Infor LN Process Modeler Workbench User Guide

Important Notices

Trademark Acknowledgements

Publication Information

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About this document

This document describes the Process Modeler Workbench that is used to graphically create and maintain the different types of diagrams that make up an enterprise model.

About this guide

This document is assembled from online Help topics.

The functionalities you can use to create and maintain the models, are basically the same for all, and explained in Functions used in all diagram types and Operations used in all diagram types.

It is assumed that you have a general understanding of Infor LN Infor Enterprise Modeler and understand these topics:

- *Enterprise Structure Diagram (p. 15)*
- *Business Control Diagram (p. 17)*
- *Business Function Diagram (p. 21)*
- *Business Process Diagram (p. 23)*
- *Entity Relationship Diagram (p. 31)*

Underlined terms indicate a link to a glossary definition. If you view this document online and you click the underlined text, you jump to the glossary definition at the end of this document.

For details, see the Infor LN Infor Enterprise Modeler Online Help.

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In your e-mail, refer to the document number and title. More specific information will enable us to process feedback efficiently.

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Chapter 1
Introduction

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Process Modeler Workbench

The Process Modeler Workbench is used to graphically create and maintain the different types of diagrams that make up an enterprise model. The enterprise model consists of these parts:

- The highest level is the enterprise-structure model which is represented by the enterprise-structure diagram that visualizes the multisite structure of the Company.
- The next level is the business model which is a subset of following diagrams that are maintained in the repository.
  - Business control diagram; visualizes the primary process that takes place and the business functions that are used to control that process.
  - Business-function diagram; visualizes the multilevel relationships between business functions.
  - Business-process diagram; visualizes a business objective.
- Then there is the data model which is represented by the Entity Relationship Diagram. This diagram provides information about the physical and/or logical data model of the Infor LN package combination to which the Enterprise Model applies.

How to use the Process Modeler Workbench

The functionalities you can use to create and maintain the models are basically the same for all and explained in Functions used in all diagram types and Operations used in all diagram types. The diagram specific information is explained in:

- *Enterprise Structure Diagram (p. 15)*
- *Business Control Diagram (p. 17)*
- *Business Function Diagram (p. 21)*
- *Business Process Diagram (p. 23)*
- *Entity Relationship Diagram (p. 31)*

The explanation of all buttons, icons and graphical objects that are available in the Process Modeler Workbench can be found in the Legend.

Functions used in all diagram types

Drop-down menus

Menu Options	Description
Edit -> Undo	To undo the last user action.
Edit -> Redo	To reverse the last Undo command.
Edit -> Cut	To delete the currently selected diagram objects from the diagram and copy these objects to the diagram clipboard.
Edit -> Copy	To copy the currently selected diagram objects from the diagram and copy these objects to the diagram clipboard.
Edit -> Paste	To copy the diagram objects from the diagram clipboard into the diagram.
Edit -> Delete	To delete the currently selected diagram objects from the diagram.
Edit -> Select All	To select all diagram objects in the diagram.
Edit -> Deselect	All To deselect all selected objects in the diagram.
View -> Show Header	To show or hide the diagram header.
View -> Show External Codes	To show or hide the external codes that are setup in the graphical object properties.
View -> Zoom in	To increase zoom level.
View -> Zoom out	To decrease zoom level.
View -> Actual size	To set the zoom to the default value 100.
View -> Zoom to fit	To resize the diagram so it is completely visible.

View -> Snap to Grid	To switch on or off the automatic alignment of objects based on a fixed grid.
Action drop-down menu	The Action drop-down menu contains diagram specific options which can be found here: ■ Enterprise Structure Diagram Action drop-down menu ■ Business Control Diagram Action drop-down menu ■ Business Function Diagram Action drop-down menu ■ Business Process Diagram Action drop-down menu
Insert -> Info Block	To insert a text block that contains information regarding the diagram such as diagram code, description, version, creation date and last modification date.
Insert -> Annotation	To insert a note that is directly readable in the diagram.
Insert ->	The other graphical objects that can be selected in the Insert drop-down menu differ per diagram type and are explained here: ■ Enterprise Structure Diagram graphical objects ■ Business Control Diagram graphical objects ■ Business Function Diagram graphical objects ■ Business Process Diagram graphical objects ■ Entity Relationship Diagram graphical objects
Arrange -> Align -> Top	To align all selected graphical objects vertically, relative to the top of the object that is most at the top.
Arrange -> Align -> Middle	To align all selected graphical objects vertically, relative to the middle of all selected objects.
Arrange -> Align -> Bottom	To align all selected graphical objects vertically, relative to the bottom of the object that is most at the bottom.
Arrange -> Align -> Left	To align all selected graphical objects horizontally, relative to the left of the object that is most to the left.
Arrange -> Align -> Center	To align all selected graphical objects horizontally, relative to the middle of all selected object.
Arrange -> Align -> Right	To align all selected graphical objects horizontally, relative to the right of the object that is most to the right.

