

HP Asset Manager

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Helpdesk

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Introduction

Who is the Helpdesk module intended for?

The Asset Manager helpdesk is designed for technical support teams that are sufficiently well-structured to be able to benefit from a program that formally organizes the problem-solving cycle.

Among the most habitual users of the Helpdesk module are the:

- Technicians in charge of helpdesk calls.
- Engineers and technicians in charge of helpdesk tickets.
- Helpdesk group supervisors.
- Helpdesk department supervisors.
- IT managers.

What does the Helpdesk module do?

To make the most efficient use of your helpdesk, Asset Manager organizes the work of the technical support team, from answering help requests to the final resolution of problems, following the process in detail.

If your helpdesk team has few members or is loosely structured, you may be able to use the "Work order records". (Consult the **Portfolio** guide, chapter **Work orders and projects**).

How to use this guide

Chapter General overview

This chapter explains how the Helpdesk module is designed and how to implement it.

Read this information for an overview of Asset Manager.

Chapter Practical cases

In order to help you understand the Helpdesk module, we have created practical cases for you to execute in the Asset Manager demonstration database. Each scenario corresponds to a typical situation that occurs for the Helpdesk team. Using these practical cases, you will be able to work in most of the tables found in the Helpdesk module and use the tools that created to carry out most tasks.

Read the chapter [Practical cases](#) [page 21] to familiarize yourself with the Helpdesk module. The next part of the guide will give you systematic information on each table and each tool.

Main chapters

The core chapters of the [HP Asset Manager 5.20 - Helpdesk](#) [page 2] guide describe the main tables and tools of the Helpdesk guide:

- [Answering calls](#) [page 27]
- [Helpdesk groups](#) [page 45]
- [Problem types](#) [page 51]
- [Helpdesk tickets](#) [page 55]
- [Severities](#) [page 73]
- [Escalation schemes](#) [page 77]
- [Knowledge base](#) [page 87]
- [Decision trees](#) [page 89]
- [Tracking tools](#) [page 97]

Chapter Glossary

The terminology specific to the Helpdesk module is relatively specialized. The glossary contains most of these key terms for the Asset Manager software.

Read this glossary for an explanation of these terms.

Chapter References

This chapter contains exhaustive and systematic reference information.

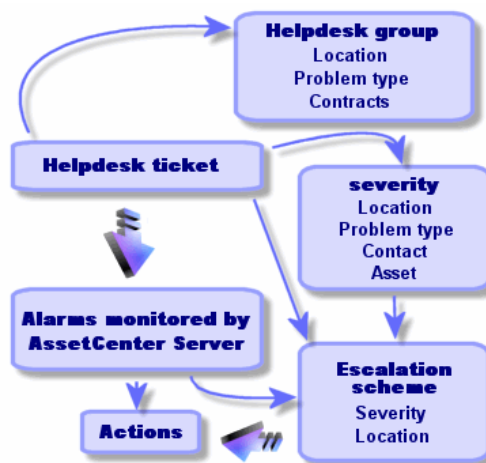
Read this chapter if you would like to learn more about all the components of Asset Manager that are used in the Helpdesk module. You can also find here advanced or supplementary information.

1 General overview

How Helpdesk works

The following diagram shows a few of the automated procedures that form the structure of the Asset Manager helpdesk:

Figure 1.1. Helpdesk module - automatic mechanisms



When a helpdesk ticket is opened:

- 1 It is assigned to a helpdesk group and to a particular member of that group. Asset Manager automatically proposes a member of the helpdesk group according to the location of the asset with a problem and the type of problem. When the DBMSs support double outer-joins, the automatic group-selection procedure goes a step further: Any contracts relating to the helpdesk groups are taken into consideration before assigning a ticket to a particular group.



Warning:

To obtain the list of DBMSs supporting double outer-joins, refer to section [DBMSs supporting double outer-joins](#) [page 110].

- 2 To automatically assign an escalation scheme to the helpdesk ticket, Asset Manager uses an intermediate concept called "severity". Asset Manager automatically assigns a severity level to the ticket, according to the type of problem, the person and the asset concerned by the ticket, and the asset location.
- 3 After establishing the severity, Asset Manager can finally determine the escalation scheme for the ticket, which depends not only on the severity, but on the asset location as well.
- 4 The escalation scheme defines the actions to trigger, depending on the progression of the helpdesk ticket's processing:
 - Certain actions are defined in the alarms monitored by Asset Manager Automated Process Manager. These alarms measure the progress on the helpdesk ticket over time.
 - Other actions are triggered when someone changes the assignment or the status of the ticket (ticket open, waiting for assignment, closed, etc.).

This is a very general overview of helpdesk management using Asset Manager. Look through the rest of this manual for further information.

Typical players and tasks of the Helpdesk module

This section uses real-life examples to help you understand how to divide the support tasks among different members of the helpdesk team. The way in which you divide up tasks depends on the size of your team and how it is structured. The division you choose will be formalized using the user profile that an Asset Manager administrator assigns to the players in the helpdesk team.

Players in the helpdesk team

Operator: employee whose major task is to record help requests. The level of technical competence of this person depends on how your organization is structured.

Person responsible for ticket (Ticket supervisor or assignee): technically competent individual. This person may answer the initial call, or may be involved in a deferred reply. They mainly work on helpdesk tickets.

Helpdesk group: group of technicians with similar areas of competence for a given group of locations and possibly involved in a given contract.

Helpdesk group supervisor: person who manages a group of helpdesk technicians. This person may be involved in the initial call or only in a deferred reply. The supervisor's main function is to oversee the activities of the helpdesk employees.

Helpdesk administrator: person who supervises all activity relating to the helpdesk.

Tasks to be performed

- Recording the problems encountered.
- Assigning the tickets.
- Solving the problems and managing the helpdesk tickets.
- Supervising the activities.
- Consulting messages and news items.

Matching players with tasks to be performed

The structure of your team and the capabilities of the individuals will determine how your players divide up the work.

Operators

- In all cases: They record requests.
- If they are technically competent: They provide first-level technical support. They create tickets that are closed immediately if the problem has been solved and open tickets if the problem must be solved later.
- If they are not technically competent they systematically create helpdesk tickets.
- If they are also ticket supervisors, they can access the helpdesk ticket details for their group.

Ticket supervisors

- If the team is not highly structured: They record help requests from the beginning, like operators.
- If the team is more structured: They never create tickets during calls. Instead they start the work on tickets that have been assigned to them by the group supervisor, the helpdesk administrator, or by themselves by working on tickets assigned to their group.
- In all cases: Helpdesk ticket supervisors mainly work on helpdesk tickets that have been assigned to them.

Helpdesk administrator

Their role is to define helpdesk groups, severities, schedules, escalation schemes, ticket features, problem types and the structure of the decision tree.

In some cases, the helpdesk administrator assigns tickets created by the operators to the competent helpdesk ticket supervisors.

Key concepts used in the Helpdesk module

This section covers the key terms applied to helpdesk management. This information is grouped into four categories:

Items that help you to manage the problem solving cycle. These elements enable you to record problems and track their resolution:

- Helpdesk tickets
- Work orders
- News items
- The knowledge base
- The decision tree

Items that help you to structure the management of the helpdesk. These items are defined when you set up your Asset Manager helpdesk, and they follow the evolution of the helpdesk group.

- Helpdesk groups
- Problem types
- Severities
- Business-day calendars
- Escalation schemes

A tool to help record problems:

- ◆ The answer-call wizard

Main roles in the helpdesk team:

- Helpdesk administrator
- Helpdesk group supervisor
- Ticket supervisor

All these concepts are described in the chapter [Glossary](#) [page 103].

We recommend that you read about these concepts before advancing further in this guide.

Steps in implementing the Helpdesk module

In order to implement the helpdesk under optimal conditions, we recommend following the steps detailed below:

1 Analyze your organization first.

In order to implement the helpdesk using Asset Manager, you must make a preliminary study of your organization: analyze the support teams and their competence, how helpdesk questions are processed, etc.

2 Configure the messaging system.

3 If necessary, modify the parameters displayed by the **Edit/ Options** menu, in the **Helpdesk** group.

4 Configure and execute Asset Manager Server.

5 After completing this analysis, you can define various items that form the basic structure of your helpdesk: helpdesk groups, escalation schemes, etc. By defining these items, you set up automatic procedures (automatically assigning escalation schemes to open helpdesk tickets, triggering actions when helpdesk tickets are opened, assigning maximum resolution dates, etc.).

2 Practical cases

Scenario 1: Problem solved during the initial call.

Step 1: You receive a call from a user.

Display the answer-call wizard using the **Helpdesk/ Answer call** menu or by pressing F2.

Step 2: You take the details of the user.

Fill in the answer call window using the following information:

The screenshot shows a software window titled "Answer call: Helpdesk ticket #TICK001002". The window contains several input fields and sections:

- Ticket TICK001002**: A progress bar and a timer showing "00:03:39".
- Person responsible for ticket:** A dropdown menu.
- Caller:** Clech, Richard
- Ticket:** (Empty field)
- New ticket:**
 - Asset:** Compaq Deskpro 4000S (DKT001001)
 - Type:** PC
 - Description:** (Empty text area)
- Escalation:** Standard Default (1 business d)
- Contact:** Clech, Richard
- Notes:** (408) 422-5502

The right side of the window is titled "Resolution" and contains:

- Questions:** A section with a question "Is the problem linked to the display?". Below it are "Help" and "History" checkboxes. A list shows "No" (selected) and "Yes".
- Solutions:** A table with columns "Resolution", "Short desc.", and "Detail". Below the table are "Rejected", "Save", and "Select" buttons.

At the bottom of the window are several buttons: "Save call", "Close the ticket", "Proceed...", "Fill out...", and "Cancel".

Step 3: Look for a solution to the problem.

To do this, click the **Description** field, enter some information, then use the right portion of the screen, labeled **Resolution**:

- 1 Ask the user the question in the **Questions** frame.
- 2 Select a response and click **Next**.
- 3 Predefined solutions to the problem appear in the **Solutions** frame. Examine these solutions by selecting the **Details** box.

Step 4: End the call.

- If a standard solution exists

Select this solution and then click the **Select** button.

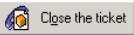
A **Closed** ticket is automatically created with the information you enter.

To view it, display the table of helpdesk tickets via the **Helpdesk/ Tickets** menu item, and select the ticket.

Use the ticket number appearing in the title bar of the answer call window to find the ticket in its table.

- If no standard solution exists

Describe the problem and its solution in the **Description** frame in the

left-hand window and click .

A **Closed** ticket is automatically created with the information you enter.

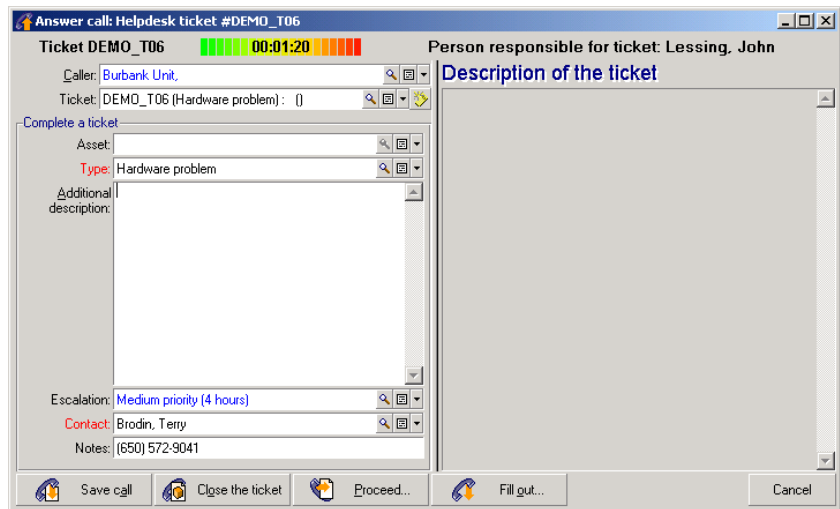
Scenario 2: Problem already saved as a helpdesk ticket.

Step 1: You receive a call from a user.

Display the answer-call wizard using the **Helpdesk/ Answer call** menu or by pressing F2.

Step 2: You save the call.

Fill in the answer call window, using the following information:



Step 3: You fill in the information on the selected ticket.

You may modify all the information in the frame on the left, entitled **Complete a ticket**.

Step 4: You end the call.

- If the problem still is not solved

Click the  button.

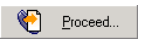
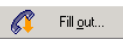
The ticket is modified according to what you entered in the left-hand box.

- If the problem is solved



Click the  button.

The ticket is modified according to what you entered in the left-hand box.
The ticket status is set to **Closed**.

- If you need to access a ticket detail

Click  or 

The ticket is modified according to what you entered in the left-hand box and you may continue to modify it.

Using the  button, in contrast to the  button, Asset Manager does not modify the **Status** or **Assigned** fields in the ticket detail.

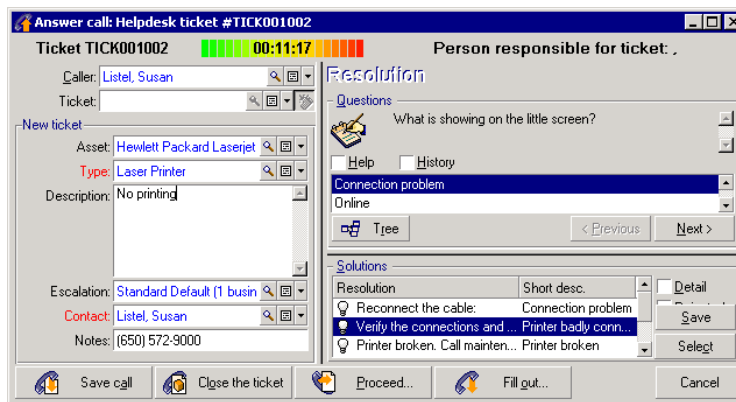
Scenario 3: Problem that must be resolved later.

Step 1: You receive a call from a user.

Display the answer-call wizard using the **Helpdesk/ Answer call** menu or by pressing F2.

Step 2: You save the call.

Fill in the answer call window, using the following information:

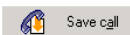


Step 3: You look for a solution to the problem.

Read the **Questions** section to examine the problem with the user. The list of questions has been created in advance in the decision tree (**Helpdesk/ Decision tree** menu).

Read the **Description** section to see if a standard solution already exists. In this example, let's imagine that the problem cannot be solved during the call.

Step 4: You create a helpdesk ticket to store the problem.

Click the  button.

Asset Manager creates a ticket with status **Assigned** or **Awaiting assignment**. If the ticket is **awaiting assignment**, it will be assigned later (from the Dashboard, displayed by the **Helpdesk/ Dashboard** menu item).

Use the ticket number appearing in the title bar of the answer call window to find the ticket created at the end of the call.

Step 5: Manage the existing helpdesk ticket.

There are several ways to display the list of helpdesk tickets currently being processed:

- **Helpdesk/ Tickets** menu


This menu displays the list of all helpdesk tickets.

The filters in the **Helpdesk tickets** specific menu let you select the tickets according to the criteria you define.


