



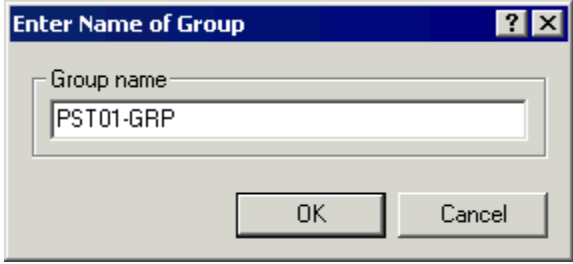
Exercise: Work with the Group Object

Create a Family of Linked Group Objects

Purpose Learn how to create a family of linked group objects and how to update the group objects simultaneously and dynamically.

For this exercise, we use the IGSS Demo project.

Task 1: Create three linked Groups and show them on the same diagram

Step	Action
1	<p>In Definition go to the File menu and near the bottom click on the demo.elm file to open the Demo project.</p> <p>In the Plants area, open the Wastewater treatment diagram and click on the Pump Station button.</p>
2	Select all objects on the diagram.
3	<p>In the Edit menu, select Group Manager and create a new group called PST01-GRP.</p> 



4 On the **Members** tab, click the **Add Selected Objects** button.

Group Manager [?] [X]

PST01-GRP [v] New Group... Rename group Delete Group...

Description: Break Heritage! Export... Copy

[]

Members Paste Options

Object	Type	Object	Area of o...	Diagram
[-] PST01-GRP				
[-] Global				
[-] Plants				
Object	Object	PST01-graph	Plants	
Object	Object	PST01-P1stop	Global	
Object	Object	PST01-P1reset	Global	
Object	Object	PST01-conn.	Global	
Object	Object	PST01-P2reset	Global	
Object	Object	PST01-Level	Global	
Object	Object	PST01-LevelTotal	Global	
Object	Object	PST01-LevelYest	Global	
Object	Object	PST01-P1	Global	
Object	Object	PST01-P2	Global	
Object	Object	PST01-A1	Global	
Object	Object	PST01-A2	Global	
Object	Object	PST01-A3	Global	
Object	Object	PST01-A4	Global	
Object	Object	PST01-A5	Global	
Object	Object	PST01-A6	Plants	

Owning diagram: [None] [v] Click browse to drag objects from the object browser

[] To Portal Show Remove Browse

Add Selected Objects Add Selected References

[] On top Close



- 5 On the **Paste Options** tab, do the following:
- Under **Modify name**, select the **Enable** check box.
 - In the **Naming convention** field, type **PST##-***
 - Select the **Exclude templates from substitution** check box
 - Under **Modify address mapping**, select the **Node** check box

Group Manager [?] [X]

PST01-GRP [New Group... | Rename group | Delete Group...]

Description: [Break Heritage! | Export... | Copy]

[Members | **Paste Options**]

Object Modification Options

Modify name

Enable Wild cards: ? match any single char.
* match any number of char.
substitute one char.
@ substitute any number of char.
[xx] substitute xx with any number of characters

Naming convention [PST##-*]

Exclude templates from substitution.

Modify object descriptions as well.

Substitutes [] [] []

Modify address mapping

Driver Data group

Node Word offset

Bit offset

When pasting this group you will be prompted for the options selected in this dialogue

