

GSS User Manual (v1.2.605)

I. Preparing GSS

1. Copy gss.exe to any directory you want
2. You have one of sqlserver supported by zeoslib:
Oracle, PostgreSQL, MySQL, Firebird, Interbase, mssql, sqllite, sybase
3. If you use PostgreSQL or MySQL, copy all appropriate files in \lib directory to system directory (Ex. \winnt\system32\ or \windows\system\)
4. You have any table in your database to access

II. 15 Minutes Tutorial

1. Execute GSS.exe
2. 'Choose project' window will appear.
 - Click new
 - Fill name of your new project
 - Specify home directory, we can leave it blank, this mean that we want to put the project directory same as GSS.exe
 - If we want to load this new project when gss.exe running, set this project as default.
 - Select the project in yellow list-box and click 'Ok' button
3. Blank window will appear
4. Click Heart button  at left-top window to go to Project Properties, this button will unavailable when project is locked.
Hotkey: ^F9
5. Go to 'Data Connection' tab to setup database connection
Fill the Hostname, protocol, database, username, and password for your database server, and then click 'Test Connection', if you fill correct data then 'Succeed' message will display.
6. Go to 'Menu Structure' tab to Define Menu Structure
 - Click 'Add brother'
 - Set Caption : 'Master' <press enter>
 - Click 'Add Child'
 - Set Caption : Order List <or any appropriate table name you have>
Set SQL File : Order List.gsf (See GSF Editor Section Below)
 - Big Icon : <fill 32x32 bmp file name or use (...) button to explore>
 - Small Icon : * <or fill 16x16 bmp file>

Note: Please don't put GSF file on root menu.

GSF Editor

1. Click  button to go to GSF Editor
2. In 'window' tab
Form Name : FrmOrderList

Check list : Sizeable Escape MDI Child Maximized

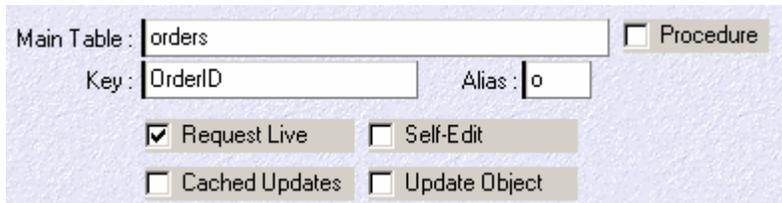
3. Go to 'Data' tab

Main Table : Orders <Physical table name in your database>

Key : OrderID

Alias : o

Request Live : True



Main Table : Procedure
Key : Alias :
 Request Live Self-Edit
 Cached Updates Update Object

4. Go to 'SQL' tab

- Click 'wizard' button 

- Click 'Ok'

- Select query created

```
SELECT
o.OrderID      {cap="Order ID";w="10";buttons=(autonumber(select
o.CustomerID  {cap="ID<Customer>";w="10";buttons=(lookup(Custom
c.CompanyName as Customer {cap="Name<Customer>";w="40";buttons=(det
o.EmployeeID   {cap="ID<Employee>";w="10";buttons=(detail(Employe
o.OrderDate    {cap="Order Date";w="10";buttons=(cal);def="DATE"
o.RequiredDate {cap="Required Date";w="10";buttons=(cal);font={M
o.ShippedDate  {cap="Shipped Date";w="10";buttons=(cal);font={MS
o.ShipVia      {cap="Ship Via";w="10/30";editor=radio;h="/3";col:
o.Freight      {cap="Freight";w="10";},
o.ShipName     {cap="Ship Name";w="40";},
o.ShipAddress  {cap="Ship Address";w="40";},
o.ShipCity     {cap="Ship City";w="30";},
o.ShipRegion   {cap="Ship Region";w="30";},
o.ShipPostalCode {cap="Ship Postal Code";w="20";},
- ShipCountry  {cap="Ship Country";w="20";}
```

Note: Brackets '{ }' at a line is identifier for a field and contain field properties, if this line double-clicked then Field Properties Editor will appear but when Free-Edit activated we can type directly to editor to change as necessary.

- A field properties can edit by double-click a field, field properties editor is shown below.

The screenshot shows the 'Field Properties...' dialog box with the following settings:

- Field:** o.OrderID
- More Field:**
- Caption:** Order ID
- Band:** [Empty]
- Hide:**
- Width:** 10
- Footer Field:** [Empty]
- Center:**
- Buttons:**
 - Detail
 - Lookup
 - Auto Number: select coalesce(max(OrderID),0)+1 from orders
 - Cal
 - Exclusive
 - Password
- Font:** abc
- Display Format:** [Empty]
- Edit Mask:** [Empty]
- Valid chars:** [Empty]
- Default:** [Empty]
- Editor:** [Dropdown]
- Width:** [Empty]
- Height:** [Empty]
- Col:** [Empty]
- Tail:** [Empty]
- Upper-Case
- Required
- Tab Stop
- Enabled
- Read Only
- Pull:** [Dropdown]
- Help ID:** [Green box]
- Help Type:** [Dropdown]
- Duplicate Table:** [Empty]
- Dup. Filter:** [Empty]
- Domain:** [Empty]
- Calc. Field:** [Empty]
- Field Owner:** [Blue box] ... (user levels)
- Rule Procedure:** [Red box]

- For now leave it by default
- We can use Free edit, to edit field properties manually or to add join table or any SQL filter.



