AllFusion® Process Modeler Data Flow Diagramming

Design Guide

r7.2

ca™

CA Product References

This document references the following CA products:

- AllFusion® Process Modeler

Contact Technical Support

For online technical assistance and a complete list of locations, primary service hours, and telephone numbers, contact Technical Support at http://ca.com/support.

Contents

Chapter 1: Data Flow Diagramming Method

This section contains the following topics:

Data Flow Diagrams

A Data Flow Diagram (DFD) documents the movement and processing of information within your business or organization. DFDs model systems as a network of activities, data stores, and external references connected to one another by arrows. DFDs provide a blueprint of your system development tasks and reduce the time you spend on repetitive planning and design. DFDs can also complement existing Business Process (IDEF0) models.

Use DFDs to document the following information:

- Data processing functions such as *Input Customer Data*

- Data used or created by the data processing system such as *Invoice*

- Objects, persons, or departments that interact with sales such as *Vendor*

- Data processing tables such as *Inventory Table*

The following illustrates a typical data flow diagram:
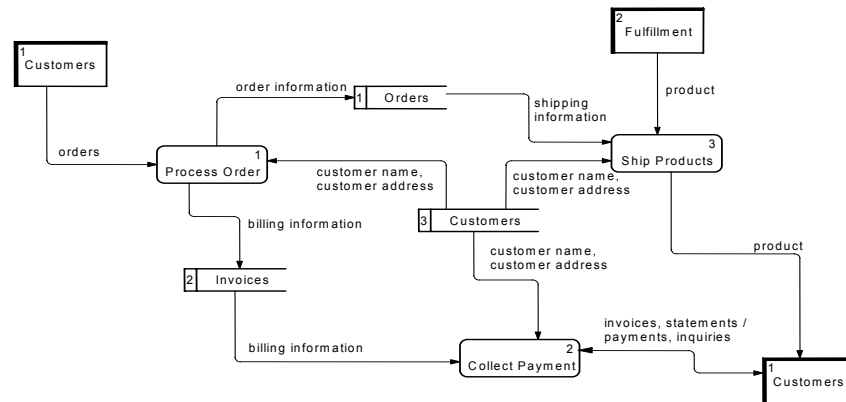
DFD Objects

DFD objects represent data processing functions. You can create these objects using this product or import them from AllFusion ERwin Data Modeler. The following lists the model objects used in Data Flow Diagrams:

Activity

Describes an action that processes or transforms data or resources.

This product supports the Gane and Sarson DFD method, in which activities are represented by a box with rounded corners.

Data Store

Shows the flow of data to and from a database table, AllFusion ERwin Data Modeler entity, or both.

External Reference

Represents a location, entity, person, or department that is a source or destination of data but is outside the scope of the diagram.

Arrow

Represents the flow of data between activities, data stores, and external references.

Activities

An activity in DFD modeling represents a function that processes or transforms inputs to outputs. Although generally drawn as rounded-corner boxes, activities are synonymous with activities in IDEF0 and IDEF3. Like IDEF3 activities, DFD activities have inputs and outputs, but do not support controls or mechanisms as arrows, as in IDEF0. In some implementations of Gane and Sarson DFDs, IDEF0 mechanisms are modeled as resources. The following illustration displays the IDEF0 mechanism at the bottom of the box.
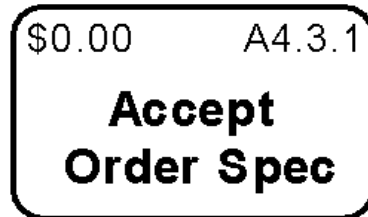
Data Stores

As flows represent objects in motion, data stores represent objects at rest. In a data processing system, data stores represent any mechanism by which data is held for subsequent processing. A typical representation in DFD modeling of a data store is shown in the following illustration:
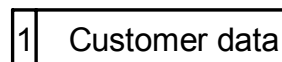
External References

An external reference can provide both inputs into the system (act as a supplier), and receive outputs (act as a customer). External references are depicted as shadowed boxes and usually appear at the edges of a diagram. A single external reference (such as Customer) can appear multiple times in a single diagram. This is often used to reduce the clutter of long lines cutting across a diagram.
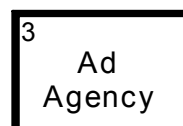
Arrows

Arrows are used to describe the flow of objects from one part of the system to another. Because DFD activity box sides do not have a dedicated function (as in IDEF0, where each box side has a specific meaning), arrows can originate from or terminate to any side of the activity. A double-headed arrow indicates a coordinated command-response dialogue between two activities, between an activity and an external reference, or between two external references. For example, in the following illustration, a double-headed arrow represents a coordinated interchange between *Quill Computer Business System* and *Customer*.
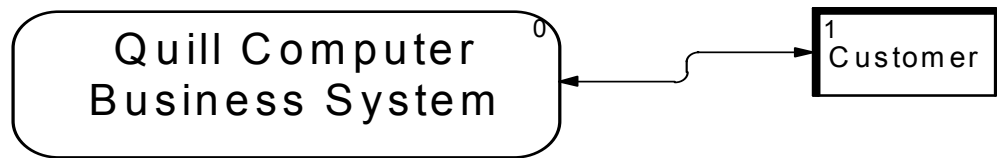
Branching and Joining of Arrows