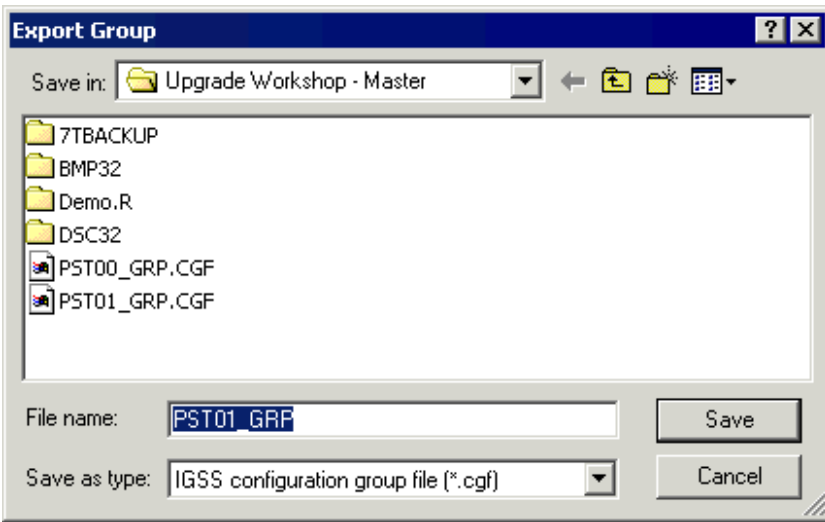
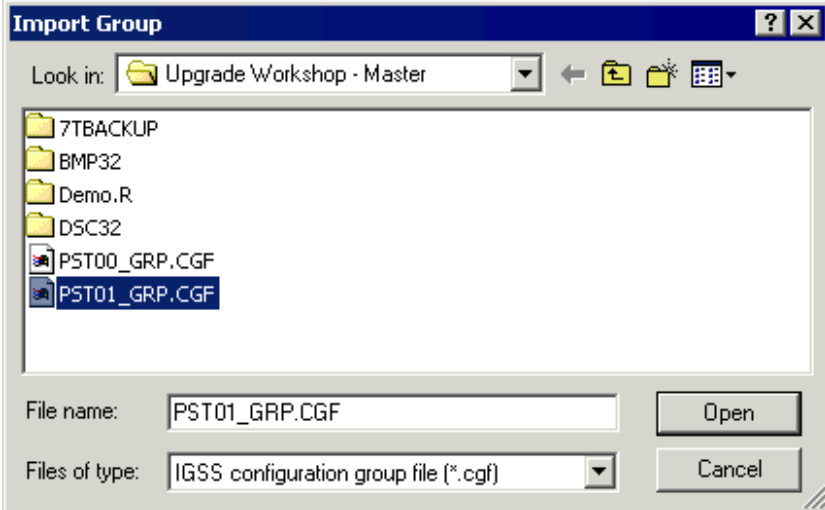
[Modify Current Group...]

Paste/reimport Objects only (no descriptors)

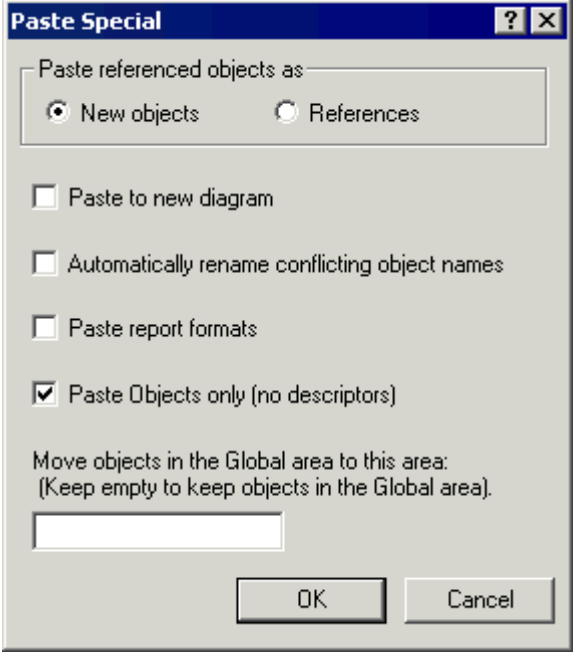
Do not paste the group itself.

On top [Close]