- **Helpdesk/ Dashboard** menu

This menu displays the list of helpdesk tickets whose status is neither **Closed** nor **Closed and verified**.


The Dashboard changes depending on the person who displays it: the Helpdesk administrator, Group supervisor or simply a Member of a helpdesk group.

The  **Ticket(s)** button displays the list of helpdesk tickets assigned to a technician or a group selected in the Dashboard.


To create a work order record within a helpdesk ticket:

To create a work order record within a helpdesk ticket, first display the ticket detail, then click the **Work orders** tab and use the  button to add work orders attached to the helpdesk ticket.

Close a ticket:

When the ticket has been definitively processed, display the ticket detail and click  **Close**. Asset Manager creates a history of the ticket in the **Activity** tab, modifies the **Description** field (SQL name: Description) in the **General** tab, adjusts the date of closure in the **Closure** tab and modifies the **Status** (SQL name: seStatus) of the ticket. You may also make another step by assigning the value **Closed and verified** to the **Status** field when you have verified the ticket with the user.

3 Answering calls

This chapter explains how to use Asset Manager's answer-call wizard, which is available via the **Helpdesk/ Answer call** menu item, the  icon, or the F2 keyboard key.

The answer-call wizard is a function that guides the person taking calls. (We use "call" in the broadest possible sense of the word: Telephone call, a visit by a user, a fax, etc.)

It gives you a simplified and guided view of an existing ticket or ticket being created.

It is designed to facilitate as much as possible the recording of helpdesk tickets.

Taking a call consists in:

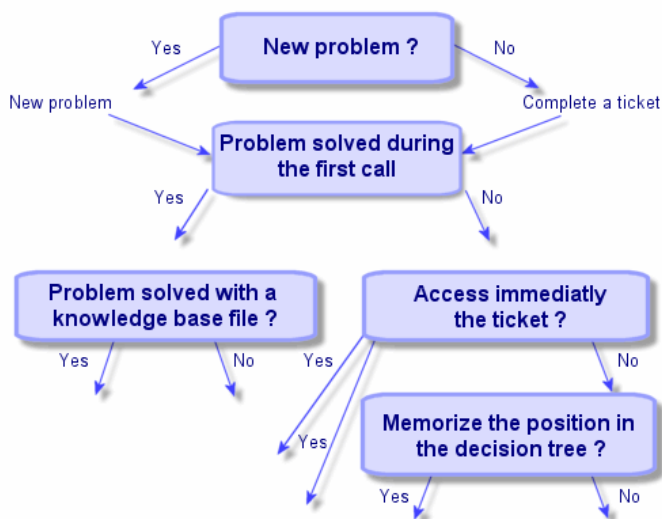
- 1 Identifying the caller.
- 2 If the call concerns a ticket that has already been created: Adding the new information to the ticket, or closing the ticket.
- 3 If the call concerns a new problem that has not yet been logged:
 - 1 Entering the relevant information.
 - 2 Creating a ticket (open or closed).

Steps in answering a call

The answer-call wizard helps you enter information about the calls received by the helpdesk team. You are not obliged to use this tool since you can create tickets without having to go through the answer-call wizard.


The following diagram gives an overview of how a call is taken:

Figure 3.1. Answer call - steps



Activating the answer-call wizard

Activate the answer-call wizard using the **Helpdesk/ Answer call** menu item,

the F2 key, or by clicking .

 **Tip:**

If answer call is already in process when you open the wizard, Asset Manager displays another answer call window and starts the answer call procedure.

Populating the answer-call screen

This section describes how to populate the answer-call screen. It covers:

- The design of the answer-call screen.
- How to enter information.
- Automatically populated fields

Design of the answer-call screen

The answer-call screen is made up of several parts:

- The status bar at the top of the screen displays general information.
- The left zone of the window must be populated. This is called the "data entry zone".
- The right zone of the window provides information on the field selected on the left. This is called the "help zone".

Status bar



Ticket number

The number, which appears on the top of the screen at the start of the call, is the number that will be given to the ticket if you decide to create it at the end of the call. In this way, it is easy to give the ticket reference to your interlocutor. Later on, the number displayed is either that of a new ticket being created, or that of a ticket to be modified.

Time-elapsed indicator

The colored indicator displays the time elapsed since the start of the call.

You can modify the parameters of the indicator using the **Edit/ Options** menu item, in the **Helpdesk** category.

There is no intelligence behind the indicator: It is for information only.

Person responsible for ticket (Ticket supervisor)


The person responsible for the ticket is that belonging to the ticket selected in the **Ticket** field in left zone of the screen, if the call concerns an existing ticket.

If a new ticket is opened, Asset Manager automatically selects the supervisor from the helpdesk group to which the ticket is assigned.

Data entry zone


Use the mouse or the keyboard's tabulation button to move through the different fields.

- If the **Ticket** field is not populated, the bottom zone shows **New problem**.
- If the **Ticket** field is populated (automatically or by hand), the bottom zone shows **Complete a ticket**.

To force the creation of a new ticket when the **Ticket** field is populated, click the  button. Click it a second time to be able to complete the selected ticket.

Help zone

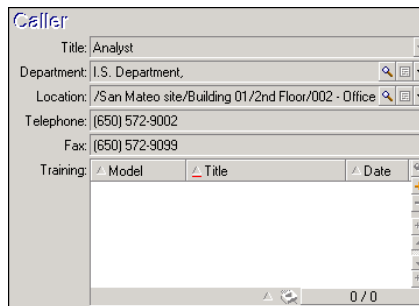
The information in the help zone is not updated immediately. An update delay has been implemented so you can move between the different fields without being slowed down by the updating process. You can modify this parameter using the **Edit/ Options** menu, in the **Helpdesk** group.

To update the information without having to wait, press F5 or click . This button only appears if there is information to be updated.

Entering information

Caller


This is the person who has called you to report a problem.



Model	Title	Date
-------	-------	------


Only populate this field in two cases:

- To add to or modify an existing ticket. (The problem reported by the caller has already given rise to the creation of a ticket.)
- To create a new ticket and to attach it to the ticket selected in the **Ticket** field. In this case, proceed as follows:

- 1 Populate the **Caller** and the **Ticket** fields.
- 2 Click .

3 Populate the fields in the **New ticket** frame.

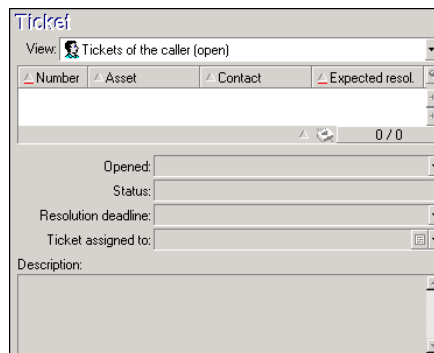
Do not populate the fields in the **New ticket** frame before the **Ticket** field. This will have the effect of deleting the information you have entered in the New ticket frame.

If you select a ticket but later realize that a new ticket needs to be created for the call, click the  button.

Warning:

In **New ticket** mode, if the **Ticket** field is populated, the new ticket will be attached to the existing ticket as a child ticket.


Click the **Ticket** field once more to go back to the status that enables you to complete the selected ticket (right side of the screen).



In the help zone, a filter enables you to display a selection of open tickets (**Status** of the ticket other than **Closed** or **Closed and verified**) or a selection of tickets regardless of their **Status**:

- **Tickets of the caller (open):** Tickets whose **Contact** field (**General** tab) has the same value as the **Caller** field in the answer-call screen. The **Status** and **Contact** fields (SQL names: seStatus and Contact) are used as filter criteria.
- **Tickets of the asset (open):** Tickets whose **Asset** field has the same value as the **Asset** field in the answer-call screen. The **Status** and **Asset** fields (SQL names: seStatus and Asset) are used as filter criteria.
- **Hot tickets (open):** Tickets whose **Hot ticket** check box (**General** tab) is checked. The **Status** and **Hot ticket** fields (SQL names: seStatus and bHot) are used as filter criteria.
- The options followed by "(All)" enable you to view all the open and closed tickets of a caller, for an asset or all hot tickets open or closed.

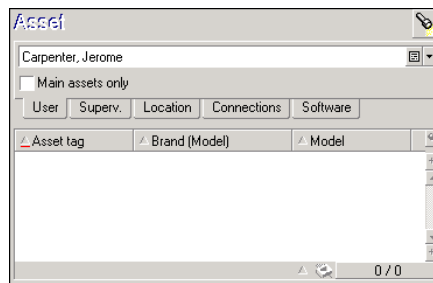
You can only consult the information that appears in the screen's help zone. The **Description** zone only presents the start of the **Description** field of the ticket.


To modify the ticket, you need to drill down to the ticket detail by clicking the magnifier button .

Click once in the help zone of the ticket to populate the **Ticket** field in the data entry zone. Wait a few moments for the data to be updated, otherwise press F5.

Asset

This field enables you to indicate which asset is concerned by the problem.



If the  icon appears in the help zone, click it to launch the search for information.

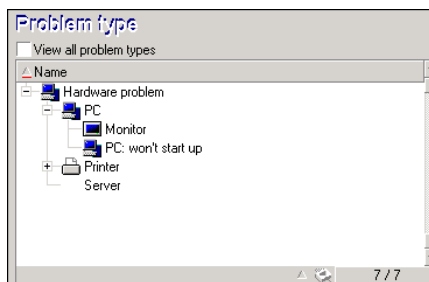
You will find several sub-tabs:

- **User** and **Superv.:** assets for which the caller is responsible or just uses.
- **Location** tab: assets located in the same place as the caller.
- The **Connected to** tab: lists all assets connected to the selected asset (by default, this is the asset selected in the data-entry zone).
- **Software** tab: **Per named user** type software licenses used by the caller.

If you check the **Main assets only** check box in the **User**, **Superv.** and **Location** sub-tabs, only those assets at the root of the tree structure are displayed.

Type

This field enables you to indicate the type of problem encountered.



By default, only the problem types associated with the model of the asset selected and its sub-models are displayed in the help zone.

If no asset is selected, no type is displayed.

If the asset is not associated with a model, all the problem types will be displayed.

If you want to force all the problem types to be displayed, check the **View all problem types** check box.

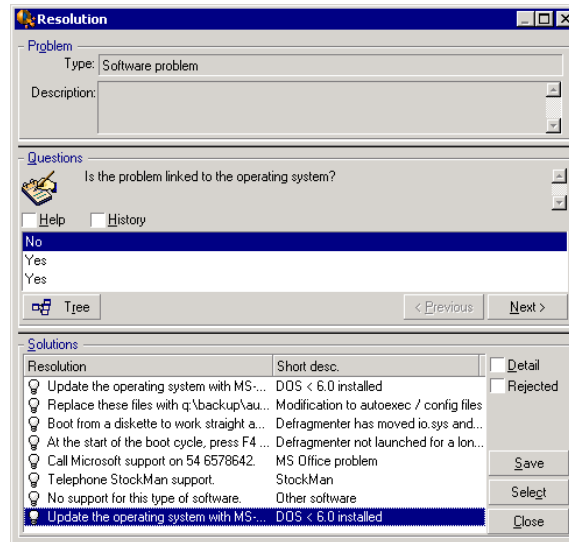
Description (or Additional description)

This field enables you to describe the problem freely. What you enter here is added to the **Description** field of the ticket.

If you are completing a ticket, Asset Manager displays a window of the previous type in the help zone. This cannot be modified.




If you are creating a new ticket, the help zone will guide you through the problem solving process:

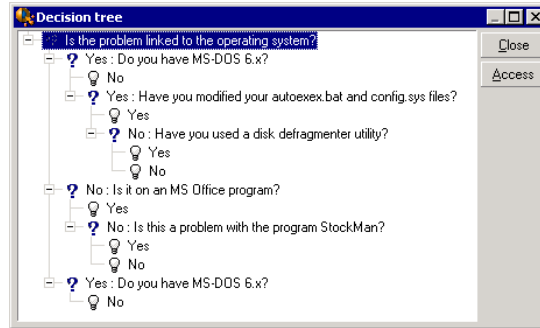


Questions

The node in the decision tree associated with the selected problem type is displayed in the zone. (The problem type must be associated with the node beforehand.) If a question is associated with this node, the answer-call wizard proposes several answers to choose from. Double-click the adequate answer to continue going through the decision tree. You can also activate the zone where the answers are (by selecting one of answers and typing the line number of the answer to select). The **Next** button has the same effect. The **Previous** button enables you to back-step through the tree. It is not possible to go further back than the starting node associated with the problem type.

Tree button

The  **Tree** button displays the decision tree and places the cursor on the node associated with the problem type.



Select a node in the tree and click the **Access** button to change the starting node of the branch on which you want to work. You will need to use this technique to avoid having to navigate through the entire branch at a given moment.

Help check box

Check this box if you want to display, after the question and between brackets, the contents of the Description tab in the question detail to the right of the question (if a description has been already entered in the decision tree).

History check box

Check this box if you want to display the list of successive questions you have already responded to in going through the decision tree.

Solutions

The Solutions area of the help zone displays the knowledge base files associated with the nodes in the branch of the decision tree, which originate from the node formed by the previous question.

Details check box

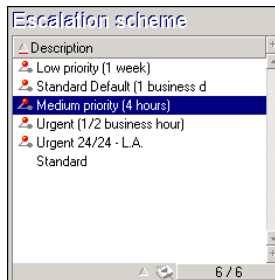
Check this box in order to display the details of the selected solution (Description and Resolution fields (SQL names: Description and Solution) at the bottom of the Resolution window.

Rejected check box

Check this box in order to continue displaying all the solutions from the starting node onwards, even if they have been eliminated due to the path taken through the tree.

Escalation

This field enables you to select the escalation scheme most adapted to the problem type concerned.



The help zone enables you to select the escalation scheme among those associated with the problem type that you selected, should the Asset Manager-proposed escalation scheme be unsuitable.

Important:

Creating escalation schemes falls within the scope of the administrator rather than a call operator. It is not possible to create an escalation scheme directly from the **Escalation** field in the answer-call screen.

Contact

Person to contact for this ticket. This item of information can be found in the **Contact** field of the **General** tab of the ticket detail.

Automatically populated fields

Person responsible for ticket (Ticket supervisor) is automatically selected

If a new ticket is opened, Asset Manager automatically selects the supervisor from the helpdesk group to which the ticket is assigned.

In order to determine to which group the ticket will be assigned, Asset Manager takes into account the problem type, the location of the asset, and potentially the contracts that involve the helpdesk groups:

- 1 Asset Manager searches the helpdesk groups associated with the problem type of the ticket.
- 2 From among these groups, Asset Manager then locates the helpdesk group associated with the location that is "nearest" to the asset: direct location, otherwise parent location, and so forth until the root location.
- 3 If the Asset Manager database engine supports double outer-joins, Asset Manager searches, from among these eligible groups, the helpdesk groups according to contracts that concern them and maintenance contracts covering the asset.

 **Warning:**

To obtain the list of DBMSs supporting double outer-joins, refer to section [DBMSs supporting double outer-joins](#) [page 110].