Arrange -> Make Same Size -> Width	To resize the width of all selected graphical objects to the widest of all selected objects.
Arrange -> Make Same Size -> Height	To resize the height of all selected graphical objects to the highest of all selected objects.
Arrange -> Make Same Size -> Both	To resize the height and width of all selected graphical objects to the highest and widest of all selected objects.
Arrange -> Space Evenly -> Across	To align all selected graphical objects with the same horizontal distance from each other.
Arrange -> Space Evenly -> Down	To align all selected graphical objects with the same vertical distance from each other.

Operations used in all diagram types

These operations are generic for all diagram types:

Operation	Description
Insert a relationship/trigger	From the Insert drop-down menu or the Diagram Objects toolbar select relationship or trigger. Click and hold the left mouse key on the first graphical object that you want to connect, then move the cursor to the destination object and release the left mouse button.
Insert all other graphical objects	From the Insert drop-down menu or the Diagram Objects toolbar select the desired graphical object. Move the cursor to the first a location in the diagram and click once.
Move a graphical object	Select one or more graphical objects and drag them to the new location.
Modify the size of a graphical object	Select the graphical object and drag one of the black squares positioned at the outline of the object. To change the width of the object by dragging the black squares positioned at the left or the right side. To change the height of the object by dragging the black square positioned at the top or the bottom. To change both the width and the height, drag the black square at the top or the bottom. To change both the width and the height, drag the black square positioned at the corner. Not all diagram objects are resizable!

Link a text to a graphical object	Right-click the graphical object. Select Text or Model Text. A text window is displayed where you can enter your text. In this text window, from the Reference menu you can select Zoom session. A list of possible options is displayed. You can add references to other Dynamic Enterprise Modeler content or Infor LN sessions in the text. To exit the text window click the save changes and exit button. Once a Text or Model Text is linked to a graphical object, a Text- or Model Text icon is linked to the diagram object. A double click on this icon also opens the text window
View/Modify the properties a graphical object	Right-click a graphical object, select Properties to view/modify the properties of the graphical object.
View/Modify the properties of the diagram	Right-click the diagram canvas outside an graphical object and select Properties to view/modify the properties of the diagram.

Operations used in the specific diagram types:

- Operations used Enterprise Structure Diagram
- Operations used in Business Control Diagram
- Operations used in Business Function Diagram
- Operations used in Business Process Diagram
- Operations used in Entity Relationship Diagram

Toolbars

The available buttons on the toolbars:

- *Top Toolbar (p. 35)*
- *Diagram Objects Toolbar (p. 36)*
- *Align Toolbar (p. 37)*

Chapter 2
Enterprise structure diagram

2

Enterprise Structure Diagram

On a geographical map Enterprise Units can be located to create a graphical representation of the organization and its entities such as warehouses, departments or work centers. Besides being a site, an enterprise unit can also represent an external business partner. Insert an Enterprise Unit Relationship between enterprise units and link a category to the relationship to define if it is for instance a goods or a money flow.

To describe in more detail the operations within the enterprise unit, link a business control diagram to that unit.

Enterprise Structure Diagram graphical objects

Menu option	Description
Insert -> Enterprise Unit	To insert an Enterprise Unit.
Insert -> Enterprise Relationship	To insert an Enterprise Relationship with a description to identify the relation between two Enterprise Units.

Enterprise Structure Diagram Action dropdown menu

Menu option	Description
Action -> Show Background	To switch on or off the background map that is set up in the diagram properties.

Operations used Enterprise Structure Diagram

Operation	Description
Link a business control diagram to an enterprise unit	Right-click the Enterprise Unit and select Properties. In properties select a business model and a Business Control Model. A Linked Business Control Diagram icon is linked to the Enterprise Unit.
Modify the direction of the Enterprise Relationship	Right-click the Enterprise Relationship and select Reverse Direction.

Chapter 3
Business control diagram

3

Business Control Diagram

In a business control diagram, Business Functions are used to describe the operations that take place in a specific enterprise unit. When those Business Functions fall within the circle of influence of the enterprise unit, they are grouped together in an Area. External Agents (such as customers, suppliers, governments) are added to indicate their influence on the operations both located outside the Area. Arrows are drawn between External Agents and Business Functions to indicate what triggers the operation. The results from this operation can trigger the next operation in another business function and arrows are drawn between business functions. The arrows are called Triggers.

Further detail in the operations can be added by linking Business Processes to Business Functions using Transformation Rules. The transformation rules are created in the repository through the Rules (tgbrg7500m000) session. For more information on the creation of transformation rules, see the Infor LN Session Help .

At the bottom of the diagram a flow represents the primary goods or money flow.

