Peregrine

AssetCenter

Cable and Circuit

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AssetCenter

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Cable and Circuit

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PREFACE

Foreword

Warning

Managing cables and circuits relies on the technical knowledge of the following domains:

- Organization of cabling systems
- Cabling techniques
- Cabling material
- Cabling standards

This guide does not explain the technical knowledge related to domains mentioned above; it is assumed that you are already familiar with it.

For whom is the Cable and Circuit module?

AssetCenter's Cable and Circuit module was mainly designed for organizations with a complex networking system (LAN, WAN, telephony, video, etc).

In general, it is used by the following people:

- Network administrators
- Maintenance technicians

What purpose does the Cable and Circuit module serve?

The Cable and Circuit module enables you to perform the following tasks:

- Conduct a physical and detailed inventory of your cables and cable devices:
  - Technical description
  - Geographic location
- Locate your cables and cable devices:
  - Labeling system
  - Description of links between cable devices and cables.
- Verify the continuity of the cables' paths (from the user to the server or to the PABX).
- Create projects and work orders to mange the placement or removal of cables and cable devices.

Managing these tasks enables you to:

- Locate each cable and cable device.
- Easily intervene in case of a problem at level of the faulty cable or cable device.
- Create, modify or cancel connections.
- Homogenize the mode of connection between cables and cable devices.
- Define cabling standards all the way to the conductors and connector pins.

How to use this guide

Reminders chapter

This chapter covers the graphical interface of AssetCenter, which you need to be familiar with before going on to the rest of the guide. This information is not brought up again in the guide in the effort to keep it as concise as possible.

Read through this information at least once. You will need to have a good grasp of it to be able to properly understand the rest of this guide.

Presentation of the cable management chapter

This chapter outlines some important principals relating to the cabling of a network and explains how AssetCenter represents a cable network.

You should read this information to form a general idea of how AssetCenter functions.

Demonstrative example chapter

In order that your learning be as easy as possible, we have developed an example throughout the course of this guide. This example represents a part of a network in the AssetCenter database. Using this example, you will be guided through the various tables concerned in cable management and will use most of the cabling wizards that automate the most common tasks.

Read the chapter **Demonstrative example** to better understand what you are going to create in the AssetCenter database using the demonstrative example, and how to best use this example throughout the course of this guide.

Implementing cable management chapter

Before creating cable devices, cables and cable links, it is indispensable that you perform some preliminary tasks and populate certain tables of reference.

Read this chapter to understand what these tasks are, what purpose these tables of reference serve and how to populate them.

The steps outlined in this chapter are done so in an ordered fashion. You must respect this order in order to properly perform these steps.

Each step brings you information on the following points:

- **Definitions**

  This section indicates which definitions you should consult in the chapter **Glossary** . It is important to read these definitions since each one of these glossary terms has a precise signification in AssetCenter.
- **Table names**

  Names of the reference tables to populate.
- **Access menu**

  Menu enabling you to access the tables to populate.
- **Simplified data model**

  This model is for the administrator who wants to understand how the database is structured. This information is indispensable for creating data in an appropriate manner and for customizing the utilization of AssetCenter for your personal needs.
- **Prerequisites**

  In order to populate certain tables, you need to have previously populated certain others. The list of such tables is provided for you in this point.
- **Fields and links that must absolutely be populated**

  There are many numerous fields and links in the AssetCenter database. Certain are mandatory, others are optional. This point provides you the list of fields and links that are mandatory in order for the Cable and Circuit module to function correctly.
- **Creation procedure**

This point provides you the information you need to create records in the table.

- **Demonstrative example**

  Nothing speaks louder than an example! That's why we have illustrated each step necessary to implement the Cable and Circuit module with a concrete example. All you need to do is adapt this example to your own needs.

  In order to keep the amount of extra information to a minimum, the detailed descriptions of fields and links present in the database is not provided in this guide. You can obtain this information by using the contextual help available for these fields (Help on this field).

  To learn more about the help on fields and links, refer to the section **Other sources of information** of this preface.

  In the same way, we will not detail each step taken to create records in all the different tables. This is because the steps taken are always the same and always respect the general interface of AssetCenter application.

Creating the termination fields chapter

Once the tables of reference are created, you can concentrate on creating the termination fields. Termination fields must be created before running the riser and lateral cables in order to take advantage of the cabling wizards, which help you accomplish these tasks.

Read this chapter to understand how to create, expand and duplicate termination fields.

Note: To create termination fields, you use cabling wizards and rely on the termination-field configurations.

Manually creating the cable devices, cables and connections chapter

Of course, you can also create cable devices, cables and connections manually. This chapter explains how to do this.

However, AssetCenter is also provided with cabling wizards that automate these common tasks.

Read this chapter if you wish to learn how these wizards create such records. Otherwise, you can skip this chapter.

Chapter Creating the connections with the wizards

These chapters present the cabling wizards that automate the main tasks required to manage your cables.

Each wizard is presented with the following information:

- **Functions performed by the wizard**
- **Prerequisites**
- **Launching the wizard**
- **Information used when using the wizard**
- **Data created or modified by the wizard**
- **Viewing the result**
- **After having launched the wizard**
- **Resolving possible problems**

Read these chapters to learn about the possibilities offered by these wizards as well as how they function.

Viewing the traces chapter

A cable network is constituted by a considerable number of cables and connections. In order to help you locate them all, AssetCenter represents the traces of your network.

Read this chapter to understand how to access the representation of these traces, how to read them and how to browse through them.

Glossary

The terminology for the Cable and Circuit module is very specialized. The glossary that we propose contains the key terms used in the AssetCenter application and a selection of terms common to this profession.

Read this glossary to better understand what these terms signify.

References chapter

This chapter contains exhaustive and systematic reference information.

Read this chapter if you want to find out about all the components of AssetCenter that are linked to cable management, or to access advanced or supplementary information.

Other sources of information

This guide was only written to give you information directly related to cable management.

To obtain associated information not covered in this guide, we recommend that you read the following documents:

The document ...	Covers information relating to the ...	Format	Location in the AssetCenter installation folder
Installation	• Installation of AssetCenter	Printed	**\doc\pdf\installbook*.pdf**
		Online	**\doc\chm\installbook*.chm**
Core tables	• Location management	Printed	**\doc\pdf\core*.pdf**
		Online	**\doc\chm\core*.chm**
Introduction	• General interface of the application	Printed	**\doc\pdf\intro*.pdf**
		Online	**\doc\chm\intro*.chm**
Portfolio	• Management of natures, models, assets, projects and work orders in general	Printed	**\doc\pdf\asset*.pdf**
		Online	**\doc\chm\asset*.chm**
Administration	• Itemized-list management	Printed	**\doc\pdf\admin*.pdf**
		Online	**\doc\chm\admin*.chm**

	• Utilization of wizards • Creation of scripts • Customization of fields • Utilization of calculated fields		
The document ...	**Covers information relating to the ...**	**Format**	**Location in the AssetCenter installation folder**
Help on fields and links	• Utilization of database fields and links	Online	This help is accessible using one of the following methods, after having selected the field or link: • Right-click and select **Help on this field** from the shortcut menu. • Press **Shift** and **F1** simultaneously on your keyboard. • Select the **Help/ Help on this field** menu.
Programmer's reference	• Utilization of APIs	Printed	**\doc\pdf\progref*.pdf**
		Online	**\doc\progref*.chm**
Database structure	• List of the database's tables, fields, links and indexes • Automatic agents triggered by AssetCenter.	Text file	• **\infos\database.txt** • **\infos\tables.txt**
		Printed	**\doc\pdf\dbstruct*.pdf**
		Online	**\doc\chm\dbstruct*.chm**
General online help	• The functioning of the entire application	Online	This help is accessible using one of the following methods, after having selected the field or link: • Press **F1** on the keyboard. • Select the **Help/ Index** menu.

CHAPTER 1

Reminders

Introduction

The reminders developed in this chapter are brief. We will tell you each time where to find more information. The information indicated in this chapter will not be repeated elsewhere in the document.

General interface of the AssetCenter application

This section will go over some of the rudimentary points of the application's interface.

To learn more, refer to the **Introduction** guide.

Accessing tables

The principal tables of AssetCenter are accessible via the menu bar in the upper region of the work space. The menu entries have been grouped by type of function. Each type of function corresponds to an entry in

the menu bar, which can be unfolded by clicking it. You then can select the desired menu entry or sub-menu.

If a table is not accessible via the main menus, you can use the **Tools/ List of screens** menu item.

Creating records in the tables

To create a new record in a table, you need to first display the table using the associated menu entry.

AssetCenter offers you to possibility of creating a new record in the table by clicking **New**. Or you can duplicate an existing record by clicking **Duplicate**.

Fill in the information concerning the item being created.

Any window in AssetCenter will present you with a certain number of fields. It is not necessary to populate all of these fields - the ones that are mandatory appear in red.

Validate the creation of your new record by clicking **Create**.

A detail window will close if you click the **Close** button.

Using wizards

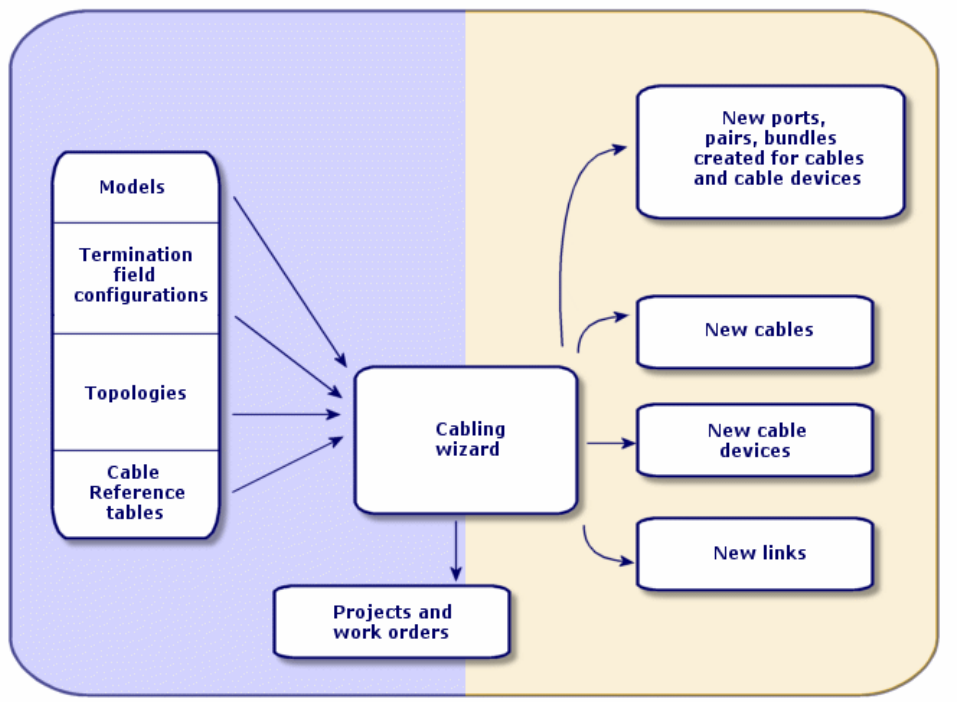
Cabling wizards facilitate the massive creation of cables, cable devices and cable links:

- Certain wizards are capable of automatically generating cables, cable devices and cable links in AssetCenter.
- Certain wizards enables you to create ports, pairs and slots at the level of the cable device in AssetCenter.
- Certain other wizards delete these cable links.

The following diagram illustrates how the wizards function:

- The left-hand side indicates from which tables the wizards draw their reference information.
- The right-hand side indicates what the wizards create.

Figure 1.1. AssetCenter cabling wizards



Overview

General information

The wizards are kept in the **Actions** table (**amAction**).

An action is an operation that calls upon a program which is directly executable in AssetCenter.

You can define the actions using the **Tools/ Actions/ Edit** menu item.

Wizards are composed of a succession of pages. Each of these pages displays information or requires user input, such as a selection to be made or data items to be entered.

Navigation

Navigating between the different pages of a wizard is easy:

- Once you have appropriately populated a page, you can continue to the following page by clicking **Next**. If you have reached the last page in a wizard, this button is no longer available.
- You always have the possibility of going back to correct possible errors or to review information by clicking **Previous**.
- You can execute the wizard's final action by clicking **Finish**.

Warning: You cannot go back, however, once you have clicked this button.

- The wizard displays a window listing the results of the action and any possible error messages.

  You can then close the window by clicking **OK**.

Warning: Once you close this window, however, the information contained in the window will be lost.

- You completely cancel the execution of a wizard (and, consequently, any action associated with it) by clicking **Cancel**.

Action types

There are two types of actions:

- Contextual: Your mouse cursor must be positioned on the appropriate context on the screen in order for the action to be proposed the menu obtained by right-clicking.
- Non-contextual: The action can be executed from no matter where your cursor is placed.

Executing actions

You can execute an action in one of the following manners:

- By clicking on the arrow of the  icon in the toolbar: The drop-down list displays the names of all the available actions. If you click  , it triggers the action's execution again. If the icon is associated with the last action executed, this icon is replaced by the  icon.
- Select the action using the **Tools/ Actions** menu item.
- By going to the detail of the action:
  1. Display the list of actions via the **Tools/ Actions/ Edit** menu.
  2. Select the action to execute.
  3. Click **View**.
- For an action whose **Context** field (**ContextTable**) indicates the reference table:
  1. Select a record from the table's list of records, or select a field (not a link) in the table.
  2. Right-click.
  3. Select the action in the list displayed by the **Actions** entry in the shortcut menu.

Note: You may select several records in a list and apply an action to them.

Selecting records from lists

Certain wizards ask you to select several records from a list. The number of records that you can select at the same time is limited to 99.

Particularities of the cabling wizards

Once they have finished their execution, most cabling wizards populate a project and a work order if you validate this possibility.

The project enables you to conserve a trace of the operations performed in the database. The work order describes the actions that you must perform physically.

Once a wizard has been executed, we recommend that you consult the project and work order created by this wizard.

Prerequisites

You need to have already created a project and have associated with it a work order before executing the action.

To do this:

- Select the **Portfolio/ Projects** menu.
- Create a new project and populate the fields and links that you want to use.
- Select the **Work orders** tab.
- Click the **+** button to add a work order to the project.
- Validate this addition by modifying the project.

How do I keep a copy of a wizard's output?

When you click **Finish** after the last step in a wizard, this performs certain operations in the database and displays information in a operations window.

If you want to keep a trace of these operations, you can perform the following steps:

1. Select all the operation lines that you want to keep.
2. Press **Ctrl** and **C** on your keyboard at the same time.

This copies the lines that you selected to the Windows clipboard.

Warning: Once you click OK in the operations window, you cannot go back again.

What should I do in case of an 2001 error?

When you execute the cabling wizards, you might receive an error message identified by the number **2001**.

This error is due in general to the selection of an inappropriate label rule.

In effect, if the label rule does not apply to the object types that the wizard must create, the wizard will most likely try to create similar labels for several records. However, labels are unique values that identify individual items. This thus prohibits the creation of several records having the same label.

Example 1.1. Example of an inappropriate label rule

Let's suppose that the Labels table contains a label rule for cable links of cable bundles. Now, let's suppose that this rule is the type: `<Name of the cable model> - <Cable label> - <Number of pairs of the bundle>`.

If you select this label rule to create cable-link labels for the **ports** of the same cable device, the wizard will try to create several labels with the same value (this value will have the form: `<Name of the device model> - <Device label> -`). This is because the ports do not have any pairs, (only cables are composed of pairs), and thus, the wizard will not find any number to insert into the label (to populate the `<Number of pairs of the bundle>` part).

For this reason, the wizard cannot create the cable links in the database. AssetCenter thus displays the **2001** error when you execute the wizard.

To remedy this problem, you need to select the appropriate label rule and execute the wizard again.

What happens if the wizard cannot be executed in its entirety?

If there is an error during the execution of a wizard, AssetCenter cancels all the actions that it already performed in the database before the error occurred (creation or deletion of records or links, modification of fields, etc.).

This saves you from having to go back and manually adjust anything in your database in case of an error.

Impacting the customizable feature of the database.

The AssetCenter database is customizable. Notably, you can modify the labels of the tables, fields and links. Therefore, it is possible that the documentation contains a label that no longer corresponds to your database.

The SQL names, contrary to labels, cannot be modified. It is for this reason that we indicate the SQL name in parentheses after the label of a table, field or link.

2 Presentation of the cable management

CHAPTER

Introduction

Managing a cable network is extremely complex. This is due to the large number of cables and cable devices involved in a network. Consequently, it is important to be able to locate these cables and cable devices with precision and simplicity.

AssetCenter offers this possibility and enables you to manage large quantities of information that would otherwise be difficult to store on paper or in an generic database.

Areas covered by the Cable and Circuit module

This section covers certain aspects of managing a cable network and explains how the network is represented in AssetCenter. Some principal terms are also defined in this section.

The Cable and Circuit module concerns the "hidden" part of the cable network, from the wall outlet to the termination fields.

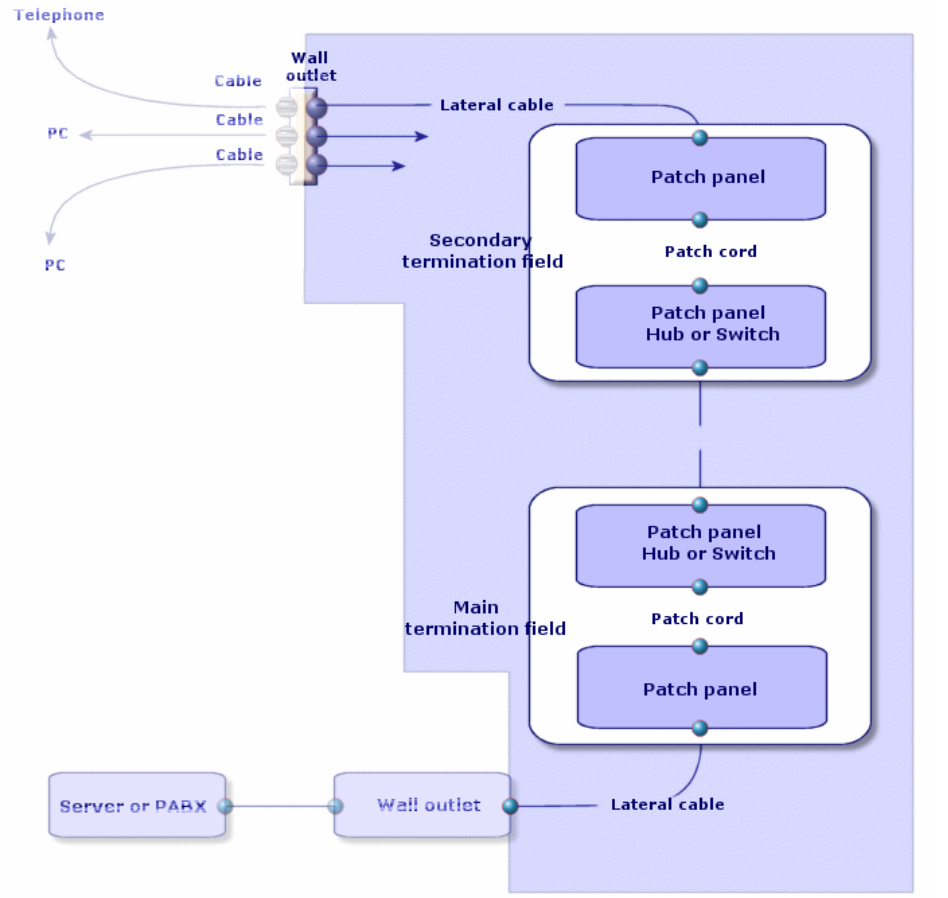
Example

The invisible side of the wall outlet is also taken into consideration. The visible side of the outlet and its connection to computers, peripheral devices and telephones is not taken into consideration here.

The termination-field devices, the riser and the lateral cables are also included here. The servers, the PABX and the connection to them are not concerned by the module.

The following illustration shows you the part of a network covered by the Cable and Circuit module.

Figure 2.1. Areas covered by cable management



Principal concepts

The cables: pairs, conductors, bundles

See chapter Glossary, section AssetCenter key terms/ Pair/conductor of this manual.

See chapter Glossary, section AssetCenter key terms/ Bundle of this manual.

The cable devices: pins, terminals, ports

See chapter Glossary, section AssetCenter key terms/ Pin/ Terminal of this manual.

See chapter Glossary, section AssetCenter key terms/ Port of this manual.

The connection between cable devices and cables: connection types

See chapter Glossary, section AssetCenter key terms/ Connection type of this manual.

The cable devices and cables are connected in the following ways:

- From device pin to device pin.
- From device pin to cable conductor or wire.
- From device port to device port.
- From device port to cable bundle.

Thus, AssetCenter distinguishes between two types of connections:

- By pin: Each pin is identified.
- By port: Pins are not longer identified individually.

Connections: cable links, user and host directions

Link

See chapter Glossary, section AssetCenter key terms/ Cable link of this manual.

Host direction

See chapter Glossary, section AssetCenter key terms/ Host of this manual.

User direction

See chapter Glossary, section AssetCenter key terms/ User of this manual.

Note about patch cords

The patch cords used to cross connect the termination-field devices are not described in the database. Only the cable links between the ports and these devices are described.

Locating wires and pins: color codes

See chapter Glossary, section AssetCenter key terms/ Color code of this manual.

3 Demonstrative example

CHAPTER

Demonstrative example

In order to facilitate your learning experience, we will develop an example throughout the course of this manual.

This will enable you to better understand what the Cable and Circuit module represents and how it represents it.

Warning

In order that an example works, you must carry out each step in its entirety and respect the order in which these steps are presented.

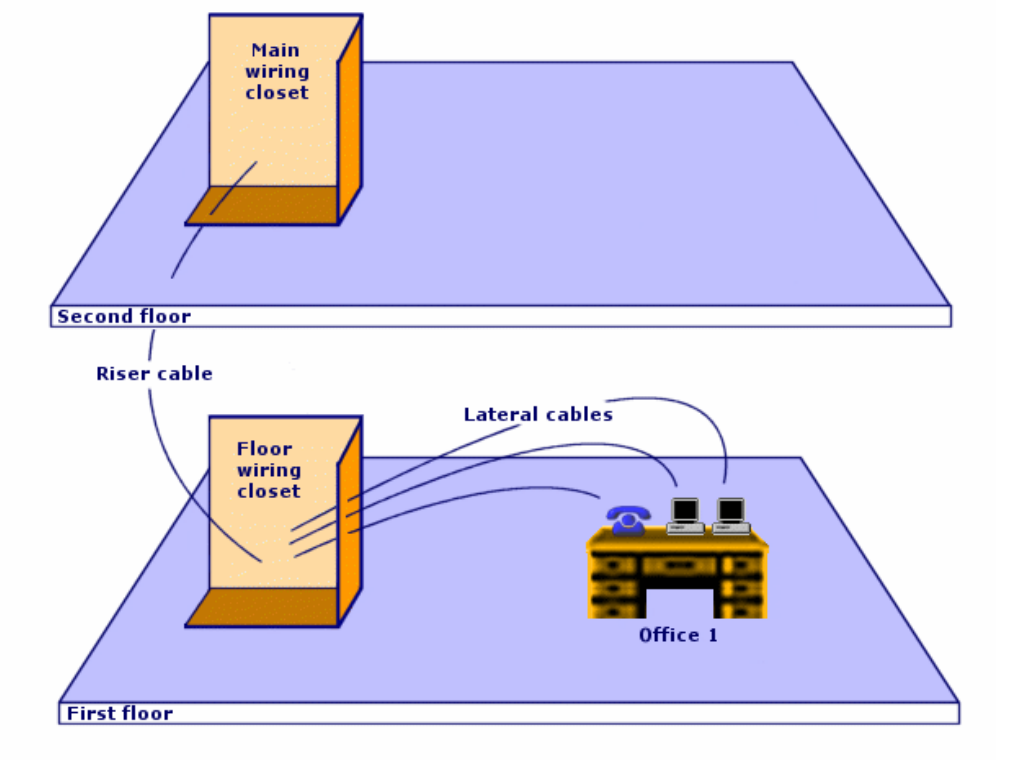
Only the mandatory fields and links are mentioned, in order to avoid information overload. You are encouraged, however, to explore and discover the utility of these optional fields and links on your own.

Description of the example

Locations of the demonstrative example

The network that we are going to represent is divided up in the locations illustrated by the following diagram:

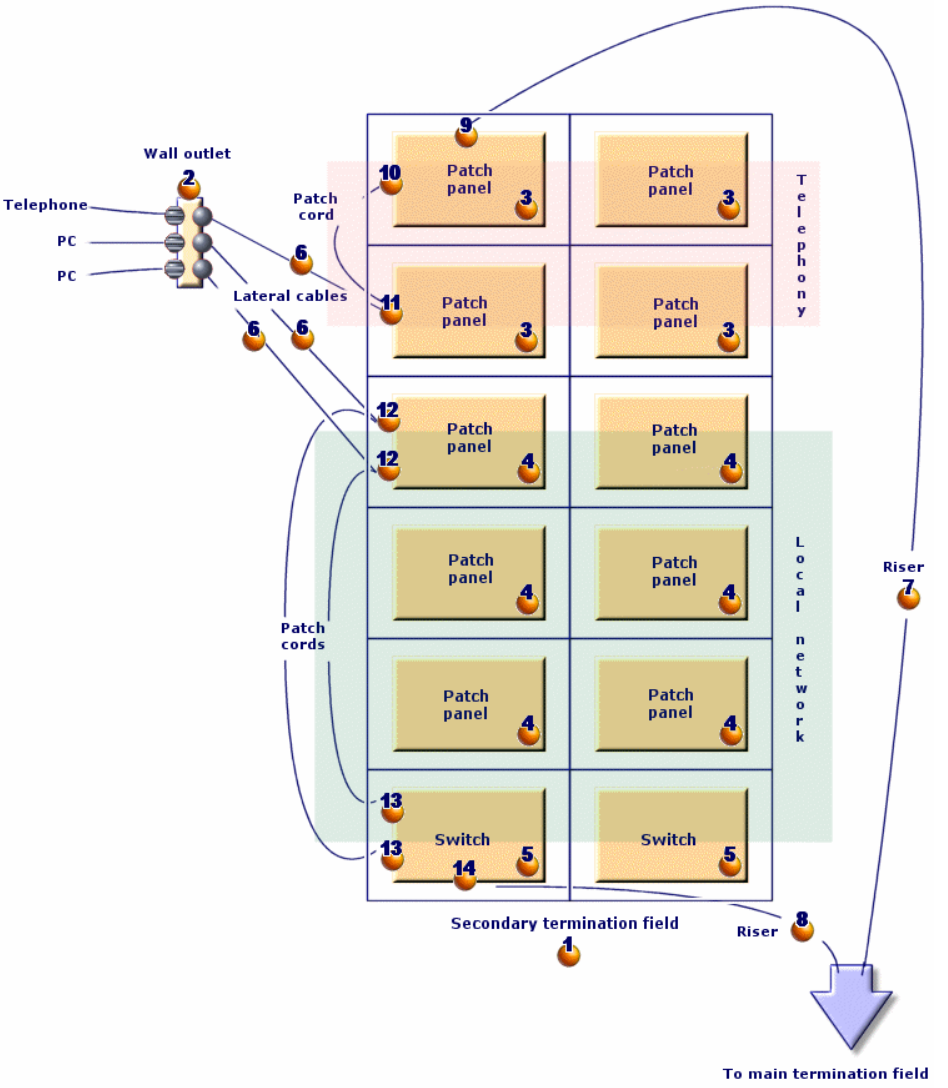
Figure 3.1. Locations of the demonstrative example



Network of the demonstrative example

The following diagram illustrates which portion of the network we will use as an example in the AssetCenter database.

Figure 3.2. Network of the demonstrative example



This network contains components that will not be used in the example used to illustrate cable management:

- 1 telephone connected to the wall outlet by 1 telephone cable.
- 1 stationary computer connected to the wall outlet by 1 LAN cable.
- 1 portable computer connected to the wall outlet by 1 LAN cable.

Then there are the components that will be used:

Location on the diagram	Quantity	Component	Composition	Connection type
1	1	Termination field	2 columns and 6 rows	
2	1	Wall outlet	3 ports with 8 pins	By pin
3	4	Patch panels	Back side: 24 ports with 8 preloaded pins	By port
			Front side: 24 RJ45 ports	By port (patch)
4	6	Patch panels	Back side: 256 pins (32 x 8)	By pin
			Back side: 24 RJ45 ports	By port (patch)
5	2	Switch	10 slots	
	1	Module (for one of the switch slots)	8 RJ45 ports	By port
6	3	Lateral cables	4 twisted pairs with 2 copper wires	
7	1	Riser cable	32 twisted pairs with 2 copper wires	
8	1	Riser cable	4 twisted pairs with 2 copper wires	
9	1	Port	2 pins (back side)	By pin
10	1	Port	8 pins (front side)	By port
11	1	Port	8 pins (front side)	By port
			8 pins (back side)	By pin
12	2	Ports	8 pins (2 sides)	By port
13	2	Ports	8 pins (front side)	By port
14	1	Port	8 pins (back side)	By port

4 Implementing cable management

CHAPTER

Introduction

Before implementing your cable management, you need to perform certain preliminary steps, which are described in this chapter.

You must then define the reference information that will be used to create and define your cables, cable devices and cable links. This reference information must be created first: You can create it all right away, or do so as you go.

Prerequisites

In order to continue reading this guide

Before continuing to read this guide, you must first:

1 Install AssetCenter.

2 Import the data from the datakit for the Cable and Circuit module in the demonstration database (see the section **To import the data from the datakit to an existing database.** in this guide).
3 Execute AssetCenter.
4 Connect to AssetCenter's demonstration database.
5 Activate the Cable and Circuit module using the **File/ Activate modules** menu item.

In order to work with your own database

In order to work with your own database, you must:

1 Install AssetCenter.
2 Execute AssetCenter Database Administrator.
3 Create your database by importing the data from the Cable and Circuit datakit (see the section **To import the data from the datakit when you create the database.** of this guide).
4 Insert your user's license that includes authorization for the Cable and Circuit module.
5 Execute AssetCenter.
6 Connect to your database.
7 Activate the Cable and Circuit module using the **File/ Activate modules** menu item.

Importing the datasys data when you create your database

Proceed in the following manner:

1 Execute AssetCenter Database Administrator.
2 Select the **File/ Open** menu item.
3 Select the **Open database description file - create new database** option.
4 Select the **gbbase.dbb** file, located in the **config** sub-folder of the AssetCenter installation folder.
5 Select the **Action/ Create database** menu item.

6 Check the **Create system data** option.
7 Populate the other fields and continue creating the database (see the section **To learn more about creating databases** of this guide).

To import the data from the datakit when you create the database.

Proceed in the following manner:

1 Execute AssetCenter Database Administrator.
2 Select the **File/ Open** menu item.
3 Select the **Open database description file - create new database** option.
4 Select the **gbbase.dbb** file, located in the **config** sub-folder of the AssetCenter installation folder.
5 Select the **Action/ Create database** menu item.
6 Check the **Use an import scenario** option.
7 Populate the **Import configuration** field by selecting the **Import data destined for the cable module** value from the list.
8 Populate the other fields and continue creating the database (see the section **To learn more about creating databases** of this guide).

To import the data from the datakit to an existing database.

Proceed in the following manner:

1 Execute AssetCenter Database Administrator.
2 Select the **File/ Open** menu item.
3 Select the **Open database description file - create new database** option.
4 Select the **gbbase.dbb** file, located in the **config** sub-folder of the AssetCenter installation folder.
5 Select the **Action/ Create database** menu item.
6 Unselect the **Create database** option.
7 Unselect the **Create system data** option.
8 Check the **Use an import scenario** option.

9 Populate the **Import configuration** field by selecting the **Import data destined for the cable module** value from the list.

10 Click **Create**.

To learn more about installing AssetCenter

Refer to the **Installation** guide.

To learn more about creating databases

Refer to the following documentations:

- **Installation** guide, chapter **Installing AssetCenter**, section **Creating an AssetCenter database**.
- **AssetCenter Database Administrator** guide, chapter **Creating a database**.

Creating the cable-device types

Definitions

See chapter Glossary, section AssetCenter key terms/ Cable device type of this manual.

Table names

The types of cable devices are stored in the **amDeviceType** itemized list in the **Itemized lists** table (**amItemizedList**).

Access menu

Administration/ Itemized lists

Prerequisites

No prerequisites.

The **amDeviceType** itemized list already exists in the **Itemized lists** table.

Creation procedure

1 Display the **Itemized lists** table.
2 Select the **amDeviceType** itemized list.
3 Create the values that you need.

Demonstrative example

Create the following values if they don't already exist:

- **Switch module**
- **Patch panel**
- **Wall outlet**
- **Switch**

Creating the cable types

Definitions

See chapter Glossary, section AssetCenter key terms/ Cable type of this manual.

Table names

The types of cables are stored in the **amCableType** itemized list in the **Itemized lists** table (**amItemizedList**).

Access menu

Administration/ Itemized lists

Prerequisites

No prerequisites.

The **amCableType** itemized list already exists in the **Itemized lists** table.

Creation procedure

1 Display the **Itemized lists** table.
2 Select the **amCableType** itemized list.
3 Create the values that you need.

Demonstrative example

Create the following values if they don't already exist:

- **Twisted pairs**

Creating the roles

Definitions

See chapter Glossary, section AssetCenter key terms/ Role of this manual.

Table names

The types of cables are stored in the **amCableRole** itemized list in the **Itemized lists** table (**amItemizedList**).

Access menu

Administration/ Itemized lists

Prerequisites

No prerequisites.

The **amCableRole** itemized list already exists in the **Itemized lists** table.

Creation procedure

1 Display the **Itemized lists** table.
2 Select the **amCableRole** itemized list.
3 Create the values that you need.

Demonstrative example

Create the following values if they don't already exist:

- **Riser**
- **Lateral**

Creating the colors to use for the color codes

Table names

The colors are stored in the **Itemized lists** table (**amItemizedList**):

- **amColor**
- **amTipColor**
- **amRingColor**

Access menu

Administration/ Itemized lists

Prerequisites

No prerequisites.

The **amColor**, **amTipColor** and **amRingColor** itemized lists already exist in the **Itemized lists** table.

Creation procedure

1 Display the **Itemized lists** table.

2 Select the **amColor** itemized list.
3 Create the values that you need.
4 Select the **amTipColor** itemized list.
5 Create the values that you need.
6 Select the **amRingColor** itemized list.
7 Create the values that you need.

Tip: You can begin by creating the colors in the amColor itemized list, then copy them into the amTipColor and amRingColor itemized lists.

Demonstrative example

We are going to create the colors that we need for the color code entries in our demonstrative example.

First, we will create them in the **amColor** itemized list, and then we will copy them into the **amTipColor** and **amRingColor** itemized lists.

Creating the colors in the amColor itemized list

1 Select the **amColor** itemized list.
2 Add the following values to the itemized list:

- **white/blue**
- **white/brown**
- **white/orange**
- **white/green**
- **blue**
- **blue/white**
- **blue/yellow**
- **blue/black**
- **blue/red**
- **blue/violet**

- **yellow/blue**
- **yellow/brown**
- **yellow/green**
- **brown**
- **brown/white**
- **brown/yellow**
- **brown/black**
- **brown/red**
- **brown/violet**
- **black/blue**
- **black/brown**
- **black/orange**
- **black/green**
- **orange**
- **orange/black**
- **red/blue**
- **red/brown**
- **red/green**
- **green**
- **green/white**
- **green/yellow**
- **green/black**
- **green/red**
- **green/violet**
- **violet/blue**
- **violet/brown**
- **violet/green**

Creating the colors in the amTipColor and amRingColor itemized lists

Follow the same steps you used for the **amColor** itemized list (by creating the same colors).

Creating the color codes

Definition

See chapter Glossary, section AssetCenter key terms/ Color code of this manual.

See chapter Glossary, section AssetCenter key terms/ Color code entry of this manual.

See chapter Glossary, section AssetCenter key terms/ Ring of this manual.

See chapter Glossary, section AssetCenter key terms/ Tip of this manual.

