# AssetCenter Cable and Circuit



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AssetCenter





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# **Introduction (Cable and Circuit)**

**PREFACE** 



# Warning:

The Cable and Circuit module 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 the domains mentioned above; it is assumed that you are already familiar with it.

# Who is the Cable and Circuit module intended for?

The Cable and Circuit module is mainly intended 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 does the Cable and Circuit module do?

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

## **Chapter Overview (Cable and Circuit)**

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.

# **Chapter Presentation of the practical case (Cable and Circuit)**

To make this guide as simple as possible, we have developed an example that is used throughout its entirety. This example represents a part of a network in the AssetCenter database. Using this example, you will be guided through the various tables involved in the Cable and Circuit module and will use most of the cabling wizards that automate the most common tasks.

Read the chapter Presentation of the practical case (Cable and Circuit) [page 21] to better understand what you are going to create in the AssetCenter database using the practical case, and how to best use this practical case throughout the course of this guide.

## **Chapter Implementing cable management (Cable and Circuit)**

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 (Cable and Circuit) [page 189]. 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 use of AssetCenter for your personal needs.

### Create the ...

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

### 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 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.

### • Create the ... for the practical case

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 chapter References (Cable and Circuit) [page 219], section Other sources of information (Cable and Circuit) [page 241].

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.

# **Chapter Termination fields**

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.



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

## Chapter Cable devices, cables and connections - manual creation

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 Connections - creation with the wizards**

This chapter presents 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 this chapter to learn about the possibilities offered by these wizards as well as how they function.

## **Chapter Viewing the traces**

A cable network is composed of numerous 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.

# **Chapter Glossary (Cable and Circuit)**

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.

# **Chapter References (Cable and Circuit)**

This chapter contains exhaustive and systematic reference information. Read this chapter if you want to learn about all the AssetCenter components that are linked to the Cable and Circuit module, or to access advanced or supplementary information.

# Overview (Cable and Circuit)

CHAPTER

Managing a cable network is extremely complex: There is a large number of cables and cable devices involved in a network. You need 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.

## Examples:

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.

Telephone Wall outlet Cable Lateral cable Cable Cable Patch panel Secondary Patch cord termination field PC Patch panel Hub or Switch Patch panel **Hub or Switch** Main Patch cord termination field Patch panel Wall outlet Lateral cable Server or PABX

Figure 1.1. Cable and Circuit module - area of coverage

# **Principal concepts**

## Cables: pairs, conductors, bundles

- → Pair/conductor [page 200].
- → Bundle [page 197].

# Cable devices: pins, terminals, ports

- → Pin/ Terminal [page 189].
- → Port [page 201].

# The connection between cable devices and cables: connection types

→ Connection type [page 204].

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**

- → Cable link [page 199].
- → Host [page 199].
- → User [page 206].



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

→ Color code [page 190].

# Presentation of the practical case (Cable and Circuit)

**CHAPTER** 

In order to facilitate your learning experience, we will develop a practical case throughout the course of this guide.

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



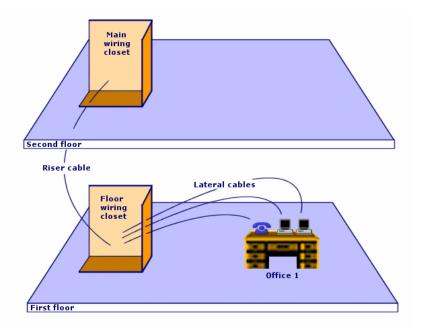
### Warning:

For an example to work, you must perform each step in its entirety and respect the order in which these steps are presented. Only the fields and links that are absolutely necessary to perform most procedures are referred to in this guide. Feel free to explore the utility of the other fields and links on your own.

# Locations of the practical case

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

Figure 2.1. Practical case - locations to use



# Network of the practical case

The following diagram illustrates which portion of the network we will use in the AssetCenter database for our practical case.

9 Wall outlet Patch Patch Telephony panel panel Patch Telephone Lateral cables Patch panel Patch panel 3 12 Patch Patch panel panel 12 Local Patch Patch Riser panel panel Patch etwork Patch Patch panel panel Switch Switch 5 5 Secondary termination field Riser

Figure 2.2. Practical case - network to use

This network contains components that will not be used in the example illustrating the Cable and Circuit module:

To main termination field

- 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:

Table 2.1. Practical case - list of components to use

Location on the diagram	Quantity	Component	Composition	Connection type
<u></u>	1	Termination field	2 columns and 6 rows	Does not apply.
<u> </u>	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)
<b>₫</b>	6	Patch panels	Back side: 256 pins (32 x 8)	By pin
			Back side: 24 RJ45 ports	By port (patch)
<u>5</u>	2	Switch	10 slots	Does not apply.
	1	Module (for one of the switch slots)	8 RJ45 ports	By port
<u>6</u>	3	Lateral cables	4 twisted pairs with 2 copper wires	Does not apply.
<u></u> <b>♂</b>	1	Riser cable	32 twisted pairs with 2 copper wires	Does not apply.
8	1	Riser cable	4 twisted pairs with 2 copper wires	Does not apply.
<u> </u>	1	Port	2 pins (back side)	By pin
10	1	Port	8 pins (front side)	By port
11	1	Port	8 pins (front side) 8 pins (back side)	By port 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

# 3 Implementing cable management (Cable and Circuit)

**CHAPTER** 

Before implementing the Cable and Circuit module, 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.

# **Preliminary steps**

# To continue reading this guide

Before continuing to read this guide, you must first:

- Install AssetCenter.
- 2 Execute AssetCenter.
- 3 Connect to AssetCenter's demonstration database.
- 4 Activate the Cable and Circuit module using the **File/ Activate modules** menu item.

# Working with your own database using the Cable and Circuit module

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

- Install AssetCenter.
- 2 Execute AssetCenter Database Administrator.
- 3 Create your database by importing the Cable and Circuit **line-of-business data** (Procedure detailed below).
- 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 System 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.xml** 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.

# Importing the Line-of-business data 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.xml** file, located in the **config** sub-folder of the AssetCenter installation folder.
- 5 Select the **Action/ Create database** menu item.
- 6 Check the **Import extra data** option.

- 7 Select the Cable and Circuit Line-of-business data from the Data to import list.
- 8 Populate the other fields and continue creating the database.

# Importing the Line-of-business into 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.xml** 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 **Import extra data** option.
- 9 Select the Cable and Circuit Line-of-business data from the Data to import list.
- 10 Click Create.

# To learn more about installing AssetCenter

Refer to the **Installation** guide.

# **Cable-device types**

### **Definitions**

→ Cable device type [page 205].

### **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

# **Creating cable device types**

- 1 Display the list of itemized lists (**Administration/ Itemized lists**).
- 2 Select the **amDeviceType** itemized list.
- 3 Create the values that you need.

# **Prerequisites**

No prerequisites.

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

# Creating the cable device types for the practical case

- 1 Display the list of itemized lists (Administration/ Itemized lists).
- 2 Select the **amDeviceType** itemized list.
- 3 Create the following values if they don't already exist:
  - Switch module
  - Patch panel
  - · Wall outlet
  - Switch

# **Cable types**

### **Definitions**

→ Cable type [page 204].

### **Table names**

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

### Access menu

Administration/Itemized lists

# **Creating cable types**

- 1 Display the list of itemized lists (Administration/ Itemized lists).
- 2 Select the **amCableType** itemized list.
- 3 Create the values that you need.

# **Prerequisites**

No prerequisites.

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

# Creating the cable types for the practical case

- 1 Display the list of itemized lists (Administration/ Itemized lists).
- 2 Select the **amCableType** itemized list.
- 3 Create the following values if they don't already exist:
  - Twisted pairs

# **Cable roles**

### **Definitions**

→ Role [page 202].

### **Table names**

The cable roles are stored in the **amCableRole** itemized list in the **Itemized lists** table (**amItemizedList**).

### **Access menu**

Administration/ Itemized lists

# **Creating cable roles**

- 1 Display the list of itemized lists (**Administration/Itemized lists**).
- 2 Select the **amCableRole** itemized list.

3 Create the values that you need.

# **Prerequisites**

No prerequisites.

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

# Creating the cable roles for the practical case

- 1 Display the list of itemized lists (**Administration/Itemized lists**).
- 2 Select the **amCableRole** itemized list.
- 3 Create the following values if they don't already exist:
  - Riser
  - Lateral

# 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

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

# **Creating colors**

- 1 Display the list of itemized lists (Administration/ Itemized lists).
- 2 Select the **amColor** itemized list.
- 3 Create the values that you need.
- 4 Select the **amTipColor** itemized list.

- Create the values that you need.
- Select the **amRingColor** itemized list.
- Create the values that you need.



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

# **Prerequisites**

No prerequisites.

# Creating the colors for the practical case

We are going to create the colors that we need for the color code entries for our practical case.

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

- Display the list of itemized lists (Administration/ Itemized lists).
- 2 Select the **amColor** itemized list.
- 3 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).

# **Color codes**

## **Definition**

- → Color code [page 190].
- → Color code entry [page 196].
- → Ring [page 200].
- → Tip [page 200].

# **Table names**

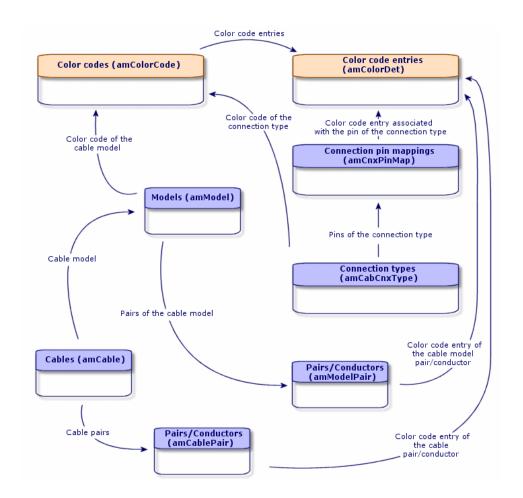
- Color codes (amColorCode)
- Color code entries (amColorDet)

### **Access menu**

Cable/ Color codes

# Simplified data model

Figure 3.1. Color codes - data model



# **Creating color codes**

- 1 Display the list of color codes (Cable/ Color codes).
- 2 For each color code to create:
  - 1 Create a record in the **Color codes** table.
  - 2 Add a color code entry by pair or by conductor.

# **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

Table 3.1. 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	

# Creating the color codes for the practical case

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

# **Creating the color codes**

- Display the list of color codes (Cable/ Color codes).
- 2 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

- 1 Select the color code **568B 4 pairs**.
- 2 Create the following color codes:

Value of the # field (sSequenceNum- ber)	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
3	green	white/green	green
4	brown	white/brown	brown

# Creating the entries for the color code 32 pairs

- 1 Select the color code **568B 32 pairs**.
- 2 Select the color code and create the following color code entries:

Value of the # field (sSequenceNum- ber)	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
$\overline{4}$	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

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

# **Label rules**

## **Definitions**

→ Label rule [page 201].

→ Label [page 196].

#### **Table names**

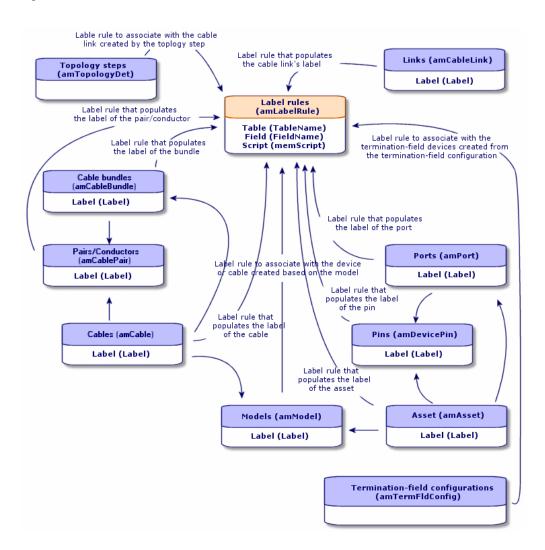
Label rules (amLabelRule)

#### **Access menu**

Cable/ Label rules

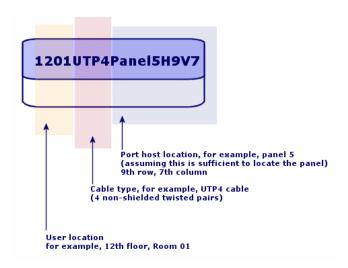
#### Simplified data model

Figure 3.2. Labels and label rules - data model



## **Label example**

Figure 3.3. Cable label - example



# **Creating label rules**



# 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

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 link can reference a cable or a cable device.

You can create label rules for the following components:

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

To create label rules:

- 1 Display the list of label rules (Cable/ Label rules).
- 2 Create the records from the list.

#### **Prerequisites**

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

## Fields and links that must absolutely be populated

Table 3.2. Label rules - 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	

## Creating the label rules for the practical case

We are going to create the lable rules we need to use in the practical case in order to:

• Recognize the cables according to their model and their code.

- Name the links.
- Populate the lables and cable devices.

To do this:

- Display the list of label rules (Cable/ Label rules).
- 2 Create a new record for each lable rule in the **Label rules** table (amLabelRule) and populate the following fields:

Field	Record 1	Record 2	Record 3	Record 4	Record 5
Name	Practical case - Cables	Practical case - Link - Sequen- tially, by pairs	Practical case - Wallfield assets	Practical case - Wall outlet link	Practical case - Port of a termin- ation-field patch panel link
Table	Cables (amC-able)	Links (amC- ableLink)	Assets (amAsset)	Links (amC- ableLink)	Links (amC- ableLink)
Field	Label	Label	Label	Label	Label
Script	See below.	See below.	See below.	See below.	See below.



To avoid typing the following scripts by hand, you can copy and paste them from the online help to AssetCenter.

The values of the **Script** field are:

Record 1:

```
RetVal = [Model.Name] + " - " + [Code]
```

Record 2:

```
Dim lErr
             As Long
Dim hqPair As Long
Dim strResult As String
Dim strVal As String
hgPair = AmQueryCreate()
lErr = AmQueryExec(hgPair, "SELECT Name FROM amCablePair WHERE lBun
dleId = " & [lBundleId] & " ORDER BY sSequenceNumber")
Do While ( lErr = 0 )
 strVal = AmGetFieldStrValue(hqPair, 0)
 If ( strResult = "" ) Then
   strResult = strVal
    strResult = strResult & " " & strVal
```

```
End If

lErr = AmQueryNext(hqPair)
Loop

AmReleaseHandle(hqPair)

RetVal = [Cable.Model.Name] & " (" & [Cable.Label] & ") - (" & strR esult & ")"
```

• Record 3:

```
Dim lErr
              As Long
Dim hqTFDev As Long
Dim strTFName As String
Dim 1Col As Long
Dim lRow
            As Long
hqTFDev = AmQueryCreate()
lErr = AmQueryExec(hqTFDev, "SELECT DeviceTermFieldDev.TerminationF
ield.Name, DeviceTermFieldDev.sHoriz, DeviceTermFieldDev.sVert FROM
amAsset WHERE lAstId = " & [lAstId])
If (lErr = 0) Then
 strTFName = AmGetFieldStrValue(hgTFDev, 0)
 1Col = AmGetFieldLongValue(hqTFDev, 1)
 1Row = AmGetFieldLongValue(hqTFDev, 2)
End If
AmReleaseHandle(hgTFDev)
RetVal = FormatResString("$1 Co: $2 Li: $3", strTFName, lCol, lRow)
```

Record 4:

```
RetVal = FormatResString("$1:$2", [Device.Label], [Port.PortNo])
```

Record 5:

```
RetVal = FormatResString("$1 Port: $2", [Device.Label], [Port.Port
No])
```

When you select the label rule **Practical case - Cables** 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

# **Types of pairs and conductors**

#### **Definitions**

→ Pair/Conductor type [page 205].

#### **Table names**

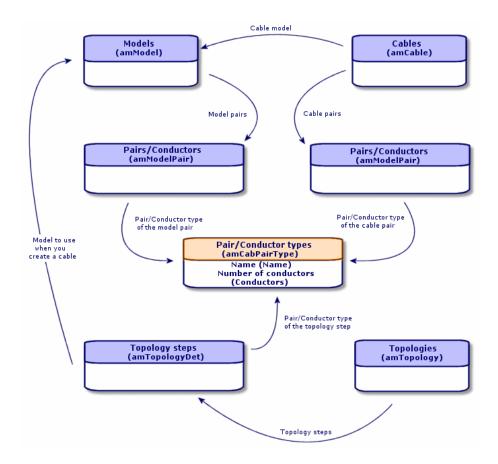
Pair/conductor types (amCabPairType)

#### **Access menu**

Cable/ Cable pair/conductor types

#### Simplified data model

Figure 3.4. Pair/conductor types - data model



# **Creating pair/conductor types**

- 1 Display the list of pair/conductor types (Cable/ Cable pair/conductor types).
- 2 Create as many records as there are pair/conductor types that you use.

#### **Prerequisites**

None

#### Fields and links that must absolutely be populated

Table 3.3. Pair/conductor types - 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

# Creating the pair/conductor types for the practical case

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

- 1 Display the list of pair/conductor types (Cable/ Cable pair/conductor types).
- 2 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	

## **Connection types**

#### **Definitions**

→ Connection type [page 204].

#### **Table names**

 $Cable\ connection\ types\ (amCabCnxType)$ 

Connection pin mappings (amCnxPinMap)

#### Access menu

Cable/ Cable connection types

# **Creating connection types**

- 1 Identify the connection types that you use in your network.
- 2 Display the list of connection types (Cable/ Cable connection types).
- 3 Create a record by identified connection type.
- 4 If you want to associate each of this connection-type's pins 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.

## **Prerequisites**

You need to have already created the color codes.

