

# Tivoli's Multilingual Support



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# Tivoli's Power - Our Dilemma

***THE POWER TO MANAGE.  
ANYTHING. ANYWHERE.™***



# Ok Marketing, we'll deliver!

Tivoli's Globalization Team  
accepts the challenge!



# What we did...

- Full Unicode support
- Split language from locale
- Run time language selection
- World-wide remote support
- Dynamic translation delivery
- Read anything, anywhere!

# Full Unicode support

- Java - world-wide software
- Unicode support
- Provide font.properties file
- World-wide Unicode font

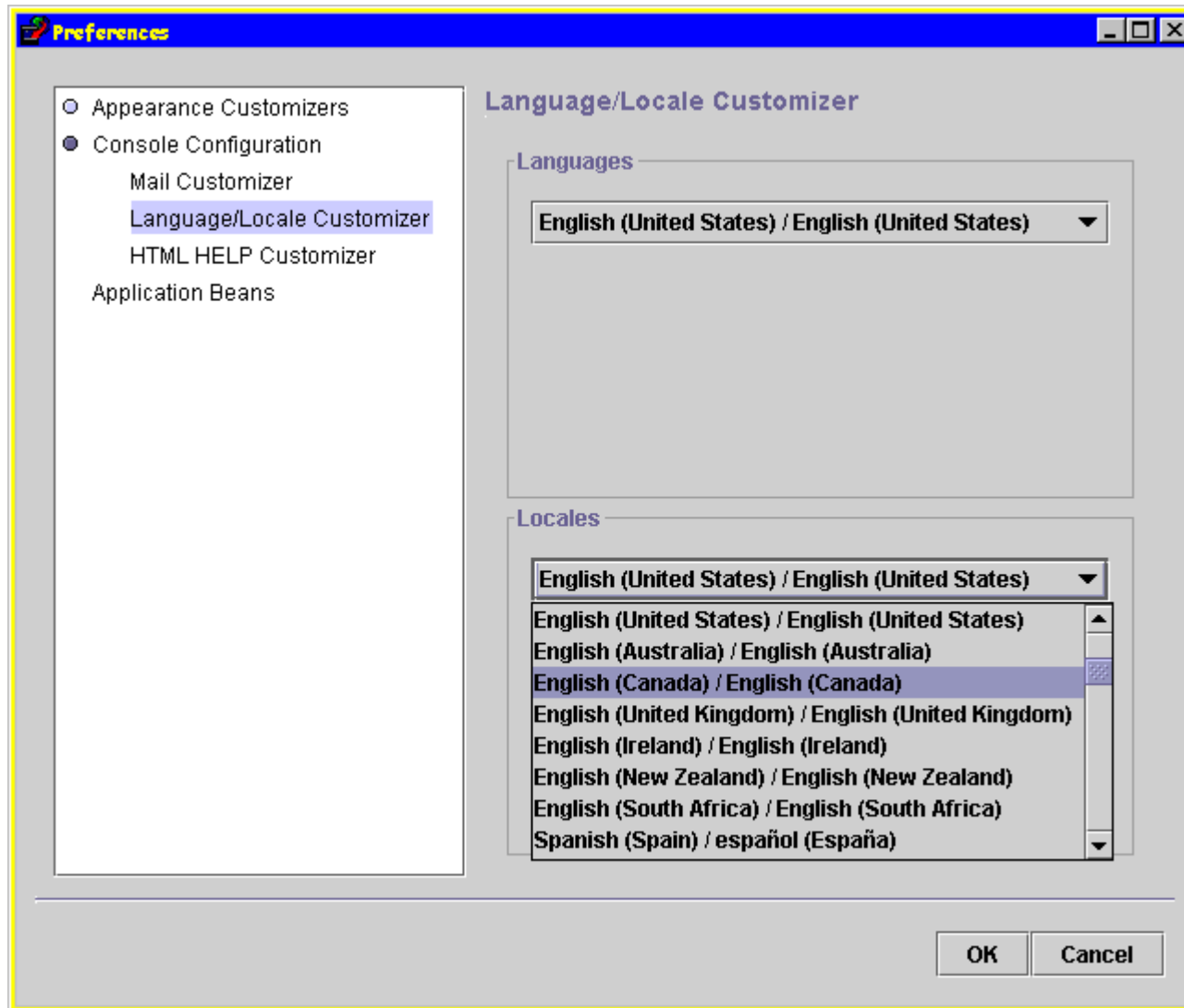
# Multinational Enterprise



# Split Language from Locale

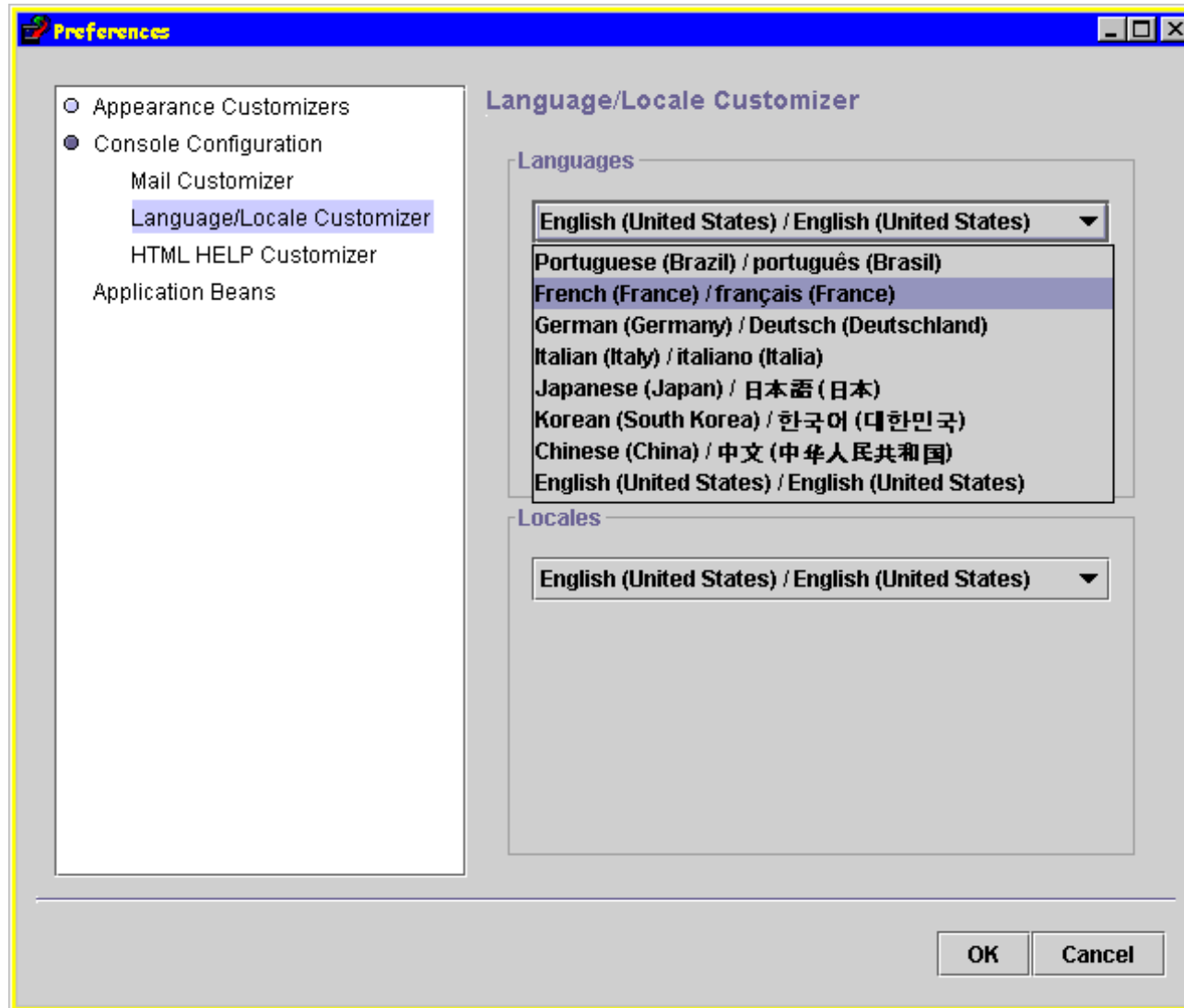
- Support for untranslated locales
- User can select the best language
- Local collation supported
- Local date/time format supported
- Potential for cross company standards
- Close to translation without the cost!