Table names

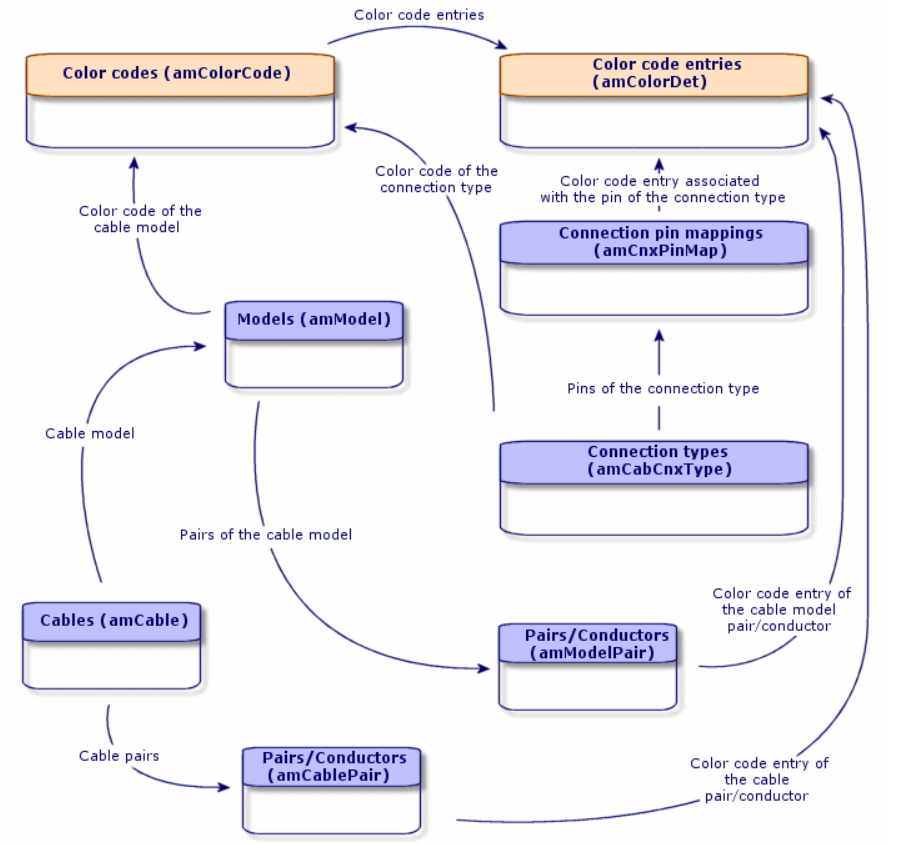
- **Color codes** (**amColorCode**)
- **Color code entries** (**amColorDet**)

Access menu

Cables/ Color codes

Simplified data model

Figure 4.1. Data model associated with the color codes



Prerequisites

We recommend that you first create the colors in the following itemized lists of the **Itemized lists** table (**amItemizedList**):

- **amColor**
- **amTipColor**
- **amRingColor**

If you have not already done this, you can add the colors on the fly while you create the color codes.

Fields and links that must absolutely be populated

Label of the field or link	SQL name of the field or link
Color codes table (**amColorCode**)	
Name	Name
Color code entries	ColorDetail
Color code entries table (**amColorDet**)	
#	sSequenceNumber
Color	Color

Creation procedure

For each color code created:

1 Create a record in the **Color codes** table.

2 Add a color code entry by pair or by conductor.

Demonstrative example

We are going to create 2 color codes and their entries.

Creating the color codes

Create a new record for each color code in the **Color codes** table (**amColorCode**) and populate the following fields:

Value of the field or link ...	Record 1	Record 2
Name (**Name**)	568B - 4 pairs	32 pairs

Creating the entries of color code 568B - 4 pairs

Select the color code and create the following color code entries:

Value of the # field (sSequenceNumber)	Value of the Color field (Color)	Value of the Tip color field (TipColor)	Value of the Ring color field (RingColor)
1	blue	white/blue	blue
2	orange	white/orange	orange

Value of the # field (sSequenceNumber)	Value of the Color field (Color)	Value of the Tip color field (TipColor)	Value of the Ring color field (RingColor)
3	green	white/green	green
4	brown	white/brown	brown

Creating the entries for the color code 32 pairs

Select the color code and create the following color code entries:

Value of the # field (sSequenceNumber)	Value of the Color field (Color)	Value of the Tip color field (TipColor)	Value of the Ring color field (RingColor)
1	white/blue	white/blue	blue/white
2	white/brown	white/brown	brown/white
3	white/green	white/green	green/white
4	blue/yellow	blue/yellow	yellow/blue
5	blue/black	blue/black	black/blue
6	blue/red	blue/red	red/black
7	blue/violet	blue/violet	violet/blue
8	yellow/brown	yellow/brown	brown/yellow
9	yellow/green	yellow/green	green/yellow
10	brown/black	brown/black	black/brown
11	brown/red	brown/red	red/brown
12	brown/violet	brown/violet	violet/brown
13	black/orange	black/orange	orange/black
14	black/green	black/green	green/black
15	red/green	red/green	green/red
16	green/violet	green/violet	violet/green
17	white/blue	white/blue	blue/white
18	white/brown	white/brown	brown/white
19	white/green	white/green	green/white
20	blue/yellow	blue/yellow	yellow/blue
21	blue/black	blue/black	black/blue
22	blue/red	blue/red	red/black
23	blue/violet	blue/violet	violet/blue
24	yellow/brown	yellow/brown	brown/yellow
25	yellow/green	yellow/green	green/yellow
26	brown/black	brown/black	black/brown
27	brown/red	brown/red	red/brown
28	brown/violet	brown/violet	violet/brown
29	black/orange	black/orange	orange/black
30	black/green	black/green	green/black

Value of the # field (SequenceNumber)	Value of the Color field (Color)	Value of the Tip color field (TipColor)	Value of the Ring color field (RingColor)
31	red/green	red/green	green/red
32	green/violet	green/violet	violet/green

Creating the label rules

Definitions

See chapter Glossary, section AssetCenter key terms/ Label rule of this manual.

See chapter Glossary, section AssetCenter key terms/ Label of this manual.

Table names

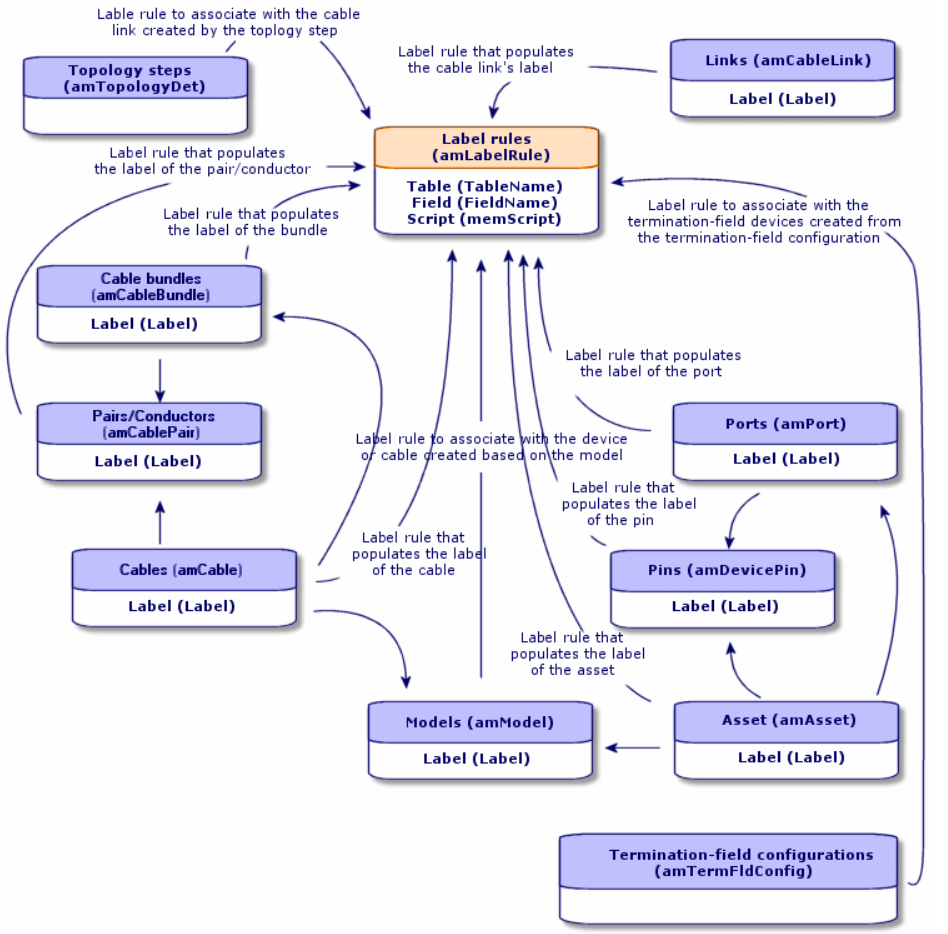
Label rules (amLabelRule)

Access menu

Cable/ Label rules

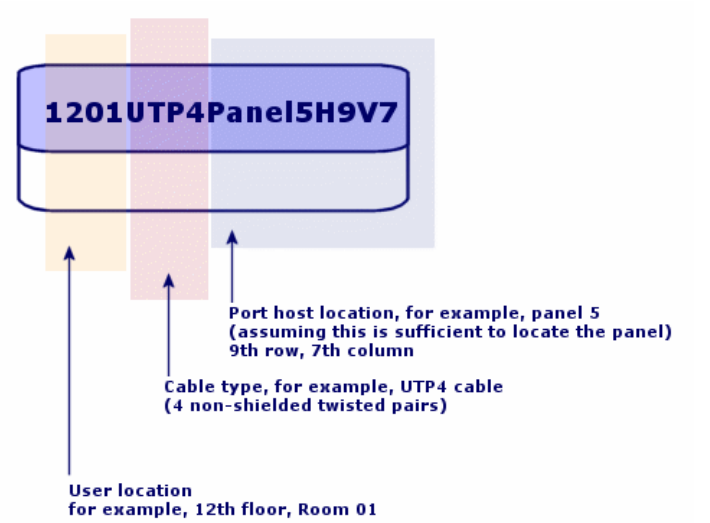
Simplified data model

Figure 4.2. Data model associated with the labels and label rules



Label example

Figure 4.3. Example of a cable label



Prerequisites

Determine with precision which information you want to use to create labels.

Fields and links that must absolutely be populated

Label of the field or link	SQL name of the field or link
Field	FieldName
Name	Name
SQL name	SQLName
Script	memScript
Table	TableName

Creation procedure

Warning: In order for the wizards to function, you must create label rules to identify the following components:

- Cable devices
- Termination-field devices
- Cables
- Links

Tip: There are several ways to create cable-link labels according to, for example:

- The connection can be made by port or by pin.
- You can use either the starting and ending numbers in a sequence of pins or you can use all the numbers in the sequence.
- The port link on a cable or a cable device.

You can create label rules for the following components:

- Bundles
- Pins/ terminals
- Ports
- Pairs/conductors

Demonstrative example

We are going to create a label rule enabling you to locate and identify cables according to their model and their code.

Create a new record in the **Label rules** table (**amLabelRule**) and populate the following fields:

Field	Value
Name	Cable label rule
Table	Cables (amCable)
Field	Label
Script	`RetVal = [Model.Name] + " - " + [Code]`

When you select this label rule for a cable, the label will indicate:

- The cable's model.
- The cable's code.

It is presented in the form of:

```
<Name of the cable model> - <Code of the cable>
```

Example

FTP - Category 5 - 4 twisted pairs - 000001

Creating the types of pairs and conductors

Definitions

See chapter Glossary, section AssetCenter key terms/ Pair/Conductor type of this manual.

Table names

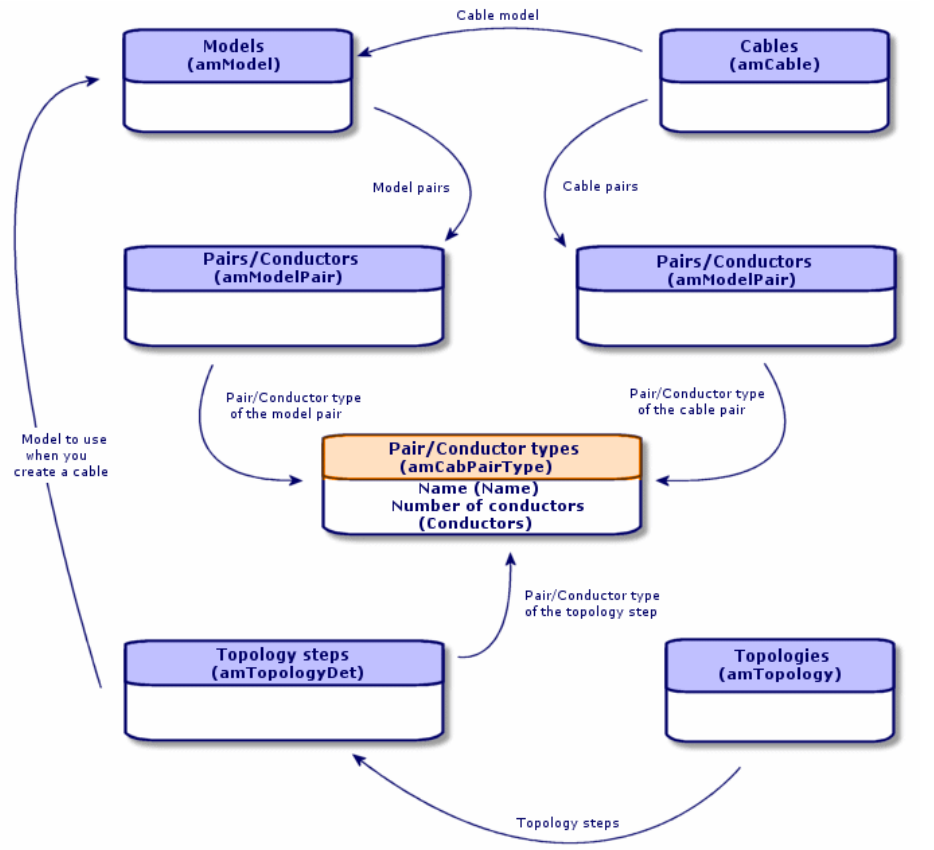
Pair/conductor types (amCabPairType)

Access menu

Cable/ Cable pair/conductor types

Simplified data model

Figure 4.4. Data model associated with the pair/conductor types



Prerequisites

None

Fields and links that must absolutely be populated

Label of the field or link	SQL name of the field or link
Name	Name
No. of conductors	sConductors

Creation procedure

Create as many records as there are pair/conductor types that you use.

Demonstrative example

We are going to crate a pair type composed of 2 copper wires:

Create a new record in the **Pair/Conductor types** table (**amCabPairType**) and populate the following fields:

Field or link to populate	Value
Name (**Name**)	Copper
No. of conductors (**sPairs**)	2

Creating the connection types

Definitions

See chapter Glossary, section AssetCenter key terms/ Connection type of this manual.

Table names

Cable connection types (**amCabCnxType**)

Connection pin mappings (**amCnxPinMap**)

Access menu

Cable/ Connection types

Prerequisites

You need to have already created the color codes.

Fields and links that must absolutely be populated

Label of the field or link	SQL name of the field or link	Remarks
Connection types table (amCabCnxType)		
Name	Name	
Port-based or pin-based	seMode	
No. of pins/terminals	sPinCount	
Color code	ColorCode	
Connection pin mappings	CnxPinMaps	• If the **Port-based or pin-based** field has **Pin** for its value, then this link must be populated. • If the **Port-based or pin-based** field has **Port** for its value, then this field is optional.
Connection pin mappings table (amCnxPinMap)		
#	sPinSeq	
Color code entry	ColorCodeDet	

Creation procedure

1. Identify the connection types that you use in your network.
2. Create a record by identified connection type.
3. If you want to associate each of this connection-type's pin to a color code entry, then you have to populate the **Connection pin mappings** link. Create as many links as the connection type contains pins/terminals.

Demonstrative example

We are going to create the following connection types:

- RJ45 - 568B - Port
- RJ45 - 568B - Pin

Creating the connection types

Create a new record in the**Connection types** table (**amCabPairType**) and populate the following fields:

Field or link to populate	Value for record 1	Value for record 2
Name (**Name**)	RJ45 - 568B - Port	RJ45 - 568B - Pin
Port-based or pin-based (**Name**)	Port	Pin
No. of pins/terminals (**sPinCount**)	0	8
Color code (**ColorCode**)		568B - 4 pairs

Populate the Connection pin mappings link for the RJ45 - 568B - Pin connection type.

Select the connection type and create the connection-pin mapping entries by populating the following fields:

Value of the # field (sPinSeq)	Color code entry (ColorCodeDet)
1	orange
2	orange
3	green
4	blue
5	blue
6	green
7	brown
8	brown

Creating the duties

Definitions

See chapter Glossary, section AssetCenter key terms/ Duty of this guide.

Table names

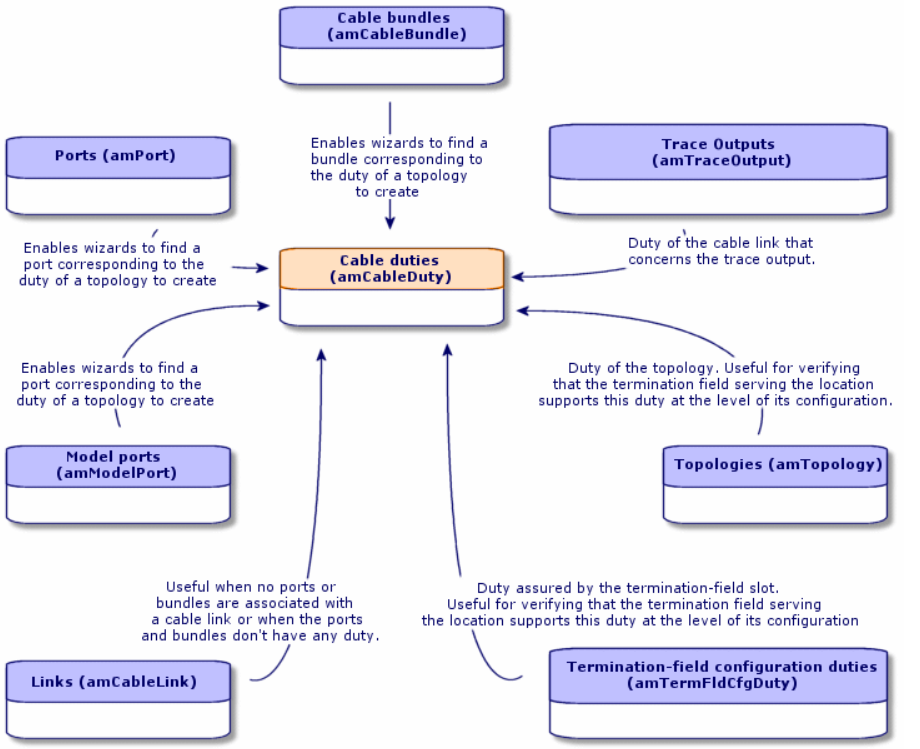
Cable duties (amCableDuty)

Access menu

Cable/ Cable duties

Simplified data model

Figure 4.5. Data model associated with the duties



Prerequisites

No prerequisites.

Fields and links that must absolutely be populated

Label of the field or link	SQL name of the field or link
Name	Name

Creation procedure

Create a record for each of the duties that your cable network fulfills.

At this stage, we advise against populating the **Topologies** link (**Topology**) since the topologies have not yet been created. It is better to associate a duty with the topologies after they have been created.

Demonstrative example

We are going to create two duties.

Create a new record in the **Cable duties** table (**amCableDuty**) and populate the following fields:

Field or link to populate	Value for record 1	Value for record 2
Name (**Name**)	Data	Voice

Creating the locations

We are introducing the **Locations** table for the needs of the example.

Table names

Locations (**amLocation**)

Access menu

Portfolio/ Locations

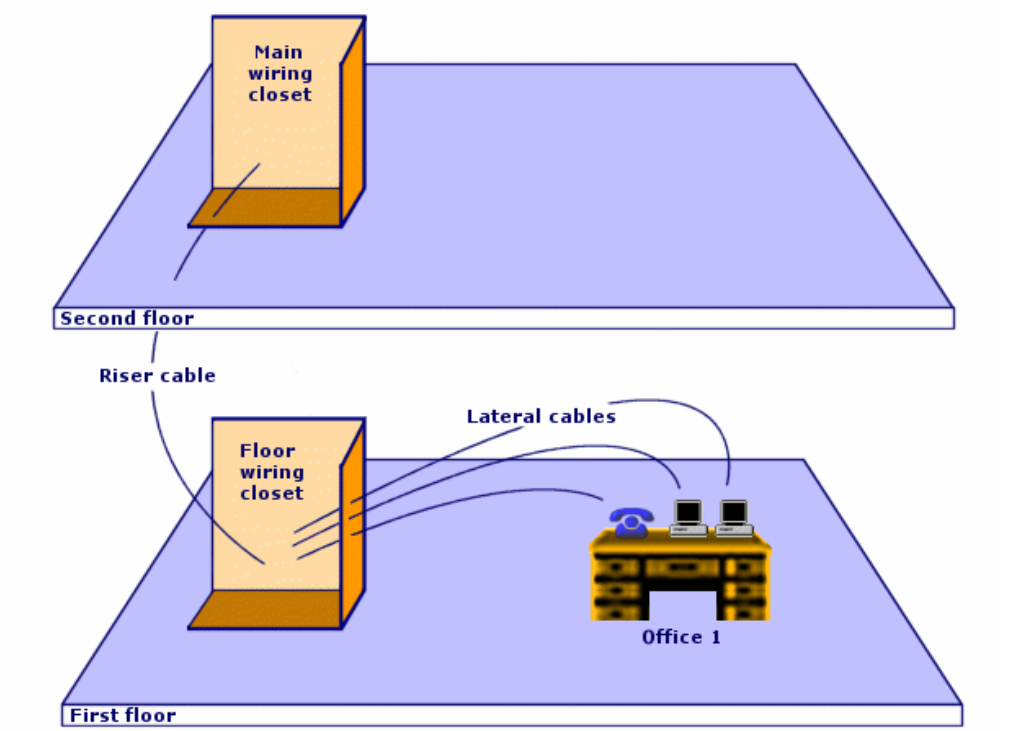
Prerequisites

No prerequisites.

Demonstrative example

We are going to create the records that correspond to the locations represented by the following diagram:

Figure 4.6. Locations to use



Create a new record in the **Locations** table (**amLocation**) and populate the following fields:

Field or link to populate	Value for record 1	Value for record 2	Value for record 3	Value for record 4	Value for record 5	Value for record 6
Name (**Name**)	Cabled building	1st floor	2nd floor	Wiring closet for each floor	Main wiring closet	Office 1
Sub-location of (**Parent**)		Cabled building	Cabled building	Cabled building/1st floor	Cabled building/2nd floor	Cabled building/1st floor

Creating the projects and work orders associated with cabling

The projects and work orders enable you to conserve a trace of the operations carried out on the network:

- Running or removing cables.
- Connecting or disconnecting bundles and ports.
- Installing a cable device.

The cabling wizards necessitate the creation of projects and work orders before executing them. You therefore need to create at least one project containing at least one work order.

The cabling wizards do not populate the following tables, unless you select a project and a work order at the end of the wizard's execution:

- **Trace outputs (amTraceOutput)**
- **Trace histories (amTraceHistory)**
- **Trace operations (amTraceOp)**

Table names

- **Projects (amProject)**
- **Work orders (amWorkOrder)**

Access menu

- **Portfolio/ Projects**
- **Support/ Interventions**

Prerequisites

No prerequisites.

Fields and links that must absolutely be populated

Label of the field or link	SQL name of the field or link
Projects table (amProject)	
Title	Title
Work orders	WorkOrders
Work orders table (amWorkOrder)	
Work order #	WONo

Creation procedure

1. Create a project for each cabling operation you will perform.
2. Associate one or more work orders with the project.
3. Execute the cabling wizards by referencing the appropriate project and work order.

   These wizards automatically populate the following links in the projects:

   - **Assets** (**AstProjDescs**)
   - **Cables** (**ProjectCables**)
   - **Project traces** (**ProjectTraces**)

These wizards automatically populate the following links in the work orders:

- **Title** (**Title**)
- **Work order devices** (**ProjBien**)
- **Project cables** (**ProjCable**)
- **Project traces** (**ProjTraceOut**)

Demonstrative example

We are going to create one project per wizard, which you will execute in the demonstrative example. We will also associate a work order to each one of these projects.

Thus, you will be able to consult these projects and work orders in able to better understand what the wizards create, modify or delete.

Creating the projects

Create a new record in the **Projects** table (**amProject**) and populate the following fields:

	Label (Title)
Value for record 1	Create a termination field
Value for record 2	Disconnect bundles
Value for record 3	Disconnect ports
Value for record 4	Duplicate wiring closet
Value for record 5	Swap assets
Value for record 6	Remove cables
Value for record 7	Remove lateral cables
Value for record 8	Remove cables by location and roles
Value for record 9	Expand termination field
Value for record 10	Cross-connect generic hub
Value for record 11	Cross-connect specific hub
Value for record 12	Cross-connect bundles
Value for record 13	Cross-connect ports
Value for record 14	Cross-connect ports (internal)
Value for record 15	Cross-connect wallfield
Value for record 16	Run lateral cables
Value for record 17	Run riser cables
Value for record 18	Relocate cables
Value for record 19	Transfer project assets
Value for record 20	Relocate project connections
Value for record 21	Transfer project cables

Creating a Work orders link for each project

Select each project, one after the other, then go to the **Work orders** tab and add a new work order to the project by populating the following fields:

Project label	Value of the # of work orders (WONo)
Create a termination field	Accept the value proposed by AssetCenter.
Disconnect bundles	Accept the value proposed by AssetCenter.
Disconnect ports	Accept the value proposed by AssetCenter.
Duplicate wiring closet	Accept the value proposed by AssetCenter.
Swap assets	Accept the value proposed by AssetCenter.
Remove cables	Accept the value proposed by AssetCenter.
Remove lateral cables	Accept the value proposed by AssetCenter.
Remove cables by location and roles	Accept the value proposed by AssetCenter.

Project label	Value of the # of work orders (WONo)
Expand termination field	Accept the value proposed by AssetCenter.
Cross-connect generic hub	Accept the value proposed by AssetCenter.
Cross-connect specific hub	Accept the value proposed by AssetCenter.
Cross-connect bundles	Accept the value proposed by AssetCenter.
Cross-connect ports	Accept the value proposed by AssetCenter.
Cross-connect ports (internal)	Accept the value proposed by AssetCenter.
Cross-connect wallfield	Accept the value proposed by AssetCenter.
Run lateral cables	Accept the value proposed by AssetCenter.
Run riser cables	Accept the value proposed by AssetCenter.
Relocate cables	Accept the value proposed by AssetCenter.
Transfer project assets	Accept the value proposed by AssetCenter.
Relocate project connections	Accept the value proposed by AssetCenter.
Transfer project cables	Accept the value proposed by AssetCenter.

Creating the natures for cables and cable devices

The natures define the information that is common to certain groups of assets. The cables and cable devices each require a specific nature that will be associated with the models of cables and cable devices.

The information that you define at the nature level determines whether certain fields and links will be displayed in the detail of models, cables and assets.

Table names

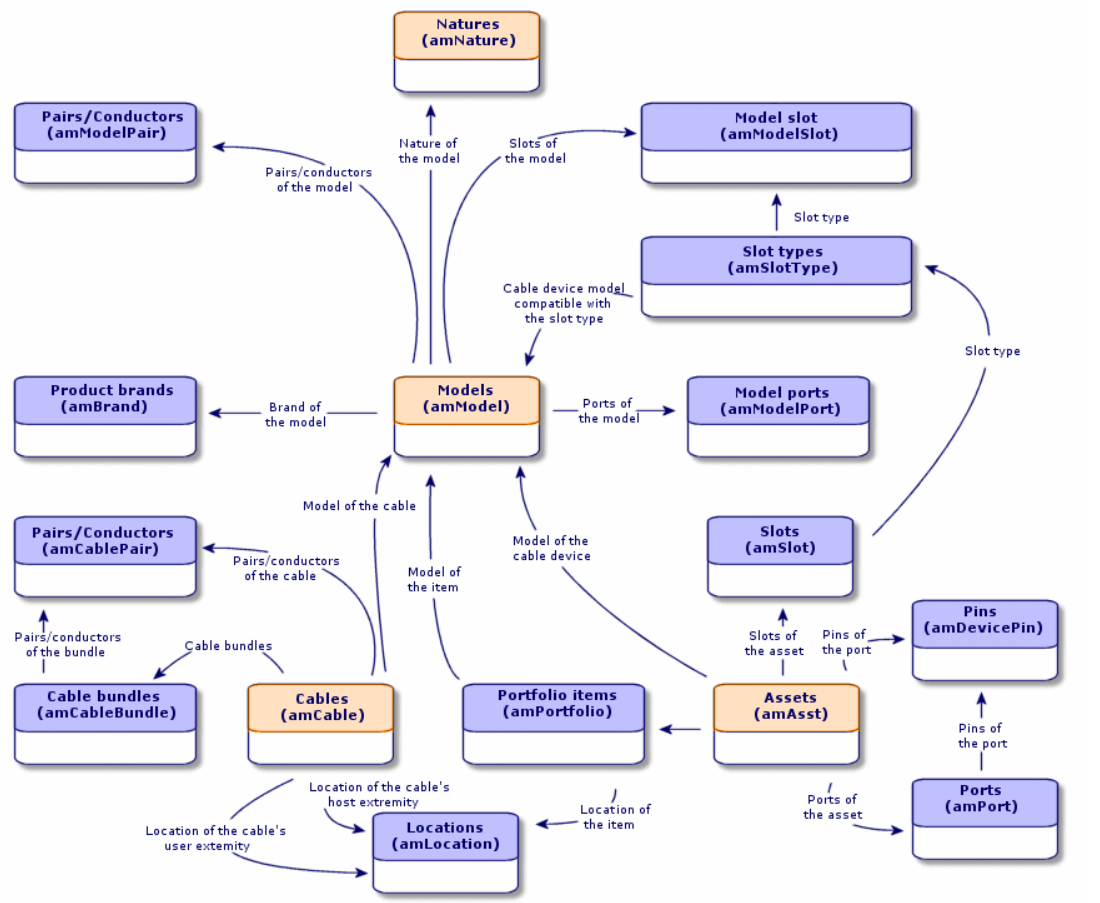
Natures (amNature)

Access menu

Portfolio/ Natures

Simplified data model

Figure 4.7. Data model associated with the cables and cable devices



Prerequisites

No prerequisites.

Fields and links that must absolutely be populated

Label of the field or link	SQL name of the field or link	Remarks
Name	Name	
Created	seBasis	Must have the value **Asset** for the cable devices and **Cable** for the cables.
Management constraints	seMgtConstraint	Does not apply to cables. This field must have the value **Unique asset tag** for the cable devices.
Also create	seOverflowTbl	Does not apply to cables. This field must have for its value **None** for the cable devices.
Cable device	bDevice	Does not apply to cables. This option must be checked for the cable devices.
Can be connected	bIsCnxClient	Does not apply to cables. This option must be checked for the cable devices.

Creation procedure

Create a nature for the cable devices and a nature for the cables.

Demonstrative example

We are going to create a nature for the cable devices and a nature for the cables.

Create a new record for each nature in the **Natures** table (**amNature**) and populate the following fields:

Field or link to populate	Value for record 1	Value for record 2
Name (**Name**)	Cable	Cable device
Created (**seBasis**)	Cable	Asset
Management constraints (**seMgtConstraint**)		Unique asset tag
Also create (**seOverflowTbl**)		None
Cable device (**bDevice**)		Check
Can be connected (**bIsCnxClient**)		Check

Creating the brands

The brands are associated with the models.

Table names

Brands (amBrand)

Access menu

Portfolio/ Brands

Prerequisites

No prerequisites.

Fields and links that must absolutely be populated

Label of the field or link	SQL name of the field or link
Name	Name

Creation procedure

Create one record per brand of cable device and cable of your network.

Demonstrative example

We are going to create the brands of the cable devices and cables in our example. You will then be able to associate them with the models that you will create later.

Create a new record for each brand in the **Product brands** table (**amBrand**) and populate the following fields:

Field or link to populate	Value for record 1	Value for record 2	Value for record 3	Value for record 4
Name (**Name**)	Corel	Hewlett Packard	ITT	Generic

Creating the cable models

The cable models enable you to create the cables in your network in the **Cables** table (**amCable**).

Definitions

See chapter Glossary, section AssetCenter key terms/ Cable of this manual.

Table names

- **Models** (**amModel**)
- **Pairs/Conductors** (**amCablePair**)

Access menu

Portfolio/ Models

Prerequisites

You should have already created:

- A nature for the cables.
- The brands of the cables.
- Label rules.
- Cable types.
- Color codes.
- Pair/ Conductor types.

Fields and links that must absolutely be populated

Label of the field or link	SQL name of the field or link	Remarks
Models table (amModel)		
Name	Name	

Label of the field or link	SQL name of the field or link	Remarks
Nature	Nature	Must be a cable nature
Label rule	LabelRule	
Cable type	CableType	
Color code	ColorCode	If you want the pairs/conductors to be identified by a color code.
Model pairs/conductors	Pairs	
Pairs/Conductors table (amModelPair)		
Name	Name	
#	sSequenceNumber	
Pair/Conductor type	CabPairType	
Color code entry	ColorCodeDet	If you selected a color code at the level of the cable model.

Creation procedure

Create a record for each cable model in your network.

To associate pairs/conductors with the cable model, you have the following choices:

- Add each pair/conductor manually by clicking **+**.
- Launch the **Create pairs** wizard.

Using the Create pairs wizard

Functions performed by the wizard

This wizard generates pairs having the same type.

Prerequisites

You should have already created:

- Pair/ Conductor types

Launching the wizard

To access this wizard, you need to select a record or field (not a link) in the **Models** table (**amModel**):

1 Display the models using the **Portfolio/ Models** menu.
2 Select the model in the list window, or select a field (not a link) in the **Models** table.
3 Select the **Create pairs** wizard.

Information used when using the wizard

Label displayed by the wizard	Explanations
Default type for each pair/conductor created.	The selected value populates the **Pair/conductor type** link (**CabPairType**) of each pair/conductor created.
Number to begin with	For example, enter 1 if you want to create 4 numbered pairs from 1 to 4. Enter 5 if you want to create 4 numbered pairs from 5 to 8. This number populates the **#** field (**sSequenceNumber**) of the model pairs. The number displayed by default by the wizard corresponds to the largest existing pair number plus 1 (if the model contains 4 pairs, numbered 1 through 4, this number will be 5). The pair number is linked with the number of the color code entries of the model in order to associate a color code entry to a pair/conductor.

Data created or modified by the wizard

The wizard creates records in the **Pairs/Conductors** table (**amModelPair**).

The wizard populates the following fields:

Field label	SQL name of the field	Explanations
Name	Name	A sequential number that begins with the starting number specified using the wizard.
#	sSequenceNumber	A sequential number that begins with the starting number specified using the wizard.
Pair/Conductor type	CabPairType	The pair/conductor type is selected using the wizard.
Color code entry	ColorCodeDet	Color code entry associated with the cable whose number (**sSequenceNumber**)

	corresponds to the number of the conductor pair (**sSequenceNumber**).

Viewing the result

The easiest way to view the result of this wizard is to look at the **Cable** tab of the model.

After having launched the wizard

You need to edit the pairs/conductors manually if you want to change certain information relating to them.

Demonstrative example

We are going to create a 32-pair cable model (for the telephone riser) and a 4-pair cable model (for the given lateral and riser cables).

Creating the models

Create a new record in the **Models** table (**amModel**) and populate the following fields:

Field or link to populate	Value for record 1	Value for record 2
Name (**Name**)	L 120 - Category 5 - 32 twisted pairs	FTP - Category 5 - 4 twisted pairs
Nature (**Nature**)	Cable	Cable
Brand (**Brand**)	Corel	Corel
Label rule (**LabelRule**)	Cable label rule	Cable label rule
Cable type (**CableType**)	Twisted pairs	Twisted pairs
Color code (**ColorCode**)	32 pairs	568B - 4 pairs

Creating the pairs/conductors for each cable model

Launch the **Create pairs** wizard one time for each model, and specify the following values:

Label displayed by the wizard	Value for the L 120 - Category 5 - 32 twisted pairs cable	Value for the FTP - Category 5 - 4 twisted pairs cable
Number of pairs/conductors to generate	32	4

Label displayed by the wizard	Value for the L 120 - Category 5 - 32 twisted pairs cable	Value for the FTP - Category 5 - 4 twisted pairs cable
Default type for each pair/conductor created	Copper	Copper
Number to begin with	1	1

Creating the cable device models without slots

Definitions

See chapter Glossary, section AssetCenter key terms/ Cable device of this manual.