The repository is the modeling environment in which the Business Control Diagrams are defined. These business control diagrams serve as a basis on which you can create a business model(s).

Business Control Diagram graphical objects

Menu option	Description
Insert -> Trigger	To insert a Trigger between the other graphical objects in the diagram.
Insert -> Function	To insert a business function.
Insert -> External Agent	To insert External Agents such as customers, suppliers and governments that affect the Business Functions.
Insert -> Area	To insert an Area to visualize related business functions.
Insert -> Flow	To insert a Flow to visualize the goods flow, financial flow or information flow.
Insert -> CODP	To insert a Customer Order Decoupling Point to be located on the Flow.
Insert -> Buffer	To insert a Buffer, representing a queue or a stock point to be located on the Flow.
Insert -> Primary Activity	To insert a Primary Activity such as receive goods or production to be located on the Flow.

Business Control Diagram Action drop-down menu

Menu option	Description
Action -> Function Categories	To make parts of the Business Control Diagram visible or not, based on the categories of the Business Functions.
Action -> Children	To link child Business Control Diagrams to the current diagram.

Operations used in Business Control Diagram

Operation	Description
Modify the Type of the Trigger	Right-click the Trigger, point to Type and select one of one of these options: ■ Free (midpoints can be added) ■ Direct ■ Z-style ■ Horizontal-Vertical ■ Vertical-Horizontal
Modify the direction of the Trigger	Right-click the Trigger and select Reverse direction or Bidirectional
Add a Midpoint to a Trigger	Right-click the Trigger and select Add Midpoint to change the route of the Trigger. This is only possible if the Type of the Trigger is Free. You can add as many Midpoints as required.
Add or remove a Time Trigger	Right-click the Business Function, select Time Trigger or Normal to switch the time trigger on or off.
Modify the Category of the Business Function/External Agent/Buffer/ Primary Activity	Right-click the Business Function/external agent, select Category. The category determines the color of the business function/external agent/Buffer/Primary Activity.
View/edit the Business Process linked to the Business Function	If a transformation rule exists for a Business Function, a business process icon is linked to this function. Double-click this icon, a list of linked business processes is shown. Click "Go to Details" in front of the appropriate process.
To modify the color of the Area/CODP	Right-click the Area/CODP and select Properties. In properties change the background color.
To modify the Flow Type	Right-click the Flow, point to Type and select one of these options: ■ Goods ■ Information

	■ Financial
Modify the direction of the Enterprise Relationship	Right-click the Enterprise Relationship and select Reverse Direction

Chapter 4
Business function diagram

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Business Function Diagram

For a Parent Business Function a Business Function Diagram can be created to represent the child Business Functions. Icons indicate if a Wizard is available to implement the Business Function.

The repository is the modeling environment in which the Business Functions are defined. The Business Function Diagrams from the Repository serve as a basis on which to create a business model (s). The Business Function Diagrams in the Business Model is used to indicate the Optimization Relations between Business Functions. This is to represent either a variant (replacement functionality) or an option (additional functionality. Phases can be linked to Business Functions to indicate in which phase the functions are implemented and used. This is represented by colored circles linked to the Business Functions.

Business Function Diagram graphical objects

Menu option	Description
Insert -> Function	To insert a Business Function.
Insert -> Optimization Relationship (only available in a Business Model)	To insert an Optimization Relationship.

Business Function Diagram Action drop-down menu

Menu option	Description
Action -> Phases by Model	To make parts of a selection of optimizations visible. Optimization phases must be linked to the Business Functions.

Operations used in Business Function Diagram

Operation	Description
Link Optimization Phases to a business function	Right-click the business function, click Phases and modify the phases that this function is using. The Phases icon is linked to the Business Function. Also colored circles become visible depending on the selected phases.
Link a Wizard to a business function	Right-click the Business Function, click Properties and set up a wizard. The Wizard icon is linked to the business function.
Execute a Wizard linked to a business function	Double-click the Wizard icon that is linked to the Business Function. The wizard is started.

Chapter 5
Business process diagram

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Business Process Diagram

A Business Process Diagram is the lowest level of representation of the business operations. It represents the flow of activities (manual or application) users have to run from start to finish. Control Activities are used to represent the choices users have to make in that process.

Sub Business Processes are used to bring sufficient detail but still keep the structure understandable.

Linking Roles to Business Processes or to business process activities authorizes employees linked to those roles to run the activities.

Business Processes are created and maintained in the repository and serve as a basis on which to create a business model (s). Changes you make in the repository reflect in the Business Models. In a Business Model you can modify the authorization that is setup in the Repository, thus creating enterprise unit specific authorization setup.

The Business Process Diagram is based on the Petri nets modeling conventions.