- 4 If no groups are found, Asset Manager repeats the first three steps starting from the problem type at the next highest level in the problem type hierarchy, until it reaches the root of the problem-type tree.
- 5 The ticket supervisor can be selected from among the helpdesk group technicians who have the least number of tickets in progress.

 **Note:**

If there is more than one eligible ticket supervisor, Asset Manager selects one at random.

Caller field is automatically populated

If the **Caller** field is empty, and you populate or modify the **Asset** field, then the **Caller** field automatically displays that asset's user.

This automatic mechanism takes precedence over automatic mechanisms linked to default values. As soon as the value of the **Caller** field has been validated, this automatic mechanism is deactivated.

Contact field is automatically populated

Asset Manager automatically proposes a person to contact:

- If the **Contact** field is empty when you populate or modify the **Caller** field, the value of the **Caller** field will be propagated to the **Contact** field.
- If the **Contact** field is empty when you populate or modify the value of the **Asset** field, the **Contact** field will display the user of the asset.

These automatic mechanisms take precedence over automatic mechanisms linked to default values.

As soon as the value of the **Contact** field has been validated, these automatic mechanisms are disabled.

Escalation field is automatically populated

Determining the severity of a ticket

In order to determine how a ticket will be processed, Asset Manager uses the notion of "severity". A ticket's severity does not appear in the answer-call screen, it appears instead in the **Tracking** tab of the ticket detail.

When you create a ticket using the answer-call wizard, Asset Manager assigns it the highest severity from among those relating to the:

- Problem type
- Contact
- Asset
- Location of the asset

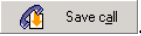

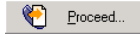

Determining the escalation scheme

Once the severity of the ticket is defined, Asset Manager will automatically propose an escalation scheme according to the following rules:

- 1 Asset Manager searches the escalation schemes associated with the severity of the ticket (Severities sub-tab of Selection tab in an escalation scheme detail).
- 2 Among the escalation schemes selected in this way, Asset Manager searches the escalation scheme associated with the "nearest" location to that of the asset: direct location, otherwise the parent location, and so on toward the root location (in the detail of an escalation scheme, **Selection** tab, **Locations** sub-tab).
- 3 If no escalation scheme is found, Asset Manager starts the first two steps again, incrementing the severity by 1 until reaching the highest severity.
- 4 If no escalation scheme is found, Asset Manager starts the first two steps again, decreasing the severity by 1 until severity 0.

Finish taking the call

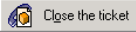
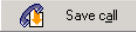
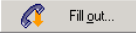
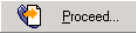
You can finish taking the call in different ways:

- By using **Select** or **Save** in the help zone displayed when the **Description** field in the data-entry zone is active.
- By using the , , , and  buttons.

In each case, the answer call window closes, and the ticket is created or updated with the information that was entered during the call.

The table below summarizes what information is copied at the level of the ticket detail when one of the five buttons is used:

Table 3.1. Answer call - value of the ticket fields according to the button used

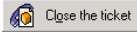
Ticket detail					
BUTTONS	STATUS FIELD (SQL name: seStatus)	GENERAL TAB DESCRIPTION FIELD (SQL name: Description)	CLOSURE TAB RESOLUTION FIELD (SQL name: Solution)	DIAGNOSTICS FIELD (SQL name: StandardSol)	CLOSED ON FIELD (SQL name: dtEnd)
Select	Closed	Description from the data-entry zone of the answer-call screen	Questions and answers from the help zone	Identifier and short description of the solution	Date closed
	Closed	Description from the data-entry zone of the answer-call screen			Date closed
Save	Assigned or In progress or Awaiting assignment	Description from the data-entry zone of the answer-call screen, followed by questions and answers from the help zone			
 Save call or  Fill out...	Assigned or In progress or Awaiting assignment	Description from the data-entry zone of the answer-call screen			
	In progress (the person in the Assigned field (SQL name: Assignee) is the person taking the call)	Description from the data-entry zone of the answer-call screen			

Problem solved during call with "Possible solution" in right-hand screen

Click **Select** to close the ticket and link it to the selected solution.

The ticket detail is not displayed. Its number is shown in the title bar of the answer-call screen. You can find the ticket using the **Helpdesk/ Tickets** menu item.


Problem solved during call without "Possible solution" in right-hand screen

Click  to close the ticket without associating it with a knowledge base file.

The ticket detail is not displayed. Its number appears in the title bar of the answer-call screen. You can find the ticket using the **Helpdesk/ Tickets** menu item.

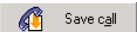
Problem not solved, save questions and responses, without immediate access to the ticket

If the problem is not solved during the call, and you want to save all the questions and responses you have exchanged with the caller, but you do not want to access the ticket for the moment:

- 1 Click **Save** to save the call and the route you have taken through the decision tree, without closing the ticket. The ticket detail is not displayed. Its number appears in the title bar of the answer-call screen. You can find the ticket using the **Helpdesk/ Tickets** menu item.
- 2 If you click  in the ticket detail, you directly access the node last reached in the decision tree during the call.

Problem not solved, discard questions and responses, without immediate access to the ticket

If the problem is not solved during the call, and you do not want to save the questions and responses you have exchanged with the caller, nor do you not want to access the ticket for the moment:

- 1 Click  to save the call without saving the route you have taken in the decision tree.
- 2 The ticket detail is not displayed. Its number appears in the title bar of the answer-call screen. You can find the ticket using the **Helpdesk/ Tickets** menu item.

Problem not solved, go to the ticket immediately

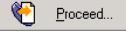
If the problem is not solved during the call, and you want to access the ticket immediately, there are two possibilities:

- Click .
- Or click .

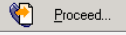
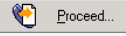
In both cases:

- The information from the call is written in the ticket detail.
- The ticket detail is displayed.

Difference between  and .

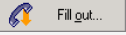

- Let's say that the person taking the call selects a ticket for which they are not the supervisor, but which falls within their area of competence. They then click . Asset Manager automatically sets the **Status** field to **In progress** and modifies the **Assigned** field in order to show the person taking the call as the assignee. This is the case, even if the ticket is already assigned to a supervisor, regardless of the status of the ticket.

Note:

The person taking the call only has the right to click the  button if their profile allows it, and if their helpdesk group is capable of resolving the problem type concerned. (The call operator's profile is in their record's **Profile** tab, located in the Employees and departments table.) If either of these two conditions is not fulfilled, the  button appears in gray. In this case, the call must be saved using the **Save call** or **Save** button in order to keep a trace of it.

- If the person taking the call clicks , the ticket detail appears. This differs from clicking  in that Asset Manager does not modify either the **Status** field or the **Assignee** field of the ticket's detail.

Note:

The person taking the call can only use the  button if their profile allows it. (The call operator's profile is in their record's **Profile** tab, located in the Employees and departments table). Otherwise, the  button is remains unavailable.

Note concerning the rights of helpdesk operators


You can define the Asset Manager database access rights of call operators:

- ◆ Via the usual user profiles specified in the **Profile** tab's **Profile** field (SQL name: Profile), located in the record details of the Employees and departments table).

Shortcut keys that can be used when taking a call

Keyboard function keys and buttons have been implemented in order to facilitate navigation between fields and between the help zone and data-entry zone:

Table 3.2. Answer call - shortcut keys

ALT + UP ARROW	If the cursor is placed in the data entry zone, it is moved over to the help zone.
ALT + LEFT ARROW	If the cursor is placed in the help zone, it is moved over to the data entry zone.
ALT + x (if the shift-lock is activated), or SHIFT + ALT + x (if the CAPS LOCK is deactivated) where "x" is a number from 1 to 8	If the cursor is placed in the data entry zone, it is moved to the xth field of the screen. The fields are numbered from 1 to 8 starting from the top. Important: You cannot use the numeric keypad.
CTRL + x, where "x" is a shortcut key (hotkey) assigned to a problem type.	Enables you to populate the Type field automatically. Can be used regardless of the position of the cursor.
F5	If the cursor is placed in the data entry zone, the help zone is refreshed immediately. If the cursor is placed in the help zone, the data entry zone is refreshed immediately using the selected information.
F6	Hides the data entry zone.
F7	Hides the help zone.
F8	Cycles between showing: the data entry zone alone, the help zone alone and both zones.
	If the cursor is placed in the data entry zone, the help zone is refreshed immediately. The icon is only displayed if there is information to be refreshed.

 **Note:**

When refreshing the answer-call screen: In order not to slow down the data-entry process, the answer-call wizard does not refresh immediately when you move from one field to another, or when you select information in the help zone. By default, the reaction time is 1 second. You can modify this parameter using the **Edit/Options** menu item, in the **Helpdesk** group.

4 Helpdesk groups

This section explains how to describe and manage the helpdesk groups with Asset Manager.

Helpdesk groups are made up of helpdesk technicians who are capable of solving similar problems for a given group of locations and who are involved with given contracts.

These groups reflect your internal organization: How you define a group depends on who solves what type of problems and at which locations, and according to which contracts.

Helpdesk groups are managed from a list available via the **Portfolio/ Groups** menu item.




Note:

Within the context of the helpdesk, employee groups are referred to as "helpdesk groups".

Structure of a helpdesk group

Helpdesk groups are organized in a hierarchy. Therefore any helpdesk group can have a parent group, defined in the Sub-group of field (SQL name: Parent), and a child group. When creating a sub-group, the competencies, locations and

contracts linked to the parent group are automatically propagated to the sub-group.

 **Warning:**

Once the sub-groups are created, if you add a location (or competence or contract) to the parent group, this location (or competence or contract) is not automatically propagated to the sub-groups.

The Assignable (SQL name: bAssignable) option (SQL name: bAssignable) determines whether or not you can assign a helpdesk ticket to this group. This makes it possible to distinguish between operational groups that process tickets and those that simply classify them.

Example

The "Los Angeles" group can contain two sub-groups corresponding to two call centers. In this case the "Los Angeles" group would just be used to structure these groups; the tickets being processed by the sub-groups.

Overview of helpdesk groups

How they work

Helpdesk groups enable you to assign a ticket to a group of technicians before assigning it to one technician in particular. You can do this manually in the detail of a ticket by populating the **Group** field (SQL name: EmplGroup) in the **Tracking** tab.

Asset Manager automatically suggests a helpdesk group when a ticket is created (when a call is being taken or when a ticket is created directly). Automatic selection is carried out by the **AmDefGroup()** API if it is used in the default value of the **Group** link (EmplGroup):

- 1 Asset Manager searches the helpdesk groups associated with the problem type of the ticket.
- 2 From among these groups, Asset Manager then locates the helpdesk group associated with the location that is "nearest" to the asset: direct location, otherwise parent location, and so forth until the root location.
- 3 If no groups are found using the previous method, and if the DBMS supports double outer-joins, Asset Manager searches the groups not associated with a location.

To obtain the list of DBMSs supporting double outer-joins, refer to section [DBMSs supporting double outer-joins](#) [page 110].

- 4 If the database engine supports double outer-joins, Asset Manager selects, from among the eligible groups, the helpdesk group according to contracts that concern them and maintenance contracts covering the asset.
To obtain the list of DBMSs supporting double outer-joins, refer to section [DBMSs supporting double outer-joins](#) [page 110].
- 5 If no groups are found, Asset Manager repeats the first three steps starting from the problem type at the next highest level in the problem type hierarchy, until it reaches the root of the problem-type tree.

Creating adequate helpdesk groups

Setting up helpdesk groups requires that you have a good working knowledge of each helpdesk technician's area of expertise. It also requires a preparatory analysis of your organization's structure and operations. To do this, you should:

- 1 Determine the locations that correspond to the coverage zones of your helpdesk teams. Example: a site, a building, a city. An office is perhaps too specific.
- 2 Determine which are the significant problem types in the hierarchy of problems. Example: "Office software". On the other hand, the sub-type Word of the "Office software" problem type is perhaps too precise if your technicians are competent on several applications.
- 3 Match the locations and the problem types to create a helpdesk group for each pair. In practice, for each problem encountered, we recommend proceeding as follows:
 - 1 Draw up a matrix, putting significant problem types on one axis and locations on the other.
 - 2 Enter the appropriate helpdesk groups, according to their areas of expertise and their zones of coverage.

It is possible that areas of expertise are not distributed in the same way from one location to another. A large site may have specialized technicians, whereas a smaller site might just have one general technician.

Example

With a DBMS supporting double outer-joins: if the problem type and location are equivalent, the contract is the determining factor for automatically assigning a helpdesk group.

Warning:

To obtain the list of DBMSs supporting double outer-joins, refer to section [DBMSs supporting double outer-joins](#) [page 110].

Let's take the following example:

- A helpdesk group called "Group1" is competent for "Problem type1" at "Location1" and linked to "Contract1".
- A helpdesk group called "Group2" is competent for "Problem type1" at "Location1" and linked to "Contract2".

Thus:

- If you want to create a helpdesk ticket for an asset covered by "Contract1", it is assigned to "Group1".
- If you want to create a helpdesk ticket for an asset covered by "Contract2", it is assigned to "Group2".

 **Note:**

If no problem type is specified for a group, the group is considered to be competent for all problem types.

If no location is specified for a group, the group is considered to be competent for all locations.

If no contract is specified for a group, the group is considered to be competence regardless of the maintenance contract covering the asset.

Defining a helpdesk group supervisor

The group supervisor has a special role in the "Asset Manager administrator/ Helpdesk administrator/ Group supervisor/ technician" hierarchy. For example, the group supervisor can view all open helpdesk tickets for the technicians in their group using the "Dashboard".

You select the group supervisor from the list of departments and employees.



To declare an employee as a helpdesk group supervisor, populate the **Supervisor** field (SQL name: Supervisor) at the top of the group detail. However, this is not sufficient to assign the supervisor access to helpdesk management functions: The Asset Manager administrator must also assign the necessary access rights using the **Profile** tab in the **Organization/ Employees and departments** link on the navigation bar.

 **Warning:**

The group supervisor is not normally considered part of the group. If you want to reverse that situation, you must add the supervisor to the list of group members. If you do not do this, news items sent to the group will not be displayed on the supervisor's screen, nor can he supervise a ticket.

Populating the composition of helpdesk groups

The **Composition** tab in the helpdesk group detail lets you select the employees that are part of the helpdesk group. These are called "Helpdesk technicians".

Use the ,  and  buttons to add, delete, display or modify the helpdesk technicians.

You can select any employee in the database as a technician.

The helpdesk technician has a special role in the "Asset Manager Administrator/ Helpdesk administrator/ Group supervisor / helpdesk technician" hierarchy. For example, the technician can view all helpdesk tickets for which they are a supervisor, or for which their group is responsible, using the "Dashboard".

Adding an employee to a "Helpdesk group" is not sufficient to give that person access to all the functions of the helpdesk. The Asset Manager administrator must also assign the necessary access rights using the **Profile** tab in the **Organization/ Employees and departments** link on the navigation bar.

An employee may belong to several different helpdesk groups.

Defining areas of expertise of helpdesk groups

The **Areas of expertise** tab in the detail of a helpdesk group enables you to select the problem types that fall within their areas of expertise.

