

# Building Bridges



Making Qt and KDE Accessible

# About me

Frederik Gladhorn

Qt (Nokia)

KDE



# Accessibility

degree to which a product, device, service, or environment is available to as many people as possible

# KDE Accessibility

magnifier  
font and color settings  
Jovie  
Simon

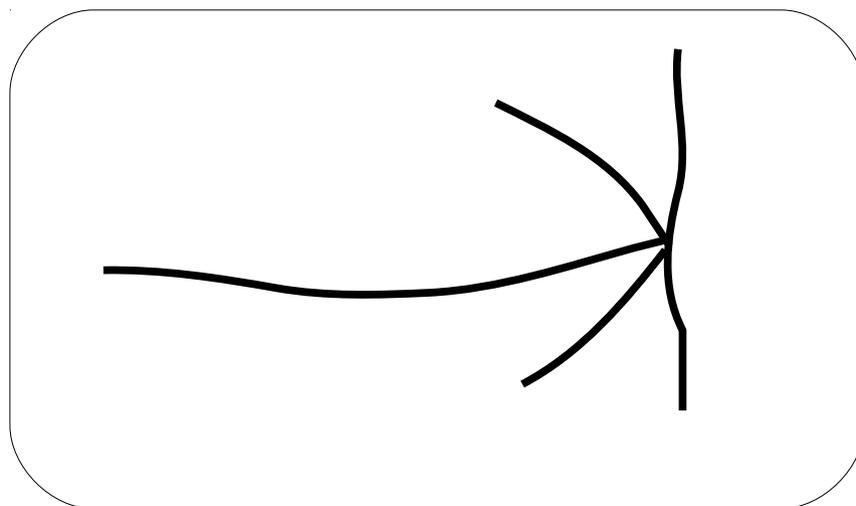