Table names

- **Models** (**amModel**)
- **Model ports** (**amModelPort**)

Access menu

Portfolio/ Models

Prerequisites

You should have already created:

- A nature for the cable devices.
- The brands of the cable devices.
- Label rules.
- Device types.
- Connection types.
- Duties.

Fields and links that must absolutely be populated

Label of the field or link	SQL name of the field or link	Remarks
Models table (amModel)		
Name	Name	
Nature	Nature	Must be a cable device nature
Label rule	LabelRule	
Device type	DeviceType	
Number of pins/terminals	lPins	If the device is connected to the network by pins on at least one side.
Number of sides	seDevSdType	
Ports	Ports	If the device is connected to the network by ports on all sides.
Ports table (amModelPort)		
Port #	PortNo	If you create ports.
#	sSequenceNumber	If you create ports.
Connection type	CabCnxType	If you create ports.
Duty	Duty	If you create ports.

Creation procedure

Create a record for each cable device model in your network.

To associate pairs/conductors with the device model, you have the following choices:

1 Add each port manually by clicking **+**.

2 Launch the **Create ports** wizard.

Connection by ports or by pins

There are two connection modes for the cable devices:

- By ports
- By pins

If the device is connected to the network by ports on all sides:

- Assign the value **0** to the **Number of pins/terminals** field (**lPins**).

- Create the **Ports** links (**Ports**). These ports will be associated with the cable bundles using the **Cable links** table (**amCableLink**).

If the device is connected to the network by pins on at least one side:

- Populate the **Number of pins/terminals** field (**lPins**) with the total number of pins contained by the cable device.
- Only create the **Ports** (**Ports**) link if you want to use the cabling wizards to create cable links to the device pins. In effect, such wizards create virtual ports that they associate automatically to the existing pins that are free.

Create ports wizard

Functions performed by the wizard

This wizard generates ports having the same duty and the same connection type.

Prerequisites

You should have already created:

- Connection types
- Functions

Launching the wizard

To access this wizard, you need to select a record or a field (not a link) in the **Models** table (**amModel**):

1. Display the models using the **Portfolio/ Models** menu.
2. Select the model in the list window, or select a field (not link) in the **Models** table.
3. Select the **Create ports** wizard.

Information used when using the wizard

Label displayed by the wizard	Explanations
Default type for each port created	The selected value populates the **Connection type** link (**CabCnxType**) of each port created.

Label displayed by the wizard	Explanations
Default type for each port created	The selected value populates the **Duty** link (**Duty**) of each port created.
Number to begin with	For example, enter 1 if you want to create 4 numbered ports from 1 to 4. Enter 5 if you want to create 4 numbered ports from 5 to 8. This number populates the **Port #** field (**PortNo**) of the model ports. The number displayed by default by the wizard corresponds to the largest existing port number plus 1 (if the model contains 4 ports, numbered 1 through 4, this number will be 5).

Data created or modified by the wizard

The wizard creates records in the **Model ports** table (**amModelPort**).

The wizard populates the following fields:

Field label	SQL name of the field	Explanations
Sequence number of the port in the model	sSequenceNumber	A sequential number that begins with the starting number specified using the wizard.
Port #	PortNo	A sequential number that begins with the starting number specified using the wizard.
Connection type	CabCnxType	The connection type selected using the wizard.
Duty	Duty	The duty selected using the wizard.

Viewing the result

The easiest way to view the result of this wizard is to look at the **Ports** tab of the model.

After having launched the wizard

You need to edit the ports manually if you want to change certain information relating to them.

Demonstrative example

We are going to create the models that will help create the following cable devices without slots:

- 3-port wall outlet
- Patch panels
- Switch modules

Creating the models

Create a new record in the **Models** table (**amModel**) and populate the following fields:

Field or link to populate	Value for record 1	Value for record 2	Value for record 3	Value for record 4
Name (**Name**)	Procurve 10/100 Base T - 8 ports	24-port preloaded patch panel	32-port patch panel (256 pins)	3-port wall outlet
Nature (**Nature**)	Cable device	Cable device	Cable device	Cable device
Brand (**Brand**)	Hewlett Packard	Generic	Generic	ITT
Device type (**DeviceType**)	Switch module	Patch panel	Patch panel	Wall outlet
Number of pins/terminals (**lPins**)	0	0	256	24
Number of sides (**seDevSdType**)	Single sided	Double sided	Double sided	Single sided

Creating the ports for each device model for which the network connection is established by ports

Launch the **Create ports** wizard one time for each model whose **Number of pins/terminals** field (**lPins**) is empty.

Create ports for the model Procurve 10/100 Base T - 8 ports.

Select the model and execute the wizard. Then enter the following information:

Label displayed by the wizard	Value
Number of ports to generate	8
Default connection type for each port to generate	RJ45 - 568B - Port
Default type for each port created	Data
Number to begin with	1

Creating the ports for the 24-port preloaded patch panel model

Select the model and execute the wizard. Then enter the following information:

Label displayed by the wizard	Value
Number of ports to generate	24
Connection type by default for each port to generate	RJ45 - 568B - Port
Default type for each port created	Data
Number to begin with	1

Creating the slot types

Definitions

See chapter Glossary, section AssetCenter key terms/ Slot type of this manual.

Table names

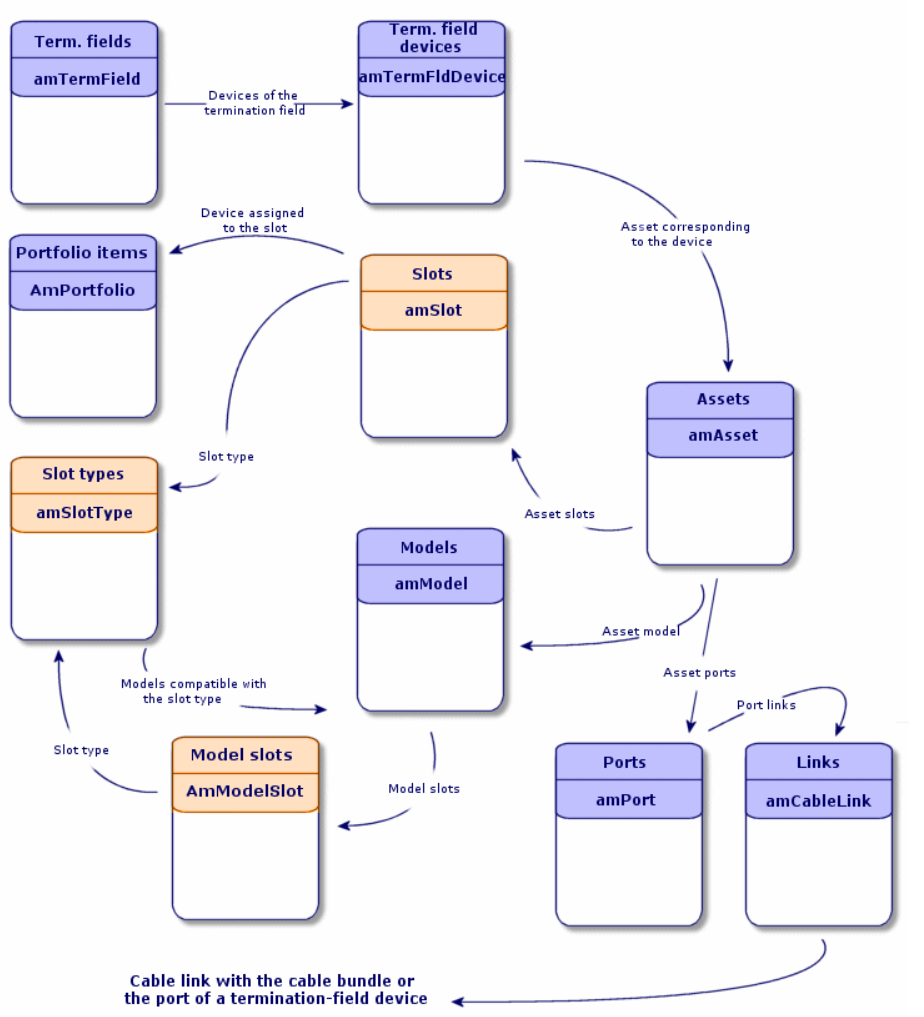
Slot types (amSlotType)

Access menu

Cable/ Slot types

Simplified data model

Figure 4.8. Data model associated with the slots



Prerequisites

You need to have already created the models of modules or extensions to insert in the slots.

Fields and links that must absolutely be populated

Label of the field or link	SQL name of the field or link
Name	Name
Compatible models	SlotTypeModels

Creation procedure

Create a record per slot type of your termination-field devices.

Demonstrative example

We are going to create a slot type for the **ProcureSwitch 4000 M - 10 slots** model that will receive the **Procurve 10/100 Base T - 8 ports** models.

Note: You are going to create the ProcureSwitch 4000 M - 10 slots in another step.

Create a new record in the **Slot types** table (**amSlotType**) and populate the following fields:

Field or link to populate	Value
Name (**Name**)	8-port switch module
Compatible models (**SlotTypeModels**)	Procurve 10/100 Base T - 8 ports

Creating the cable device models with slots

Definitions

See chapter Glossary, section AssetCenter key terms/ Cable device of this manual.

Table names

- **Models (amModel)**
- **Model slots (amModelSlot)**
- **Model ports (amModelPort)**

Access menu

Portfolio/ Models

Prerequisites

You should have already created:

- A nature for the cable devices.
- The brands of the cable devices.
- Label rules.
- Device types.
- Connection types.
- Functions.
- Slot types.

Fields and links that must absolutely be populated

Label of the field or link	SQL name of the field or link	Remarks
Models table (amModel)		
Name	Name	
Nature	Nature	Must be a cable device nature
Label rule	LabelRule	
Device type	DeviceType	
Number of pins/terminals	lPins	If the device is connected to the network by pins on at least one side.
Number of sides	seDevSdType	
Ports	Ports	If the device is connected to the network by ports on all sides.

Label of the field or link	SQL name of the field or link	Remarks
Model slots	ModelSlots	If the device must receive connection modules in its slots.
Ports table (amPort)		
Port #	PortNo	If you create ports.
#	sSequenceNumber	If you create ports.
Connection type	CabCnxType	If you create ports.
Duty	Duty	If you create ports.
Model slots table (amModelSlot)		
Name	Name	If you create slots.
#	sSequenceNumber	If you create slots.
Slot type	SlotType	If you create slots.

Creation procedure

Create a record for each cable device model in your network.

To associate ports or slots with the device model, you have the following choices:

1 Add each port or slot manually by clicking **+**.

2 Launch either the **Create ports** or **Create slots** wizard.

Connection by ports or by pins

See chapter **Implementing cable management** , section **Creating the cable device models without slots / Connection by ports or by pins** .

Create ports wizard

See chapter **Implementing cable management** , section **Creating the cable device models without slots / Create ports wizard** .

Create slots wizard

Functions performed by the wizard

This wizard generates slots having the same type.

Prerequisites

You should have already created:

- Slot types

Launching the wizard

To access this wizard, you need to select a record or select a field (not a link) in the **Models** table (**amModel**).

1 Display the models using the **Portfolio/ Models** menu.
2 Select the model in the list window, or select a field (not a link) in the **Models** table.
3 Select the **Create slots** wizard.

Information used when using the wizard

Label displayed by the wizard	Explanations
Default type for each slot created	The selected value populates the **Slot type** link (**SlotType**) of each slot created.
Number to begin with	For example, enter 1 if you want to create 4 numbered slots from 1 to 4. Enter 5 if you want to create 4 numbered slots from 5 to 8. This number populates the **#** field (**sSequenceNumber**) and **Name** field (**amModelSlot**) of the model slots. The number displayed by default by the wizard corresponds to the largest existing slot number plus 1 (if the model contains 4 slots, numbered 1 through 4, this number will be 5).

Data created or modified by the wizard

The wizard creates records in the **Model slots** table (**amModelSlot**).

The wizard populates the following fields:

Field label	SQL name of the field	Explanations
Name	Name	A sequential number that begins with the starting number specified using the wizard.

Field label	SQL name of the field	Explanations
#	sSequenceNumber	A sequential number that begins with the starting number specified using the wizard.
Slot type	SlotType	The slot type selected using the wizard.

Viewing the result

The easiest way to view the result of this wizard is to look at the **Slots** tab of the model.

After having launched the wizard

You need to edit the slots manually if you want to change certain information relating to them.

Demonstrative example

We are going to create the model of a modular switch that has 10 slots:

Creating the model

Create a new record in the **Models** table (**amModel**) and populate the following fields:

Field or link to populate	Value
Name (**Name**)	ProcureSwitch 4000 M - 10 slots
Nature (**Nature**)	Cable device
Brand (**Brand**)	Hewlett Packard
Device type (**DeviceType**)	Switch
Number of pins/terminals (**lPins**)	0
Number of sides (**seDevSdType**)	Single sided

Creating the slots

Launch the **Create slots** wizard one time for each model, and specify the following values:

Label displayed by the wizard	Value
Number of slots to generate	10
Default type for each slot created	8-ports switch module
Number to begin with	1

Creating the topologies

Definitions

See chapter Glossary, section AssetCenter key terms/ Topology of this manual.

See chapter Glossary, section AssetCenter key terms/ Topology step of this manual.

See chapter Glossary, section AssetCenter key terms/ Host of this manual.

See chapter Glossary, section AssetCenter key terms/ User of this manual.

Table names

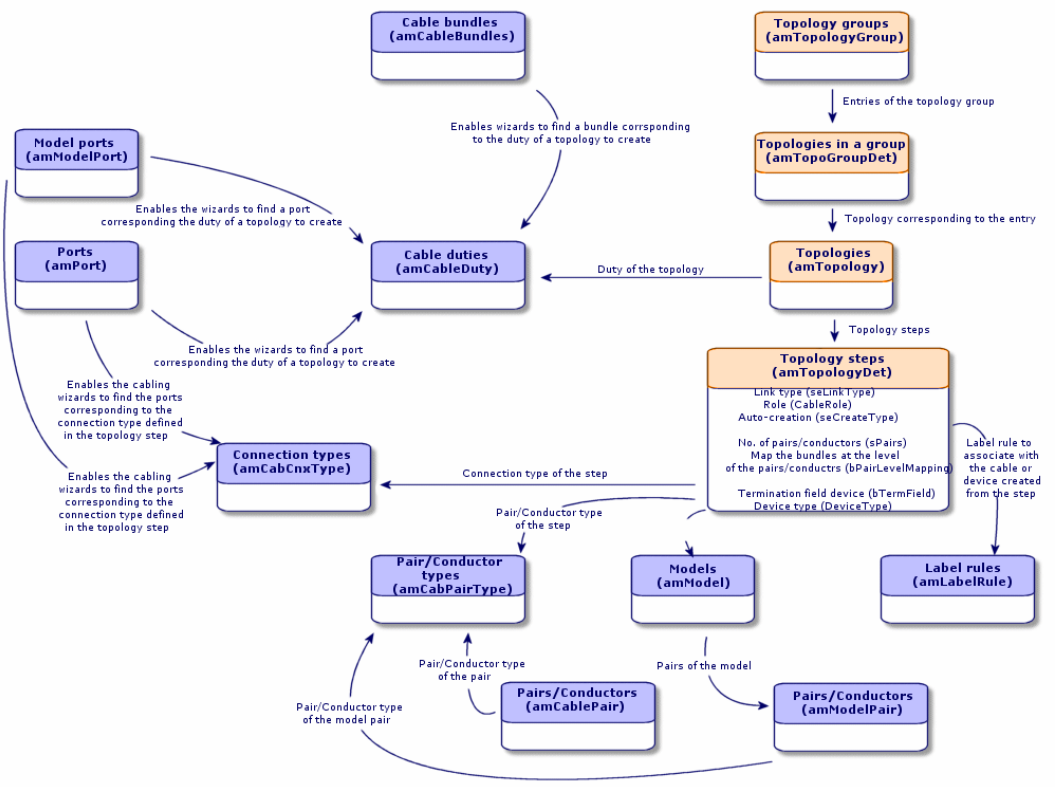
- **Topologies** (**amTopology**)
- **Topology steps** (**amTopologyDet**)

Access menu

Cable/ Topologies

Simplified data model

Figure 4.9. Data model associated with the topologies



Prerequisites

You should have already created the:

- Functions
- Label rules
- Cable types
- Pair/conductor types
- Device types
- Connection types

- Roles
- Models of cables and cable devices to create from the topology step.

Fields and links that must absolutely be populated

Label of the field or link	SQL name of the field or link	Remarks
Topologies table (amTopology)		
Name	Name	
Direction	seTraceDir	
Function	Duty	
Topology steps	Detail	
Topology steps table (amTopologyDet)		
#	sSequenceNumber	
Link type	seLinkType	
Label rule	LabelRule	
Cable type	CableType	If seLinkType = **Cable**
Device type	DeviceType	If seLinkType = **Device**
Pair/Conductor type	CabPairType	If seLinkType = **Cable**
Connection type	CabCnxType	If seLinkType = **Device**
Map bundles at pair/conductor level	bPairLevelMapping	If seLinkType = **Cable**
Termination field device	bTermField	If seLinkType = **Device**
No. of pairs/conductors	sPairs	If seLinkType = **Cable**
Auto-create	seCreateType	
Model	Model	If seCreateType <> **Never create**
Role	CableRole	• If seLinkType = **Cable** • or bTermField = **Yes**

Creation procedure

Create a topology and its steps for each standard trace of your network.

Example

The topology of a telephone connection between the standard user and the floor's termination field is composed of the following steps:

1 A link at the level of the wall outlet.

2 A link at the level of a lateral cable.
3 A link at the level of a termination-field device.

Demonstrative example

We are going to create two topologies:

- Data connection between the wall outlet and the floor's termination field.
- Telephone connection between the wall outlet and the floor's termination field.

These topologies break down into three steps:

1 A link at the level of the wall outlet.
2 A link at the level of the lateral cable.
3 A link at the level of the termination-field device.

These topologies are then assembles together in a group of topologies.

Creating the topologies

Create a new record in the **Models** table (**amModel**) and populate the following fields:

Field or link to populate	Value for record 1	Value for record 2
Name (**Name**)	Telephone outlet to termination field.	Local network outlet to termination field.
Direction (**seTraceDir**)	User to host	User to host
Duty (**Duty**)	Voice	Data

Creating the steps for the Telephone outlet to termination field topology

Select the topology and add 3 steps by populating the following fields:

Creating step 1

Field or link to populate	Value
# (**sSequenceNumber**)	1
Cable link type (**seLinkType**)	Device
Label rule (**LabelRule**)	Wall outlet label
Cable type (**CableType**)	
Device type (**DeviceType**)	Wall outlet

Field or link to populate	Value
Pair/ Conductor type (**CabPairType**)	
Connection type (**CabCnxType**)	RJ45 - 568B - Pin
Map bundles at pair/conductor level (**bPairLevelMapping**)	
Termination field device (**bTermField**)	
No. of pairs/conductors (**sPairs**)	
Auto-create (**seCreateType**)	Create if not available
Model (**Model**)	3-port outlet
Role (**CableRole**)	

Creating step 2

Field or link to populate	Value
# (**sSequenceNumber**)	2
Cable link type (**seLinkType**)	Cable
Label rule (**LabelRule**)	Label by sequential pair number
Cable type (**CableType**)	Twisted pairs
Device type (**DeviceType**)	
Pair/ Conductor type (**CabPairType**)	Copper (2)
Connection type (**CabCnxType**)	
Map bundles at pair/conductor level (**bPairLevelMapping**)	Check this selection box.
Termination field device (**bTermField**)	
No. of pairs/conductors (**sPairs**)	2
Auto-create (**seCreateType**)	Always create
Model (**Model**)	FTP - Category 5 - 4 twisted pairs
Role (**CableRole**)	Lateral

Creating step 3

Field or link to populate	Value
# (**sSequenceNumber**)	3
Cable link type (**seLinkType**)	Device
Label rule (**LabelRule**)	Term-field patch-panel port label
Cable type (**CableType**)	
Device type (**DeviceType**)	Patch panel
Pair/ Conductor type (**CabPairType**)	
Connection type (**CabCnxType**)	RJ45 - 568B - Pin
Map bundles at pair/conductor level (**bPairLevelMapping**)	
Termination field device (**bTermField**)	Check this selection box.

Field or link to populate	Value
No. of pairs/conductors (**sPairs**)	
Auto-create (**seCreateType**)	Never create
Model (**Model**)	
Role (**CableRole**)	Lateral

Creating the steps for the Local network outlet to termination field topology

Select the topology and add 3 steps by populating the following fields:

Creating step 2

Field or link to populate	Value
# (**sSequenceNumber**)	1
Cable link type (**seLinkType**)	Device
Label rule (**LabelRule**)	Wall outlet label
Cable type (**CableType**)	
Device type (**DeviceType**)	Wall outlet
Pair/ Conductor type (**CabPairType**)	
Connection type (**CabCnxType**)	RJ45 - 568B - Pin
Map bundles at pair/conductor level (**bPairLevelMapping**)	
Termination field device (**bTermField**)	
No. of pairs/conductors (**sPairs**)	
Auto-create (**seCreateType**)	Create if not available
Model (**Model**)	3-port outlet
Role (**CableRole**)	

Creating step 2

Field or link to populate	Value
# (**sSequenceNumber**)	2
Cable link type (**seLinkType**)	Cable
Label rule (**LabelRule**)	Label by sequential pair number
Cable type (**CableType**)	Twisted pairs
Device type (**DeviceType**)	
Pair/ Conductor type (**CabPairType**)	Copper (2)
Connection type (**CabCnxType**)	
Map bundles at pair/conductor level (**bPairLevelMapping**)	Check this selection box.
Termination field device (**bTermField**)	
No. of pairs/conductors (**sPairs**)	4

Field or link to populate	Value
Auto-create (**seCreateType**)	Always create
Model (**Model**)	FTP - Category 5 - 4 twisted pairs
Role (**CableRole**)	Lateral

Creating step 3

Field or link to populate	Value
# (**sSequenceNumber**)	3
Cable link type (**seLinkType**)	Device
Label rule (**LabelRule**)	Term-field patch-panel port label
Cable type (**CableType**)	
Device type (**DeviceType**)	Patch panel
Pair/ Conductor type (**CabPairType**)	
Connection type (**CabCnxType**)	RJ45 - 568B - Port
Map bundles at pair/conductor level (**bPairLevelMapping**)	
Termination field device (**bTermField**)	Check this selection box.
No. of pairs/conductors (**sPairs**)	
Auto-create (**seCreateType**)	Never create
Model (**Model**)	
Role (**CableRole**)	Lateral

Creating the topology groups

Definitions

See chapter Glossary, section AssetCenter key terms/ Topology group of this manual.

Table names

- **Topology groups (amTopologyGroup)**
- **Topologies in a group (amTopoGroupDet)**

Access menu

Cable/ Topology groups

Simplified data model

Figure 4.10. Data model associated with the topology groups

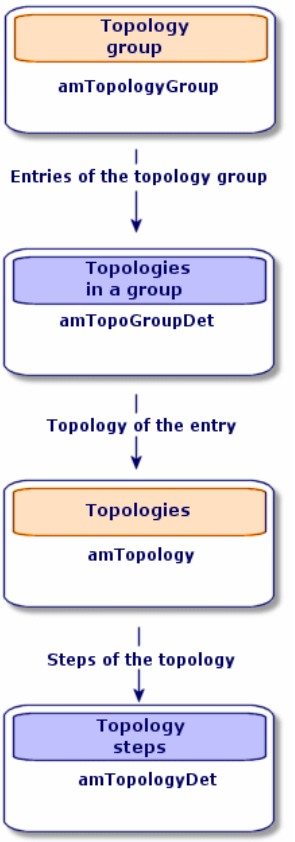
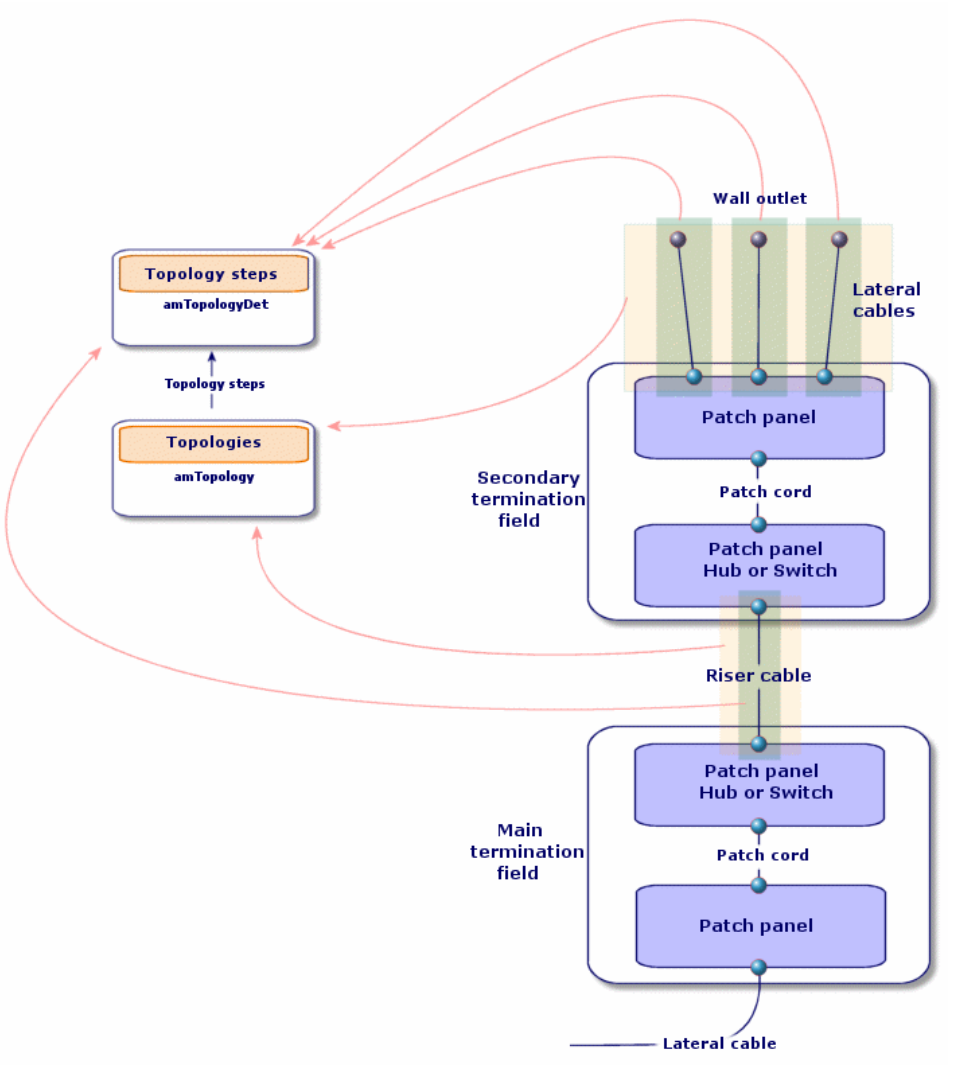


Figure 4.11. Correspondence between a termination field in your portfolio and the topologies



Prerequisites

You need to have already created the topologies.

Fields and links that must absolutely be populated

Label of the field or link	SQL name of the field or link
Topology groups table (amTopologyGroup)	
Name	Name
Topologies of the group	TopoGrpDetail
Topologies in a group table (amTopoGroupDet)	
#	sSequenceNumber

Creation procedure

Create one record per configuration type of your network.

Example

A standard workstation is composed of 3 topologies:

- Telephone outlet to a termination field.
- Local network outlets to a termination field.
- Local network outlets to termination field.

Demonstrative example

We are going to crate a group of topologies that reunite the following topologies:

- 1 telephone outlet to a termination field.
- 2 local network outlets to a termination field.

Creating the topology group

Create a new record in the **Topology groups** table (**amTopologyGroup**) and populate the following fields:

Field or link to populate	Value
Name (**Name**)	Standard workstation

Adding topologies to the Standard workstation group

Select the topology group and add it to the topologies by populating the following fields and links:

Add topology 1

Field or link to populate	Value
# (**sSequenceNumber**)	1
Topology (**Topology**)	Telephone outlet to termination field.

Add topology 2

Field or link to populate	Value
# (**sSequenceNumber**)	2
Topology (**Topology**)	Local network outlet to termination field.

Add topology 3

Field or link to populate	Value
# (**sSequenceNumber**)	3
Topology (**Topology**)	Local network outlet to termination field.

Creating termination-field configurations

Definitions

See chapter Glossary, section AssetCenter key terms/ Termination field configuration of this manual.

Table names

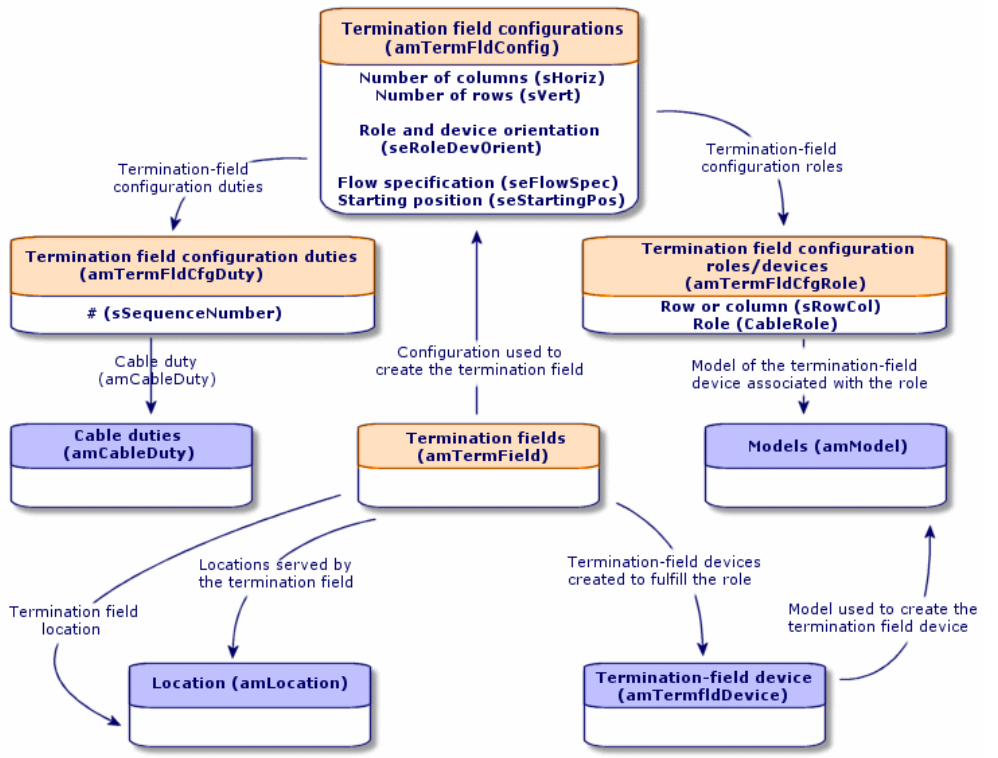
- **Termination field configurations (amTermFldConfig)**
- **Termination-field configuration duties/services (amTermFldCfgDuty)**
- **Termination field configuration roles and devices (amTermFldCfgRole)**

Access menu

Cable/ Termination field configurations

Simplified data model

Figure 4.12. Data model associated with the termination-field configurations



Parameters of a termination-field configuration

A termination-field configuration defines numerous parameters that are used by the cabling wizards to create a termination field.

The following diagrams will explain how these parameters are interpreted when you create a termination field.