Use the ,  and  buttons to add, delete, display or modify problem types.

Choose the problem types from the Problem types table. A problem type may be attributed to several helpdesk groups.




This tab enables Asset Manager to assign a ticket to a group automatically (during the call or when creating a ticket directly) according to the **Location** (SQL name: Location) of the asset, the **Problem type** and the maintenance contracts covering the asset.

Warning:

Contracts are involved in the automatic selection procedure of a helpdesk group only if the DBMS supports double outer-joins. to obtain a list of DBMSs supporting double outer-joins, refer to section [DBMSs supporting double outer-joins](#) [page 110].

Defining locations concerned by the helpdesk group

The **Locations** tab in the detail of helpdesk group enables you to select the locations concerned by the group.

Use the ,  and  buttons to add, delete, display or modify locations.

Choose the locations from the Locations table. A location may be attributed to several helpdesk groups.

This tab enables Asset Manager to assign a ticket to a group automatically (during the call or when creating a ticket directly) according to the **Location** of the asset, the **Problem type** and the maintenance contracts covering the asset.

Warning:

Locations are involved in the automatic selection procedure of a helpdesk group only if the DBMS supports double outer-joins. To obtain a list of DBMSs supporting double outer-joins, refer to section [DBMSs supporting double outer-joins](#) [page 110].

Defining contracts concerned by the helpdesk group

The **Contracts** tab (SQL name: Contracts) in the helpdesk group detail enables you to select contracts for which the group intervenes.

Use the ,  and  buttons to add, delete, view or modify contracts.

Contracts are selected in the Contracts table. A contract may be assigned to several helpdesk groups.

If the DBMS supports double outer-joins, the **Contracts** tab enables Asset Manager to automatically assign a helpdesk ticket to a helpdesk group (during the call answering phase or when directly creating a ticket) according to the **Location** of the asset associated with the ticket, the **Problem type** of the ticket, and the maintenance contracts covering the asset.

To obtain the list of DBMSs supporting double outer-joins, refer to section [DBMSs supporting double outer-joins](#) [page 110].

5 Problem types

This section explains how to describe and manage different problem types with Asset Manager.

A problem type is part of the description of a helpdesk ticket.

The problem types encountered by the helpdesk team are described in a hierarchical table, which can be displayed from the **Helpdesk/ Problem types** menu item.

Example of hierarchy of problem types:

- ◆ Printer problem
 - Laser printer
 - Ink jet printer

Problem types are attributed to helpdesk groups that are competent to solve this type of problem. Thus, once the caller's problem type is selected, Asset Manager can automatically propose the helpdesk group that is the best suited.

Problem types are also useful for organizing tickets and drawing up statistics.



Note:

As is the case for assets, problem types each have a unique bar-code label. By default, this label is defined by a script that uses an Asset Manager counter. You can customize this script to adapt the bar-code label to your needs.

Problem type codes and shortcuts

Code (Code) and **Hotkey** (HotKey) are both fields in the **Problem types** table (amProblemClass) that make it easier to select a problem type during a call or in the helpdesk ticket.

Code

Not only can this field be used as a reconciliation key with an external database, but it can be used in place of the **Name** field to enter and identify problem types in a helpdesk ticket or while taking a call.

This is useful if you want to select problem types using smaller IDs than what is found in the **Name** field, but larger than what is found in the **Hotkey** field.

To use the **Code** field instead of the **Name** field, you must modify certain Asset Manager parameters (explained later on).

Configuring Asset Manager to use codes in ticket details

- 1 Start Asset Manager Application Designer.
- 2 Select the **Problem types** table (amProblemClass).
- 3 Modify the table's description string (this is a string displayed to describe records in that table when they are selected by links):
 - 1 Select the **String** zone.
 - 2 Define a description string that begins with [Code].


Hotkey

The hotkey enables you to quickly select the problem type during the call (by holding down the CTRL key and the hotkey character). The hotkey is a single character and cannot be used directly in the detail of a ticket. It is made redundant by the code but has been retained in order to maintain functional compatibility with Asset Manager 2.0.

Associating a severity to a problem type

Asset Manager enables you to associate a severity level with each problem type. This severity enables you to decide the priority with which tickets should be processed.

You can associate a severity level with a problem type as follows:

- From the problem type detail: Simply populate the **Severity** field (SQL name: Severity) in the **General** tab of the problem type detail.
- From the severity detail: Click  in the **Problem types** sub-tab of the **Selection** tab in the severity detail to associate a problem type with the severity.

To determine the severity of a ticket, Asset Manager compares the severity of the problem type with that of the asset, the location of the asset and the user of the asset: The highest severity is the one which is used.

Link between the problem type and the decision tree

The **Question** field (SQL name: DecTreeNode) in the **General** tab of the problem type detail enables you to associate the problem type with a question in the decision tree.

Thus, when you use the decision tree during a call, Asset Manager directly displays the question associated with the problem type you have selected. This saves you from having to go through the decision tree from root level.

A decision tree question may be associated with several problem types.

A problem type may only be associated with one single question.

Link between a problem type and a model

The **Model** field (SQL name: Model) in the **General** tab of the problem type detail enables you to associate the problem type with an asset model.

The value of this field is used when taking the call: Once the asset is selected, the answer-call wizard first displays only the problem types associated to the model.

A model may be associated with several problem types.

A problem type may only be associated with one single model.

Groups with expertise on a problem type

The **Groups** tab in a problem type detail enables you to select the groups with expertise in solving a problem type.




This information is used when creating helpdesk tickets in order to determine which group will be attributed the ticket by default:

Asset Manager automatically suggests a helpdesk group when a ticket is created (when a call is being taken or when a ticket is created directly). Automatic selection is carried out as follows:

- 1 Asset Manager searches the helpdesk groups associated with the problem type of the ticket.
- 2 From among these groups, Asset Manager then locates the helpdesk group associated with the location that is "nearest" to the asset: direct location, otherwise parent location, and so forth until the root location.
- 3 If the Asset Manager database engine supports double outer-joins, Asset Manager selects, from among the eligible groups, the helpdesk groups according to contracts that concern them and maintenance contracts covering the asset.

To obtain the list of DBMSs supporting double outer-joins, refer to section [DBMSs supporting double outer-joins](#) [page 110].

- 4 Note: If no groups are found, Asset Manager repeats the first three steps starting from the problem type at the next highest level in the problem type hierarchy, until it reaches the root of the problem-type tree.

Use the ,  and  buttons to add, delete, display or modify groups.

The groups are selected in the table of groups. A helpdesk group may be attributed to several problem types.

6 Helpdesk tickets

This section explains how to describe and manage helpdesk tickets with Asset Manager.

A helpdesk ticket enables you to describe a problem and track its resolution. You can create it directly via the **Helpdesk/ Tickets** menu item, or using the answer-call wizard, which enables you to create a ticket quickly and with assistance.

When you use the answer-call wizard to create a helpdesk ticket, there are two possibilities:

- The problem is solved during the call: A helpdesk ticket is created with the Closed status. It only serves to record the call.
- The problem requires a deferred solution: A helpdesk ticket is created to keep track of the problem and manage its resolution. The ticket is assigned to a helpdesk group and/or to a ticket supervisor, who will find the helpdesk ticket in the list of tickets assigned to them.

Status of a helpdesk ticket

The status of a helpdesk ticket is defined in the **Status** field (SQL name: seStatus) at the top of the ticket detail window. The value for this field is selected in an itemized list (you cannot modify the values in this list). In some cases, a value is assigned automatically to this field.

The **Status** field (SQL name: seStatus) is sequenced: The values listed below appear in their hierarchical order. You may therefore use comparison operators in query filters on the table of tickets.

For example: **Closed and verified** > **Closed**.

Awaiting assignment

This is the default value for a ticket.

Assigned

This value is attributed as soon as the **Assigned** field (SQL name: Assignee) field showing the name of the ticket supervisor is populated. It is not possible to manually attribute this value if the field is not populated.



In progress

This value needs to be attributed manually. It is independent of the values of the other fields in the ticket.

Closed

Indicates that the problem has been fully dealt with.

This value is assigned automatically when the ticket is closed in one of the following ways:

- Creating a ticket history whose **Nature** field (SQL name: Nature) is set to **Closure** via the  **Close** button in the ticket detail.
- Selecting a solution in the resolution screen.
- Pressing the  **Close the ticket** button in the answer-call screen.

You can also manually select this value.

When this value is assigned, the **Closed on** field (SQL name: dtEnd) in the ticket's **Closure** tab is populated automatically.

Closed and verified

This value needs to be attributed manually. It is independent of the values of the other fields in the ticket. This value indicates that the problem has not only been fully processed, but also verified by a member of the helpdesk team or the user.

Assigning a helpdesk ticket

Helpdesk tickets are generally assigned to a helpdesk group and to a ticket supervisor who is part of the group.

The names of the group and ticket supervisor handling the ticket are displayed in the **Assignment** frame of the **Tracking** tab of the helpdesk ticket detail.

Group (SQL name: EmplGroup)

If you have populated the **Type** field (**General** tab) and the **Asset** field (SQL name: Asset), Asset Manager automatically suggests a helpdesk group when a ticket is created (when a call is being taken or when a ticket is created directly). Automatic selection is carried out as follows:

- 1 Asset Manager searches the helpdesk groups associated with the problem type of the ticket.
- 2 From among these groups, Asset Manager then locates the helpdesk group associated with the location that is "nearest" to the asset: direct location, otherwise parent location, and so forth until the root location.
- 3 If the Asset Manager database engine supports double outer-joins, Asset Manager searches, from among the eligible groups, the helpdesk groups according to contracts that concern them and maintenance contracts covering the asset.

To obtain the list of DBMSs supporting double outer-joins, refer to section [DBMSs supporting double outer-joins](#) [page 110].

- 4 If no groups are found, Asset Manager repeats the first three steps starting from the problem type at the next highest level in the problem type hierarchy, until it reaches the root of the problem-type tree.

Assigned (SQL name: Assignee)

The ticket supervisor is responsible for the ticket.

When you choose a group, the people who can be ticket supervisors are the technicians in the group and its sub-groups.

If the helpdesk group is not specified, Asset Manager proposes helpdesk technicians from all groups.

By default, if the **Group** field is populated, Asset Manager automatically designates the ticket supervisor from among the members of the helpdesk group who have the least number of tickets in progress.

Escalating a helpdesk ticket

Asset Manager enables you to associate an escalation scheme with each helpdesk ticket.

To automatically determine the appropriate escalation scheme, Asset Manager uses an intermediate concept called "severity".

The severity and the escalation scheme associated with a helpdesk ticket are indicated in the **Tracking** tab of the ticket detail.

Severity (SQL name: Severity)

By default, when a ticket is created, and for as long as you do not modify manually the value of this field, Asset Manager automatically gives you the choice of the highest severity from those of:

- The problem type of the ticket (**General** tab)
- The assets selected in the ticket (basic information)
- The location of the asset selected in the ticket (basic information)
- The contract of the ticket (**General** tab)

You can "force" the value of this field manually. In this case, Asset Manager will no longer give you a value automatically.

Escalation (SQL name: EscalScheme)

By default, when a ticket is created, and for as long as you do not modify manually the value of this field, Asset Manager automatically gives you the choice of the best suited escalation scheme according to the following criteria:

- 1 Asset Manager searches the escalation schemes associated with the severity of the ticket (**Severities** sub-tab of **Selection** tab in an escalation scheme detail).
- 2 Among the escalation schemes selected in this way, Asset Manager searches the escalation scheme associated with the "nearest" location to that of the asset: direct location, otherwise the parent location, and so on toward the root location (**Locations** sub-tab of **Selection** tab in an escalation scheme detail).
- 3 If no escalation scheme is found, Asset Manager starts the first two steps again incrementing the severity by 1 until reaching the highest severity.
- 4 If no escalation scheme is found, Asset Manager starts the first two steps again decreasing the severity by 1 until severity 0.

Expected resolution date


This is the deadline by which you want the ticket to be closed. It is defined in the **Expected resol.** field (SQL name: dtResolLimit) in the **Tracking** tab of the ticket detail.

This expected resolution date is used by Asset Manager Automated Process Manager to automatically control deadlines. These controls may trigger actions.


By default, this date is automatically calculated according to the following rules:

- When you select the escalation scheme, the resolution time defined at the level of the escalation scheme is added to the date and time of the ticket's creation.
- Asset Manager takes into account the calendar of business days in the escalation scheme.
- If there are any suspensions whose **Freeze all the escalation scheme** check box (SQL name: seSuspMode) in the **Suspend** tab is selected, the expected resolution date is postponed according to the total amount of suspension time.


To force (override) this value:


- 1 Click the  button.
- 2 Then click **Modify**.
- 3 Enter a required date.
- 4 Click **Modify** again.

To return to the automatic calculation mode:

- 1 Click again on the  button.
- 2 Then click **Modify**.



Note:


The closed padlock button, , makes it impossible to modify the expected date of resolution by hand. Creating, modifying, deleting the suspension with the **Freeze all the escalation scheme** option cleared recalculates the expected resolution date.

The open padlock  button authorizes modification of the expected resolution date by hand but no automatic mechanism recalculates the field.


Work orders made for a helpdesk ticket

The work orders you create from the **Work orders** tab are identical to those created using the **Portfolio/ Work orders** menu item. You can also view them from the list of work orders displayed by this menu item.

Use the  and  buttons to add, view or modify the work orders attached to the helpdesk ticket.


Use the  button to delete the link between the work order record and the helpdesk ticket.

Warning:

When you use the  button, only the link to the work order record is deleted. The work order record itself remains in the work orders table. If you want to delete it, you must do so from the **Portfolio/ Work orders** menu item.

Linked tickets

The **Linked tickets** tab displays the list of tickets that have a link to the current ticket. Linked tickets can be found in one of three tabs, depending on the nature of the link:

- **Sub-tickets:** Tickets directly linked to the current ticket (one level lower than the current ticket in the hierarchy of tickets) appear here. You can create a sub-ticket, either using the **Helpdesk tickets/ Add sub-ticket** menu item, or using the  Sub-tick. button in a ticket detail, or in the answer-call screen.

Note:

The **Helpdesk tickets/ Add sub-ticket** menu item is only available if a helpdesk ticket is being displayed.

- **Asset tickets:** Tickets concerning the asset in the current ticket appear here. This enables you to see if an asset has reoccurring problems and how these problems have been solved.
- **Similar problems:** Tickets having the same problem **Type** appear here. This enables you to find which solutions have been found to similar problems.

Taking notes on a helpdesk ticket

You can enter notes to complement the description of a helpdesk ticket:

- In the ticket detail.
- In the detail of the histories associated with the ticket.

In the ticket detail

You can take notes in the following fields:

- **Description** (SQL name: Description) in the **General** tab of the ticket detail.
- **Resolution** (SQL name: Solution) in the **Closure** tab of the ticket detail.

The **Description** field in the **General** tab is populated automatically by:

- The contents of the **Description** field for the ticket histories whose nature is set to "Incoming call", "Outgoing call" or "Suspension" when they are created. These slips appear in the **Activity** tab of the ticket detail.