## Fields and links that must absolutely be populated

Table 3.4. Connection types - Fields and links that must absolutely be populated

Label of the field or link	SQL name of the field or link	Remarks
Connection types tab	le (amCabCnxType)	
Name	Name	
Port-based or pin-	seMode	
based		
No. of pins/terminals	sPinCount	
Color code	ColorCode	
Connection pin map- pings	CnxPinMaps	<ul> <li>If the Port-based or pin-based field has Pin for its value, then this link must be populated.</li> </ul>
		<ul> <li>If the Port-based or pin-based field has Port for its value, then this field is optional.</li> </ul>
Connection pin mapp	oings table ( amCnxPin	Map)
#	sPinSeq	
Color code entry	ColorCodeDet	

# **Creating the connection types for the practical case**

We are going to create the following connection types:

- RJ45 568B Port
- RJ45 568B Pin

## **Creating the connection types**

- Display the list of connection types (Cable/ Cable connection types).
- 2 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	Port	Pin	
(Name)			
No. of pins/terminals (sPin-	0	8	
Count)			
Color code (ColorCode)		568B - 4 pairs	

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

- 1 Select the **RJ45 568B Pin** connection type.
- 2 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	

Value of the # field (sPinSeq)	Color code entry (ColorCodeDet)
8	brown

# **Cable duties**

#### **Definitions**

→ Duty [page 198].

#### **Table names**

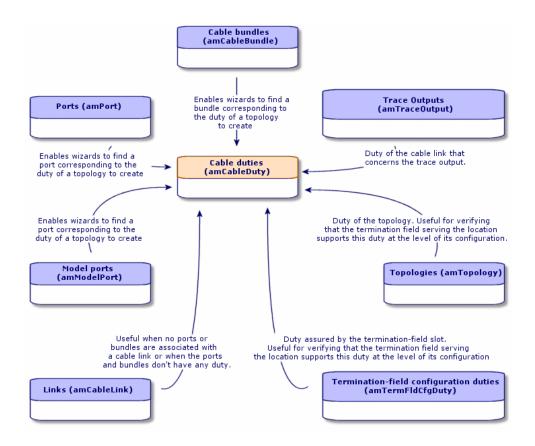
Cable duties (amCableDuty)

#### **Access menu**

Cable/ Cable duties

#### Simplified data model

Figure 3.5. Duties - data model



# **Creating cable duties manually**

- Display the list of cable duties (Cable/ Cable duties).
- 2 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.

#### **Prerequisites**

No prerequisites.

#### Fields and links that must absolutely be populated

Table 3.5. Cable duties - Fields and links that must absolutely be populated

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

## Creating the cable duties manually for the practical case

We are going to create two duties.

- 1 Display the list of cable duties (Cable/ Cable duties).
- 2 Create a new record and populate the following fields:

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

## **Locations**

We are introducing the **Locations** table for the needs of our practical case.

#### **Table names**

Locations (amLocation)

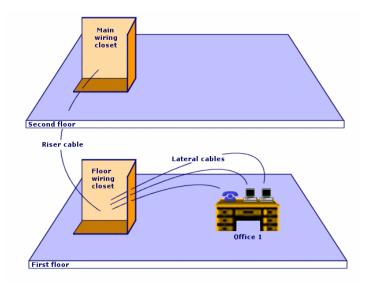
#### Access menu

#### Portfolio/Locations

# Creating the locations for the practical case

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

Figure 3.6. Practical case - locations to use



- Display the list of locations (**Portfolio/ Locations**).
- Create a new record per location and populate the following fields:

Field or link to populate	Value for record 1	Value for record 2	Value for record 3	
Name (Name)	Cabled building	1st floor	2nd floor	

Field or link to populate	Value for record 1	Value for record 2	Value for record 3
Sub-location of (Par-	Do not populate.	Cabled building	Cabled building
ent)			

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

# 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.

You need to create projects and work orders before launching the cabling wizards. Due to this constraint, you must 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
- Portfolio/ Work orders

# Creating projects and work orders associated to the Cable and Circuit module

- Display the list of projects (Portfolio/ Projects).
- 2 Create a project for each cabling operation you will perform.
- Associate one or more work orders with the project.
- 4 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)

#### **Prerequisites**

No prerequisites.

## Fields and links that must absolutely be populated

Table 3.6. Projects and work orders associated with cabling - 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

# Creating the projects and work orders for the practical case

We are going to create one project per wizard, which you will execute in the practical case. 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**

- 1 Display the list of projects (**Portfolio/ Projects**).
- 2 Create a new record per project 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 a 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
Value for record 9	Expand a 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

- 1 Select each project one by one.
- 2 Select 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 a 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	Accept the value proposed by AssetCenter.
Expand a 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.

## 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**

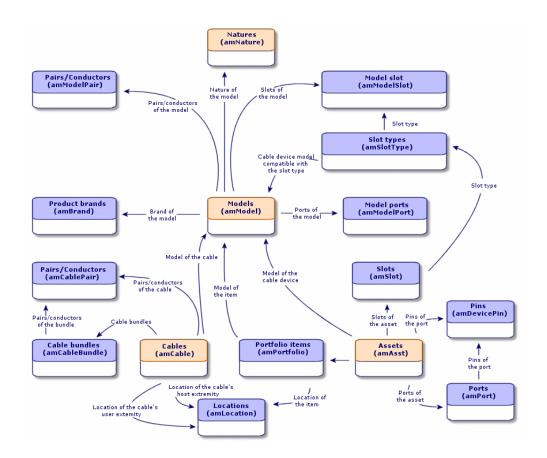
Natures (amNature)

#### Access menu

Portfolio/ Natures

#### Simplified data model

Figure 3.7. Cables and cable devices - data model



# Creating the natures of cables and cable devices

- 1 Display the list of natures (**Portfolio/ Natures**).
- 2 Create a nature for the cable devices and a nature for the cables.

## **Prerequisites**

No prerequisites.

#### Fields and links that must absolutely be populated

Table 3.7. Natures reserved for cables and cable devices - 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 be set to <b>Asset</b> for the cable devices and
		<b>Cable</b> for the cables.
Management con-	seMgtConstraint	Does not apply to cables. This field must be
straints		set to Unique asset tag for the cable devices.
Also create	seOverflowTbl	Does not apply to cables. This field must be
		set to <b>None</b> 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.

# Creating the natures of cables and cable devices for the practical case

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

- Display the list of natures (Portfolio/ Natures).
- 2 Create a new record per nature 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	Portfolio item	
Management constraints	Do not populate.	Unique asset tag	
(seMgtConstraint)			
Also create (seOverflowTbl)	Do not populate.	None	
Cable device ( <b>bDevice</b> )	Do not populate.	Check	

Field or link to populate	Value for record 1	Value for record 2
Can be connected (blsCnxCli-	Do not populate.	Check
ent)		

## Brands of cable and cable device models

#### **Table names**

Brands (amBrand)

#### Access menu

Portfolio/ Brands

## Creating the brands of the cable and cable device models

- 1 Display the list of brands (**Portfolio/ Brands**).
- 2 Create one record per brand of cable device and cable of your network.

#### **Prerequisites**

No prerequisites.

#### Fields and links that must absolutely be populated

#### Table 3.8. Brands of cable and cable device models - Fields and links that must absolutely be populated

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

# Creating the brands of the cable and cable device models for the practical case

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

- 1 Display the list of brands (**Portfolio/ Brands**).
- 2 Create a new record per brand and populate the following fields:

Field or link to popu-	Value for record 1	Value for record 2	Value for record 3	Value for record 4
late				
Name (Name)	Corel	Hewlett Packard	ITT	Generic

## **Cable models**

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

#### **Definitions**

→ Cable [page 190].

#### **Table names**

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

#### **Access menu**

Portfolio/ Models

## **Creating cable models**

- 1 Display the list of models (**Portfolio/ Models**).
- 2 Create a record for each cable model in your network.
- 3 Associate pairs/conductors with the cable model.

You have the following possibilities:

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

## **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

Table 3.9. Cable models - 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 nature.
Label rule	LabelRule	
Cable type	CableType	
Color code	ColorCode	If you want the pairs/conduct- ors to be identified by a color code.
Model pairs/conductors	Pairs	
Pairs/Conductors table (ar	nModelPair)	
Name	Name	
#	sSequenceNumber	
Pair/Conductor type	CabPairType	
Color code entry	ColorCodeDet	If you selected a color code at the level of the cable model.

# **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 list of models (**Portfolio/ Models**).
- 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

Table 3.10. Create pairs wizard - description of fields to populate

Label displayed by the wizard	Explanations
Default type for each	The selected value populates the Pair/conductor type link
pair/conductor created.	(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 ( <b>sSequenceNumber</b> ) of the model pairs.
	The number displayed by default in this field corresponds to the largest value that already exists in the # field ( <b>sSequenceNumber</b> ), 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:

Table 3.11. Create pairs wizard - created or modified data

Field label	SQL name of the field	Explanations
Name	Name	The same value as the # field (sSequenceNum-
		ber).
#	sSequenceNumber	A sequential number just after the largest value
		already existing in the # field (sSequenceNum-
		ber).
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) corres-
		ponds 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.

## Creating the cable models for the practical case

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**

- 1 Display the list of models (**Portfolio/ Models**).
- 2 Create a new record per model 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	FTP - Category 5 - 4 twisted
	pairs	pairs
Nature ( <b>Nature</b> )	Cable	Cable
Brand ( <b>Brand</b> )	Corel	Corel
Label rule ( <b>LabelRule</b> )	Practical case - Cables	Practical case - Cables
Cable type (CableType)	Twisted pairs	Twisted pairs
Color code (ColorCode)	32 pairs	568B - 4 pairs

# Creating the pairs/conductors for each cable model

- 1 Select the model.
- 2 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	32	4
generate		
Default type for each pair/con-	Copper	Copper
ductor created		
Number to begin with	1	1

## Cable device models without slots.

#### **Definitions**

→ Cable device [page 193].

#### **Table names**

- Models (amModel)
- $\bullet \quad Model \ ports \ (am Model Port) \\$

#### **Access menu**

Portfolio/ Models

# Creating the models of cable devices without slots

- 1 Display the list of models (**Portfolio/ Models**).
- 2 Create a record for each cable device model in your network.
- 3 Add ports to the model.

You have the following choices:

- Add each port manually by clicking +.
- Launch the **Create ports** wizard.

#### **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

Table 3.12. Models of cable devices without slots - 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.

Label of the field or link	SQL name of the field or link	Remarks
#	sSequenceNumber	If you create ports.
Connection type	CabCnxType	If you create ports.
Function	Duty	If you create ports.

## **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 list of models (**Portfolio/ Models**).
- 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

Table 3.13. Create ports wizard - description of fields to populate

Label displayed by the wizard	Explanations
Default type for each port created	The selected value populates the <b>Connection</b>
	<b>type</b> link ( <b>CabCnxType</b> ) of each port created.
Type of duty by default for each port created	The selected value populates the <b>Duty</b> link
	( <b>Duty</b> ) 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 <b>Port</b> # field ( <b>PortNo</b> ) 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:

Table 3.14. Create ports wizard - data created or modified by the wizard

Field label	SQL name of the field	Explanations
Sequence number of	sSequenceNumber	A sequential number that begins with the
the port in the model		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.

Field label	SQL name of the field	Explanations
Function	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.

# Creating the models of cable devices without slots for the practical case

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**

- 1 Display the list of models (**Portfolio/ Models**).
- 2 Create a new record per model and populate the following fields:

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

Field or link to populate	Value for record 1	Value for record 2	Value for record 3	Value for record 4
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

For each model whose **Number of pins/terminals** (**lPins**) is null:

- 1 Select the **Procurve 10/100 Base T-8 ports** model.
- 2 Launch the **Create ports** wizard one time by entering 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

- 3 Select the **24-port preloaded patch panel** model.
- 4 Launch the **Create ports** wizard one time by entering the following information:

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

# **Slot types**

#### **Definitions**

→ Slot type [page 206].

## **Table names**

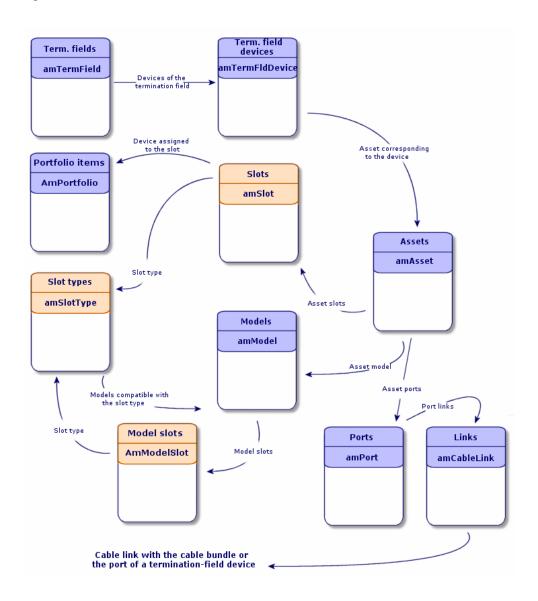
Slot types (amSlotType)

#### Access menu

Cable/ Slot types

## Simplified data model

Figure 3.8. Slots - data model



## **Creating slot types**

- Display the list of slot types (Cable/ Slot types).
- 2 Create a record per slot type of your termination-field devices.

#### **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

Table 3.15. Slot types - 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

## Creating the slot types for the practical case

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.



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

- Display the list of slot types (Cable/ Slot types).
- 2 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

Field or link to populate	Value
Compatible models ( <b>SlotTypeModels</b> )	Procurve 10/100 Base T - 8 ports

## Cable device models with slots.

#### **Definitions**

→ Cable device [page 193].

#### **Table names**

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

#### Access menu

Portfolio/ Models

## Creating the models of cable devices with slots

- 1 Display the list of models (**Portfolio/ Models**).
- 2 Create a record for each cable device model in your network.
- 3 Associate ports or slots to the model.

You have the following choices:

- Add each port or slot manually by clicking +.
- Launch either the **Create ports** or **Create slots** wizard.

#### **Connection by ports or by pins**

→ Connection by ports or by pins [page 65].

#### **Create ports wizard**

→ Create ports wizard [page 65].

# **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.
- Slot types.

# Fields and links that must absolutely be populated

Table 3.16. Models of cable devices with slots - 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.
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.
Function	Duty	If you create ports.
Model slots table (amModel	lSlot)	
Name	Name	If you create slots.
#	sSequenceNumber	If you create slots.

Label of the field or link	SQL name of the field or link	Remarks
Slot type	SlotType	If you create slots.

# **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 list of models (**Portfolio/ Models**).
- 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

Table 3.17. Create slots wizard - description of fields to populate

Label displayed by the wizard	Explanations
Default type for each slot created	The selected value populates the <b>Slot type</b> link
	(SlotType) of each slot created.

Label displayed by the wizard	Explanations
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:

Table 3.18. Create slots wizard - created or modified data

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.
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.

# Creating the models of cable devices with slots for the practical case

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

# **Creating the model**

- 1 Display the list of models (**Portfolio/ Models**).
- 2 Create a new record 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 ( <b>DeviceType</b> )	Switch
Number of pins/terminals (lPins)	0
Number of sides (seDevSdType)	Single sided

# **Creating the slots**

- 1 Select the **Procurve 4000M-10 slots** model.
- 2 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

# **Topologies**

# **Definitions**

- → Topology [page 203].
- → Topology step [page 196].
- → Host [page 199].
- → User [page 206].

## **Table names**

Topologies (amTopology)

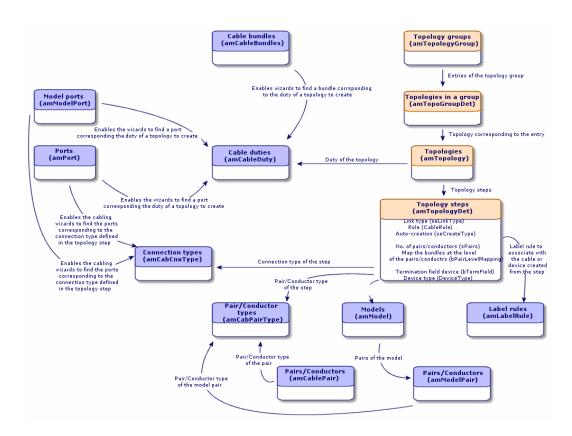
Topology steps (amTopologyDet)

#### Access menu

Cable/ Topologies

# Simplified data model

Figure 3.9. Topologies - data model



# **Creating topologies**

- 1 Display the list of topologies (Cable/ Topologies).
- 2 Create a topology and its steps for each standard trace of your network.

# **Topology 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.

# **Prerequisites**

You should have already created the:

- Duties
- 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

Table 3.19. Topologies - 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 (amTop	ologyDet )		
#	sSequenceNumber		
Link type	seLinkType		
Label rule	LabelRule		
Cable type	CableType	If seLinkType = <b>Cable</b>	
Device type	DeviceType	If seLinkType = <b>Device</b>	
Pair/Conductor type	CabPairType	If seLinkType = <b>Cable</b>	
Connection type	CabCnxType	If seLinkType = <b>Device</b>	

Label of the field or link	SQL name of the field or link	Remarks
Map bundles at pair/conduct-	bPairLevelMapping	If seLinkType = <b>Cable</b>
or level		
Termination-field device	bTermField	If seLinkType = <b>Device</b>
No. of pairs/conductors	sPairs	If seLinkType = <b>Cable</b>
Auto-create	seCreateType	
Model	Model	If seCreateType <> <b>Never</b>
		create
Role	CableRole	• If seLinkType = <b>Cable</b>
		• or bTermField = <b>Yes</b>

# Creating the topologies for the practical case

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 assembled together in a group of topologies.

