





## **Genero 2.20 summary**

Desktop client
Web client
Web Services
Application Server

## Desktop Client



- Migration of the underlying technology from QT3 to QT4
  - Long term support
  - Better rendering according to desktop themes (Vista, MacOS, ...)
  - New widgets and widgets improvements (SVG, WebKit, HTML support, Picture Flow, ...)
- Compatibility mode
- Tree view support
- Styling/Rendering enhancements
  - Button rendered as link Full html labels
  - Web component
  - Folder enhancements
  - Tabbed MDI

- SVG rendering
  - Integrated search and spell checking
  - CoverFlow display array rendering
- Report Viewer integration

### Web Client



- Tree view support
- > **Styling** (except desktop too specific)
  - Button rendered as link
  - Full html labels
  - Web component
  - SVG/SWF rendering
- > XUL Snippets Set
- FrontCalls JavaScript framework
  - + ActiveX extension to support GDC FrontCall

### Web Services



> A new Security API

You can ENCRYPT
DECRYPT
SIGN
AUTHENTICATE

against

XML Document XML Fragment Strings

WSI compliance



#### > GDC HTTP Protocol enhancements

- More efficiency when using Secure connection, Authentication or compression
- Licenses behavior as GDC does with sockets connections

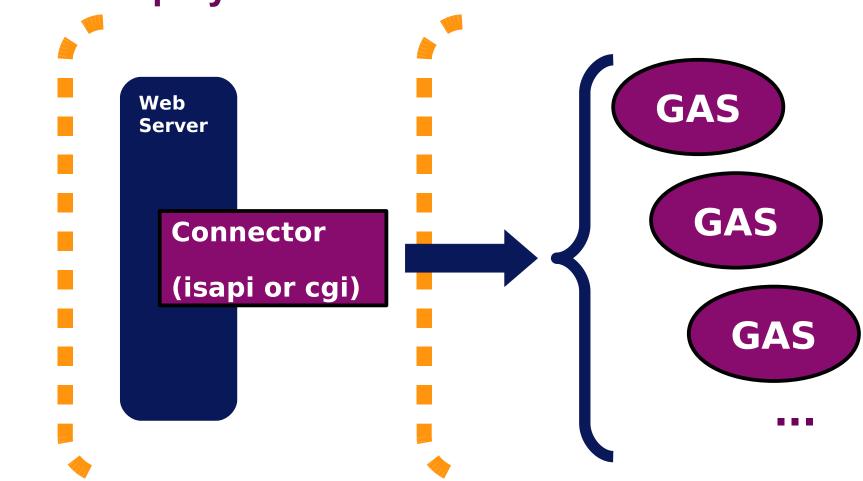
### Monitoring

### Easier deployment

- New Connectors
- Multi-threaded core

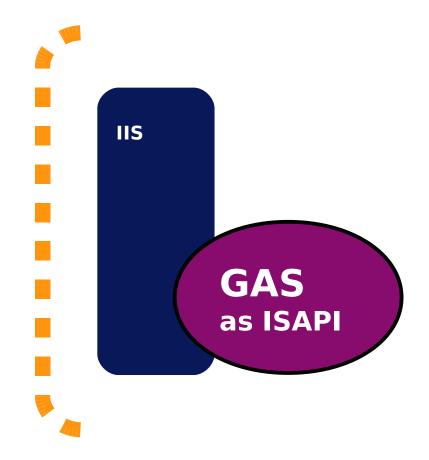


2.1x Deployment



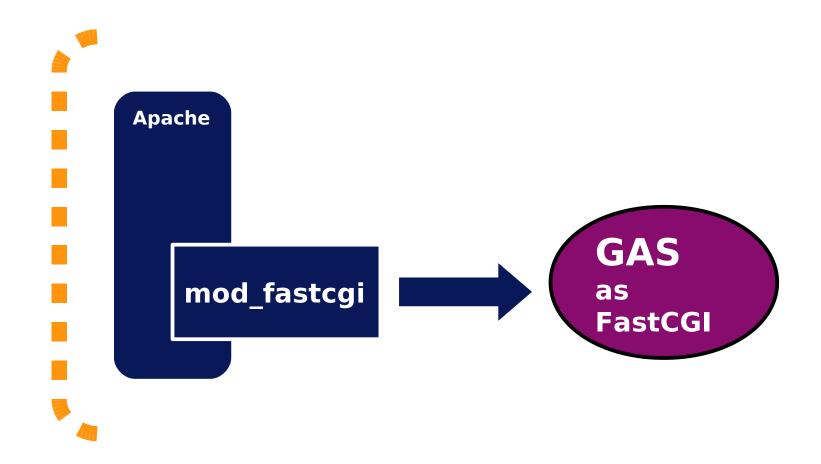


> 2.20 Deployment on Windows Server





> 2.20 Deployment on Apache







## **Genero 2.21 draft summary**

Desktop and Web client Application Server

## Desktop and Web clients



> 2.11 compatibility

Run Genero 2.11 application (FGLRUN 2.11) on GDC 2.21 and GAS 2.21

- Other miscellaneous improvement
  - Display Byte to Images
  - ScrollPane containers
  - SpinEdit ValueMin/ValueMax
- MSI installer for GDC



### Genero applications deployment helpers

- To configure XCF file
- To upload/deploy application/service resources on the Application Server
- To customize snippets?
- To stop an application/service





## **Open Subjects**

Drag'n drop
Manage charts in 4GL
Canvas Enhancements
RIA technologies (XUL, Silverlight, Flex)
GAS reliability
PDA native client

# Drag & Drop



#### Main use cases

- Drag'n drop rows between two tables
- Drop objects/files on the current dialog or specific widgets in current dialog
- Drag and drop (aka move) canvas objects=> See Canvas Enhancements Section

# Manage charts in 4GL



### The goal:

From an array of records, generate interactive charts and manage them (drill down)

### Three options:

- Interactive canvas
  - Long because Self Made
  - + Homogeneous
- Generate images or animation (SVG, SWF, GIF, ...)
  - How to manage interactivity
  - + Already available
- Display Array Polymorphism
  - Rely on client capabilities (homogeneity ?)
  - + No modification in program logic
  - + Already experimented with PictureFlow

## Canvas enhancements



### The goal:

Handle 2D graphical and interactive application such as "workflow definition" or "put pallets on truck"

### The missing features:

- Better graphical feature (styles, images, ...)
- Group definition
- Interactivity
  - Binding on actions for mouse manipulation (clicks, moves)
  - Moveable attribute

# RIA technologies



- RIA = Rich Internet Application
  This is the main stream to develop new applications
- Several technologies
  - HTML/AJAX : Google Apps, Zimbra
  - XUL: Amazon, Zimbra
  - Silverlight: Vista, VisualStudio, ...
  - Flex (Adobe) : ...
  - => All technologies based on XML
- Our Genero Web Client produces XML and, thus, is able to render your applications with all these technologies

# GAS reliability



- An architecture enhancement to keep users on GASd failures
- An architecture enhancement to remove the "sticky session" constraint
- J2EE Application Server integration

## PDA Native Client







# Thanks for your time









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