An arrow on a data flow diagram may be branched (split), and arrow segments may be relabeled to show the decomposition of the data that is carried along the flow. The following example illustrates the customer information arrow splitting into three separate arrows:
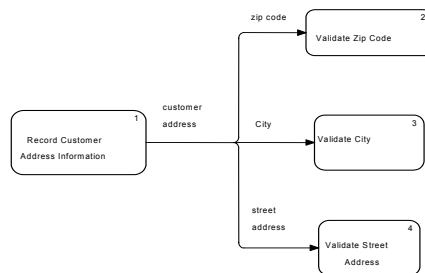
The following illustration shows how arrows may also join (merge) to form aggregate objects:
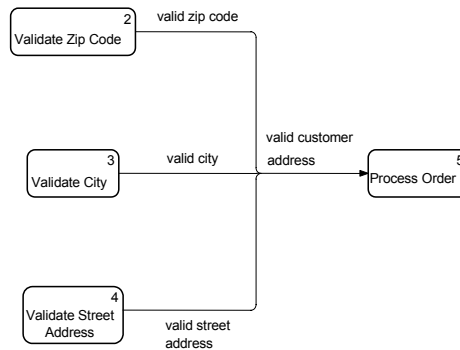
Object Numbering

In a data flow diagram, each activity number can include a prefix, parent diagram number, and an object number, as shown in the figure below. The object number uniquely identifies the activity on a diagram. The parent diagram number and object number together uniquely identify each activity in your model.
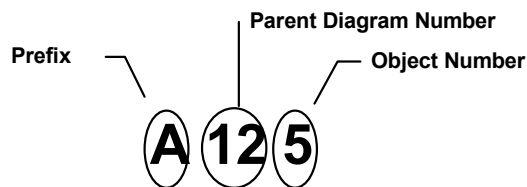
Unique numbers are assigned to each data store or external reference name, regardless of the location of the object in the diagram.

Each data store number can include the prefix D and a unique store number.
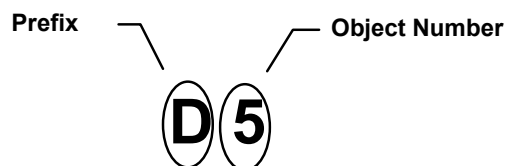
Similarly, each external reference can include the prefix E and a unique external entity number.

Prefix   **Object Number**

E 5
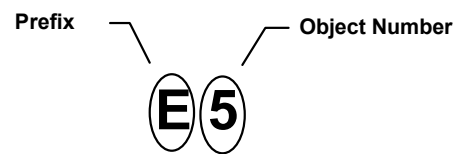
Chapter 2: DFD Model Syntax and Semantics

This section contains the following topics:

DFD Model Structure

In the DFD model structure, systems are viewed as nouns. The context data flow diagram often consists of an activity box and external references. The activity box is usually labeled with the name of the system. The figure below is a typical data flow context diagram.

Quill Computer Business System
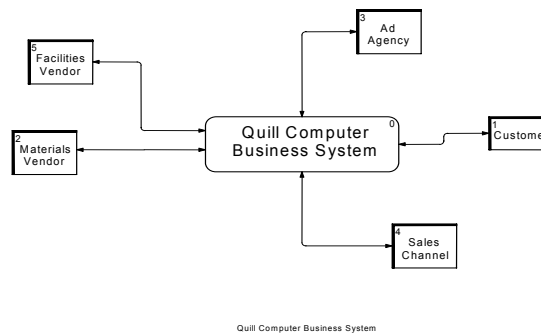
You should build a model from a single viewpoint and include a well-defined purpose and scope. The purpose should summarize all the questions the new model must answer. The scope should provide the amount of detail necessary to answer the questions listed in the purpose.

Note: For more information, see the AllFusion Process Modeler *Business Process Modeling Design Guide*.

Chapter 3: Building a DFD

This section contains the following topics:

How You Build a DFD

You can build a DFD using a traditional structured analysis and design approach similar to that used for building an IDEF0 diagram, using any of the following methods:

- Build a physical model of the system that you are currently using.

- Create a logical model containing the essential requirements of the current system.

- Create a logical model containing the essential requirements of the proposed system.

- Create a physical model of the proposed system.

Example: Data Flow Diagram

The following is an example of a completed data flow diagram:
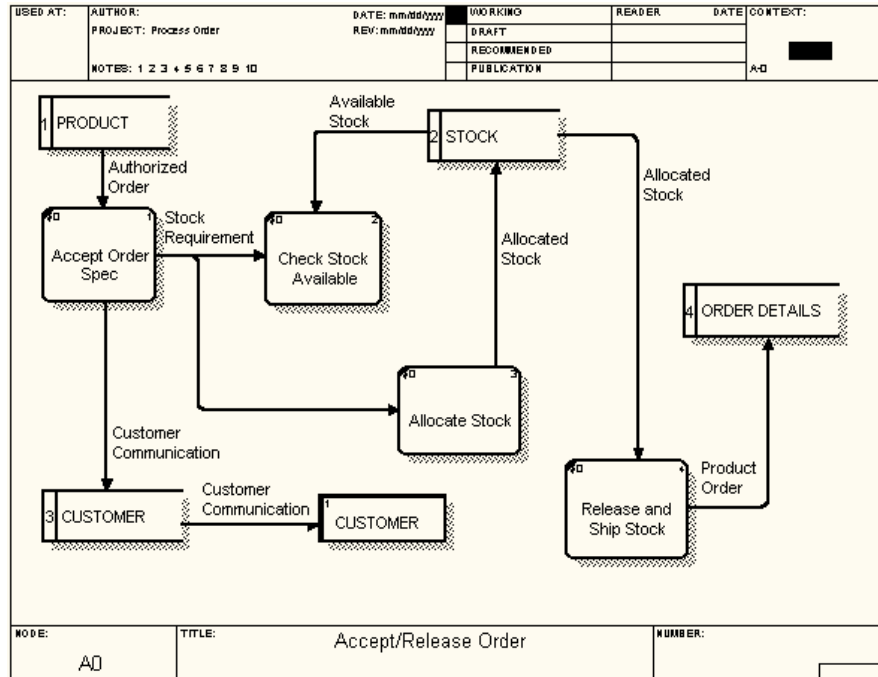
Create a DFD

Create a DFD when it is necessary to document the movement and processing of information within your business or organization.

