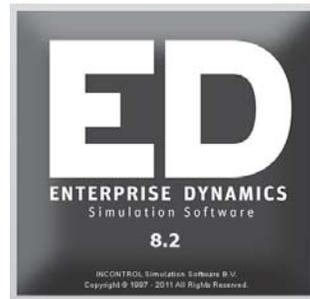


Enterprise Dynamics 8.2 Highlights



INCONTROL
Simulation Solutions

Enterprise Dynamics 8.2



With the introduction of Enterprise Dynamics 8.2 we continue to offer a simulation product that is developed for you: the user. We have implemented a lot of new features and expanded existing functionalities based on user requests. The “What’s New” list comprises functionalities in the simulation engine itself, the atoms that you use to develop your simulation models and the introduction of the free Enterprise Dynamics Viewer.

Visit our website <http://community.incontrolsim.com> to join the Enterprise Dynamics Community. The ED Community is the source for users to share experiences, ask questions to your peers and to us, and a source of many examples.

Enterprise Dynamics 8.2 is not just software. Enterprise Dynamics offers you a simulation product that is widely used in industry and academic institutes worldwide. We offer simulation training programs that go beyond the level of knowing the function of each button; we train in gaining simulation knowledge. Our JIRA support system is a knowledge base for people searching for information on specific functionalities with our response attached to it (including solution, work-around, fix version, etc.). To top all that our first class ED Community allow users to discuss Enterprise Dynamics between peers. We encourage simulation professionals to participate in the discussions and to share their best practices.

Students and academics are invited to visit our targeted academic website <http://www.incontrolsim.com/academy> which contains many resources of information, test cases, and tutorials.

Join the Enterprise Dynamics® Community

The Enterprise Dynamics simulation community is for all our users. Register today to get started.

ED Academy

Read about the latest developments of ED Educational and get inspired by the simulation projects performed by students and researchers around the world.

Free Enterprise Dynamics Viewer

Sometimes you just want to share your simulation model with other users. The obligation to purchase a license when you want to share your model with somebody can sometimes prohibit this wish.

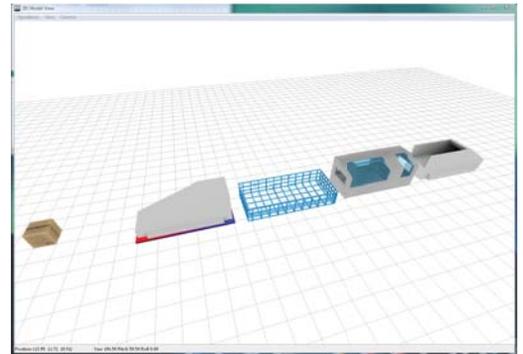
Enterprise Dynamics now has a free viewer version available. This version allows a user to load and run a simulation model. No new atoms can be added to the model and model parameters cannot be changed, but the viewer allows you to see the simulation run in 2D and 3D. It allows the user to zoom in on specific parts of the simulation model and see and analyze the results. The viewer even allows you to load your own customized atoms that are used in your simulation model.

Download the free Enterprise Dynamics Viewer from: <http://www.incontrolsim.com/viewer>

3D Modeling

Enterprise Dynamics 8.2 allows you to develop or change your simulation model from the 3D environment. This will allow users to fit the 3D visualization of the simulation model exactly to reality with much more ease.

You can still hover through the 3D visualization like in previous versions of Enterprise Dynamics, but by pressing the CTRL button or CTRL+SHIFT buttons you enter the atom-positioning mode. For easy modeling we have also added a dynamic grid that will always be in the center of your modeling viewpoint. This will make positioning atoms as easy as possible.



GUI Builder

The Enterprise Dynamics GUI Builder allows the simulation designer to develop his or her own user forms. These forms can be used as input forms for atoms or serve as status windows, monitors, model wizards, etc.

With each version of Enterprise Dynamics we add functionalities to the GUI Builder based on user needs and industry standards. In Enterprise Dynamics 8.2 we have added a new 3D Icon component with which you can display a preview of 3D models.