# Locale Customiser





# Language Customiser



# Run Time Language Selection

- Users change language as desired
- Language is independent of operating system or locale
- Enables remote support

# Instant English



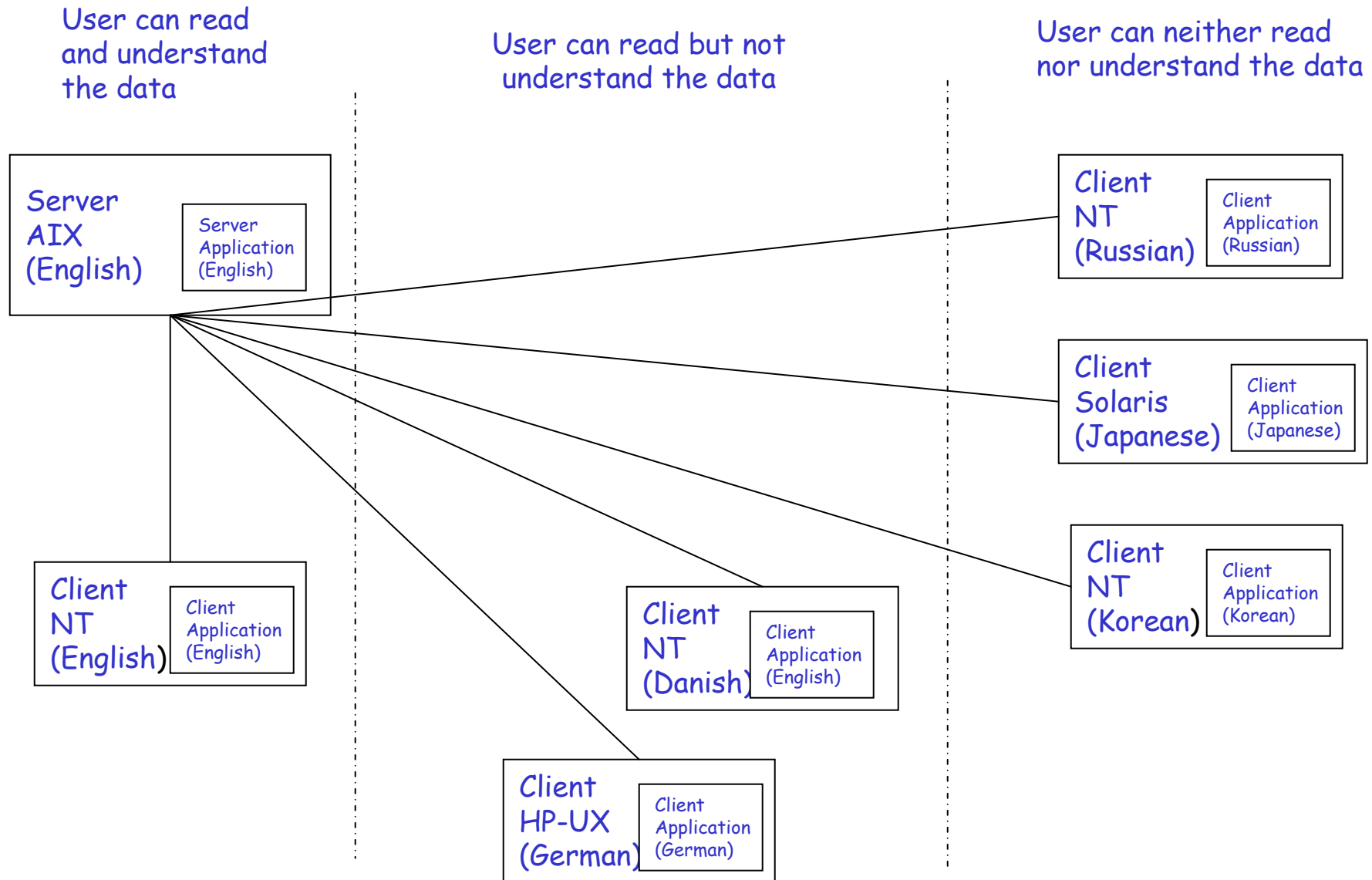
# Dynamic Translation Delivery

- Any language - Anywhere
- Reduce space requirements
- Reduce installation times
- Allow additional languages after product delivery
- Enable world wide GA pre-translation
- Invisible downloading of language

# Gojira eats Tokyo...



# Transferring Human Language Data Across System Boundaries



# Read Anything, Anywhere!

Addressing the difference between the information contained in the spoken word and the written word.