To create a DFD

1. Click New from the File menu.

    The AllFusion Process Modeler r7 dialog opens.

2. Enter a name for the model you are creating in the Name text box, select the Data Flow (DFD) option for model type, and click OK.

    The Properties for New Models dialog opens.

3. Complete the following fields in the General tab of the Properties for New Models dialog, and click OK:

   Author

   Specifies the name of the model author.

   Author initials

   Specifies the initials of the model author.

   Apply CRUD/IRUN restrictions

   Enforces CRUD and IRUN restrictions on Call arrows and Mechanism arrows.

   When you clear this check box, CRUD and IRUN restrictions are not enforced so that you can specify CRUD and IRUN data to Mechanism arrows and Call arrows.

   The model opens and displays the Activity Box that will become your first Activity.

Add More Activities to a DFD

When you create a DFD, you also create your context activity. The next step is to decompose that activity into its related activities. If you need to add more activities to the diagram, you can do this using the Activity Box Tool in any open data flow diagram.

To add activities

1. Click the Activity Box Tool then click the area on the diagram where you want to add the activity.

   The activity box is displayed on the diagram.

2. Double-click the activity box you just added.

   The Activity Properties dialog opens at the Name tab.

3. Enter a name for the activity or select an existing name from the Unused Activity Names list, and click OK.

   The Activity Properties dialog closes and the name for that activity displays in the activity box.

Add Data Stores to a DFD

After you have added all the required activities, you can add data stores to the diagram to represent the various databases needed for each activity.

To add a data store

1. Click the Data Store Tool ▭ then click the area on the diagram where you want to add the data store.

   The Data Store dialog opens.

2. Select one of the following to assign a name for the new data store and click OK:

   Reusable Data Store

   Specifies a data store name from the Reusable Data Store list or lets you enter a new data store name in the lower text box.

   Note: If this is the first data store in the diagram, you must use the text box.

   Arrow

   Specifies the arrow to associate with the data store in the diagram. This option is unavailable if the diagram has no arrows.

   Entity

   Specifies an existing entity to associate with the data store in the diagram. This option is unavailable if the diagram has no entities.

   Other

   Specifies not to associate an existing arrow or entity with the data store. Can also indicate you have selected an existing data store or entered a unique name in the text box.

   Default: Other

   The Data Store dialog closes and the data store appears on the diagram.

Example: Data Store

The following is an example of a data store named PRODUCT with its associated activity:
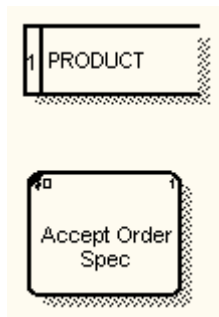
Add External References to a DFD

Add external references to show sources or destinations of data outside the scope of the diagram.

A DFD external reference is different than a border arrow in an IDEF0 diagram. Although similar, you use them for different purposes.

Note: For more information, see the AllFusion Process Modeler *Business Process Modeling Design Guide*.

To add external references

1. Click the External Reference Tool ☐ then click the area on the diagram where you want to add the external reference.

    The External Reference dialog opens.

2. Select one of the following to assign a name for the new external reference and click OK:

    Reusable External References

    Specifies an external reference name from the Reusable External References list or lets you enter a new external reference name in the lower text box.

    Note: If this is the first external reference in the diagram, you must use the text box.

    Arrow

    Specifies the arrow to associate with the external reference in the diagram. This option is unavailable if the diagram has no arrows.

Entity

> Specifies an existing entity to associate with the external reference in the diagram. This option is unavailable if the diagram has no entities.

Other

> Specifies not to associate an existing arrow or entity with the external reference. Can also indicate you have selected an existing external reference or entered a unique name in the text box.

Default: Other

> The External Reference dialog closes and the external reference appears on the diagram.

Note: A unique number is assigned to the external reference or, if you select an existing name from the Reusable External References list, the previously assigned external reference number is used.

Example: External Reference

The following is an example of an external reference named CUSTOMER:
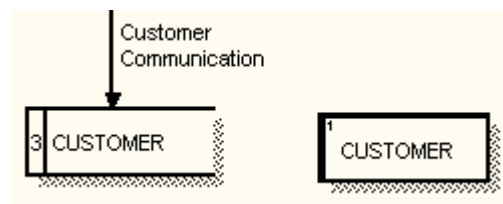
Add Arrows to a DFD

After you have created activities, data stores, and external references, create arrows to specify their associations.

To add arrows

1. Click the Arrow Tool ➔ then click the source border, activity, data store, or external reference.

   A large highlight triangle appears, similar to what is shown in the following illustration.
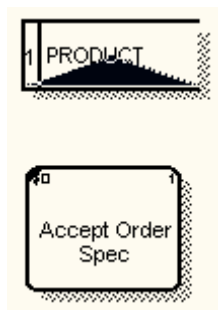
2. Click the highlight triangle, then move the cursor over the destination border.

