



GARGANTUA DATABASES - COMPOSITION RULES

ADMINISTRATION TOOL

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INTRODUCTION

WHAT IS A COMPOSITION RULE?

A composition rule allows you to automatically copy values entered in one or several source attributes by a Web Client user, and paste them into a target attribute, within the same form.

In GARGANTUA Administration Tool, you can define the items - attributes and/or character strings - used for the composition, and assign the rule to a target attribute in a given form.

When a user indexes an object with this form in GARGANTUA Web Client, the value of the target attribute will be automatically entered as the user will fill in the source attributes.



When a composition rule is used to fill in a field, the Web Client user cannot fill it in or modify it himself any longer: only the values automatically generated by the rule can be saved.



For a composition rule to work properly, 3 conditions must be met:

- *The target attribute and the source attributes must be within the same form.*
- *The source attributes must be mandatory, so that the Web Client user cannot leave them empty.*
- *The target attribute must be of alphanumeric type or open custom list type (which means that the user can type other values than those available in the list).*

EXAMPLE

In GARGANTUA Administration Tool, an administrator has created a “Contact” form that contains the “First Name” and “Last Name” attributes. He wants the **label** system attribute of indexed objects to be automatically filled as follows : “LAST NAME First Name”.

The administrator creates the following composition rule: “Last Name” in upper case “space” “First Name”.

T	Last Name	ABC
T	First Name	-

(The “ **ABC** ” option allows you to display the last name in upper case in the composition, however it was typed by the GARGANTUA Web Client user.)

Once the composition rule has been created, the administrator applies it to the “Contact” form using the

Composition rule property of the **label** system attribute.

Form page: Default

Contact

label : 

Last Name :

First Name :

Company :

Phone Number :

Attribute elements

- ☒ T Company
- ☐ create date
- ☐ modify date
- ☒ T First Name
- ☒ **label**
- ☒ T Last Name
- ☐ owner
- ☒ T Phone Number
- ☐ securitv profile

Properties

Property	Value
composition r...	LAST NAME First Name
	Company "date"
	LAST NAME First Name
	ZIP Code/City

In the Web Client, a user creates a folder with the “Contact EN” form: he enters “Smith” in the “Last Name” field and “John” in the “First Name” field. Simultaneously, GARGANTUA fills in the folder label: “SMITH John”.

Create folder

Choose a folder type:  Contact

Contact

Label :  SMITH John

Last Name : Smith

First Name : John

Company : Blue Air

Phone Number : 800-455-4968

CREATING A COMPOSITION RULE

To create a new composition rule, proceed as follows:

1. In the left pane of GARGANTUA Administration Tool, expand the sub-branch corresponding to the database of your choice.
2. Click the **Composition rules** sub-branch.

The **Manage composition rules** screen displays in the right pane.

3. In the bottom left corner of the right pane, click the **New** button.

The new composition rule management screen displays.

4. In the **Properties** tab, in the **Identity** section, specify a name, and, if you want, a description for the new rule.
5. In the **Content** tab, configure your new rule using the composition rules editor.

You need to at least create a text item or select and include an item.

6. When you are finished, in the bottom left corner of the right pane, click the **Apply** button.

The composition rule has been saved. You can now deploy it and associate it to a form attribute and/or modify it using the composition rules editor.

COMPOSITION RULES MANAGEMENT SCREEN - TABS AVAILABLE

The **Manage composition rules** screen contains the following tabs:

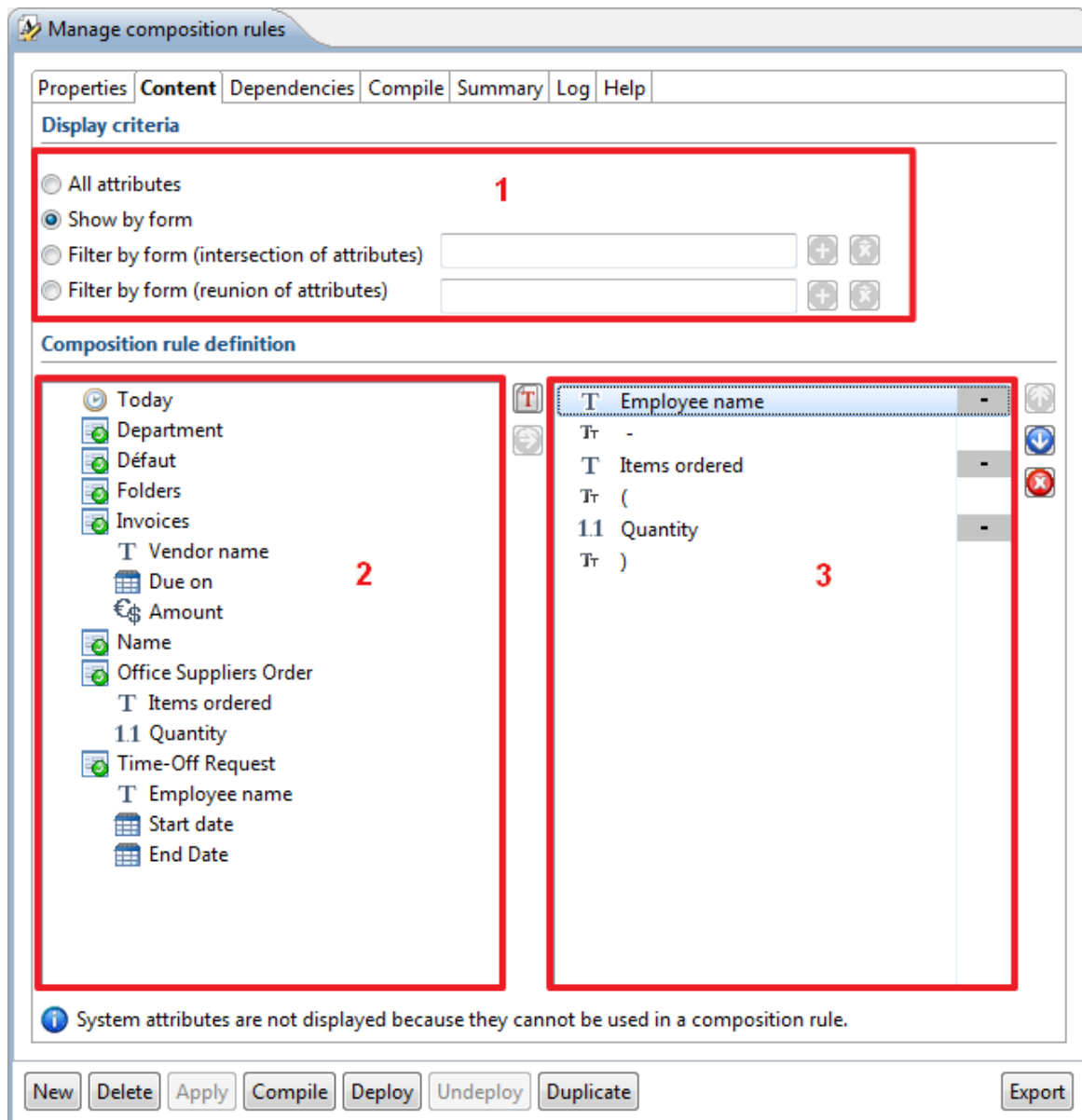
- The **Properties** tab allows you to display the main features of a composition rule: name, description and history.
- The **Content** tab allows you to define a composition rule, by affecting its attributes.
- The **Dependencies** tab allows you to view the objects used by a composition rule.
- The **Compilation** tab allows you to display the potential errors in a composition rule.
- The **Summary** tab allows you to display a summary of a composition rule.
- The **Log** tab allows you to view the list of all the operations performed on a composition rule, and to filter them according to some criteria.
- The **Help** tab allows you to access the contextual help.

“PROPERTIES” TAB

The **Properties** tab allows you to name or rename a composition rule (**Name** field), to type a description (**Description** field), to view the history of its deployed versions (**Deployment history** table), and to add the composition rule to a package (**Package** field).

“CONTENT” TAB

The composition rules editor is available in the **Content** tab of the **Manage composition rules** screen. It allows you to select the items to include in each rule, and to set their display order and format in the Web Client:



1. Frame allowing to filter the attributes that will be available in frame 2: this tool is particularly useful to avoid including attributes from different forms in the composition rule.
 - **All attributes:** When this option is selected, all the attributes of the database display in alphabetical order.
 - **Show by form:** When this option is selected, all the attributes of the database display as a list sorted by form.
 - **Filter by form (intersection of attributes):** When this option is selected, attributes are filtered: only the attributes contained in all the forms selected display.

- **Filter by form (reunion of attributes):** When this option is selected, attributes are filtered: attributes contained in **at least one** of the forms selected display.
2. Frame allowing to select the items of the composition rule;
 -  Button allowing to create a text item to include in the composition rule; to modify a text item, double-click it in the right frame;
 -  Button allowing to include in the rule the item currently highlighted in the selection frame;
 -  Besides database attributes, GARGANTUA offers a Today item: the current date is included or updated everytime the Web Client user creates or modify a production object.
 3. Frame allowing to set the display order and format of the different items;
 -  Button allowing to move the currently selected item upwards;
 -  Button allowing to move the currently selected item downwards;
 -  Button allowing to delete the currently selected item;
 -  Button allowing to set the display format in the Web Client for the selected item.

For date items, you can choose among the following display formats:

-  - The date displays as it was typed in the source attribute.
- **2000** - Only the part corresponding to the year displays, in aaaa format.
- **31/12** - Only the part corresponding to the month displays, in mm format.
- **31/12** - Only the part corresponding to the day displays, in j format.
- **31/Ab** - Only the part corresponding to the month displays, as text.
- **Ab/12** - Only the part corresponding to the day of the week displays, as text.

For text or list items, you can choose among the following display formats:

-  - Data display as they were typed in the source attribute.
- **ABC** - Data display in upper case, however it was typed.
- **abc** - Data display in lower case, however it was typed.
- **Abc** - Only the first letter displays. The original case is kept, however it was typed.
- **Abc** - Only the first 2 letters display. The original case is kept, however it was typed.
- **ABC** - Only the first letter displays. Data display in upper case, however it was typed.
- **ABC** - Only the first 2 letters display. Data display in upper case, however it was typed.
- **abc** - Only the first letter displays. Data display in lower case, however it was typed.
- **abc** - Only the first 2 letters display. Data display in lower case, however it was typed.