Changes or deletions to ticket histories are not reflected in this field.

- The contents of the **Description** field entered in the call answering phase.
- The **Description** field may also include history of questions, answers and solutions selected when browsing the decision tree in the call answering phase, or from the helpdesk ticket detail. To do this, simply click the **Save** button to the right of the **Solutions** section, during the call answering phase or from the ticket detail.
- Finally, this field also shows the closing of the ticket.

The **Resolution** field in the **Closure** tab is populated automatically with the contents of the **Description** field of ticket histories whose nature field was set to "Closure" when they were created.

In the ticket history detail










You can enter additional information in the **Description** fields of the details of the ticket histories associated with the file. These fields are located in the:

- **General** tab of the detail of an incoming or outgoing call.
- **Close** tab of a closure slip.
- **Suspend** tab of a suspension slip.

Buttons used in processing helpdesk tickets

On the right side of the ticket detail appear a number of icons that help in processing tickets:

Table 6.1. Helpdesk tickets - buttons in the records detail

	<p>Click this icon to add a ticket history whose nature is Incoming call in the Activity tab. This enables you to keep a trace of the calls received by the helpdesk team.</p> <p>The Description field (SQL name: Description) in General tab of the helpdesk ticket is completed by information from the incoming call slip.</p>
	<p>Click this icon to add a ticket history whose nature is Outgoing call in the Activity tab. This enables you to keep a trace of the calls made by the helpdesk team.</p> <p>The Description field in General tab of the helpdesk ticket is completed by information from the outgoing call slip.</p>
	<p>Click this icon to add a work order to the ticket. This appears in the Work orders tab of the ticket details and in the list of work orders (Portfolio/ Work orders menu item).</p>
	<p>Click this button to create a sub-tab ticket attached to the ticket.</p>
	<p>Click this button to close the ticket. This creates a Closure-type ticket history in the Activity tab of the ticket. The Closed on field in the Closure tab and the Status field (SQL name: seStatus) are also updated.</p> <p>The Resolution field (SQL name: Solution) in the Closure tab of helpdesk ticket is completed by the Description in the closure slip.</p> <p>The Description field in the General tab of the detail of the ticket also mentions the closure of the ticket.</p>
	<p>When you are a member of a helpdesk group, this button is activated if the ticket is not assigned to you. It enables you to assign the ticket to yourself. No ticket history is created.</p>
	<p>When you are a member of a helpdesk group, this button is activated if the ticket is assigned to you. It enables you to unassign the ticket. No ticket history is created. The status of the ticket changes to Awaiting assignment.</p>
	<p>Click this button to add a Suspension ticket history to the Activity tab. This enables you to declare that you are waiting for a piece of information before being able to continue processing the ticket.</p> <p>The Description field in the General tab and Tracking tab of the helpdesk ticket is completed by information from the suspension slip.</p>
	<p>Click this button to end the suspension.</p> <p>This button only appears if the ticket is suspended.</p>



Click this button to access the knowledge base. Asset Manager places you on the node in the decision tree associated with the ticket's problem type or on the current node the last time you clicked the **Save** button in the resolution screen.

Refer to the section describing the process of taking calls for further information on how the resolution screen works.







Click this button to check a previously closed helpdesk ticket.




Two cases may arise depending on the ticket status:

- If the ticket is closed, Asset Manager sets the ticket status to **Closed and verified**.
- If the ticket is not closed, Asset Manager first displays a ticket closing screen. Once the ticket is closed, its status is set to **Closed and verified**.

Activities linked to processing the ticket

The **Activity** tab in the detail of a ticket contains ticket histories linked to the ticket.

The ticket histories are created automatically if you use one of the buttons to the right of the ticket screen: , , , .

You can also use the ,  and  buttons to add, delete, view or modify the ticket histories.

Nature of ticket histories

There may be several types of ticket histories:

- "Incoming call": Describes a call from a user. When a support technician modifies or creates a helpdesk ticket via the answer-call wizard, a ticket history whose nature is "Incoming call" is created.
- "Outgoing call": These are calls initiated by the helpdesk group handling the ticket.
- "Closure": A helpdesk ticket is closed when its processing is complete (problem solved, obsolete problems, etc.).
- "Suspension": You suspend a helpdesk ticket when you must stop working on it, e.g. while waiting for information from the user.
- Any other nature that you define yourself: In this case, there are no automated procedures linked to the existence of ticket histories of this nature.





Timing a ticket history

Starting a ticket history

The **Start** field (SQL name: dtStart) at the top of the ticket history detail indicates the time when the slip was created.

If the incoming call slip was created in the call answering phase, this field displays the time when the call answering phase began.

Duration (SQL name: tsProcessTime)

The duration is calculated automatically between the time when the ticket history appears on the screen (after clicking the , , , or  button) and the time when it is validated by clicking the **Add** button.

You can change the value of this duration.

To pause or resume the timing for the duration, click the  button.


Suspending a helpdesk ticket

You suspend a helpdesk ticket when you must stop working on it. This happens, for example, when you are waiting for more information from the user.

This section provides the following information:

- Suspending a helpdesk ticket.
- The impact of suspending a ticket.
- How to modify a suspension item.
- How to end the suspension.
- Multiple suspensions.

How to suspend a helpdesk ticket


To suspend a ticket, display its detail and click the  button. A suspension slip is proposed. Once this is validated, it is created in the **Activity** tab.

Specify in the **Type** field (SQL name: seSuspLimitType) how the planned end of suspension date is set:

- **Date** defines an end of suspension date. You must populate the **Deadline** field (SQL name: dtSuspLimit).

- **Duration** defines the duration (in days) before the end of suspension. You must populate the field that appears to the right of the **Type** field.

The screenshot shows a form titled "End of suspension". It has two main sections: "Type" and "Deadline". The "Type" section has a dropdown menu currently showing "Duration" and a text input field to its right containing the number "30". The "Deadline" section has a text input field that is currently empty.

- **Manual** indicates that the end of the suspension must be defined manually using the  **Resume** button.
- **Next business day**, **Next business week** and **Next business month** indicate that the suspension will terminate the next working day, working week, or working month following the suspension date, respectively.

 **Note:**

You cannot select one of the last three values if no business day calendar is associated with the ticket's escalation scheme.

You can also populate the **Suspension type** field (SuspType): For example, you could do this to differentiate a suspension due to a customer from a suspension due to your company's working hours. This field is populated using the **amSuspType** custom itemized list.

 **Note:**

The **Deadline** and **Reason** fields (SQL names: dtSusplimit and SuspReason) in the **Tracking** tab of the ticket detail are automatically populated using the information from the suspension slip. These fields cannot be populated by hand. The **Deadline** date sets a limit on the waiting period for an item that is holding up progress. The time and date in the **Reason** fields correspond to the creation of the suspension slip.


Impact of suspending a ticket

Freezing the escalation scheme alarms

When you freeze a helpdesk ticket, you suspend the ticket as long as the **Freeze all the escalation scheme** option (SQL name: seSuspMode) in the suspension slip is checked.



When a ticket is suspended and the **Freeze all the escalation scheme** option in the detail of the suspension is checked:

- Alarms defined in the **Alarms** tab of the escalation scheme are not triggered for as long as the date specified in the **Deadline** field (SQL name:

dtSuspLimit) of the suspended ticket is not exceeded. If the suspension **Type** (SQL name: seSuspLimitType) is set to **Manual**, no alarms are triggered until a user clicks .

- Alarms defined in the **Alarms** tab of the escalation scheme are postponed according to the duration of the suspension period. Asset Manager Automated Process Manager will trigger them the next time they come up, if justified to do so by the status of the ticket.

When a ticket is suspended and the **Freeze all the escalation scheme** option in suspension detail is not checked:


- Alarms defined in the **Alarms** tab of the escalation scheme are not triggered for as long as the **Deadline** defined in the suspension slip is not exceeded. If the suspension **Type** (SQL name: seSuspLimitType) is set to **Manual**, no alarms are triggered until a user clicks .
- When checks are made after the date defined in the **Deadline** field, or after clicking , Asset Manager Server triggers those alarms that would have been triggered during the suspension period if this is still justified by the status of the ticket.

Triggering an action at the end of a suspension period

If the ticket is still suspended and the **Deadline** field in the suspension slip is overrun, Asset Manager Automated Process Manager triggers the action defined in the suspension slip.

Postponing the Expected resol. date (SQL name: dtResolLimit) for the ticket (Tracking tab in the ticket)


The **Expected resol.** date of the ticket is postponed according to the duration of the suspension period if:

- The suspension **Type** is not set to **Manual**.
- The Freeze all the escalation scheme check box of the suspension slip is checked.
- The padlock button to the right of **Expected resol.** field of the ticket appears as unlocked .

The length of the suspension is calculated from the time when the suspension slip is created or modified. It is obtained by calculating the difference between the date specified in the **Deadline** field of the suspension slip and value of the creation or modification date of the suspension slip. The calculation of the suspension duration takes into account the working periods as defined in the calendar attached to the escalation scheme.





Note:

If the suspension **Type** is set to **Manual**, the **Expected resol.** date is only postponed to the end of the suspension. But this is only true if the Freeze all the escalation scheme check box in the suspension slip is checked, and if the button to the right of the **Expected resol.** field in the ticket is shown as .


Modifying a suspension item

Modifying a suspension slip

You may modify a suspension slip after its creation in two ways:

- By clicking the magnifier  button to the right of the **Reason** field (SQL name: SuspReason) in the **Tracking** tab of the ticket detail.
- By selecting the suspension slip in the **Activity** tab of the ticket by clicking the magnifier  button.


If you modify a suspension slip, Asset Manager modifies, if necessary:

- The total duration of the suspension period of the ticket.
- The **Expected resol.** date of the ticket, if the padlock button to the right of this field appears as locked . (For example, this recalculation can be performed if you modify the deadline of the suspension slip.)


If you modify the calendar attached to the escalation scheme


Modifications made to the specified working periods do not affect those suspension times already calculated in the tickets. The new version of the calendar is taken into account for all calculations made after its modification. You cannot therefore backdate calculations, but only update a calendar for future periods.

If you modify the escalation scheme


If the padlock button to the right of the **Expected resol.** field appears as locked, , Asset Manager recalculates, if necessary, the **Expected resol.** of the ticket. It will also then recalculate the total time that the ticket is frozen, taking into account the new calendar and the new alarms in the escalation scheme.

If you freeze or unfreeze the escalation scheme in the suspension slip

- If you uncheck the **Freeze all the escalation scheme** option (SQL name: seSuspMode), and if the padlock button to the right of the **Expected resol.** field appears as locked , Asset Manager recalculates, if necessary, the **Expected resol.** date of the ticket. It also recalculates the trigger dates of alarms, taking into account the time during which the ticket has been frozen.

- If you check the **Freeze all the escalation scheme** option, and if the padlock button to the right of the **Expected resol.** field appears as locked , Asset Manager recalculates, if necessary, the **Expected resol.** date of the ticket. It also recalculates the trigger dates of alarms, taking into account the time during which the ticket will be frozen.


Ending the suspension

To end the suspension, click the  button.


Impact on the helpdesk ticket

The **Deadline** and **Reason** (SQL names: dtSuspLimit and SuspReason) fields in the **Tracking** tab are reset, but the suspension slip remains in the **Activity** tab.

The **Expected resol.** field of the ticket is recalculated according to the real duration of the suspension if:

- The Freeze all the escalation scheme check box of the suspension slip is checked.
- The padlock button to the right of **Expected resol.** field of the ticket appears as locked .

Example:

- 1 On Monday, you suspend the ticket with the following parameters: Freeze all the escalation scheme  until Thursday: The **Expected resol.** date of the ticket is postponed 3 days.
- 2 On Tuesday, you end the suspension. Thus, the real duration of the suspension is only one day. Also, the **Expected resol.** of the ticket is reduced by 2 days.

Impact on verification of escalation scheme alarms

Asset Manager Automated Process Manager takes into consideration the alarms as they appear in the escalation scheme at the time the check is performed. Only those alarms not yet triggered are checked.

If the **Freeze all the escalation scheme** check box (SQL name: seSuspMode) in the suspension detail was checked:

- The periods during which the ticket was actually frozen are taken into account.
- The alarms defined in the **Alarms** tab in the escalation scheme are shifted by the actual duration of the suspension. Asset Manager Automated Process Manager will trigger them at their new deadline, if still warranted by the ticket's status.

If the **Freeze all the escalation scheme** check box (SQL name: seSuspMode) in the suspension detail was not checked:

- ◆ For controls performed after the date in the field **Deadline** (SQL name: dtSuspLimit), Asset Manager Automated Process Manager triggers the alarms that may have been triggered during the suspension period, if still warranted by the ticket's status.

Multiple suspensions

If several suspension slips are created, Asset Manager calculates the total duration of the freeze. It takes into account the suspension slips for which the Freeze all the escalation scheme check box is checked.

This total duration of the freeze is taken into account:

- When calculating the **Expected resol.** date (SQL name: dtResolLimit) for the ticket when it is calculated automatically.
- When checking the alarms to trigger.

Closing a helpdesk ticket


This section explains how to close a helpdesk ticket. It highlights several methods you can use to close a ticket, as well as describes the closure slips.

Closing a helpdesk ticket

Using the  Close button in the ticket detail

Method

In the ticket detail:

- 1 Click  Close.
- 2 Populate the closure slip.
- 3 Click **Add**, then **Modify** to validate.

Impact on the fields in the ticket detail

A "Close" type ticket history is created in the **Activity** tab of the ticket detail.

In the **General** tab of the ticket detail, the **Description** zone (SQL name: Description) makes mention of the ticket being closed.

The **Status** field (SQL name: seStatus) in the ticket detail is updated.

In the **Closure** tab of the ticket detail:

- The **Closed on** field is updated with the date of closure.


- The contents of the **Resol. code** and **Satisfaction** fields (SQL names: ResolCode and SatisLvl) are updated using information from the closure slip.
- The **Description** (SQL name: Description) from the closure slip is added to the **Resolution** zone (SQL name: Solution).

By selecting a solution from the resolution screen

In the resolution screen, you can close the ticket by clicking **Select**. This confirms the designated solution defined in the resolution screen.

How to display the resolution screen

There are two ways to display the resolution screen:

- 1 By clicking  in the detail of a ticket.
- 2 By clicking the **Description** field in the data-entry zone of the answer-call screen (when creating a ticket only): The resolution screen appears in the help zone.

Impact on the fields in the ticket detail

The **Status** field in the ticket detail is set to **Closed**.

If you are taking a call, the **Description** zone (SQL name: Description) in the **General** tab of the ticket detail is updated using the **Description** field of the data-entry zone of the answer-call screen.

In the **Closure** tab of the ticket detail:

- The **Closed on** field is updated with the date of closure.
- The **Diagnosis** field (SQL name: StandardSol) is updated with the identifier and short description of the solution used.
- The corresponding questions and answers from the decision tree are added to the **Resolution** zone.

Using the button in the answer-call screen

In the answer-call screen, click the  button to close a ticket without using the possible solution proposed by the resolution screen.