   A large highlight triangle appears.

3. Click the highlight triangle.

   An arrow appears representing the flow of data.

   Note: Unlike IDEF0 modeling, in Data Flow Diagramming, you can attach arrows to any side of an Activity Box.

4. Right-click the stem of the arrow and select Name from the shortcut menu.

   The Arrow Properties dialog opens.

5. Name the arrow and click OK.

   The Arrow Properties dialog closes, and the arrow displays with its name.

Activity Decomposition Diagrams

You can use activity decomposition diagrams in business modeling to break an activity down into its constituent parts. For example, the activity *Run Video Store* can be decomposed into activities such as *Open Store*, *Receive Payment*, *Rent Video*, and *Close Store*. Each of these activities can also be decomposed into their constituent activities.

You can decompose activities (in IDEF0 and DFD modeling) or Units of Work (in IDEF3 modeling). Units of Work (UOWs) indicate an event, process, decision, or action. Although the methodologies differ, the basic premise of decomposition is the same. You can decompose IDEF0 models into IDEF3 and DFD constituent activities and Units of Work.

Note: The IDEF0 diagram must always be the parent activity of any mixed model decomposition diagram. It is a good idea to have at least two levels of IDEF0 activities before decomposing into another methodology. That way, you have enough activities to create child decomposition diagrams.

Create an Activity Decomposition Diagram

You can decompose a context activity when you create a decomposition diagram. This is helpful when you need greater detail for a more accurate representation of the system you are modeling.

To create an activity decomposition diagram

1. Select the activity that you want to decompose and then click the Go to Child Diagram tool ▼ on the AllFusion PM toolbar.

    The Activity Box Count dialog opens.

2. Select one of the following decomposition types and any additional options and click OK:

    IDEF0

    Specifies to create an IDEF0 decomposition diagram.

    DFD

    Specifies to create a DFD decomposition diagram.

    If you select to create a DFD decomposition, you can select the following:

    Include Externals and Data Stores

    (Optional) Specifies to include externals and data stores in the decomposition diagram.

IDEF3

Specifies to create an IDEF3 decomposition diagram.

Number of Activities in this Decomposition (0-8)

Specifies the number of activities between zero and eight to create in the decomposition diagram.

The Activity Box Count dialog closes and the decomposition diagram opens.

3. Double-click one of activity boxes that you just created.

   The Activity Properties dialog opens at the Name tab.

4. Enter a name for the activity or select an existing name from the Unused Activity Names list, and click OK.

   The Activity Properties dialog closes and the new name for that activity displays in the activity box.

   Note: Double-click each activity box for which you need to enter a name. You can reposition the activity boxes on the diagram as needed. You will also need to connect the existing arrow objects to the activities in the decomposition.

Example: Activity Decomposition Diagram

The following is an example of an activity decomposition diagram in the beginning stage, showing a decomposition of four activities:
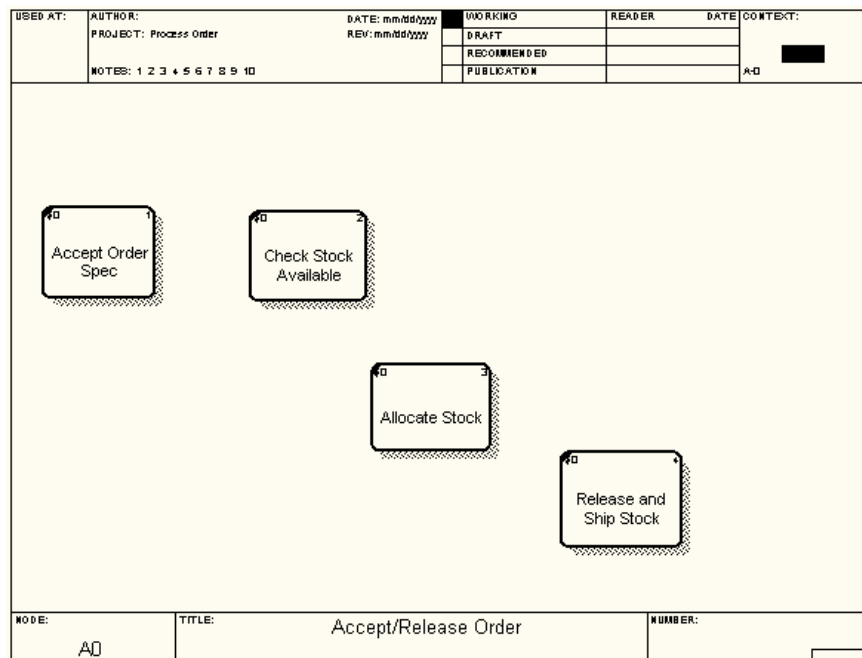
Chapter 4: Additional DFD Features

This section contains the following topics:

Event Partitioning

An alternate approach to data flow diagramming in software design is called *event partitioning*. Use event partitioning to build a system model containing several DFDs.

How You Use Event Partitioning

To use event partitioning, complete the following tasks:

- Build a *logical model* to show the system as a collection of *activities* and document *what* the system should do.

- Create an *environment model* to describe the system as an object that responds to events from external references. This environment model usually consists of a statement of the system's purpose, a single context diagram, and an event list. The context diagram consists of a single box that represents the entire system, and the external references with which this system interacts (its environment).

- Create a *behavior model* to show how the system handles all of the events. This model begins as a single diagram, with one box representing each response to an event identified in the environment model. Data stores are added to model data that must be remembered between events. Flows are added to connect the other elements, and the diagram is checked for consistency with the environment model.