## Creating the topologies

- 1 Display the list of topologies (Cable/ Topologies).
- 2 Create a new record per topology and populate the following fields:

Field or link to populate	Value for record 1	Value for record 2
Name (Name)	Telephone outlet to termination	Local network outlet to termin-
	field.	ation field
Direction (seTraceDir)	User to host	User to host
Duty ( <b>Duty</b> )	Voice	Data

# Creating the steps for the Telephone outlet to termination field topology

1 Select the topology.

# 2 Create step 1 by populating the following fields:

Field or link to populate	Value
# (sSequenceNumber)	1
Cable link type (seLinkType)	Device
Termination field device ( <b>bTermField</b> )	Unselect the box.
Label rule (LabelRule)	Practical case - Wall outlet link
Connection type (CabCnxType)	RJ45 - 568B - Pin
Device type ( <b>DeviceType</b> )	Wall outlet
Auto-create (seCreateType)	Create if not available
Model (Model)	3-port outlet

# 3 Create step 2 by populating the following fields:

Field or link to populate	Value
# (sSequenceNumber)	2
Cable link type (seLinkType)	Cable
Role (CableRole)	Lateral
Label rule ( <b>LabelRule</b> )	Practical case - Link - Sequen-
	tially, by pairs
Pair/ Conductor type (CabPairType)	Copper (2)
Cable type (CableType)	Twisted pairs
Auto-create (seCreateType)	Always create
Map bundles at pair/conductor level (bPairLevelMapping)	Check this selection box.
No. of pairs/conductors (sPairs)	2
Model (Model)	FTP - Category 5 - 4 twisted
	pairs

# 4 Create step 3 by populating the following fields:

Field or link to populate	Value
# (sSequenceNumber)	3
Cable link type (seLinkType)	Device
Termination field device ( <b>bTermField</b> )	Check this selection box.
Role (CableRole)	Lateral
Label rule (LabelRule)	Practical case - Port of a termin-
	ation-field patch panel link
Connection type (CabCnxType)	RJ45 - 568B - Pin

Field or link to populate	Value
Device type ( <b>DeviceType</b> )	Patch panel

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

- 1 Select the topology.
- 2 Create step 1 by populating the following fields:

Field or link to populate	Value
# (sSequenceNumber)	1
Cable link type (seLinkType)	Device
Termination field device ( <b>bTermField</b> )	Unselect the box.
Label rule (LabelRule)	Practical case - Wall outlet link
Connection type (CabCnxType)	RJ45 - 568B - Pin
Device type ( <b>DeviceType</b> )	Wall outlet
Auto-create (seCreateType)	Create if not available
Model (Model)	3-port outlet

# 3 Create step 2 by populating the following fields:

Field or link to populate	Value
# (sSequenceNumber)	2
Cable link type (seLinkType)	Cable
Role (CableRole)	Lateral
Label rule ( <b>LabelRule</b> )	Practical case - Link - Sequen-
	tially, by pairs
Pair/ Conductor type (CabPairType)	Copper (2)
Cable type (CableType)	Twisted pairs
Auto-create (seCreateType)	Always create
Model (Model)	FTP - Category 5 - 4 twisted
	pairs
Map bundles at pair/conductor level ( <b>bPairLevelMapping</b> )	Check this selection box.
No. of pairs/conductors (sPairs)	4

# 4 Create step 3 by populating the following fields:

Field or link to populate	Value
# (sSequenceNumber)	3
Cable link type (seLinkType)	Device

Field or link to populate	Value
Termination field device ( <b>bTermField</b> )	Check this selection box.
Role (CableRole)	Lateral
Label rule (LabelRule)	Practical case - Port of a termin-
	ation-field patch panel link
Connection type (CabCnxType)	RJ45 - 568B - Port
Device type ( <b>DeviceType</b> )	Patch panel

# **Topology groups**

# **Definitions**

→ Topology group [page 198].

## **Table names**

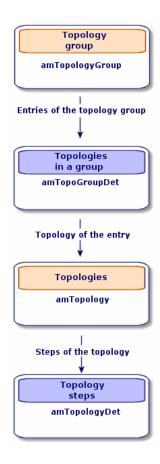
- Topology groups (amTopologyGroup)
- Topologies in a group (amTopoGroupDet)

## **Access menu**

Cable/ Topology groups

# Simplified data model

Figure 3.10. Topology groups - data model



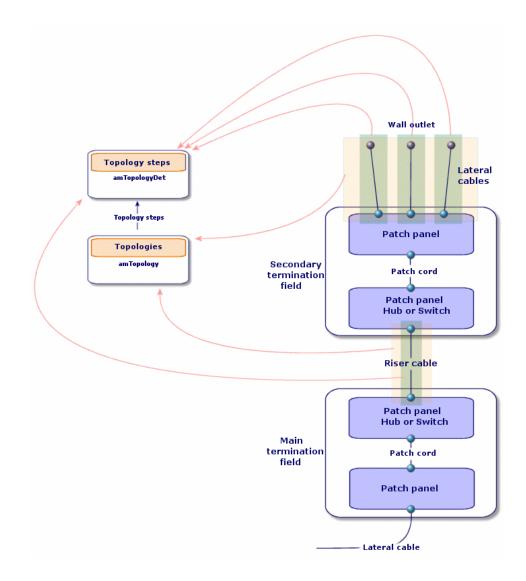


Figure 3.11. Topologies - correspondence between the termination field of a network

# **Creating topology groups**

- 1 Display the list of topology groups (Cable/ Topology groups).
- 2 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.

## **Prerequisites**

You need to have already created the topologies.

## Fields and links that must absolutely be populated

Table 3.20. Topology groups - 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	

# Creating the topology groups for the practical case

We are going to create 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

- Display the list of topology groups (Cable/ Topology groups).
- 2 Create a record and populate the following fields:

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

# Adding topologies to the Standard workstation group

1 Select the **Standard workstation** topology group.

2 Add topology 1 by populating the following fields and links:

Field or link to populate	Value
# (sSequenceNumber)	1
Topology ( <b>Topology</b> )	Telephone outlet to termination field.

3 Add topology 2 by populating the following fields and links:

Field or link to populate	Value
# (sSequenceNumber)	2
Topology ( <b>Topology</b> )	Local network outlet to termination field

4 Add topology 3 by populating the following fields and links:

Field or link to populate	Value
# (sSequenceNumber)	3
Topology ( <b>Topology</b> )	Local network outlet to termination field

# **Termination-field configurations**

#### **Definitions**

→ Termination-field configuration [page 193].

#### **Table names**

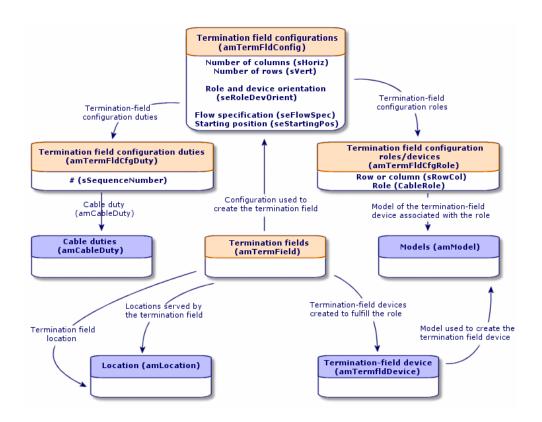
- $\bullet \quad Termination \ field \ configurations \ (amTermFldConfig)$
- $\bullet \quad Termination-field\ configuration\ duties/services\ (amTermFldCfgDuty)$
- $\bullet \quad Termination \ field \ configuration \ roles \ and \ devices \ (amTermFldCfgRole)$

#### **Access menu**

Cable/ Termination field configurations

# Simplified data model

Figure 3.12. Termination-field configuration - data model



# Parameters of a termination-field configuration

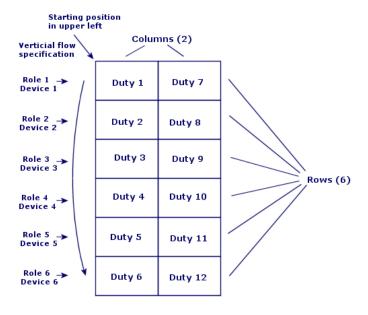
A termination-field configuration defines numerous parameters that are used by the cabling wizards to create a termination field.

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

Termination-field configurations Number of roles if horizontal amTermFldConfig Number of roles if vertical Number of columns (shoriz) = 2 Number of rows (sVert) = 6 Flow specification (seFlowSpec) = Vertical Starting position (sStartingPos) = Upper left Device and role orientation (sRoleDevOrien) = Vertical Termination 2x6 = Number of duties field duties Roles Termination-Termination-field field configuration configuration roles and devices duty amTermFldCfgDuty amTermFldCfgrole # (sSequenceNumber) Row or column (sRowCol) Role (CableRole) Model (Model) Duty (Duty) Duties Models amModel amCableDuty

Figure 3.13. Example of termination-field configuration - representation in AssetCenter

Figure 3.14. Example of termination-field configuration - correspondence at the termination field level



Role and device orientation = Vertical

 $Figure 3.15. Termination - field \, configuration - \, example \, of \, the \, impact \, resulting \, from \, changing \, \\ the \, starting \, position$ 

If starting position = Lower right

D12	D6
D11	D5
D10	D4
D9	D3
D8	D2
D7	D1

D="Duty"

Figure 3.16. Termination-field configuration - example of the impact resulting from changing the cable device and role orientations

If device and role orientation = Horizontal



R = "Role and device"

Figure 3.17. Termination-field configuration - example of the impact resulting from changing the flow specification

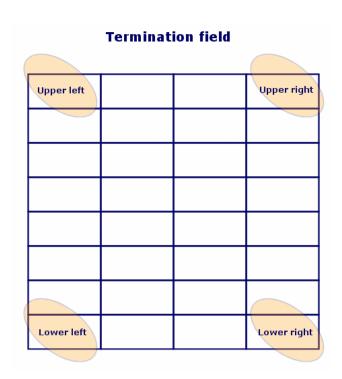
If flow specification = Horizontal

D1	D2
Dз	D4
D5	D6
D7	D8
D9	D10
D1 1	D12

D="Duty"

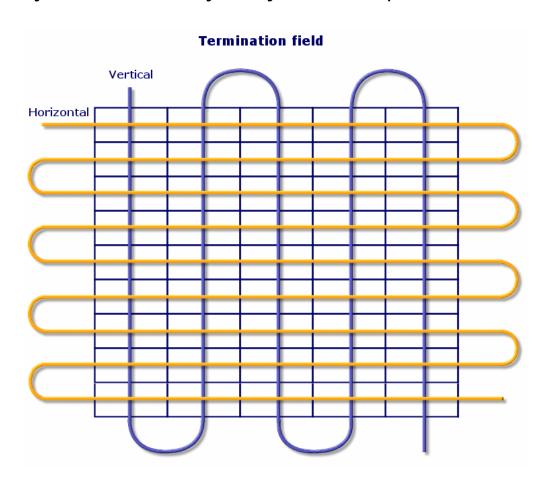
# **Starting position**

Figure 3.18. Termination-field configuration - signification of the starting positions



# **Flow specification**

Figure 3.19. Termination-field configuration - signification of the flow specification



# **Creating termination-field configurations**

- 1 Display the list of termination-field configurations (**Cable/Termination field configurations**).
- 2 Create one record per termination-field type of your network.

# **Prerequisites**

You should have already created the:

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

# Fields and links that must absolutely be populated

Table 3.21. Termination-field configurations - 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 (amT	ermFldConfig)	
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	TermFldConfRoles	
devices		
Termination field configuration duties/servi	ces (amTermFldCfgDuty)	
#	sSequenceNumber	
Function	Duty	
Termination field configuration roles and devices table (amTermFldCfgRole)		
Row or column	sRowCol	
Role	CableRole	
Model	Model	

# Creating the termination-field configurations for the practical case

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

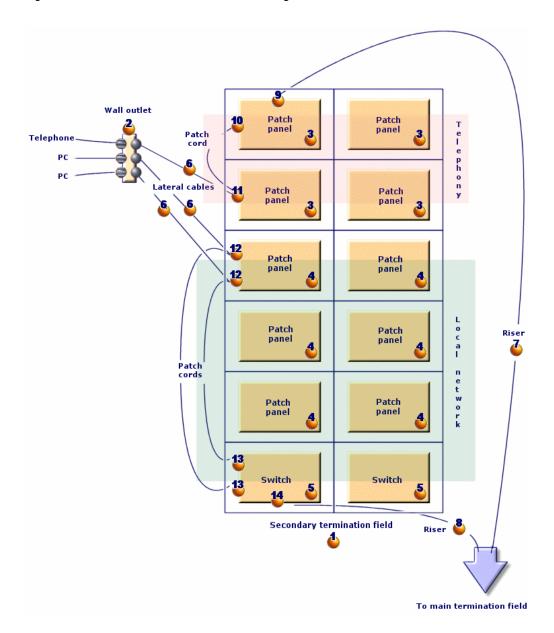


Figure 3.20. Practical case - Termination-field configuration to create

# **Creating the termination-field configuration**

- 1 Display the list of termination-field configurations (Cable/ Termination field configurations).
- 2 Create a record 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)	Practical case - Wallfield assets

# Creating the duties of the Standard termination field configuration

- 1 Select the termination-field configuration.
- 2 Select the **Duties** tab and add duties by populating the following fields and links:

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

# Creating the roles of the Standard termination field configuration

1 Select the termination-field configuration.

2 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
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

# 4 Termination fields

CHAPTER

#### **Definitions**

→ Termination field [page 202].

#### **Table names**

 $Termination \ fields \ (amTermField)$ 

#### **Access menu**

Cable/ Termination fields

# **Creating termination fields**

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

# **Prerequisites**

You should have already created the:

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

# Fields and links that must absolutely be populated

Table 4.1. Termination fields - Fields and links that must absolutely be populated

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

# **Creating termination fields manually**

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

- 1 Display the list of termination fields (Cable/ Termination fields).
- 2 Create a record.
- 3 Create the termination-field slots using the **Termination field devices** link (**TermFieldDevices**).
- 4 Select the termination fields served by the termination field using the **User locations** link (**UserLocs**).

# 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 the:

- · Termination-field configurations
- Locations of the served termination fields and workstations.

# Launching the wizard

Launching a wizard does not necessarily require that you be in a specific context.

To launch a wizard:

- 1 Display the list of actions (**Tools/ Actions**).
- 2 Select the **Create a termination field** wizard.

# Information used when using the wizard

Table 4.2. Create a termination field wizard - description of fields to populate

Label displayed by the wizard	Explanations
Configure the termination fie	eld page
Automatically name the termination field?	If you check this option, the wizard uses the <b>TermFieldName</b> calculated field to populate the <b>Name</b> field ( <b>Name</b> ) of the termination field.
	→ Calculated fields (Cable and Circuit) [page 233].
Termination field name	This field populates the <b>Name</b> field ( <b>Name</b> ) of the termination field if you did not check the <b>Automatically name the termination field</b> 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.
Specify the options page	

Label displayed by the wizard	Explanations
Column	Indicate the number of termination field columns to create.
	This number must be inferior or equal to the <b>Number of columns</b> field ( <b>sHoriz</b> ) 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 <b>Number of rows</b> field ( <b>sVert</b> ) 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 <b>Model</b> link ( <b>Model</b> ) for this, which is defined at the level of the termination-field configuration roles and devices.
Select the 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' <b>Label rule</b> ( <b>LabelRule</b> ) link. It also populates the devices' <b>Label</b> field ( <b>Label</b> ) in reference to this label rule.
	The label rule that the wizard proposed by default is the rule selected using the <b>Label rule</b> link ( <b>LabelRule</b> ) of the termination-field configuration.
Select a project and a work o	
Apply all changes to a pro-	Check this option if you want to:
ject/work order:	<ul> <li>Keep a trace of the operations performed in the database at the project level.</li> </ul>
	• 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 perform for the work order.
Device comments	Enter the value to create for the <b>Description</b> field ( <b>Description</b> ) of the <b>Assets included in projects</b> table ( <b>amAstProjDesc</b> ).
	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:

Table 4.3. Create a termination field wizard - data created or modified by the wizard

Field label	SQL name of the field	Explanations
Termination field	d table (amTermFi	ield)
Name	Name	The name that you selected using the wizard or the name
		determined by the <b>TermFieldName</b> calculated field.
Termination	TermFldConfig	The configuration selected using the wizard.
field configura-		
tion		
Location	Rental	The location selected using the wizard.
Termination-	TermField-	The wizard creates a device for each termination-field
field devices	Devices	slot is created if you checked the <b>Automatically generate</b>
		the devices option in the wizard.
Termination field	d devices table (an	nTermFldDevice)
#	sSequenceNum-	Defined according to the termination-field configuration
	ber	parameters.
Horizontal posi-	sHoriz	Defined according to the termination-field configuration
tion		parameters.
Vertical position	sVert	Defined according to the termination-field configuration
		parameters.
Role	CableRole	The <b>Role</b> field ( <b>CableRole</b> ) 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 <b>Model</b> link
		(Model) of the termination-field configuration role
		corresponding to the position of the device in the ter-
		mination field.
Assets table (amA	Asset)	
Model	Model	The Model (Model) of the termination-field configura-
		tion role corresponding to the position of the device in
		the termination field.

Field label	SQL name of the field	Explanations	
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/ter-	Pins	AssetCenter creates as many pins as there are defined	
minals		by the <b>Number of pins/terminals</b> field ( <b>IPins</b> ) of the model.	
Ports	Ports	Ports of the device model.	
Ports table (amPe	ort)		
Port #	PortNo	Same as for the model.	
#	sSequenceNum- ber	Same as for the model.	
Connection type	CabCnxType	Same as for the model.	
Status	seCnxStatus	Value set to <b>Available</b> by the wizard.	
Function	Duty	The <b>Duty</b> link ( <b>Duty</b> ) of the termination-field configuration duty defined for the device slot, of which the port is a part.	
Slots table (amSle	ot)		
Name	Name	Same as for the model.	
#	sSequenceNum- ber	Same as for the model.	
Slot type	SlotType	Same as for the model.	
Pins table (amDe	evicePin)		
Name	Name	Automatic sequential number.	
#	sSequenceNum- ber	Automatic sequential number.	
Status	seCnxStatus	Value set to <b>Available</b> by the wizard.	