Impact on the fields in the ticket detail

The **Status** field in the ticket detail is set to **Closed**.

The **Description** zone in the **General** tab of the ticket detail is completed using the **Description** zone in the data-entry zone of the answer-call screen.

The **Closed on** field in the **Closure** tab of the ticket detail is updated with the date of closure.

Manually in the ticket detail

Method

Set the **Status** of the ticket to **Closed** or **Closed and verified**.

You can also populate the **Closure** tab of the ticket detail with the date of closure, the selected predefined solution (**Diagnostic**), and its description (**Resolution**).

Impact on the fields in the ticket detail


Closing a ticket in this way does not have any effect on the fields in the ticket detail. You must fill in any other information by hand (such as the **Description** in the **General** tab, etc.).



Note:

We recommend using one of the other methods, which automatically update the ticket using the appropriate information.

Closure slip

When you create a closure slip by clicking the  button in the helpdesk ticket detail, certain fields in the **Closure** tab of the ticket details are populated automatically:

- The **Satisfaction**, **Resol. code** and **To be integrated in the knowledge base** fields. (SQL names: SatisLvl, ResolCode and bToInteg).



Note:

The **To be integrated in the knowledge base** field is used as a reminder only. It is not linked to any automated function.

- The contents of the **Description** field (SQL name: Description) in the **Closure** tab of the closure slip are copied to the **Resolution** field (SQL name: Solution) in the **Closure** tab.

If this information is modified (in the **Closure** tab in the ticket or in the ticket history) after having validated the closure slip using the **Add** button, the information is not propagated to the other tab.

However, if you create another closing slip, its information will be copied to the **Closure** tab in the ticket.

7 Severities

This section explains how to describe and manage severities with Asset Manager. You can access the list of severities via the **Helpdesk/Severities** menu item.

Each helpdesk ticket is assigned a severity. This enables you to decide the priority with which tickets should be processed.

Automatic mechanisms are available for assigning severities to tickets according to the:

- Problem type
- Interlocutor
- Asset concerned
- Location of the asset

Using severities

Severities are associated with levels. You can use as many severity levels as you want. Level 0 is the weakest. There is no maximum limit.

Severities are stored in their own table and are associated to different types of elements:

- Problem types
- Assets
- Departments and employees

- Locations
- Models

 **Warning:**

Severities can only be attributed to assets, employees, departments, models and locations from the detail of the severity. It is not possible to attribute a severity from the details of these elements. However, you can attribute a severity to a problem type from its detail.

Examples of elements to which it is useful to associate a severity:

- A mission critical server.
- The secretary to the CEO.
- The location "Machine-room".
- The problem type "PC-won't start up".

Automatic assignment of a severity to a helpdesk ticket

A severity is attributed to a ticket when it is created, whether it is created directly from the list of tickets or using the answer-call wizard.

Asset Manager assigns the highest severity to the ticket from among those relating to the:

- Problem type
- Contract
- Asset
- Location of the asset

This only holds true when creating a ticket. If you modify or populate the value of these fields after creating the ticket, the severity of the ticket is not modified.

 **Warning:**

The categories attached to the severities are not used to calculate the severity of a helpdesk ticket. The assets-model association automatically associates the assets to the severity of their model when they are created.

Automatic assignment of an escalation scheme to a helpdesk ticket

Asset Manager tries to associate an escalation scheme automatically to a ticket according to the severity of the ticket and the location of the asset.

Creating severities

This section describes the suggested method for creating severities:

- 1 To implement severities, you must first analyze the structure and operation of your organization.
- 2 After completing this analysis, you need to create the severities before starting to create helpdesk tickets.

In general, three or four types of severity are sufficient.




Example: low, medium, high, very high.

Indicate the level of each severity (**Level** field (SQL name: lSeverityLvl) in the **General** tab of the severities detail).

 **Note:**

We recommend creating severities in steps of 10 (10, 20, 30, etc.). In this way, if the necessity arises, you can insert new severities between the existing ones.

- 3 Associate problem types, assets, locations, employees and departments with these severities as required.

These associations are made from the sub-tabs in the **Selection** tab of the severities detail. In these sub-tabs, use the ,  and  buttons to add, remove, view or modify items associated with a severity.

 **Warning:**

You cannot assign a severity to these items from their detail, except for problem types. You can only do so from the severity detail.

- 4 Associate the severities to certain models of assets, so that those assets are associated with these severities when they are created.

 **Note:**

The assets created before you associated the model with the severity do not benefit from this automated function. Therefore, you will have to manually assign the severity.

- 5 Associate the severities with escalation schemes.

8 Escalation schemes

This section explains how to describe and manage escalation schemes with Asset Manager. You can access the list of escalation schemes via the **Helpdesk/ Escalation schemes** menu item.

An escalation scheme enables you define the way in which a ticket is to be processed:

- Calendar of business days to take into account in calculating deadlines.
- Actions to be triggered, at certain time limits, if the ticket still has the a given status. For example, you can send an automatic message to a group supervisor if a ticket remains unassigned 1 day after being created.
- Actions to be triggered when the status of ticket changes.
- Actions to be triggered when the asset changes assignment.

Escalation schemes thus reflect the internal procedures of your organization. To determine which escalation scheme to automatically associate with a ticket, Asset Manager takes into account the severity of the ticket and the location of the problem.

Overview of using escalation schemes

Overview

Escalation schemes standardize the conditions under which tickets are processed.

You define:

- A calendar of workable periods (business days).
- The alarms to be triggered automatically if the status of the ticket does not evolve within the planned time limits (assignment, start of resolution, closure).
- The actions to be triggered automatically when the status of the ticket is modified.
- The actions to be triggered automatically when the assignment of the ticket is modified.

An escalation scheme is associated with tickets when they are created.



As is the case for assets, problem types each have a unique bar-code label. By default, this label is defined by a script that uses an Asset Manager counter. You can customize this script to adapt the bar-code label to your needs.

The surveillance program, Asset Manager Automated Process Manager, monitors the alarms and triggers them if necessary.

Actions concerning the assignment or status change of the ticket are automatically triggered when their value changes. It is not Asset Manager Automated Process Manager that triggers these actions but an agent of Asset Manager.

Examples how escalation schemes are useful

- Automatic issuing of a message when a ticket is assigned.
- Automatic issuing a message to the helpdesk supervisor when the ticket remains unassigned after a certain length of time.
- Automatic issuing of a message to the user when the ticket is closed, which asks their opinion on the quality of service received.

Automatic assignment of an escalation scheme to a helpdesk ticket

When you create a helpdesk ticket, Asset Manager tries to automatically associate it with an escalation scheme. This process is based on two types of information:

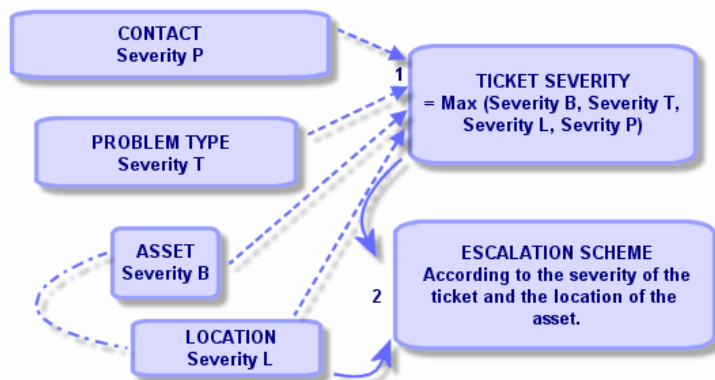
- The severity of the ticket (ticket details, **Tracking** tab).
- The location of the asset attached to the ticket.

Asset Manager proposes the most appropriate escalation scheme as follows:

- 1 Asset Manager searches the escalation schemes associated with the severity of the ticket (Severities sub-tab of Selection tab in an escalation scheme detail).
- 2 Among the escalation schemes selected in this way, Asset Manager searches the escalation scheme associated with the "nearest" location to that of the asset: direct location, otherwise the parent location, and so on toward the root location (Locations sub-tab of Selection tab in an escalation scheme detail).
- 3 If no escalation scheme is found, Asset Manager starts the first two steps again incrementing the severity by 1 until reaching the highest severity.
- 4 If no escalation scheme is found, Asset Manager starts the first two steps again decreasing the severity by 1 until severity 0.
- 5 When Asset Manager finds more than one escalation scheme at one of the above levels, it selects one randomly.

The following diagrams illustrate how Asset Manager selects the escalation scheme:

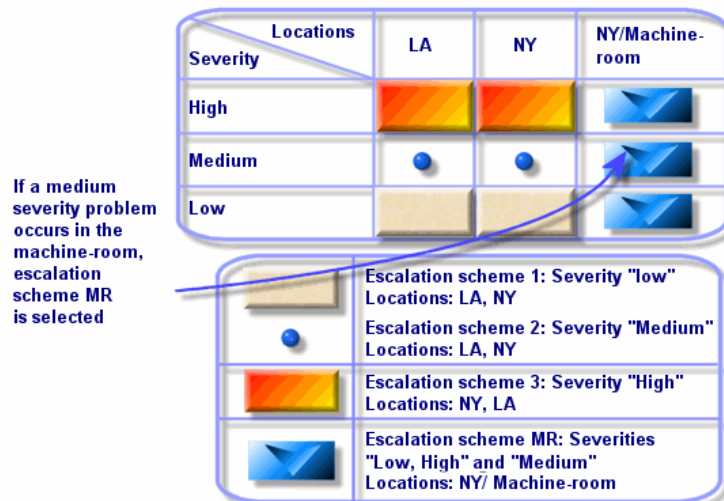
Figure 8.1. Escalation schemes - automatic assignment of a ticket



Four escalation schemes are defined in the following example. In the case of a medium severity ticket opened for an asset in the machine-room:

- 1 Asset Manager searches the escalation schemes associated with a medium severity, (escalation scheme detail, **Selection** tab, **Severities** sub-tab). It finds two: Escalation scheme 2 and escalation scheme MR.
- 2 Among these two escalation schemes, Asset Manager searches if one of them is associated with the location of the asset, i.e. the machine-room (escalation scheme detail, **Selection** tab, **Locations** sub-tab). Thus, escalation scheme MR is selected.

Figure 8.2. Escalation schemes - the role of locations and severities



Creating escalation schemes appropriately

To create escalation schemes in an appropriate fashion, you need to identify the pairs (location, severity) that best describe the cases you may encounter in your organization.

You are not obliged to create an escalation scheme for each location, since the selection algorithm for the escalation scheme widens the search to parent locations when it does not find the exact location level of the ticket.

Resolution time

Each escalation scheme defines a deadline for the closure of helpdesk tickets associated with the scheme (**Resolution time frame** in the **General** tab of the escalation scheme detail).

Important:

When calculating deadlines linked to the resolution time, the business days calendar associated with the escalation scheme is taken into account, and the "Resolution time" is converted to hours.

The resolution time can be used in defining alarms to be triggered when certain deadlines have been reached.

Alarms to be triggered on certain deadlines

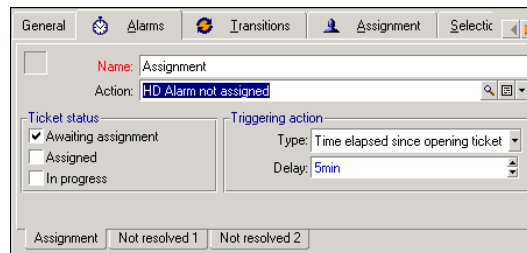
The **Alarms** tab of the escalation scheme detail shows the list of alarms to be triggered. Each alarm is described in a sub-tab. To add, duplicate, or remove an alarm, right-click in the tab to display the shortcut menu and select the **Add linked record**, **Duplicate linked record** or **Delete link**.

You can create as many alarms as you want.

The alarms are monitored by the surveillance program Asset Manager Automated Process Manager.

Example of functioning

Figure 8.3. Alarm functions - record example



If, when Asset Manager Automated Process Manager checks the alarms, more than five minutes have elapsed since the opening of the ticket, and the ticket is **Awaiting assignment**, Asset Manager Automated Process Manager triggers the action "HDAalarm not assigned".

Type and Delay

Table 8.1. Alarms - examples of types and delays

Type	Delay	Deadline condition
Time elapsed since opening ticket.	5 mins	If more than 5 minutes have passed since the opening of the ticket (Opened on (SQL name: dtOpened) field of the ticket's detail).
% of the resolution time	10 %	If more than 10 % of the resolution time has passed (the difference between the Opened on and Resolution Limit fields of the ticket's detail).
Time before resolution deadline	20 mins	If more than 20 minutes is left before the resolution limit (Resolution limit field of the ticket's detail).

Calculation of deadlines

When you define the alarms to be triggered on overrunning certain deadlines, and when you set the **Resolution time** in the **General** tab of the escalation scheme detail, it is important to be aware of the way deadlines are calculated:

Application of the calendar

The time elapsed takes into account workable periods (business days) if the escalation scheme is associated with a calendar (**General** tab in escalation scheme). This calendar defines the working periods to be considered when triggering alarms in the **Alarms** tab.

Example:

You create a ticket on Thursday September 23, 2009 at 5 P.M.

The ticket is associated with an escalation scheme that contains a "Ticket not assigned" alarm with the following values:

- Status: **Awaiting assignment**
- Type: "time elapsed since opening ticket"
- Delay: "15 min"
- Action: "Action 1"

The escalation scheme is associated with a calendar that specifies that the Thursday September 23 and Friday September 24, 2009 are worked from 9 A.M. to 5:05 P.M.

The "Ticket not assigned" alarm will trigger the "Action1" action on Friday September 24, 2009 at 9:10 A.M. if the ticket is **Awaiting assignment**.

Conversion of delays (time limits) to hours

When calculating deadlines, delays (time limits) are converted to hours.

Example:

A helpdesk ticket is created on Monday May 10, 2009 at 12:00 P.M.

The ticket is associated with an escalation scheme that contains an "Ticket not closed" alarm with the following values:

- Status: **In progress**
- Type: "% of resolution time "
- Delay: "100 %"
- Action: "Action2"

The "Resolution time" of the escalation scheme is set to 2 days and the escalation scheme is associated with a calendar specifying that all Mondays, Tuesdays, Wednesdays, Thursdays and Fridays in 2009 are workable from 9 A.M. to 6 P.M. and that all Saturdays and Sundays in 2009 are not workable.

When calculating deadlines, 2 days is equivalent to 48 hours, or 5 full workable days and 3 hours. As a consequence, the "Ticket not closed" alarm will trigger the "Action2" action on Monday May 17, 2009 at 3 P.M. if the ticket is **In progress**.

Actions to be triggered when the status of a ticket changes

The list of actions to be triggered when the status of a ticket changes appears in the **Transitions** tab of the escalation scheme detail.

The test and the possible triggering of the action are carried out when the change of status of the ticket is validated, for example by clicking **Create** or **Modify** in the ticket detail. The value of the **Status** field (SQL name: Status) needs to be different from the value stored in the database in order for an action to be triggered.

Actions must be created in the table of actions.

 **Note:**

It is not Asset Manager Automated Process Manager that triggers these actions but an agent of Asset Manager.