- (Optional) Reformat the model for presentations using activity aggregation to create simplified parent diagrams and performing decomposition to improve clarity.

Organization Visualization

Complex business processes often cut across a number of organizational boundaries and disciplines. Understanding and optimizing these types of processes requires companies to extend their thinking beyond traditional hierarchical models and to visualize operations from the perspective of their customers and partners.

With Swim Lane diagrams and organization charts you have the tools to visualize the structure and process flows of your organization. Swim Lane diagrams enable you to quickly assess and improve complex business process flows across organizational groups. Organization charts graphically help you to understand your organization's structure and its impact on your business optimization effort.

Swim Lane Diagrams

Swim Lane diagrams can provide your organization with an efficient mechanism for visualizing and optimizing processes. Swim Lane diagrams organize complex processes across functional boundaries, and help you to conveniently view processes, roles, and responsibilities, and their flow. You can build a new diagram or use one based on existing Process Flow (IDEF3) diagrams.

You can add Swim Lane diagrams to any model to better visualize process flow. Swim Lane diagrams display graphical horizontal lanes that represent process dependencies called *roles*. For example, you could create a Swim Lane diagram to display all activities with the Shipping role in the Shipping swim lane. You can also add bitmaps and a diagram scale or timeline to any Swim Lane diagram.

Example: Swim Lane Diagram

The following is an example of a Swim Lane diagram:
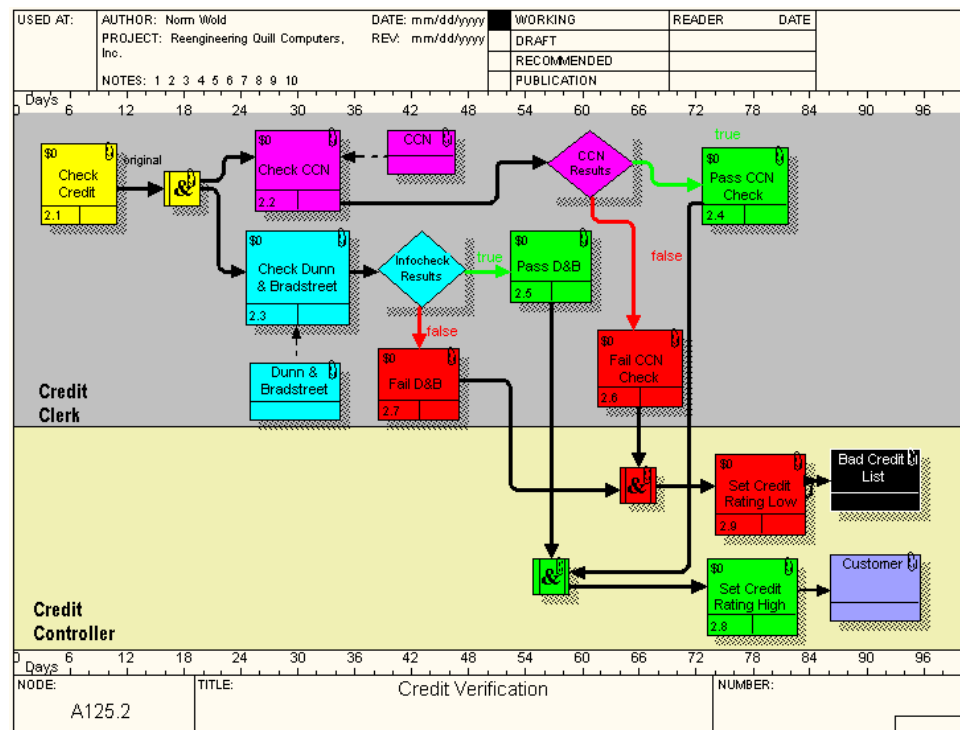
Organization Charts

Organization structures have an immense impact on how business processes are defined and carried out. Without a clear understanding of roles, relationships, and responsibilities, it is often impossible to successfully optimize business operations.

Organization charts are based on user-defined roles and provide a graphical view of an organization's structure. Use them to quickly clarify the business process optimization effort.

Example: Organization Chart

The following is an example of a typical organization chart:
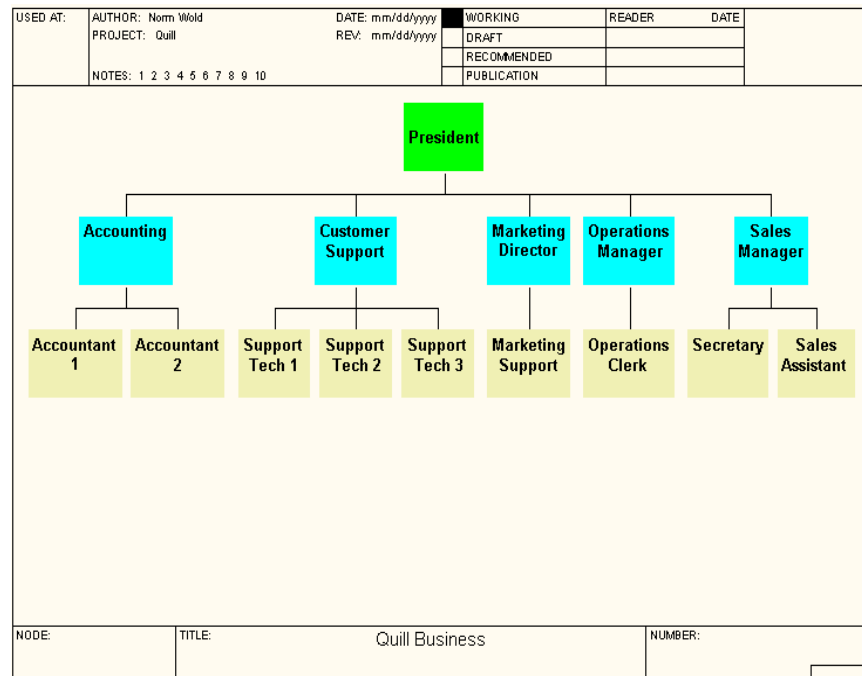
How To Use Swim Lane Diagrams and Organization Charts in Your Models

