### What's New 6.3

The third update to Enterprise Dynamics 6.0 contains a lot of small issues that have been solved. However we have also implemented many new things.

#### **Atoms**

- 1: The <u>MultiTransform</u> atom did not put the names of the labels in the transform table correctly. This has been fixed.
- 2: The <u>Function Editor</u> atom did not properly update edited functions. This has been corrected.
- 3: The <u>Operator</u> atom set the wrong status when called to perform a task. This lead to wrong results in the <u>Report</u> atom. This has been fixed.
- 4: The <u>ArrivalList</u> atom did not set the correct column headers the first time the <u>Edit list</u> popup menu was selected. By setting the basic dimensions of the table at the <u>OnCreation</u> event handler this has been fixed.
- 5: If you selected a status pie graph a message appeared if you wanted to update the atom. This is corrected by modifying the kernel.fnc status pie function.
- 6: The first option of the <u>Database Connection</u> atom <u>Select</u> database from file pointed to a non-existing directory. At default it will now open the Enterprise Dynamics program directory.
- 7: The <u>Warehouse</u> atom was not correctly visualized in 3D. This has been modified.
- 8: The AVI Creator atom did not work properly. This has been fixed. It is now even possible to save the animation of a 2D animation window.
- 9: The <u>Node</u> atom did not display the path speed label correctly. This has been fixed.
- 10: The <u>Dispatcher</u> atom has been modified to correct a problem with the <u>Advanced Transporter</u>. The load restriction <u>Same</u> <u>Container</u> did not function properly.
- 11: The <u>Team</u> atom has been fixed. The call for operators was not prioritized correctly.
- 12: The <u>Data Recorder</u> atom contained a division by zero error when you wanted to write data to Excel. This error has been corrected. It is now also possible to use multiple <u>Data</u>

  Recorder atoms in your model and write data to multiple worksheets.

#### **Engine**

- 1: If you used the 4DScript function <u>SetFramesPerSecond</u> and you set the value to 0 a division by 0 error occurred. This has been corrected.
- 2: The <u>Atom Editor</u> now contains an additional property in the spatial tab sheet.
- 3: The 2D Visualization tab in the <u>Preferences</u> window now allows you to switch off the capability to edit your 2D animation window when the grid is switched off.
- 4: The speed with which Enterprise Dynamics is capable of dealing with labels has been increased with 250%.
- 5: A number of drawing functions can now be displayed with a

- transparent color (ColorTransparent).
- 6: The <u>DrawCircle</u> and <u>DrawEllipse</u> functions have 2 additional optional parameters to display only a portion of the entire circle or ellipse.
- 7: A bug was detected in the 4DScript editor when you pasted text from another program. This has been fixed.
- 8: The <u>Scale</u> function had a wrong internal reference, which caused multiple animation windows to display icons at the wrong zoom size.
- 9: With the new 4DScript function <u>SpeedbarPositionInfo</u> it is possible to change the location of a speed bar.
- 10: The Atom tab sheet in the <u>Atom Editor</u> now contains a flag to force an atom to execute the <u>OnCreation</u> event handler when a model is loaded.

# 4DScript

- 1: 2 new functions are created: <u>SetNumberOfRandomGenerators</u> and <u>NumberOfRandomGenerators</u>. With these functions it is possible to set the number of active random generators (default 1,000) and to obtain the current number of random generators. The maximum number of random generators is 2,147,483,646.
- 2: It is now possible to check for the end of a file via 4DScript using the function <u>EOF</u>.
- 3: 6 new functions are available to push and pop an atom pointer, string, or value to a stack: <a href="PopAtomPointer">PopAtomPointer</a>, <a href="PopValue">PushValue</a>, <a href="PopString">PopString</a>, and <a href="PopString">PushString</a>.
- 4: To create and remove a directory 2 new functions have been created: CreateDirectory and RemoveDirectory.
- 5: Some color constants are added: <u>ColorBrown</u>, <u>ColorOrange</u>, and ColorTransparent.
- 6: Some new visualization settings have been added: <a href="mailto:sa3DModel">sa3DModel</a>, <a href="mailto:sa8DModel">sa8DModel</a>, <a href="mailto:sa8DModel">sa8DModel</a>, <a href="mailto:sa8DModel">sa8DModel</a>, <a href="mailto:sa8DModel">sa8DModel</a>, <a href="mailto:sa8DModel">sa8DModel</a>, <a href="mailto:sa8DModel</a>, <a href="mailto:sa8DModel">sa8DModel</a>, <a href="mailto:sa8DModel</a>, <a href="mailto:sa8DModel">sa8DModel</a>, <a href="mailto:sa8DModel</a>, <a href="mailto
- 7: The functionalities of the <u>RegisterIcon</u> function have been expanded to be able to use movies instead of images only.
- 8: The functions <u>RegisterFunction</u> and <u>Dim</u> have been changed so that they will register a function or a variable immediately. You don't have to register the function or variable via the 4DScript Interact window anymore to use the function or variable at once.
- 9: The function <u>RegisterFunction</u> has an alternate syntax, which makes the created functions better readable.
- 10: The function <u>BindEvent</u> and <u>UnbindEvent</u> now have some additional parameters for more event control.
- 11: The functions <u>CreateAtom</u> and <u>CreateAtomCopy</u> have an optional parameter <u>e5</u> with which you can set if the <u>OnCreation</u> event handler should be executed when a simulation model is loaded.
- 12: A new constant is introduced <u>saDontSaveLabels</u> with which you can set (via the <u>SetSetting</u> function) if the labels of an atom need to be saved in a simulation model or not.
- 13: The function <u>RegisterFunction</u> has an additional optional parameter with which you can avoid error messages in the error window if the implementation of the function you want

to register contains an error.

14: You can now use the function <u>Error</u> to display a message in the <u>Error window</u>.

## Help

- 1: Some minor errors in the help have been fixed (e.g. <u>diText</u>, <u>Cylinder</u>).
- We have added a section in the help file in which the various windows of Enterprise Dynamics are explained.
- 3: The following functions did not mention the possibility to use them in the <u>On2DDraw</u> event handlers (they only described their use for the <u>On3DDraw</u> event handlers: <u>PopCoords</u>, <u>PushCoords</u>, <u>RotateCoords</u>, and <u>TranslateCoords</u>. This has been fixed in the Help.