Figure 4.13. Example of termination-field configuration in AssetCenter

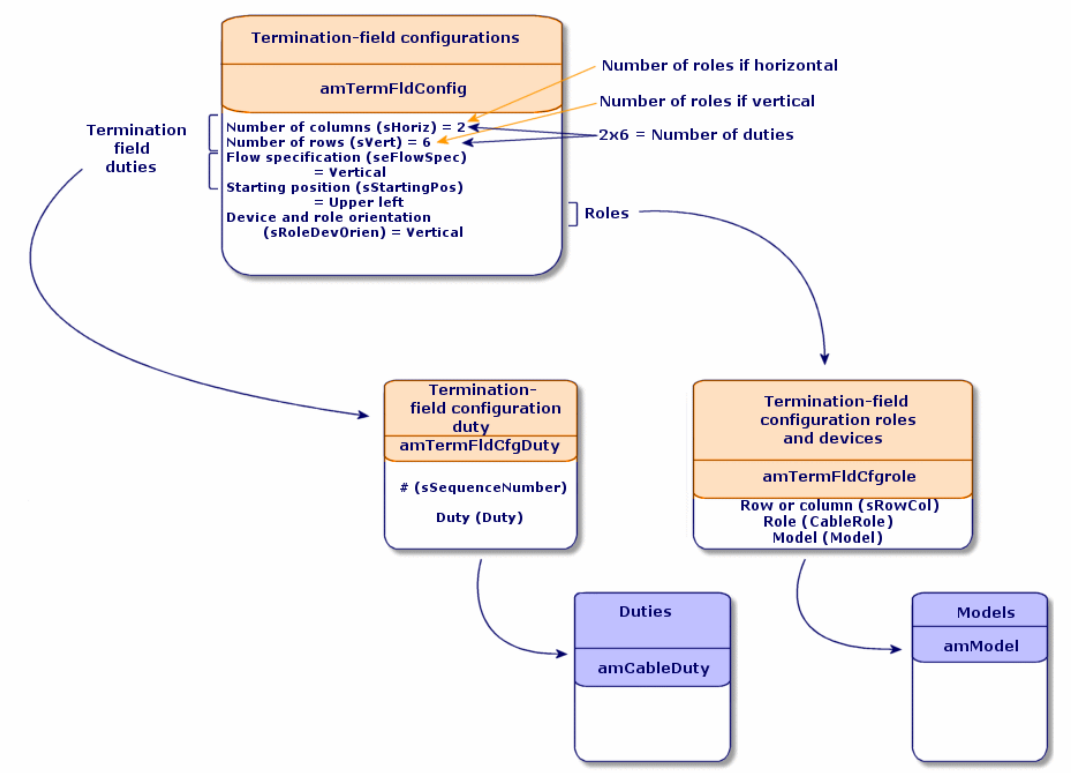


Figure 4.14. Interpretation of this example of a configuration on a termination field

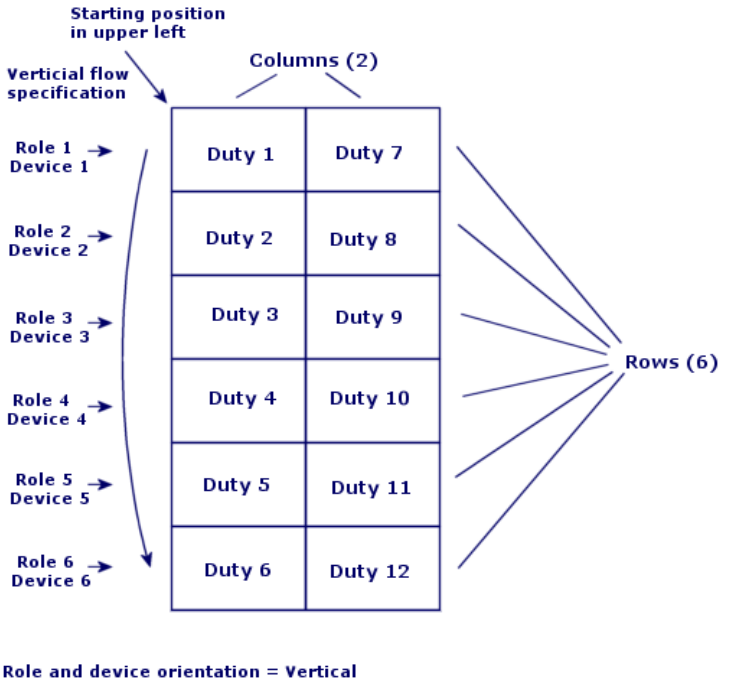


Figure 4.15. Example of the impact resulting from changing the starting position

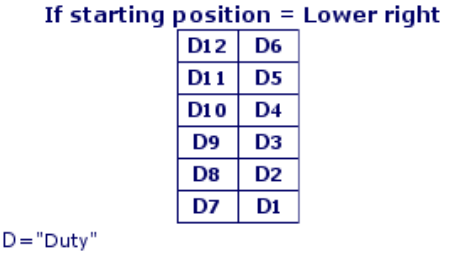


Figure 4.16. Example of the impact resulting from changing the cable device and role orientations

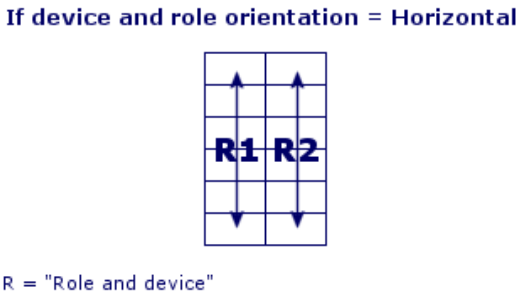
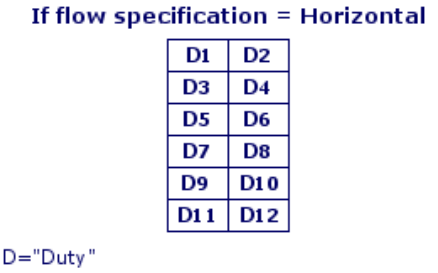
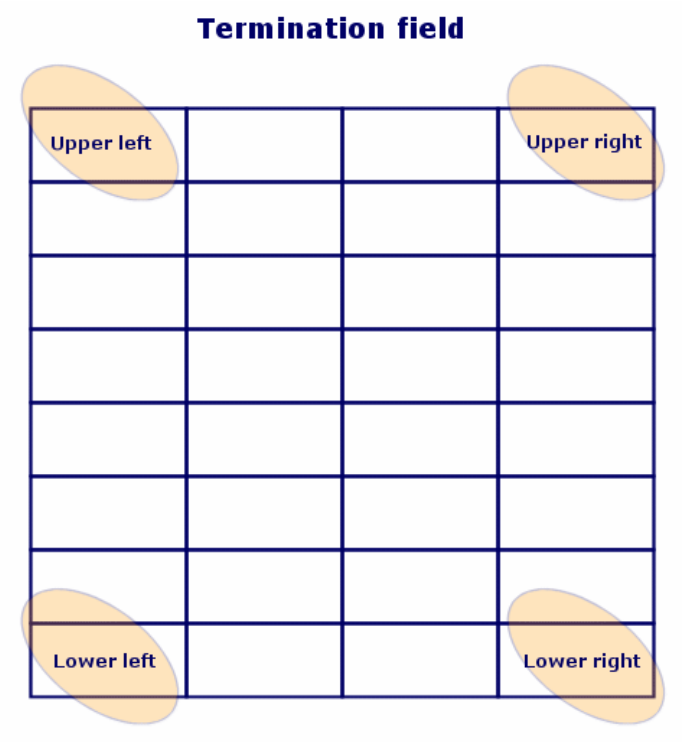


Figure 4.17. Example of the impact resulting from changing the flow specification



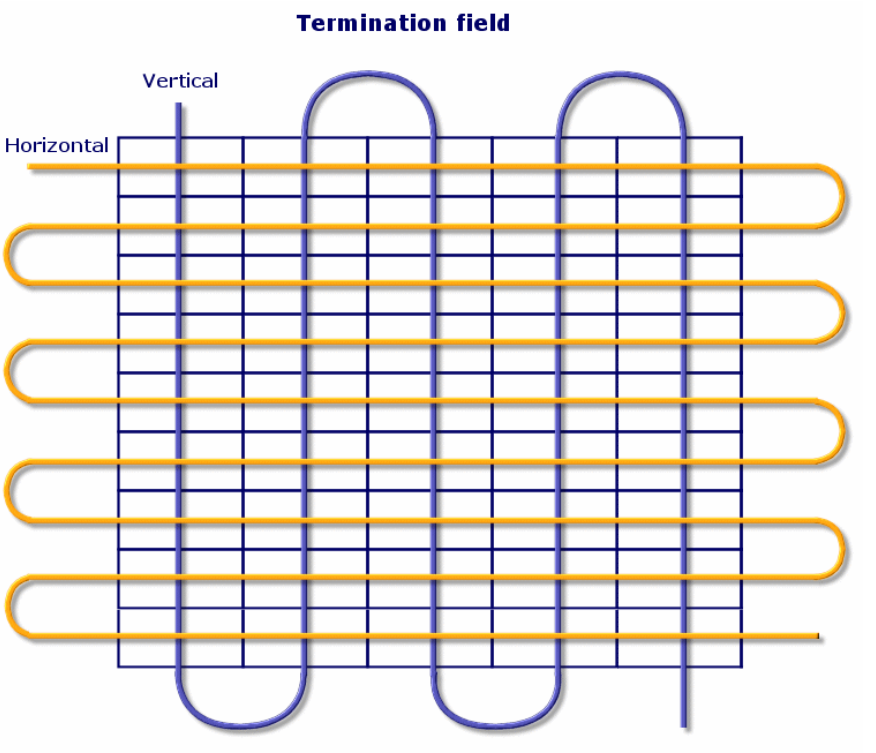
Starting position

Figure 4.18. Signification of the starting positions



Flow specification

Figure 4.19. Signification of the flow specification



Prerequisites

You should have already created the:

- Functions
- Label rules
- Roles
- Termination-field configuration models

Fields and links that must absolutely be populated

Label of the field or link	SQL name of the field or link
Termination field configurations table (amTermFldConfig)	
Name	Name
Number of columns	sHoriz
Number of rows	sVert
Flow specification	seFlowSpec
Starting position	seStartingPos
Termination field configuration duties/services	TermFldCfgDuty
Role and device orientation	seRoleDevOrient
Label rule	LabelRule
Termination field configuration roles and devices	TermFldConfRoles
Termination field configuration duties/services (amTermFldCfgDuty)	
#	sSequenceNumber
Function	Duty
Termination field configuration roles and devices table (amTermFldCfgRole)	
Row or column	sRowCol
Role	CableRole
Model	Model

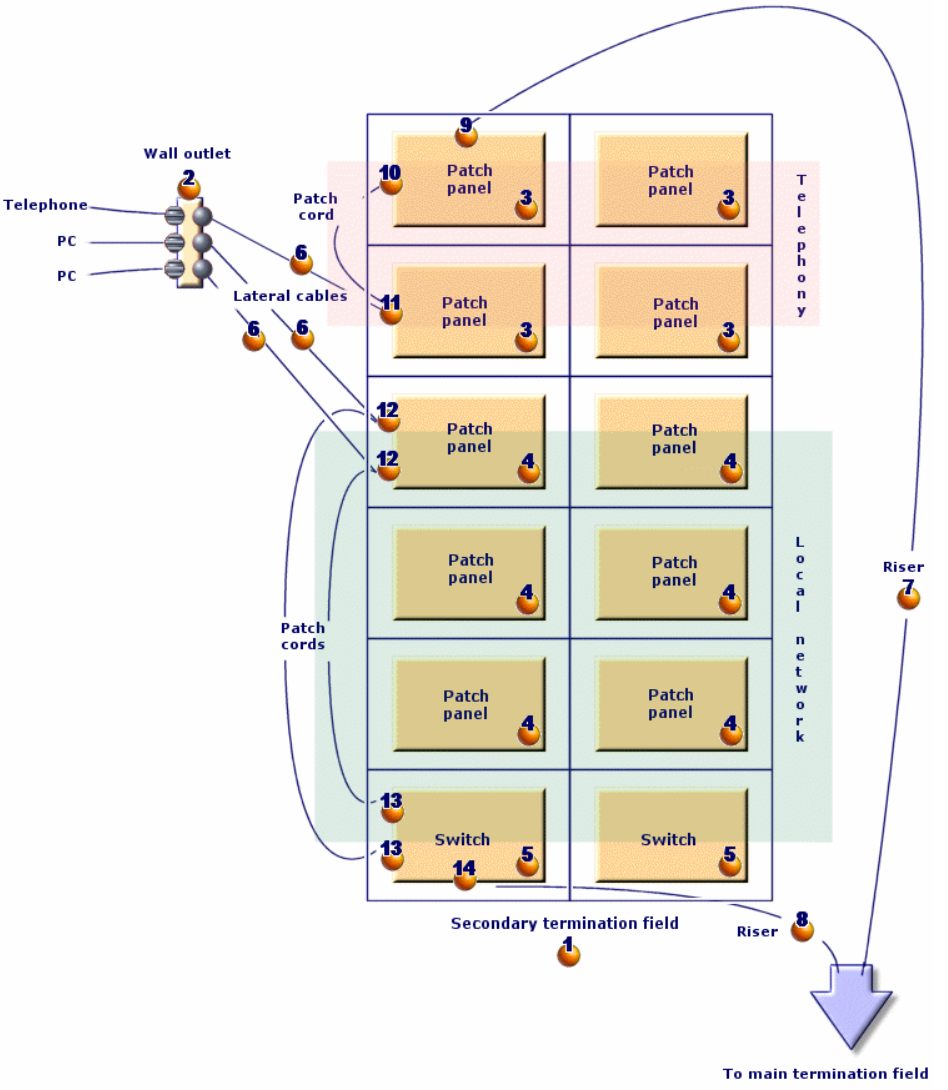
Creation procedure

Create one record per termination-field type of your network.

Demonstrative example

We are going to create a termination-field configuration based on the following model:

Figure 4.20. Termination-field configuration to create as an example



Creating the termination-field configuration

Create a new record in the **Termination field configurations** table (**amTermFldConfig**) and populate the following fields:

Field or link to populate	Value
Name (**Name**)	Standard termination field
Number of columns (**sHoriz**)	2
Number of rows (**sVert**)	6
Flow specification (**seFlowSpec**)	Vertical
Starting position (**seStartingPos**)	Top-left
Role and device orientation (**seRoleDevOrient**)	Vertical
Label rule (**LabelRule**)	Wallfield label

Creating the duties of the Standard termination field configuration

Select the termination field configuration, then select the **Duties** tab and add duties by populating the following fields and links:

Field or link to populate	# (sSequenceNumber)	Duty (Duty)
Value for function 1	1	Voice
Value for function 2	2	Voice
Value for function 3	3	Data
Value for function 4	4	Data
Value for function 5	5	Data
Value for function 6	6	Data
Value for function 7	7	Voice
Value for function 8	8	Voice
Value for function 9	9	Data
Value for function 10	10	Data
Value for function 11	11	Data
Value for function 12	12	Data

Creating the roles of the Standard termination field configuration

Select the termination field configuration, then select the **Roles and devices** tab and add roles/devices by populating the following fields and links:

	Row or column (sRowCol)	Role (CableRole)	Model (Model)
Value for role 1	1	Riser	32-port patch panel (256 pins)
Value for role 2	2	Lateral	32-port patch panel (256 pins)
Value for role 3	3	Lateral	24-port preloaded patch panel

	Row or column (sRowCol)	Role (CableRole)	Model (Model)
Value for role 4	4	Lateral	24-port preloaded patch panel
Value for role 5	5	Lateral	24-port preloaded patch panel
Value for role 6	6	Riser	ProcureSwitch 4000 M - 10 slots

5 Creating the termination fields

CHAPTER

Definitions

See chapter Glossary, section AssetCenter key terms/ Termination field of this manual.

Table names

Termination fields (amTermField)

Access menu

Cable/ Termination fields

Prerequisites

You should have already created the:

- Termination field configurations.
- Location of termination fields and work posts served by the termination fields.
- Functions
- Label rules
- Roles
- Termination-field device models.

Fields and links that must absolutely be populated

Label of the field or link	SQL name of the field or link
Termination fields table (amTermField)	
Name	Name
Location	Rental
Termination field devices	TermFieldDevices
User locations	UserLocs
Termination field devices table (amTermFldDevice)	
Role	CableRole
Label	Label
Horizontal position	sHoriz
#	sSequenceNumber
Vertical position	sVert

Creation procedure

You can create the termination field manually or you can use one of the following wizards:

- **Create a termination field**
- **Expand termination field**
- **Duplicate wiring closet**

Creating manually

For each termination field in your network (main termination field or the one on each floor):

1 Create a record in the **Termination fields** table (**amTermField**).
2 Create the termination field slots using the **Termination field devices** link (**TermFieldDevices**).
3 Select the termination fields served by the termination field using the **User locations** link (**UserLocs**).

Using the Create a termination field wizard

Functions performed by the wizard

The **Create termination field** wizard creates a termination field from a termination field configuration.

Prerequisites

You should have already created:

- Termination field configurations
- The locations of the served termination fields and workstations.

Launching the wizard

To access the wizard, you must select a record or a field (not a link) in the **Locations** table (**amLocation**):

1 Display the locations using the **Portfolio/ Locations** menu.
2 Select a location from the list or select a field (not a link) in the **Locations** table:
3 Select the **Create a termination field** wizard.

Information used when using the wizard

Label displayed by the wizard	Explanations
Select the termination field page	
Automatically name the termination field?	If you check this option, the wizard uses the **TermFieldName** calculated field to populate the **Name** field (**Name**) of the termination field. To learn more about calculated fields, refer to the chapter **References** , section **Calculated fields used in cable management** of this guide.
Termination field name	This field populates the **Name** field (**Name**) of the termination field if you did not check the **Automatically name the termination field** option.
Locations	Select the termination field's location.
Termination field configurations	Select the configuration that must be used as the model for the creation of the termination field.
Select the options page	
Column	Indicate the number of termination field columns to create. This number must be inferior or equal to the **Number of columns** field (**sHoriz**) of the termination field configuration. The value of this field is proposed by default.
Line	Indicate the number of termination field rows to create. This number must be inferior or equal to the **Number of rows** field (**sVert**) of the termination field configuration. The value of this field is proposed by default.
Auto-generate devices	If you check this option, the wizard creates a termination field device for the termination field slots. The wizard uses the **Model** link (**Model**) for this, which is defined at the level of the termination-field configuration roles and devices.
Label rule for new devices	Select the label rule to associate with the termination-field devices created by the wizard. This label rule populates the devices' **Label rule** (**LabelRule**) link. It also populates the devices' **Label** field (**Label**) in reference to this label rule. The label rule that the wizard proposed by default is the rule selected using the **Label rule** link (**LabelRule**) of the termination field configuration.
Select the project page	

Label displayed by the wizard	Explanations
Apply all changes to a project/work order:	Check this option if you want to: • Keep a trace of the operations performed in the database at the project level. • Describe the actions that you need to perform for (during) the work order.
Projects	The project in which is stored a trace of the operations performed in the database by the wizard.
Work orders	The work orders in which is described the actions that you must physically carry out for the work order.
Device comments	Enter the value to create for the **Description** field (**Description**) of the **Assets included in projects** table (**amAstProjDesc**). This applies to all the devices created by the wizard.

Data created or modified by the wizard

The wizard creates:

- 1 termination field (**amTermField**).
- Termination field devices (**amTermFldDevice**).
- The assets corresponding to the termination-field devices (**amAsset**).
- Ports for the devices (**amPort**).
- Slots for the devices (**amSlot**).
- Pins/terminals for the devices (**amDevicePin**).

The wizard populates the following fields:

Field label	SQL name of the field	Explanations
Termination field table (amTermField)		
Name	Name	The name that you selected using the wizard or the name determined by the **TermFieldName** calculated field.
Termination field configuration	TermFldConfig	The configuration selected using the wizard.
Location	Rental	The location selected using the wizard.

Field label	SQL name of the field	Explanations
Termination field devices	TermFieldDevices	The wizard creates a device for each termination field slot is created if you checked the **Automatically generate the devices** option in the wizard.
Termination field devices table (amTermFldDevice)		
#	sSequenceNumber	Defined according to the termination-field configuration parameters.
Horizontal position	sHoriz	Defined according to the termination-field configuration parameters.
Vertical position	sVert	Defined according to the termination-field configuration parameters.
Role	CableRole	The **Role** field (**CableRole**) of the termination-field configuration role corresponding to the position of the device in the termination field.
Device	Device	The device created by the wizard using the **Model** link (**Model**) of the termination-field configuration role corresponding to the position of the device in the termination field.
Assets table (amAsset)		
Model	Model	The **Model** (**Model**) of the termination-field configuration role corresponding to the position of the device in the termination field.
Label rule	LabelRule	Label rule selected using a wizard.
Label	Label	Label calculated by a wizard and based on the label rule of the device.
Slots	AssetSlots	Slots of the device model
Device pins/terminals	Pins	AssetCenter creates as many pins as there are defined by the **Number of pins/terminals** field (**lPins**) of the model.
Ports	Ports	Ports of the device model
Ports table (amPort)		
Port #	PortNo	Same as for the model.
#	sSequenceNumber	Same as for the model.
Connection type	CabCnxType	Same as for the model.
Status	seCnxStatus	Value set to **Available** by the wizard.
Function	Duty	The **Duty** link (**Duty**) of the termination-field configuration duty defined for the device slot, of which the port is a part.
Slots table (amSlot)		
Name	Name	Same as for the model.
#	sSequenceNumber	Same as for the model.

Field label	SQL name of the field	Explanations
Slot type	SlotType	Same as for the model.
Pins table (amDevicePin)		
Name	Name	Automatic sequential number.
#	sSequenceNumber	Automatic sequential number.
Status	seCnxStatus	Value set to **Available** by the wizard.

Viewing the result

The termination field created can be viewed by selecting it in one of the following manners:

- In the list of termination fields displayed by the **Cable/ Termination fields**.
- In the **Termination fields** tab in the location of the termination field.

After having launched the wizard

1. The wizard does not populate the **User locations** link (**UserLocs**) of the termination fields. You must manually add these locations (which are served by the termination field).
2. The wizard does not populate the **Device** field link (**Asset**) of the slots. You must manually select and/or create the devices to insert into the slots.

Demonstrative example

We are going to create 1 termination-field column from the **Standard termination field** configuration. The second column will be added later using the **Expand termination field** wizard.

1. Launch the **Create a termination field** wizard and enter the following information:

Label displayed by the wizard	Value to enter or select
Select the termination field page	
Automatically name the termination field?	Do not check this option.
Termination field name	Floor's termination field

Label displayed by the wizard	Value to enter or select
Locations	Cabled building/1st floor/1st floor's wiring closet
Termination field configurations	Standard termination field
Select the options page	
Column	1
Line	6
Auto-generate devices	Check this selection box.
Label rule for new devices	Wallfield label
Select the project page	
Apply all changes to a project/work order?	Check this selection box.
Projects	Create a termination field
Work orders	Select the work order proposed by the wizard.
Device comments	Install the device in termination field.

2 Manually add the locations served by the termination field:

1 Select the **Cable/ Termination fields** menu.
2 Select the **Floor's termination field**.
3 Select the **Served locations** tab.
4 Add the **Cabled building/1st floor/Office 1** location.
5 Click **Modify**.

3 Add the modules in the slots of the **ProcureSwitch 4000 M - 10 slots** devices:

Warning: This will be done later on, according to the procedure described in the chapter , section / of this guide.

4 View the results created by the wizard by looking at the other tabs.

Using the Expand termination field wizard

Functions performed by the wizard

The **Expand termination field** wizard adds rows or columns to an existing termination field from a termination field configuration.

Prerequisites

You should have already created:

- The workstation locations served by the termination fields.
- The termination field to expand.

The existing termination field must have less rows or columns than the termination field configuration.

Launching the wizard

To access this wizard, you must select a record or a field (not a link) from the **Termination fields** table (**amTermField**):

1. Display the termination fields using the **Cable/ Termination fields** menu.
2. Select the termination field to expand from the list in the window.
3. Right-click to display the shortcut menu.
4. Select the **Expand termination field** wizard.

Information used when using the wizard

Label displayed by the wizard	Explanations
Select the options page	
Column	Indicate the number of termination field columns to add. This number must be inferior or equal to the **Number of columns** field (**sHoriz**) of the termination field configuration. The possible number of columns that you can add it proposed by default.

Label displayed by the wizard	Explanations
Line	Indicate the number of termination field rows to add. This number must be inferior or equal to the **Number of rows** field (**sVert**) of the termination field configuration. The possible number of rows that you can add it proposed by default.
Auto-generate devices	If you check this option, the wizard creates a termination field device for the termination field slots. The wizard uses the **Model** link (**Model**) for this, which is defined at the level of the termination-field configuration roles and devices.
Label rule for new devices	Select the label rule to associate with the termination-field devices created by the wizard. This label rule populates the devices' **Label rule** link (**LabelRule**). The wizard also populates the devices' **Label** field (**Label**) in reference to this label rule. The label rule that the wizard proposed by default is the rule selected using the **Label rule** link (**LabelRule**) of the termination field configuration.
Select the project page	
Apply all changes to a project/work order?	Check this option if you want to: • Keep a trace of the operations performed in the database at the project level. • Describe the actions that you need to perform for (during) the work order.
Projects	The project in which is stored a trace of the operations performed in the database by the wizard.
Work orders	The work orders in which is described the actions that you must physically carry out for the work order.
Device comments	Enter the value to create for the **Description** field (**Description**) of the **Assets included in projects** table (**amAstProjDesc**). This applies to the devices created while extending the termination field.

Data created or modified by the wizard

The wizard creates:

- Termination field devices (**amTermFldDevice**)
- The assets corresponding to the termination-field devices (**amAsset**).
- Ports for the devices (**amPort**).
- Slots for the devices (**amSlot**).
- Pins/terminals for the devices (**amDevicePin**).

The wizard populates the following fields:

Field label	SQL name of the field	Explanations
Termination field table (amTermField)		
Termination field devices	TermFieldDevices	The wizard creates a device for each termination field slot is created if you checked the **Automatically generate the devices** option in the wizard.
Termination field devices table (amTermFldDevice)		
#	sSequenceNumber	Defined according to the termination-field configuration parameters.
Horizontal position	sHoriz	Defined according to the termination-field configuration parameters.
Vertical position	sVert	Defined according to the termination-field configuration parameters.
Role	CableRole	The **Role** field (**CableRole**) of the termination-field configuration role corresponding to the position of the device in the termination field.
Device	Device	The device created by the wizard using the **Model** link (**Model**) of the termination-field configuration role corresponding to the position of the device in the termination field.
Assets table (amAsset)		
Model	Model	The **Model** (**Model**) of the termination-field configuration role corresponding to the position of the device in the termination field.
Label rule	LabelRule	Label rule is selected using a wizard.
Label	Label	The label is calculated by a wizard and is based on the label rule of the device.
Slots	AssetSlots	Slots of the device model
Device pins/terminals	Pins	AssetCenter creates as many pins as there are defined by the **Number of pins/terminals** field (**lPins**) of the model.
Ports	Ports	Ports of the device model

Field label	SQL name of the field	Explanations
Ports table (amPort)		
Port #	PortNo	Same as for the model.
#	sSequenceNumber	Same as for the model.
Connection type	CabCnxType	Same as for the model.
Status	seCnxStatus	Value set to **Available** by the wizard.
Function	Duty	The **Duty** link (**Duty**) of the termination-field configuration duty defined for the device slot, of which the port is a part.
Slots table (amSlot)		
Name	Name	Same as for the model.
#	sSequenceNumber	Same as for the model.
Slot type	SlotType	Same as for the model.
Pins table (amDevicePin)		
Name	Name	Automatic sequential number.
#	sSequenceNumber	Automatic sequential number.
Status	seCnxStatus	Value set to **Available** by the wizard.

Viewing the result

The extended termination field created can be viewed by selecting it in one of the following manners:

- In the list of termination fields displayed by the **Cable/ Termination fields**.
- In the **Termination fields** tab in the location of the termination field.

After having launched the wizard

1. The wizard does not populate the **User locations** link (**UserLocs**) of the termination fields. You must manually add these locations (which are served by the termination field).
2. The wizard does not populate the **Device** field link (**Asset**) of the slots. You must manually select and/or create the devices to insert into the slots.

Demonstrative example

We are going to add 1 column to the termination field that was previously created from the **Standard termination field** configuration.

1 Select the **Cable/ Termination fields** menu.

2 Select the **Floor's termination field**.

3 Launch the **Expand the termination field** wizard and enter the following information:

Label displayed by the wizard	Value to enter or select
Select the options page	
Line	0
Column	1
Auto-generate devices	Check this selection box.
Label rule for new devices	Wallfield label
Select the project page	
Apply all changes to a project/work order?	Check this selection box.
Projects	Expand termination field
Work orders	Select the work order proposed by the wizard.
Device comments	Install the device in termination field.

4 In a real-life situation, you would have to create the modules to insert in the slots of the **ProcureSwitch 4000 M - 10 slots**. However, in this demonstrative example, it is not required.

5 Look at the result:

- Select the **Cable/ Termination fields** menu.
- Select the **Floor's termination field**.
- Browsing through the different tabs

Using the Duplicate wiring closet wizard

Functions performed by the wizard

The **Duplicate wiring closet** wizard duplicates the termination fields of a source location into a target location.

Note: This target location can already contain termination fields.

Prerequisites

You should have already created:

- The parent location of the new wiring closet.
- The wiring closet (location + termination fields) to duplicate.

Launching the wizard

To access the wizard, you must select a record or a field (not a link) in the **Locations** table (**amLocation**):

1. Display the locations using the **Portfolio/ Locations** menu.
2. Select a location from the list or select a field (not a link) in the **Locations** table:
3. Select the **Duplicate wiring closet** wizard.

Information used when using the wizard

Label displayed by the wizard	Explanations
Select the source and destination locations page	
Source location	Select the termination field(s) to duplicate with its termination fields.
Destination location	Select the location where you want to duplicate the source location.

Label displayed by the wizard	Explanations
Name of the new wiring closet	• If you leave this field empty, the wizard will only duplicate the termination fields from the source location in the target location. • If you populate this field, the wizard creates a sub-location in the target location. The source termination fields are duplicated in this sub-location.
Duplicate the sub-locations.	If you check this option, the sub-locations of the source location are also duplicated.
Rename the new termination field automatically.	• If you check this option, the wizard uses the **TermFieldName** calculated field to populate the **Name** field (**Name**) of the termination field. • If you don't check this option, the wizard duplicates the names of the source termination fields. To learn more about calculated fields, refer to the chapter **References** , section **Calculated fields used in cable management** of this guide.
Refresh new termination field device's labels	• If you check this option, the wizard recalculates the devices' **Label** field (**Label**) in reference to the label rule, selected by the devices' **Label rule** link (**LabelRule**). • If you don't check this option, the wizard duplicates the labels of the source termination-field devices.
Select the termination field(s) to duplicate page	
Select the termination field(s) to duplicate	The wizard displays the termination fields of the selected, source location.
Select a project and a work order page	
Apply all changes to a project/work order?	Check this option if you want to: • Keep a trace of the operations performed in the database at the project level. • Describe the actions that you need to perform for (during) the work order.

Label displayed by the wizard	Explanations
Projects	The project in which is stored a trace of the operations performed in the database by the wizard.
Work orders	The work orders in which is described the actions that you must physically carry out for the work order.
Device comments	Enter the value to create for the **Description** field (**Description**) of the **Assets included in projects** table (**amAstProjDesc**). This applies to all the devices created by the wizard.

Data created or modified by the wizard

The wizard creates:

- Locations (**amLocation**)
- Termination fields (**amTermField**)
- Termination field devices (**amTermFldDevice**)
- The assets corresponding to the termination-field devices (**amAsset**).
- Ports for the devices (**amPort**).
- Slots for the devices (**amSlot**).
- Pins/terminals for the devices (**amDevicePin**).

The wizard populates the following fields:

Field label	SQL name of the field	Explanations
Locations table (amLocation)		
Name	Name	• It is the value of the **New wiring closet name** field in the wizard, if you have populated it. • Otherwise, it is the name of the target location that you have selected with the wizard.
Termination field table (amTermField)		
Termination field devices	TermFieldDevices	The wizard creates a record for each device in the source termination fields selected using the wizard.
Termination field devices table (amTermFldDevice)		

Field label	SQL name of the field	Explanations
#	sSequenceNumber	Same as for the source device.
Horizontal position	sHoriz	Same as for the source device.
Vertical position	sVert	Same as for the source device.
Role	CableRole	Same as for the source device.
Device	Device	The device created by the wizard using the **Model** link (**Model**) of the source device.
Assets table (amAsset)		
Model	Model	Same as for the source device.
Label rule	LabelRule	Same as for the source device.
Label	Label	• If you have checked the **Refresh new termination field device's labels** option in the wizard: It is the value calculated by the wizard in reference to this device's label rule. • If you have not checked this option, it is the same value as for the source device.
Slots	AssetSlots	Same as for the source device.
Device pins/terminals	Pins	Same as for the source device.
Ports	Ports	Same as for the source device.
Ports table (amPort)		
Port #	PortNo	Same as for the port of the source device.
#	sSequenceNumber	Same as for the port of the source device.
Connection type	CabCnxType	Same as for the port of the source device.
Status	seCnxStatus	Same as for the port of the source device.
Function	Duty	Same as for the port of the source device.
Slots table (amSlot)		
Name	Name	Same as for the slot of the source device.
#	sSequenceNumber	Same as for the slot of the source device.
Slot type	SlotType	Same as for the slot of the source device.
Pins table (amDevicePin)		
Name	Name	Automatic sequential number.
#	sSequenceNumber	Automatic sequential number.
Status	seCnxStatus	Value set to **Available** by the wizard.

Viewing the result

The duplicated termination fields can be viewed by selected them in one of the following manners:

- In the list of termination fields displayed by the **Cable/ Termination fields**.
- In the **Termination fields** tab in the location of the termination field.

After having launched the wizard

1 The wizard does not populate the **User locations** link (**UserLocs**) of the termination fields. You must manually add these locations (which are served by the termination field).

2 The wizard does not populate the **Device** field link (**Asset**) of the slots. You must manually select and/or create the devices to insert into the slots.

Demonstrative example

We are going to duplicate the termination field of the floor's wiring closet, which was previously created in the main wiring closet.

1 Launch the **Duplicate wiring closet** wizard and enter the following information:

Label displayed by the wizard	Value to enter or select
Select the source and destination locations page	
Source location	Cabled building/1st floor/1st floor wiring closet
Destination location	Cabled building/2ndfloor/Main wiring closet
Name of the new wiring closet	Leave this field empty.
Duplicate the sub-locations.	Do not check this option.
Rename the new termination field automatically.	Check this selection box.
Refresh new termination field device's labels	Check this selection box.
Select the termination field(s) to duplicate page	
Select the termination field(s) to duplicate	Floor's termination field
Select a project and a work order page	
Apply all changes to a project/work order?	Check this selection box.
Projects	Duplicate wiring closet
Work orders	Select the work order proposed by the wizard.
Device comments	Install the device in termination field.

2 Select the termination field just created:

1 Select the **Portfolio/ Locations** menu.

2. Select the **Cabled building/2nd floor/Main wiring closet** location.
3. Select the **Termination fields** tab.
4. Select the new termination field.
5. Click the **Magnifying glass** button.

3. Rename the termination field to **Main termination field**.
4. Manually add the locations served by the termination field:
   1. Select the **Served locations** tab.
   2. Add the **Cabled building/1st floor/1st floor wiring closet** location.
   3. Click **Modify**.
5. Add the modules in the slots of the **ProcureSwitch 4000 M - 10 slots** devices:

Warning: This will be done later on, according to the procedure described in the chapter , section / of this guide.

6. Look at the results of the wizard's actions by browsing through the other tabs.

6 Manually creating the cable devices, cables and connections

CHAPTER

Introduction

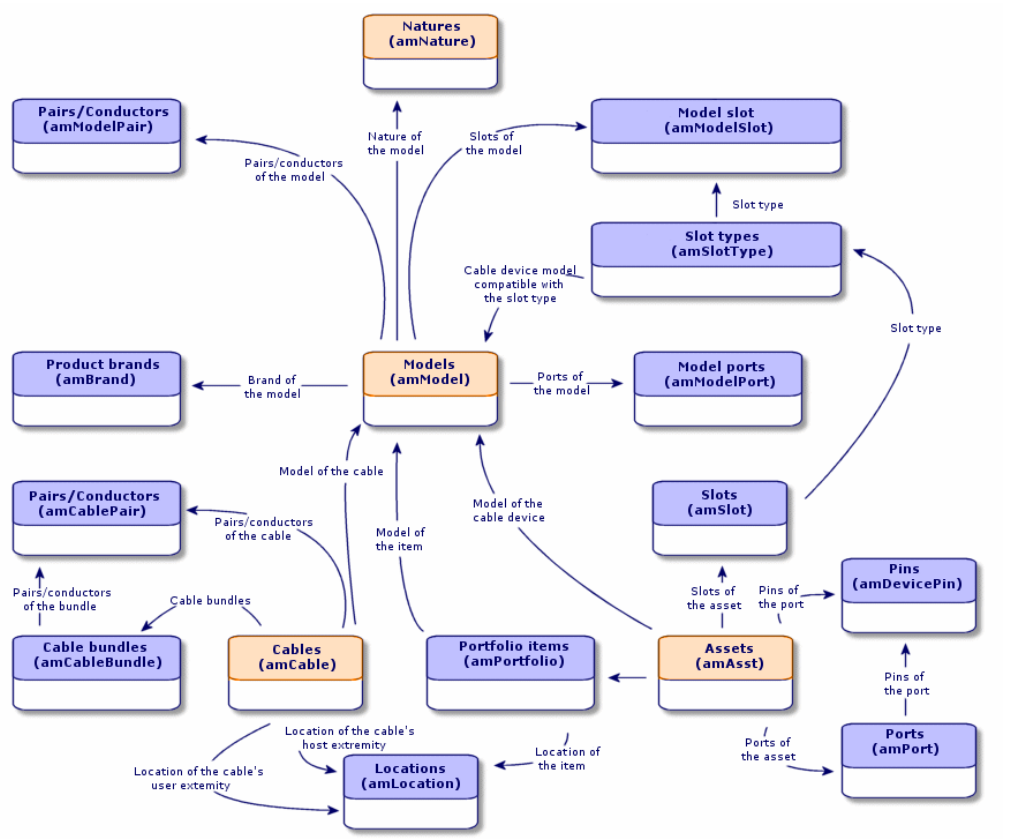
The cable devices, cables and cable links can be created manually or via the cabling wizards:

- Creating them manually requires more time, obviously, but it also allows you more control over the creation process.
- Creating them with wizards is more rapid, but you have less control.

Note: Let's recall that the cable devices are stored in the Assets table (amAsset), while the cables are stored in the Cables table (amCable). However, the models of these cable devices and cables come from the same table: Models (amModel).

Cables and cable devices: data models

Figure 6.1. Data model associated with the cables and cable devices



Manually creating the cable devices

Definitions

See chapter Glossary, section AssetCenter key terms/ Cable device of this manual.

See chapter Glossary, section AssetCenter key terms/ Port of this manual.

See chapter Glossary, section AssetCenter key terms/ Pin/ Terminal of this manual.

See chapter Glossary, section AssetCenter key terms/ Slot of this manual.

Table names

- **Assets (amAsset)**
- **Ports (amPort)**
- **Pins (amDevicePin)**
- **Slots (amSlot)**

Access menu

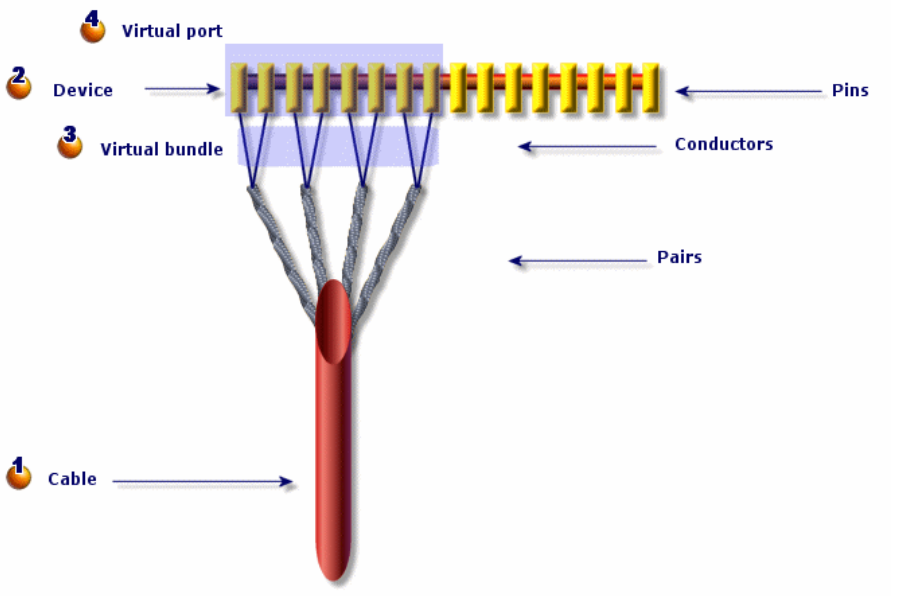
Portfolio/ Assets and Batches

Letting AssetCenter create the ports and virtual bundles for pin connections

Tip: Certain cables/cable devices are composed of numerous bundles/pairs. It would be a tedious task to declare each bundle/pair manually. The cabling wizards are capbalbe of creating and virtual bundles and ports when they are required for a cable link. The and virtual bundles and ports are also automatically deleted when the cable links that use them are no longer used.