To use Swim Lane diagrams or organization charts in AllFusion Process Modeler models, complete the following tasks:

- Create process roles using the following procedures:

  - Create and manage role group names and properties in the Role Group Dictionary.

  - Create and manage role names and properties in the Role Dictionary.

  - Create and manage resource names and their role associations in the Resource Dictionary.

  Note: For Swim Lane diagrams, you can create process roles in the UDP Dictionary by adding list items to a text list UDP.

- (Optional) Add bitmaps to the Bitmap Dictionary for enhancing Swim Lane diagrams and organization charts.

- Create Swim Lane diagrams or organization charts.

Create and Manage Role Groups

The Role Group Dictionary utilizes a grid to provide a way to create and manage role group names and property information. Create a new role group in the Role Group Dictionary so it can be used in Swim Lane diagrams or organization charts, or manage the properties of existing role groups.

Note: You must have at least one role group defined in the Role Group Dictionary before you can add either a role or a resource.

To create or manage a role group

1. Select Role Group from the Dictionary menu.

   The Role Group Dictionary opens.

2. Add or edit the information in the following Role Group Dictionary columns, select Save from the Dictionary menu, and then select Close from the Dictionary menu.

   Name

   Displays the role group name.

   Click the cell in the last row and enter the role group name, or select a name to edit.

   Note: Use a role group name that best describes how you intend to use the role group. For example, if you want to create a company organizational chart, you can use "WIDGET INC. MANAGEMENT" as a role group.

   Definition

   Displays the role group definition information.

   Bitmap

   Displays the default bitmap associated with the role group.

   Importance

   Displays the importance level of the role group.

   Shape

   Displays the default shape for the roles associated with the role group.

   The role group is added to the Role Group Dictionary and the Role Group Dictionary closes.

Create and Manage Roles

The Role Dictionary utilizes a grid to provide a way to create and manage role group names and property information. Create a new role in the Role Dictionary so it can be used in Swim Lane diagrams or organization charts, or manage the properties of existing roles.

Note: Before you can add a new role, you must have at least one role group defined in the Role Group Dictionary.

To create or manage a role

1. Select Role from the Dictionary menu.

    The Role Dictionary opens.

2. Add or edit the information in the following Role Dictionary columns, select Save from the Dictionary menu, and then select Close from the Dictionary menu.

    Name

    Displays the role name.

    Click the cell in the last row and enter the role name, or select a name to edit.

    Definition

    Displays the role definition information.

    Role Group

    Displays the role group associated with the role.

    Bitmap

    Displays the default bitmap associated with the role.

    Importance

    Displays the importance level of the role.

    Shape

    Displays the default shape associated with the role.

    The role is added to the Role Dictionary and the Role Dictionary closes.

Create and Manage Resources

The Resource Dictionary utilizes a grid to provide a way to create and manage resource names and their associations to roles. Create a new resource in the Resource Dictionary so it can be used in Swim Lane diagrams or organization charts, or manage the properties of existing resources.

Note: Before you can add a new resource, you must have at least one role group defined in the Role Group Dictionary, and roles must be defined in the Role Dictionary.

To create or manage a resource

1. Select Resource from the Dictionary menu.

    The Resource Dictionary opens.

2. Add or edit the information in the following Resource Dictionary columns, select Save from the Dictionary menu, and then select Close from the Dictionary menu.

    Name

    Displays the resource name.

    Click the cell in the last row and enter the resource name, or select a name to edit.

    Definition

    Displays the resource definition information.

    Associations

    Displays the role group/role associations.

    The resource is added to the Resource Dictionary and the Resource Dictionary closes.

Create a Process Role in the UDP Dictionary

Use the UDP Dictionary to add a UDP list item to represent a process role, so that it can be used in a Swim Lane diagram. These list items appear as selections in the UDP list boxes in diagram object dictionaries.

To add a process role to a UDP Dictionary

1. Select UDP from the Dictionary menu.

   The UDP Dictionary opens.

2. Click a cell in the UDP Datatype column, select Text List (Single selection) from the dropdown selection, and then click a cell in the Settings column.

   The Text UDP List Editor opens.

3. Type the UDP list item name on a new line in the list area and click OK.

   The process role is added and the Text UDP List Editor closes.

Add a Bitmap to the Bitmap Dictionary

You can use bitmaps (*.bmp) to enhance the appearance of any Swim Lane diagram or organization chart. To use bitmaps in diagrams, you must add them to the Bitmap Dictionary by importing them from an external source, such as your computer hard drive.

Note: You can import any size bitmap. After you import a bitmap, the original bitmap file is not referenced or required. When you save the model, all imported bitmaps are saved with the model file.

To add a bitmap to the Bitmap Dictionary

1. Select Bitmaps from the Dictionary menu.

   The Bitmap Dictionary opens.