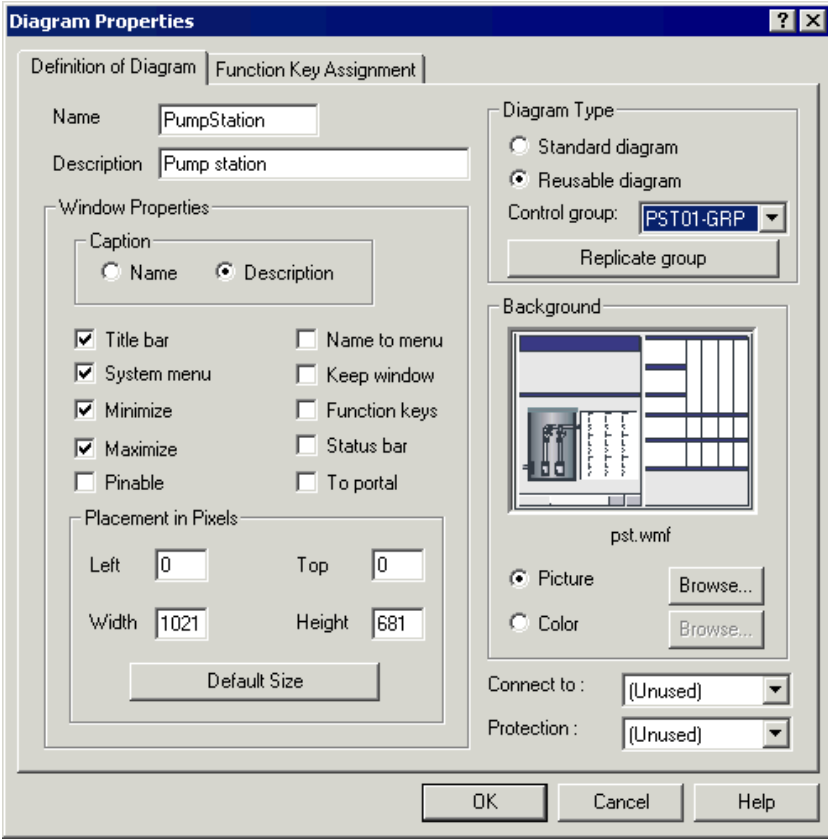


<p>6</p>	<p>Click the Export button and name the file PST01-GRP.cgf.</p> 
<p>7</p>	<p>In the File menu, select Import.</p> 

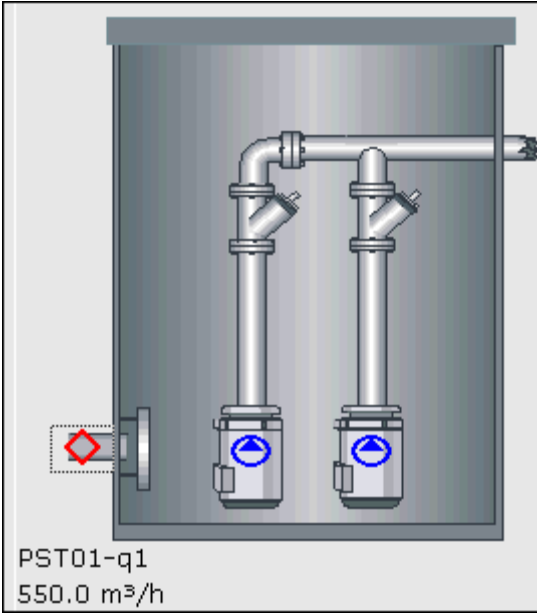


<p>8</p>	<p>In the Paste Special dialogue, do the following:</p> <ul style="list-style-type: none"> • Make sure that New objects is selected • Select the Paste objects only check box • Clear all other check boxes • Click OK. 
<p>9</p>	<p>In the Modify Options of Group Members dialogue, do the following:</p> <ul style="list-style-type: none"> • In the Substitutes field, type 02. • In the Node field, type #2 to assign node no. 2 to all objects in the group.
<p>10</p>	<p>Repeat steps 7 – 9 now using 03 as object name substitute and #3 as node substitute.</p>
<p>11</p>	<p>Right-click the diagram and select Properties.</p>



<p>12</p>	<p>Do the following:</p> <ul style="list-style-type: none"> • Select the Reusable diagram option • Select PST01-GRP as control group • Click OK. 
<p>13</p>	<p>Press F5 to refresh the diagram.</p> <p><i>RESULT:</i> The three groups now appear. Select PST02-GRP and see how the object names change on the diagram.</p>
<p>14</p>	<p>Press F5 again and this time select PST01-GRP.</p>



<p>15</p>	<p>Add a new object to the diagram named PST01-q1 to match the name convention. Place it as shown below.</p>  <p>PST01-q1 550.0 m³/h</p>
<p>16</p>	<p>Select the symbol and activate the Group Manager dialogue.</p>
<p>17</p>	<p>Select the group PST01-GRP and click the Add Selected Objects button.</p>
<p>18</p>	<p>Click the Export button and overwrite the existing file, PST01-GRP.cgf.</p>
<p>19</p>	<p>In the File menu, select Reimport. All three groups will be selected. Accept the default settings and click OK.</p>
<p>20</p>	<p>Press F5 to refresh the diagram and select PST02-GRP.</p> <p><i>RESULT:</i> The new object PST02-q1 appears at the position where you placed the new object. The same goes for the group PST03-GRP where PST03-q1 has been created.</p>

YOU HAVE SUCCESSFULLY COMPLETED THE EXERCISE.