You and your app

colors

fonts

keyboard navigation

# Keyboard Navigation



# Assistive Technology

Screen Reader

Braille



**KAccessible**

**a built in screen reader**

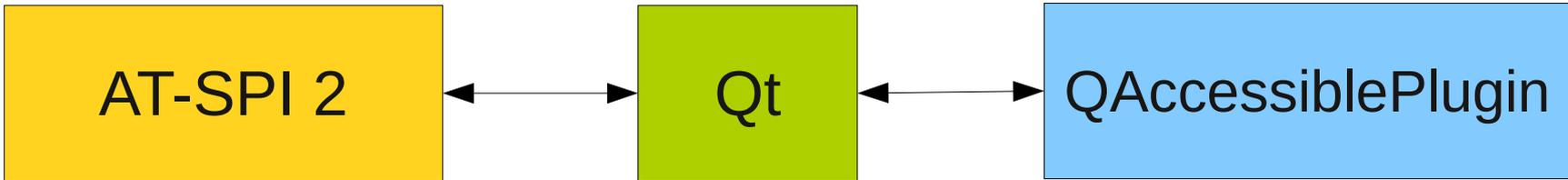
# Qt and AT-SPI

February: start... hack hack hack

1 Sprint

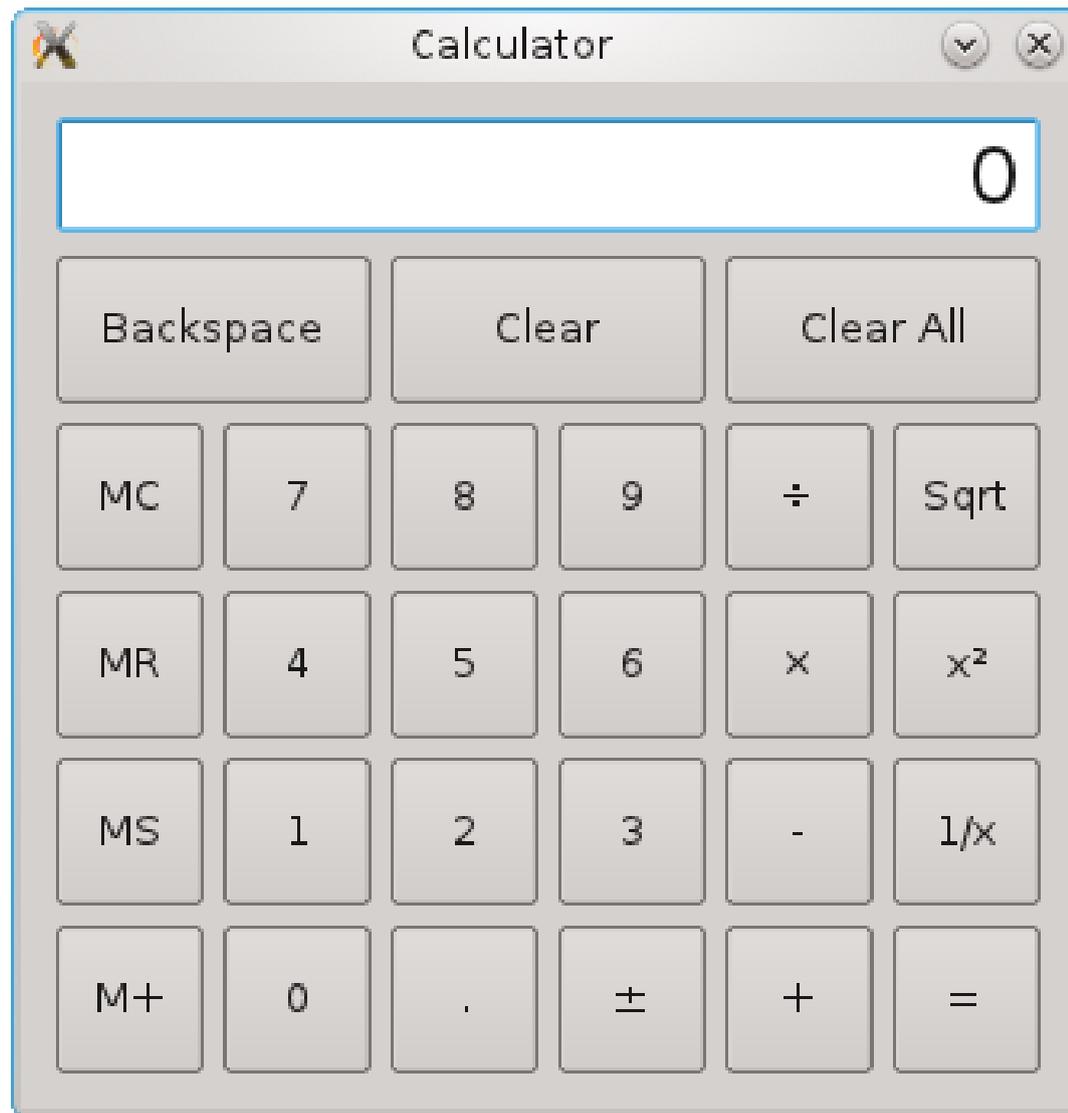