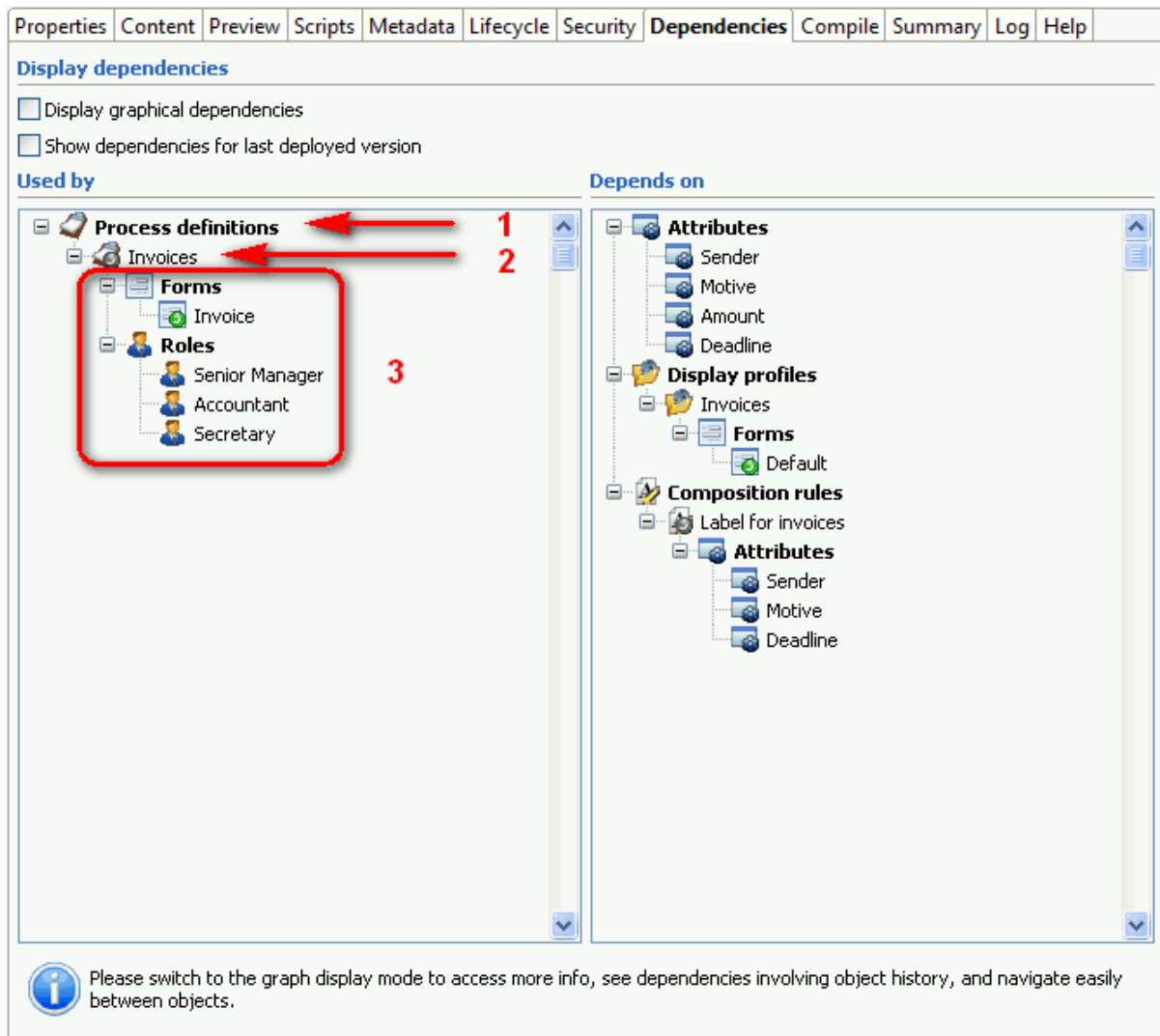
“DEPENDENCIES” TAB

The **Dependencies** tab allows you to know which other objects rely on or are used by the current design object.

DISPLAYING DEPENDENCIES IN LIST MODE

By default, dependencies are displayed in **list mode** and the **working copies** of the objects are taken into account.

Depending on whether the current object is used by and/or relies on other objects, dependencies are displayed in 1 or 2 columns. If there are 2, the objects that rely on the current object are listed in the left column, and the objects that are used by the current object appear in the right column:



The screenshot shows the 'Dependencies' tab in a software interface. The 'Used by' panel on the left displays a tree structure of objects. The 'Depends on' panel on the right displays a tree structure of objects. The 'Used by' panel shows 'Process definitions' at the top, followed by 'Invoices', 'Forms', and 'Roles'. 'Invoices' and 'Forms' are highlighted with red arrows and numbers 1 and 2 respectively. 'Roles' is highlighted with a red box and number 3. The 'Depends on' panel shows 'Attributes', 'Display profiles', 'Composition rules', and 'Attributes'. A message at the bottom says: 'Please switch to the graph display mode to access more info, see dependencies involving object history, and navigate easily between objects.'