Note: The wizards use the topologies to identify the models of the cables/cable devices and the pairs/pins.

Figure 6.2. Creating ports and virtual bundles



1 You can being by creating a cable with its pairs, or you can let the wizard create it.

2 Then, you create a cable device with its pins, or you can let the wizard create it.

3 The wizard creates a virtual bundle using the first available pairs.

4 The wizard creates a virtual port using the first available pins.

Single or double-sided devices

The cable devices can be single or double-sides. They are single-sided when the device ports or pins are all grouped together on one side. They are double-sided when the ports or pins are present on both sides of the device.

Example

The patch panels are double-sided devices. The back side is frequently used to connect lateral or riser cables. The front side is often used to perform a patch to another patch panel.

When a device is double-sided, the cabling wizards can create more than one cable link on a given port of the device.

The single or double-sided feature of the cable devices is defined by the **Number of sides** field (**seDevSdType**) in the model.

The following diagram illustrates the different types of double-sided devices, depending on whether the connection is by pin or by port.

In each case, you will need to:

- Declare ports to the level of the device model.
- Populate the **Number of pins/terminals** field (**lPins**).

Important: It is very important to respect the directives of these diagrams if you want the wizards to correctly create the virtual ports.

Figure 6.3. Double-sided devices (port/port)

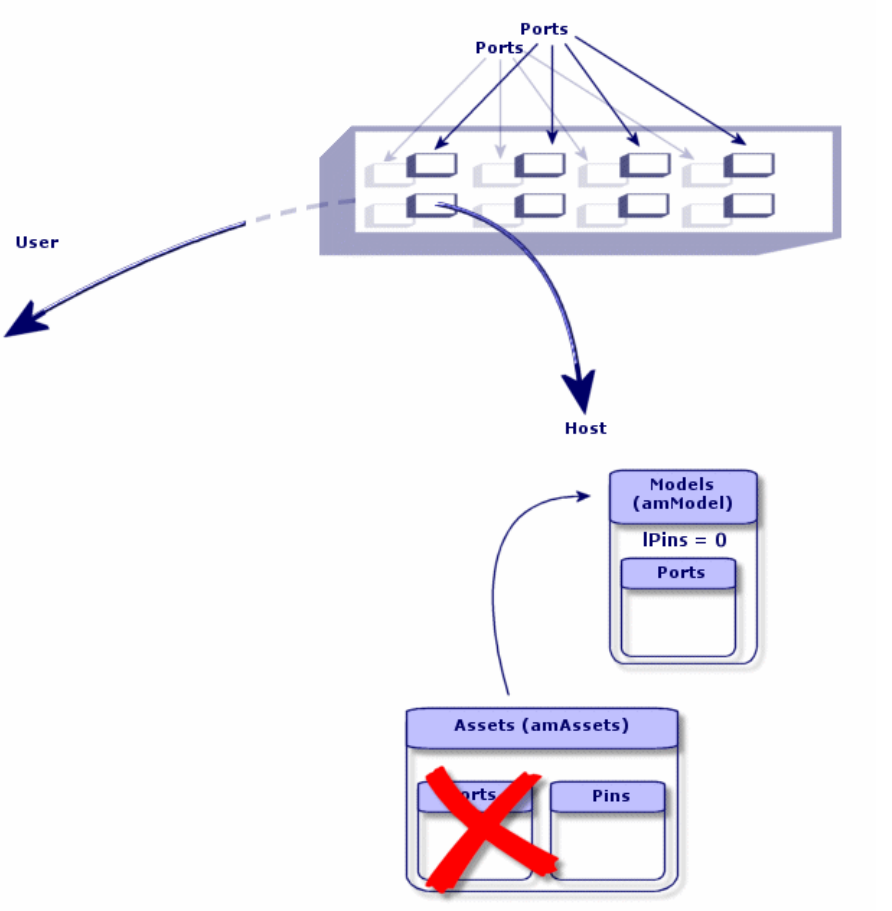


Figure 6.4. Double-sided devices (port/pins)

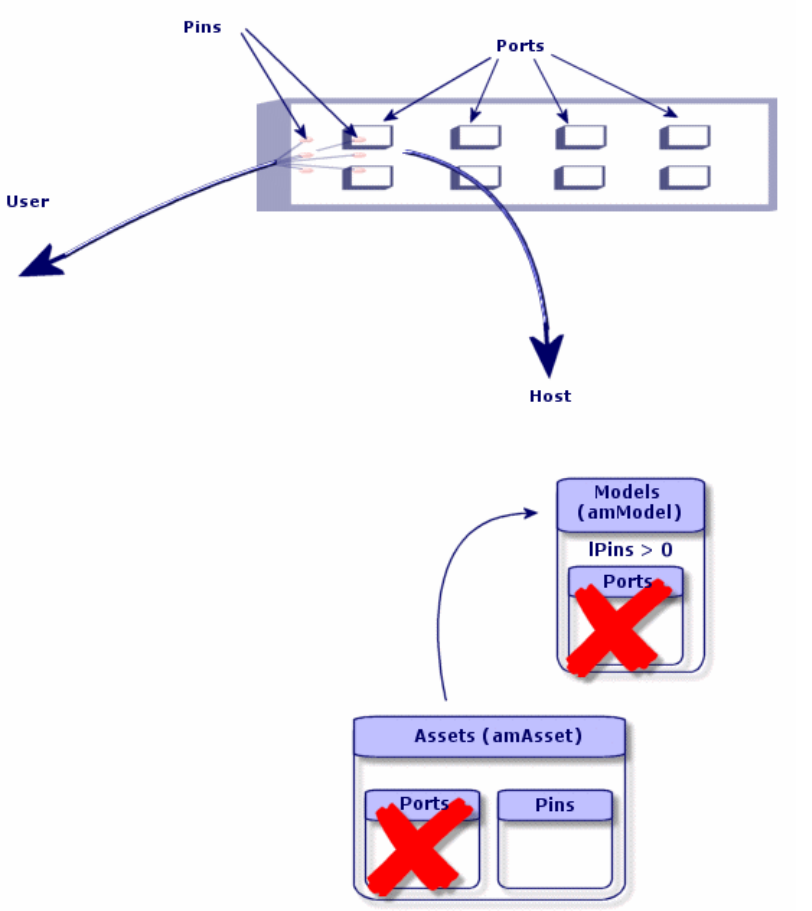
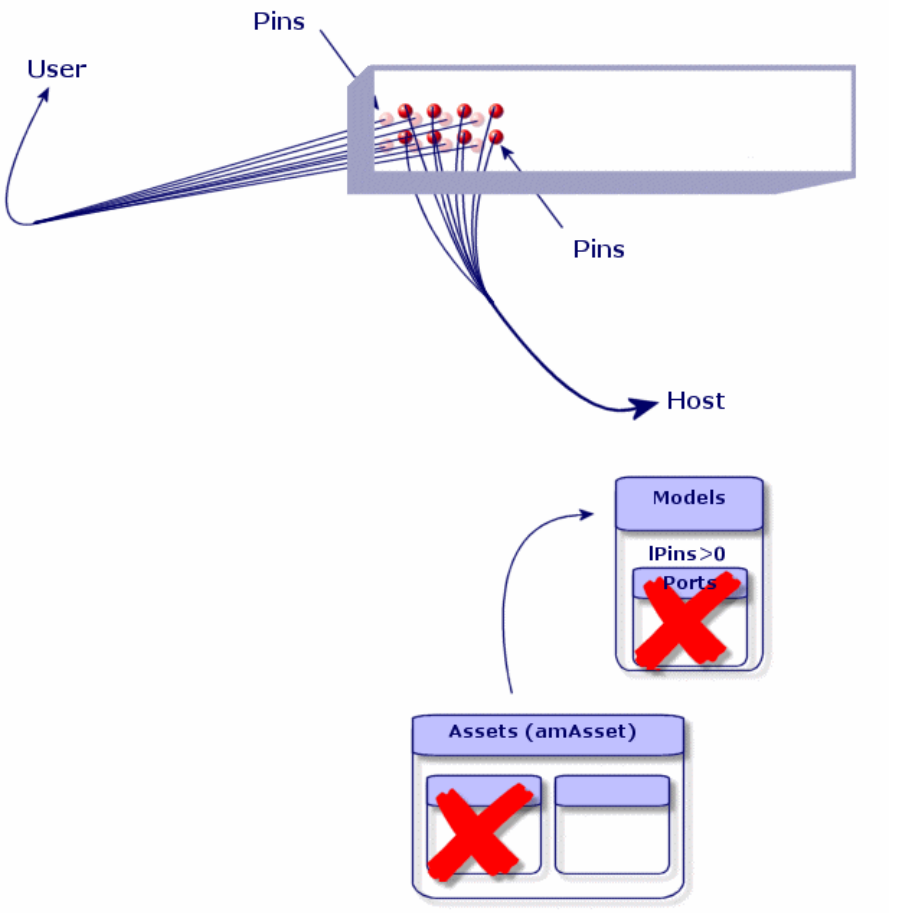


Figure 6.5. Double-sided devices (pin/pin)



Prerequisites

You should have already created the:

- Cable device models (**amModel**)
- Label rules of the cable devices, ports, slots and pins/terminals (**amLabelRule**)
- Device types (**amItemizedList**)
- Cable connection types of the device ports (**amCabCnxType**)
- Duties of the device ports (**amCableDuty**)

- Slot types of the devices (**amSlotType**)
- Termination fields containing the devices (**amTermField**)
- Device locations (**amLocation**)
- Modules to insert in the slots (**amAsset**)

Fields and links that must absolutely be populated

Label of the field or link	SQL name of the field or link	Remarks
Assets table (amAsset)		
Model	Model	The model must have a cable device nature.
Portfolio items	Assignment	
Status	seCnxStatus	
Max no. connections	sMaxCnxCount	If you want to receive a warning - during a manual creation - in case you create more ports than what is defined by this field.
Device pins/terminals	Pins	If the device is connected to the network by pins.
Ports	Ports	If the device is connected to the network by ports.
Slots	AssetSlots	If the device must receive connection modules in its slots.
Label rule	LabelRule	
Label	Label	
Ports table (amPort)		
Port #	PortNo	If you create non-virtual ports.
#	sSequenceNumber	If you create non-virtual ports.
Connection type	CabCnxType	If you create non-virtual ports.
Function	Duty	If you create non-virtual ports.
Label rule	LabelRule	
Label	Label	
Status	seCnxStatus	
Port pins/terminals	DevPin	
Slots table (amSlot)		
Name	Name	If you create slots.
#	sSequenceNumber	If you create slots.
Slot type	SlotType	If you create slots.
Assigned asset	AssignedAsset	If you create slots and they are occupied.
Pins table (amDevicePin)		
Name	Name	If you create pins.

Label of the field or link	SQL name of the field or link	Remarks
#	sSequenceNumber	If you create pins.
Port	Port	If you create pins.
Status	seCnxStatus	If you create pins.
Label rule	LabelRule	If you create pins.
Label	Label	If you create pins.

Creation procedure

If you created appropriate device models, you just need to:

1 Select the **Portfolio/ Assts and Batches** menu item.

2 Click **New.**

3 Populate the following fields and links:

- **Model** (**Model**)
- **Max no. connections** (**sMaxCnxCount**)

4 Click **Create.**

The other fields and links to populate are automatically inherited from the model.

Connection by ports or by pins

You might find it useful to read the following chapter **Implementing cable management** , section **Creating the cable device models without slots / Connection by ports or by pins** .

Double-sided devices

When a device contains ports and/or pins on 2 sides (a patch panel, for example), you need to proceed in one of the following two manners:

- If the 2 sides contain ports:

  1 Create as many ports as their are on one side or the other of the device (this number should be the same on either side).

  2 The ports thus created will appear in two cable links: a host-side link (corresponding to the port of one of the sides) and a user-side link (corresponding to the port on the other side).

- If the 2 sides contain pins:
  1. Do not create any pin manually, unless you are not using cabling wizards to create cable links.
  2. The cabling wizards that create cable links will create virtual ports according to your needs as you go. The virtual ports thus created will appear in two cable links: a host-side link (corresponding to the pins of one of the sides) and a user-side link (corresponding to the pins on the other side).
- If 1 side contains ports and the other contains pins:
  1. Do not create any port manually, unless you are not using cabling wizards to create cable links.
  2. Create the cable links on the pin side before creating them on the port side. The cabling wizards that create the cable links to the pins will create virtual ports according to your needs as you go. Each virtual port thus appears in a first cable link.
  3. Create the cable links on the port side. The cabling wizards that create the cable links to the ports will use the existing virtual ports. The virtual ports thus associated appear in a second cable link.

Slots

If the device contains slots destined to receive connection modules:

1. Create the connection modules in the **Assets** table (**amAsset**).
2. Create the **Slots** links (**AssetSlots**)by associating them to a connection module.

Demonstrative example

We are going to:

1. Create 2 modules.
2. Insert the first module in one of the switch slots of this floor's termination field.

3 Insert the second module in one of the switch slots of the main termination field.

To do this:

1 Create the 2 modules. For each module:

1 Add a record in the **Assets** table (**amAsset**), and populate the following fields:

Field or link to populate	Value for record 1	Value for record 2
Model (**Model**)	Procurve 10/100 Base T - 8 ports	Procurve 10/100 Base T - 8 ports
Max no. connections (**sMaxCnxCount**)	8	8
Asset tag (**AssetTag**	EXAMPLE005	EXAMPLE006

2 Click **Create**.

3 The fields and links to populate are automatically inherited from the model. You can view this by looking at the different tabs of the module that was just created.

2 Associate one of the modules to one of the switches of this floor's termination field:

1 Select the **Cable/ Termination fields** menu.

2 Select the **Floor's termination field**.

3 Select the **Devices** tab.

4 Select one of the devices whose **Model** field (**Model**) has the value **ProcureSwitch 4000 M - 10 slots**.

5 Click the **Magnifying glass** button.

6 Click the **Magnifying glass** button to the right of the **Device** field (**Device**).

7 Select the **Slots** tab.

8 Select one of the slots.

9 Click the **Magnifying glass** button.

10 Click the **Magnifying glass** button to the right of the **Device** field (**Device**).

11 Select the **Assigned device** field (**AssignedAsset**).

12 Select one of the **Hewlett Packard Procurve 10/100 Base T - 8 ports** devices that you just created.
13 Click **Modify**.
14 Click **Modify**.
15 Click **Close**.

3 Associate the other module with one of the switches of the main termination field:

1 Select the **Main termination field**.
2 Select the **Devices** tab.
3 Select one of the devices whose **Model** field (**Model**) is set to **ProcureSwitch 4000 M - 10 slots**.
4 Click the **Magnifying glass** button.
5 Click the **Magnifying glass** button to the right of the **Device** field (**Device**).
6 Select the **Slots** tab.
7 Select one of the slots.
8 Click the **Magnifying glass** button.
9 Click the **Magnifying glass** button to the right of the **Device** field (**Device**).
10 Select the **Assigned device** field (**AssignedAsset**).
11 Select one of the **Hewlett Packard Procurve 10/100 Base T - 8 ports** devices that you just created.
12 Click **Modify**.
13 Click **Modify**.
14 Click **Close**.

Manually creating the cables

Definitions

See chapter Glossary, section AssetCenter key terms/ Cable of this manual.

See chapter Glossary, section AssetCenter key terms/ Pair/conductor of this manual.

See chapter Glossary, section AssetCenter key terms/ Bundle of this manual.

Table names

- **Cables** (**amCable**)
- **Pairs/Conductors** (**amCablePair**)
- **Cable bundles** (**amCableBundle**)

Access menu

Cable/ Cables

Prerequisites

You should have already created the:

- Cable models (**amModel**))
- Label rules of the cable devices, pairs/conductors and bundles (**amLabelRule**)
- Cable types (**amItemizedList**)
- Cable pair/conductor types (**CabPairType**)
- Duties of the cable bundles (**amCableDuty**)
- Locations of the host and user cables (**amLocation**)

Fields and links that must absolutely be populated

Label of the field or link	SQL name of the field or link	Remarks
Cables table (amCable)		
Model	Model	The model must have a cable nature
Label rule	LabelRule	
Label	Label	

Label of the field or link	SQL name of the field or link	Remarks
User location	UserLoc	
Host location	HostLoc	
Role	CableRole	
Status	seCnxStatus	
Pairs/Conductors	Pairs	
Pairs/Conductors table (amModelPair)		
Name	Name	
#	sSequenceNumber	
Pair/Conductor type	CabPairType	
Color code entry	ColorCodeDet	If you selected a color code at the level of the cable model.

Creation procedure

If you created appropriate cable models, you just need to:

1 Populate the **Model** link (**Model**).

2 Click **Create**.

The other fields and links to populate are automatically inherited from the model.

Tip: It is not necessary to create bundles manually. The cabling wizards can create virtual bundles for you.

Demonstrative example

We are going to create an FTP cable - Category 5 - 4 twisted pairs with a bundle:

1 Create a record in the **Cables** table (**amCable**).

2 Populate the following fields and links:

Field or link to populate	Value
Model (**Model**)	FTP - Category 5 - 4 twisted pairs
Code (**Code**)	Example001

3 Click **Create**.

4 The fields and links to populate are automatically inherited from the model. You can view this by looking at the different tabs of the module that was just created.

5 Select the **Bundles** tab.

6 Click the **+** button.

7 Populate the following fields and links:

Field or link to populate	Value
# (**sSequenceNumber**)	1
Name (**Name**)	1
Duty (**Duty**)	Data
Status (**seCnxStatus**)	Available

8 Click **Add**.

9 Select the bundle from the list.

10 Click **Magnifying glass**.

11 Select the **Pairs** tab.

12 Add the 4 pairs of this cable to the bundle.

13 Click **Modify**.

Creating the connections manually

Definitions

See chapter Glossary, section AssetCenter key terms/ Cable link of this manual.

See chapter Glossary, section AssetCenter key terms/ Trace output of this manual.

See chapter Glossary, section AssetCenter key terms/ Trace of this manual.

See chapter Glossary, section AssetCenter key terms/ Cross connection of this manual.

See chapter Glossary, section AssetCenter key terms/ Host of this manual.

See chapter Glossary, section AssetCenter key terms/ User of this manual.

Table names

- **Cable links (amCableLink)**
- **Trace outputs (amTraceOutput)**
- **Trace histories (amTraceHistory)**
- **Trace operations (amTraceOp)**

Access menu

Cable/ Traces

Tools/ List of screens

Simplified data model

Relationship between the cable links, device ports and cable bundles

Principals

The connections are made between cable bundles and ports of cable devices. These connections are represented by cable links. A cable links corresponds either to a port or a bundle, but not to both at the same time. Using the hierarchic link between two cable links, you can indicate that a port or a bundle is connected to a port or a bundle. There is thus no direct link between ports and bundles. Using the hierarchic links (which indicate that a such a cable link is a parent link or sub-link of another cable link), you can create a trace. The parent cable links must be on the "host" side, in other words, the most important side of the termination field.

Example 6.1. Trace example

port -> bundle -> port

Correspondence between your network and the AssetCenter database

The following diagrams illustrate the way in which we represent a connection between a device port (a wall outlet, for example) and a cable bundle (a lateral cable, for example).

1. "Host" bundle to connect to "user" port.
2. "User" port to connect to "host" bundle.
3. "Host" cable link concerning the bundle. This link is the parent of the "user" link.
4. "User" cable link concerning the port. This link is the sub-link of the "host" link.

Figure 6.6. Cable link to represent

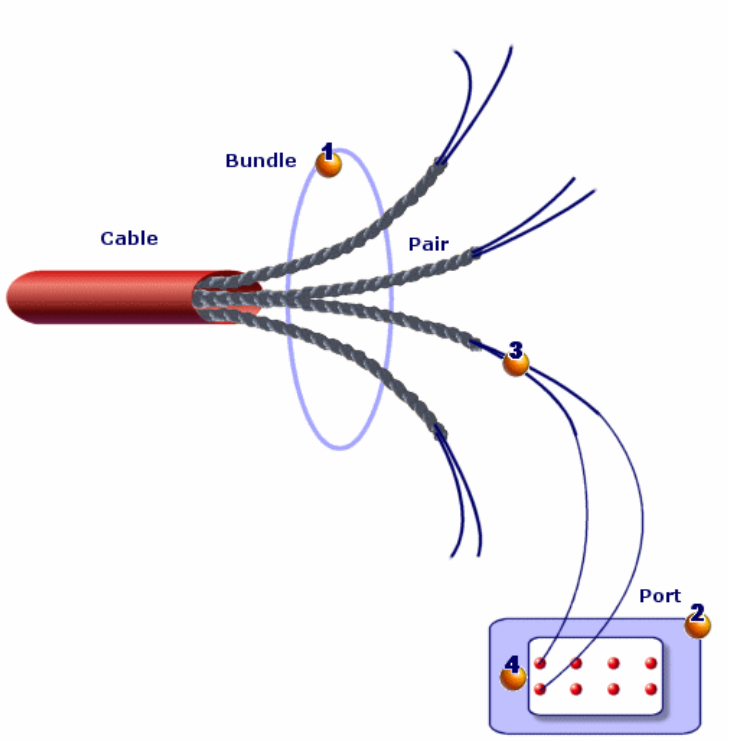


Figure 6.7. Data model associated with the cable links

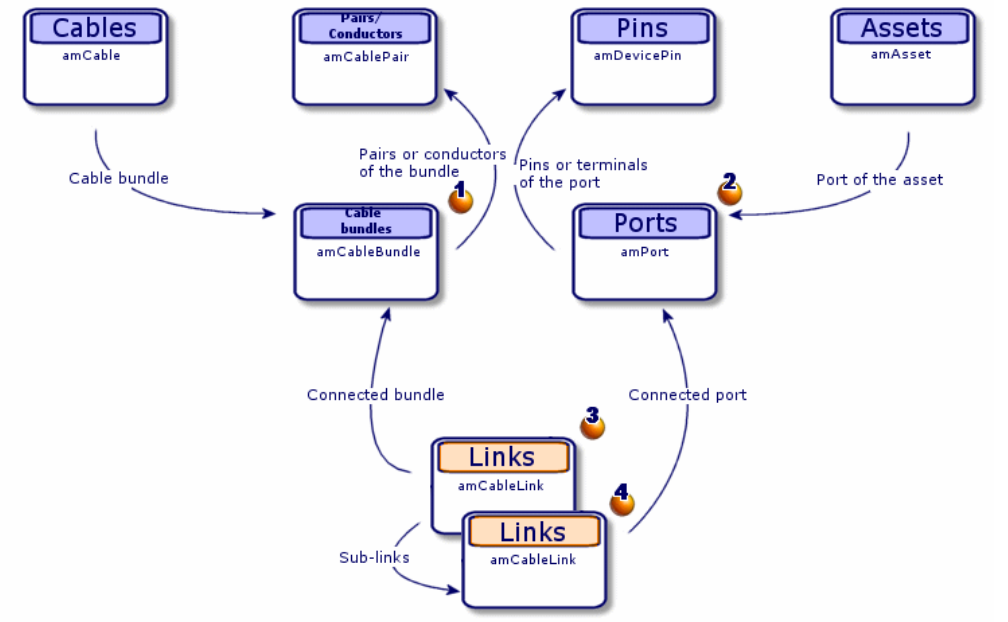
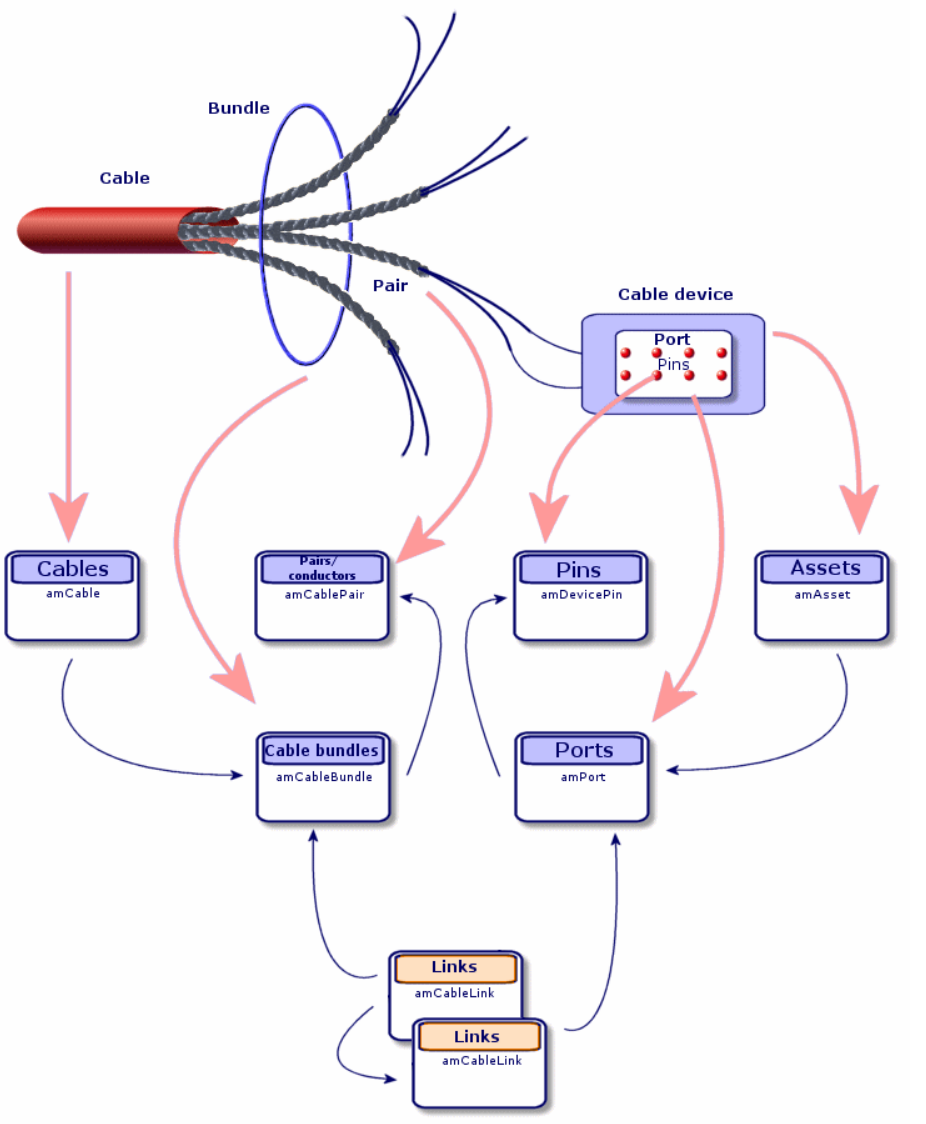


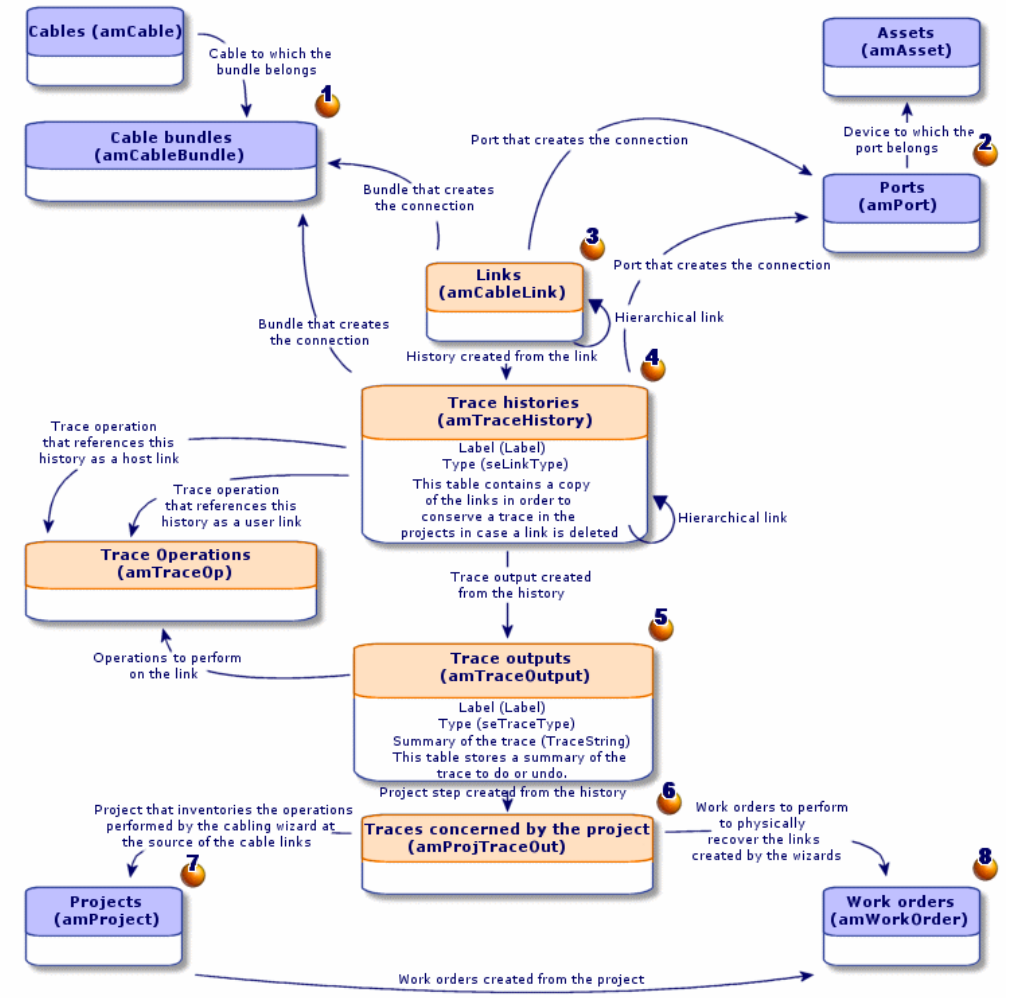
Figure 6.8. Correspondence between the cable link to represent and the database



Tables used in the complete description of the connections

Diagram

Figure 6.9. Data model associated with the cable links



Comments on the diagram

This diagram enables you to understand how the numerous tables, used in the description of the connections, work together.

1. Connected bundle.
2. Connected port.
3. Cable links concerning either a bundle or a port.
4. Copy of the cable link.
5. Description of the connection.
6. Intermediary table between projects/work orders and trace outputs.
7. Project enabling you to find the connection detail.
8. Work order that enables you to manage the implementation of the physical connection.

Prerequisites

You should have already created:

- The cable devices (**amAsset**) to connect and their ports (**amPort**).
- The cables (**amCable**) to connect and their bundles (**amCableBundle**).
- The label rules for the cable links (**amLabelRule**).
- The cable duties (**amCableDuty**).

Fields and links that must absolutely be populated

Label of the field or link	SQL name of the field or link	Remarks
Cable links table (amCableLink)		
Name	Name	
Link type	seLinkType	
Parent link	Parent	
Label rule	LabelRule	
Label	Label	
Function	Duty	
Cable	Cable	If the cable link concerns a cable
Bundle	Bundle	If the cable link concerns a cable
Device	Device	If the cable link concerns a cable device

Label of the field or link	SQL name of the field or link	Remarks
Port	Port	If the cable link concerns a cable device
Trace outputs table (amTraceOutput)		
Type	seTraceType	
Function	Duty	
Label	ModifiedLinkLabel	
Summary of the trace	TraceString	
Trace history	TraceHist	
Trace operations	TraceOps	
Trace histories table (amTraceHistory)		
Name	Name	
Type	seLinkType	
Parent history	Parent	
Label	Label	
Cable	Cable	
Bundle	Bundle	
Device	Device	
Port	Port	
Link	Link	
Trace operations table (amTraceOp)		
Title	Label	
Host trace history	HostTraceHist	
User trace history	UserTraceHist	

Creation procedure

The following tables were not designed to be manually populated:

- **amCableLink**
- **amTraceOutput**
- **amTraceHistory**
- **Trace operations**

The explanations that we provide you here are only provided for those wanting to know more about how these tables function.

Before creating a connection manually:

1 Define the traces to represent.

Example

wall outlet->lateral cable->termination field

In general, a trace is composed of 2 cable devices linked by a cable.

2 Determine which direction you want to follow: host->user or user->host.

3 Begin by the very last point.

Example

1 If you create the cable links in the user->host direction, you will begin with a termination-field device.

2 If you create the cable links in the host->user direction, you will begin with a user wall outlet.

4 Create one cable link per connection point.

In general: 2 device links and 1 cable link.

Use the **Parent** link to connect the trace components.

For each trace to create:

1 Create a record in the **Cable links** table (**amCableLink**).

2 Create a record in the **Trace output** table (**amTraceOutput**).

3 From the detail of the trace output, click + in the following tabs:

1 Trace history: This creates a record in the **Trace histories** table (**amTraceHistory**). Simply copy the information from the cable link detail and paste it here.

2 Operation: This creates a record in the **Trace operations** table (**amTraceOp**).

Demonstrative example

We are going to create a trace composed of the following cable links:

```
secondary termination-field device -> 4 twisted
pairs -> principal termination-field device
```

The direction of such a trace is user to host. We will thus begin by creating the host-side cable link.

Creating the cable links

For each cable link, create a record in the **Cable links** table (**amCableLink**) and populate the following fields and links:

Field or link to populate	Value for record 1	Value for record 2	Value for record 3
Name (**Name**)	Example002	Example003	Example004
Cable link type (**seLinkType**)	Device	Cable	Device
Parent link (**Parent**)		Device (Example002)	Device (Example003)
Label rule (**LabelRule**)	Term-field patch-panel port label	Cable label rule	Term-field patch-panel port label
Label (**Label**)	Do not enter any values; accept the proposed default value.	Do not enter any values; accept the proposed default value.	Do not enter any values; accept the proposed default value.
Duty (**Duty**)	Data	Data	Data
Cable (**Cable**)		Corel FTP - Category 5 - 4 twisted pairs (EXAMPLE001)	
Bundle (**Bundle**)		1 (EXAMPLE001)	
Device (**Device**)	Hewlett Packard Procurve 10/100 Base T - 8 ports (EXAMPLE006)		Hewlett Packard Procurve 10/100 Base T - 8 ports (EXAMPLE005)
Port (**Port**)	1 (EXAMPLE006)		1 (EXAMPLE005)

Creating the trace history

Create a new record for each nature in the **Trace outputs** table (**amTraceOutput**) and populate the following fields and links:

Field or link to populate	Value
Type (**seTraceType**)	Connect
Duty (**Duty**)	Data
Label (**ModifiedLinkLabel**)	'Data' riser run from location ' /Cabled building/2nd floor/Main wiring closet' to '/Cabled building/1st floor/1st floor wiring closet/'

Field or link to populate	Value
Trace summary (**TraceString**)	Hewlett Packard Procurve 10/100 Base T - 8 ports (EXAMPLE005) - (1) <CONNECTER> Corel FTP - Category 5 - 4 twisted pairs (EXAMPLE001) - (1) <CONNECTER> Hewlett Packard Procurve 10/100 Base T - 8 ports (EXAMPLE006) - (2)

Creating the link histories for the trace output

Create a new record in the **Trace histories** table (**amTraceHistory**) and populate the following fields and links:

Note: Most of the information is duplicated from the cable link corresponding to the history.

Field or link to populate	Value for record 1	Value for record 2	Value for record 2
Name (**Name**)	Same as for links	Same as for links	Same as for links
Type (**seLinkType**)	Same as for links	Same as for links	Same as for links
Parent history (**Parent**)		Same as for links	Same as for links
Label (**Label**)	Same as for links	Same as for links	Same as for links
Cable (**Cable**)		Same as for links	
Bundle (Bundle)		Same as for links	
Device (**Device**)	Same as for links		Same as for links
Port (**Port**)	Same as for links		Same as for links
Cable link (**Link**)	Device (Example002)	Device (Example003)	Device (Example004)

Creating the trace operations for the trace outputs

There are two operations to carry out:

- Connecting the main termination field to the cable.
- Connecting the cable to the secondary termination field.