With this 3D icon control in combination with some new 4DScript commands to check width, height, depth and many other 3D object properties you are able to develop your own customized 3D resource manager. We have also added more properties and events for specific controls that you can use for further customization of your user forms.



Recording movies

A number of users want to record their 3D visualization in a movie. We have now made it possible to set the recording codec in advance so you don't have to wait anymore to set the codec to the moment the actual recording starts.

This will allow users to prepare a movie in advance. Set the recording start and end time and the fly path and let the high quality recording of the movie run overnight without waiting for the actual start time of the recording to set the codec.

UDP messages

UDP messages can now be sent and received through a new series of GUI Builder components:

- UDP Client
- UDP Server
- UDP Anti Freeze

These components allow you to respond to UDP messages from external sources. You can set how to respond internally in Enterprise Dynamics and which message you want to send back, if any.

The components work outside the normal event scheduling of Enterprise Dynamics to allow you to respond to these messages at any desired time. You can set host and port where appropriate to have control to which UDP messages you need to respond and you can use the new UDP components parallel from each other to define specific behavior for each host and port combination.

2D visualization functions

We have added numerous 4DScript functions and new optional parameters to existing functions to give you more control and freedom in the 2D environment. You can now add 2D polygons, set an inner radius in an ellipse and set the transparency color.

This gives the simulation developer more freedom and flexibility in the creation of an appealing 2D visualization for atoms.

We have also added the possibilities to obtain the properties of registered 2D visualization objects in the resource manager.

Unique naming in library

Although an atom name does not have to be unique in Enterprise Dynamics we have added a warning when an atom is loaded into the library of which the name is already used by another atom.

This feature is added to accommodate new users and users experienced with other simulation products.

Only atoms loaded in the atom editor or library are checked on existing names. When atoms in a model have the same name the warning is not displayed.

Atom property forms revised

All atom property forms have had a revision to modernize and standardize them in appearance and use. In this way the atom property forms use the enhancements made in the GUI Builder and enhance the user-friendliness of Enterprise Dynamics.

Release Notes

A list of all issues covered in the development of Enterprise Dynamics 8.2 can be found below. We have listed them in several categories for easy reference and you can find the details of all these issues in our online support tracking system JIRA. Visit <http://support.incontrolsim.com/> to login to JIRA.

Major Issues

	New free Viewer engine license available for download at www.incontrolsim.com
APP-159	Create 3D Modeling Functionality
ED-392	New GUI properties and events
ED-509	Choose codec when recording .avi in advance
ED-503	Support for UDP Communication
ED-464	Draw polygon in 2D
ED-469	2D ellipse
ED-520	Atom naming collision detection for libraries
APP-226LOG-133	Standard GUI's revision required
APP-252	The new 3D Visualization features for the Status Monitors should be added to the other diagrams

New Features

APP-248	XML Example misses connect feature
APP-268	CreateExcelActiveX_ReadText and _WriteText functions.
APP-114	Select all atoms in Report atom
APP-143	Create a new atom that displays an image depending on user requirements.
ED-375	Display channel connections in atom editor
ED-430	GUI Component 3Dicon
ED-468	Inner radius parameter drawcircle
ED-471	Shortcut F3 for "search again" and shift F3 for "search previous" in the function editor
ED-472	Interact improvement functions
ED-478	Wish to have the functions: clear cell, clear row, clear column
ED-484	Sorting of two columns at once does not work correctly
ED-497	Obtaining more information from resource manager using 4D script
ED-504	Possibility to convert atoms in a model
ED-516	Refresh View Atom Labels during run.
ED-519	Ability to switch the colors on or off in the editor