Note: If you joined 2 tables or more, to get data grid editable, 'Update Object' property in data-tab in GSF editor must set to true.



Then Click 'Save' in GSF Editor
 Then Click 'Ok' in Project Properties

Now The Main Window have new Button like this :

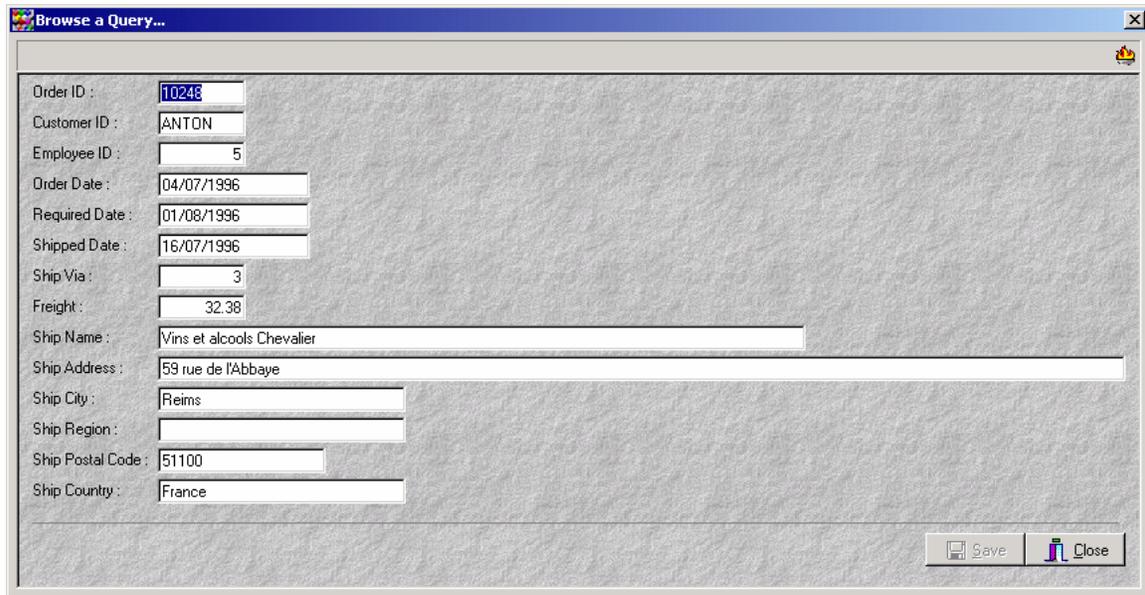


Now we can browse Order table, Order list button can click to browse, to insert, to edit, to delete or to filter data.
 Here is the result:

Order ID	Customer ID	Employee ID	Order Date	Required Date	Shipped Date	Ship Via	Freight
10248	ANTON	5	04/07/1996	01/08/1996	16/07/1996	3	32.38
10249	TOMSP	6	05/07/1996	16/08/1996	10/07/1996	1	11.61
10250	HANAR	4	08/07/1996	05/08/1996	12/07/1996	2	65.83

We can sort (descending/ascending) on any field by click on grid-title and we can filter the sorted field.

And then we can go to Edit or Insert window:

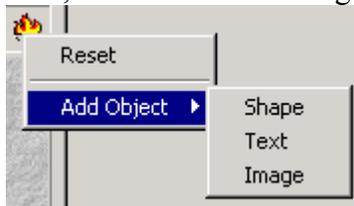


Order ID :	10248
Customer ID :	ANTON
Employee ID :	5
Order Date :	04/07/1996
Required Date :	01/08/1996
Shipped Date :	16/07/1996
Ship Via :	3
Freight :	32.38
Ship Name :	Vins et alcools Chevalier
Ship Address :	59 rue de l'Abbaye
Ship City :	Reims
Ship Region :	
Ship Postal Code :	51100
Ship Country :	France

We can change this editor layout from : 1) edit-tab in GSF editor window, 2) fields properties, 3) field rule, 4) or we can switch this window to design mode by click  button.

When the window in design-mode, the label, field control, or button can resize or move.