2. Click the Import button.

   The Open dialog opens.

3. Select the path and file name of the bitmap (*.bmp) you want to add and click Open.

   The Open dialog closes, you are returned to the Bitmap Dictionary, and your selected bitmap is displayed in the Model bitmaps list.

4. Click OK.

   The bitmap is added and the Bitmap Dictionary closes.

Create a Swim Lane Diagram

Add a Swim Lane diagram to any IDEF3 model to display all activities with a specific role and better visualize process flow. Once you have created the necessary role groups, roles, and resources, you are ready to create a Swim Lane diagram.

Note: You must have either a role group or a single-selection text list UDP defined in order to create a Swim Lane diagram.

To create a Swim Lane diagram

1. Select Add Swim Lane diagram from the Diagram menu.

   The Swim Lane Diagram Wizard - Step 1 of 2 dialog opens.

2. Complete the following information in this dialog, and then click the Next button:

   Role Group

   Bases the Swim Lane diagram on a role group and lets you select the specific role group from the dropdown list.

   Text List UDP

   Bases the Swim Lane diagram on a text list UDP and lets you select the specific text list UDP from the dropdown list.

   Yes

   Specifies to copy the objects from an IDEF3 diagram into the Swim Lane diagram and lets you select the specific IDEF3 diagram from the dropdown list.

   No

   Specifies not to copy the objects from an IDEF3 diagram into the Swim Lane diagram.

   If you select this option, you can add diagram objects such as activities and arrows later.

   Diagram name

   Specifies a name for the Swim Lane diagram.

   The Swim Lane Diagram Wizard - Step 2 of 2 dialog opens.

3. Complete the following information in this dialog, and then click the Finish button:

   Swim Lanes on Diagram

   Specifies the swim lanes to display in the Swim Lane diagram.

   Swim Lanes NOT on Diagram

   Specifies the swim lanes to not display in the Swim Lane diagram.

Add All

Specifies to move all the displayed swim lanes into the Swim Lanes on Diagram list.

Remove All

Specifies to move all the displayed swim lanes into the Swim Lanes NOT on Diagram list.

Bitmap display

Lets you specify each swim lane that you want to display as a bitmap.

Note: Swim Lane bitmaps apply only to Swim Lane diagrams based on a Role Group. Bitmaps do not apply to Swim Lane diagrams that you base on a text list UDP.

The Swim Lane diagram is added to the model using the diagram properties you defined in this wizard, and is opened in the diagram workspace.

Note: You can also drag and drop swim lanes between the Swim Lanes on Diagram tree and the Swim Lanes NOT on Diagram tree, and place them in any order that you need.

Movement of Objects in a Swim Lane Diagram

You can move objects in a Swim Lane diagram by clicking and dragging objects to the location that you want. You can change the order of swim lanes on your diagram from the Display tab of the Diagram Properties dialog.

You can also resize objects when you move the cursor over the object until you see a double-headed arrow, and then click and drag to resize.

Create an Organization Chart

Add an organization chart to any model to provide a graphical view of an organization's structure. You must first create the necessary role groups, roles, and resources in order to create an organization chart.

To create an organization chart

1. Click Add Organization Chart from the Diagram menu.

    The Organization Chart Wizard - Step 1 of 3 dialog opens.

2. Complete the following information in this dialog, and then click the Next button:

    Name

      Specifies the name of the new organization chart.

    Role Group

      Specifies the role group.

      Click the Role Group Dictionary button to either add or edit a role group.

      Note: When you open the Role Group Dictionary, the Organization Chart Wizard closes.

    Role

      Specifies the role.

      Click the Role Dictionary to add or edit a role.

      Note: When you open the Role Dictionary, the Organization Chart Wizard closes.

    Resource

      Specifies the resource.

      Click the Resource Dictionary button to add or edit a resource.

      Note: When you open the Resource Dictionary, the Organization Chart Wizard closes.

    Author

      (Optional) Specifies the organization chart author.

    The Organization Chart Wizard - Step 2 of 3 opens.

3. Complete the following information in the dialog:

   Role Group for the next level

   Specifies the role group containing the roles for the second level of the organization chart.

   Available Role / Resources

   Specifies the role and resource combinations available for selection.

   Click the role and resource combinations you require, and click Add to move it into the Selected Group/Role/Resources list.

   Selected Group/Role/Resources

   Specifies all the role and resource combinations that you moved from the Available Role / Resources list.

   Select a role and resource combination in this list and click Remove to move the role and resource combination back into the Available Role / Resources list. To change the order of this list use the up and down arrow buttons.

   Click Next.

   The Organization Chart Wizard - Step 3 of 3 opens.

4. Select the following organization chart display and style options as needed for your environment, and then click Finish:

   Drawing

   Specifies the following drawing options:

   Show boxes

   Specifies to display roles as graphical boxes in the organization chart.

   Show Role Group Name

   Specifies to display the role group name in each organization chart box.

   Show Role Name

   Specifies to display the role name in each organization chart box.

   Show Resource Name

   Specifies to display the resource name in each organization chart box.

   Border

   Specifies the following border options:

   Include Kit

   Specifies to include the diagram kit in the organization chart.

   Include title

   Specifies to include the diagram title area in the organization chart.

Box Size

Specifies the following box size options:

Fit each box to text

Enables automatic adjustment of each box to the amount of text in the box.

One size per row

Enables automatic adjustment of each box within any row to be the same size.

The box with the most amount of text is used to size all boxes in a row.

All one size

Enables automatic adjustment of each box in the organization chart to be the same size.