# Viewing the result

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

- Option 1:
  - 1 Display the list of termination fields (Cable/ Termination fields).
  - 2 Select the termination field created by the wizard.
- Option 2:
  - 1 Display the list of locations (**Portfolio/ Locations**).
  - 2 Select the location of the termination field created by the wizard.
  - 3 Select the **Termination fields** tab.

4 Select the termination field created by the wizard.

## After having launched the wizard

The wizard does not populate the following links:

- **User locations** link (**UserLocs**) of the termination fields (if it concerns locations served by the termination field).
- **Device** (Asset) of the termination-field device slots.

You therefore need to:

- Display the list of termination fields (Cable/ Termination fields).
- 2 Select the termination field created by the wizard.
- Select the **Served locations** tab.
- One by one, add the locations served by the termination field.
- Select the **Devices** tab.
- 6 One by one, select the devices with their slots, and for each one of them:
  - 1 Click the **Magnifier**.
  - 2 Click the **Magnifier** to the right of the **Device** link (**Device**).
  - 3 Select the **Slots** tab.
  - 4 One by one, select the slots to use, and for each one of them:
    - 1 Click the **Magnifier**.
    - 2 Populate the fields and links in the detail window.
  - 5 Click **Modify**.
  - 6 Click **Modify**.
  - 7 Click Close.
- Click **Modify**.

# Use the Create a termination field wizard for the practical case.

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.

- Display the list of actions (**Tools/ Actions**).
- Select the **Create a termination field** wizard.
- 3 Enter the following information:

Label displayed by the wizard	Value to enter or select		
Configure the termination field page			
Automatically name the termination field?	Do not check this option.		
Termination field name	Floor's termination field		
Locations	Cabled building/1st floor/1st floor's wiring closet		
Termination-field configurations	Standard termination field		
Specify the options page			
Column	1		
Line	6		
Auto-generate devices	Check this selection box.		
Select the label rule for new devices	Practical case - Wallfield assets		
Select a project and a work order 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.		

- 4 Manually add the locations served by the termination field:
  - 1 Display the list of termination fields (Cable/ Termination fields).
  - 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.
- 5 Add the modules in the slots of the **ProcureSwitch 4000 M 10 slots** devices:



This will be done later on, according to the procedure described in section Creating the cable devices manually for the practical case [page 127] of this guide.

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

# **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 list of termination fields (Cable/ Termination fields).
- 2 Select the termination field to expand from the list in the window.
- 3 Display the list of actions (**Tools/ Actions**).
- 4 Select the **Expand termination field** wizard.

# Information used when using the wizard

Table 4.4. Expand termination field wizard - description of fields to populate

Label displayed by the wizard	Explanations
Specify the options page	
Column	Indicate the number of termination field columns to add.
	This number must be inferior or equal to the <b>Number of columns</b> field ( <b>sHoriz</b> ) of the termination-field configuration.
	The possible number of columns that you can add is proposed by default.
Line	Indicate the number of termination-field rows to add.
	This number must be inferior or equal to the <b>Number of rows</b> field ( <b>sVert</b> ) of the termination-field configuration.
	The possible number of rows that you can add 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 <b>Model</b> link ( <b>Model</b> ) for this, which is defined at the level of the termination-field configuration roles and devices.

Label displayed by the wizard	Explanations
Select the 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' <b>Label rule</b> link ( <b>Label-Rule</b> ).
	The wizard also populates the devices' <b>Label</b> field ( <b>Label</b> ) in reference to this label rule.
	The label rule that the wizard proposed by default is the rule selected using the <b>Label rule</b> link ( <b>LabelRule</b> ) of the termination-field configuration.
Select a project and a work or	rder page
Apply all changes to a pro-	Check this option if you want to:
ject/work order?	• 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 perform for the work order.
Device comments	Enter the value to create for the <b>Description</b> field ( <b>Descrip</b> -
	tion) of the Assets included in projects table (amAstProj-
	<b>Desc</b> ). 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:

Table 4.5. Expand termination field wizard - data created or modified by the wizard

Field label	SQL name of the field	Explanations	
Termination field table (amTermField)			_

Field label	SQL name of the field	Explanations		
Termination-field	TermFieldDevices	The wizard creates a device for each termina-		
devices		tion-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 <b>Role</b> field ( <b>CableRole</b> ) 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		
		<b>Model</b> link ( <b>Model</b> ) of the termination-field		
		configuration role corresponding to the posi-		
		tion of the device in the termination field.		
Assets table (amAsset				
Model	Model	The <b>Model</b> ( <b>Model</b> ) of the termination-field		
		configuration role corresponding to the posi-		
- 1 1 1	- 1 1- 1	tion of the device in the termination field.		
Label rule	LabelRule	The label rule selected using a wizard.		
Label	Label	The label is calculated by a wizard and is based		
-1		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 <b>Number of pins/terminals</b> field		
		(lPins) of the model.		
Ports	Ports	Ports of the device model.		
Ports table (amPort)	D 17			
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 <b>Available</b> by the wizard.		
Function	Duty	The <b>Duty</b> link ( <b>Duty</b> ) 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 <b>Available</b> by the wizard.		

## Viewing the result

You can view the newly created termination field by selecting it in one of the following ways:

- Option 1:
  - 1 Display the list of termination fields (Cable/ Termination fields).
  - 2 Select the termination field created by the wizard.
- Option 2:
  - 1 Display the list of locations (**Portfolio/ Locations**).
  - 2 Select the location of the termination field created by the wizard.
  - 3 Select the **Termination fields** tab.
  - 4 Select the termination field created by the wizard.

## After having launched the wizard

The wizard does not populate the following links:

- **User locations** link (**UserLocs**) of the termination fields (if it concerns locations served by the termination field).
- **Device** (**Asset**) of the termination-field device slots.

You therefore need to:

- 1 Display the list of termination fields (Cable/ Termination fields).
- 2 Select the termination field created by the wizard.
- 3 Select the **Served locations** tab.
- 4 One by one, add the locations served by the termination field.
- 5 Select the **Devices** tab.
- 6 One by one, select the devices with their slots, and for each one of them:
  - 1 Click the **Magnifier**.
  - 2 Click the **Magnifier** to the right of the **Device** link (**Device**).
  - 3 Select the **Slots** tab.
  - 4 One by one, select the slots to use, and for each one of them:

- 1 Click the **Magnifier**.
- 2 Populate the fields and links in the detail window.
- Click **Modify**.
- Click **Modify**.
- 7 Click Close.
- Click **Modify**.

# Using the Expand termination field wizard in the practical case

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

- Display the list of termination fields (Cable/ Termination fields).
- Select the Floor's termination field.
- 3 Display the list of actions (**Tools/ Actions**).
- Select the **Expand termination field** wizard.
- Enter the following information:

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

- 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 practical case, it is not required.
- 7 Look at the results:
  - Display the list of termination fields (Cable/ Termination fields).
  - Select the **Floor's termination field**.
  - Browse through the different tabs

# **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.



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 list of locations (**Portfolio/ Locations**).
- 2 Select any location from the list or select a field (not a link) in the **Locations** table.
- 3 Display the list of actions (**Tools/ Actions**).
- 4 Select the **Duplicate wiring closet** wizard.

## Information used when using the wizard

#### Table 4.6. Duplicate wiring closet wizard - description of fields to populate

Label displayed by the wizard	Explanations
Select the source and destination locations page	
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	<ul> <li>If you leave this field empty, the wizard will only duplicate the termination fields from the source location in the target loc- ation.</li> </ul>
	• 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	<ul> <li>If you check this option, the wizard uses the TermFieldName calculated field to populate the Name field (Name) of the termination field.</li> </ul>
	<ul> <li>If you don't check this option, the wizard duplicates the names of the source termin- ation fields.</li> </ul>
	→ Calculated fields (Cable and Circuit) [page 233].
Refresh new termination-field device's labels	<ul> <li>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).</li> </ul>
	<ul> <li>If you don't check this option, the wizard duplicates the labels of the source termin- ation-field devices.</li> </ul>
Select the termination field(s) to duplicate p	age
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.
Projects	The project in which is stored a trace of the operations performed in the database by the wizard.

Label displayed by the wizard	Explanations	
Work orders	The work orders in which is described the ac-	
	tions that you must physically perform for the	
	work order.	
Device comments	Enter the value to create for the <b>Description</b>	
	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:

Table 4.7. Duplicate wiring closet wizard - data created or modified by the wizard

Field label	SQL name of the field	Explanations	
Locations table (amL	ocation)		
Name	Name	<ul> <li>It is the value of the New wiring closet name field in the wizard, if you have pop- ulated it.</li> </ul>	
		<ul> <li>Otherwise, it is the name of the target loc- ation that you have selected with the wiz- ard.</li> </ul>	
Termination field tal	ole (amTermField)		
Termination-field	TermFieldDevices	The wizard creates a record for each device in	
devices		the source termination fields selected using	
		the wizard.	
Termination field de	vices table (amTermFl	dDevice)	
#	sSequenceNumber	Same as for the source device.	
Horizontal position	sHoriz	Same as for the source device.	

Field label	SQL name of the field	Explanations
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	<ul> <li>If you 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.</li> <li>If you did not check this option: It is the</li> </ul>
		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 (amDevice)	Pin)	
Name	Name	Automatic sequential number.
#	sSequenceNumber	Automatic sequential number.
Status	seCnxStatus	Value set to <b>Available</b> by the wizard.

# Viewing the result

You can view the newly created termination field by selecting it in one of the following ways:

- Option 1:
  - 1 Display the list of termination fields (Cable/ Termination fields).
  - 2 Select the termination field created by the wizard.
- Option 2:

- 1 Display the list of locations (**Portfolio/ Locations**).
- 2 Select the location of the termination field created by the wizard.
- 3 Select the **Termination fields** tab.
- 4 Select the termination field created by the wizard.

## After having launched the wizard

The wizard does not populate the following links:

- **User locations** link (**UserLocs**) of the termination fields (if it concerns locations served by the termination field).
- **Device** (**Asset**) of the termination-field device slots.

You therefore need to:

- 1 Display the list of termination fields (Cable/ Termination fields).
- 2 Select the termination field created by the wizard.
- 3 Select the **Served locations** tab.
- 4 One by one, add the locations served by the termination field.
- 5 Select the **Devices** tab.
- 6 One by one, select the devices with their slots, and for each one of them:
  - 1 Click the **Magnifier**.
  - 2 Click the **Magnifier** to the right of the **Device** link (**Device**).
  - 3 Select the **Slots** tab.
  - 4 One by one, select the slots to use, and for each one of them:
    - 1 Click the **Magnifier**.
    - 2 Populate the fields and links in the detail window.
  - 5 Click Modify.
  - 6 Click Modify.
  - 7 Click Close.
- 7 Click Modify.

# Use the Duplicate wiring closet wizard for the practical case.

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

- 1 Display the list of locations (**Portfolio/ Locations**).
- 2 Select the location: Cabled building/1st floor/1st floor wiring closet.

- 3 Display the list of actions (**Tools/ Actions**).
- 4 Select the **Duplicate wiring closet** wizard.
- 5 Enter the following information:

Label displayed by the wizard	Value to enter or select	
Select the source and destination locations page		
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 a wiring closet	
Work orders	Select the work order proposed by the wizard.	
Device comments	Install the device in termination field.	

- 6 Select the termination field just created:
  - 1 Display the list of locations (**Portfolio/ Locations**).
  - 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 **Magnifier** button.
- 7 Rename the termination field to **Main termination field**.
- 8 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.
- 9 Add the modules in the slots of the **ProcureSwitch 4000 M 10 slots** devices:



This will be done later on, according to the procedure described in section Cable devices - manual creation [page 118].

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

# **5** Cable devices, cables and connections - manual creation

**CHAPTER** 

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.



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**).

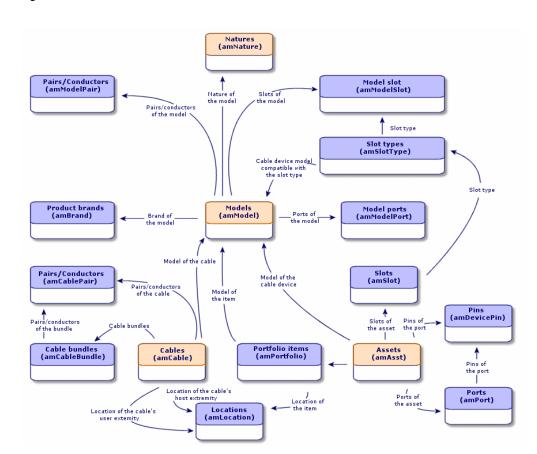


Figure 5.1. Cables and cable devices - data model

# **Cable devices - manual creation**

## **Definitions**

- → Cable device [page 193].
- → Port [page 201].
- → Pin/ Terminal [page 189].
- → Slot [page 194].

## **Table names**

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

#### Access menu

Cable/ Cable devices

# Letting AssetCenter create the ports and virtual bundles for pin connections

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 capable of creating virtual bundles and ports when they are required for a cable link. The virtual bundles and ports are also automatically deleted when the cable links that use them are no longer used.



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

Device

Virtual port

Virtual bundle

Conductors

Pairs

Cable

Figure 5.2. Ports and virtual bundles - representation

- 4 You start by creating a cable with its pairs, or you let the wizard create it.
- Then, you create a cable device with its pins, or you can let the wizard create it.
- The wizard creates a virtual bundle using the first available pairs.
- The wizard creates a virtual port using the first available pins.

## Single or double-sided devices

The cable devices can be single or double-sided. 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**).



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

Nodels (amModel)
| IPins = 0
| Ports
| Ports
| Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports | Ports |

Figure 5.3. Double-sided devices (port/port) - representation

Ports

Host

Models
(amModel)

IPins > 0

Ports

Ports

Pins

Figure 5.4. Double-sided devices (port/pins) - representation

Pins

Pins

Pins

Pins

Assets (amAsset)

Figure 5.5. Double-sided devices (pin/pin) - representation

# **Creating cable devices manually**

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

- 1 Display the list of assets (Cable/ Cable devices).
- 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.

# **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

Table 5.1. Cable devices - 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	

Label of the field or link	SQL name of the field or link	Remarks
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 device	AssignedAsset	If you create slots, and they are occupied.
Pins table (amDevice)	Pin)	
Name	Name	If you create pins.
#	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.

# **Connection by ports or by pins**

→ Connection by ports or by pins [page 65].

#### **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 manners:

- If the 2 sides contain ports:
  - 1 Create as many ports as there 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 on 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 pins 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 on 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 ports 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.

# Creating the cable devices manually for the practical case

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 Display the list of assets (Cable/ Cable devices).
  - 2 Click New.
  - 3 Populate the following links and fields:

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

- 4 Click Create.
- 5 Certain fields and links 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 switch slots of this floor's termination field:
  - 1 Display the list of termination fields (Cable/ Termination fields).
  - 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 **Magnifier** button.
  - 6 Click the **Magnifier** button to the right of the **Device** link (**Device**).
  - 7 Select the **Slots** tab.
  - 8 Select one of the slots.
  - 9 Click the **Magnifier** button.
  - 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.
- 3 Associate the other module with one of the switch slots of the main termination field:
  - 1 Display the list of termination fields (Cable/ Termination fields).
  - 2 Select the **Main termination field**.
  - 3 Select the **Devices** tab.
  - 4 Select one of the devices whose **Model** field (**Model**) is set to **ProcureSwitch 4000 M 10 slots**.

- 5 Click the **Magnifier** button.
- 6 Click the **Magnifier** button to the right of the **Device** field (**Device**).
- 7 Select the **Slots** tab.
- 8 Select one of the slots.
- 9 Click the **Magnifier** button.
- 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.

# **Cables - manual creation**

#### **Definitions**

- → Cable [page 190].
- → Pair/conductor [page 200].
- → Bundle [page 197].

#### **Table names**

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

#### Access menu

Cable/ Cables

# **Creating cables manually**

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

- 1 Display the list of cables (Cable/ Cables).
- 2 Click New.
- 3 Populate the **Model** link (**Model**).

#### 4 Click Create.

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



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

→ Cable devices - manual creation [page 118].

## **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

Table 5.2. Cables - 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	
User location	UserLoc	
Host location	HostLoc	
Role	CableRole	
Status	seCnxStatus	
Pairs/Conductors	Pairs	
Pairs/Conductors table (amM	ModelPair)	
Name	Name	

Label of the field or link	SQL name of the field or link	Remarks
#	sSequenceNumber	
Pair/Conductor type	CabPairType	
Color code entry	ColorCodeDet	If you selected a color code at the level of the cable model.

# Creating the cables manually for the practical case

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

- 1 Display the list of cables (**Cable/ Cables**).
- 2 Click New.
- 3 Populate the following fields and links:

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

- 4 Click Create.
- 5 Certain fields and links are automatically inherited from the model. You can view this by looking at the different tabs of the cable that was just created.
- 6 Select the **Bundles** tab.
- 7 Click the + button.
- 8 Populate the following fields and links:

Field or link to populate	Value
# (sSequenceNumber)	1
Name (Name)	1
Duty ( <b>Duty</b> )	Data
Status (seCnxStatus)	Available

- 9 Click **Add**.
- 10 Select the bundle from the list.
- 11 Click the **Magnifier**.
- 12 Select the **Pairs/conductors** tab.
- 13 Add the 4 pairs of this cable to the bundle.
- 14 Click Modify.

# **Connections - manual creation**

#### **Definitions**

- → Cable link [page 199].
- → Trace output [page 192].
- → Trace [page 190].
- → Cross connection [page 199].
- → Host [page 199].
- → User [page 206].