Beside that, we can add new shape, text, or image, to do this click  button one more time, and we will see designer menu :

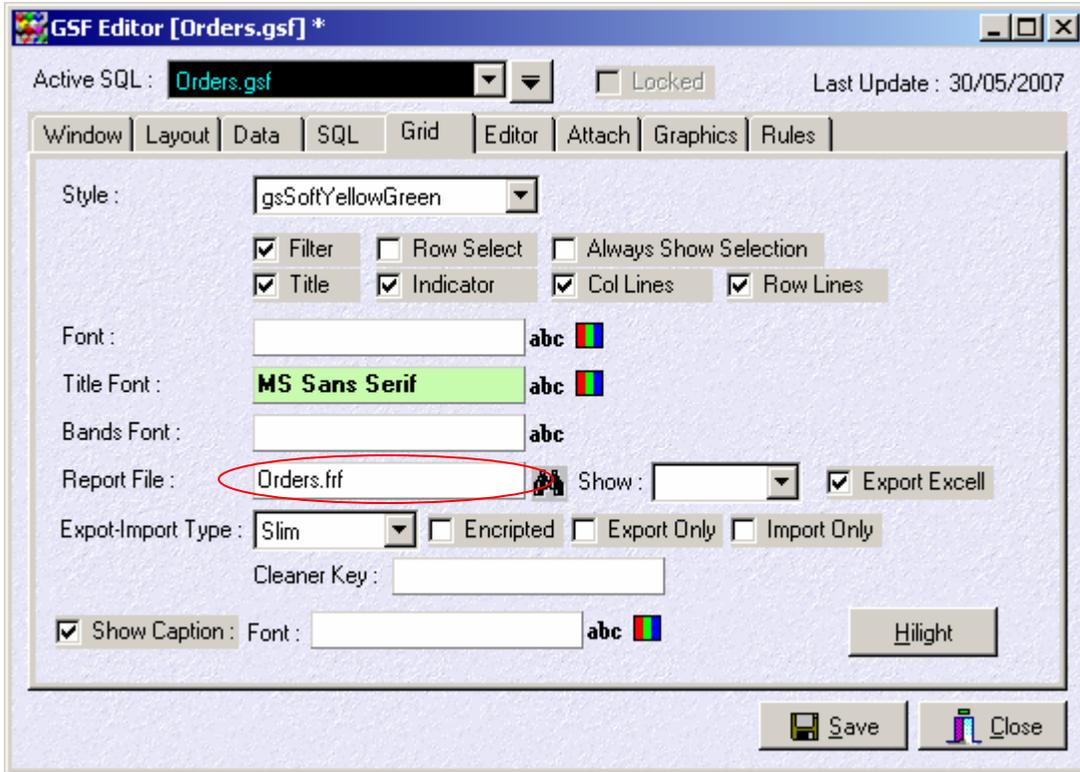


To add a Object, click on menu (Shape/Text/Image) and then use the mouse to specify coordinate (left, top, right, bottom) and then fill the object properties.

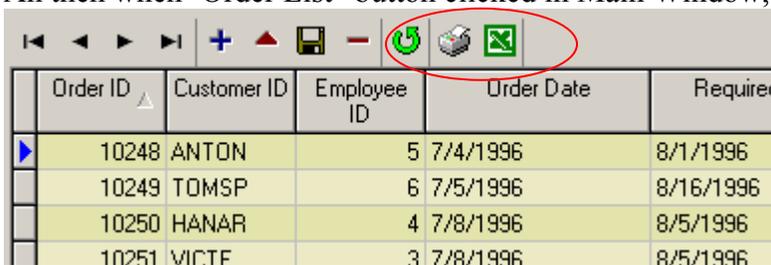
Press enter or escape to finish designer mode.

Also we can click this button (Order List) to go to GSF Editor by press and hold Ctrl Key down then click the button, as long as the GSF file not locked this GSF file properties is editable.

To add Print Button you can do by set 'Report File' with a report file name you want, for example :



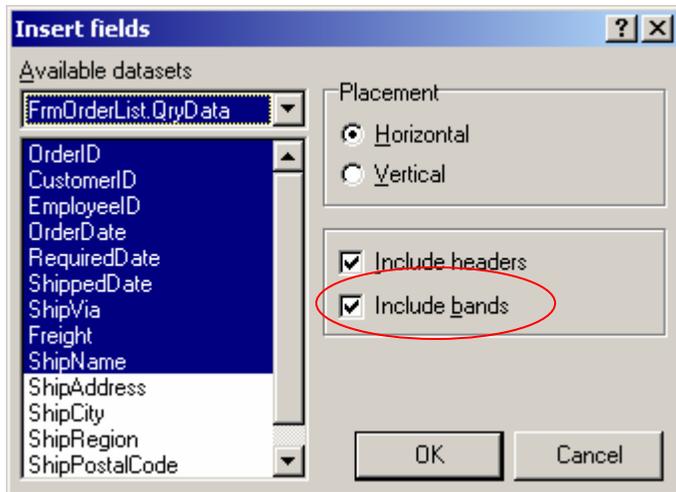
And then when 'Order List' button clicked in Main Window, print button will appear.