Business Process Diagram graphical objects

Menu option	Description
Insert -> Activity	To insert an Activity that represents work to do in the form of: ■ Manual activity; a not (in LN) automated task ■ Business process; links a sub-process

	■ Application; starts an application of the selected component
Insert -> State	To insert a State that defines a particular point in time: ■ Begin; always the start of a business process ■ End; always the end of a business process ■ Normal; all other states in the business process
Insert -> Control Activity	To insert a Control Activity that represents a decision moment and can be: ■ XOR; only one of the paths must be executed ■ OR; one or more of the paths can be executed ■ AND; all paths must be executed ■ JOIN; to join the paths split by XOR, OR or AND
Insert -> Relationship	To insert a Relationship. Valid relations: ■ Between State and Activity ■ Between State and Control Activity

Business Process Diagram Action dropdown menu

Menu option	Description
Action -> Renumber External Codes	Renumbers the external codes used in the diagram.
Action -> Syntax Check	Checks the syntax/validity of the business process; see Business Process Syntax Checks for more information.
Action -> Roles	Links Roles to the business process.

Operations used in Business Process Diagram

Operation	Description
Modify the State Type	Right-click the State, point to Type and select one of these options: ■ Begin; always the start of a business process ■ End; always the end of a business process ■ Normal; all other states in the business process
Link a Support Application to an Activity	Right-click the Activity, select Properties. In the properties setup a Support Application. A Support Applications icon is linked to the Activity. Double-clicking this icon shows a list with Support Applications from which you can start the application.
Link an AO Document to an Activity	Right-click the Activity, select Properties. In the properties setup an AO Document. An AO Document icon is linked to the Activity. Double-clicking this icon opens the AO Document.
Link a URL to an Activity/Control Activity	Right-click the Activity/Control Activity, select Properties. In the properties setup an URL. A Linked URL icon is linked to the Activity/Control Activity. Double-clicking this icon opens the URL.

Link a Role to an Activity/Control Activity	Right-click the Activity/Control Activity, select Roles by Activity. Add or delete Roles, or click "Go to Details" in front of the Role to modify the authorization level to: ■ No authorization ■ Display authorization ■ Display/Print authorization ■ Modify/Display/Print authorization ■ Insert/Modify/Display/Print authorization ■ Full authorization A Linked Roles on Activity Level icon is linked to the Activity/Control Activity. Double-clicking this icon opens the session to modify the Roles by Activity.
Activate Sub Application Authorization	Right-click the Activity, select Sub Applications. Double-click ‘All possible subapplications for …’, a list unfolds. Highlight a Sub Application and from the appropriate menu select Add subapplications as modeled Subapplication. The Sub Applications icon is linked to the Activity.
Modify Sub Application Authorization	Double-click the Sub Applications icon linked to the Activity. Highlight the Sub Application and from the Change authorization menu select one of these options: ■ No authorization ■ Display authorization ■ Display/Print authorization ■ Modify/Display/Print authorization ■ Insert/Modify/Display/Print authorization ■ Full authorization Or use one of the appropriate buttons.
Link Specific Role Authorization to a Sub Application	Double-click the Sub Applications icon linked to the activity. **1.** To change the authorization level for a Role that is already linked to the Activity, highlight the Role, holding the Ctrl-key, also highlight the Sub Application and from the Specific menu select Link Roles to modeled Subapplications. The Role appears underneath the Sub Application.

	2. To change the authorization level for a Role that is not yet linked to the Activity, highlight a sub application and from the Specific menu select Link unmodeled Roles to modeled Subapplications. The Role appears underneath the Sub Application. For both 1 and 2, highlight the new line and from the Change authorization menu select one these options: ■ No authorization ■ Display authorization ■ Display/Print authorization ■ Modify/Display/Print authorization ■ Insert/Modify/Display/Print authorization ■ Full authorization Or use one of the appropriate buttons.
Change Control Activity Type	Right-click the Control Activity and point to Type, select one of these options: ■ XOR; only one of the paths must be executed ■ OR; one or more of the paths can be executed ■ AND; all paths must be executed ■ JOIN; to join the paths split by XOR, OR or AND
Modify the Type of the Relationship	Right-click the Relationship, point to Type. Select one of these options: ■ Free (midpoints can be added) ■ Direct ■ Z-style ■ Horizontal-Vertical ■ Vertical-Horizontal
Modify the direction of the Relationship	Right-click the Relationship and select Reverse direction.
Add a Midpoint to a Relationship	Right-click the Relationship and select Add Midpoint to change the route of the Relationship. This is only possible if the Type of the Relationship is Free. You can add as many midpoints as required.