#### **Table names**

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

#### Access menu

Cable/ Traces
Administration/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 link 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.

# **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).

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

Figure 5.6. Cable link - representation of implicated components

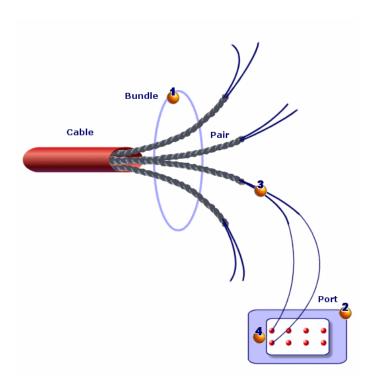


Figure 5.7. Cable links - simple data model

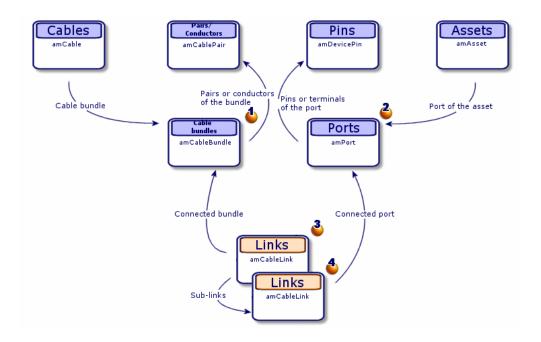
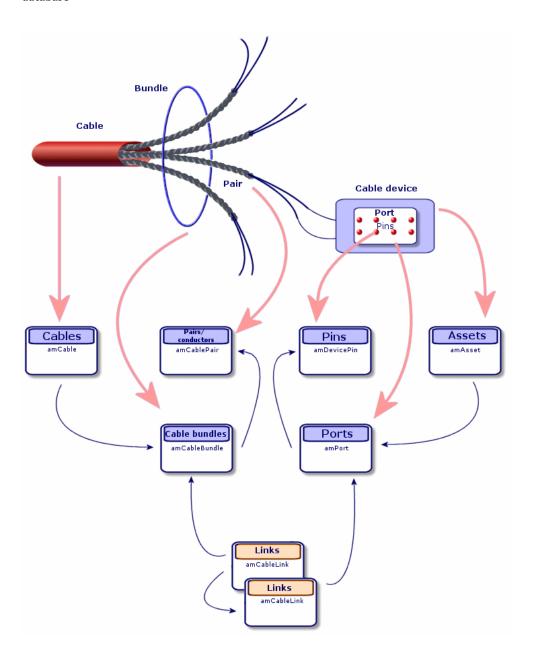


Figure 5.8. Cable links - correspondence between the cable link to represent and the database



# Tables used in the complete description of the connections

Cables (amCable) Cable to which the (amAsset) bundle belongs Device to which the Cable bundles Port that creates the connection port belongs (amCableBundle) Bundle that creates **Ports** the connection (amPort) Port that creates the connection Links (amCableLink) Hierarchical link Bundle that creates the connection History created from the link Trace histories (amTraceHistory) Trace operation that references this Label (Label) history as a host link Type (seLinkType) This table contains a copy Trace operation of the links in order to that references this conserve a trace in the Hierarchical link history as a user link projects in case a link is deleted Trace Operations (amTraceOp) Trace output created from the history Operations to perform Trace outputs on the link (amTraceOutput) Label (Label) Type (seTraceType) Summary of the trace (TraceString) This table stores a summary of the trace to do or undo. Project step created from the history Work orders to perform Project that inventories the operations to physically performed by the cabling wizard at Traces concerned by the project recover the links the source of the cable links (amProjTraceOut) created by the wizards **Projects** Work orders (amProject) (amWorkOrder) Work orders created from the project

Figure 5.9. Cable links - detailed data model

# **Comments on the diagram**

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

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

# **Creating connections manually**

The following tables were not designed to be manually populated:

- amCableLink
- amTraceOutput
- amTraceHistory
- Trace operations

The explanations that we provide here are intended 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 with the very last point.

## Examples:

- 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 Display the list of traces (**Cable/ Traces**).
- 2 Click New.
- 3 Populate the fields and links in the link window.
- 4 Display the list of screens (**Administration/ List of screens**).
- 5 Select the **Trace outputs** table (**amTraceOutput**).
- 6 Click New.
- 7 Populate the fields and links that are not inside the tabs of the detail window.
- 8 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).

# **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

Table 5.3. Connections - 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		

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

# Creating the connections manually for the practical case

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

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

- 1 Display the list of traces (Cable/ Traces).
- 2 For each cable link, create a record 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	Device	Cable	Device
(seLinkType)			
Parent link ( <b>Parent</b> )	Do not populate.	Device (Example002)	Cable (Example003)
Label rule (LabelRule)	Practical case - Port of	Practical case - Link -	Practical case - Port of
	a termination-field patch panel link	Sequentially, by pairs	a termination-field patch panel link
Label (Label)	Do not enter any val-	Do not enter any val-	Do not enter any val-
	ues; accept the pro-	ues; accept the pro-	ues; accept the pro-
	posed default value.	posed default value.	posed default value.
Duty ( <b>Duty</b> )	Data	Data	Data
Cable (Cable)	Field not available.	Corel FTP - Category 5	Field not available.
		- 4 twisted pairs (EX-	
		AMPLE001)	
Bundle ( <b>Bundle</b> )	Field not available.	1 (EXAMPLE001)	Field not available.
Device ( <b>Device</b> )	Hewlett Packard Pro-	Field not available.	Hewlett Packard Pro-
	curve 10/100 Base T - 8		curve 10/100 Base T - 8
	ports (EXAMPLE006)		ports (EXAMPLE005)
Port ( <b>Port</b> )	1 (EXAMPLE006)	Field not available.	1 (EXAMPLE005)

# **Creating the trace history**

- 1 Display the list of screens (**Administration/ List of screens**).
- 2 Select the **Trace outputs** table (amTraceOutput).
- 3 Create a record and populate the following fields and links:

Field or link to populate	Value
Type (seTraceType)	Connect
Duty ( <b>Duty</b> )	Data
Label ( <b>ModifiedLinkLabel</b> )	'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 ( <b>TraceString</b> )	Hewlett Packard Procurve 10/100 Base T - 8 ports (EXAMPLE005)
	- (1) <connecter> Corel FTP - Category 5 - 4 twisted pairs</connecter>
	(EXAMPLE001) - (1) < CONNECTER> Hewlett Packard Procurve
	10/100 Base T - 8 ports (EXAMPLE006) - (2)

# Creating the trace histories for the trace output

- 1 Display the list of screens (**Administration/List of screens**).
- 2 Select the **Trace histories** table (amTraceHistory).
- 3 Create a new record in the **Trace histories** table (**amTraceHistory**) and populate the following fields and links:



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 3
Name (Name)	Example002	Example003	Example004
Type (seLinkType)	Device	Cable	Device
Parent history ( <b>Parent</b> )	Do not populate.	Device (Example002)	Cable (Example003)
Label (Label)	Same as for links	Same as for links	Same as for links
Cable (Cable)	Field not available.	Corel FTP - Category 5	Field not available.
		- 4 twisted pairs (EX-	
		AMPLE001)	
Bundle (Bundle)	Field not available.	1 (EXAMPLE001)	Field not available.
Device ( <b>Device</b> )	Hewlett Packard Pro-	Field not available.	Hewlett Packard Pro-
	curve 10/100 Base T - 8		curve 10/100 Base T - 8
	ports (EXAMPLE006)		ports (EXAMPLE005)
Port ( <b>Port</b> )	1 (EXAMPLE006)	Field not available.	1 (EXAMPLE005)
Cable link ( <b>Link</b> )	Device (Example002)	Cable (Example003)	Device (Example004)

# Creating the trace operations for the trace outputs

There are two operations to perform:

- Connecting the main termination field to the cable.
- Connecting the cable to the secondary termination field.
- 1 Display the list of screens (**Administration/ List of screens**).

- 2 Select the **Trace operations** table (amTraceOp).
- 3 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 3
Label ( <b>Label</b> )	Connect	Connect
Host trace history (HostTrace-	Hewlett Packard Procurve	Corel FTP - Category 5 - 4
Hist)	10/100 Base T - 8 ports (EX-	twisted pairs (EXAMPLE001)
	AMPLE006)	
User trace history (UserTrace-	Corel FTP - Category 5 - 4	Hewlett Packard Procurve
Hist)	twisted pairs (EXAMPLE001)	10/100 Base T - 8 ports (EX-
		AMPLE005)

# **6** Connections - creation with the wizards

CHAPTER

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

This chapter explains how they work.



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)

# Run riser cables 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.

- → Connection by ports or by pins [page 65].
- 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.

- → Connection by ports or by pins [page 65].
- 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.

#### Use the Run riser cables wizard.

# Launching the wizard

This wizard does not require any particular context:

- Display the list of actions (**Tools/ Actions**).
- 2 Select the Run riser cables wizard.

# 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.

Table 6.1. Run riser cables wizard - description of fields to populate

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.
Host termination field	Select the host termination field to connect to the riser cable.
Do you want to select the starting position?	<ul> <li>If you check this option, the wizard will display the list of positions of the termina- tion field with its roles and the termina- tion-field device.</li> </ul>
	<ul> <li>If you don't check this option, the wizard automatically searches for the first available termination-field device having a port that is:</li> <li>Available</li> </ul>
	<ul> <li>Available</li> <li>Associated with a connection type that you will select on another page.</li> </ul>
Termination-field devices	Select the termination-field device from which you will connect the riser cable.
Select the host termination field connectors	s and a label rule page
Cable 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 <b>by pin</b> 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
Select the label rule for the links	You use this label rule to populate the <b>Label</b> field ( <b>Label</b> ) of the link created at the level of the host-termination-field device.
Do you want to search (not create) for ports of this pin mode?	<ul> <li>If you check this option, the wizard only looks for ports:</li> <li>That already exist (the wizard does not create virtual ports).</li> <li>Associated with a connection type that you will select with the wizard.</li> </ul>
Map consecutive pins to virtual port for pin- based devices (default is next available pin)?	<ul> <li>If you check this option, the wizard only uses the pins with consecutive numbers to create virtual ports.</li> <li>If you don't check this option, the wizard selects the first available pins without requiring them to have consecutive numbers.</li> </ul>
Type of cable connection for odd pins	This part of the wizard handles pins that do not exist in numbers large enough 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 duty for odd pins connector  Do you want to select the starting port?	Select the duty assigned to the remaining pins.  Select this option if 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 refers 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 refers to a port of the termination-field device that was selected with the wizard on the previous page.

Label displayed by the wizard	Explanations
Do you want to select the starting pin?	Select this option if 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.
Select a user termination field 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.
User termination field	Select the user termination field to connect to the riser cable.
Do you want to select a starting position?	<ul> <li>If you check this option, the wizard will display the list of positions of the termina- tion field with its roles and the termina- tion-field device.</li> </ul>
	<ul> <li>If you don't check this option, the wizard automatically searches for the first available termination-field device having a port that is:</li> <li>Available</li> </ul>
	<ul> <li>Associated with a connection type that you will select on another page.</li> </ul>
Termination-field devices	Select the termination-field device to which you will connect the riser cable.
Select the user termination field connector	rs and a label rule page
Cable 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 <b>by pin</b> 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
Select the label rule for the links	You use this label rule to populate the <b>Label</b> field ( <b>Label</b> ) of the link created at the level of the user-termination-field device.
Do you want to search (not create) for ports of this pin mode?	<ul> <li>If you check this option, the wizard only looks for ports:</li> <li>That already exist (the wizard does not create virtual ports).</li> <li>Associated with a connection type that you will select with the wizard.</li> </ul>
Map consecutive pins to virtual port for pin- based devices (default is next available pin)?	<ul> <li>If you check this option, the wizard only uses the pins with consecutive numbers to create virtual ports.</li> <li>If you don't check this option, the wizard selects the first available pins without requiring them to have consecutive numbers.</li> </ul>
Type of cable connection for odd pins	This part of the wizard handles pins that do not exist in numbers large enough 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 duty for odd pins connector  Do you want to select an starting port?	Select the duty assigned to the remaining pins.  Select this option if 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 refers 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 refers to a port of the termination-field device that was selected with the wizard on the previous page.

Label displayed by the wizard	Explanations
Do you want to select a starting pin?	Select this option if 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.
Select a riser cable page	
Cable role	<ul><li>The selected role is used to:</li><li>Populate the Role field (CableRole) of a cable created by the wizard</li></ul>
	<ul><li>Select a device to connect</li><li>Filters the existing cables that the wizard displays.</li></ul>
Do you want to use 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.
Number of pairs to be connected:	Define how many cable pairs must be connected to the termination fields by the wizard.
Do you want to select a starting pair?	<ul> <li>If you check this option, you can specify from which number the wizard can associ- ate an available pair to a bundle of the riser cable to create a link.</li> </ul>
	• If you do not check this option, the wizard selects the first available pairs.
Starting pairs for the cable model	Select the starting pair.
Starting pairs for the cable	Select the starting pair.
Select label rule for riser page	
Do you want to use a label rule for the cable label?	<ul> <li>If you check this option, the wizard uses a label rule to populate the Label field (La- bel) of the cable.</li> </ul>
	• If you check this option, you can directly enter the label using the wizard.
Select the label rule for the cable	You use this label rule to populate the <b>Label</b> field ( <b>Label</b> ) of the cable.

Label displayed by the wizard	Explanations
Duty of the new cable	The selected duty is:
	• Part of the criteria the wizards use to select
	ports to connect.
	<ul> <li>Associated to the ports and virtual bundles</li> </ul>
	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, which 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.
Select the label rule for the links	You use this label rule to populate the <b>Label</b>
	field (Label) of the cable link created from the
	cable.
Select a project and a work order page	
Cable comments	Value for the <b>Description</b> field ( <b>Description</b> )
	of the Cables concerned by the project table
	(amProjCable).
Connection comments	Value for the <b>Description</b> field ( <b>Description</b> )
	of the Traces concerned by the project table
Connection termination field for the work	(amProjTraceOut).  Value for the Label field (Label) of the Trace
order	operations table (amTraceOp).
oruci	operations table (anniaceop).

# 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:

Table 6.2. Run riser cables wizard - created or modified data

Field label	SQL name of the field	Explanations
Assets table (amAsset	t)	
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.
Status	seCnxStatus	This field is only populated for the virtual ports created by the wizard.
		Its value is set to <b>Available</b> by the wizard.
Virtual port	bVirtual	This field is only populated for the virtual ports created by the wizard.
		Its value is set to <b>Yes</b> .
Port pins/terminals	DevPin	Pins selected by the wizard to create a cable link.
Cables table (amCabl	le)	

Field label	SQL name of the field	Explanations	
Model	Model	Cable model selected using the wizard.	
Label rule	LabelRule	This field is only modified for the cables created by the wizard.	
		The label rule 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 <b>Available</b> 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 ta	ıble (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.	

Field label	SQL name of the field	Explanations
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 <b>Available</b> by the wizard.
Virtual bundle	bVirtual	This field is only populated for the virtual bundles created by the wizard.
		Its value is set to <b>Yes</b> .
Pairs/Conductors	Pair	Pairs/conductors selected by the wizard to create a cable link.
Cable links table (an	nCableLink)	
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	The label rule 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)	
Name	Name	Copy the value defined for the same field used at the level of the cable link.
Туре	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.

Field label	SQL name of the field	Explanations
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 (a	mTraceOutput)	
Type	seTraceType	Value set to <b>To connect</b> 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:

- 1 Display the list of projects (**Portfolio/ Projects**).
- 2 Select the project created by the wizard.
- 3 Select the **Cables** tab.

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

- 1 Select the cable to examine.
- 2 Click the magnifier to display an intermediary window.
- 3 In the intermediary window, click the magnifier 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/ Cable cross-connections** or **Actions/ Display 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.
- 4 Select the **Traces** tab.

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**

If the **Select a host termination field** page or **Select a user termination field** page does not display any termination field to select:

- 1 Click **Cancel** to interrupt the execution of the wizard.
- 2 Display the list of termination fields (**Cable/ Termination fields**).
- 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 riser cables** wizard again.

# Use the Run riser cables wizard for the practical case.

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

- 1 Display the list of actions (**Tools/ Actions**).
- 2 Select the **Run riser cables** wizard.
- 3 Enter the following information:

Label displayed by the wizard

Value to enter or select

Select a host termination field page

Label displayed by the wizard	Value to enter or select
Locations	/Cabled building/2nd floor/Main wiring closet/
Host termination field	Main wiring closet
Do you want to select a starting position?	Do not check this option.
Select the host termination field connectors and	
Cable connection types	RJ45 - 568B - Pin
Select the label rule for the links	Practical case - Port of a termination-field patch
	panel link
Do you want to search (not create) ports of this	Do not check this option.
pin mode?	
Map consecutive pins to virtual port for pin-	Check this selection box.
based devices (default is next available pin)?	
Type of cable connection for odd pins	Do not change the information displayed by the wizard; it will not be used.
Type of duty for odd pins connector	Do not change the information displayed by the
	wizard; it will not be used.
Select a user termination field page	
Locations	Cabled building/1st floor/1st floor wiring closet
User termination field	Wiring closet for each floor
Do you want to select a starting position?	Do not check this option.
Select the user termination field connectors and	
Cable connection types	RJ45 - 568B - Pin
Select the label rule for the links	Practical case - Port of a termination-field patch
	panel link
Do you want to search (not create) ports of this	Do not check this option.
pin mode?	
Map consecutive pins to virtual port for pin-	Check this selection box.
based devices (default is next available pin)?	
Type of cable connection for odd pins	Do not change the information displayed by the wizard; it will not be used.
Type of duty for odd pins connector	Do not change the information displayed by the
	wizard; it will not be used.
Select a riser cable page	
Cable role	Riser
Do you want to use an existing cable?	Do not check this option.
Model of the cable 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 la-	Check this selection box.
bel?	
Select the label rule for the cable	Practical case - Cables

Label displayed by the wizard	Value to enter or select
Duty for the new cable:	Voice
Number of pairs in a bundle	1
Select the label rule for the links	Practical case - Link - Sequentially, by pairs
Select a project and a work order page	
Apply all changes to a project/work order?	Check this selection box.
Projects	Run riser cables
Work orders	Select the work order proposed by the wizard.
Comments on the cable	Install the new cable
Connection comments	Riser run to connect devises
Connection termination field for the work order	CONNECT

#### Look at the result:

- 1 Display the list of projects (**Portfolio/ Projects**).
- 2 Select the **Run riser cables** project.
- 3 Select the **Cables** tab.
- 4 Select the cable just created.
- 5 Click the magnifier to display an intermediary window.
- 6 In the intermediary window, click the magnifier 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/ Cable cross-connections** or **Actions/ Display 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.