Press and hold down shift key then click print button to go to Report Designer.

Click 'Insert DB Fields' 

Select fields you want to print, and set include bands true and then click 'Ok'.



We can put any additional text or setup report layout before save button click to finish. Now print button will available.

Note: One dataset can have more then 1 report file, just put additional name with '#' char as separator. For example : if the default report name is Order List.frf so the additional report can be named: Order List#Simple.frf or Order List#Other.frf

III. More Explanation

Directory Structure

To know how directory structure works, see GSS.ini and related directory.

We can put GSP or home directory in server, so every time we update the project, each client will get up-to-date project. To reload project at client computer go to system menu in main window.

A. Project Properties

- General
 - Title : This will be set caption on main window
 - Icon File : To change application icon (*.ico)
 - Main Wall Paper : To set wallpaper on MDI form or main window (*.bmp), when wall-paper changed application need exit to load wallpaper.
 - Top Panel Wall : To Change upper panel wallpaper (*.bmp)
 - Outlook Wall : To Change Outlook menu wallpaper (*.bmp)
 - Def. Editor Wall : To generalize wall paper on editor window, so assigned wallpaper to each editor window is not necessary.
 - MDI : Set main window to MDI support.
 - Maximized : Initialize main window state to maximize.
 - Resizable : Main window can resize
 - Left : Put main window position at this value
 - Top : Put main window y position at this value
 - Width : Reset main window width

Height : Reset main window height
Outlook Button : Open default outlook button when project open.
Short Date Format : Change appearance of date
Help File : Specify help file (*.hlp)
Global SQL : Global data to open while project active
Environment SQL : SQL will open while project active and this dataset will be a default master of GSF file to open on main-menu defined in 'Menu Structure' tab.
Display Env. Field : A field of Environment SQL to show on main window.
Splash Image : The image shown at first time when project loaded.
Welcome SQL : The GSF file to open at first time when project loaded.
We must provide a green.bmp or green.jpg in \images directory, it's will load into welcome window.
Bevel Width : Bevel width to show splash-image.
Lock Project : Prevent project from editing.

- Menu Structure

Add Brother : To add item at same level with current selection.
Add Child : To add item as child of selected item.
Delete Node : Delete selected item.
Up  : Move item up
Down  : Move item down
Caption : To show as menu item or button caption
Hint : Additional information for current menu item
SQL File : GSF file to open when menu item click.
Big Icon : 32x32 bmp file
Small Icon : 16x16 bmp file or set '*' to get image from Big con
Manual Tag : (not use)
Create Short-Cut : to put button on top panel in main-window, so use can click easily.
Startup : To open the menu automatically when application up.
Visible : To grant the menu visibility to any user-group.
Enabled : To set enabled to any user-group.
Full Access : To grant insert, edit, and delete data to any user-group.

- Data Connection

Host Name : computer or or ip address sql server
Protocol : supported protocol with ZeosLib651
(ado, firebird-1.0, firebird-1.5, interbase-5, interbase-6, mssql, mysql, mysql-3.20, mysql-3.23, mysql-4.0, mysql-4.1, oracle, oracle-9i, postgresql, postgresql-7.3, postgresql-7.4, postgresql-8.x, sqlite, sqlite-2.8, Sybase)
Database : Existing database name in sql server to access.
User Name : user name to use (if you leave this blank, user name/password dialog box will appear when GSS trying to connect to server)
Password : The user names password.
Test Connection : To test server connectivity, username and password is required.
History Table Access : History table button will appear to some user-levels.

- Users

Enabled : To activate user management.

Activate Standard Table : To activate standard user table in sql server, users table must created with this structure:

```
CREATE TABLE users (  
    uname char(30) NOT NULL,  
    uid char(4) NOT NULL,  
    ulevel char(10),  
    ugroup char(10),  
    ro char(2),  
    passwd char(10),  
    envfilter varchar(50),  
    PRIMARY KEY( uname )  
)
```

To edit this table there is standard user.gsf available do download or you can create your own, put user.gsf in project home directory.



: User-groups privilege to access users manager menu.

User Name : User full name

User ID : user id

Level : Specify user level

Group : Specify user groups

Password : if this is empty, user can't login.

Read Only : To set read-only access to all dataset

Environment Filter : if environment query set, this is will filter the environment

dataset. For example if we have env data structure : RegionID,

RegionName; so the filter could be: RegionID='001', this caused the user just edit data to specify region in every GSF file.

- Other

Hide Main Menu: To hide main menu

Hide Top Panel : To hide top panel in main window

Hide Recent Menu : To hide recent menu on main-window.

Hide Outlook Button : To hide outlook button

Hide Status Bar : To hide status bar

Environment Text : To set environment description in main-window if 'Environment SQL' and 'Display Env. Field' are defined.