Business Process Syntax Checks

Syntax Error	Check
Error: [object type] [external code] [description]: Static condition not allowed on outgoing arrow	Static conditions are only allowed on relationships that flow from an OR, XOR, AND Control Activity to an Activity or a JOIN Control Activity. Solution: Remove the static conditions from the properties of the relationship concerned.
Error: state [external code] [description]: Missing incoming arrow	Except for the Begin State each other State must at least have one incoming arrow. Solution: Add a Relationship between an Activity or a Control Activity that is missing an outgoing arrow.
Error: state [External code] [description]: Missing outgoing arrow	Except for the End State each other State must have one outgoing arrow. Solution: Add a Relationship between an Activity or Control Activity that is missing an incoming arrow.
Error: [object type] [external code] [description]: Missing outgoing arrow	All Activities and JOIN type Control Activities must have one outgoing arrow. Solution: Add a Relationship between the Activity or the JOIN Control Activity and a state that is missing an incoming arrow.
Error: state [external code] [description]: Too many outgoing arrows"	A State can only have one outgoing arrow. Solution: Remove all but one of the outgoing Relationships that are linked to the mentioned State. Consider using a Control Activity to split the business process in multiple paths.
Error: state [external code] [description]: Duplicate incoming arrow	Only one arrow can exist between the same State and Activity (or Control Activity). Solution: Remove the duplicate arrow(s) between the listed State and (Control) Activity.
Error: activity [external code] [description]: Too many outgoing arrows	An Activity can only have one outgoing arrow. Solution: Remove all but one of the outgoing Relationships that are linked to the mentioned Activity.
Error: control [external code] [description]: Too few outgoing arrows	All Control Activities with type OR, XOR, AND must at least have two outgoing arrows. Solution: Add an outgoing Relationship from the Control Activity to a state that is missing an incoming.
Error: control [external code] [description]: Too few incoming arrows	A JOIN Control Activities must at least have two incoming arrows. Solution: Add an incoming Relationship from the JOIN Control Activity to a state that is missing an outgoing arrow.

Error: Missing begin state	Each business process must start with only one Begin State. Solution: Ensure the business process starts with a state and change the State type to ‘Begin’.
Error: [object type] [external code] [description]: Not reachable from begin state	Each Activity and Control Activity should be reachable from the Begin State. Solution: Ensure all paths in the business process starts from a Begin State and all necessary relationships are drawn.
Error: Too many begin states	Each business process must start with only one Begin State. Solution: Ensure the business process starts with only one state of the type ‘Begin’.
Error: state [external code] [description]: Incoming arrow not allowed	Each business process must start with only one Begin State. This means that there can be no incoming arrow for a begin state. In case of a loop an arrow return to the begin state. Solution: Ensure the business process starts with a begin state and remove any other begin states.
Error: Missing end state	Each business process must end with one state and this must be of the ‘End’ type. Solution: Ensure the business process ends with one state and change the State type to ‘End’.
Error: [object type] [external code] [description]: Cannot reach end state	Each business process path should end in an End State. Solution: Ensure all paths in the business process end in an End State and all necessary relationships are drawn.
Error: state [external code] [description]: Outgoing arrow not allowed	Each business process path should end in an End State. Solution: Ensure all paths in the business process end in an End State and remove any arrow that flows out of the end state.
Warning: Too many end states	Each business process path should end in an End State. A business process can have more than one end state, but this is not common. Thus a warning is displayed. Solution: Ensure all paths in the business process end in the correct End State.

Chapter 6
Entity relationship diagram

6

Entity Relationship Diagram

The Entity Relationship Diagram represents Entity Types for which data must be stored in the Infor LN Application, such as Purchase Orders, Customers and Projects. Entity Types that represent database tables are placed in the diagram. Relationships are drawn between the Entity Types and their graphical representation indicates the cardinality of the relationship (one to one, one to many or many to many) and the relation is optional.

Using Decomposed Diagrams you can link another Entity Relationship Diagram to one of the Entity Types in a diagram, thus indicating all the other relationships of that Entity Type. For instance in a diagram created for Purchase Orders, there is an Entity Type for Items. If you would draw all the Entity Types that are linked to the Item Entity, the diagram becomes unreadably big. By linking an Decomposed Diagram of the Item Entity, the Purchase Order Diagram is readable.

Entity Relationship Diagram graphical objects

Menu option	Description
Insert -> Entity Type	Inserts an Entity that represents an object for which you must record information. Select one of the following: ■ Normal; Logical entity type; a meaning to the real world and is comprised of one or more physical entity types ■ Physical entity type; database tables in the Infor applications.

	■ Associative; used to link other entity types.
Insert -> Relationship(1:n)	Inserts a relationship between two entity types. The cardinality of the relationship defines the expected number of related occurrences for each of the two entity types
Insert -> Subtype Relationship	Inserts a subtype relationship between two entity types (a subtype and a supertype) that is used to indicate that the supertype's attribute also apply to (are inherited by) the subtype.