# Which Administrator is Sugaya-san?



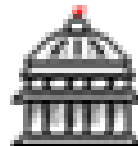
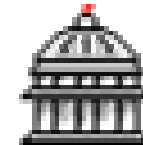
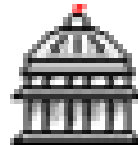
- and how do you distinguish him from Kanno-san?



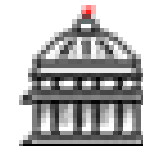
# Tooltip Transliteration



Чайковский



ВОСТОК



Москва

Two-column icon

Four-column icon

Sugaya

# Japanese family names

菅野

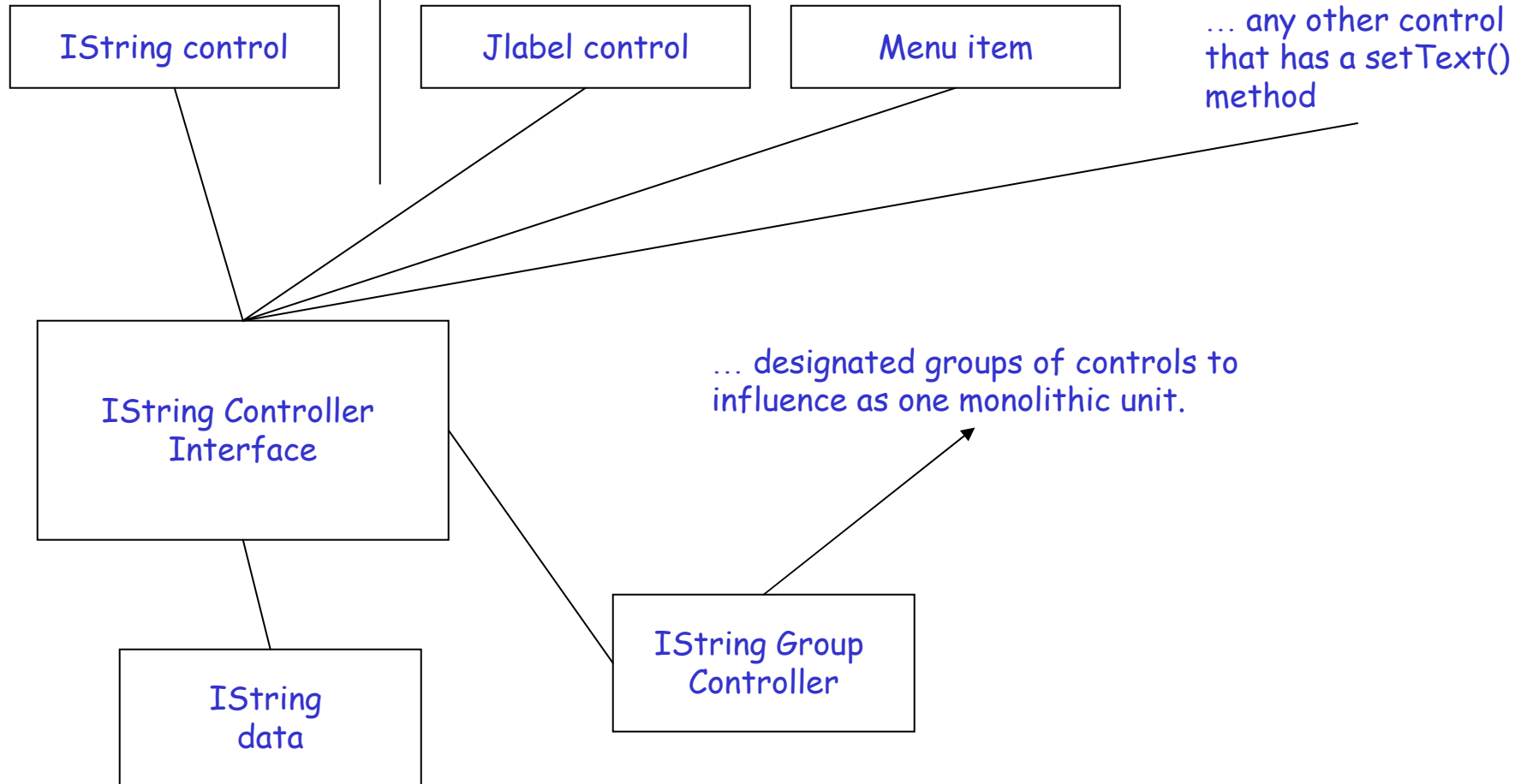
su ga no

su ga ya

ka n no

Specialized IString controls

Generic Java AWT, JFC or Third Party Controls



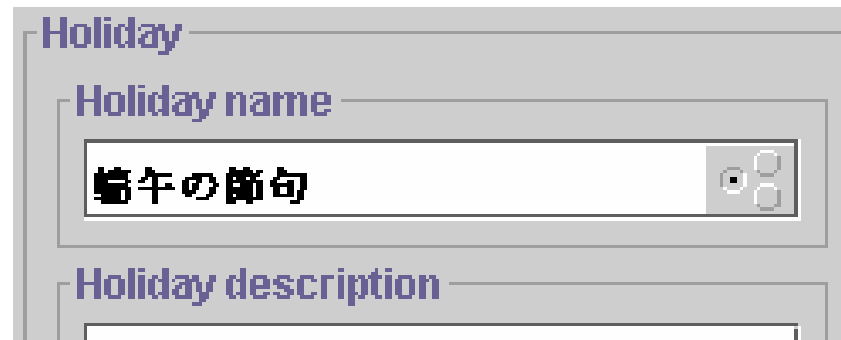