1. Some objects in this category have dependencies to the current object.
2. This object has a dependency to the current object, that is the "Invoices" process uses the "Invoice" form.
3. Here is the list of all objects that have a dependency to the "Invoices" process.

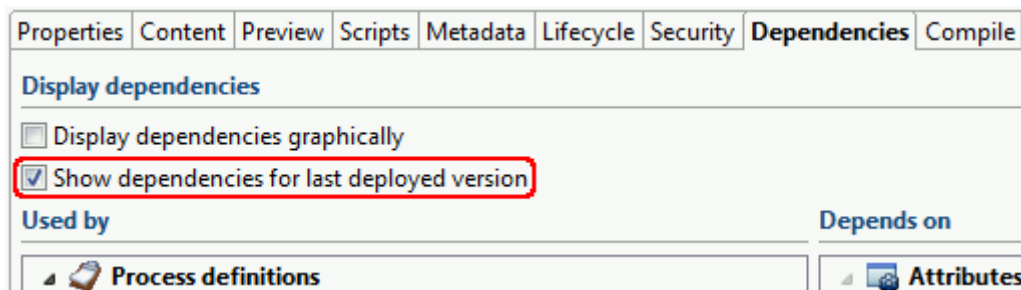
In the dependencies analysis screens as well as everywhere else in the interface, the  icon indicates whether an object is currently deployed and, if so, whether the deployed version is identical to the working copy:

- No icon - The object is not deployed.
-  - The object is deployed and there is no difference between its last deployed version and its working copy.
-  - The object is deployed but its last deployed version is not identical to its working copy.

WHAT IS THE “SHOW DEPENDENCIES FOR LAST DEPLOYED VERSION” OPTION FOR?

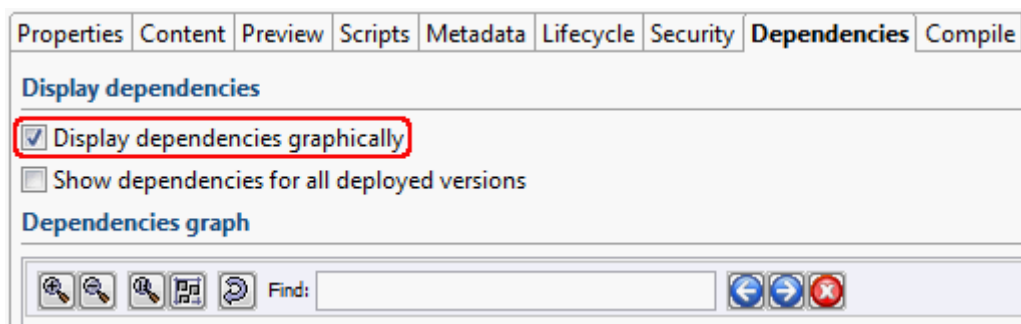
By checking the **Show dependencies for last deployed version** checkbox, you can choose to display the dependencies for the version of the object that is currently deployed, instead of the dependencies for the working copy.

This option is only available in list mode, for objects that support the **Deployment history** feature:

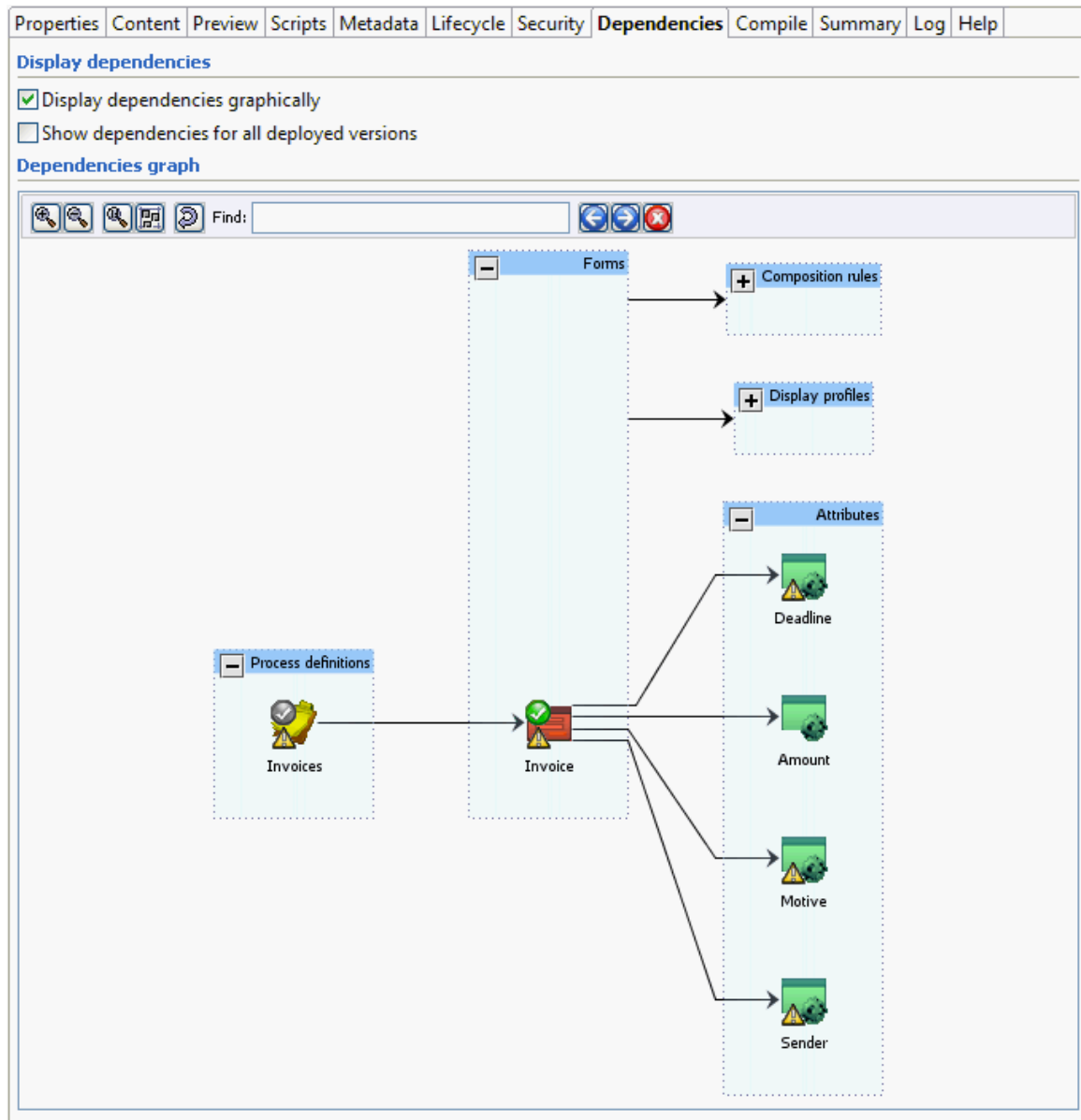


DISPLAYING DEPENDENCIES GRAPHICALLY

In order to switch from the list mode to the graphical display, check the **Display dependencies graphically** option:



The dependencies between the working copies of the various objects now take the form of a graph:



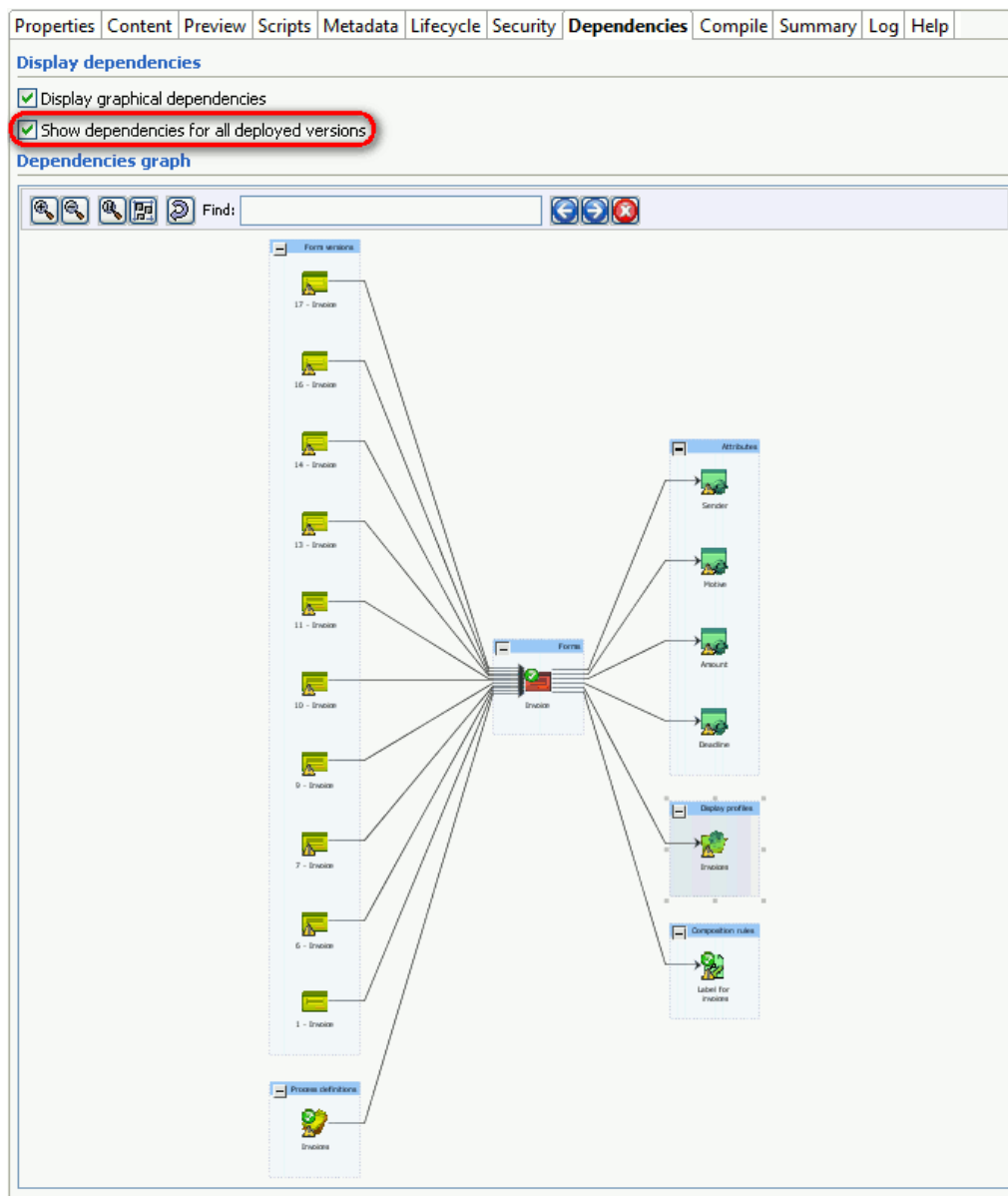
The toolbar above the graph allows you to:

