~~~~~

をッ1AAlphabetically: ~~~~~ 1 A U A B C D E F G H I J K L M N O P Q R S T U V W X Y Z ~

をッ1AXOne result found. ~~~~~

をッ9pName~	をッ2HJJustification ~~~~	をッ2HJEffective from ~	をッ2HKEffective to ~~~~
hoean01 exception	verify-test		

# I18n under the hut: Testing with pseudo localized files

をッ26CQuick Metric ~~~è -- Webpage Dialog

## をッ26CQuick Metric ~~~è

- をッ25oBusiness logic ~~~è
- をッ25pReport ~~~è**
- をッ15QSummary ~~~è

をッ275To view a preliminary report. Select a report type and time unit, and set the time range for the report. ~~~~~

をッ8WType:è をッ27qService Level Vs. Target

をッ8XBy: ~è Month

をッ271Time range: ~è をッ5tLast ~~~è 6 をッ1 emonth(s)

をッ273Calculate and Generate ~~~è

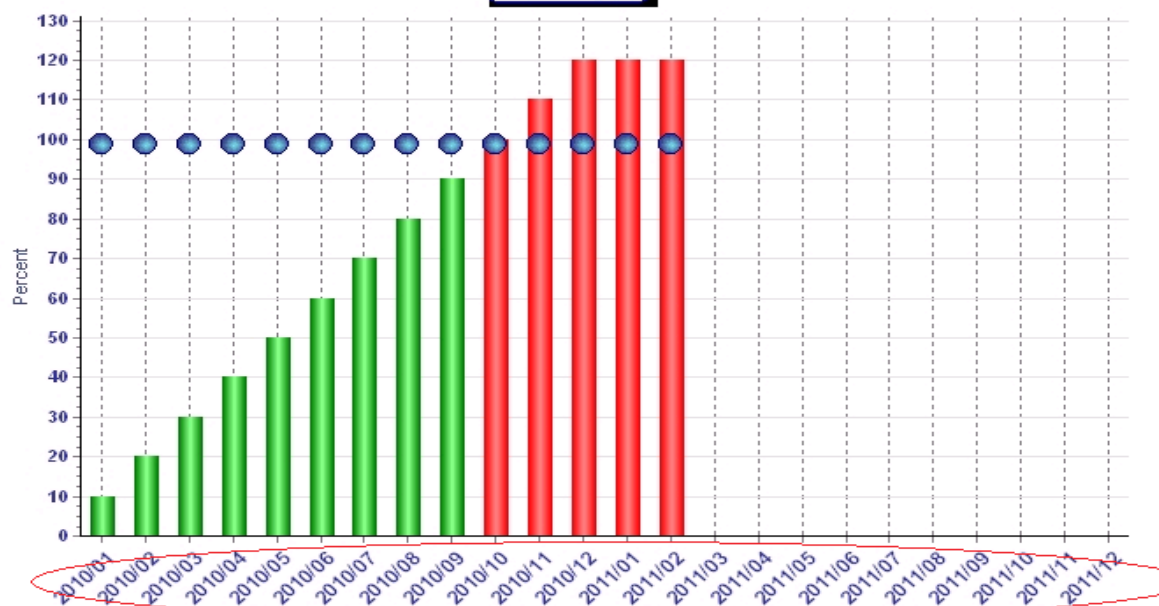
# Date / time presentation

# I18n under the hut:



2011年5月24日 00:42

表Sanity場



表Sanity場

をッ2Q5Simple Report をッ2N\_Maximum ~~~è をッ2QpService Level ~~~è をッzbyè をッBCMonthè をッ2Nvvs. Target ~~~~~è  
 Type: ~~~~~è  
 をッ2PnTime range: ~è 2010/01/01 00:00 2011/12/31 00:00  
 をッB1toè

をッ2kGthank you~è

Danke!

# Q&A