Operations used in Entity Relationship Diagram

Operation	Description
Modify the Type of the Entity Type	Right-click the Entity Type, point to Type. Select one of these options: ■ Normal ■ Associative; an octagon is added inside the graphical object
Link a Decomposed Diagram to the Entity Type	Right-click the Entity Type, select Properties. Link the appropriate Decomposed Diagram to the Entity Type. The Entity Type graphical object is embossed.
Edit/view the Decomposed Diagram linked to the Entity Type	Right-click the Entity Type, select Edit linked ERD.
Link tables to the Entity Type	Right-click the Entity Type, select Tables. Link the appropriate Infor LN tables to the Entity Type. A Linked Tables icon is attached to the Entity Type.
Modify the Type of the (Subtype) Relationship	Right-click the (Subtype) Relationship, point to Type. Select one of these: ■ Free (midpoints can be added) ■ Direct ■ Z-style ■ Horizontal-Vertical ■ Vertical-Horizontal

Modify the cardinality of the Relationship	Right-click the Relationship, point to Cardinality. Select one of these: ■ One to One (midpoints can be added) ■ One to Many ■ Many to Many
Modify the direction of the (Subtype) Relationship	Right-click the (Subtype) Relationship and select Reverse direction.
Add a Midpoint to a (Subtype) Relationship	Right-click the (Subtype) Relationship and select Add Midpoint to change the route of the Relationship. This is only possible if the Type of the Relationship is Free. You can add as many midpoints as required.
Indicate an optional Relationship between two Entity Types	Right-click the Relationship and select one of the following: ■ Optional From To ■ Optional To From A circle is displayed at the end of the Relationship that is indicated as optional.
Add/modify the description on one and/or the other side of the Relationship	Right-click the Entity Type, select Properties. Now add/modify the description From-To or To-From. The descriptions display in the diagram and can be moved around.

Chapter 7
Legend

7

Top Toolbar

Button	Description
	To save the diagram and close the workbench
	To save the diagram
	To return to the last saved version of the diagram
	To delete the current selected diagram objects from the diagram
	To print the diagram on a local printer
	To undo the last user action
	To reverse the last Undo command
	To increase zoom level
	To decrease zoom level
	To set the zoom to the default value 100

	To resize the diagram to make it completely visible

Diagram Objects Toolbar

Generic buttons

The Diagram Objects toolbar shows the graphical objects you can insert in the diagram. These buttons are generic for all diagram types:

Button	Description
	To turn on or off the automatic creation of a relationship (connector) between an existing (selected) diagram object and a newly inserted diagram object
	To switch to the ‘select mode’ to be able to select one or more graphical objects in the diagram
	To insert a graphical object that contains information regarding the diagram like diagram code, description, version, creation date and last modification date
	To insert a note that is directly readable in the diagram

The diagram specific buttons in the Diagram Objects Toolbar are explained here:

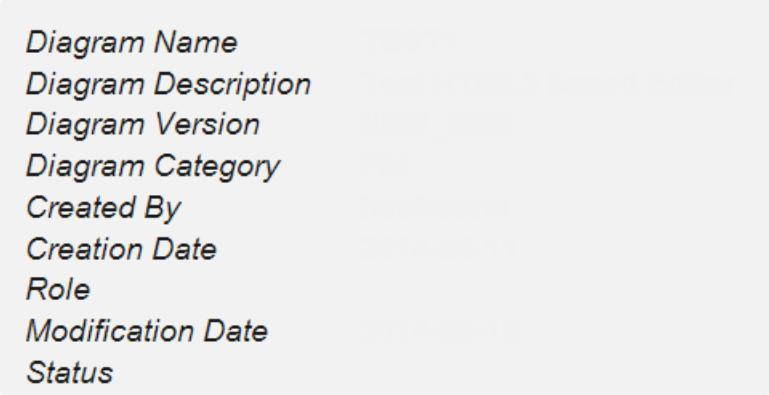
- *Diagram Objects Toolbar (p. 36)*
- Business Control Diagram objects toolbar
- Business Function Diagram objects toolbar
- Business Process Diagram objects toolbar
- Entity Relationship Diagram objects toolbar

Align Toolbar

Button	Description
	To align all selected graphical objects vertically, relative to the top of the object that is most at the top
	To align all selected graphical objects vertically, relative to the middle of all selected objects
	To align all selected graphical objects vertically, relative to the bottom of the object that is most at the bottom
	To align all selected graphical objects horizontally, relative to the left of the object that is most to the left
	To align all selected graphical objects horizontally, relative to the middle of all selected object
	To align all selected graphical objects horizontally, relative to the right of the object that is most to the right
	To align all selected graphical objects with the same horizontal distance from each other
	To align all selected graphical objects with the same vertical distance from each other
	To resize the width of all selected graphical objects to the widest of all selected objects
	To resize the height of all selected graphical objects to the highest of all selected objects
	To resize the width and height of all selected graphical objects to the widest and highest of all selected objects

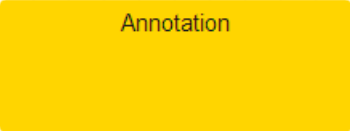
Graphical objects used in all diagram types

Info block



The fields are automatically filled. The Diagram Name, Description, Version, Role and Category are defined in the LN session where you create or modify the diagram properties.