### Run lateral cables 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 that compose the topology group.
- 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.

- → Connection by ports or by pins [page 65].
- A project and a work order, if you want to store the trace of the connections carried out.

# Use the Run lateral cables wizard.

#### Launching the wizard

This wizard does not require any particular context.

- Display the list of actions (**Tools/ Actions**).
- Select the Run lateral cables wizard.



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

#### Information used when using the wizard



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

Table 6.3. Run lateral cables wizard - description of fields to populate

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
Do you want to look for ports on the host side of the topology?	other options that will have an effect on how the wizard works.  If you check this option, the wizard looks for virtual ports that exist at the level of the termination fields in order to create the connection with the lateral cable.
Do you want to look for ports on the user side of the topology?	This is valid for the topologies selected from the following list.  If you check this option, the wizard looks for virtual ports that exist at the level of the wall outlets in order to create the connection with
	the lateral cable.  This is valid for the topologies selected from the following list.
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.
	<ul> <li>If you don't check this option, the wizard selects the first available pins without re- quiring them to have consecutive num- bers.</li> </ul>
Select a project and a work order page	
Comments on the devices	Value for the <b>Description</b> field ( <b>Description</b> ) of the <b>Assets included in projects</b> table (amAstProjDesc).

Label displayed by the wizard	Explanations
Cable comments	Value for the <b>Description</b> field ( <b>Description</b> )
	of the Cables concerned by the project table
	(amProjCable).
Connection comments	Value for the <b>Description</b> field ( <b>Description</b> )
	of the Traces concerned by the project table
	(amProjTraceOut).
Connection termination field for the work	Value for the <b>Label</b> field ( <b>Label</b> ) of the <b>Trace</b>
order	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:

Table 6.4. Run lateral cables wizard - created or modified data

Field label	SQL name of the field	Explanations
Assets table (amAsse	et)	
Ports	Ports	The wizard creates virtual ports connected to bundles of the lateral 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)	)	

Field label	SQL name of the field	Explanations
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 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 <b>Available</b> by the wizard.
Virtual port	bVirtual	This field is only populated for the virtual ports created by the wizard.
		Its value is set to <b>Yes</b> .
Port pins/terminals	DevPin	Pins selected by the wizard to create a cable link, if the connection is by pin.
Cables table (amCab	le)	
Model	Model	This field is only modified for the cables created by the wizard.
		Cable model defined at the level of the topology step.
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.

ated 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  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
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bundles created by the wizard.			Its value is set to <b>Available</b> by the wizard.
Its value is set to <b>Yes</b> .	Virtual bundle	bVirtual	, , ,
			Its value is set to Yes.

Field label	SQL name of the field	Explanations
Pairs/Conductors	Pair	Pairs/conductors selected by the wizard to
		create a cable link.
Cable links table (amo	CableLink)	
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	The label rule selected at the level of the topo-
		logy.
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 (		buildle defected of created doing the wizard.
Name	Name	Copy the value defined for the same field used
rvanic	Ivanic	at the level of the cable link.
Type	seLinkType	Copy the value defined for the same field used
Турс	selink rype	at the level of the cable link.
Parent history	Parent	Copy the value defined for the same field used
r archi mistory	1 arciit	at the level of the cable link.
Label	Label	Copy the value defined for the same field used
Laber	Laber	at the level of the cable link.
Device	Device	Copy the value defined for the same field used
Device	Device	at the level of the cable link.
Port	Port	Copy the value defined for the same field used
1011	TOIT	at the level of the cable link.
Cable	Cable	Copy the value defined for the same field used
Cabic	Cabic	at the level of the cable link.
Bundle	Bundle	Copy the value defined for the same field used
Dunaic	Dundic	at the level of the cable link.
Link	Link	Cable link created by the wizard.
Trace outputs table (a		Cable link created by the wizard.
		Value defined using the swigged
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
C C.1 .	T. C. :	based on a label rule in any way.
Summary of the trace	TraceString	Calculated by the wizard.

Field label	SQL name of the field	Explanations
Trace histories	TraceHist	Histories created by the wizard.
Trace operations	TraceOps	Operations created by the wizard.
Trace operations tab	ole (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:

- 1 Display the list of projects (**Portfolio/ Projects**).
- 2 Select the project created by the wizard.
- 3 Select the **Cables** tab.

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

- 1 Select the cable to examine.
- 2 Click the magnifier to display an intermediary window.
- In the intermediary window, click the magnifier 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/ Cable cross-connections** or **Actions/ Display 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.

#### 4 Select the **Assets** tab.

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 magnifier to display an intermediary window.
- 3 In the intermediary window, click on the magnifier 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/ Cable cross-connections** or **Actions/ Display 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.
- 5 Select the **Traces** tab.

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

### After having launched the wizard

Run the lateral 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.

# Use the Run lateral cables wizard for the practical case.

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

- 1 Display the list of actions (**Tools/ Actions**).
- 2 Select the **Run riser cables** wizard.
- 3 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	Do not check this option.
look for ports with pin-based connectors?	
Map consecutive pins to virtual port for pin-	Do not check this option.
based devices (default is next available pin)?	
Select a project and a work order page	
Apply all changes to a project/work order?	Check this selection box.
Projects	Run lateral cables
Work orders	Select the work order proposed by the wizard.
Comments on the devices	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 Display the list of projects (**Portfolio/ Projects**).
- 2 Select the **Run lateral cables** project.
- 3 Select the **Cables** tab.
- 4 Select one of the cables just created.
- 5 Click the magnifier to display an intermediary window.
- 6 In the intermediary window, click the magnifier 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/ Cable cross-connections or Actions/ Display 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.

# **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.

# Use the Cross connect bundles wizard.

#### 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:

- Display the list of cables (Cable/ Cables).
- Display the cable to connect.
- 3 Select the **Bundles** tab.
- 4 Select the bundles to cross connect.
- Display the list of actions (**Tools/ Actions**).
- Select the **Cross connect bundles** action.

#### Information used when using the wizard



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

Table 6.5. Cross connect bundles wizard - description of fields to populate

Label displayed by the wizard	Explanations
Cross connect the bundles page	
Display available host bundles	<ul> <li>If you check this option, the wizard only displays the cable bundles whose host side is not used by any cable link.</li> <li>If you check this option, the wizard displays all the cable's bundles.</li> </ul>
	If you select a bundle whose host side is used by a cable link, the wizard will break the exist- ing cable link before creating a new one.
Display available user bundles	<ul> <li>If you check this option, the wizard only displays the cable bundles whose user side is not used by any cable link.</li> </ul>
	• 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 exist- ing cable link before creating a new one.
Select the bundles to connect	Select the cable bundles to connect.
Select label rule for the link of the selected bundle(s)	You use this label rule to populate the <b>Label</b> field ( <b>Label</b> ) of the links created at the level of the cable bundles.
Select connection side	Indicate which side of the cable you want to connect.
Connect to	<ul><li>Indicate to which component you want to connect the selected bundles:</li><li>Ports: to the ports of one or more cable devices.</li></ul>
	• Bundles: to the bundles of one or more cables.
	<ul> <li>Termination fields: to the ports of the termination-field devices that serve the location of the cable.</li> </ul>
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.

Label displayed by the wizard	Explanations
Show available host ports	<ul> <li>If you check this option, the wizard only displays the ports of the device that are not used as hosts by any cable link.</li> <li>If you check this option, the wizard dis-</li> </ul>
	plays 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	<ul> <li>If you check this option, the wizard only displays the ports of the device that are not used as users by any cable link.</li> </ul>
	<ul> <li>If you check this option, the wizard dis- plays all the device's ports.</li> </ul>
	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 the link of the selected	You use this label rule to populate the <b>Label</b>
port(s)	field ( <b>Label</b> ) 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.
Display available host bundles	<ul> <li>If you check this option, the wizard only displays the cable bundles whose host side is not used by any cable link.</li> </ul>
	<ul> <li>If you check this option, the wizard dis- plays all the cable's bundles.</li> </ul>
	If you select a bundle whose host side is used by a cable link, the wizard will break the exist- ing cable link before creating a new one.

Label displayed by the wizard	Explanations
Display available user bundles	<ul> <li>If you check this option, the wizard only displays the cable bundles whose user side is not used by any cable link.</li> </ul>
	• 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 exist- ing cable link before creating a new one.
Select label rule for destination bundle	You use this label rule to populate the <b>Label</b> field ( <b>Label</b> ) 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.
	<ul> <li>If you check this option, the wizard dis- plays all the ports.</li> </ul>
	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	<ul> <li>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.</li> </ul>
	• 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 the link of the selected port(s)	You use this label rule to populate the <b>Label</b> field ( <b>Label</b> ) of the links created at the level of the termination-field port devices.
Select a project and a work order page	

Label displayed by the wizard	Explanations
Connection comments	Value for the <b>Description</b> field ( <b>Description</b> )
	of the <b>Traces concerned by the project</b> table
	(amProjTraceOut), when the wizard creates
	a connection.
Disconnection comments	Value for the <b>Description</b> field ( <b>Description</b> )
	of the <b>Traces concerned by the project</b> table
	(amProjTraceOut), when the wizard deletes
	a connection.
Comments on the termination field connected	Value for the <b>Label</b> field ( <b>Label</b> ) of the <b>Trace</b>
during work order	operations table (amTraceOp), when the
	wizard creates a connection.
Comments on the termination field disconnec-	Value for the <b>Label</b> field ( <b>Label</b> ) of the <b>Trace</b>
ted during work order	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:

Table 6.6. Cross connect bundles wizard - created or modified data

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	

Field label	SQL name of the field	Explanations		
Label rule	LabelRule	The label rule 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 (a	mTraceOutput)			
Type	seTraceType	• To connect: if it's a connection.		
		• <b>To disconnect</b> : if it's a disconnection.		
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.		
	U	•		

Field label	SQL name of the field	Explanations	
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 (an	mTraceOp)		
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.

- 1 Display the list of projects (**Portfolio/ Projects**).
- 2 Select the project created by the wizard.
- 3 Select the **Traces** tab.

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

- 1 Select the trace output to examine.
- 2 Click the magnifier to display an intermediary window.
- 3 In the intermediary window, click on the magnifier 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 Display the list of cables (Cable/ Cables).
- 2 Select the cable that you just connected from the list of cables.
- 3 Display the list of actions (**Tools/ Actions**).
- 4 Select the Cable cross-connections or Display cable traces action.

#### 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.

# Use the Cross connect bundles wizard for the practical case.

We are going to perform 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 Display the list of locations (**Portfolio/ Locations**).
- 2 Select the **Cabled building/1st floor/Office 1** location.
- 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 **Magnifier** button.
- 6 Select the **Bundles** tab.
- 7 Select the bundle from the list.
- 8 Display the list of actions (**Tools/ Actions**).
- 9 Select the **Cross connect bundles** action.
- 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.		
Select the bundles to connect	Select the bundle.		
Select label rule for the link of the selected	Practical case - Link - Sequentially, by pairs		
bundle(s)			
Connect to	Termination fields		
Select a termination field 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 <b>Voice</b> .		
Select label rule for the link of the selected port(s)	Practical case - Port of a termination-field patch panel link		
Select a project and a work order page			
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		

Label displayed by the wizard	Value
Comments on the termination field connected	CONNECT
during work order	
Comments on the termination field disconnected	DISCONNECT
during work order	

#### Look at the result:

- 1 Display the list of projects (**Portfolio/ Projects**).
- 2 Select the **Cross-connect bundles** project.
- 3 Select the **Traces** tab.
- 4 Select the trace.
- 5 Click the **Magnifier** button.
- 6 Click the **Magnifier** button to the right of the **Trace** field.
- 7 Examine the detail of the trace output.

# **7** Viewing the traces

CHAPTER

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)
  - $\bullet \quad Cable\ bundles\ (am Cable Bundle)$
- In a more general manner, using the windows displayed by the following shortcut menus:
  - Actions/ Cable cross-connections
  - Actions/ Device cross-connections
  - Actions/ Display device traces
  - Actions/ Display cable traces

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

# **Cable cross-connections wizard**

#### **Definitions**

→ AssetCenter key terms (Cable and Circuit) [page 189]/ Cross connection [page 199].

#### **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?

#### **Prerequisites**

No prerequisites.

## Use the Cable cross-connections wizard.

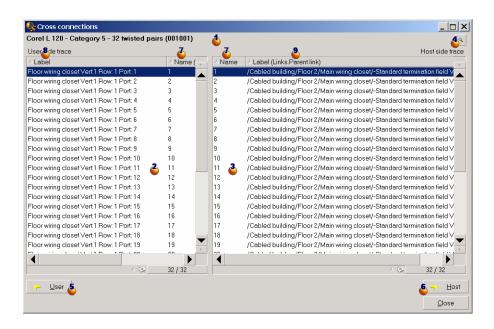
#### Launching the wizard

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

- 1 Display the list of cables (Cable/ Cables).
- 2 Select the cable in the list window, or select a field (not link) in the **Cables** table.
- 3 Display the list of actions (**Tools/ Actions**).
- 4 Select the **Cable cross-connections** wizard.

### Information used when using the wizard

Figure 7.1. Cable cross-connections wizard - browser window



- **♦** Cable or device whose **♦** and **♦** tables display the cable links.
- **₫** User cable links and devices that connect to the cable or the device **ේ**.
- **ઢ** Host cable links and devices that connect to the cable or the device **ీ**.
- **♣** Click the magnifier to display the detail of the cable or the device **♣**.
- <sup>♣</sup> Click this arrow to display the browser window for the user cable or device that corresponds to the selected link <sup>♣</sup>.
- Click this arrow to display the browser window for the host cable or device that corresponds to the selected link •.
- **♦** Cable bundle numbers **♦** (if **♦** is a cable) or device ports **♦** (if **♦** is a device).
- $\clubsuit$  Label of the user link that connects to the bundle or the port  $\clubsuit$ .
- $^{\&}$  Label of the host link that connects to the bundle or the port  $^{\&}$ .

### Data created or modified by the wizard

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

### **Device cross-connections wizard**

#### **Definitions**

→ Cross connection [page 199].

### **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 to which the device links belong (in the host or 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?

#### **Prerequisites**

No prerequisites.

### Use the Device cross-connections wizard.

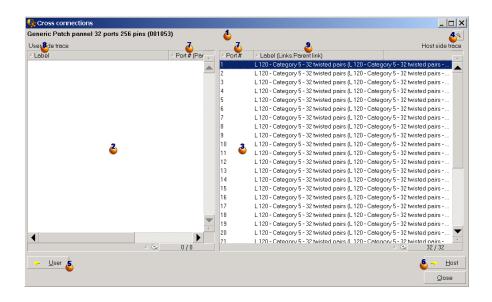
### Launching the wizard

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

- 1 Display the list of cable devices (Cable/ Cable devices).
- 2 Select the cable device in the list window, or select a field (not link) in the **Assets** table.
- 3 Display the list of actions (**Tools/ Actions**).
- 4 Select the **Device cross-connections** wizard.

### Information used when using the wizard

Figure 7.2. Device cross-connections wizard - browser window



- **♦** Cable or device whose **♦** and **♦** tables display the cable links.
- User cable links and devices that connect to the cable or the device **4**.
- ♣ Host cable links and devices that connect to the cable or the device ♣.
- lacktriangle Click this magnifier to display the detail of the cable or the device lacktriangle.
- Click this arrow to display the browser window for the user cable or device that corresponds to the selected link **\exists**.
- Click this arrow to display the browser window for the host cable or device that corresponds to the selected link **3**.
- **♦** Cable bundle numbers **♦** (if **♦** is a cable) or device ports **♦** (if **♦** is a device).
- $^{\&}$  Label of the user link that connects to the bundle or the port  $^{\&}$ .
- $^{\textcircled{3}}$  Label of the host link that connects to the bundle or the port  $^{\textcircled{4}}$ .

### Data created or modified by the wizard

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

# **Display device traces wizard**

#### **Definitions**

→ Trace [page 190].

### **Functions performed by the wizard**

The **Display device traces** 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.

### **Prerequisites**

No prerequisites.

# Use the Display device traces wizard.

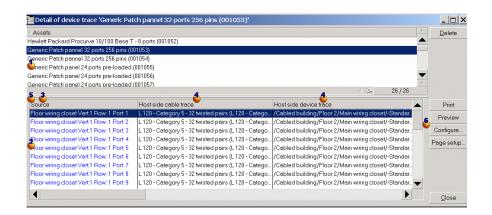
### Launching the wizard

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

- 1 Display the list of cable devices (Cable/ Cable devices).
- 2 Select the cable device in the list window, or select a field (not link) in the **Assets** table.
- 3 Display the list of actions (**Tools/ Actions**).
- 4 Select the **Display device traces** wizard.