Now: almost  
(really soon now) release

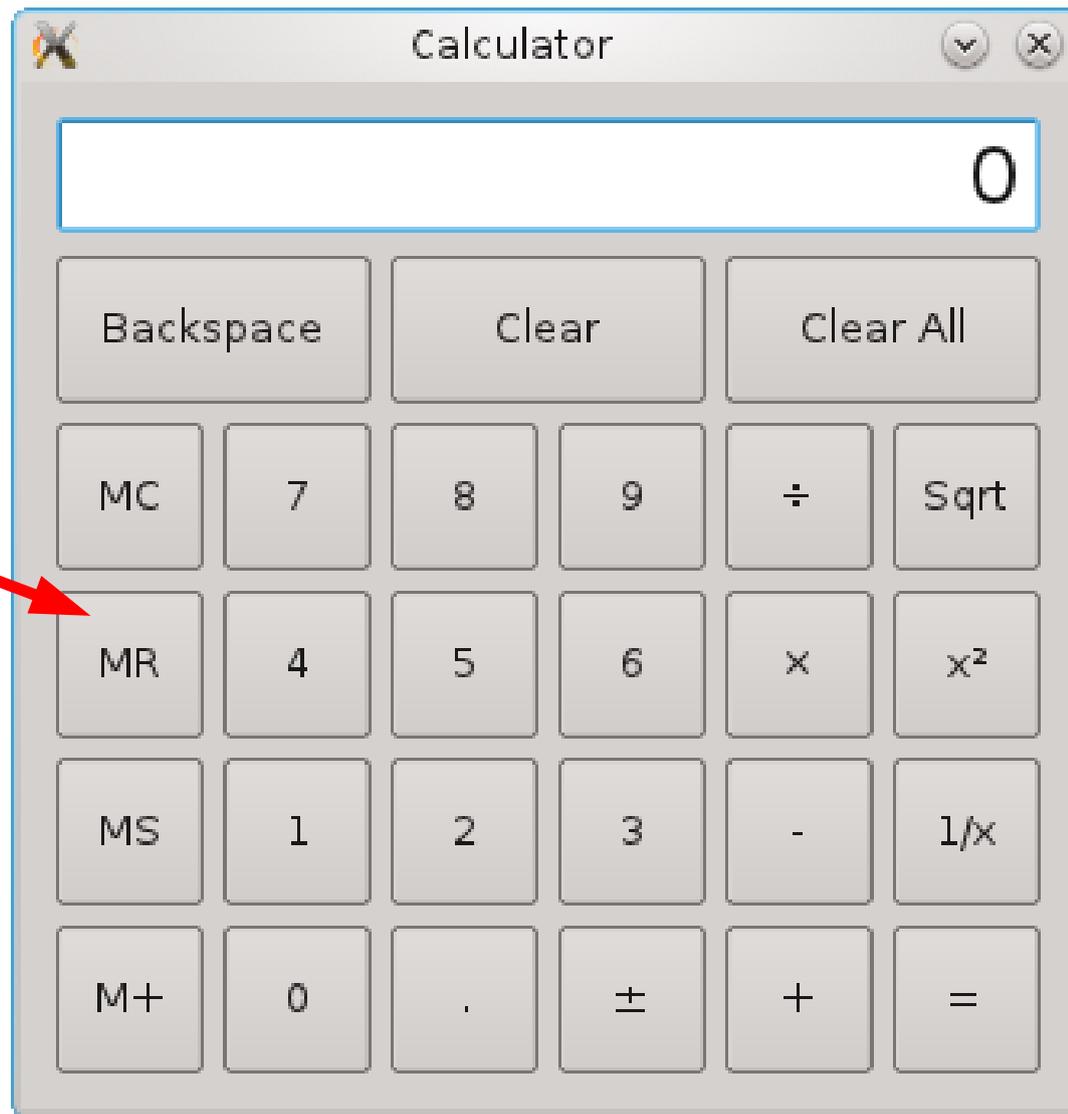




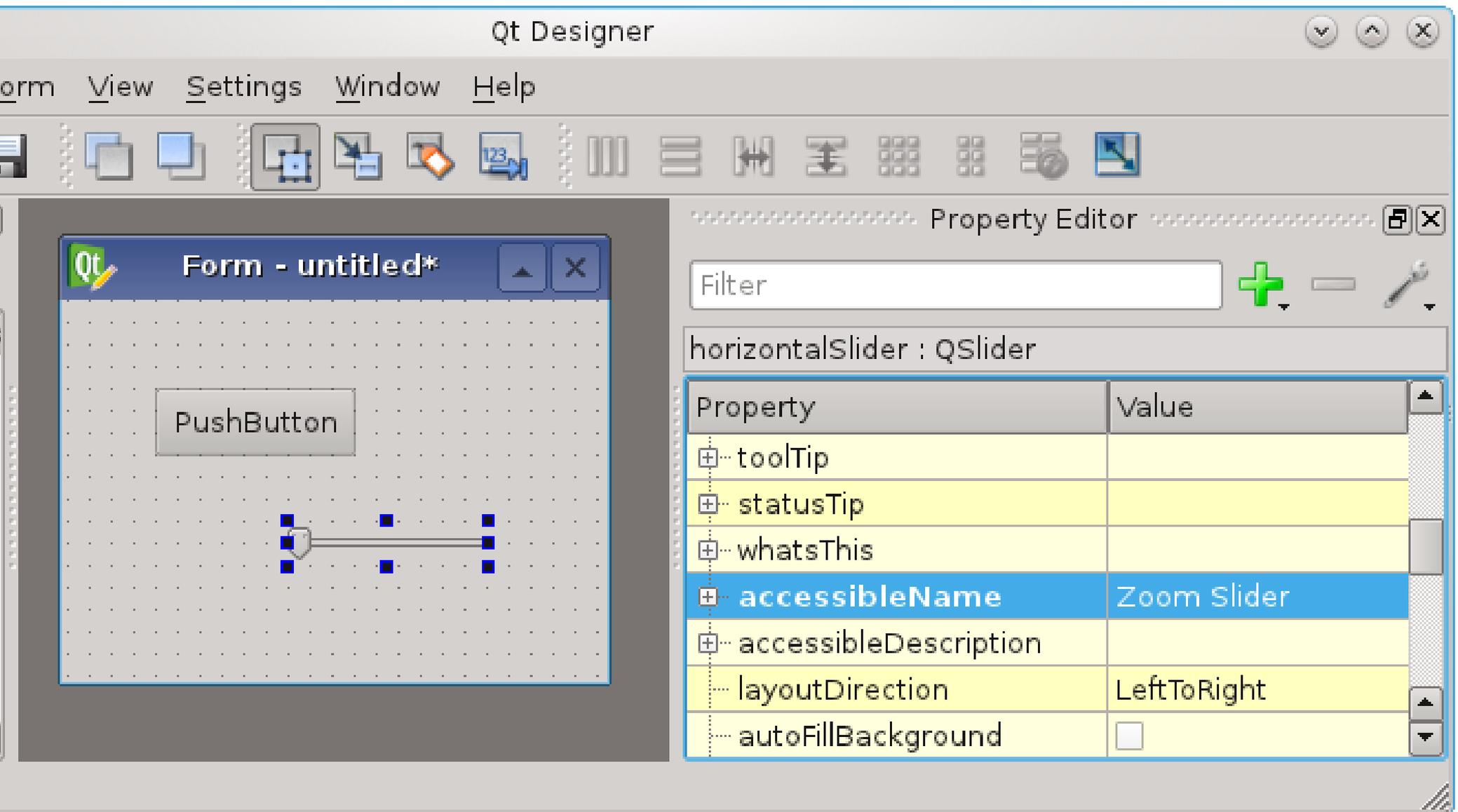


now do the **keyboard** thing again





# Setting Accessible Properties



The screenshot shows the Qt Designer interface. On the left, a window titled "Form - untitled\*" contains a Qt widget form with a grid background. A "PushButton" is placed in the upper left, and a horizontal slider is placed below it. On the right, the "Property Editor" is open, showing the properties for the selected "horizontalSlider : QSlider". The "accessibleName" property is highlighted in blue and set to "Zoom Slider".