- - Enlarge the graph;
- - Make the graph smaller;
- - Restore the default size for the graph;
- - Optimize the size of the graph;
- - Refresh the graph;
- Find: - Search the names of the objects in the graph for a particular string; the objects that match the search criterion are highlighted in pale blue;
- - Navigate between the objects that contain the search string;
- - Reset the search results so that no more objects are highlighted.

WHAT IS THE “SHOW DEPENDENCIES FOR ALL DEPLOYED VERSIONS” OPTION FOR?

If you check the **Show dependencies for all deployed versions** box, the dependencies graph will include all previously deployed versions of the objects, instead of just their working copies. If the current object supports the **Deployment history** function, then the list of all its previously deployed versions will also appear in the graph.

This option is only available when dependencies are displayed graphically:



“COMPILATION” TAB

The **Compilation** tab makes it possible to diagnose and solve errors and inconsistencies before an object is published. This feature is also available at database level, so that all objects can be compiled in a single move.

HOW AND WHEN TO USE THE GARGANTUA COMPILER

Before you deploy or redeploy a design object, you need to compile it in order to solve any potential errors or problems:

1. Click the name of the object you want to deploy in the left pane of the Administration Tool - or the name of a database, if you want to deploy all the objects it contains in a single move.

The corresponding management screen appears in the right pane.

2. In the lower part of the right pane, click the **Compilation** button.

The Compile tab opens and a list of messages appears.

3. If the list only contains success and/or information messages (see [Structure of the messages list](#)), you can proceed and deploy the object.

On the other hand, if the list contains error and/or warning messages (see [Structure of the messages list](#)), you must solve the corresponding problems before you deploy the object.

STRUCTURE OF THE MESSAGES LIST

The list of the compiler's messages contains the following information:

Properties	Assignments	Compile	IP Filters	Storage rules	Log	Database logging options	Help
3 errors, 2 warnings, 3 infos							
		Invoices by Sender : Incorrect criteria combinations (multiple actual objects for folders and/or processes)					
		Invoices					
		Invoices : The role assigned to this process is not assigned to the database					
		Invoices : Unlinked cancel thread					
		Validation					
		Finance : The database is using the default storage. It is recommended that each Gargantua database use one or more dedicated storage areas, not the system default. You should create these storage areas and rules that make use of them. You cannot disable this message, only make it a warning.					
		Invoices by Sender : No actor(s) assignment(s) to view (the view is not public)					
		Invoices : No planner selected					
		Invoices : Expected an identifier and instead saw 'var'					Line: 2
		Invoices : Stopping, unable to continue (50% scanned).					Line: 2
1	2	3	4	5			

- Icons indicating the type of each message:



- Success;



- Information;



- Warning;