The box with the most amount of text is used to size each box in the organization chart.

Draw Style

Specifies the following draw style options:

Standard

Enables boxes in the organization chart to be drawn according to the options selected in the Drawing group box.

Bitmap

Enables role bitmaps in the organization chart boxes to be drawn.

You can view bitmaps in the organization chart only if you first assign bitmaps to roles in the Role Dictionary.

Shape

Enables role shapes in the organization chart boxes to be drawn.

You can view shapes in the organization chart only if you first assign shapes to roles in the Role Dictionary.

Your organization chart opens in the diagram workspace.

Note: You can change any of these options later in the Style tab in the Organization Chart Properties dialog.

Move Organization Chart Objects

You can move objects in an organization chart by clicking and dragging objects right on the diagram workspace.

To move objects in an organization chart

1. Click Open from the File menu and select the model that contains the organization chart that you need to edit.

   The model opens in the diagram workspace.

2. Open the organization chart that you need to edit, single-click each object, drag it to its new location in the organization chart, and then release the mouse button.

   Note: The cursor changes to a thick black arrow to show you when you can release the mouse button.

   The object appears in its new location.

Example: Organization Chart Object Movement

In the following illustration, the organization chart object *Sales Assistant--Joe Russo* needs to be moved from *Operations Manager--Lisa Elliot* to *Sales Manager--George White*:
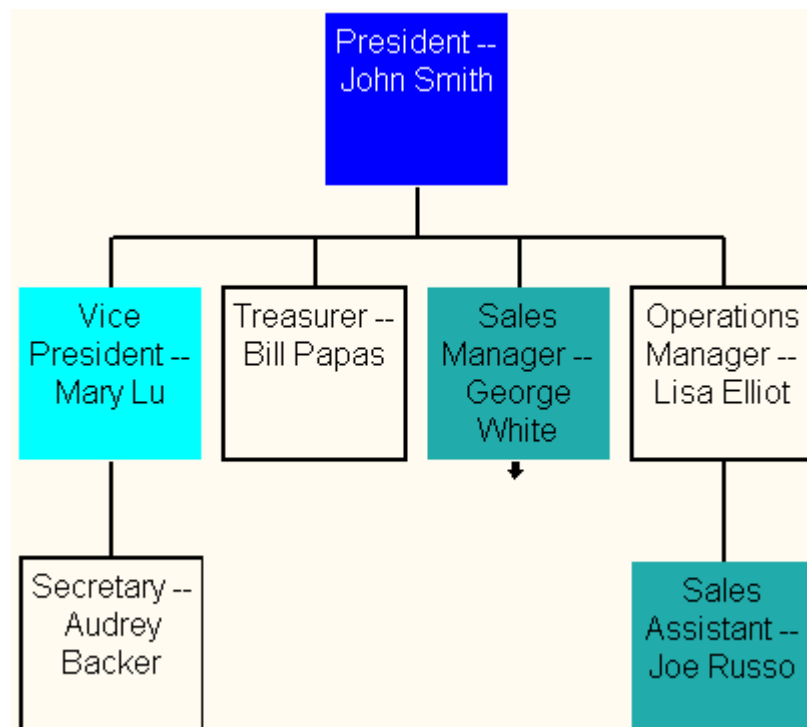
Example: Organization Chart Object Movement Completion

In the following illustration, the movement of the organization chart object *Sales Assistant--Joe Russo* from *Operations Manager--Lisa Elliot* to *Sales Manager--George White* was completed:
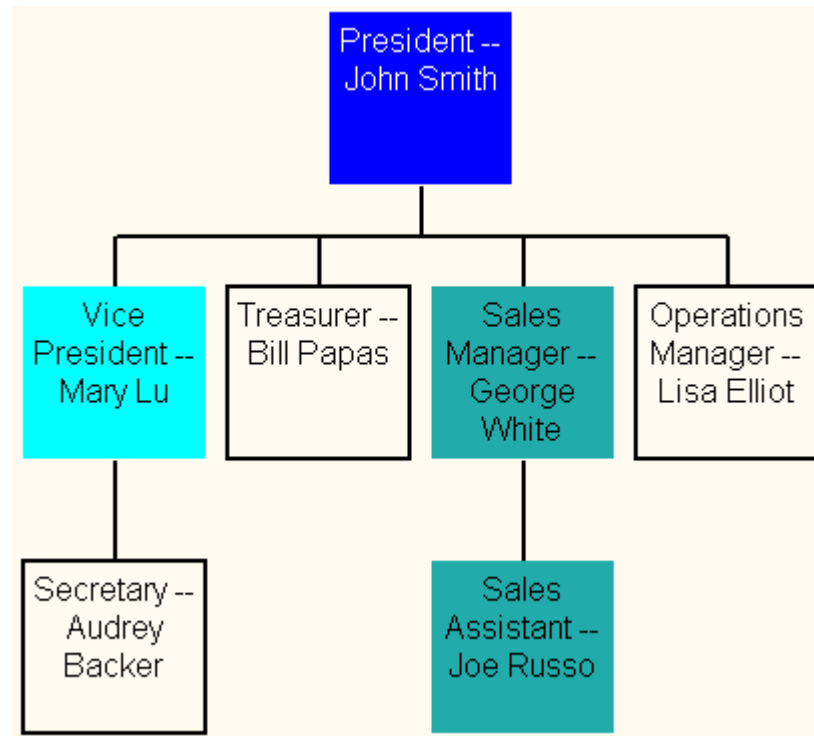
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