Qt Designer

Form View Settings Window Help

Qt Form - untitled\*

PushButton

horizontalSlider : QSlider

Property	Value
+ tooltip	
+ statusTip	
+ whatsThis	
+ <b>accessibleName</b>	Zoom Slider
+ accessibleDescription	
layoutDirection	LeftToRight
autoFillBackground	<input type="checkbox"/>

# Accessible Properties

- Name: Short, when the widget doesn't provide it by default or the label is misleading when spoken
- Description: More elaborate explanation

QWidget

QAccessiblePlugin

QAccessibleInterface

# Qt Quick (QML)

Accessible.role: Accessible.Button

No plugin needed

# Qt Quick (QML)

Accessible.role : Accessible.Button

No plugin needed

Do this at home kids

Have AT-SPI-2 running

Grab Qt 4.8

Get the QAccessibleBridge

`gitorious.org/qt-at-spi`

Conclusion:

check your app!

colors, fonts

keyboard navigation

run with screen reader

# Challenges

Input methods – touch

Screen Reader integration

QML/Qt Quick

# Meet and talk

Simon, Accessibility in general,  
Gnome, KDE, everyone.

Today 16:05

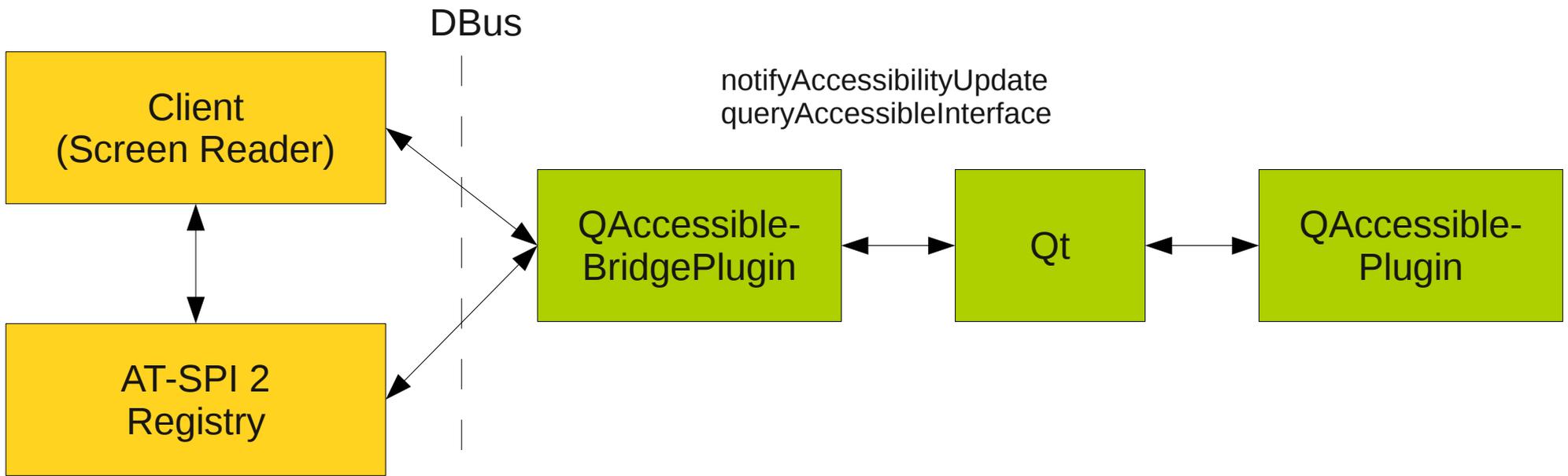
find us in front of Audimax

Accessibility BoF  
Wednesday 10:00  
room 1.404/1

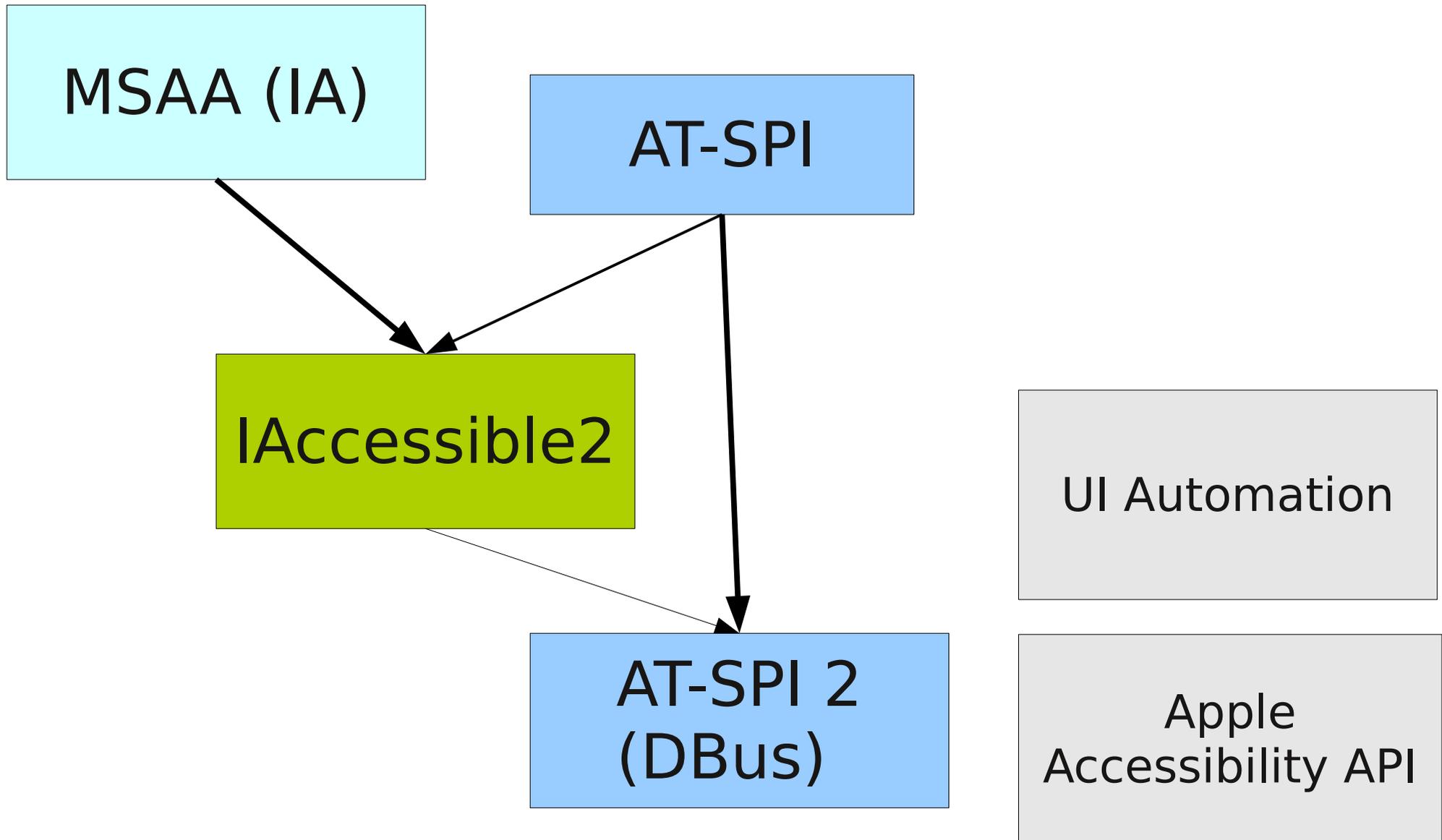
A photograph of the Golden Gate Bridge in San Francisco, California. The bridge is a suspension bridge with two large towers and a network of cables. The bridge is painted a reddish-orange color. The background shows a clear blue sky and a body of water with some boats. The text "Questions?" is overlaid in the center of the image.

# Questions?

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# Accessibility APIs



QDBusVirtualObject  
Efficient structure now  
memory efficient  
  
overhead almost 0