Improved Atoms

APP-150	Changing "Atom Name" in GUIs of status atoms does not take effect
APP-156	Composition Container incorrectly connects channels on Copy or Daughter
APP-206	Table Atom copy-paste results in lost alias functions of original
APP-229	Continues evaluation of Lock atom does not allow triggering atom reference
APP-240	Condition Control condition not always fires action on true/false
APP-244	Empty setuptime of server results in error that cannot be solved through GUI.
APP-246	ExcelActiveX_Read and ExcelActiveX_Write do not work if you leave out the optional atom reference
APP-247	Socket Send executes 4DS twice
APP-249	Inviewfield points in composition container are not always defined correctly
APP-250	User Events Atom saves in top of Modeltree
APP-258	Initialize atom does not work properly
APP-263	Excel ActiveX Read Block does not read values when the system uses a comma separator
APP-269	Reading empty cells from Excel with the ExcelActiveX atom results in a cell with a space in the table.
APP-279	Predefined logic of the data recorder is incorrect.
APP-253	The new Monitors should be resizable in the 2D Model View using the mouse
APP-254	Modernization of the Monitor atom
APP-256	Source and Sink 2D visualization differs from 3D visualization
APP-262	Add monitoring functionality to Histogram atom and create predefined logics to generate segments.
LOG-32	Advanced transporter and battery charging station: bugs and improvements
LOG-121	Advanced Transporter: access violation with reference to prevatom in function AdvancedTransporter_Event6
LOG-125	Category TRANSPORT: Subcategory RAILBOUD: Transfer Car: Subatom Transfer Stations: Color not changeable

LOG-127	Category TRANSPORT: Subcategory RAILBOUD: Transfer Car: Subatom Transfer Stations: Trigger (Entry and Exit) not active
LOG-128	Category TRANSPORT: Subcategory RAILBOUD: Transfer Car: Subatom TransferCar StorageUnit: Trigger (Entry and Exit) not active
LOG-139	Portal Crane: GUI: Detailed Movements sheet show numbers instead of describing text
LOG-142	Operator GUI component shifted
LOG-143	Conveyor functions cannot distinguish advanced conveyors (from regular conveyors)
LOG-144	ASRS changes in GUI are not saved or directly applied
LOG-145	Conveyor draw supports GUI throws division by 0.
LOG-149	Changing the width and the length of the stations and move forward and backward with the "forward" and "fast forward" buttons fails
LOG-154	Bug when opening the Network Control Gui
LOG-155	Overlapping fonts in Operator Gui
LOG-158	Advanced transporter gives access violation during model save
LOG-126	Category TRANSPORT: Subcategory RAILBOUD: Transfer Car: Subatom Transfer Stations: Place products without movement
LOG-129	Category TRANSPORT: Subcategory RAILBOUD: Transfer Car: Subatom Transfer Car: Add load and unload times
LOG-130	Category TRANSPORT: Subcategory RAILBOUD: Transfer Car: Lock position
LOG-135	Trigger OnReset for Corner Transfer Unit
LOG-151	Transfer Car - Push System - Register orders for products without label "ProductTypeid"
LOG-7	Display the Speedometer multiple instances
NLS-38	Reconstruction of atom "Elevator"
NLS-56	Update-Buttons do not what is expected in TransferCar-atom

Improved GUI's

APP-233	Status Bar in 3D animation window missing
APP-239	Attribute controls form returns wrong type when loaded
APP-265	Make "View atom Labels" work in Model Tree as well
APP-277	'Fly To (F7)' in 3D model view takes way control from ED.
APP-278	non-unique naming in Conveyor GUIs
APP-266	Attribute controls form does not refresh tree
ED-426	Statusbar 3D visualization object does not display the statusbar