- Profile

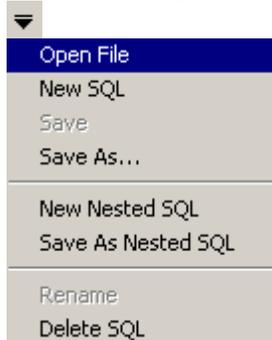
You can put your customer and your company information here.

- License

If GSS usefull for you please visit shareit for us.

B. GSF Properties

- Active SQL : This is current GSF file editing.



- Open File : Open other GSF file to edit
- New SQL : Create new GSF file
- Save : Save current GSF file, including nested GSF.
- Save As : Save current GSF file as new file.
- New Nested SQL : Create a nested GSF file, nested GSF stored in primary GSF file.
- Save As Nested SQL : Save current editing GSF into new name of nested GSF file.
- Rename : Rename current GSF.
- Delete SQL : Delete current GSF, there is a difference between deleting nested GSF and deleting master GSF.
- Locked : To prevent editing final GSF file.

Window

- Form Name :
 1. This form name usefull for identified form as MDI child, so the form will not open more then once.
 2. This form name will shown in report designer to print the fields.
- Icon : To change default applications icon (*.ico)
- *Dimension* Left : To put window at x coordinate
- *Dimension* Top : To put window at y coordinate
- *Dimension* Width : To specify width of the form
- *Dimension* Height : To specify height of the form
- Sizeable : To make the window sizeable
- Escape : To call close window when escape key pressed.

- MDI Child : To set form as MDI child, works if Application set MDI form (see project properties)
- Maximized : To set window state start as maximized.
- *Caption* Main Window : To set form caption
- *Caption* Editor : To set form caption in editor mode
- *Caption* Grid : To add additional caption in grid mode
- *Caption* Find Window : To display caption in select mode.
- Help ID : To set help ID when projects help file assigned.
- Help Type : To identify help ID type.

Layout

- **Type :**
 - Grid – Layout is grid (default)
 - Editor – Layout is editor
 - Left – Layout is editor at left and grid at right
 - Top – Layout is editor at top and grid at bottom
 - Right – Layout is grid at left and editor at right
 - Bottom – Layout is grid at top and editor at bottom
 - Report – Tell to GSS that the GSF is to print
 - Update – Tell to GSS that GSF is update SQL
- **Insert :** If the layout is ‘Editor’ and ‘Insert’ checkbox is checked then the form will set to insert mode only.
- **Size :** if the layout have editor and grid, this size can specify the size of grid, for example: “400” or in percent format : “70%”.
- **Update Message :** if layout is ‘Update’ then when sql ready to execute this message will appear.
- **Refresh table :** To refresh other opened GSF file.

Data

- **Main Table :** Specify of main table or procedure to access.
- **Procedure :** Identity if the main table is a procedure name in database.
- **Key :** key of the table
- **Alias :** alias of the table
- **Request Live :** To add : edit, insert, and update capability.
- **Self Edit :** To make a grid as editor.
- **Cached Updates :** To prevent data posting to server automatically, posting to server right after update button click.
- **Update Object :** To create update SQL (automatically) so the complex SQL is editable. Table to edit is main table with key and alias specified.
- **Summary SQL :** To show footer summary field at grids column.
- **History Table :** To show log table when available.
- **Auto Refresh :** To watch changing of table, this is will automatically refresh rows from server.
- **Prevent Edit/Delete :** To prevent edit/delete to any user groups when condition is true.
- **Where :** The expression to calculate to prevent Edit/Delete condition.
For example: %approve%=’Y’

‘+’ at right-bottom the editor () that’s mean we can press insert on keyboard to get a field or substitution variable.

Grid

- Style : to change grid color.
(gsNormal, gsCustom, gsPriceList, gsMSMoney, gsBrick, gsDesert, gsEggplant, gsLilac, gsMaple, gsMarine, gsRose, gsSpruce, gsWheat, gsSoftWheat, gsSoftRose, gsAquaBlue, gsSoftMaple, gsSoftLilac, gsSoftDesert, gsSoftEggPlant, gsSoftBrick, gsSoftSpruce, gsSoftYellowGreen, gsSoftGray)
- Filter : to show/hide filter capability.
- Row Select : To change column select to row select instead.
- Always Show Selection : To make selection always visible.
- Title : To show/hide grid title
- Indicator : To show/hide grid indicator
- Col Lines : To show/hide grid column lines
- Row Lines : To show/hide grid row lines
- Font : To set grid font and background color
- Title Font : To set grid title columns and background color
- Bands Font : To set bands font.
- Report File : To specify report file in grid. If the report file is new file, press and hold down shift key when click print button in grid data form.
- Export Excell : To show/hide export button in grid data form.
- Export-Import Type : To enable/disable export-import capability and set data format.
Data format : Slim = Only send data
SQL = Send data in standard SQL format
- Encrypted: To set export/import text file encrypted.
- Clean key: To set filters key to clean dataset when importing data.
- Show Caption : To show/hide grid caption
- Font : To set grids caption font and background color
- ***Highlight***
 - Font : Hilight font and color
 - Field : if this field is blank, hilight will affect to all columns.
 - Expression : Condition to calculate, for example : %amount%>100000
Press insert to add a field.