# Kanji

**Holiday**

**Holiday name**

端午の節句

**Holiday description**

A screenshot of a software interface for managing holidays. The interface is titled "Holiday" and has a "Holiday name" field containing the Japanese text "端午の節句" (Bunpaku no Setsukku). Below the name field is a "Holiday description" field, which is currently empty. The interface has a grey background and a white text box for the name.

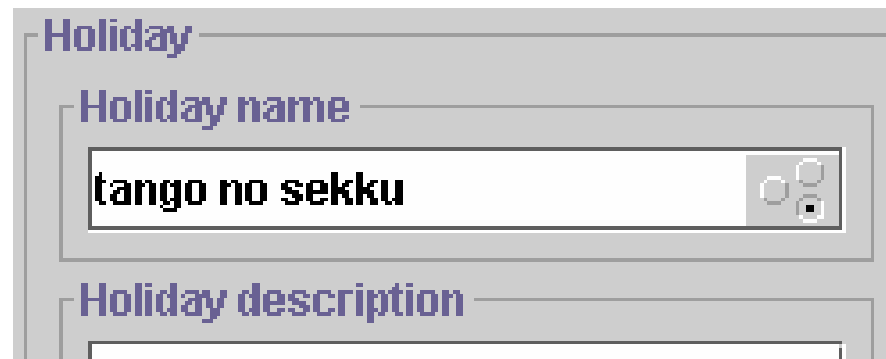
# Romaji

**Holiday**

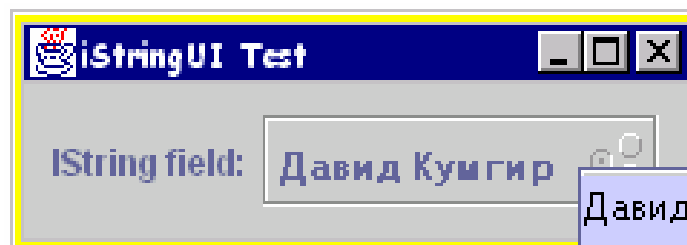
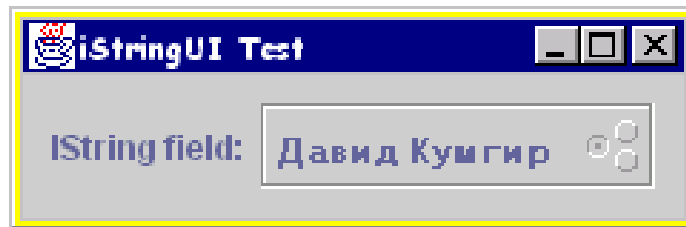
**Holiday name**