Actions to be triggered when the assignment of a ticket changes

The list of actions to be triggered when the assignment of a ticket changes appears in the **Assignment** tab of the escalation scheme detail.

There are two zones concerning:

- The supervisor to whom the ticket is assigned: Ticket detail, **Tracking** tab, **Assigned** field (SQL name: Assignee).
- The group to which the ticket is assigned: Ticket detail, **Tracking** tab, **Group** field (SQL name: EmplGroup).

In both cases there is a distinction between:

- Assignment: Assigning a new supervisor or group to the ticket
- Unassignment: Removing the assignment from a supervisor or group

 **Warning:**

When the **Assigned** or **Group** field in the ticket detail already has a value and you replace it by a new one, it is considered as an unassignment followed by an assignment.

Reassigning a ticket is equivalent to unassigning then reassigning.

The test and the possible triggering of the action are carried out when the change of assignment is validated, for example by clicking **Select** or **Modify** in the ticket detail. The value of the **Assigned** or **Group** fields needs to be different from the value stored in the database in order for an action to be triggered, which is true for a first assignment, an unassignment and a reassignment.

Actions need to be created in the table of actions.




 **Note:**

It is not Asset Manager Automated Process Manager that triggers these actions linked to the (re)assignment of tickets but an agent of Asset Manager.

Elements taken into account in automatically assigning an escalation scheme to a ticket

The list of elements taken into account by Asset Manager when automatically assigning an escalation scheme to a ticket appear in the **Selection** tab of the escalation scheme detail screen.

The sub-tabs of this tab associate severities and locations with given escalation schemes.

Go to the appropriate sub-tab and use the ,  and  buttons to add, remove, view or modify locations or severities associated with the escalation scheme.

9 Knowledge base

This chapter explains how to use and manage the knowledge base, which you can access via the **Helpdesk/ Knowledge base** menu item.

The knowledge base is a group of files describing problems and their solutions. These files enable you to solve more easily the problems you encounter. You enrich the knowledge base when you discover new problems and solutions.

Each knowledge file can be attached to an entry point in the decision tree. Thus, when you take a call, by navigating in the decision tree, the answer-call wizard suggests related knowledge files in the selected node and sub-nodes of the decision tree.

Example of knowledge file:

- Description: Monitor blank but under tension.
- Resolution: Plug the cable between the monitor and the CPU.

Viewing knowledge base entries


Files in the knowledge base are not made in such a way that they can be consulted from their full list.

However, if you select a node in the decision tree for the call answering phase or when the helpdesk ticket is resolved, Asset Manager displays the list of knowledge base entries linked to that node. The knowledge base entry thus selected to solve a call appears in the detail of the helpdesk ticket, in the **Closure** tab.

Classifying knowledge base entries by problem type

The **Problem type** field (SQL name: ProblemClass) enables you to classify knowledge base entries by associating them with problem types.

This facilitates the problem-solving process.

In effect, when taking a call, or from a ticket detail by clicking  **Solve**, only those knowledge files corresponding to the problem type of the ticket (ticket detail, **General** tab, **Type** field (SQL name: ProblemClass)) are displayed.

Managing knowledge base entries

The **Identifier** (SQL name: Code) enables you to assign a unique knowledge base entry in order to perform matching operations with external knowledge bases. The identifier is thus used as a reconciliation key between the two databases.

10 Decision trees

This section explains how to use the decision tree in Asset Manager. You can access the decision tree via the **Helpdesk/ Decision tree** menu item.

The decision tree enables you to analyze a situation step by step in order to find the most appropriate solution to the problem you encounter.

Browsing through a decision tree consists of validating each logical step in a predefined sequence that describes a problem and its possible solutions. At each step, you must specify your problem from among a choice of questions. If you validate the proposed response, you will validate your problem and a new choice of questions will be presented. This continues until the problem is clearly identified, and at this point, the system proposes a solution.

The problem types may point to an entry point in the decision tree. Thus, when the call is being taken, it is possible to be actively assisted in the resolution of the problem step by step once the problem type has been determined.


 **Note:**

Decision trees each have a unique bar-code label. By default, this label is defined by a script that uses an Asset Manager counter. You can customize this script to adapt the bar-code label to your needs.

Overview of the decision tree

Presentation

The decision tree can be used in two cases:

- When taking a call: Once the problem type is selected and the cursor is placed in the **Description** field, the answer-call wizard automatically displays the decision tree node associated with the problem type.
- From a ticket detail: Once the problem type is selected, you can click the  button. This invokes a window enabling you to go through the decision tree.

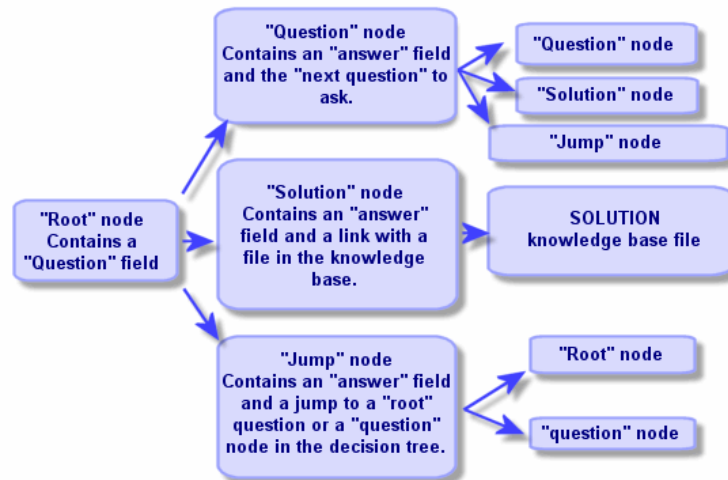
The list of nodes displayed using the **Helpdesk/ Decision tree** menu item, enables you to organize the nodes, but it is not used to solve a problem.

There are different types of nodes:

- **Root:** Root question
- **Question:** Answer followed by a question
- **Solution:** Reply with solution
- **Jump:** Reply followed by jump

The nodes are logically organized. It is important to respect their underlying logic:

Figure 10.1. Decision trees - logical links between node types



Each node plays a specific role:

Root node

These nodes are used as a possible departure point in the decision tree, in the form of a question. They lead to one of the following nodes:

- **Question**
- **Solution**
- **Jump**

Question nodes

These nodes correspond to one of the possible answers to a **Root** node or another **Question** node and contain a new question.

They lead to nodes of the following type:

- **Question**
- **Solution**
- **Jump**

Solution nodes

These nodes correspond to one of the possible answers to a **Root** node or a **Question** node.

They lead to a solution taken from the knowledge base.

Jump nodes

These nodes correspond to one of the possible answers to a **Root** node or a **Question** node.

They point to another node in the decision tree of type:

- **Root**
- **Question**

They are used when you encounter a situation when has already been developed in another branch of the decision tree. This avoids the unnecessary duplication of information.

Example of a decision tree:

Figure 10.2. Decision trees - example

Answer/Question	Type	Solution
Root/Is the screen completely blank?	Root	()
No/Is the lamp showing?	Question	()
No/Solution	Solution	KB2 (Screen-CPU connection)
Yes/Have you changed the resolution or the number of colors?	Question	()
No/Solution	Solution	KB4 (Display not working)
Yes/Solution	Solution	KB1 (Blank screen)
Root/Is there any text showing on the screen?	Root	()
No/Is the display plugged in?	Question	()
Yes/Is the CPU plugged in?	Question	()
No/Solution	Solution	KB5 (Computer badly plugged-in)
Yes/Solution	Solution	KB6 (PC not working)
No/Solution	Solution	KB1 (Blank screen)
Yes/Have you modified your autoexec.bat and config.sys files?	Question	()
Yes/Solution	Solution	KB8 (Modification to autoexec / config files)
No/Have you used a disk defragmenter utility?	Question	()
Yes/Solution	Solution	KB9 (Defragmenter has moved io.sys and msdos.sys)
No/Solution	Solution	KB10 (Defragmenter not launched for a long time)
Root/Is the problem linked to the operating system?	Root	()
No/Is this on an MS Office program?	Question	()
Yes/Solution	Solution	KB11 (Ms office prob)
No/Is this a problem with the program StockMan?	Question	()
Yes/Solution	Solution	KB12 (StockMan)
No/Solution	Solution	KB13 (Other software)

Link between the problem types and the decision tree

Problem types can be associated with a **Root** or **Question** node in the decision tree.

Thus, when you invoke the decision tree (when taking a call or from a ticket detail), Asset Manager directly displays the question associated with the problem type you have selected. This saves you from having to go through the decision tree from its root.

A decision tree question may be associated with several problem types.

A problem type may only be associated with one single node.




Creating a decision tree

To create a decision tree, first define the **Root** type nodes: they are used as possible departure points in the decision tree, in the form of a question.




In the **Answers** tabs of these **Root** nodes, enter all the possible responses to the root question. These may be the following types of nodes:

- **Question:** These nodes are possible answers to a question in the **Root** node or a **Question** node; they contain another question.

- **Solution:** these nodes are one of the possible answers to a **Root** node or to another **Question** node. They point to another solution taken from the knowledge base.
- **Jump:** These nodes are one of the possible answers to a **Root** node or a **Question** node. They point to another node in the decision tree (**Root** or **Question** type). They are used when you encounter a situation that was already developed in another branch of the decision tree. This avoids the unnecessary duplication of information.

Use the ,  and  buttons to add, remove, view or modify nodes.

You can also use the following buttons:


- : adds a **Question** node
- : adds a **Solution** node
- : adds a **Jump** node

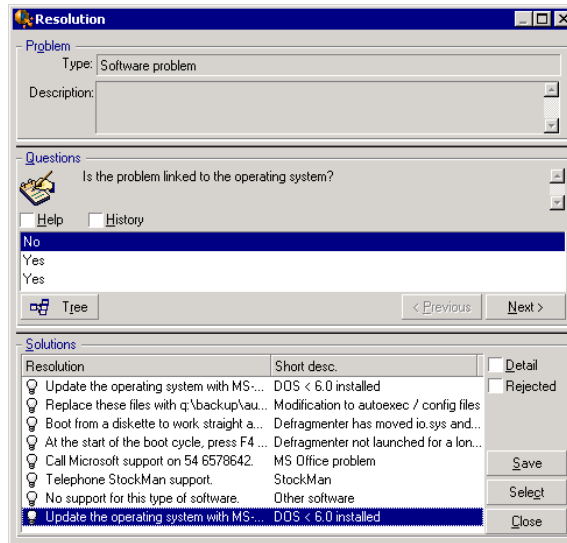
After creating the **Root** nodes in detail, populate the description of the **Question** type nodes. Specify all the possible answers to the **Question** nodes that you have created. This is performed in the **Answers** sub-tab in the **Next question** tab.

Solving a problem using the decision tree

The decision tree is not used directly from the list of its nodes, but via a resolution screen that you invoke in two cases:

- When taking a call: Once the problem type is selected and the cursor is placed in the **Description** field, the answer-call wizard automatically displays the decision tree node associated with the problem type.


- From the ticket detail: Once the problem type is selected, you can click the  button. This invokes a window enabling you to go through the decision tree.

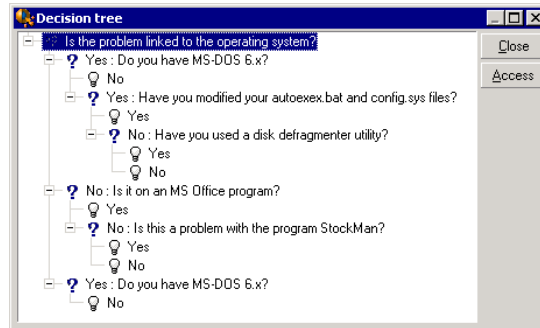


Questions

The node in the decision tree associated with the selected problem type is displayed in the zone. (The problem type must be associated with the node beforehand). If a question is associated with this node, the answer-call wizard proposes several answers to choose from. Double-click the adequate answer to continue to go through the decision tree. You can also activate the zone where the answers are by selecting one of the answers and type the number of the line of the answer to select. The **Next** button has the same effect. The **Previous** button enables you to back step through the tree. It is not possible to go further back than the starting node associated with the problem type

Tree button

The  **Tree** button displays the decision tree and places the cursor on the node associated with the problem type.



Select a node in the tree and click the **Access** button to change the starting node in the branch on which you want to work. You will need to use this possibility if you do not want to have to go through all of the branch at a given moment.

Help check box

Check this box if you want to display, after the question and between brackets, the contents of the **Description** tab in the question detail to the right of the question (if a description has already been entered in the decision tree).

History check box

Check this box if you want to display the list of successive questions you have already responded to in going through the decision tree.

Solutions

The list of knowledge base files associated with the nodes in the branch of the decision tree is displayed in the **Solutions** frame of the help zone.

Details check box


Check this box in order to display the details of the selected solution (**Description** (SQL name: Description) and **Resolution** (SQL name: Solution) fields).

Rejected check box

Check this box in order to continue displaying all the solutions from the starting node onwards, even if they have been eliminated due to the path taken through the tree.

Save button

Closes the resolution screen saving the current position in the decision tree.

- 1 All the questions and answers are saved in the **Description** (SQL name: Description) of the ticket. The current question is saved; thus, if you click the  button in the ticket details, you can use the decision tree directly from this question.
- 2 If you create a new helpdesk ticket while taking a call, the call will terminate with the creation of a ticket whose status is **Awaiting assignment**, **Assigned** or **In progress**. The ticket number appears in the title bar of the answer-call screen. You can locate the ticket using the **Helpdesk/ Tickets** menu item.

Choose button.

Closes the resolution screen and links the ticket to the selected solution file.

- 1 All the questions and answers are saved in the ticket detail (**Closure** tab, **Resolution** field (SQL name: Solution)).
- 2 The identifier and short description of the solution are copied over to the **Diagnosis** field (SQL name: StandardSol) in the **Closure** tab of the ticket detail.
- 3 The status of the ticket is set to **Closed** and the date of closure is shown in the **Closure** tab of the ticket detail.
- 4 If you create a new helpdesk ticket while taking a call, the call will terminate with the creation of a ticket. The ticket number appears in the title bar of the answer-call screen. You can locate the ticket using the **Helpdesk/ Tickets** menu item.

11 Tracking tools

This chapter explains the different tools that enable you to track helpdesk tickets.

Dashboard

This chapter explains how to use the Asset Manager Helpdesk Dashboard. You can access the Dashboard via the **Helpdesk/ Dashboard** menu item.

Overview of the Dashboard

The Dashboard's main function is to display a summary report on the helpdesk tickets in progress (those whose **Status** fields (SQL name: seStatus) are neither **Closed** nor **Closed and verified**).

Not all employees see the same summary report, however. This is because the Dashboard takes different helpdesk tickets into account depending on the employee logged on to the database:

- **Asset Manager administrator or the helpdesk administrator:** The Dashboard takes into account all tickets assigned to all groups, helpdesk technicians and unassigned tickets.
- **Group Supervisor:** The Dashboard takes into account tickets assigned to the supervisor's groups (the **Group** field in the ticket detail) and the tickets


assigned to technicians that are members of the supervisor's groups (the **Assigned** field (SQL name: Assignee) in the ticket detail).