Editor

- Form Name : this form name will usefull to print data in editor window.
- Flat : To set all control as flat.
- Sizeable : To set editor form can resize.
- Label-On-Top : To set label at top of the data control.
- Insert Once : To close the form when data posted in insert process.
- Right Justify Label : To set label justification.
- Wall Paper : To set editor forms wallpaper, this is will replace default wallpaper specified in project properties.
- *Dimension* Left : To put editor window at x coordinate
- *Dimension* Top : To put editor window at y coordinate
- *Dimension* Width : To specify width of the editor form
- *Dimension* Height : To specify height of the editor form

- Button Position : To set save/close button position
- *Margin Left* : Left space
- *Margin Top* : Top space
- *Margin Right* : Right space
- *Margin Bottom* : Bottom space
- Column Count : to set editors column count.
- Font : Default editor font
- Report File : To print a row in editor.

- **Objects:** to add object in editor forms.
 - Type : (image, Rect, text)
 - Active : to activate/deactivate current object.

(type : Image)

 - Source : (file, field)
 - Use Web Browser : Set image or object viewer to web browser component so can view any file extension such as: *.html, *.jpg, *.pdf, *.doc, etc.
 - Image File : We can set still image file or image from field value, use (...) button to explore.
 - Directory : To hold files
 - *Dimension Left* : To put object at x coordinate
 - *Dimension Top* : To put object at y coordinate
 - *Dimension Width* : To specify width of the object
 - *Dimension Height* : To specify height of the object
 - Framed : To add frame around of the object window
 - Shadow Color : To add shadow of object window
 - Read Only : To set data as view only.
 - Hide Navigator : To hide/show navigator.

(type : Rect)

 - *Dimension Left* : To put rectangle at x coordinate
 - *Dimension Top* : To put rectangle at y coordinate
 - *Dimension Width* : To specify width of the rectangle
 - *Dimension Height* : To specify height of the rectangle
 - Rounded : to set rounded at corner of rectangle
 - Frame Color : to specify frame color
 - Fill Color : to specify rectangle color

(type : Text)

 - *Position Left* : x coordinate text position
 - *Position Top* : y coordinate text position
 - Font : text font
 - Caption : text objects caption

Attach : to attach other (nested) GSF file in opened GSF

- Place : (grid, print, sub, detail)
 - Grid: The attach file will accessed from grids popup menu
 - Print: The attach file will accessed from print button in grid window
 - Sub: The attach file will accessed from new button at grid window

Detail: The attach file will show in grid window

To setup relation ship between attached file we can add “:rel-field” in SQL, for example if we have master query structure (EmployeeID, EmployeeName) then attached SQL should have expression like this:

Where EmployeeID=:EmployeeID

For more explanation see section “IV. Relationship Between GSF File”

- Active : to activate/deactivate attachment
- SQL File : to specify GSF file
- Set Fields : to specify fields to set from master datasource when inserting a row.
- Column : If the attachment will shown at a specify column not whole of grids.
- Value : the value to condition the attachment visibility.
- Hint : Attachment hint text.
Format: <Short Hint>|<Long Hint>
- Size : Button width or window size (accept window size in percent)
- Position :If attachment is detail, where the control should place.
(left, right, top, bottom) default is bottom.
- On Editor : Show attachment in editor window instead.
- Refresh Caller : if attachment data is updated, then caller data will refresh.
- Default : If ‘default’ is checked and the attachment placed in grid or print then where grid is double click then the attachment will execute.
- Flat Button : To set button style as flat
- Wallpaper : To change panel wallpaper/background
- Color : To set panel background color when wallpaper is unset.

Graphics

- Type : (pie, line, bar)
- Active : activate/deactivate graphics
- Data : (row, col)
- Embed : Show in main GSF window
- Field Label : Specify field label where data source is col
- Data Fields : specify data fields
- Height : specify control height (accept in percent format) when graphics is in embed mode.
- Caption : Caption text
- Hint : Hint text
- Title : Graphics Title, accept substitution (see V. Substitution)
- Sub Title : Graphics sub title, accept substitution (see V. Substitution)
- Wall : Graphics wall paper (image file)
- Background : Graphics background color
- Font : Graphics font
- Title Font : Graphic title font

SQL

- Free Edit : To edit SQL as free text editor
- Wizard : To collect fields from some table
- Filtering : To add data filter and filter dialog box
 - Caption : Filter dialog box caption
 - Embed : Set filter control in main GSF window
 - Window Left : To put dialog window at x coordinate
 - Window Top : To put dialog window at y coordinate
 - Window Width : To specify width of the dialog window
 - Window Height : To specify height of the dialog window
 - Skip Dialog : To apply default value of filter without showing dialog window
 - Wall Paper : Change default input window wall paper
 - Font : Dialog window global font.