Create a new record for each operation in the **Trace operations** table (**amTraceOp**) and populate the following fields and links:

Field or link to populate	Value for record 1	Value for record 2
Label (**Label**)	Connect	Connect

Field or link to populate	Value for record 1	Value for record 2
Host trace history (**HostTraceHist**)	Hewlett Packard Procurve 10/100 Base T - 8 ports (EXAMPLE006)	Corel FTP - Category 5 - 4 twisted pairs (EXAMPLE001)
User trace history (**UserTraceHist**)	Corel FTP - Category 5 - 4 twisted pairs (EXAMPLE001)	Hewlett Packard Procurve 10/100 Base T - 8 ports (EXAMPLE005)

7 Creating the connections with the wizards

CHAPTER

Introduction

AssetCenter is provided with numerous cabling wizards that automate the creation of connections.

This chapter explains how they work.

Note: Trace outputs (amTraceOutput)Trace histories (amTraceHistory)Trace operations (amTraceOp) The cabling wizards do not populate the following tables unless you select a project and a work order at the end of the wizard's execution:

Using the Run risers wizard

Functions performed by the wizard

This wizard connects two termination fields using a riser cable.

Prerequisites

You should have already created:

- The host termination field.
- The devices of the host termination field to which the riser cable will connect.

Warning: You must respect different conditions according to the connection to the device and whether it is made by ports or by pins.

- The user termination field.
- The devices of the user termination field to which the riser cable will connect.

Warning: You must respect different conditions according to the connection to the device and whether it is made by ports or by pins.

- The connection types you will use to connect the cable to the host and user devices.
- The label rules you will use to label the cable, the host links and the user links.

- The riser cable model to create.
- A project and a work order, if you want to store the trace of the connections carried out.

Launching the wizard

This wizard does not require any particular context.

Information used when using the wizard

Warning: Certain labels in the following table are not displayed by the wizard unless you select the appropriate option.

Label displayed by the wizard	Explanations
Select a host termination field page	
Locations	Select the location of the host termination field that you want to connect to the riser cable.
Termination fields	Select the host termination field to connect to the riser cable.

Do you want to select a starting position?	• If you check this option, the wizard will display the list of positions of the termination field with its roles and the termination field device.
	• If you don't check this option, the wizard automatically searches for the first available termination-field device having a port:
	  • Available
	  • Associated with a connection type that you will select on another page.

Termination field devices	Select the termination field device from which you will connect the riser cable.
Select the host termination field connectors and a label rule page	
Connection types	Select the connection type enabling you to connect the riser cable to the termination field.

	The wizards use the connection type, which you choose, as part of their criteria to select a port in order to create a cable link. If the connection type is **by pin** and the wizard created a virtual port to create a cable link, the connection type selected is associated with this virtual port.
Label displayed by the wizard	**Explanations**
Do you want to search for ports of this pin mode?	If you check this option, the wizard only looks for ports: • That already exist (the wizard does not create virtual ports). • Associated with a connection type that you will select with the wizard.
Do you want to select a starting position?	Select this option is you want to specify from which pin number the wizard can start using pins to create a virtual port. This port will be associated to a riser-cable bundle to create a link.
Starting pin	This pin determines from which pin number the wizard can start using pins to create a virtual port. This port will be associated to a riser-cable bundle to create a link.
Label rule	You use this label rule to populate the **Label** field (**Label**) of the link created at the level of the host-termination-field device.
Map consecutive pins to virtual port for pin-based devices (default is next available pin)?	• If you check this option, the wizard only uses the pins with consecutive numbers to create virtual ports. • If you don't check this option, the wizard selects the first available pins without requiring them to have consecutive numbers.
Type of cable connection for odd pins	The pins concerned by this part of the wizard are those not existing in large enough numbers to create a connection after having associated all the other pins to virtual ports. These pins can, however, be used in other ways. Indicate in this field what type of connection to use for the remaining pins.

Label displayed by the wizard	Explanations
Type of service for odd pins connector	Select the duty assigned to the remaining pins.
Do you want to select a starting port?	Select this option is you want to specify from which number the wizard should associate a port to a bundle of the riser cable to create a link. This is referring to a port of the termination-field device that was selected with the wizard on the previous page.
Starting port	This port specifies from which number the wizard can associate a port to a bundle of the riser cable to create a link. This is referring to a port of the termination-field device that was selected with the wizard on the previous page.
Select a user termination field page	

Do you want to select a starting position?	• If you check this option, the wizard will display the list of positions of the termination field with its roles and the termination field device.
	• If you don't check this option, the wizard automatically searches for the first available termination-field device having a port:
	  • Available
	  • Associated with a connection type that you will select on another page.

Locations	Select the location of the user termination field to connect to the riser cable. Only the locations served by the host termination field are listed.
Termination fields	Select the user termination field to connect to the riser cable.
Termination field devices	Select the termination field device to which you will connect the riser cable.
Select the user termination field connectors and a label rule page	
Connection types	Select the connection type enabling you to connect the riser cable to the termination field. The wizards use the connection type, which you choose, as part of their criteria to select a port in order to create a cable link.

	If the connection type is **by pin** and the wizard created a virtual port to create a cable link, the connection type selected is associated with this virtual port.
Label displayed by the wizard	**Explanations**
Do you want to search for ports of this pin mode?	If you check this option, the wizard only looks for ports: • That already exist (the wizard does not create virtual ports). • Associated with a connection type that you will select with the wizard.
Do you want to select a starting position?	Select this option is you want to specify from which pin number the wizard can start using pins to create a virtual port. This port will be associated to a riser-cable bundle to create a link.
Starting pin	This pin determines from which pin number the wizard can start using pins to create a virtual port. This port will be associated to a riser-cable bundle to create a link.
Label rule	You use this label rule to populate the **Label** field (**Label**) of the link created at the level of the user-termination-field device.
Map consecutive pins to virtual port for pin-based devices (default is next available pin)?	• If you check this option, the wizard only uses the pins with consecutive numbers to create virtual ports. • If you don't check this option, the wizard selects the first available pins without requiring them to have consecutive numbers.
Type of cable connection for odd pins	The pins concerned by this part of the wizard are those not existing in large enough numbers to create a connection after having associated all the other pins to virtual ports. These pins can, however, be used in other ways. Indicate in this field what type of connection to use for the remaining pins.
Type of service for odd pins connector	Select the duty assigned to the remaining pins.
Do you want to select an starting port?	Select this option is you want to specify from which number the wizard should associate a

	port to a bundle of the riser cable to create a link. This is referring to a port of the termination-field device that was selected with the wizard on the previous page.
Label displayed by the wizard	**Explanations**
Starting port	This port specifies from which number the wizard can associate a port to a bundle of the riser cable to create a link. This is referring to a port of the termination-field device that was selected with the wizard on the previous page.
Select a riser cable page	
Do you want to select an existing cable?	• If you check this option, the wizard asks you to select an existing cable. • If you do not check this option, the wizard asks you to select a riser-cable model in order to create the cable itself.
Cable role	The selected role: • The wizards use the value of a cable's **Role** field (**CableRole**) as part of their criteria to select a device to connect. • Filters the existing cables that the wizard displays.
Do you want to select a starting pair?	• If you check this option, you can specify from which number the wizard can associate an available pair to a bundle of the riser cable to create a link. • If you do not check this option, the wizard selects the first available pairs.
Available pairs for the cable:	Select the starting pair.
Pairs for the cable model:	Select the starting pair.
Number of pairs to be connected:	Define how many cable pairs must be connected to the termination fields by the wizard.
Select label rule for riser page	
Do you want to use a label rule for the cable label?	• If you check this option, the wizard uses the a label rule to populate the **Label** field (**Label**) of the cable. • If you check this option, you can directly enter the label using the wizard.

Label displayed by the wizard	Explanations
Label rule	You use this label rule to populate the **Label** field (**Label**) of the cable.
Duty for the cable:	The selected duty: • Is part of the criteria the wizards use to select ports to connect. • Is associated to the ports and virtual bundles created by the wizard to create the links.
Number of pairs in a bundle	Indicates the number of pairs to associated to each virtual bundle created by the wizard. You must be able to divide the total number of pairs to be connected you defined in the previous page by this number. The default value is calculated in the following manner: 1 The wizard subtracts the connection type with the least numbers of pins (from the host and user connection types selected with the wizard). 2 It then divides the number of pins of the connection type that was subtracted by the number of pairs/conductors of the pair/conductor type of the cable selected with the wizard.
Label rule	You use this label rule to populate the **Label** field (**Label**) of the cable link created from the cable.
Apply Base 25 rule for connecting port-based devices	• If you check this option, the pairs whose number is a multiple of 25 are ignored by the wizard when the links are created. • If you do not check this option, no pairs of this type are excluded.
Select the project page	
Cable comments	Value for the **Description** field (**Description**) of the **Cables concerned by the project** table (**amProjCable**).
Connection comments	Value for the **Description** field (**Description**) of the **Traces concerned by the project** table (**amProjTraceOut**).

Label displayed by the wizard	Explanations
Connection termination field for the work order	Value for the **Label** field (**Label**) of the **Trace operations** table (**amTraceOp**).

Data created or modified by the wizard

The wizard creates, if appropriate, the following items:

- A cable (**amCable**)
- Pairs for this cable (**amCablePair**)
- Virtual bundles (**amCableBundle**)
- Virtual ports (**amPort**)
- Cable links (**amCableLink**)
- Trace histories (**amTraceHistory**)
- Trace outputs (**amTraceOutput**)
- Trace operations (**amTraceOp**)

The wizard populates the following fields:

Field label	SQL name of the field	Explanations
Assets table (amAsset)		
Ports	Ports	The wizard creates virtual ports connected to bundles of the riser cable if it is necessary.
Ports table (amPort)		
Port #	PortNo	This field is only populated for the virtual ports created by the wizard. Its value is the number after the last port number existing for the device.
#	sSequenceNumber	This field is only populated for the virtual ports created by the wizard. Its value is the number after the last port number existing for the device.
Connection type	CabCnxType	This field is only populated for the virtual ports created by the wizard. Connection type selected using the wizard for the host or user termination field.
Function	Duty	This field is only populated for the virtual ports created by the wizard. Duty defined by the wizard for the cable.

Field label	SQL name of the field	Explanations
Status	seCnxStatus	This field is only populated for the virtual ports created by the wizard. Its value is set to **Available** by the wizard.
Virtual port	bVirtual	This field is only populated for the virtual ports created by the wizard. Its value is set to **Yes**.
Port pins/terminals	DevPin	Pins selected by the wizard to create a cable link.
Cables table (amCable)		
Model	Model	Cable model selected using the wizard.
Label rule	LabelRule	This field is only modified for the cables created by the wizard. Label rule is selected using a wizard for the cable.
Label	Label	This field is only modified for the cables created by the wizard. The label is calculated according to the label rule.
User location	UserLoc	This field is only modified for the cables created by the wizard. Location of the user termination field selected using the wizard.
Host location	HostLoc	This field is only modified for the cables created by the wizard. Location of the host termination field selected using the wizard.
Role	CableRole	Role selected using the wizard.
Status	seCnxStatus	This field is only modified for the cables created by the wizard. Its value is set to **Available** by the wizard.
Pairs/Conductors	Pairs	This field is only modified for the cables created by the wizard. Pairs/conductors of the model.
Bundles	Bundles	Virtual bundles created by the wizard if it is necessary.
Pairs/Conductors table (amCablePair)		
Bundle	Bundle	Bundle with which the pair/conductor is associated to create a cable link.
Pins table (amDevicePin)		

Field label	SQL name of the field	Explanations
Port	Port	Port with which the pin/terminal is associated to create a cable link.
Cable bundle table (amCableBundle)		
#	sSequenceNumber	This field is only populated for the virtual bundles created by the wizard. Its value is the number after the last bundle number existing for the device.
Name	Name	This field is only populated for the virtual bundles created by the wizard. Its value is the number after the last bundle number existing for the device.
Function	Duty	This field is only populated for the virtual bundles created by the wizard. Duty defined by the wizard for the cable.
Status	seCnxStatus	This field is only populated for the virtual bundles created by the wizard. Its value is set to **Available** by the wizard.
Virtual bundle	bVirtual	This field is only populated for the virtual bundles created by the wizard. Its value is set to **Yes**.
Pairs/Conductors	Pair	Pairs/conductors selected by the wizard to create a cable link.
Cable links table (amCableLink)		
Name	Name	Default value of the field.
Link type	seLinkType	Populated by the wizard according to whether the cable link concerns a cable device or a cable.
Parent link	Parent	
Label rule	LabelRule	Label rule is selected using a wizard.
Label	Label	The label is calculated according to the label rule.
Function	Duty	Duty selected using the wizard.
Device	Device	Device selected automatically by the wizard or by you using the wizard.
Port	Port	Port selected or created by the wizard.
Cable	Cable	Cable created by the wizard or selected by you using the wizard.
Bundle	Bundle	Bundle selected or created using the wizard.
Trace histories table (amTraceHistory)		

Field label	SQL name of the field	Explanations
Name	Name	Copy the value defined for the same field used at the level of the cable link.
Type	seLinkType	Copy the value defined for the same field used at the level of the cable link.
Parent history	Parent	Copy the value defined for the same field used at the level of the cable link.
Label	Label	Copy the value defined for the same field used at the level of the cable link.
Device	Device	Copy the value defined for the same field used at the level of the cable link.
Port	Port	Copy the value defined for the same field used at the level of the cable link.
Cable	Cable	Copy the value defined for the same field used at the level of the cable link.
Bundle	Bundle	Copy the value defined for the same field used at the level of the cable link.
Link	Link	Cable link created by the wizard.
Trace outputs table (amTraceOutput)		
Type	seTraceType	Value set to **To connect** by the wizard.
Function	Duty	Duty selected using the wizard.
Label	ModifiedLinkLabel	The label is calculated by the wizard and is not based on a label rule in any way.
Summary of the trace	TraceString	Calculated by the wizard.
Trace history	TraceHist	Histories created by the wizard
Trace operations	TraceOps	Operations created by the wizard.
Trace operations table (amTraceOp)		
Title	Label	Value defined by the wizard according to the comments that you entered using the wizard.
Host trace history	HostTraceHist	Defined by the wizard.
User trace history	UserTraceHist	Defined by the wizard.

Viewing the result

The easiest way to view the result of this wizard is to display the detail of the project selected on the last page of the wizard:

- The **Cables** tab enables you to locate the cable that connects the two termination fields:

  1 Select the cable to examine.

2 Click the magnifying glass to display an intermediary window.
3 In the intermediary window, click on the magnifying glass to the right of the **Cable** field to view the detail of the device.
4 Right-click on any field (not link) in the **Assets** table (**amAsset**) to display the shortcut menu.
5 From the shortcut menu, select either the **Actions/ Cross connections** or **Actions/ Cable traces** menu entry to view and browse through the traces.

   This particularly enables you to access the termination-field devices that were connected to the cable by a wizard.

- The **Traces** tab displays the list of trace outputs created by the wizard.

After having launched the wizard

Run the riser cable at the level of your network, being sure to respect the indications listed in the project and the work order, and update the follow-up information of the project and work order.

Resolving possible problems

Problem

The **Select a host termination field** page or **Select a user termination field** page does not display any termination field to select.

Solution

1 Click **Cancel** to interrupt the execution of the wizard.
2 Select the **Cable/ Termination fields** menu.
3 Select the host termination field (the one that was not listed by the wizard).
4 Select the **Served locations** tab.
5 Add the location to the location of the user termination field to the list.
6 Click **Modify**.

7 Click **Close**.

8 Execute the **Run risers** wizard again.

Demonstrative example

We are going to run a telephone riser cable between the floor's termination field and the main termination field.

Launch the **Run risers** wizard and enter the following information:

Label displayed by the wizard	Value to enter or select
Select a host termination field page	
Locations	/Cabled building/2nd floor/Main wiring closet/
Termination fields	Main termination field
Do you want to select a starting position?	Do not check this option.
Select the host termination field connectors and a label rule page	
Connection types	RJ45 - 568B - Pin
Do you want to search for ports of this pin mode?	Do not check this option.
Label rule	Term-field patch-panel port label
Map consecutive pins to virtual port for pin-based devices (default is next available pin)?	Check this selection box.
Type of cable connection for odd pins	Do not change the information presented by the wizard; it will not be used.
Type of service for odd pins connector	Do not change the information presented by the wizard; it will not be used.
Select a user termination field page	
Locations	Cabled building/1st floor/1st floor wiring closet
Termination fields	Floor's termination field
Do you want to select a starting position?	Do not check this option.
Select the user termination field connectors and a label rule page	
Connection types	RJ45 - 568B - Pin
Do you want to search for ports of this pin mode?	Do not check this option.
Label rule	Term-field patch-panel port label
Map consecutive pins to virtual port for pin-based devices (default is next available pin)?	Check this selection box.
Type of cable connection for odd pins	Do not change the information presented by the wizard; it will not be used.

Label displayed by the wizard	Value to enter or select
Type of service for odd pins connector	Do not change the information presented by the wizard; it will not be used.
Select a riser cable page	
Cable role	Riser
Do you want to select a existing cable?	Do not check this option.
Select the cable model for the cable that you want to create.	L 120 - Category 5 - 32 twisted pairs
Number of pairs to be connected:	32
Do you want to select a starting pair?	Do not check this option.
Select label rule for riser page	
Do you want to use a label rule for the cable label?	Check this selection box.
Label rule	Cable label rule
Duty for the cable:	Voice
Number of pairs in a bundle	1
Label rule	Label by sequential pair number
Select the project page	
Apply all changes to a project/work order?	Check this selection box.
Projects	Run risers
Work orders	Select the work order proposed by the wizard.
Create device comment	Install the new cable
Connection comments	Riser run to connect devises
Connection termination field for the work order	CONNECT

Look at the result:

1. Select the **Portfolio/ Projects** menu.
2. Select the **Run risers** project.
3. Select the **Cables** tab.
4. Select the cable just created.
5. Click the magnifying glass to display an intermediary window.
6. In the intermediary window, click on the magnifying glass to the right of the **Cable** field to view the detail of the device.
7. Have a look at the different tabs at your own pace.
8. Select any field (not link) in the **Cables** table (**amCable**).
9. Right-click.

10 From the shortcut menu, select either the **Actions/ Cross connections** or **Actions/ Cable traces** menu entry to view and browse through the traces.

This particularly enables you to access the termination-field devices that were connected to the cable by a wizard.

Using the Run laterals wizard

Functions performed by the wizard

This wizard connects wall outlets to a termination field using lateral cables. The wizard uses a group of topologies as its model.

Prerequisites

You should have already created:

- The location of the wall outlets.
- The group of topologies to use as the model.
- The topologies constitute the group of topologies.
- The termination fields that serve the locations of the wall outlets.
- The devices of the termination field to which the lateral cable will connect.

Warning: You must respect different conditions according to the connection to the device and whether it is made by ports or by pins.

- A project and a work order, if you want to store the trace of the connections carried out.

Launching the wizard

This wizard does not require any particular context.

If you display the list of locations (**Portfolio/ Locations** menu item) and select all the locations of the wall outlets at the same time, the wizard will not ask to you perform this selection again.

Information used when using the wizard

Note: Certain labels in the following table are not displayed by the wizard unless you select the appropriate option.

Label displayed by the wizard	Explanations
Select user locations page	
Locations	Select one location per wall outlet to connect.
Select the topology group page	
Topology groups	Select the group of topologies that will be used as the connection model of the wall outlets to the termination field that serves them.
Are there any topologies in which you want to look for ports with pin-based connectors?	Check this option if you want the wizard to look for virtual ports that have already been created on the host or the user side of the topology. This option's only result is that it displays two other options who will have an effect on how the wizard works.
Do you want to look for ports on the host side of the topology?	If you check this option, the wizard looks for virtual ports that exists at the level of the termination fields to create the connection with the lateral cable. This is valid for the topologies selected from the following list.
Do you want to look for ports on the user side of the topology?	If you check this option, the wizard looks for virtual ports that exists at the level of the wall outlets to create the connection with the lateral cable.

	This is valid for the topologies selected from the following list.
Label displayed by the wizard	**Explanations**
Topology in a group	Select the topologies to which apply the options previously checked.
Map consecutive pins to virtual port for pin-based devices (default is next available pin)?	• If you check this option, the wizard only uses the pins with consecutive numbers to create virtual ports. • If you don't check this option, the wizard selects the first available pins without requiring them to have consecutive numbers.
Select the project page	
Asset comments	Value for the **Description** field (**Description**) of the **Assets included in projects** table (**amAstProjDesc**).
Cable comments	Value for the **Description** field (**Description**) of the **Cables concerned by the project** table (**amProjCable**).
Connection comments	Value for the **Description** field (**Description**) of the **Traces concerned by the project** table (**amProjTraceOut**).
Connection termination field for the work order	Value for the **Label** field (**Label**) of the **Trace operations** table (**amTraceOp**).

Data created or modified by the wizard

The wizard creates, if appropriate, the following items:

- Cables (**amCable**)
- Pairs for this cable (**amCablePair**)
- Virtual bundles (**amCableBundle**)
- Cable devices (**amAsset**)
- Pins for the devices (**amDevicePin**).
- Virtual ports for the devices (**amPort**).
- Cable links (**amCableLink**)
- Trace histories (**amTraceHistory**)
- Trace outputs (**amTraceOutput**)
- Trace operations (**amTraceOp**)

The wizard populates the following fields:

Field label	SQL name of the field	Explanations
Assets table (amAsset)		
Ports	Ports	The wizard creates virtual ports connected to bundles of the later cable if it is necessary.
Location	Rental	The wizard links wall outlets to the location selected using the wizard, if it creates wall outlets.
Ports table (amPort)		
Port #	PortNo	This field is only populated for the virtual ports created by the wizard. Its value is the number after the last port number existing for the device.
#	sSequenceNumber	This field is only populated for the virtual ports created by the wizard. Its value is the number after the last port number existing for the device.
Connection type	CabCnxType	This field is only populated for the virtual ports created by the wizard. Its value corresponds to the connection type defined at the level of the topology step for the device to which the port belongs.
Function	Duty	This field is only populated for the virtual ports created by the wizard. Its value corresponds to the duty defined at the level of the topology step for the device to which the port belongs.
Status	seCnxStatus	This field is only populated for the virtual ports created by the wizard. Its value is set to **Available** by the wizard.
Virtual port	bVirtual	This field is only populated for the virtual ports created by the wizard. Its value is set to **Yes**.
Port pins/terminals	DevPin	Pins selected by the wizard to create a cable link, if the connection is by pin.
Cables table (amCable)		
Model	Model	This field is only modified for the cables created by the wizard.

		Cable model defined at the level of the topology step.
Field label	**SQL name of the field**	**Explanations**
Label rule	LabelRule	Default value of the field.
Label	Label	This field is only modified for the cables created by the wizard. The label is calculated according to the label rule.
User location	UserLoc	This field is only modified for the cables created by the wizard. Location of the wall outlet.
Host location	HostLoc	This field is only modified for the cables created by the wizard. Location of the termination field found by the wizard to create the connection.
Role	CableRole	This field is only modified for the cables created by the wizard. Role defined at the level of the topology step.
Status	seCnxStatus	This field is only modified for the cables created by the wizard. Its value is set to **Available** by the wizard.
Pairs/Conductors	Pairs	This field is only populated for the cables created by the wizard. Pairs/conductors of the model.
Bundles	Bundles	Virtual bundles created by the wizard if it is necessary.
Pairs/Conductors table (amCablePair)		
Bundle	Bundle	Bundle with which the pair/conductor is associated to create a cable link.
Pins table (amDevicePin)		
Port	Port	Port with which the pin/terminal is associated to create a cable link.
Cable bundle table (amCableBundle)		
#	sSequenceNumber	This field is only populated for the virtual bundles created by the wizard. Its value is the number after the last bundle number existing for the device.
Name	Name	This field is only populated for the virtual bundles created by the wizard.

		Its value is the number after the last bundle number existing for the device.
Field label	**SQL name of the field**	**Explanations**
Function	Duty	This field is only populated for the virtual bundles created by the wizard. Duty defined at the level of the topology.
Status	seCnxStatus	This field is only populated for the virtual bundles created by the wizard. Its value is set to **Available** by the wizard.
Virtual bundle	bVirtual	This field is only populated for the virtual bundles created by the wizard. Its value is set to **Yes**.
Pairs/Conductors	Pair	Pairs/conductors selected by the wizard to create a cable link.
Cable links table (amCableLink)		
Name	Name	Default value of the field.
Link type	seLinkType	Populated by the wizard according to whether the cable link concerns a cable device or a cable.
Parent link	Parent	
Label rule	LabelRule	Label rule is selected at the level of the topology.
Label	Label	The label is calculated according to the label rule.
Function	Duty	Duty defined at the level of the topology.
Device	Device	Device selected or created using the wizard.
Port	Port	Port selected or created by the wizard.
Cable	Cable	Cable selected or created by the wizard.
Bundle	Bundle	Bundle selected or created using the wizard.
Trace histories table (amTraceHistory)		
Name	Name	Copy the value defined for the same field used at the level of the cable link.
Type	seLinkType	Copy the value defined for the same field used at the level of the cable link.
Parent history	Parent	Copy the value defined for the same field used at the level of the cable link.
Label	Label	Copy the value defined for the same field used at the level of the cable link.
Device	Device	Copy the value defined for the same field used at the level of the cable link.

Field label	SQL name of the field	Explanations
Port	Port	Copy the value defined for the same field used at the level of the cable link.
Cable	Cable	Copy the value defined for the same field used at the level of the cable link.
Bundle	Bundle	Copy the value defined for the same field used at the level of the cable link.
Link	Link	Cable link created by the wizard.
Trace outputs table (amTraceOutput)		
Type	seTraceType	Value defined using the wizard.
Function	Duty	Duty defined at the level of the topology.
Label	ModifiedLinkLabel	The label is calculated by the wizard and is not based on a label rule in any way.
Summary of the trace	TraceString	Calculated by the wizard.
Trace history	TraceHist	Histories created by the wizard
Trace operations	TraceOps	Operations created by the wizard.
Trace operations table (amTraceOp)		
Title	Label	Value defined by the wizard according to the comments that you entered using the wizard.
Host trace history	HostTraceHist	Defined by the wizard.
User trace history	UserTraceHist	Defined by the wizard.

Viewing the result

The easiest way to view the result of this wizard is to display the detail of the project selected on the last page of the wizard:

- The **Cables** tab enables you to locate the cable that connects the two termination fields:
  1. Select the cable to examine.
  2. Click the magnifying glass to display an intermediary window.
  3. In the intermediary window, click on the magnifying glass to the right of the **Cable** field to view the detail of the device.
  4. Right-click on any field (not link) in the **Assets** table (**amAsset**) to display the shortcut menu.
  5. From the shortcut menu, select either the **Actions/ Cross connections** or **Actions/ Cable traces** menu entry to view and browse through the traces.

This particularly enables you to access the termination-field devices that were connected to the cable by a wizard.

- The **Assets** tab enables you to locate the devices created by the wizard (not those that already existed):
  1. Select the device to examine.
  2. Click the magnifying glass to display an intermediary window.
  3. In the intermediary window, click on the magnifying glass to the right of the **Asset** field to view the detail of the device.
  4. Right-click on any field (not link) in the **Assets** table (**amAsset**) to display the shortcut menu.
  5. From the shortcut menu, select either the **Actions/ Cross connections** or **Actions/ Cable traces** menu entry to view and browse through the traces.

     This particularly enables you to access the termination-field devices that were connected to the cable by a wizard.
- The **Traces** tab displays the list of trace outputs created by the wizard.

After having launched the wizard

Run the later cable and install the cable devices as you need them, being sure to respect the indications listed in the project and the work order, and update the follow-up information of the project and work order.

Demonstrative example

We are going to run a later cable between the wall outlet of Office 1 and the floor's termination field.

Launch the **Run laterals** wizard and enter the following information:

Label displayed by the wizard	Explanations
Select user locations page	
Locations	Cabled building/1st floor/Office 1
Select the topology group page	
Topology groups	Standard workstation
Are there any topologies in which you want to look for ports with pin-based connectors?	Do not check this option.

Label displayed by the wizard	Explanations
Map consecutive pins to virtual port for pin-based devices (default is next available pin)?	Do not check this option.
Select the project page	
Apply all changes to a project/work order?	Check this selection box.
Projects	Run laterals
Work orders	Select the work order proposed by the wizard.
Asset comments	Install the device.
Cable comments	Install new cable
Connection comments	Lateral run to connect devices
Connection termination field for the work order	CONNECT

Look at the result:

1. Select the **Portfolio/ Projects** menu.
2. Select the **Run lateral** project.
3. Select the **Cables** tab.
4. Select one of the cables just created.
5. Click the magnifying glass to display an intermediary window.
6. In the intermediary window, click on the magnifying glass to the right of the **Cable** field to view the detail of the device.
7. Have a look at the different tabs at your own pace.
8. Select any field (not link) in the **Cables** table (**amCable**).
9. Right-click.
10. From the shortcut menu, select either the **Actions/ Cross connections** or **Actions/ Cable traces** menu entry to view and browse through the traces.

    This particularly enables you to access the termination-field devices that were connected to the cable by a wizard.

Using the Cross-connect bundles wizard

Functions performed by the wizard

This wizard connects bundles of the same cable to one of the following components:

- Bundles of one or more cables.
- Ports of one or more cable devices.
- Ports of termination-field devices.

If the selected bundles or ports are already connected, the wizard begins by breaking the existing cable links before creating new ones.

Prerequisites

You should have already created:

- The source cable to connect, with its bundles, its user location and its host location.
- The cable device to which the cable connects, with its ports and its location. Otherwise, the cable to which the cable connects with its bundles, its user location and its host location.
- The termination fields that serve the user or host location of the cable to connect.
- A project and a work order, if you want to store the trace of the connections carried out.

Warning: The wizard does not know how to create a virtual port.

Launching the wizard

To access this wizard, you must select a record or a field (not a link) from the **Cable bundles** table (**amCableBundle**):

To position yourself in the appropriate context:

1 Display the list of cables via the **Cable/ Cables** menu.
2 Display the detail of the cable to connect.
3 Select the **Bundles** tab.
4 Select the bundles to cross connect.
5 Right-click to display the shortcut menu.
6 Select the **Actions/ Cross-connect bundles** menu.

Information used when using the wizard

Note: Certain labels in the following table are not displayed by the wizard unless you select the appropriate option.

Label displayed by the wizard	Explanations
Cross connect the bundles page	
Display available host bundles	• If you check this option, the wizard only displays the cable bundles whose host side is not used by any cable link. • If you check this option, the wizard displays all the cable's bundles. If you select a bundle whose host side is used by a cable link, the wizard will break the existing cable link before creating a new one.
Display available user bundles	• If you check this option, the wizard only displays the cable bundles whose user side is not used by any cable link. • If you check this option, the wizard displays all the cable's bundles. If you select a bundle whose user side is used by a cable link, the wizard will break the existing cable link before creating a new one.
Cable bundles	Select the cable bundles to connect.
Select label rule for bundle(s) selected	You use this label rule to populate the **Label** field (**Label**) of the links created at the level of the cable bundles.

Label displayed by the wizard	Explanations
Select connection side	Indicate which side of the cable you want to connect.
Connect to	Indicate to which component you want to connect the selected bundles: • Ports: to the ports of one or more cable devices. • Bundles: to the bundles of one or more cables. • Termination fields: to the ports of the termination-field devices that serve the location of the cable.
Select a device and ports page	
Select a device	Select the cable devices to which you want to connect the bundles of the source cable.
Show available host ports	• If you check this option, the wizard only displays the ports of the device that are not used as hosts by any cable link. • If you check this option, the wizard displays all the device's ports. If you select a port that is already used as a host, the wizard will break the existing cable link before creating a new one.
Show available user ports	• If you check this option, the wizard only displays the ports of the device that are not used as users by any cable link. • If you check this option, the wizard displays all the device's ports. If you select a port that is already used as a user, the wizard will break the existing cable link before creating a new one.
Select the target ports	You must select as many ports as you have selected bundles for the cable in the previous window.
Select label rule for port(s) selected	You use this label rule to populate the **Label** field (**Label**) of the links created at the level of the port device.
Select a cable and bundles page	
Cables	Select the cable to which you want to connect the bundles of the source cable.

Label displayed by the wizard	Explanations
Display available host bundles	• If you check this option, the wizard only displays the cable bundles whose host side is not used by any cable link. • If you check this option, the wizard displays all the cable's bundles. If you select a bundle whose host side is used by a cable link, the wizard will break the existing cable link before creating a new one.
Display available user bundles	• If you check this option, the wizard only displays the cable bundles whose user side is not used by any cable link. • If you check this option, the wizard displays all the cable's bundles. If you select a bundle whose user side is used by a cable link, the wizard will break the existing cable link before creating a new one.
Select label rule for destination bundle	You use this label rule to populate the **Label** field (**Label**) of the links created at the level of the target cable bundles.
Select a termination field and ports page	
Termination fields	Select the termination fields to which you want to connect the bundles of the source cable.
Show available host ports	• If you check this option, the wizard only displays the ports of the termination-field devices that are not used as hosts by any cable link. • If you check this option, the wizard displays all the ports. If you select a port that is already used as a host, the wizard will break the existing cable link before creating a new one.
Show available user ports	• If you check this option, the wizard only displays the ports of the termination-field devices that are not used as users by any cable link. • If you check this option, the wizard displays all the device's ports.

	If you select a port that is already used as a user, the wizard will break the existing cable link before creating a new one.
Label displayed by the wizard	**Explanations**
Select the target ports	You must select as many ports as you have selected bundles for the cable in the previous window.
Select label rule for port(s) selected	You use this label rule to populate the **Label** field (**Label**) of the links created at the level of the termination-field port devices.
Select project and work order information page	
Connection comments	Value for the **Description** field (**Description**) of the **Traces concerned by the project** table (**amProjTraceOut**), when the wizard creates a connection.
Disconnection comments	Value for the **Description** field (**Description**) of the **Traces concerned by the project** table (**amProjTraceOut**), when the wizard deletes a connection.
Termination field connected during work order	Value for the **Label** field (**Label**) of the **Trace operations** table (**amTraceOp**), when the wizard creates a connection.
Termination field disconnected during work order	Value for the **Label** field (**Label**) of the **Trace operations** table (**amTraceOp**), when the wizard deletes a connection.

Data created or modified by the wizard

To create a connection, the wizard creates the following items:

- Cable links (**amCableLink**)
- Trace histories (**amTraceHistory**)
- Trace outputs (**amTraceOutput**)
- Trace operations (**amTraceOp**)

To delete a connection, the wizard performs the following tasks:

- Deletes the cable links (**amCableLink**).
- Creates trace outputs (**amTraceOutput**).
- Creates trace operations (**amTraceOp**).

The wizard populates the following fields:

Field label	SQL name of the field	Explanations
Cable links table (amCableLink)		
Name	Name	Default value of the field.
Link type	seLinkType	Populated by the wizard according to whether the cable link concerns a cable device or a cable.
Parent link	Parent	
Label rule	LabelRule	Label rule is selected using a wizard. If no label rule has been selected, this is the default value of the field.
Label	Label	The label is calculated according to the label rule.
Function	Duty	Duty of the port or bundle connected by the wizard.
Device	Device	Device selected using the wizard.
Port	Port	Port selected using the wizard.
Cable	Cable	Cable selected using the wizard.
Bundle	Bundle	Bundle selected using the wizard.
Trace histories table (amTraceHistory)		
Name	Name	Default value of the field.
Type	seLinkType	Copy the value defined for the same field used at the level of the cable link.
Parent history	Parent	Copy the value defined for the same field used at the level of the cable link.
Label	Label	Copy the value defined for the same field used at the level of the cable link.
Device	Device	Copy the value defined for the same field used at the level of the cable link.
Port	Port	Copy the value defined for the same field used at the level of the cable link.
Cable	Cable	Copy the value defined for the same field used at the level of the cable link.
Bundle	Bundle	Copy the value defined for the same field used at the level of the cable link.
Link	Link	• If the wizard creates a connection: It is the cable link created by the wizard. • If the wizard deletes a connection: It is empty.
Trace outputs table (amTraceOutput)		
Type	seTraceType	• **To connect**, if it's a connection. • **To disconnect**, if it's a disconnection.

Field label	SQL name of the field	Explanations
Function	Duty	Duty of the port or the bundle connected by the wizard.
Label	ModifiedLinkLabel	The label is calculated by the wizard and is not based on a label rule in any way.
Summary of the trace	TraceString	Calculated by the wizard.
Trace history	TraceHist	• If the wizard creates a connection: They are the histories created by the wizard. • If the wizard deletes a connection: They are the histories that exist for the deleted cable links.
Trace operations	TraceOps	Operations created by the wizard.
Trace operations (amTraceOp)		
Title	Label	Value defined by the wizard according to the comments that you entered using the wizard.
Host trace history	HostTraceHist	Defined by the wizard.
User trace history	UserTraceHist	Defined by the wizard.