Bug Fixes

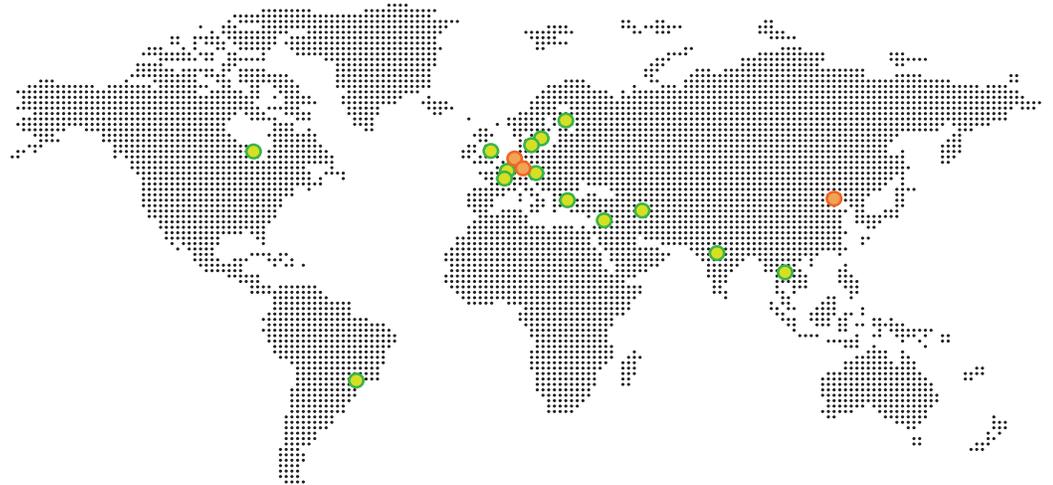
APP-185	The German Example models need to be improved. For example old style product Gui's and incorrect code in Breakdown fields of servers and 4DScript bugs.
APP-242	Autofit fails when using table data
APP-280	When running the example model Basic modeling - servers and run the GUI I get an error message
ED-538	When selecting an object in 3D the object is highlighted with the texture on the highlight.
APP-255	Report atom markup incorrect and incomplete
APP-257	Klompfen.mod
APP-259	The function cleartable doesn't clear.
APP-270	Change in the progressbar settings in the function excelactivex_readblock
ED-91	DiShape with fill color transparent gives problem when 5th parameter is 0
ED-168	4dscript compiler doesn't check number of parameters correctly for the Concat function
ED-258	Access violations with order settings order in GUI builder
ED-417	ed.his i/o error
ED-432	DbRecords gives value -1 after executing DbSql
ED-433	Find atom (match whole word only) in model tree does not work properly
ED-470	GUI table: copy paste on row does not work as expected
ED-475	GeneratorSeed(1) := *** Doesn't update the run control
ED-476	ColorTransparent is treated as ColorBlack
ED-479	Saved csv tabledata does not load into table
ED-480	Why is it allowed to make function names with spaces?
ED-485	Images in Gui's flicker
ED-487	Form Inspector buttonbar scroll arrows don't work
ED-489	Activating the GUI Builder Form Inspector fails with heavy visualization
ED-492	Fourth parameter of function StringPos does not work correctly

ED-493	Gui builder gives access violations and crashes on Engine2D in specific cases
ED-495	Move command cannot exceed hardcoded window settings
ED-502	Value function loses decimals
ED-505	Function DrawText does not work properly.
ED-508	DrawCone and DrawCylinder copy last selected colour.
ED-510	The string returned by GetUserName contains trailing char(0)
ED-302	Split and document help on the basic speedbar buttons

Smaller improvements

APP-205	Help from ModelTreeAtom does not display
APP-260	XMLNodeSetAttribute Help missing
APP-264	FreezeScreen Entry in the Help is incorrect
APP-267	ExcelActiveX_Read, _ReadText, _Write and _WriteText functions are not documented in help file.
APP-272	Stress that enablestatusmonitor is necessary in help file of statustime
APP-241	Exp Wizard calculates wrong PFM results when using the group option
APP-23	Update screenshots in Training material
ED-333	Can't access German examples from the Example Wizard
ED-422	Maximum simulation speed (slider control) differs extremely from 'Unlimited'
ED-517	Tab order does not work with ScriptEdit component
ED-521	Opening a GUI event by double clicking opens in middle of desktop, not screen
ED-522	FileSize returns negative sizes
ED-523	ReadTableFromFile fails for unknown reason
ED-524	GUI Builder not visible (off screen) and not moveable
ED-527	The table size is not updated correctly
ED-532	InputNum does not pop up with runtime license
ED-534	ED hangs after setting gridsize on 2D visualization component
ED-537	Function "Version" returns unexpected value
ED-414	Paste location of atom in atomtree
ED-437	ADO connect with access 2007 database
ED-455	Help file for ED angles- and coordinate- system
ED-474	Selection of atoms in 2D
ED-483	GUI Smartedit component input verification
ED-496	AtomTreeRefresh collapses AtomTree
ED-498	When opening the Atom Editor, show the atom currently selected in the model layout
LOG-156	Example model Operator 3 does not include the described break behavior

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