Input Dialogs Properties:

Name : Specify a name

Caption : Specify a caption (optional)

Type :

<input type="radio"/> label	<input type="radio"/> datetime	<input checked="" type="radio"/> string	<input type="radio"/> check
<input type="radio"/> date	<input type="radio"/> year	<input type="radio"/> radio	<input type="radio"/> lookup
<input type="radio"/> time	<input type="radio"/> month	<input type="radio"/> combo	<input type="radio"/> Buttons

SQL File : Specify lookup GSF file (only if dialog type is lookup)

Update : to update other input field when lookup data set selected

Example: CustomerID, Customer=CustomerName

Set Field : Field to set when new record created

Width : Specify width the edit control

Height : Specify height the edit control

Pull : Pull-up position of edit control

Hide : Hide edit control

Disabled : Disabled edit control

Read Only : Set control as read only

Tab Stop : To get or release tab stop

Char Case : (Normal, Upper, Lower)

Default : Default value

Label Font : Specify label font

Editor Font : Specify editor font

Domain : Set domain (see section VI. Domain)

Col Count : Set column count

- **Field Rule**

Field : Field name to add the rule

Procedure : database procedure/SQL

Ex.: rule_calc_total %price%, %qry%

Special substitution ID are : %-action-%, %old-value%, %new-value%

%-action-% : insert or edit

See section V. Substitution

There is 3 kinds result set of rules procedure: (abort, set, msg)
Rule procedure/SQL result must have field named “_” to hold action information , for example :

1. Rule SQL to abort
Select ‘type=abort;msg=”The value is not acceptable!!” ’ as _
Note: msg is optional
2. Rule SQL to show message
Select ‘type=msg;msg=”Please remember the date !!” ’ as _
3. Rule SQL to set any fields

a) Set Field Value

```
Select ‘type=set’ as _,
      1997 as Year,      -- set year field value with 1997
      5000 as Amount    -- set amount field value with 5000
```

Or,

```
Select ‘type=set;set=Year;amount’ as _,
      1997 as Year,      -- set year field value with 1997
      5000 as Amount    -- set amount field value with 5000
```

b) Set Field Disabled

Rule SQL to set any fields value and disabled any field controls
Select ‘type=set;dis=”OrderDate,Discount” ’ as _,
 0 as Price -- set price field value to 0

c) Set Field Enabled

Rule SQL to set any fields value and enabled any field controls
Select ‘type=set;en=”OrderDate,Discount” ’ as _,
 0 as Price -- set price field value to 0

- GSF Rules (Project properties)
(rule format, see field rule above)
 - a. Before Insert
 - b. Before Edit
 - c. Before Delete
 - d. Before Close

C. Field Properties

- Field : field name (in physical table or procedure)
- More Field : Indicate that the field is last field or not.
- Caption : Field grid caption
- Band : Some field with same band will display as a group in grid.
- Hide : Hide field in grid but in editor can display if editor specified.
- Width : Field display width.
- Footer Field : Field name in summary SQL
- Center : Set field justify as center
- Detail : To add display detail button to execute a GSF file
- Lookup : To add Lookup button to execute a GSF file
- Update : Field to be updated when lookup SGF file execute an a row selected.
Example: CompanyID,Company=CompanyName
CompanyID=CompanyID same as CompanyID

- Auto Number : To create auto number when new record created
Example: select coalesce(max(OrderID),0)+1 from orders

- Cal : To add calendar button
- Exclusive : To make control read only.
- Font : Editor font
- Password : To display password char so original text will shown as '*' charanter.
- Display Format : Field display format
- Edit Mask : Editor mask edit
- Valid Chars : To validate key stroke to some valid character,
for example: "AFDafd"
- Default : Default value
- Editor : (edit, check, radio, combo, text, memo, image, list, none)
Set editor to 'none' to hide field in editor but shown in grid.
If the editor specified the field will show event the field is invisible in grid.

- Width : Editor width (character length)
- Height : Editor height
- Col : Radio button column count
- Tail : To display additional text following editor control
- Upper-Case : Set value to upper-case
- Required : To set field as mandatory field.
- Tab Stop : To set/skip tab on control.
- Enabled : To enabled/disabled control
- Read Only : To set control as read-only
- Pull : Pull-up the editor to previous field position.
- Help ID : Specify help id when help file project assigned.
- Help Type : Help ID type
- Duplicate Table : To check duplicate value automatically
Example: orders

- Dup. Filter : Duplicate table filter, leave it blank if duplicate table key same as the current field.
Example: RegionID='%'RegionID%'
- Domain : See section VI. Domain
- Calc. Field : See section VI. Domain
- Field Owner : The field can be edit to same of user-levels
- Rule Procedure : See previous rule explanation.