Viewing the result

The easiest way to view the result of this wizard is to display the detail of the project selected on the last page of the wizard:

The **Traces** tab displays the list of trace outputs created by the wizard.

1 Select the trace output to examine.
2 Click the magnifying glass to display an intermediary window.
3 In the intermediary window, click on the magnifying glass to the right of the **Trace output** field.
4 Examine the trace output information.

You can also display the cross connections screen or the cable trace outputs screen:

1 Select the cable that you just connected from the list of cables.
2 Right-click on the cable in the list.
3 Select the **Actions/ Cross connections** or **Actions/ Cable traces** shortcut menu.

After having launched the wizard

Perform the physical cross connections, being sure to respect the indications listed in the project and the work order, and update the follow-up information of the project and work order.

Demonstrative example

We are going to carry out a modification at the level of the lateral cable that links the telephone outlet from Office 1 to the floor's termination field: We will connect the cable to another termination-field port.

Proceed in the following manner:

1. Select the **Portfolio/ Locations** menu.
2. Select **Cabled building/1st floor/Office 1**.
3. Select the **Cable users** tab.
4. Select the cable that connects the telephone to the termination field (this bundle's duty is **Voice**).
5. Click the **Magnifying glass** button.
6. Select the **Bundles** tab.
7. Select the bundle from the list.
8. Right-click to display the shortcut menu.
9. Select the **Actions/ Cross-connect bundles** menu.
10. Enter the following information:

Label displayed by the wizard	Value
Cross connect the bundles page	
Select connection side	Host side
Display available host bundles	Unselect this option.
Cable bundles	Select the bundle.
Select label rule for bundle(s) selected	Label by sequential pair number
Connect to	Termination fields
Select a device and ports page	
Termination fields	Floor's termination field
Show available host ports	Check this selection box.
Select the target ports	Select a port whose function is **Voice**.
Select label rule for port(s) selected	Term-field patch-panel port label
Select project and work order information page	

Label displayed by the wizard	Value
Apply all changes to a project/work order?	Check this selection box.
Projects	Cross connect bundles
Work orders	Select the work order proposed by the wizard.
Connection comments	Connect cables
Disconnection comments	Disconnect cables
Termination field connected during work order	CONNECT
Termination field disconnected during work order	DISCONNECT

Look at the result:

1 Select the **Portfolio/ Projects** menu.
2 Select the **Cross-connect bundles** project.
3 Select the **Traces** tab.
4 Select the trace.
5 Click the **Magnifying glass** button.
6 Click the **Magnifying glass** button to the right of the **Trace** field.
7 Examine the detail of the trace output.

CHAPTER 8

Viewing the traces

Introduction

There are several ways to view a trace:

- Connection point by connection point, using the **Trace** tabs of the following tables:
  - **Cables (amCable)**
  - **Assets (amAsset)**
  - **Ports (amPort)**
  - **Cable bundles (amCableBundle)**
- In a more general manner, using the windows displayed by the following shortcut menus:
  - Actions/ Cable cross-connections
  - Actions/ Device cross-connections
  - Actions/ Trace output by device
  - Actions/ Trace output by cable

This chapter explains how to view the traces in a general manner.

Using the Cable cross-connections wizard

Definitions

See chapter Glossary, section AssetCenter key terms/ Cross connection of this manual.

Functions performed by the wizard

The **Cable cross-connections** wizard displays a window that enables you to perform the following tasks:

- View the host and user links of the cable.
- Navigate through the traces, which are made up of cable links (either in the host direction or the user direction).

This enables you, for example, to answer the following questions:

- Which links are for this cable?
- Which bundles are used by links?
- To which wall outlet port is such cable bundle connected?
- To which termination field port is such a cable bundle connected?

Data created or modified by the wizard

This wizard does not create, delete or modify any data.

Prerequisites

No prerequisites.

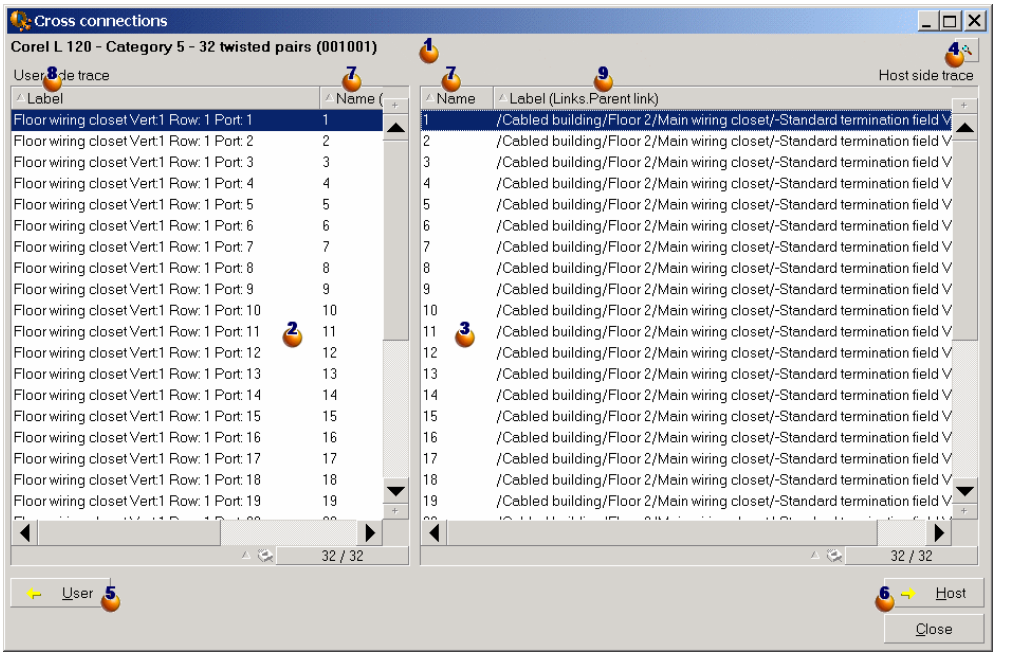
Launching the wizard

To access this wizard, you need to select a record or a field (not a link) in the **Cables** table (**amCable**):

1 Display the cables using the **Cables/ Cables** menu item.
2 Select the cable in the list window, or select a field (not link) in the **Cables** table.
3 Select the **Cable cross-connections** wizard.

Information used when using the wizard

Figure 8.1. Cable cross-connections wizard's browser window.



1 Cable or device whose 2 and 3 tables display the cable links.

2 User cable links and devices that connect to the cable or the device 1.

3 Host cable links and devices that connect to the cable or the device 1.

4 Click this magnifying glass to display the detail of the cable or the device 1.

5 Click this arrow to display the browser window for the user cable or device that corresponds to the selected link 2.

6 Click this arrow to display the browser window for the host cable or device that corresponds to the selected link 3.

7 Cable bundle numbers 1 (if 1 is a cable) or device ports 1 (if 1 is a device).

8 Label of the user link that connects to the bundle or the port 7.

9 Label of the host link that connects to the bundle or the port 7.

Use the Device cross-connections wizard

Definitions

See chapter Glossary, section AssetCenter key terms/ Cross connection of this manual.

Functions performed by the wizard

The **Device cross-connections** wizard displays a window to help you perform the following tasks:

- View the host and user links of the device.
- Navigate through the traces, which are made up of device links (either in the host direction or the user direction).

This enables you, for example, to answer the following questions:

- Which links are for this device?
- Which ports are used by links?
- To which cable bundle is such a device port connected?

Data created or modified by the wizard

This wizard does not create, delete or modify any data.

Prerequisites

No prerequisites.

Launching the wizard

To access this wizard, you need to select a record or a field (not a link) in the **Assets** table (**amAsset**):

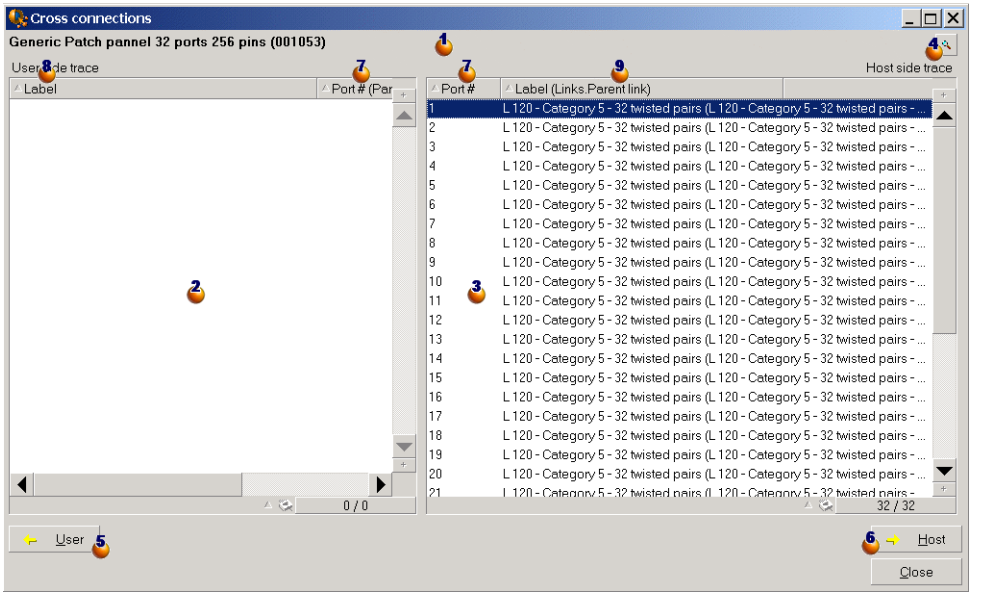
1 Display the cable devices using the **Portfolio/ Assets and Batches** menu item.

2 Select the cable device in the list window, or select a field (not link) in the **Assets** table.

3 Select the **Device cross-connections** wizard.

Information used when using the wizard

Figure 8.2. Device cross-connections wizard's browser window.



1 Cable or device whose 2 and 3 tables display the cable links.

2 User cable links and devices that connect to the cable or the device 1.

3 Host cable links and devices that connect to the cable or the device 1.

4 Click this magnifying glass to display the detail of the cable or the device 1.

5 Click this arrow to display the browser window for the user cable or device that corresponds to the selected link 2.

6 Click this arrow to display the browser window for the host cable or device that corresponds to the selected link 3.

7 Cable bundle numbers 1 (if 1 is a cable) or device ports 1 (if 1 is a device).

8 Label of the user link that connects to the bundle or the port 7.

9 Label of the host link that connects to the bundle or the port 7.

Using the Device traces wizard

Definitions

See chapter Glossary, section AssetCenter key terms/ Trace of this manual.

Functions performed by the wizard

The **Device trace** wizard displays a window to help you perform the following tasks:

- View the host and user traces of the device.
- Print the list of traces.

Data created or modified by the wizard

This wizard does not create, delete or modify any data.

Prerequisites

No prerequisites.

Launching the wizard

To access this wizard, you need to select a record or a field (not a link) in the **Assets** table (**amAsset**):

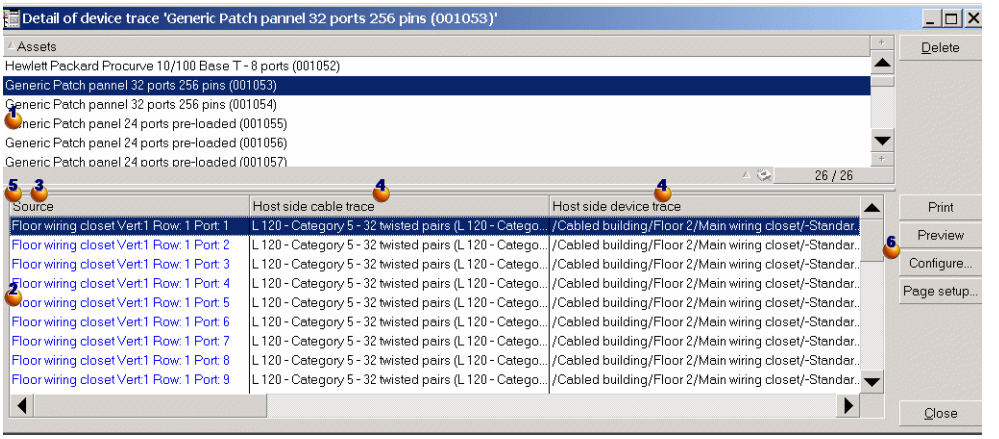
1 Display the cable devices using the **Portfolio/ Assets and Batches** menu item.

2 Select the cable device in the list window, or select a field (not link) in the **Assets** table.

3 Select the **Device traces** wizard.

Information used when using the wizard

Figure 8.3. Browser window of theDevice traces wizard



1 Select the device to examine.

2 This table contains one row per link that is directly attached to the device 1.

3 The **Source** column displays the labels of the links that are directly attached to the device 1.

4 The **Host side xxx trace** columns are located to the right of the **Source** column. They display the labels of the traces in the host direction.

5 The **User side xxx trace** columns are located to the left of the **Source** column. They display the labels of the traces in the user direction.

The blue labels designate the labels of the links in the **Source** column.

The red labels designate the labels of the links in the **Host side xxx trace** column and the **User side xxx trace** column, which are directly linked to the device 1. (Consequently, they indicate that the trace passes more than once by the device 1).

6 Use these buttons to regulate how the table will be printed.

Using the Cable traces wizard

Definitions

See chapter Glossary, section AssetCenter key terms/ Trace of this manual.

Functions performed by the wizard

The **Cable traces** wizard displays a window to help you perform the following tasks:

- View the host and user traces of the cable.
- Print the list of traces.

Data created or modified by the wizard

This wizard does not create, delete or modify any data.

Prerequisites

No prerequisites.

Launching the wizard

To access this wizard, you need to select a record or a field (not a link) in the **Cables** table (**amCable**):

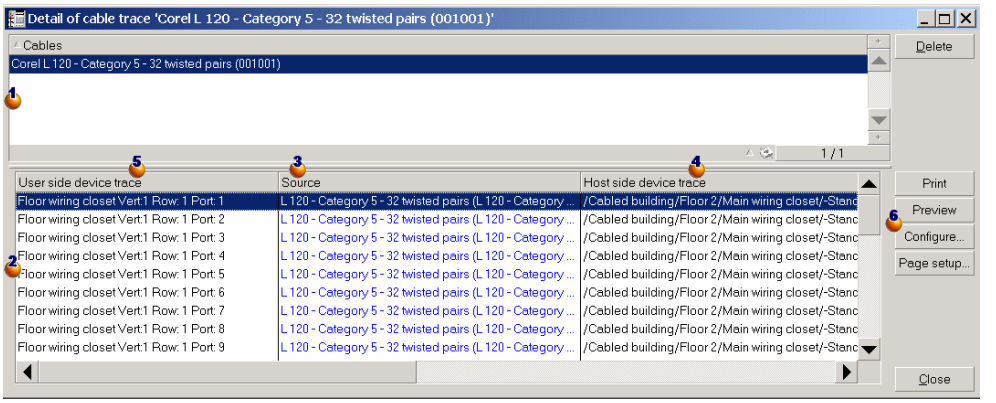
1 Display the cables using the **Cables/ Cables** menu item.

2 Select the cable in the list window, or select a field (not link) in the **Assets** table.

3 Select the **Cable traces** wizard.

Information used when using the wizard

Figure 8.4. The browser window for the Cable traces wizard



1 Select the cable to examine.

2 This table contains one row per link that is directly attached to the cable 1.

3 The **Source** column displays the labels of the links that are directly attached to the cable 1.

4 The **Host side xxx trace** columns are located to the right of the **Source** column. They display the labels of the traces in the host direction.

5 The **User side xxx trace** columns are located to the left of the **Source** column. They display the labels of the traces in the user direction.

The blue labels designate the labels of the links in the **Source** column.

The red labels designate the labels of the links in the **Host side xxx trace** column and the **User side xxx trace** column, which are directly linked to the device . (Consequently, they indicate that the trace passes more than once by the device).

 Use these buttons to regulate how the table will be printed.

9 Glossary

CHAPTER

AssetCenter key terms

Pin/ Terminal

Component of a cable device port that creates an electronic connection (pin) or optical connection (terminal) with a connector pin/terminal or a cable wire.

The cable-device pins/terminals are associated with a port. The ports, themselves, can be associated with a bundle of cable pairs/conductors to create a cable link.

At the level of the connection types, the pins/terminals are associated with a color code entry.

Opposites

Pin is one of the two connection modes whose opposite is **Port** .

Table in the AssetCenter database that describes these objects

Pins (**amDevicePin**)

Cable

A cable is composed of one of the following sets of components:

- A set of wire pairs, if it conducts electrically.
- A set of conductors, if it conducts optically.

The pairs or conductors are grouped into bundles in order to create a connection with a cable device.

The cables connect the cable devices together.

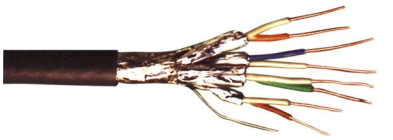
Opposites

Cable device

Table in the AssetCenter database that describes these objects

Cables (amCable)

Figure 9.1. Example of a cable with its pairs and its wires



Trace

Succession of links (in the logical sense) between cables and cable devices.

Opposites

This is opposite to **Cabling path** , which describes the cabling in a physical sense.

Color code

Once connected, in order find and distinguish between:

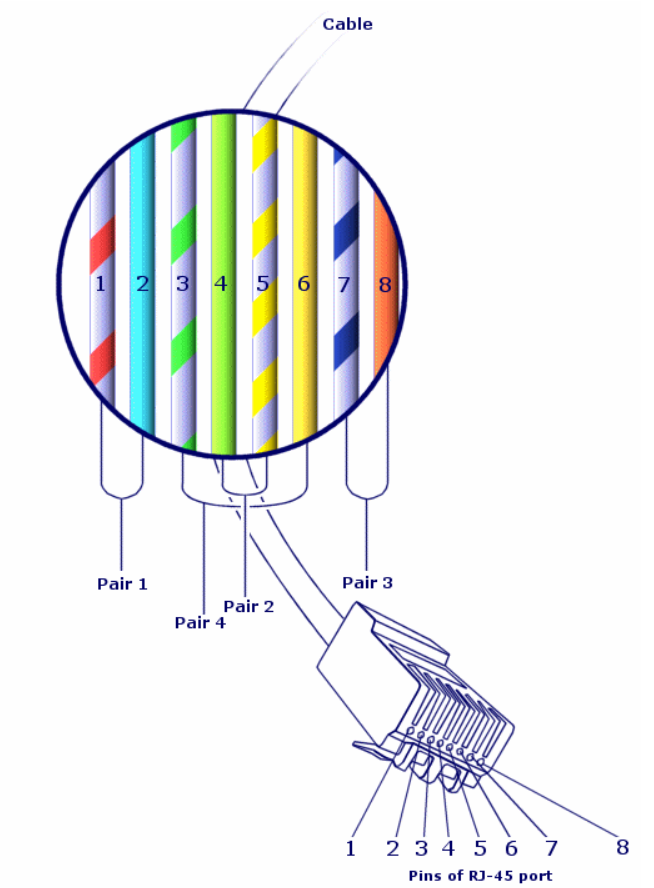
- A wire pair and
- A connector pin

We use color codes.

Each wire and each pin are associated with a color code entry which identifies the wire.

When you create pairs using the **Create pairs** wizard, the wizard automatically assigns a color code entry to each created pair according to the pair's **Sequential number** field.

Figure 9.2. Relation between cable wires, connector pins and their associated colors.



If we take the **RJ-45** connector, each pin is associated with a wire having a given color and a given duty:

Pin number	Color of the associated pair.	Colors of the tip wire	Colors of the ring wire	Duty
1	orange	white/blue	orange	Data transmission +
2	orange	white/orange	orange	Data transmission -
3	green	white/green	green	Data reception +
4	blue	white/blue	blue	Voice transmission +
5	blue	white/blue	blue	Voice transmission -
6	green	white/green	green	Data reception -
7	brown	white/brown	brown	Voice reception +
8	brown	white/brown	brown	Voice reception -

Table in the AssetCenter database that describes these objects

Color codes (amColorCode)

Column

Vertical axis of a termination field.

Opposites

Line

Trace output

Description of a trace.

Table in the AssetCenter database that describes these objects

Trace outputs (amTraceOutput)

Termination field configuration

Defines the typical organization of a termination field type. Specifically:

- The duty assigned to each row or column of the termination field.
- The role assigned to each row or column of the termination field (and as a consequence, the roles of the cable devices that are there).

The termination-field configuration is used by the cabling wizards to automate the creation of termination fields (with their devices).

Table in the AssetCenter database that describes these objects

Termination field configurations (amTermFldConfig)

Cable device

The cable devices corresponding to the network components that are not cables.

The cable devices that connect to the cables and cable devices using:

- Pins, if it conducts electrically.
- Terminals, if it conducts optically.

The pins or connectors are grouped into ports in order to create a connection with the cable bundle or the port of another cable device.

Examples

Example
• Controller card • Wall outlets • Patch panels • Switches • Hubs

Synonyms

Cable equipment

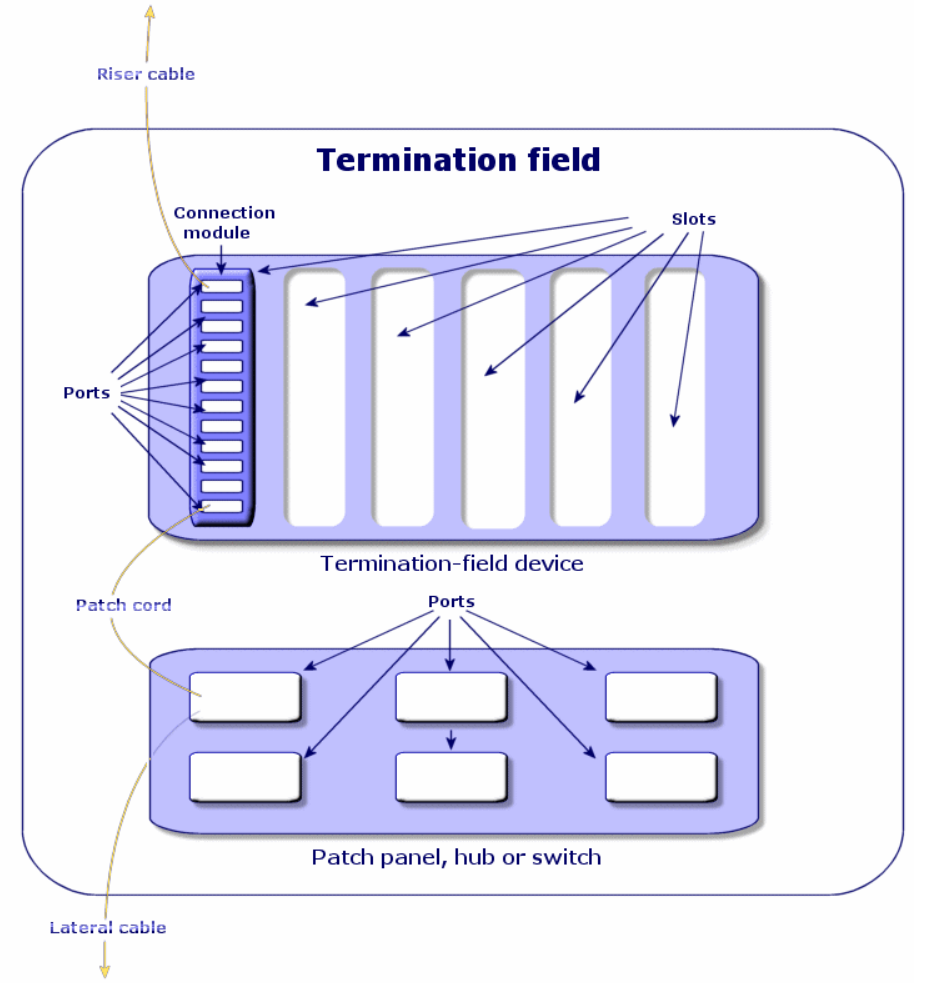
Tables in the AssetCenter database that describe these objects

Assets (amAsset)

Slot

The slot of a cable device in which you can introduce a an extension card or module. These are, themselves, cable devices and create cable links with other cables or cable devices.

Figure 9.3. Slots



Examples

A **HP Procurve 10/100 Base T - 8 ports** module which inserts itself in a **ProcureSwitch 4000 M - 10 slots** switch.

Synonyms

Expansion connector

Tables in the AssetCenter database that describe these objects

- **Slots (amSlot)**
- **Model slots (amModelSlot)**

Color code entry

One of the colors of a color code.

Each color code entry can be associated with:

- Cable pairs/conductors
- Cable-device port pins.

Tables in the AssetCenter database that describe these objects

Color code entries (amColorDet)

Topology step

One of the cable links to create in order to lay out a topology. The steps of a topology are ordered.

Tables in the AssetCenter database that describe these objects

Topology steps (amTopologyDet)

Label

An identifier, in the cable network, of the:

- Cable devices
- Bundles
- Cables
- Pins/ terminals
- Pairs/conductors
- Ports
- Links

They are created in the database, then physically attached to these components in order to locate and identify them.

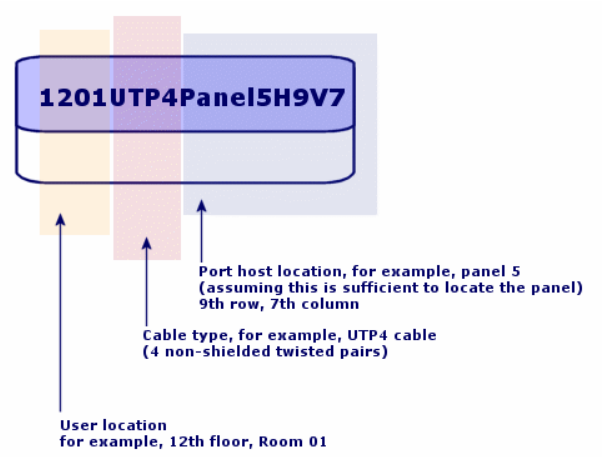
Labels are created using label rules.

The label must best represent the item that it identifies. The label rule can create, for example, labels using the following information:

- Location of the host and the user.
- Host and user ports (identifier of the asset and the port).
- Type of cable or device (4 pairs, patch panel, etc.).

The corresponding label is presented in the following form:

Figure 9.4. Cable label



Bundle

Sub-set of pairs of a cable to which we assign a particular duty. The bundles are used for the creation of cable links between a cable and a cable device: we link a bundle of the cable to a port of the device. We make sure that the duty of the bundle is the same as the one of the port.

Tables in the AssetCenter database that describe these objects

Cable bundles (amCableBundle)

Duty

Type of data transported or processed by:

- A cable bundle.
- A cable device port.
- A cable link.

Duties are used by the cabling wizards that create links. They enable the wizards to reconcile a ports with bundles performing the same duty.

A duty is also assigned to a:

- Termination-field configuration slot: in order that this duty be propagated to the level of the ports of the device that is created there.
- A topology: in order that this duty be searched for or populated at the level of the bundles and ports to use in laying out a topology.
- A trace: in order to represent the duty fulfilled by the links, ports and bundles that compose the trace.

Examples

- Data
- Voice
- Video

Tables in the AssetCenter database that describe these objects

Cable duties (**amCableDuty**)

Topology group

A topology group brings together several topologies. The groups of topologies are used by the cabling wizards to automate the creation of cables, cable devices and cable links.

A topology group can, for example, regroup a topology for the creation of each of the following items:

- Fax link
- Telephone link
- LAN link

A topology group describes a standard configuration of the cable network. You can define different topology groups according to their location, for example.

Tables in the AssetCenter database that describe these objects

Topology groups (amTopologyGroup)

Host

This concept is used to define the direction of a trace. This determines which cable links will be hosts (parents) of other cable links when the wizards create the links between cables and/or cable devices.

In general the host direction is the one that goes to the main termination field.

Opposites

User

Cross connection

An action that consists of linking together network items (cables and cable devices).

Cable link

A cable link represents in AssetCenter the connection point at the level of a cable device (port) or cable (bundle). The succession of the links enables you to constitute a trace.

Tables in the AssetCenter database that describe these objects

Cable links (amCableLink)

Line

Horizontal axis of a termination field

Opposites

Column

Ring

A jack outlet is composed of a **tip** and a **ring**, which are opposites. The jack connector uses a 2-pair cable. One of this cable's wires goes to the tip; the other to the ring. Thus, the **tip** and the **ring** help distinguish the two wires in a pair, no matter how many pairs there are in a cable.

Opposites

Tip

Pair/conductor

Data transmission media. Can be optic fiber or a pair of electric wires.

Tables in the AssetCenter database that describe these objects

Pairs/Conductors (amCablePair)

Tip

A jack outlet is composed of a **tip** and a **ring**, which are opposites. The jack connector uses a 2-pair cable. One of this cable's wires goes to the tip; the other to the ring. Thus, the **tip** and the **ring** help distinguish the two wires in a pair, no matter how many pairs there are in a cable.

Opposites

Ring

Port

Slot used to transfer data into and out of a cable device.

In cable management, the ports serve as the connection point with another port or a cable bundle when the cable links are created.

Tables in the AssetCenter database that describe these objects

- **Ports (amPort)**
- **Model ports (amModelPort)**

Opposites

Port is one of the two connection modes, opposite of the **Pin** connection mode.

Label rule

Formula for the composition of labels destined for the following items:

- Cable devices
- Bundles
- Cables
- Pins/ terminals
- Pairs/conductors
- Ports
- Links

These labels, except for those for the cable links, enable you to physically locate and identify components in a precise manner.

The label for the cable link helps you rapidly view what the link represents.

The calculation formulas are composed using Basic script.

Contrary to the default values of the fields, the label rules are never applied automatically. You must use a wizard for this.

Synonyms

None

Tables in the AssetCenter database that describe these objects

Label rules (amLabelRule)

Termination field

Designates a cable distribution entity that enables you to link the cables coming from users to the cables going to hosts.

A termination field can be composed of:

- Patch panels
- Hubs
- Punchdown blocks
- Switches
- Etc.

Synonyms

Patch panel

Tables in the AssetCenter database that describe these objects

Termination fields (amTermField)

Role

The role corresponds to the part of the network that a cable serves.

The roles are associated to the following items:

- Cables
- Termination-field device models
- Termination field devices
- Cables in a topology step

The role enables certain cabling wizards to create adequate connections between cable devices and cables.

To do this, the wizards match the roles of the:

- Topology steps
- Cables
- Termination field configurations
- Termination field devices

Examples

Example 9.1. Example of functioning

If, using a wizard that runs cables, you create cables whose roles are **Riser**, AssetCenter will automatically connect these cables to a device included in a termination field column whose role is also **Riser**.

Example 9.2. Examples of roles

- Lateral (termination field to user equipment).
- Riser (termination field to another termination field).

Tables in the AssetCenter database that describe these objects

Itemized lists (**amItemizedList**)

Sequence

Ordered number to identify items from numerous tables of the AssetCenter application.

Terminal

See **Pin/ Terminal**.

Topology

A topology groups together the necessary data to automate the creation of a link:

- Links to create.
- Cables and cable devices to look for or create.

Examples

A topology describing the link that links a user to the telephone network (wall outlet -> cable -> patch panel).

Tables in the AssetCenter database that describe these objects

Topologies (amTopology)

Cable type

The cable types qualify the models and the topology steps. This enables the cabling wizards to find or create the right type of cable from the topology step.

Tables in the AssetCenter database that describe these objects

Itemized lists (amItemizedList)

Connection type

A connection type represents a mode of connection between components of the cable network.

Example

RJ-45, RJ-11, Block of 4 pairs, etc.

It is a physical description of the pins of a port or the connectors of a terminal.

Example

- The ports of the workstations, PABX or servers.
- Wall-mounted telephone sockets (RJ-45, RJ-9 sockets)
- The terminals of the termination-field punchdown blocks (CAD, RAC IBM).

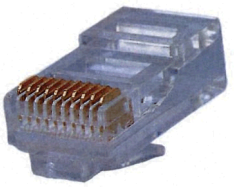
The connection type enables the cabling wizards to:

- Find the ports of a cable device that correspond to the connection type defined in a topology step.
- Or to create virtual ports of the given type if necessary.

Tables in the AssetCenter database that describe these objects

Connection types (amCabCnxType)

Figure 9.5. RJ-45 connector



Cable device type

The device type qualifies the models and the topology steps. This enables the cabling wizards to find or create the right type of cable device from a topology step.

Examples

Let's suppose that you created a connection between a cable and a cable device whose connection type is **XXX** (Connection mode = **Pins**, number of pins/connectors = **8**). Once the 8 pins of the terminal of the cable device are associated to a wire, AssetCenter automatically creates a virtual port.

Tables in the AssetCenter database that describe these objects

Itemized lists (amItemizedList)

Pair/Conductor type

A type or pair or conductor is defined by its name and the number of physical conductors that compose it.

The pair/conductor type enables the cabling wizards to find the pairs/conductors of a cable that corresponds to the type defined in a topology step. The pairs/conductors thus selected are grouped together in the form of a virtual bundle, and these virtual bundles are associated to ports (in a cable link).

Tables in the AssetCenter database that describe these objects

Pair/conductor types (amCablePairType)

Slot type

The slot type defines which extension models or module it is possible to insert in a given slot of a cable device.

This link is used when you select an asset for the slot of a cable device: only the assets whose model is compatible with the slot type are proposed.

Tables in the AssetCenter database that describe these objects

Slot types (amSlotType)

User

This concept is used to define the direction of a trace. This determines which cable links will be users (sub-links) of other cable links when the wizards create the links between cables and/or cable devices.

In general the user direction is the one that goes to the user's wall outlet.

Opposites

Host

Key terms of the profession

Adapter

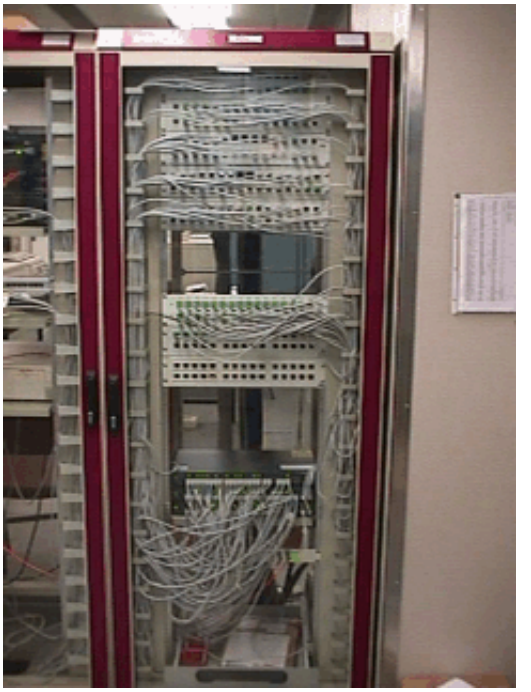
Set of male and female connectors that enable a cable device to use a peripheral for which it doesn't have the necessary circuits and connections: models, CD-ROM drives. The adapters go into the expansion slots.

Figure 9.6. Example of adapters

Rack

Storage unit that contains the cable distribution devices.

Figure 9.7. Example of a rack



Punchdown block

A box enabling you to connect the wires of a cable to a port in order to facilitate the connection with the cable.

Figure 9.8. Examples of punchdown blocks

Chassis

Metal frame upon which cable devices are mounted

Cabling path

Physical path of the cable, which is opposite of the trace that gives the logical path.

Opposites

Trace (logic)

Converter

Device that:

- Changes the electronic signals or the IT data from one form into another.