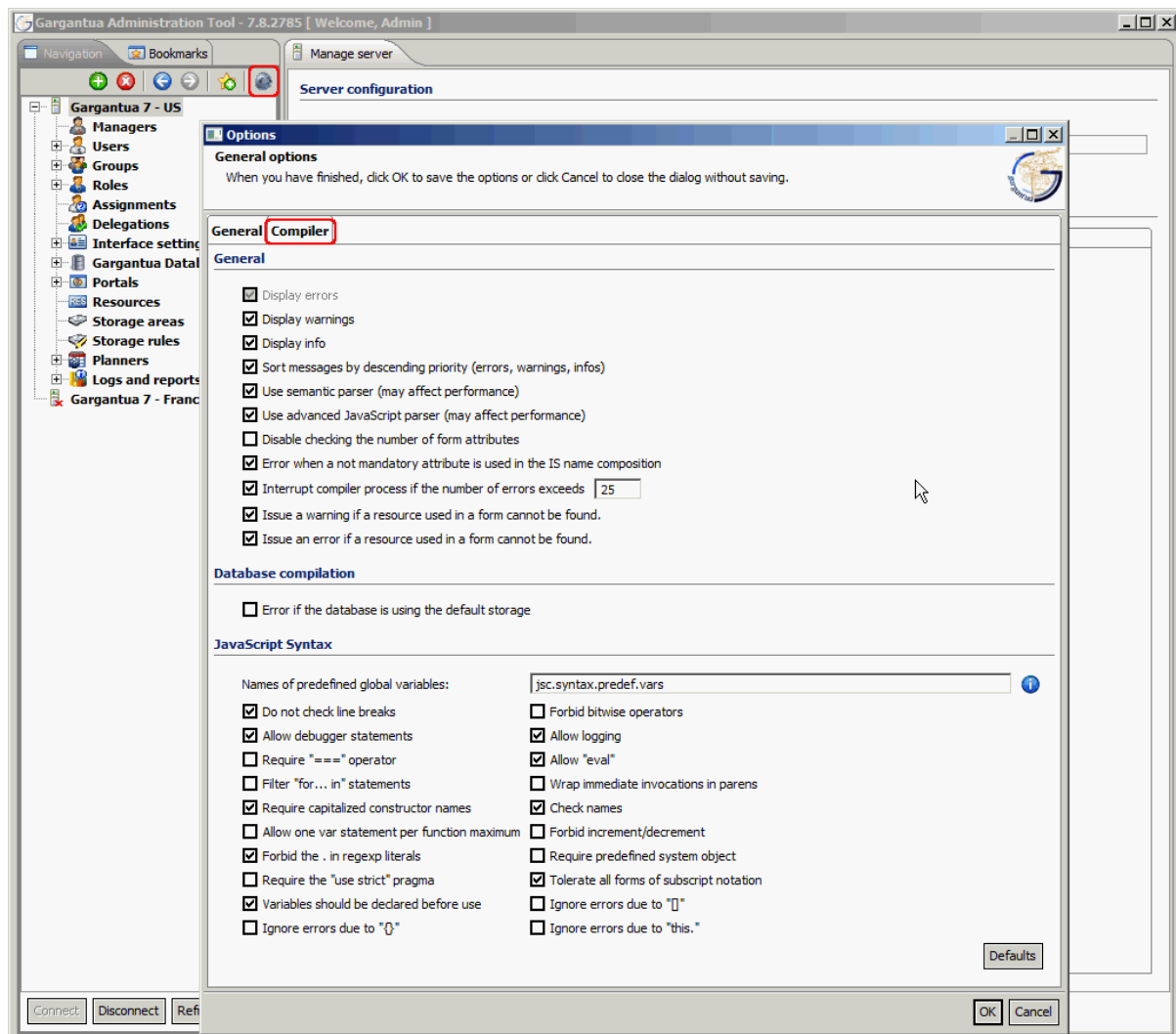


- Error;

- Icons indicating the type of the objects the messages are about;
- Links leading to the management screens where the problems can be solved;
- Details about the current problem;
- If the object is a script, line where the problem occurs.

CUSTOMIZING THE COMPILER'S BEHAVIOR

If you wish, you can customize the messages list (order, contents...) and the behavior of the JavaScript parser with the help of the **Options** dialog:



See the “General – Connection to Server” chapter of this manual for more information on the different options available.

“SUMMARY” TAB

The **Summary** tab allows you to display a summary of an item that presents its main features, like its manager, form, priority, content, etc.

The **Summary** tab is particularly helpful to have a general insight of the item, without having to browse through each tab.

The **Summary** tab also has a saving option in PDF format, which allows to view the summary of an item without

the GARGANTUA Administration tool.

“LOG” TAB

The **Log** tab allows you to view a list of all the operations performed in one of the branches of GARGANTUA Administration Tool.

You can filter your search through the following criteria:

- Start date, end date;
- User;
- Operation.

To filter by dates:

1. Fill in the date from which you want to view the operations performed, in the **Start date** field.
2. Fill in the date until which you want to view the operations performed, in the **End date** field.
3. Click on **Display**.

The list of the operations performed between the two dates is displayed in the **Log entries** field.



You can also click on the “Week audits”, “Month audits”, “Year audits” and “All audits” icons, so as to view the operations performed in larger periods of time.

To filter by users:

1. Click on the magnifying glass, close to the **User** field.
2. Fill in the user name from whom you want to view the performed operations.
3. Click on **Display**.

The list of the operations performed by the user is displayed in the Log entries field.

To filter by operation:

1. Click on the arrow of the **Operation** field.
A list of the possible operations is displayed.
2. Click on the type of operation desired.
3. Click on **Display**.

The list of the operations performed in relation with the selected type of operation is displayed in the **Log entries** field.



You can tick the “Show login/logout events” box to display the users connections and disconnections. This functionality is only available for the “Users” and “Server log” branches.

You can tick the “Only Show error audits box” to only display the failed operations.



The “Reset” button allows you to cancel the last filtering.

You can also export the list of the performed operations, in .csv format.

To export a list of the performed operations:

1. Generate a list, depending on the previous criteria.
2. Click on the **CSV Export** button.
3. Choose the place where you want to save the export.
4. Click on **Save**.

You have exported a list of the performed operations.

MANAGING COMPOSITION RULES

DEPLOYING A COMPOSITION RULE

Like most production objects, composition rules have three different status:

-  - The rule has not been deployed yet. It is not used by any deployed version of a database form.
-  - The latest deployed version of the rule is identical to the working copy currently saved displayed in GARGANTUA Administration Tool.
-  - The latest deployed version of the rule is different from the working copy currently saved displayed in GARGANTUA Administration Tool.

When a form depending on a composition rule is deployed or redeployed, the rule is automatically deployed or redeployed too. However, it may be useful to deploy composition rules manually in order to:

- Manage more accurately the deployment history;
- Compile rules and make sure they do not contain any error before using them in forms;
- See clearly which forms are impacted by the modification of a given rule: they get the  icon when redeploying the rule.

To deploy or redeploy a composition rule, proceed as follows:

1. In the left pane of GARGANTUA Administration Tool, expand the sub-branch corresponding to the database of your choice.
2. Click the name of the composition rule to deploy.