IV. Relationship Between GSF File

Relationship between two GSF file condition is:

1. Master datasource is set
Top level datasource is environment GSF, every main GSF called in main window will set the mastersource to Environment GSF.
2. Relation field in SQL is defined
Relation syntax is: ForeignKey=:PrimaryKey
ForeignKey is a field name in current GSF file
PrimaryKey is a field in master datasource

Example: RegionID=:RegionID
RegionID=:RegionID AND Order=:OrderID

V. Substitution

Substitution ID is some text/name between two '%' characters.

Example: %user.uid%, %user.name%

So we can add Substitution ID in SQL or Expression.

Example: Where CompanyName like '%cust.fullname%'
Where CompanyName like '\%%my.shortname%\%'

Substitution ID can be use in :

1. Environment GSF field (env.<field-name>)
2. Global GSF field (global.<field-name>)
3. Local Data (local.<field-name>)
4. User Properties (user.UID, user.Name, user.group, user.level)
5. Customer Properties (cust.FullName, cust.ShortName, cust.Address, cust.city, cust.Phone, cust.Email, cust.Website)
6. Company Properties (My.FullName, My.Address, My.Phone, My.Email, My.Website)
7. GSF Input Dialog (input.<name>)

8. Default Constants (defa.#Year, defa.#Month, defa.#Day, defa.#Date, defa.#Time, defa.#DateTime, defa.#Day1, defa.#Month1, defa.Year, defa.Month, defa.Day, defa.Date, defa.Time, defa.DateTime, defa.Day1, defa.Month1)

sign is to retrieve data from sql server

Day1 = starting date in a month, Ex: 2007/9/1

Month1 = starting date in a year, Ex: 2007/1/1

9. Master datasource/dataset

We can put Substitution ID in :

1. SQL Statement in GSF
2. Rule SQL
3. Welcome SQL
4. Auto Number Field
5. Set Field on New Record from attachment
6. Graphics Caption and subtitle
7. Where conditional in GSF editor
8. Default value (don't need '%')
9. Report designer, Example: [my.FullName]

VI. Domain

- a. Standard Format: Key1[=Value1]||Key2[=Value2]||...
Example: 1=Sunday|2=Monday|3=Tuesday
One|Two|Three|Four|Five=5
- b. From SQL Format: !Select Key, Value From AnyTable
Example: !Select DayID, DayName From DayList
!Select MonthName From MonthList

Note: We can retrieve domain value using this format:

- %(fieldname)%
- %input.(name)%

VII. Startup, Scheduling, Run Once

When GSS run, there is three initialization files will execute:

1. GSS.ini,
 - Contain GSS project information
 - When this gss.ini file not found in project directory, GSS will create this file automatically, this mean you don't have any project created.
 - When a project was created, there is new section with your project name as a section name.

- If <home-directory> not specify, GSS will assume that <project-dir> same as <home-dir>
- Hostname, protocol, database, user, password will ignore when this connection parameter specify in GSS project.
- Here is the example of GSS.ini :

```
-----
[project]
Open=<project-name>.gsp      ; to open a project automatically when GSS start

[<project-name>]           ; a project section
Home=<home-directory>
Hostname=
Protocol=
Database=
User=
Password=
-----
```

2. Startup.ini

To run some gss file(s) at startup affect to all user.

There are five section types:

```
[always]           ; to execute some gss files every time gss up
[daily]           ; to execute some gss files every day
[1]               ; to execute some gss files every 1st day in each month
[1/5]            ; to execute some gss files every 1st day and 5th month
                  in each years
[1/1/2007]       ; to execute some gss files in a specify date
```

Here is the example, we want to execute “Summary Report.gsf”, “Save Order.gsf” every time GSS up:

```
-----
[always]
Summary Report.gsf
Save Order.gsf
-----
```

3. Startup#<user-group>.ini

To run some gss file(s) at startup affect to a group specified. (See Start.ini)

4. *.gsf stored in <homedir>\once directory

Every file(s) stored in \once directory will execute and delete when GSS run.

VIII. Sample Northwind Project

To show more about how GSS works you can activate sample application northwind.zip

(Using standard northwind Database from mssql)

To activate, just place the files and the directory into same directory.

- GSS.exe
- Gss.ini
- Northwind.gsp
- Northwind\
- Execute: sp_categories.sql
- User.gsf
- Create directory c:\images

Any question please post to greensolution yahoo group.

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“Database programming must be simply” that’s our concern.

(GSS Team)