  Example

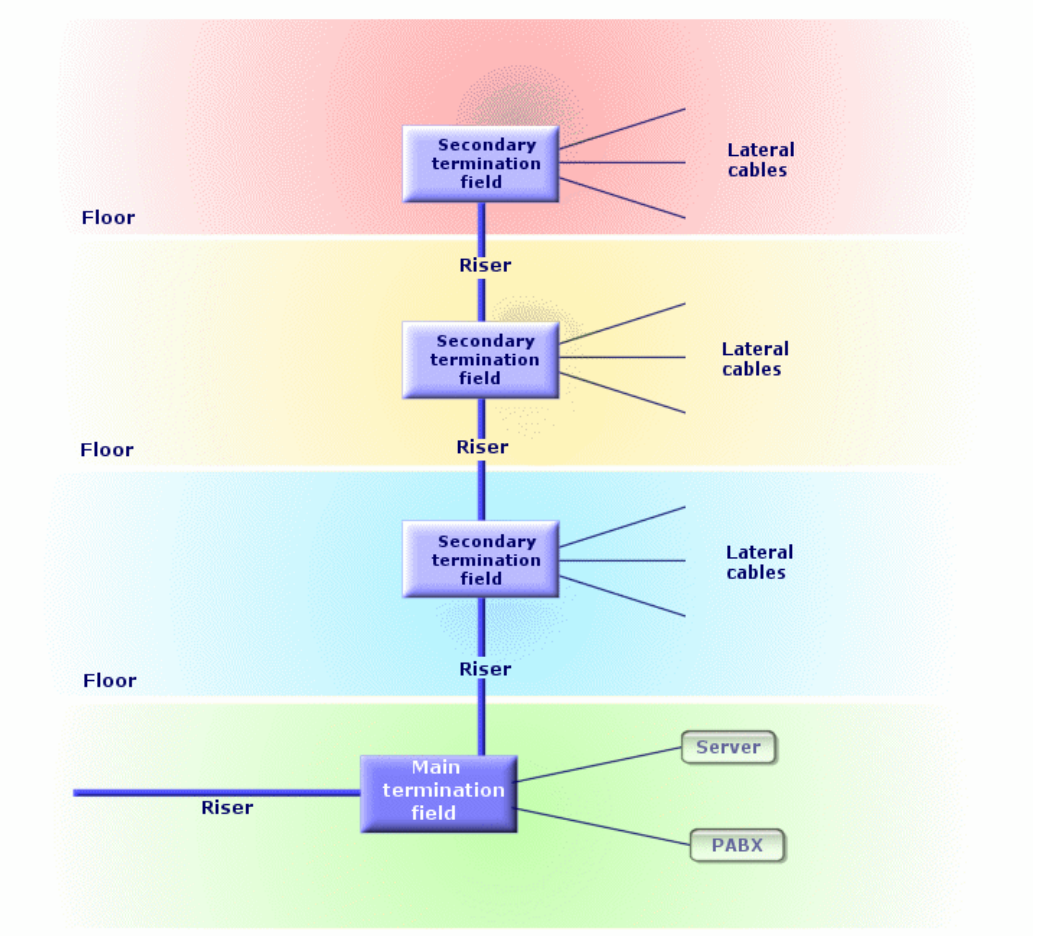
  An **ADC** converter that translates analog signals to digital signals.

- Connects equipment with incompatible interfaces.
- Converts the signal coming from one cable type in order to transmit it to another cable type.

Vertical distribution

Distribution of the cables between different termination fields. The cables linking the termination fields are generally composed of numerous pairs, and are called risers.

Figure 9.9. Vertical distribution of a cable network



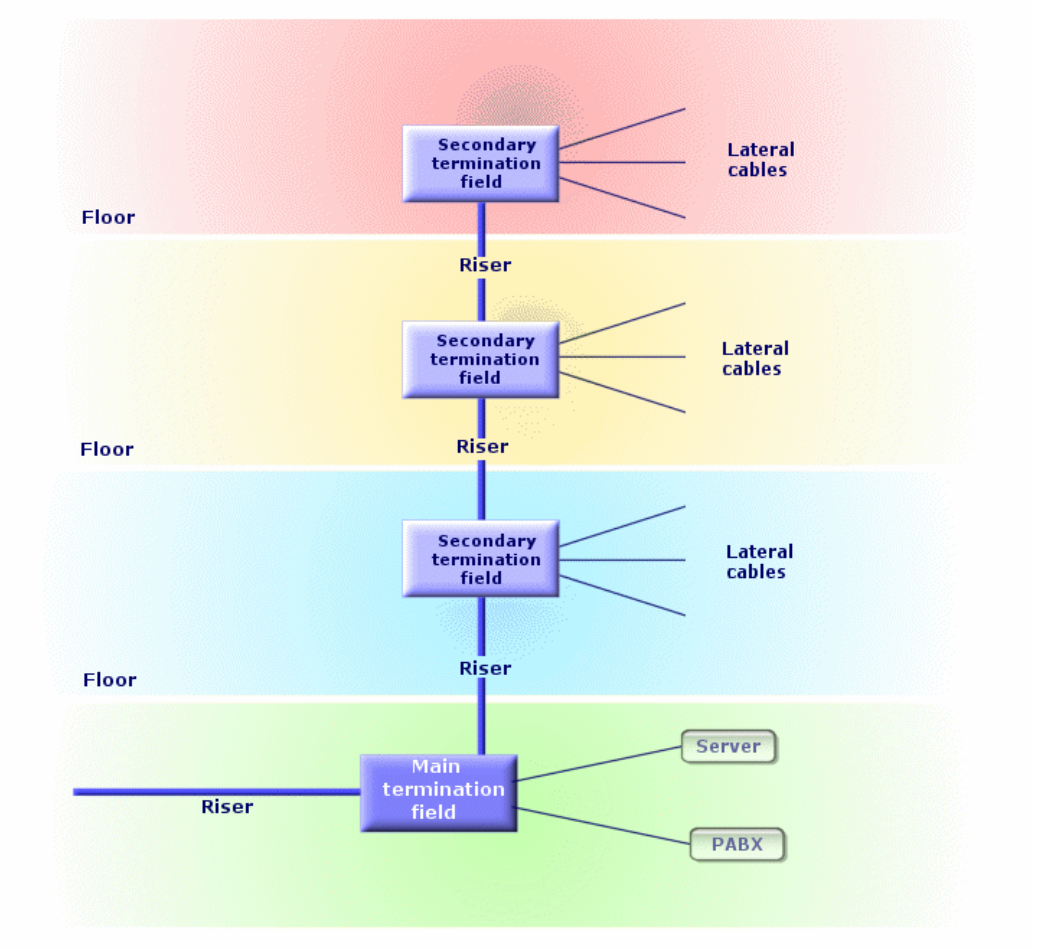
Opposites

Lateral distribution

Lateral distribution

Distribution of the cables between the users and the termination fields.

Figure 9.10. Lateral distribution of a cable network



Synonyms

Horizontal distribution

Opposites

Vertical distribution

Hub

The hub is a box where cables come in from computers, servers, printers and other peripheral devices. It establishes the communication between the different network users.

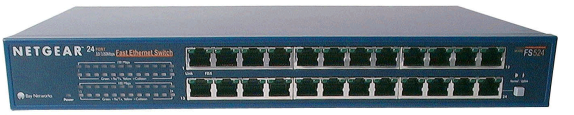
There are passive hubs that are nothing more than simple **multiple outlet adapter**, which do not modify the signals going through them.

Then there are active hubs that regenerate the signals, thus eliminating the possible errors that can occur due to the distance or the electrical interference.

It is possible to connect several hubs together, thus expanding the existing network.

Hubs do not intervene in the transmission of messages. When a computer sends information, the hub transmits it to all the other computers, and only the computer for whom the message was intended will process it. If the message's receiver sends a response, the hub transmits this message to everyone as well: Again, only the computer for whom the message was intended will receive it. The authorized debit on the network is divided between the number of computers or peripheral devices that "communicate" at the same time.

Figure 9.11. Example of hubs



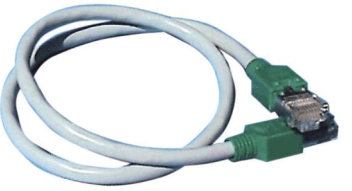
Synonyms

- Concentrator
- Multiplexer

Jumper/ Patch cord

Short cord used to establish a permanent, yet modifiable, connection between devices and termination fields.

Figure 9.12. Example of a patch cord



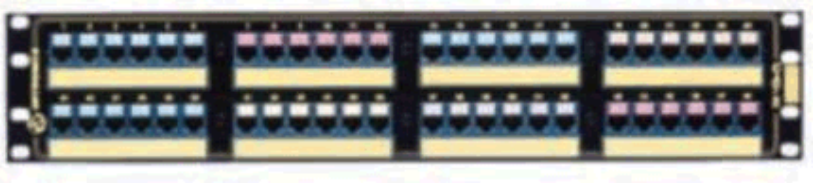
Length

Dimension of a cable.

Patch panel

Device of a termination field situated in the proximity of hubs, switches, etc. It comes in between them and the cables distributed throughout the location. The cables connect to the back of the patch panels. To each cable corresponds a connector on the panel. The other side of the cables is linked to a wall outlet in an office. We use jumpers to link the panel's connectors (front side) to the ports of the termination field's active item.

Figure 9.13. Example of a patch panel



Synonyms

Distribution panel

Wall outlet

Device that enables a mal connector of a cable (of a computer, peripheral device, or telephone) to connect to the network.

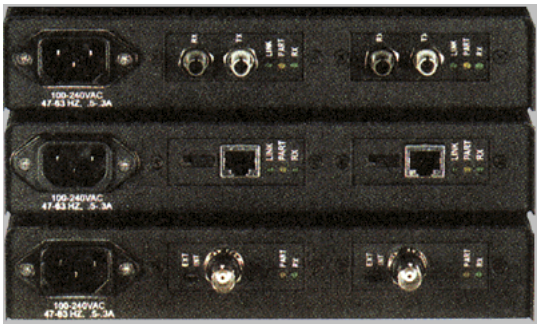
Main termination field

Processed in AssetCenter as a termination field.

Repeater

Device used to reduce distortion by amplifying or regenerating a signal so that it can be transmitted farther with its original form and intensity. On the network, it connects two networks or two segments of the network at the level of the physical layer of the OSI model and regenerates the signal.

Figure 9.14. Example of a repeater



Synonyms

Regenerator

Riser

Vertical distribution cable (between floors or buildings).

Router

Even more **intelligent** than switches, the router is generally used to connect different networks together, for example, a company's internal network to the Internet network. These are veritable computers capable of filtering information according to criteria established by the user. They know how to direct information to a destination via the available

paths and by choosing the most appropriate itinerary. They also know how to make two different types of networks, using different types of communication protocols, coexist.

Figure 9.15. Example of routers

Wall field

Dealt with in AssetCenter as a termination field.

Switch

Like a hub, it also concentrates the cables coming from all the computers and peripheral devices of the network. Unlike a hub, the switch has a memory where it stores the addresses of the machines that it connects. When a computer sends a messages to another computer, the switch knows who is "communicating" and for whom the information is intended. It sends the data to the destination without having to involve the rest of the network. The target machine receives this data at the same rate as the transmitter.

Figure 9.16. Examples of a switch

Synonyms

PABX

Run (a cable)

Action that consists of laying a cable.

Synonyms

Lay

Run

Section of cable.

10 References

CHAPTER

Cabling reports and forms provided by default.

AssetCenter is not provided with any default cabling report or form.

To learn more about reports, refer to the **Administration** manual, chapter **Editing reports**.

Interface options linked to cable management

There are no options dedicated to cable management.

Counters used to manage cable.

The Cable and Circuit modules uses numerous counters.

These counters are used in the default values of certain fields.

You can access the **Counters** table (**amCounter**) using the **Administration/ Counters** menu item.

The following counters are directly linked to cable management:

SQL name of the counter	Label and SQL name of the table that uses the counter	Label and SQL name of the field that uses the counter
amCableLink_BarCode	Links (**amCableLink**)	Name (**Name**)
amTraceHistory_BarCode	Link history (**amTraceHistory**)	Name (**Name**)
amCable_CableTag	Cables (**amCable**)	Code (**Code**)

To learn more about using counters, refer to the **Administration** guide, chapter **Structuring the database**, section **Customizing the database/Counters in field default values**.

Calculated fields used in cable management

The Cable and Circuit modules uses numerous calculated fields.

These calculated fields are used in the default values of certain fields.

You can access the **Calculated fields** table (**amCalcField**) using the **Administration/ Calculated fields** menu item.

The following calculated fields are directly linked to cable management:

Label of the calculated field	SQL name of the calculated field	Label and SQL name of the field that uses the calculated field	Utilization
TermFieldName	csf_ sysCableTermFieldName	Termination fields (**amTermField**)	This calculated field is used by certain AssetCenter APIs to automatically generate a termination field name (**gf_CreateTerminationField**, for example). Certain cabling wizards call on this API (the **Create a termination field** wizard, for example).

You can customize these calculated fields.

To learn more about using calculated fields, refer to the **Administration** guide, chapter **Calculated fields**.

To learn more about composing scripts, refer to the **Administration** guide, chapter **Using scripts**.

To learn more about APIs, refer to the **Programmer's reference** guide.

Actions and wizards used in cable management.

The Cable and Circuit modules uses numerous actions to automate certain tasks. Most of these actions are performed by wizards.

You can access the **Actions** table (**amAction**) using the **Tools/ Actions/ Edit** menu item.

You can easily filter the actions linked to cable management by using a simple filter on the following fields:

- Domain (**Domain**)
- Nature (**Nature**)

The following actions are directly linked to cable management:

Name of action	SQL name of the action	Action type	Context of the action (SQL name of the table)	Section of the guide to consult
Create pairs	sysCableCreatePair	Wizard	amModel	Chapter **Implementing cable management** , section **Creating the cable models / Using the Create pairs wizard**
Create ports	sysCableCreatePort	Wizard	amModel	Chapter **Implementing cable management** , section **Creating the cable device models without slots / Create ports wizard**

Name of action	SQL name of the action	Action type	Context of the action (SQL name of the table)	Section of the guide to consult
Create slots	sysCableCreateSlot	Wizard	amModel	Chapter **Implementing cable management** , section **Creating the cable device models with slots / Create slots wizard**
Create a termination field	sysCableCreateTermField	Wizard	amLocation	Chapter **Creating the termination fields** , section **Using the Create a termination field wizard**
Disconnect bundles	sysCableDisCnxBundle	Wizard	amCableBundle	
Disconnect ports	sysCableDisCnxPort	Wizard	amPort	
Duplicate wiring closet	sysCableDupCloset	Wizard	amLocation	Chapter **Creating the termination fields** , section **Using the Duplicate wiring closet wizard**
Expand termination field	sysCableExpTermField	Wizard	amTermField	Chapter **Creating the termination fields** , section **Using the Expand termination field wizard**
Hub cross-connect (generic)	sysCableHubCnx	Wizard		
Cross connect ports (internal)	sysCableInternalXCnxPort	Wizard	amPort	
Cable trace	sysCableOutCabTr	Wizard	amCable	
Device trace	sysCableOutDevTr	Wizard	amAsset	
Refresh asset label	sysCableRefreshAssetLbl	Script	amAsset	

Name of action	SQL name of the action	Action type	Context of the action (SQL name of the table)	Section of the guide to consult
Refresh bundle label	sysCableRefreshBundleLbl	Script	amCableBundle	
Refresh cable label	sysCableRefreshCableLbl	Script	amCable	
Refresh the link label	sysCableRefreshCableLinkLbl	Script	amCableLink	
Refresh pair/conductor label	sysCableRefreshPairLbl	Script	amCablePair	
Refresh pin/terminal label	sysCableRefreshPinLbl	Script	amDevicePin	
Refresh port label	sysCableRefreshPortLbl	Script	amPort	
Refresh project trace	sysCableRefreshProjectTr	Script	amProjTraceOut	
Refresh trace history	sysCableRefreshTrHist	Script	amTraceHistory	
Relocate cables	sysCableRelocateCable	Wizard		
Remove cables	sysCableRemoveCab	Wizard	amCable	
Remove cables by location and roles	sysCableRemoveCabLocRole	Wizard		
Remove lateral cables	sysCableRemoveLateralCable	Wizard		
Run laterals	sysCableRunLateral	Wizard		Chapter **Creating the connections with the wizards** , section **Using the Run laterals wizard**
Run risers	sysCableRunRiser	Wizard		Chapter **Creating the connections with the**

				wizards , section Using the Run risers wizard
Name of action	**SQL name of the action**	**Action type**	**Context of the action (SQL name of the table)**	**Section of the guide to consult**
Hub cross-connect (specific)	sysCableSpecificHubXCnx	Wizard		
Swap assets	sysCableSwapAsset	Wizard	amAsset	
Cross-connect wallfield	sysCableWallCnx	Wizard		
Cross connect bundles	sysCableXCnxBundle	Wizard	amCableBundle	Chapter **Creating the connections with the wizards** , section **Using the Cross-connect bundles wizard**
Cross connect ports	sysCableXCnxPort	Wizard	amPort	
Transfer project assets	sysCableXferAsset	Wizard	amAstProjDesc	
Transfer project cables	sysCableXferCable	Wizard	amProjCable	
Relocate project connections	sysCableXferTrace	Wizard	amProjTraceOut	
Cross connections...	sysCableCableXCnx	Script	amCable	Chapter **Viewing the traces** , section **Using the Cable cross-connections wizard**
Cable traces...	sysCableCableTrace	Script	amCable	Chapter **Viewing the traces** , section **Using the Cable traces wizard**
Device traces...	sysCableDeviceTrace	Script	amAsset	Chapter **Viewing the traces** , section **Using the Device traces wizard**

To learn more about using actions, refer to the **Administration** guide, chapter **Defining actions**.

To learn more about composing scripts, refer to the **Administration** guide, chapter **Using scripts**.

To learn more about APIs, refer to the **Programmer's reference** guide.

You can create new actions or customize existing ones.

Menus and tabs linked to cable management

The Cable and Circuit modules uses numerous menus.

The following menus are directly linked to cable management:

Sub-menu	Table that the menu accesses (label and SQL name)	Tabs dedicated to cable management	Important fields or links (outside of the dedicated tabs)	Utilization	Section of the guide to consult
File menu					
Activating the modules		N/A	Cable and Circuit	Enables you to activate or deactivate the Cable and Circuit module, if your license authorizes it. This is the menu to use if you can't see the following menus in your application:	
Cable menu					
Cables	Cables (**amCable**)	All	All		Chapter **Manually creating the cable devices, cables and connections** ,

Submenu	Table that the menu accesses (label and SQL name)	Tabs dedicated to cable management	Important fields or links (outside of the dedicated tabs)	Utilization	Section of the guide to consult
					section **Manually creating the cables**
Links	Links (**amCableLink**)	All	All		Chapter **Manually creating the cable devices, cables and connections** , section **Creating the connections manually**
Topology groups	Topology groups (**amTopologyGroup**)	All	All		Chapter **Implementing cable management** , section **Creating the topology groups**
Topologies	Topologies (**amTopology**)	All	All		Chapter **Implementing cable management** , section **Creating the topologies**
Termination fields	Termination fields (**amTermField**)	All	All		**Creating the termination fields** chapter
Configuration of the termination fields	Termination field configurations (**amTermFldConfig**)	All	All		Chapter **Implementing cable management** , section **Creating**

Submenu	Table that the menu accesses (label and SQL name)	Tabs dedicated to cable management	Important fields or links (outside of the dedicated tabs)	Utilization	Section of the guide to consult
					termination-field configurations
Label rules	Label rules (**amLabelRule**)	All	All		Chapter **Implementing cable management**, section **Creating the label rules**
Color codes	Color codes (**amColorCode**)	All	All		Chapter **Implementing cable management**, section **Creating the color codes**
Cable duties	Cable duties (**amCableDuty**)	All	All		Chapter **Implementing cable management**, section **Creating the duties**
Connection types	Connection types (**amCabCnxType**)	All	All		Chapter **Implementing cable management**, section **Creating the connection types**
Pair/conductor types	Pair/Conductor types (**amCablePairType**)	All	All		Chapter **Implementing cable management**, section **Creating the types of pairs**

					and conductors
Slots menu	**Table that the menu accesses (label and SQL name)**	**Tabs dedicated to cable management**	**Important fields or links (outside of the dedicated tabs)**	**Utilization**	**Section of the guide to consult**
Slot types	Cable/ Slot types (**amSlotType**)	All	All		Chapter **Implementing cable management** , section **Creating the slot types**
Portfolio menu					
Assets and batches	Assets (**amAsset**)	Pins/Terminals Ports Slots Trace Connections	None		Chapter **Manually creating the cable devices, cables and connections** , section **Manually creating the cable devices**
Assignments	Portfolio items (**amPortfolio**)	None	None		Chapter **Manually creating the cable devices, cables and connections** , section **Manually creating the cable devices**
Natures	Natures (**amNature**)	None	Cable device (**bDevice**) Create (**seBasis**) Management constraints (**seMgtConstraint**)		Chapter **Implementing cable management** , section **Creating the natures for**

					cables and cable devices
Sub-menu	Table that the menu accesses (label and SQL name)	Tabs dedicated to cable management	Important fields or links (outside of the dedicated tabs)	Utilization	Section of the guide to consult
Models	Models (**amModel**))	Devices Slots Cables	Can be connected (**bIsCnxClient**)		Chapter **Implementing cable management** , sections **Creating the cable device models without slots** , **Creating the cable device models with slots** et **Creating the cable models**
Projects	Projects (**amProject**)	Cables Traces	None		Chapter **Implementing cable management** , section **Creating the projects and work orders associated with cabling**
Locations	Locations (**amLocation**)	Cables Users Cables Hosts Termination fields	None		Chapter **Implementing cable management** , section **Creating the locations**
Brands	Product brands (**amBrand**)	None	None		Chapter **Implementing cable management** ,

					section **Creating the brands**
Sub-menu	**Table that the menu accesses (label and SQL name)**	**Tabs dedicated to cable management**	**Important fields or links (outside of the dedicated tabs)**	**Utilization**	**Section of the guide to consult**
Helpdesk menu					
Work orders	Work orders (**amWorkOrder**)	None	None		Chapter **Implementing cable management** , section **Creating the projects and work orders associated with cabling**
Tools menu					
Actions/ Edit	Actions (**amAction**)	None	None		Chapter **References** , section **Actions and wizards used in cable management.**
Actions/ <Name of action>		N/A		Proposes the actions that are either non-contextual or whose contexts are active. Enables you to trigger the selected action.	Chapter **References** , section **Actions and wizards used in cable management.**
Customize toolbar		N/A		Enables you to add or remove cable icons from the toolbar.	Chapter **References** , section **Toolbar icons used in cable management**

Submenu	Table that the menu accesses (label and SQL name)	Tabs dedicated to cable management	Important fields or links (outside of the dedicated tabs)	Utilization	Section of the guide to consult
List of screens		N/A		Enables you to access tables that are not accessible by the present menus. This task is reserved for the administrator since these tables were not really designed to be modified.	
Administration menu					
Itemized lists	Itemized lists (**amItemizedList**)	None	None		Chapter **References** , section **Itemized lists used in cable management**
Counters	Counters (**amCounter**)	None	None		Chapter **References** , section **Counters used to manage cable.**
Calculated fields	Calculated fields (**amCalcField**)	None	None		Chapter **References** , section **Calculated fields used in cable management**

Tables linked to cable management

The Cable and Circuit modules uses numerous tables.

The following tables are directly linked to cable management:

Table label	SQL name of the table	Menu item used to access the table	Section of the guide to consult
Actions	amAction	Tools/ Actions/ Edit Tools/ Actions/ <Name of action>	Chapter **References** , section **Actions and wizards used in cable management.**
Portfolio items	amPortfolio	Portfolio/ Assignments	Chapter **Manually creating the cable devices, cables and connections** , section **Manually creating the cable devices**
Assets	amAsset	Portfolio/ Assets and Batches	Chapter **Manually creating the cable devices, cables and connections** , section **Manually creating the cable devices**
Pins	amDevicePin	Tools/List of screens or Cable/ Cables	Chapter **Manually creating the cable devices, cables and connections** , section **Manually creating the cable devices**
Cables	amCable	Cable/ Cables	Chapter **Manually creating the cable devices, cables and connections** , section **Manually creating the cables**
Cables concerned by the project	amProjCable	Tools/List of screens or Portfolio/ Projects	Chapter **Implementing cable management** , section **Creating the projects and work orders associated with cabling**
Traces concerned by the project	amProjTraceOut	Tools/List of screens or Portfolio/ Projects	Chapter **Implementing cable management** , section **Creating the projects and work orders associated with cabling**
Calculated fields	amCalcField	Administration/ Calculated fields	Chapter **References** , section **Calculated fields used in cable management**

Table label	SQL name of the table	Menu item used to access the table	Section of the guide to consult
Color codes	amColorCode	Cable/ Color codes	Chapter **Implementing cable management**, section **Creating the color codes**
Trace outputs	amTraceOutput	Tools/List of screens	Chapter **Manually creating the cable devices, cables and connections**, section **Creating the connections manually**
Counters	amCounter	Administration/ Counters	Chapter **References**, section **Counters used to manage cable.**
Termination field configurations	amTermFldConfig	Cable/ Termination-field configurations	Chapter **Implementing cable management**, section **Creating termination-field configurations**
Termination field devices	amTermFldDevice	Tools/List of screens or Cable/ Termination fields	**Creating the termination fields** chapter
Model slots	amModelSlot	Tools/List of screens or Portfolio/ Models	Chapter **Implementing cable management**, section **Creating the cable device models with slots**
Slots	amSlot	Tools/List of screens or Portfolio/ Assets and Batches	Chapter **Manually creating the cable devices, cables and connections**, section **Manually creating the cable devices**
Color code entries	amColorDet	Tools/List of screens or Cable/ Color codes	Chapter **Implementing cable management**, section **Creating the color codes**
Itemized lists	amItemizedList	Administration/ Itemized lists	Chapter **References**, section **Itemized lists used in cable management**
Topology steps	amTopologyDet	Tools/List of screens or Cable/ Topologies	Chapter **Implementing cable management**, section **Creating the topologies**
Cable bundles	amCableBundle	Tools/List of screens or	Chapter **Manually creating the cable devices, cables and**

		Cable/ Cables	**connections** , section **Manually creating the cables**
Table label	**SQL name of the table**	**Menu item used to access the table**	**Section of the guide to consult**
Cable duties	amCableDuty	Cable/ Cable duties	Chapter **Implementing cable management** , section **Creating the duties**
Termination field configuration duties/services	amTermFldCfgDuty	Tools/List of screens or Cable/ Termination-field configurations	Chapter **Implementing cable management** , section **Creating termination-field configurations**
Topology groups	amTopologyGroup	Cable/ Topology groups	Chapter **Implementing cable management** , section **Creating the topology groups**
Link history	amTraceHistory	Tools/List of screens	Chapter **Manually creating the cable devices, cables and connections** , section **Creating the connections manually**
Work orders	amWorkOrder	Help desk/ Work orders	Chapter **Implementing cable management** , section **Creating the projects and work orders associated with cabling**
Links	amCableLink	Cable/ Cable links	Chapter **Manually creating the cable devices, cables and connections** , section **Creating the connections manually**
Locations	amLocation	Portfolio/ Models	Chapter **Implementing cable management** , section **Creating the locations**
Connection pin mappings	amCnxPinMap	Tools/List of screens or Cable/ Connection types	Chapter **Implementing cable management** , section **Creating the connection types**
Models	amModel	Portfolio/ Models	Chapter **Implementing cable management** , sections **Creating the cable device models without slots** , **Creating the cable device models with slots** et **Creating the cable models**

Table label	SQL name of the table	Menu item used to access the table	Section of the guide to consult
Nature	amNature	Portfolio/ Natures	Chapter **Implementing cable management**, section **Creating the natures for cables and cable devices**
Trace operations	amTraceOp	Tools/List of screens	Chapter **Manually creating the cable devices, cables and connections**, section **Creating the connections manually**
Pairs/Conductors	amCablePair	Tools/List of screens or Cable/ Cables	Chapter **Manually creating the cable devices, cables and connections**, section **Manually creating the cables**
Cable model pairs/conductors	amModelPair	Tools/List of screens or Portfolio/ Models	Chapter **Implementing cable management**, section **Using the Create pairs wizard**
Ports	amPort	Tools/List of screens or Portfolio/ Assets and Batches	Chapter **Manually creating the cable devices, cables and connections**, section **Manually creating the cable devices**
Model ports	amModelPort	Tools/List of screens or Portfolio/ Models	Chapter **Implementing cable management**, sections **Creating the cable device models without slots**
Projects	amProject	Portfolio/ Projects	Chapter **Implementing cable management**, section **Creating the projects and work orders associated with cabling**
Label rules	amLabelRule	Cable/ Label rules	Chapter **Implementing cable management**, section **Creating the label rules**
Locations - Termination fields relation	amRelTermLoc		**Creating the termination fields** chapter
Models - Slot types relation	amSlotTypeModel		Chapter **Implementing cable management**, section **Creating the slot types**

Table label	SQL name of the table	Menu item used to access the table	Section of the guide to consult
Termination fields	amTermField	Cable/ Termination fields	**Creating the termination fields** chapter
Termination field configuration roles	amTermFldCfgRole	Tools/List of screens or Cable/ Termination-field configurations	Chapter **Implementing cable management**, section **Creating termination-field configurations**
Topologies	amTopology	Cable/ Topologies	Chapter **Implementing cable management**, section **Creating the topologies**
Topologies in a group	amTopoGroupDet	Tools/List of screens or Cable/ Topology groups	Chapter **Implementing cable management**, section **Creating the topology groups**
Connection types	amCabCnxType	Cable/ Connection types	Chapter **Implementing cable management**, section **Creating the connection types**
Pair/Conductor types	amCablePairType	Cable/ Types of pairs/conductors	Chapter **Implementing cable management**, section **Creating the types of pairs and conductors**
Slot types	amSlotType	Cable/ Slot types	Chapter **Implementing cable management**, section **Creating the slot types**

Itemized lists used in cable management

Certain fields can be populated by selecting their values from a list. These itemized lists are such lists.

You can access the **Itemized lists** table (**amItemizedList**) using the **Administration/ Itemized lists** menu item.

The Cable and Circuit modules uses the following itemized lists:

Itemized list identifier	Field populated using an itemized list (label and SQL name)	Table in which field is found (label and SQL name)
amDeviceType	Device type (**DeviceType**)	Models (**amModel**))

	Device type (**DeviceType**)	Topology steps (**amTopologyDet**)
Itemized list identifier	**Field populated using an itemized list (label and SQL name)**	**Table in which field is found (label and SQL name)**
amCableType	Cable type (**CableType**)	Models (**amModel**))
	Cable type (**CableType**)	Topology steps (**amTopologyDet**)
amCableRole	Role (**CableRole**)	Cables (**amCable**)
	Role (**CableRole**)	Termination field configuration roles and devices (**amTermFldCfgRole**)
	Role (**CableRole**)	Termination field devices (**amTermFldDevice**)
	Role (**CableRole**)	Topology steps (**amTopologyDet**)
amColor	Color code entries (**amColorDet**)	Color (**Color**)
amTipColor	Color code entries (**amColorDet**)	Tip color (**TipColor**)
amRingColor	Color code entries (**amColorDet**)	Ring color (**RingColor**)

To learn more about itemized lists, refer to the **Administration** guide, chapter **Managing itemized lists.**

APIs used in cable management

Certain AssetCenter APIs are used in the Cable and Circuit module.

These APIs perform the following functions:

- Verification of the integrity rules of the database.

  Example

  Verification that the pins of a port belong to the same cable device as the port itself.

- Triggering of certain agents on the database.

  Example

  Duplication of the pairs of a cable model when a cable is created.

To obtain a list and description of the APIs used in cable management, refer to the documentation: **Programmer's reference**.

Views used in cable management

There are no views dedicated to cable management.

To learn more about using views, refer to the **Introduction** guide, chapter **Using views**.

Toolbar icons used in cable management

Certain toolbar icons are used exclusively for cable management.

To obtain this list and add these icons to the toolbar:

1 Select the **Tools/ Customize toolbar** menu.
2 Select the **Tools** tab.
3 Select **Cable** from the list of **Categories**.

To learn more about customizing the toolbar, refer to the **Introduction** guide, chapter **Customizing a client workstation**, section **General AssetCenter interface options**.

Automatic actions used in cable management

To see the list of actions that are automatically executed in the background by AssetCenter, refer to the **Database structure** document.

You will find the actions' references in the **Foreword** chapter, section **Other sources of information** of this guide.

Components of the datakit and datasys used in cable management

AssetCenter is provided with a set of data that can be imported to a demonstration database or your own database.

Note: Certain of these sets of data are already imported in the installation database installed with AssetCenter.

These data sets are a part of one of the following groups:

- The **datasys**: data that is indispensable in order for AssetCenter to function.
- The **datakit**: data that is useful to familiarize yourself with AssetCenter.

Data from the datasys concerning the Cable and Circuit module

For everything concerning the Cable and Circuit module, the **datasys** contains data for the following tables:

- **Actions** (**amAction**)

Example
Cabling wizards

- **Calculated fields** (**amCalcField**)

The data from the **datasys** relating to the Cable and Circuit module is already included in the demonstration database installed with AssetCenter.

The data from the **datasys** relating to the Cable and Circuit module will be part of your database if you select this option while creating your database with AssetCenter Database Administrator (refer to the

Implementing cable management chapter , section **Prerequisites** of this guide).

Data from the datakit for the Cable and Circuit module

For everything that concerns the Cable and Circuit module, the **datakit** contains data for numerous tables. Here are some examples:

- **Label rules** (**amLabelRule**)
- **Color codes** (**amColorCode**)
- **Topologies** (**amTopology**)
- **Termination field configurations** (**amTermFldConfig**)
- **Models** (**amModel**)

The data from the **datakit** relating to the Cable and Circuit module will be part of your database if you select this option while creating your database with AssetCenter Database Administrator (refer to the **Implementing cable management chapter** , section **Prerequisites** of this guide).

Modules of the AssetCenter Server software used in cable management

There are no modules dedicated to cable management.

Interdependence of tables used in cable management

Cable management uses numerous tables in the AssetCenter database. There are multitudes of links between these tables. It is thus convenient to optimize the order in which you populate these tables.

The order that we propose below is not mandatory: AssetCenter enables you to create missing records in linked tables whenever it is necessary.

Example

We recommend that you create the duties, label rules, roles and models before creating the termination-field configurations. However, you can, of course, add a value on the fly to the itemized list that populates the **Role** field, and then create on the fly a model, a duty and a label rule. Keep in mind, though, that you will have to populate numerous, interwoven, tables, which can be quite complicated

Here is a table that optimizes the order of how you should create your records. It indicates which dependant tables you need to populate.

The demonstrative example that is developed throughout the course of this guide respects these recommendations.

We have voluntarily excluded the tables that are indirectly linked to cable management:

- **Brands**
- **Assets and Batches**
- **Models**
- **Locations**
- **Projects**
- **Work orders**

We have also excluded the secondary tables, even if they are directly linked to cable management. These tables are automatically populated when you create records in the main tables.

Table label	SQL name of the table	Menu to access the table	Tables to populate first	Comments
Itemized lists	amItemizedList	Administration/ Itemized lists		The itemized lists to populate have the following descriptions and identifiers: • **amDeviceType** • **amCableType** • **amCableRole** This is required if you close these

				itemized lists (if you render them unable to be modified by users).
Table label	**SQL name of the table**	**Menu to access the table**	**Tables to populate first**	**Comments**
Color codes	amColorCode	Cable/ Color codes		
Label rules	amLabelRule	Cable/ Label rules		
Pair/Conductor types	amCablePairType	Cable/ Types of pairs/conductors		
Connection types	amCabCnxType	Cable/ Connection types	amColorCode	
Cable duties	amCableDuty	Cable/ Cable duties		
Locations	amLocation	Portfolio/ Locations		
Projects	amProject	Portfolio/ Projects		
Work orders	amWorkOrder	Help desk/ Work orders		
Nature	amNature	Portfolio/ Natures		
Models	amModel	Portfolio/ Models	amNature amLabelRule amItemizedList amColorCode amCabCnxType amCableDuty amCablePairType	Cable device models without slots
Slot types	amSlotType	Cable/ Slot types	amModel	
Models	amModel	Portfolio/ Models	amNature amLabelRule amItemizedList amColorCode amCabCnxType amCableDuty amCablePairType amSlotType	Cable device models with slots

Table label	SQL name of the table	Menu to access the table	Tables to populate first	Comments
Topologies	amTopology	Cable/ Topologies	amCableDuty amLabelRule amItemizedList amCabCnxType amModel amCablePairType	
Topology groups	amTopologyGroup	Cable/ Topology groups	amTopology	
Termination field configurations	amTermFldConfig	Cable/ Termination-field configurations	amCableDuty amLabelRule amItemizedList amModel	
Termination fields	amTermField	Cable/ Termination fields	amTermFldConfig amLocation amItemizedList amModel	
Assets	amAsset	Portfolio/ Assets and Batches	amNature amLabelRule amItemizedList amModel amCabCnxType amCableDuty amSlotType amTermField amLocation	
Cables	amCable	Cable/ Cables	amNature amLabelRule amItemizedList amModel amColorCode amCabCnxType amCableDuty amCablePairType amSlotType amLocation