tango no sekku

**Holiday description**

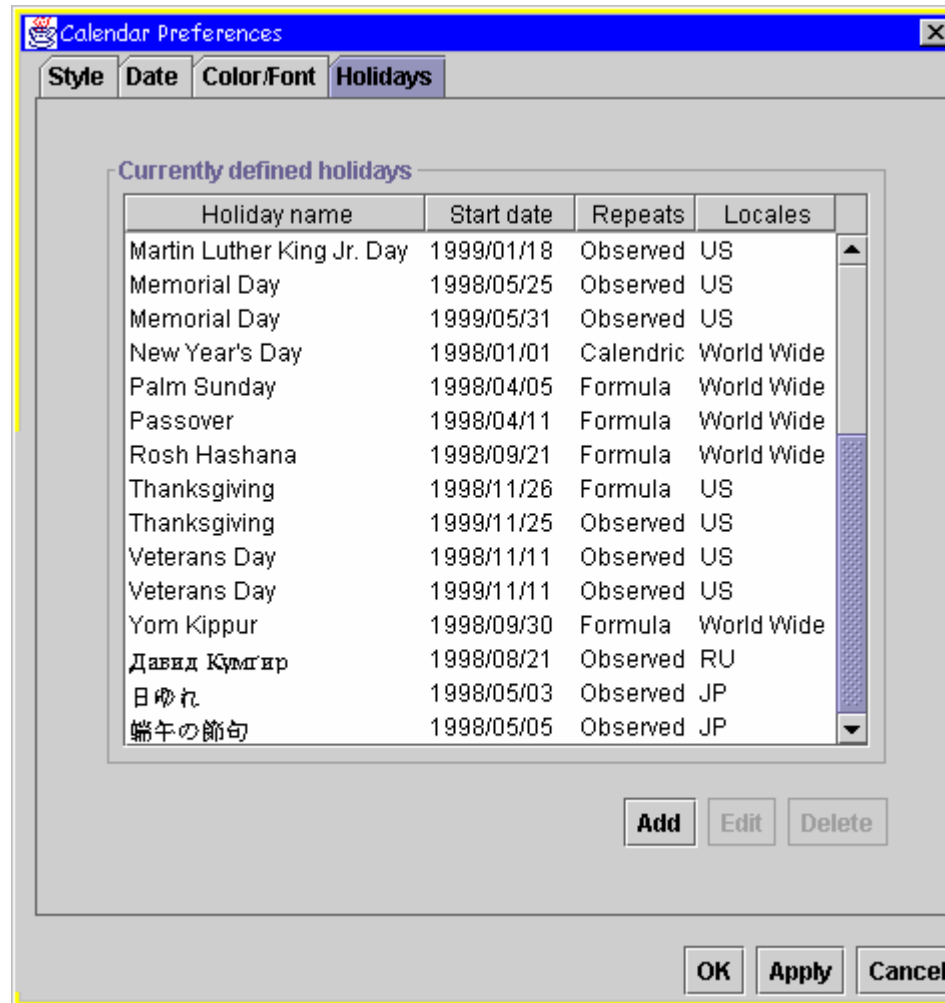
A screenshot of a graphical user interface form. The form has a title bar labeled "Holiday". Below the title bar, there is a section labeled "Holiday name" which contains a text input field with the text "tango no sekku". To the right of the text input field are three small circular icons. Below the "Holiday name" section is another section labeled "Holiday description", which is currently empty.

# Ukrainian



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# International List



# Problems Solved with NSString

- Character recognition
- Character differentiation
- Japanese names
- Overridden sort
- Case mapping



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# Drop me a line...



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