- Support technician: The Dashboard takes into account all tickets assigned to the technician as ticket supervisor (the **Assigned** field in the ticket detail) and those in their group that are not currently assigned.

To display the results, Asset Manager compares the date and time when the Dashboard was launched or updated with the **Expected resol.** field (SQL name: dtResolLimit) in the ticket detail. For example, the "<2 h" column displays the number of tickets whose expected resolution date is less than two hours away, but more than one hour away.

Use the **Window/ Update** menu item or F5 to update the Dashboard.

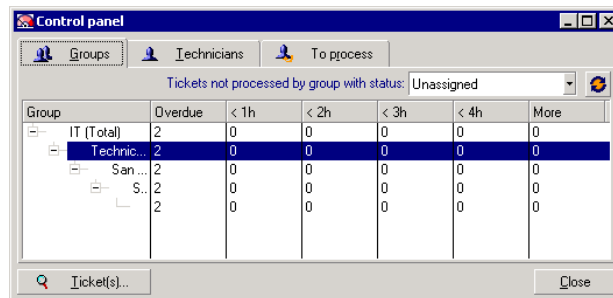
To access the tickets whose number appears in the Dashboard, you have several possibilities:

- To display the list and details of the tickets corresponding to a whole line:
 - 1 Select a line and click the  button.
 - 2 Or double-click the title of the line (to the left of the line).
- To display the list and details of the tickets corresponding to a cell:
 - 1 Double-click the cell itself.

Tracking tickets by group

The **Groups** tab in the Dashboard only appears if the employee logged on to the database is the Asset Manager administrator, the helpdesk administrator or the helpdesk group supervisor.

It enables you to track tickets group by group.



Group	Overdue	< 1h	< 2h	< 3h	< 4h	More
IT (Total)	2	0	0	0	0	0
Technic...	2	0	0	0	0	0
San ...	2	0	0	0	0	0
S...	2	0	0	0	0	0
	2	0	0	0	0	0

"Group" column:

- The **Group** column displays a hierarchical view of the tree of helpdesk groups.

- The number of helpdesk tickets associated with a parent group also includes the tickets associated with its sub-groups. To avoid confusion, the name of the parent group is followed by the word "(Total)", and a pseudo sub-group with the same name enables you to view the number of tickets associated with the parent group only.
- This pseudo sub-group only appears in the following two cases:
 - The **Assignable** box (SQL name: bAssignable) is checked for this group.
 - Helpdesk tickets were assigned to this group before the check was removed from the **Assignable** box (SQL name: bAssignable).

"Tickets not processed by group with status:" filter

This filter enables you to select the tickets according to their status:

- Unassigned: tickets that are not assigned to a ticket supervisor.
- Assigned: tickets that are assigned to a ticket supervisor.
- All tickets: All tickets assigned or otherwise.

"< x" Columns

The "< x" columns display the number of open tickets that must be solved within the specified time.

Tracking helpdesk tickets technician by technician

The **Technicians** tab in the Dashboard only appears if the employee logged on to the database is the Asset Manager administrator, the helpdesk administrator or the helpdesk group supervisor.

It enables you to track tickets technician by technician.

Technician	Overdue	< 1h	< 2h	< 3h	< 4h	More
Lessing, John	1	0	0	0	0	0

"Tickets not processed by technician in group:" filter

This filter enables you to select the technician according to the group to which they belong.

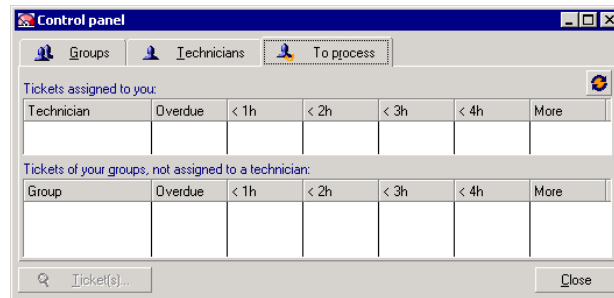
"< x" columns

The "< x" columns display the number of open tickets that must be solved within the specified time.

Tickets to be processed

The **To process** tab in the Dashboard only appears if the employee logged on to the database is a member of a helpdesk group.

It helps them keep track of any tickets assigned to them.



Tickets assigned to you

Lists all the tickets assigned to the helpdesk technician logged on to the database.

Tickets in your groups, not assigned to a technician

Lists all the tickets assigned to a group to which the technician belongs, but that are not currently assigned to a ticket supervisor.

"< x" columns

The "< x" columns display the number of open tickets that must be solved within the specified time.

Statistics table

Use the **Helpdesk/ Statistics** menu item to access the Statistics table.

The Statistics table provides you with a summary report of the helpdesk team's activities for a given period. This table is accessible to the helpdesk group supervisors, the helpdesk administrators and the Asset Manager administrator.

The Statistics table calculates statistics relating to the progress of helpdesk tickets. The tabs provide you with three different views: by group, by problem type and by technician.

Group column

- The **Group** column displays a hierarchical view of the tree of helpdesk groups.
- The number of helpdesk tickets associated with a parent group also includes the tickets associated with its sub-groups. To avoid confusion, the name of the parent group is followed by the word "(Total)", and a pseudo sub-group with the same name enables you to view the number of tickets associated with the parent group only.
- This pseudo sub-group only appears in the following two cases:
 - The **Assignable** box (SQL name: bAssignable) is checked for this group.
 - Helpdesk tickets were assigned to this group before the check was removed from the **Assignable** box (SQL name: bAssignable).

Statistics table filter

The filter at the top of the Statistics table enables you to select tickets according to their opening date. It is thus possible to view all tickets opened within the last month, for example.

From ... To

Select the start and end dates for the period you want to analyze. These dates are included in that time period.

In progress column

Asset Manager lists the tickets whose **Status** field (SQL name: seStatus) is neither **Closed** nor **Closed and verified**.

Warning:

The **In progress** column only counts tickets opened within the period specified by the filter. Tickets opened before this period are not taken into account.

Completed column

Asset Manager lists the tickets whose **Status** field is neither **Closed** nor **Closed and verified**.

Unassigned line in the By group tab

These are the helpdesk tickets that have not been assigned to a group.


Unassigned line in the By technician tab


These are the tickets that have not been assigned to a ticket supervisor.

Modifying graph colors

You can modify the graph colors using the **Helpdesk** group in the **Edit/Options** menu item.

Updating the Statistics table

Use the **Window/ Update** menu item, F5, or the  button to update the table immediately.

To automate the process of refreshing the screen, right-click the  button, and select **Configure**. Check the **Every** check box and indicate the at what frequency the table should be refreshed.

Ticket-tracking console

The **Helpdesk/ Ticket tracking** menu provides a graphical overview of the helpdesk-ticket statistics.

The following diagrams are available:

- Helpdesk tickets by status.
- Helpdesk tickets by group.
- Helpdesk tickets open by severity.
- Helpdesk tickets open by location.

These diagrams are updated every minute.

12 Glossary

Helpdesk ticket

A helpdesk ticket enables you to describe a problem and track its resolution. You can create a ticket from the **Helpdesk/ Tickets** menu item or by using the answer-call wizard (**Helpdesk/ Answer call**), which guides you through creating a ticket rapidly.

When you use the answer-call wizard to create a helpdesk ticket, there are two possibilities:

- The problem is solved during the call: A helpdesk ticket is created with the **Closed** status. It only serves to record the call.
- The problem requires a deferred solution: A helpdesk ticket is created to keep track of the problem and manage its resolution. The ticket is assigned to a helpdesk group and/or to a ticket supervisor, who will find the helpdesk ticket in the list of tickets assigned to them.

Work order

A work order is an operation carried out on an asset to solve a problem: repair, user assistance, installation, move, etc.

Work orders are described hierarchically (as a tree of work orders or sub-tasks). You can assign as many sub-tasks to a work order as you like, and, if you wish,

you can base them on a template defined in the Model field (SQL name: Model). This template describes a generic work order or a standard work order procedure. The information defined in a work order is used in the work order detail.

News item

A news item is an item of current information you want to broadcast to a group of individuals for a given period.

As a general rule, news items only concern short-lived information.

Example of a news item: "The XXX server will be down for maintenance between 11:00 and 12:00 on February 10, 2009".

Knowledge base

The knowledge base is a group of files describing problems and their solutions. By matching your problem to one already described in the knowledge base, you can use existing information to solve your current problems quicker and easier. You enrich the knowledge base when you discover new problems and solutions. In this way, the base of information continually grows.

Each knowledge file can be attached to an entry point in the decision tree. Thus, when you take a call, by navigating through the decision tree, the answer-call wizard suggests related knowledge files in the selected node and sub-nodes of the decision tree.

Example of knowledge file:

- Description: Monitor turned on but there is nothing on screen.
 - Resolution: Plug the cable between the monitor and the CPU.
-

Decision tree

The decision tree enables you to analyze a situation step by step in order to find the most appropriate solution for that problem.

The tree is made up of questions, possible answers and corresponding solutions. Problem types, determined by you when taking a call, correspond to entry points in the decision tree. These entry points then lead to the wealth of stored information relating to a problem. Thus, when you take a call, this system

might actually be able to actively assist you in the step-by-step resolution of that problem.

 **Note:**

Decision trees each have a unique bar-code label. By default, this label is defined by a script that uses an Asset Manager counter. You can customize this script to adapt the bar-code label to your needs.

Helpdesk group

Helpdesk groups are managed from a list available via the **Portfolio/ Groups** menu item.

 **Note:**

Within the context of the helpdesk, employee groups are referred to as "helpdesk groups".

Helpdesk groups are made up of helpdesk technicians who are capable of solving similar problems for a given group of locations and who are involved with given contracts.

Helpdesk groups reflect your internal organization: How you define a group depends on who solves what type of problems and at which locations, and according to which contracts.

Helpdesk groups are organized in a hierarchy. Therefore any helpdesk group can have a parent group, defined in the **Sub-group of** field (SQL name: Parent), and a child group. When creating a sub-group, the competencies, locations and contracts linked to the parent group are automatically propagated to the sub-group.

 **Warning:**

Once the sub-groups are created, if you add a location (or competence or contract) to the parent group, this location (or competence or contract) is not automatically propagated to the sub-groups.

The **Assignable** option (SQL name: bAssignable) determines whether or not you can assign a helpdesk ticket to this group. This makes it possible to distinguish between operational groups that process tickets and those that simply classify them.

Example

The "Los Angeles" group contains two sub-groups corresponding to two call centers. In our scenario, the "Los Angeles" group would just be used to structure these groups; the tickets being processed by the sub-groups.

Problem type

A problem type is part of the description of a helpdesk ticket.

The problem types encountered by the helpdesk team are described in a hierarchical table, which can be displayed from the **Helpdesk/ Problem types** menu item.

Example of hierarchy of problem types:

- ◆ Printer problem
 - Laser printer
 - Ink jet printer

Problem types are attributed to helpdesk groups that are competent to solve this type of problem. Thus, once the caller's problem type is selected, Asset Manager can automatically propose the helpdesk group that is the best suited.

Problem types are also useful for organizing tickets and drawing up statistics.

Note:

As is the case for assets, problem types each have a unique bar-code label. By default, this label is defined by a script that uses an Asset Manager counter. You can customize this script to adapt the bar-code label to your needs.

Severity

Each helpdesk ticket is assigned a severity. This enables you to decide the priority with which tickets should be processed.

Automatic mechanisms are available for assigning severities to tickets according to the:

- Problem type
- Interlocutor
- Asset concerned
- Location of the asset

Business-day calendar

A business day calendar describes the work and vacation periods for a given technical support team. Calendars are used to calculate deadlines to meet when processing helpdesk tickets by taking into account the work periods for the support team. You can create as many calendars as you want using the **Tools/Calendars** menu item.

Escalation scheme

An escalation scheme enables you define the way in which a ticket is to be processed:

- Calendar of business days to take into account in calculating deadlines.
- Actions to be triggered, at certain time limits if the ticket still has a given **Status**. For example, it is useful to be able to send an automatic message to a group supervisor if a ticket remains unassigned one day after being created.
- Actions to be triggered when the status of ticket changes.
- Actions to be triggered when the asset changes assignment.

Escalation schemes thus reflect the internal procedures of your organization. To determine which escalation scheme to automatically associate with a ticket, Asset Manager takes into account the severity of the ticket and the location of the problem.

Answer-call wizard

The answer-call wizard is an Asset Manager function that guides the person taking calls. (We use "call" in the broadest possible sense of the word: Telephone call, a visit by a user, a fax, etc.)

It gives you a simplified and guided view of an existing ticket or ticket being created.

It is designed to facilitate as much as possible the recording of helpdesk tickets.

Taking a call consists of:

- 1 Identifying the caller.
- 2 If the call concerns a ticket that has already been created: adding the new information to the ticket, or closing the ticket.
- 3 If the call concerns a new problem that has not yet been logged:

- 1 Entering the relevant information.
- 2 Creating a ticket (open or closed).

Helpdesk administrator

The helpdesk administrator is a user of Asset Manager to whom the administrator has assigned the right to administrate the helpdesk.

To assign a user profile to someone:

- 1 Open the detail of the employee (**Organization/ Employees and departments** link on the navigation bar, **Profile** tab).
- 2 Select the **Administration rights** check box (bHDAdmin).
- 3 Populate the **Profile** link by selecting the appropriate profile.

The helpdesk administrator (along with the administrator of Asset Manager) is the only person able to view the tickets of all groups and of all ticket supervisors using the "Dashboard".

Helpdesk group supervisor

The helpdesk group supervisor is selected in the table of departments and employees.

The helpdesk group supervisor (along with the helpdesk administrator and the administrator of Asset Manager) is the only person able to view the tickets of all the ticket supervisors of the helpdesk groups under their responsibility using the "Dashboard". The helpdesk supervisor can also proceed with the resolution of all problem types.

Ticket supervisor

A ticket supervisor is a user of Asset Manager user who has been selected to be part of a helpdesk group (in the **Composition** tab of the helpdesk group detail).

The helpdesk "Dashboard" lets the technician view:

- Tickets that have been assigned to them. They are the "supervisor" of these tickets.
- Tickets that are assigned to their group but still not assigned to a ticket supervisor.

13 References

Toolbar icons (Helpdesk)

Certain of the toolbar icons are specific to the Helpdesk 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 **Helpdesk** from the **Categories** list.

For more information on customizing the toolbar, consult the **Tailoring** guide, part 1 **Customizing client computers**, chapter **Customizing a client workstation**, section **Customizing the toolbar**.

Interface options (Helpdesk)

Certain of the interface options are specific to the Helpdesk module.

To learn more about this list and how to configure it:

- 1 Select the **Edit/ Options** menu.
- 2 Unfold the **Helpdesk** node.

DBMSs supporting double outer-joins

During the automatic selection of a helpdesk group, contracts are only accounted for if the DBMS supports double outer-joins.

This is the case of:

- DB2 UDB.
- Oracle Database Server.

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