Annotation



Icons used in all diagrams

Icons are graphical decorators linked to the diagram objects to indicate that certain data has been setup for that object.

	Text icon	Text created for a graphical object in the repository.
	Model Text icon	Text created for a graphical object in a business model.

Graphical objects used in the Enterprise Structure Model

Enterprise Unit

The graphical representation of the enterprise unit, it can be changed by selecting a different category in the enterprise unit properties. For each enterprise unit category a different image can be setup. The description is an object that can be moved individually from the image.

	Linked Business Control Diagram icon	Indicates that a business control diagram has been linked to the Enterprise Unit

Enterprise Relationship

The graphical representation of a relationship between enterprise units. The description is an object that can be moved individually from the line.

Enterprise Structure Diagram objects toolbar

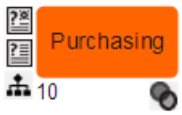
Button	Description
	To insert an Enterprise Unit.
	To insert an Enterprise Relationship with a description to identify the relation between two Enterprise Units

Graphical objects used in the Business Control Model

Trigger

The graphical representation of a relationship between business functions or business functions and external agents. The description is an object that can be moved individually from the line.

Function

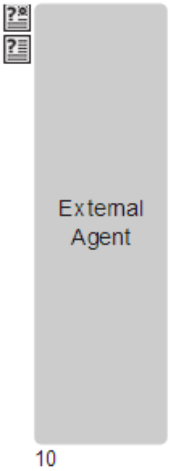


	Linked Business Process icon	Indicates that business processes are linked to the business function via a Transformation Rule
	Linked Business Function icon	Indicates that a Business function created in the Business Functions (tgbrg2500m000) session have been linked.

Function with Timed Trigger

It indicates that the function either triggers itself completely at a fixed moment in time, for example monthly. O that after receiving a trigger from anywhere else it waits to also trigger itself before actually starting.

External Agent

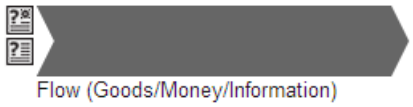


Represents External Agents such as customers, suppliers and governments that affect the Business Functions

Area

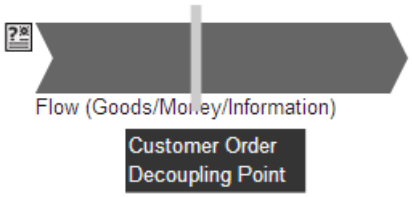
Visualizes which functions are related and fall within the circle of influence of the enterprise unit. If the area is moved, all graphical objects within that area are moved with it.

Flow



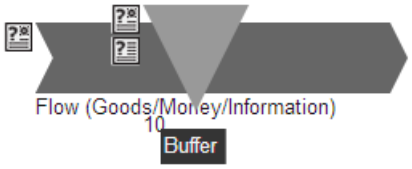
Shows the primary process controlled in the diagram. It can be represent a goods flow, financial flow or information flow.

Customer Order Decoupling Point



A customer order decoupling point indicates up to what point in the material flow the product is tied to a specific customer order.

Buffer



The graphical representation of a queue or a stock point to be located on the Flow

Primary activity

Represents a primary activity such as receive goods or production to be located on the flow

Business Control Diagram objects toolbar

Button	Description
	To insert a Trigger between the other graphical objects in the diagram. An incoming Trigger represents the cause/origin of the Business Function. The outgoing Trigger represents the result of an action
	To insert a business function
	To insert External Agents such as customers, suppliers and governments that affect the Business Functions
	To insert an Area to visualize related business functions
	To insert a Flow to visualize the goods flow, financial flow or information flow
	To insert a Customer Order Decoupling Point to be located on the Flow
	To insert a Buffer, representing a queue or a stock point to be located on the Flow
	To insert a Primary Activity such as receive goods or production to be located on the Flow

Graphical objects used in the Business Function Model

Function

Represents a model item that defines relevant business issues and operations.

	Wizard icon	Indicates that a wizard is linked to the business function
	Phases icon	Indicates that phases are linked to the business function, only available in a business model.
	Linked Phases icon	Indicates which phases are linked to the business function, only available in a Business Model.

Optimization relationship

Represents the relation between two business functions and can only be used in a Business Model.

Business Function Diagram objects toolbar

Button	Description
○	To insert a Business Function
↷	To insert an Optimization Relationship, only available in a Business Model.