The composition rule management screen displays in the right pane.

3. At the bottom of the right pane, click the **Compilation** button.

The **Compilation** tab displays.

4. If the **Compilation** tab contains error or warning messages, solve the problems first: you cannot deploy the composition rule as is.

If the **Compilation** tab does not contain any error or warning messages, go to the next step of this procedure.

5. At the bottom of the right pane, click the **Deploy** or **Redeploy** button.

If this is the first time that this rule is deployed, the procedure is complete.

Otherwise, the **Deploy object** dialog displays: perform the next steps of this procedure.

6. If you want to keep a backup of the former version of the composition rule, select the **Create new object version** radio button. You can add a comment allowing you to identify later the new version that

you are about to create.

Otherwise, select the **Override current version** radio button: the former version of the composition rule will be replaced by the version you are about to deploy.

7. When you are finished, click **OK** to close the dialog.

The **Properties** tab displays: the new version of the composition rule has been deployed.

UNDEPLOYING A COMPOSITION RULE

To undeploy a composition rule:

1. Make sure that the rule is not used by any deployed version of a database form, or you will not be able to undeploy it.
2. In the left pane of GARGANTUA Administration Tool, click the name of the composition rule to undeploy.

The composition rule management screen displays in the right pane.

3. In the lower part of the right pane, click the **Undeploy** button.

The  icon displays next to the composition rule name in the left pane of the Administration Tool: the composition rule deployment has been cancelled.

DUPLICATING A COMPOSITION RULE

If you want to create two similar composition rules, GARGANTUA allows you to work on one, and then to duplicate it. Then, you only need to apply the necessary modifications to the copy.

To duplicate a composition rule:

1. In the left pane of GARGANTUA Administration Tool, click the name of the composition rule to duplicate.

The composition rule management screen displays in the right pane.

2. In the lower part of the right pane, click the **Duplicate** button.

A new composition rule named “xxx (1)” displays in the left pane of the Administration Tool.



Note that the management screen displayed in the right pane still refers to the composition rule that you have just duplicated. The copy's management screen does not open automatically.

3. In the left pane, click the name of the new composition rule.

The corresponding management screen displays in the right pane.

4. Apply the necessary modifications in the **Properties** and **Content** tab, and click **Apply**.

The composition rule has been copied and saved.

EXPORTING A COMPOSITION RULE

GARGANTUA allows you to export one or more composition rules as .sxa archives, in order to import them later into another database or onto another server.

Proceed as follows:

1. In the left pane of GARGANTUA Administration Tool, expand the sub-branch corresponding to the database of your choice.
2. Click the **Composition rules** sub-branch.

The **Manage composition rules** screen displays in the right pane.

3. In the bottom right corner of the right pane, click the **Export** button.

A dialog allowing to select the objects to export displays.

4. In the **Object** column of the dialog, check the checkboxes corresponding to the composition rules that you want to export.
5. In the **History** column, check the checkboxes corresponding to the objects for which you want to export not only the version currently deployed, but also the history of former versions.
6. Click **OK** to close the dialog.

The file explorer displays.

7. Browse to the local or remote folder where you want to save the .sxa export, and click **Save**.

A confirmation message displays.

8. Click **OK**.

The .sxa export has been saved on your disk.

IMPORTING A COMPOSITION RULE

To import one or more composition rules in the .sxa format into a database:

1. In the left pane of GARGANTUA Administration Tool, expand the sub-branch corresponding to the database of your choice.
2. Click the **Composition rules** sub-branch.

The **Manage composition rules** screen displays in the right pane.

3. In the bottom right corner of the right pane, click the **Import** button.

The file explorer displays.

4. Browse to the folder where you have saved the .sxa archive, and click **Open**.

A dialog allowing to select the objects to import displays.

5. In the **Object** column of the dialog, check the checkboxes corresponding to the composition rules that you want to import.
6. In the **History** column, check the checkboxes corresponding to the objects for which you want to import the history of former versions.
7. If you want to override the composition rules of the target database that have the same name as imported rules, check the **Overwrite** checkbox.

Otherwise, leave the checkbox unchecked. The rules imported will be renamed as “xxx **(1)**” if rules with the same name already exist in the database.

8. Click **OK**.

A confirmation message displays.

9. Click **OK**.

The operation has been done. The rules imported are now available in the database.

DELETING A COMPOSITION RULE

To delete a composition rule, proceed as follows:

1. Make sure that the rule is not used by any deployed version of a database form, or you will not be able to delete it.
2. In the left pane of the GARGANTUA Administration Tool, expand the sub-branch corresponding to the database of your choice.
3. Click the name of the composition rule to delete.
4. In the bottom right corner of the right pane, click the **Delete** button.

A warning message displays.

5. Click **Yes**.

If the composition rule is not used in any form, it disappears from the navigation tree of the left pane: the procedure is complete.

If the composition rule is used by the working copy of one or more forms, a warning message displays: click **OK**. The **<Unknown>** value will now display in the properties of the attribute where the rule was used:

Property	Value
mandatory	no
composition rule	<Unknown>

If the composition rule is used by one or more deployed versions of forms, an error message telling you that you cannot delete it displays: click **OK**.