### Information used when using the wizard

Figure 7.3. Display device traces wizard - browser window



- Select the device to examine.
- This table contains one row per trace that is directly attached to the device
- **b**, as well as one line per free port (in other words, one that is not used by any link).
- The **Source** column displays the labels of the links that are directly attached to the device  $\mathbf{\Phi}$ , as well as a label for the free ports.
- The blue labels designate the ports used by at least one link.
- The red labels designate the ports that are not used by any links.
- The xxx Host side trace columns are located to the right of the Source column. They display the labels of the traces in the host direction.
- The xxx User side trace columns are located to the left of the Source column. They display the labels of the traces in the user direction.

### Data created or modified by the wizard

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

# Display cable traces wizard

#### **Definitions**

→ Trace [page 190].

### **Functions performed by the wizard**

The **Display 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.

#### **Prerequisites**

No prerequisites.

# Use the Display cable traces wizard.

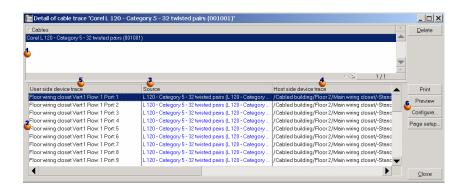
### Launching the wizard

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

- 1 Display the list of cables (**Cable/ Cables**).
- 2 Select the cable in the list window, or select a field (not link) in the **Cables** table.
- 3 Display the list of actions (**Tools/ Actions**).
- 4 Select the **Display cable traces** wizard.

### Information used when using the wizard

Figure 7.4. Display cable traces wizard - browser window



- Select the cable to examine.
- This table contains one row per trace that is directly attached to the cable
- (in other words, one that is not used by any links).
- The **Source** column displays the labels of the links that are directly attached to the cable 4, as well as a label for the free bundles.
- The blue labels designate the labels of the bundles used by at least one link.
- The red labels designate the labels of the bunles that are not used by any links.
- The xxx Host side trace columns are located to the right of the Source column. They display the labels of the traces in the host direction.
- The xxx User side trace columns are located to the left of the Source column. They display the labels of the traces in the user direction.

### Data created or modified by the wizard

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

# **8** Glossary (Cable and Circuit)

CHAPTER

# **AssetCenter key terms (Cable and Circuit)**

# **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 [page 201].

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 [page 193]

### Table in the AssetCenter database that describes these objects

Cables (amCable)

Figure 8.1. Cable with its pairs and its wires - photo



# **Trace**

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

### **Opposites**

This is opposite to Cabling path [page 209], which describes the cabling in a physical sense.

### **Color code**

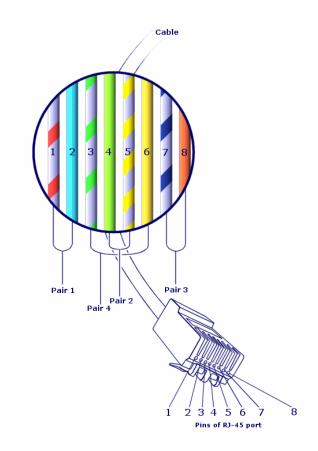
We use color codes in order find and distinguish between:

- A wire pair
- And a connector pin

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 8.2. Color code - relation between cable wires, connector pins and colors.



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

Table 8.1. Color codes - description for an RJ-45 connector

Pin num- ber	Color of the associated pair.	Colors of the tip wire	Colors of the ring wire	Function
1	orange	white/blue	orange	Data
				transmis-
				sion +
2	orange	white/orange	orange	Data
				transmis-
				sion -
3	green	white/green	green	Data re-
				ception +
4	blue	white/blue	blue	Voice
				transmis-
				sion +
5	blue	white/blue	blue	Voice
				transmis-
				sion -
6	green	white/green	green	Data re-
				ception -
7	brown	white/brown	brown	Voice re-
				ception +
8	brown	white/brown	brown	Voice re-
				ception -

### Table in the AssetCenter database that describes these objects

 $Color\,codes\,(amColorCode)$ 

### Column

Vertical axis of a termination field.

### **Opposites**

→ Line [page 200]

# **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**

- 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 an extension card or module. These are, themselves, cable devices and create cable links with other cables or cable devices.

Riser cable **Termination field** Connection Slots module Ports Termination-field device Patch cord Ports Patch panel, hub or switch Lateral cable

Figure 8.3. Cable device slots - representation

### **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.

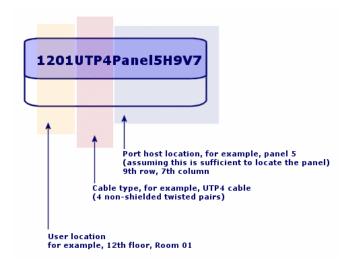
Labels are created using label rules.

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 8.4. Cable label - example



### **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
- Cable device port
- 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 [page 206]

### **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 [page 192]

# 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 [page 200]

### 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 [page 200]

#### **Port**

Slot used to transfer data into and out of a cable device.

In the Cable and Circuit module, 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

### **Example of how this works**

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**.

#### **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**

A cable type qualifies 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 terminal fields of a connector.

#### Examples:

- 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 8.5. RJ-45 connector - photo



# **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 pair or conductor type 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 correspond 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**

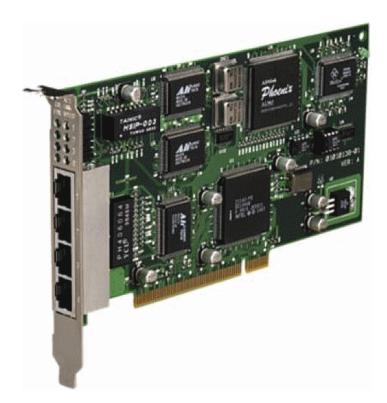
→ Host [page 199]

# **Key terms of the profession (Cable and Circuit)**

# **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 8.6. Adapter - photo



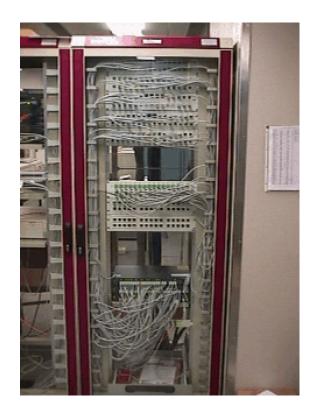




# Rack

Storage unit that contains the cable distribution devices.

Figure 8.7. Rack - photo



### **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 8.8. Punchdown block - photos



# **Chassis**

Metal frame upon which cable devices are mounted.

# **Cabling path**

Physical path of the cable, which is opposite of the trace, which provides the logical path.

### **Opposites**

→ Trace [page 190] (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.

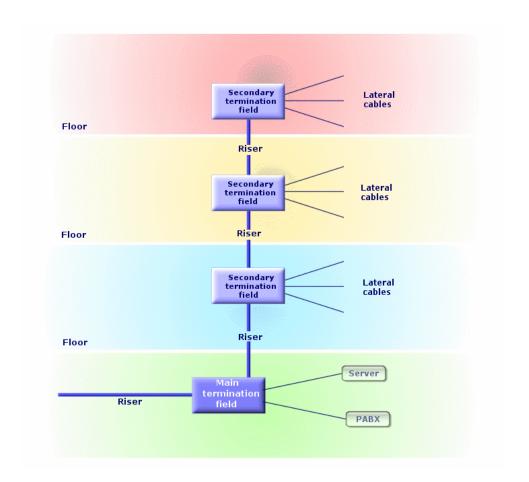


Figure 8.9. Vertical distribution of a cable network - representation

### **Opposites**

→ Lateral distribution [page 211]

# **Lateral distribution**

Distribution of the cables between the users and the termination fields.

Secondary termination field Lateral cables Floor Riser Secondary termination field Lateral cables Riser Floor Secondary termination field Lateral cables Riser Floor Server Main termination Riser PABX

Figure 8.10. Lateral distribution of a cable network - representation

### **Synonyms**

Horizontal distribution

### **Opposites**

→ Vertical distribution [page 210]

#### Hub

The hub is a box where cables come in from computers, servers, printers and other peripheral devices. It establishes communication between 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 8.11. Hub - photo



### **Synonyms**

- Concentrator
- Multiplexer

# Jumper/ Patch cord

Short cord used to establish a permanent, yet modifiable, connection between devices and termination fields.

Figure 8.12. Patch cord - photo



# 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 sides of the cables are 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 8.13. Patch panel - photo



### **Synonyms**

Interconnect

### **Wall outlet**

Device that enables a male 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 8.14. Repeater - photo



#### **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 8.15. Router - photo



### **Wallfield**

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 8.16. Switch - photo





#### **Synonyms**

PABX

# Run (a cable)

Action that consists of laying a cable.

#### **Synonyms**

Lay

# Run

Section of cable.

# **9** References (Cable and Circuit)

CHAPTER

# **Menus and tabs (Cable and Circuit)**

The Cable and Circuit module uses numerous menus.

The following menus are directly linked to the Cable and Circuit module:

Table 9.1. Menus and tabs (Cable and Circuit) - list

Sub- menu	Table that the menu accesses (label and SQL name)	Tabs dedicated to cable manage- ment	Important fields or links (outside of the dedicated tabs)	Comments	Section of the guide to consult
File n	nenu				

Sub- menu	Table that the menu accesses (label and SQL name)	Tabs dedicated to cable manage- ment	Important fields or links (outside of the dedicated tabs)	Comments	Section of the guide to consult
Activating the modules	Does not apply.	Not available	Cable and Circuit	Enables you to activate or deac- tivate the Cable and Circuit module, if your license author- izes it.	Not available
				This is the menu to use if you can't see the following menus in your application:	
Cable r					
Cables	Cables (amC-able)	All	All		Cables - manu- al creation [page 129]
Cable	Assets (amAs-	Pins/Terminals	Not available	This menu dis-	Cable devices -
devices	set)	Ports		plays records	manual cre-
		Slots		from the same table as the <b>As</b> -	ation [page 118]
		Trace		sets and	
		Connections		Batches menu, but filters the	
				records: Only	
				assets linked to a model with	
				nature <b>Cable</b>	
				<b>device</b> are dis-	
				played.	
Links	Links (amC- ableLink)	All	All		Connections - manual cre- ation [page 132]
Торо-	Topology	All	All		Topology
logy	groups (amTo-				groups
groups	pologyGroup)				[page 82]
Topo-	Topologies	All	All		Topologies
logies	(amTopology)				[page 76]

Sub- menu	Table that the menu accesses (label and SQL name)	Tabs dedicated to cable manage- ment	Important fields or links (outside of the dedicated tabs)	Comments	Section of the guide to consult
Ter- mina- tion fields	Termination fields (amTermField)	All	All		Termination fields [page 97]
Configuration of the termination fields	Termination field configura- tions (amTerm- FldConfig)	All	All		Termination- field configura- tions [page 86]
Label rules	Label rules (amLabelRule)	All	All		Label rules [page 37]
Color codes	Color codes (amColor- Code)	All	All		Color codes [page 33]
Cable duties	Cable duties (amCable-Duty)	All	All		Cable duties [page 48]
Cable con-nection types	Connection types (amCab- CnxType)	All	All		Connection types [page 45]
Pair/con- ductor types	Pair/Conduct- or types (amC- ablePairType)	All	All		Types of pairs and conductors [page 43]
Slot types	Cable/ Slot types (amSlot- Type)	All	All		Slot types [page 68]
	io menu				
Assets and batches	Assets (amAsset)	Pins/Terminals Ports Slots Trace Connections	Not available		Cable devices - manual cre- ation [page 118]

Sub- menu	Table that the menu accesses (label and SQL name)	Tabs dedicated to cable manage- ment	Important fields or links (outside of the dedicated tabs)	Comments	Section of the guide to consult
Assign- ments	Portfolio items (amPortfolio)	Not available	Not available		Cable devices - manual cre- ation [page 118]
Natures	Natures (am- Nature)	Not available	Cable device (bDevice) Create (seBasis) Management constraints (seMgtCon- straint)		Natures for cables and cable devices [page 55]
Mod- els	Models (am- Model))	Devices Slots Cables	Can be connected (blsCnxClient)		Cable device models with slots. [page 72] and Cable models [page 59]
Pro- jects	Projects (amProject)	Cables Traces	Not available		Projects and work orders as- sociated with cabling [page 52]
Loca- tions	Locations (am- Location)	User cables Host cables Termination fields	Not available		Locations [page 50]
Brands	Product brands (amBrand)	Not available	Not available		Brands of cable and cable device models [page 58]
	io menu				
Work	Work orders (am- WorkOrder)	Not available	Not available		Projects and work orders as- sociated with cabling [page 52]
Tools n	nenu				- ·

Sub- menu	Table that the menu accesses (label and SQL name)	Tabs dedicated to cable manage- ment	Important fields or links (outside of the dedicated tabs)	Comments	Section of the guide to consult
Ac- tions/ Edit	Actions (amAction)	Not available	Not available		Actions and wizards (Cable and Circuit) [page 235]
Ac- tions/ <name of ac- tion&gt;</name 	Does not apply.	Not available	Not available	Proposes the actions that are either non-contextual or whose contexts are active.  Enables you to trigger the selected action.	Actions and wizards (Cable and Circuit) [page 235]
Cus- tom- ize tool- bar	Does not apply.	Not available	Not available	Enables you to add or remove cable icons from the tool- bar.	Toolbar icons (Cable and Circuit) [page 224]
	istration menu				
Item- ized lists	Itemized lists (amItemized-List)	Not available	Not available		Itemized lists (Cable and Circuit) [page 232]
Coun- ters	Counters (am- Counter)	Not available	Not available		Counters (Cable and Circuit) [page 234]
Calcu- lated fields	Calculated fields (amCal- cField)	Not available	Not available		Calculated fields (Cable and Circuit) [page 233]

Sub- menu	Table that the menu accesses (label and SQL name)	Tabs dedicated to cable manage- ment	Important fields or links (outside of the dedicated tabs)	Comments	Section of the guide to consult
List of	Does not apply.	Not available	Not available	Enables you to	
screens				access tables	
				that are not ac-	
				cessible by the	
				present menus.	
				This task is re-	
				served for the	
				administrator	
				since these	
				tables were not	
				really designed	
				to be modified.	

## **Toolbar icons (Cable and Circuit)**

Certain toolbar icons are used exclusively for the Cable and Circuit module.

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 **Customizing the toolbar**.

# **Interface options (Cable and Circuit)**

There are no options dedicated to the Cable and Circuit module.

# **Tables (Cable and Circuit)**

The Cable and Circuit module uses numerous tables.

The following tables are directly linked to the Cable and Circuit module:

Table 9.2. Tables (Cable and Circuit) - list

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	Actions and wizards (Cable and Circuit) [page 235]
		Tools/ Actions/ <name ac-<br="" of="">tion&gt;</name>	
Portfolio items	amPortfolio	Portfolio/Portfo- lio items	Cable devices - manual creation [page 118]
Assets	amAsset	Portfolio/ Assets and Batches	Cable devices - manual creation [page 118]
Pins	amDevicePin	Administra- tion/List of screens	Cable devices - manual creation [page 118]
		Cable/ Cable devices, Pins/Terminals tab	
		Portfolio/ Assets and batches, Pins/Terminals tab	
Cables	amCable	Cable/ Cables	Cables - manual creation [page 129]
Cables concerned by the project	amProjCable	Administra- tion/List of screens	Projects and work orders associated with cabling [page 52]
		Portfolio/ Projects, <b>Cables</b> tab	
Traces concerned by the project	amProjTraceOut	Administra- tion/List of screens	Projects and work orders associated with cabling [page 52]
		Portfolio/ Projects, <b>Traces</b> tab	
Calculated fields	amCalcField	Administration/ Calculated fields	Calculated fields (Cable and Circuit) [page 233]
Color codes	amColorCode	Cable/ Color codes	Color codes [page 33]

Table label	SQL name of the table	Menu item used to access the table	Section of the guide to consult
Trace outputs	amTraceOutput	Administra- tion/List of screens	Connections - manual creation [page 132]
Counters	amCounter	Administration/ Counters	Counters (Cable and Circuit) [page 234]
Termination field configurations	amTermFldConfig	Cable/ Termination-field configurations	Termination-field configurations [page 86]
Termination field devices	amTermFld- Device	Administra- tion/List of screens	Termination fields [page 97]
		Cable/ Termination fields, <b>Devices</b> tab	
Model slots	amModelSlot	Administra- tion/List of screens	Cable device models with slots. [page 72]
		Portfolio/ Models, <b>Slots</b> tab	
Slots	amSlot	Administra- tion/List of screens	Cable devices - manual creation [page 118]
		Portfolio/ Assets and Batches, <b>Slots</b> tab	
		Cable/ Cable devices, <b>Slots</b> tab	
Color code entries	amColorDet	Administra- tion/List of screens	Color codes [page 33]
		Cable/ Color codes	
Itemized lists	amItemizedList	Administration/ Itemized lists	Itemized lists (Cable and Circuit) [page 232]
Topology steps	amTopologyDet	Administra- tion/List of screens	Topologies [page 76]
		Cable/ Topologies	

Table label	SQL name of the table	Menu item used to access the table	Section of the guide to consult
Cable bundles	amCableBundle	Administra- tion/List of screens	Cables - manual creation [page 129]
		Cable/ Cables, <b>Bundles</b> tab	
Cable duties	amCableDuty	Cable/ Cable du- ties	Cable duties [page 48]
Termination field configura- tion duties/ser-	amTermFldCfg- Duty	Administra- tion/List of screens	Termination-field configurations [page 86]
vices		Cable/ Termination-field configurations, <b>Duties</b> tab	
Topology groups	amTopology- Group	Cable/ Topology groups	Topology groups [page 82]
Trace histories	amTraceHistory	Administra- tion/List of screens	Connections - manual creation [page 132]
Work orders	amWorkOrder	Portfolio/ Work orders	Projects and work orders associated with cabling [page 52]
Links	amCableLink	Cable/ Cable links	Connections - manual creation [page 132]
Locations	amLocation	Portfolio/ Mod- els	Locations [page 50]
Connection pin mappings	amCnxPinMap	Administra- tion/List of screens Cable/ Cable connection types	Connection types [page 45]
Models	amModel	Portfolio/ Models	Cable device models with slots. [page 72] and Cable models [page 59]
Nature	amNature	Portfolio/ Natures	Natures for cables and cable devices [page 55]
Trace operations	amTraceOp	Administra- tion/List of screens	Connections - manual creation [page 132]