Graphical objects used in the Business Process Model

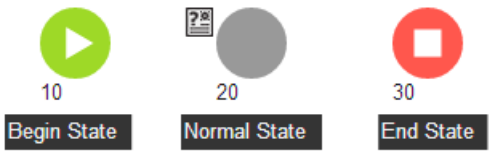
Activity

An activity represents work to do in the form of:

- Manual activity; a not (in LN) automated task
- Business process; links a sub-process
- Application; starts an application of the selected component

	Linked URL icon	Indicates that an URL is linked to the activity. Click on the icon to start the URL
	Linked AO Document icon	Indicates that an AO document is linked to the activity.
	Sub Applications icon	Indicates that sub application authorization has been setup for the activity
	Linked Roles on Activity Level icon	Indicates that Roles authorization is setup for the activity
	Support Application icon	Indicates that a support application has been linked to the activity

State



Represents a particular point in time.

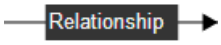
Control activity

A control activity represents a decision moment and can be one of the following:

- XOR; only one of the paths must be executed
- OR; one or more of the paths can be executed
- AND; all paths must be executed
- JOIN; to join the paths split by XOR, OR or AND

	Linked URL icon	Indicates that an URL is linked to the activity. Click on the icon to start the URL
	Linked Roles on Activity Level icon	Indicates that Roles authorization is setup for the activity

Relationship



Indicates the flow of activities in the business process.

Valid relations:

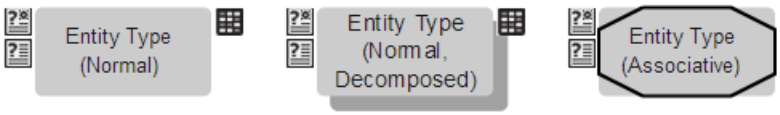
- Between State and Activity
- Between State and Control Activity

Business Process Diagram objects toolbar

Button	Description
	To insert an Activity to represent work to do
	To insert a State that defines a particular point in time
	To insert a Control Activity that represents a decision moment
	To insert a Relationship

Graphical objects used in the Entity Relationship Model

Entity type



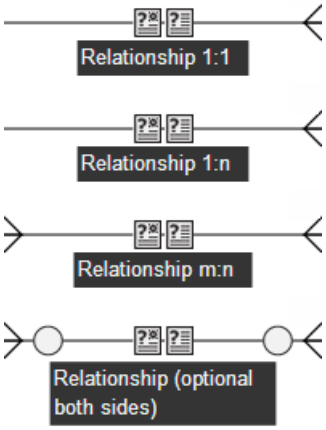
Entity that represents an object for which you must record information. It can be one of the following:

- Normal; to represent a Logical entity (has a meaning to the real world and is comprised of one or more physical entity types) or a Physical entity (database tables in the Infor LN applications)
- Associative; used to link other entity types

An entity in a diagram can have a Decomposed diagram linked to it. The graphical object is represented embossed.

	Linked Tables icon	Indicates that a database table is linked to the Entity Type

Relationship (1:n)



Represents the relationship between the entity types. The cardinality of the relationship defines the expected number of related occurrences for each of the two entity types.

Subtype relationship

An indication that the supertype's attribute also apply to (are inherited by) the subtype

Entity Relationship Diagram objects toolbar

Button	Description
	To insert an Entity that represents an object for which you must record information
	To insert a relationship between two entity types
	To insert a subtype relationship between two entity types

Appendix A
Appendix

A

appropriate menu

Commands are distributed across the **Views**, **References**, and **Actions** menus, or displayed as buttons. In previous LN and Web UI releases, these commands are located in the *Specific* menu.

business control diagram

A graphic design that visualizes the primary process that takes place within an organization and shows the business functions that are used to control that process.

business-function diagram

A graphic design that visualizes the multilevel relationships between business functions.

Note

The lowest level of business functions is used to set the value of static conditions. The level above the lowest level is used to link business processes to business functions.

business model

A model that represents the organization.

There are two types of business models:

- *Reference* models apply to specific industries or business typologies.
- *Project* models apply to a specific organization.

business-process diagram

A graphic design that visualizes the business objective via a process structure in the Petri Net format.

data model

Consists of one or more entity relationship diagrams that together represent the way the information is stored in a database.

enterprise-structure diagram

A graphic design that shows the geographic location of enterprise units and the relationships between these enterprise units in a multisite organization.

You can model various kinds of relationships between enterprise units; this includes goods flows, financial flows, and information flows.

enterprise-structure model

An enterprise structure diagram that shows the geographic location of enterprise units and the relationships between these enterprise units in a multisite organization.

repository

A library of model items.

LN distinguishes the following repositories:

- Business functions
- Business processes
- Business-control diagrams

In coherence with each other the repository model items can form a business model.

transformation rule

An expression imposing a unilateral dependency of business processes in relation to business functions. By carrying out the rules, business processes are imported into the business model based on the business functions that are already present.

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