Table label	SQL name of the table	Menu item used to access the table	Section of the guide to consult
Pairs/Conduct- ors	amCablePair	Administra- tion/List of screens	Cables - manual creation [page 129]
		Cable/ Cables, Pairs/Conduct- ors tab	
Cable model pairs/conductors	amModelPair	Administra- tion/List of screens	Create pairs wizard [page 61]
		Portfolio/ Models, <b>Cable</b> tab	
Ports	amPort	Administra- tion/List of screens	Cable devices - manual creation [page 118]
		Portfolio/ Assets and batches, Ports tab	
		Cable/ Cable devices, <b>Ports</b> tab	
Model ports	amModelPort	Administra- tion/List of screens	Cable device models without slots. [page 63]
		Portfolio/ Models, <b>Ports</b> tab	
Projects	amProject	Portfolio/ Pro- jects	Projects and work orders associated with cabling [page 52]
Label rules	amLabelRule	Cable/ Label rules	Label rules [page 37]
Locations - Ter- mination fields relation	amRelTermLoc		Termination fields [page 97]
Models - Slot types relation	amSlotTypeMod- el		Slot types [page 68]
Termination fields	amTermField	Cable/ Termination fields	Termination fields [page 97]

Table label	SQL name of the table	Menu item used to access the table	Section of the guide to consult
Termination	amTermFldCf-	Administra-	Termination-field configurations
field configura- tion roles	gRole	tion/List of screens	[page 86]
		Cable/ Termina-	
		tion-field config-	
		urations, Roles	
		and devices tab	
Topologies	amTopology	Cable/ Topolo-	Topologies [page 76]
		gies	
Topologies in a	amTopoGroup-	Administra-	Topology groups [page 82]
group	Det	tion/List of	
		screens	
		Cable/ Topology	
		groups	
Connection	amCabCnxType	Cable/ Cable	Connection types [page 45]
types		connection types	
Pair/Conductor	amCablePair-	Cable/ Types of	Types of pairs and conductors
types	Type	pairs/conductors	[page 43]
Slot types	amSlotType	Cable/ Slot types	Slot types [page 68]

# Interdependence of tables used in cable management (Cable and Circuit)

The Cable and Circuit module 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 add a value on the fly to the itemized list that populates the **Role** field. Then you can 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 practical case 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 the Cable and Circuit module. These tables are automatically populated when you create records in the main tables.

Table 9.3. Interdependence of tables (Cable and Circuit) - table

Tal	ble label	SQL name of the table	Menu to access the table	Tables to populate first	Comments
1	Itemized lists	amItemizedList	Administration/ Itemized lists		Itemized list must first be populated before being closed by the administrat- or as users will no longer be able to create values on the fly. List of the itemized lists in the Cable and Circuit module:  Itemized lists (Cable and Cir-
					cuit) [page 232].
1	Color codes	amColorCode	Cable/ Color codes		
1	Label rules	amLabelRule	Cable/ Label rules		

Tal	ole label	SQL name of the table	Menu to access the table	Tables to populate first	Comments
1	Types of pairs and conductors	amCablePair- Type	Cable/ Types of pairs/conductors		
1	Connection types	amCabCnxType	Cable/ Cable connection types	amColorCode	
1	Cable duties	amCableDuty	Cable/ Cable du- ties		
1	Locations	amLocation	Portfolio/ Loca- tions		
1	Projects	amProject	Portfolio/ Pro- jects		
1	Work orders	amWorkOrder	Portfolio/ Work orders		
1	Nature	amNature	Portfolio/ Natures		
1	Models	amModel	Portfolio/ Models	amNature amLa- belRule amItem- izedList amColor- Code amCab- CnxType amC- ableDuty amC- ablePairType	Cable device models without slots.
1	Slot types	amSlotType	Cable/ Slot types	amModel	
1	Models	amModel	Portfolio/ Mod- els	amNature amLa- belRule amItem- izedList amColor- Code amCab- CnxType amC- ableDuty amC- ablePairType amSlotType	Cable device models with slots.
1	Topologies	amTopology	Cable/ Topologies	amCableDuty amLabelRule amItemizedList amCabCnxType amModel amC- ablePairType	
1	Topology groups	amTopology- Group	Cable/ Topology groups	amTopology	

Tal	ble label	SQL name of the table	Menu to access the table	Tables to populate first	Comments
1	Termination	amTermFldCon-	Cable/ Termina-	amCableDuty	
	field configur-	fig	tion-field config-	amLabelRule	
	ations.		urations	amItemizedList amModel	
1	Termination	amTermField	Cable/ Termina-	amModel amTermFldCon-	
1	fields	amremmeled	tion fields		
	Heids		tion neids	fig amLocation amItemizedList	
				amModel	
1	Assets	amAsset	Portfolio/ Assets	amNature amLa-	
1	Assets	amasset	and Batches	belRule amItem-	
			and Datches	izedList amMod-	
				el amCab-	
				CnxType amC-	
				ableDuty	
				amSlotType	
				amTermField	
				amLocation	
1	Cables	amCable	Cable/ Cables	amNature amLa-	
				belRule amItem-	
				izedList amMod-	
				el amColorCode	
				amCabCnxType	
				amCableDuty	
				amCablePair-	
				Type amSlot-	
				Type amLoca-	
				tion	

# **Itemized lists (Cable and Circuit)**

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 module uses the following itemized lists:

Table 9.4. Itemized lists (Cable and Circuit) - list

Itemized list identi- fier	Field populated using an itemized list (label and SQL name)	Table in which field is found (label and SQL name)
amDeviceType	Device type ( <b>DeviceType</b> )	Models (amModel))
	Device type ( <b>DeviceType</b> )	Topology steps (amTopologyDet)
amCableType	Cable type ( <b>CableType</b> )	Models (amModel))
	Cable type (CableType)	Topology steps (amTopologyDet)
amCableRole	Role (CableRole)	Cables (amCable)
	Role (CableRole)	Termination field configuration roles and devices (amTermFldCf-
		gRole)
	Role (CableRole)	Termination field devices (amTerm-
		FldDevice)
	Role (CableRole)	Topology steps (amTopologyDet)
amColor	Color code entries (amColorDet)	Color (Color)
amTipColor	Color code entries (amColorDet)	Tip color ( <b>TipColor</b> )
amRingColor	Color code entries (amColorDet)	Ring color ( <b>RingColor</b> )

To learn more about itemized lists, refer to the **Advances use** guide, chapter **Itemized lists**.

# **Calculated fields (Cable and Circuit)**

The Cable and Circuit module 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 the Cable and Circuit module:

Table 9.5. Calculated fields (Cable and Circuit) -list

Label of the cal- culated field	SQL name of the calculated field	Label and SQL name of the field that uses the calculated field	Utilization
TermField- Name	csf_sysCableTermFieldName	Termination fields (amTerm- Field)	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 <b>Create a ter-</b> <b>mination field</b> wizard, for ex- ample).

You can customize these calculated fields.

To learn more about using calculated fields, refer to the **Advanced use** guide, chapter **Calculated fields**.

To learn more about composing scripts, refer to the **Advanced use** guide, chapter **Scripts**.

To learn more about APIs, refer to the **Programmer's reference** guide.

# **Counters (Cable and Circuit)**

The Cable and Circuit module 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 the Cable and Circuit module:

Table 9.6. Counters (Cable and Circuit) - list

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	Trace histories (amTraceHis-	Name (Name)
	tory)	
amCable_CableTag	Cables (amCable)	Code (Code)

To learn more about using counters, refer to the **Administration** guide, chapter **Customizing the database**, section**Counters in field default values**.

## **Actions and wizards (Cable and Circuit)**

The Cable and Circuit module 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 the Cable and Circuit module by using a simple filter on the following fields:

- Domain (**Domain**)
- Nature (**Nature**)

The following actions are directly linked to Cable and Circuit module:

Table 9.7. Actions and wizards (Cable and Circuit) - list

Name of ac- tion	SQL name of the action	Action type	Context of the action (SQL name of the table)	Section of the guide to consult
Create	sysCableCreatePair	Wizard	amModel	Create pairs wizard
pairs				[page 61]
Create	sysCableCreatePort	Wizard	amModel	Create ports wizard
ports				[page 65]
Create slots	sysCableCreateSlot	Wizard	amModel	Create slots wizard
				[page 74]

Name of ac- tion	SQL name of the action	Action type	Context of the action (SQL name of the table)	Section of the guide to consult
Create a	sysCableCreateTermField	Wizard	amLoca-	Create a termination field
termina-	•		tion	wizard [page 99]
tion field				-1 0 -
Disconnect	sysCableDisCnxBundle	Wizard	amCable-	_
bundles	,		Bundle	
Disconnect	sysCableDisCnxPort	Wizard	amPort	
ports	,			
Duplicate	sysCableDupCloset	Wizard	amLoca-	Duplicate wiring closet
wiring	, 1		tion	wizard [page 110]
closet				
Expand ter-	sysCableExpTermField	Wizard	amTerm-	Expand termination field
mination	, 1		Field	wizard [page 104]
field				11 0 3
Hub cross-	sysCableHubCnx	Wizard		
connect	•			
(generic)				
Cross con-	sysCableIntern-	Wizard	amPort	
nect ports	alXCnxPort			
(internal)				
Display	sysCableOutCabTr	Wizard	amCable	
cable trace				
Display	sysCableOutDevTr	Wizard	amAsset	
device				
traces				
Refresh as-	sys Cable Refresh Asset Lbl	Script	amAsset	
set label				
Refresh	sysCableRefreshBundleL-	Script	amCable-	
bundle la-	bl		Bundle	
bel	0.11.0.6.1.0.11.711		0.11	
Refresh	sysCableRefreshCableLbl	Script	amCable	
cable label				
Refresh the	sysCableRefreshC-	Script	amC-	
link label	ableLinkLbl	0	ableLink	
Refresh	sysCableRefreshPairLbl	Script	amCable-	
pair/con-			Pair	
ductor la-				
bel				

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 pin/termin-	sysCableRefreshPinLbl	Script	amDevi- cePin	
al label				
Refresh port label	sysCableRefreshPortLbl	Script	amPort	
Refresh project trace	sysCableRefreshProjectTr	Script	amPro- jTraceOut	
Refresh trace his- tory	sysCableRefreshTrHist	Script	amTrace- History	
Relocate cables	sysCableRelocateCable	Wizard		
Remove cables	sysCableRemoveCab	Wizard	amCable	
Remove cables by location and roles	sysCableRemoveCabLo- cRole	Wizard		
Remove lateral cables	sysCableRemoveLateral- Cable	Wizard		
Run lateral cables	sysCableRunLateral	Wizard		Run lateral cables wizard [page 159]
Run riser cables	sysCableRunRiser	Wizard		Run riser cables wizard [page 145]
Hub cross- connect (specific)	sysCableSpecificHubX- Cnx	Wizard		
Swap a device in a termina- tion field	sysCableSwapAsset	Wizard	amAsset	
Cross-con- nect wall- field	sysCableWallCnx	Wizard		
Cross con- nect bundles	sysCableXCnxBundle	Wizard	amCable- Bundle	Cross connect bundles wizard [page 168]

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
Cross con-	sysCableXCnxPort	Wizard	amPort	
nect ports				
Transfer	sysCableXferAsset	Wizard	amAstProj-	
project as-			Desc	
sets				
Transfer	sysCableXferCable	Wizard	amProjC-	
project			able	
cables				
Relocate	sysCableXferTrace	Wizard	amPro-	
project con-			jTraceOut	
nections				
Cable	sysCableCableXCnx	Script	amCable	Cable cross-connections
cross-con-				wizard [page 180]
nections				
Device	sysCableDeviceXCnx	Script	amAsset	Device cross-connections
cross-con-				wizard [page 182]
nections				
Display	sysCableCableTrace	Script	amCable	Display cable traces wiz-
cable traces				ard [page 186]
Display	sysCableDeviceTrace	Script	amAsset	Display device traces wiz-
device				ard [page 184]
traces				

To learn more about using actions, refer to the **Advanced use** guide, chapter **Actions**.

To learn more about composing scripts, refer to the **Advanced use** guide, chapter **Scripts**.

To learn more about APIs, refer to the **Programmer's reference** guide.

You can create new actions or customize existing ones.

# Modules of the AssetCenter Server (Cable and Circuit)

There are no modules dedicated to the Cable and Circuit module.

# System data and Line-of-business data (Cable and Circuit)

AssetCenter is provided with a set of data that can be imported to a demonstration database or your own database.



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:

- **System data**: data that is indispensable in order for AssetCenter to function.
- **Line-of-business data**: basic data to insert into your production database if you find it useful.

This data is divided into functional areas.

• **Sample data**: data that is useful to familiarize yourself with AssetCenter.

#### System data specific to the Cable and Circuit module

For everything concerning the Cable and Circuit module, the **System data** contains data for the following tables:

• Actions (amAction)

Example: cabling wizards

Calculated fields (amCalcField)

The **System data** relating to the Cable and Circuit module is already included in the demonstration database installed with AssetCenter.

The **System data** specific to the Cable and Circuit module will be incorporated into your production database if you select this option when creating the database using AssetCenter Database Administrator (→ Preliminary steps [page 25]).

#### Line-of-business data for the Cable and Circuit module

Here are a few examples of **Line-of-business data** specific to the Cable and Circuit module:

- Label rules (amLabelRule)
- Color codes (amColorCode)
- Topologies (amTopology)

- Termination field configurations (amTermFldConfig)
- Models (amModel)

The Line-of-business data specific to the Cable and Circuit module are included systematically in the demonstration database installed with AssetCenter. They will be incorporated into your production database if you select this option when creating the database using AssetCenter Database Administrator (->> Preliminary steps [page 25]).

# **Reports and forms (Cable and Circuit)**

AssetCenter is provided with reports and forms. Certain are specific to the Cable and Circuit module.

In order for these reports and forms to be available in your database, you must import them from the AssetCenter Database Administrator.

#### Importing and identifying reports specific to the Cable and Circuit module

To find out how to import reports, refer to the Advanced use guide, chapter Crystal Reports, section Installing and using the reporting tool, sub-section Installing preconfigured Crystal Reports in your database.

To identify the reports specific to the Cable module, refer to the **Advanced use** guide, chapter **Crystal Reports**, section **Identifying Crystal reports specific** to a given module.

#### Importing and identifying forms specific to the Cable and Circuit module

To find out how to import forms, refer to the **Advanced use** guide, chapter **Forms**, section **Installing preconfigured forms into your working database**.

To identify the forms specific to the Cable module, refer to the **Advanced use** guide, chapter **Forms**, section **Identifying forms specific to a given module**.

## **Automatic actions (Cable and Circuit)**

To see the list of actions that are automatically executed in the background by AssetCenter, refer to the **Database structure** document.

References: Other sources of information (Cable and Circuit) [page 241].

## **APIs (Cable and Circuit)**

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: They verify that the pins of a port belong to the same cable device as the port itself.
- Triggering of certain agents on the database. Example: They duplicate 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 (Cable and Circuit)**

There are no views dedicated to the Cable and Circuit module.

To learn more about using views, refer to the **Introduction** guide, chapter **Using views**.

## Other sources of information (Cable and Circuit)

This manual includes information directly linked to the Cable and Circuit module.

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

Table 9.8. Other documentation (Cable and Circuit) -list

The document	Covers information relating to the	Format	Location in the AssetCenter installation folder
Installation	<ul> <li>Installation of As-</li> </ul>	Printed	\doc\pdf\lnstallation*.pdf
	setCenter	Online	\doc\chm\install*.chm
Core tables	<ul> <li>Location manage-</li> </ul>	Printed	\doc\pdf\CommonTables*.pdf
	ment	Online	\doc\chm\common*.chm

The document	Covers information relating to the	Format	Location in the AssetCenter installation folder
Introduction	<ul> <li>General interface</li> </ul>	Printed	\doc\pdf\UserInterface*.pdf
	of the application	Online	\doc\chm\userint*.chm
Portfolio	Management of	Printed	\doc\pdf\Portfolio*.pdf
	natures, models, assets, projects and work orders in general	Online	\doc\chm\portfol*.chm
Administration	Customization of	Printed	\doc\pdf\Administration*.pdf
	fields	Online	\doc\chm\admin*.chm
Advanced use	<ul> <li>Itemized-list</li> </ul>	Printed	\doc\pdf\AdvancedUse*.pdf
	management	Online	\doc\chm\advanced*.chm
	<ul> <li>Use of wizards</li> </ul>		
	<ul> <li>Creation of scripts</li> </ul>		
	<ul> <li>Use of calculated fields</li> </ul>		
Contextual help on fields and links  Programmer's reference	<ul> <li>Use of database fields and links</li> <li>Use of APIs</li> </ul>	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+F1.  Select the Help/Help on this field menu.  \doc\pdf\ProgrammersReference*.pdf
		Online	\doc\progref*.chm
Database structure	<ul> <li>List of the data-</li> </ul>	Text file	<ul> <li>doc\infos\database.txt</li> </ul>
	base's tables,		<ul> <li>\infos\tables.txt</li> </ul>
	fields, links and indexes	Online	\doc\chm\dbstruct*.chm
	<ul> <li>Automatic agents triggered by Asset- Center.</li> </ul>		
General online help	The functioning of the entire ap- plication	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.

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